



**Tuesday, June 7, 2022
5:00 PM**

**City Council
Tuesday Meeting Agenda**

**Council Chambers
200 Forrest Street**

Call to Order

Call to Prayer and Pledge of Allegiance

Presentation Agenda

POLICY AGENDA

1. **2022-404** Approve the minutes for the May 16 & 17, 2022 meetings of the City Council.

2. **2022-375** Adopt a Resolution setting Public Hearing on Tuesday, July 5th, 2022 at 4:00 p.m. in the City Council Chambers located at City Hall to determine if certain properties are in such a state of uncleanliness so as to be a menace to the health and safety of the community, according to the provision of MS Code 1972, Section 21-19-11.

3. **2022-402** Adopt a Resolution appointing voting delegates for the City of Hattiesburg for the 2022 Mississippi Municipal League election.

4. **2022-395** Adopt a Resolution declaring property Identified as all or part of Forrest County PPIN 032303, 032304, and 021676 necessary for public use, authorize the mayor or his representative to make a fair market value offer for the property and to execute any and all documents necessary to complete the acquisition of the subject property.

5. **2022-389** Adopt a Resolution declaring property Identified as a portion of Forrest County Parcel No. 2-028G-05-072.00 (PPIN 024545) necessary for public use and authorize any and all proceedings necessary to acquire the aforementioned property pursuant to *Miss. Code Ann. 21-31-47*, as amended.

6. **2022-396** Adopt a Resolution authorizing the acquisition of an Airspace Easement over the Norfolk Southern Railroad and Authorize the Mayor to make a fair market value offer for same.

- 7. 2022-381** Adopt a Resolution requesting initiation of the Fourth Street Pathway Project, from Thornhill Drive to 38th Avenue, from the Mississippi Department of Transportation, and authorize the Mayor to sign the Project Initiation Request Letter.
- 8. 2022-379** Approve Agreement with Shows, Dearman and Waits, Inc. for engineering services for the Forrest Avenue Sewer Replacement Project, and authorize the Mayor to execute in duplicate.
- 9. 2022-405** Approve Contract with Shows, Dearman and Waits, Inc., for engineering services related to the development of Storm Water Mapping and Modeling, in an amount not to exceed \$96,437.00 and authorize the Mayor to execute in duplicate.
- 10. 2022-348** Approve Subcontract with J.L. McCool Contractors, Inc. for the State Aid Project No. DECD-001-018(35)BO identified as Highway 49, Camp, Adeline and Mamie Project and authorize the Mayor to execute subcontract in multiples.
- 11. 2022-384** Approve Change Order with Hanco Corp. General Contractors for various miscellaneous items for the Hattiesburg Public Safety Complex Project, for an increase to the contract in the amount of \$137,792.54.
- 12. 2022-394** Approve Relocation Assistance in the amount of \$197,240.00 for the owners and/or tenants being displaced by the acquisition of 3 properties for the construction of the Hall Avenue West Overpass project.
- 13. 2022-382** Acknowledge bids received on May 19, 2022 for the Midtown Overlay Infrastructure Improvements Project, and accept the bid from Grady Crawford Construction Company, Inc. in the amount of \$2,681,542.50, and authorize the Mayor to execute the contracts upon preparation.
- 14. 2022-401** Approve Agreement between the City of Hattiesburg and the Mississippi Department of Human Services for participation in the Low-Income Household Water Assistance Program and authorize the Mayor to execute the same.
- 15. 2022-403** Approve Agreement between City of Hattiesburg and Art Makes Art Inc. to provide year-round after-school arts programs for children in the City of Hattiesburg to include children and adolescents in the amount of \$10,000 and authorize manual check for the same.
- 16. 2022-390** Approve a Subrecipient Agreement with Starter Homes of Mississippi to provide roof repairs in connection with the City's Roof Repair Initiative Program and authorize the Mayor to execute in triplicate. {Entitlement}

17. **2022-376** Declare and approve a sole source purchase for Watch Guard Interview Room Camera System in the amount of \$27,350.00 as a sole source purchase per section 37-7-1 of the Mississippi Code of 1972 as amended; Watch Guard is the sole manufacturer and exclusive distributor of this system.
18. **2022-377** Declare and approve a sole source purchase for Watch Guard Body Camera and Car 4RE System in the amount of \$67,150.00 as a sole source purchase per section 37-7-1 of the Mississippi Code of 1972 as amended; Watch Guard is the sole manufacturer and exclusive distributor of this system.
19. **2022-392** Acknowledge receipt of Final Judgement in Civil Action No. C020-1115 for the acquisition of property identified in the attached documentation as Forrest County Parcel PPIN 022501 for the Hall Avenue East Overpass Project and authorize the issuance of a manual check to the court in the amount of \$3,900.00.
20. **2022-383** Acknowledge receipt of fully executed Agreement for (1) Local Agency Highway-Railway Grade Separation Improvements and (2) Permanent Easement Both Encroachment and Airspace, with the Illinois Central Railroad Company.

ROUTINE AGENDA

1. **2022-386** Acknowledge receipt of the award for the Substance Abuse and Mental Health Services Administration (SAMSHA) Treatment Drug Courts Grant in the amount of \$385,230 for the continuation of the Hattiesburg Behavioral Health Court Treatment Expansion project, covering the period May 31, 2022 through May 30, 2023.
2. **2022-380** Acknowledge receipt of the two quote docket.
3. **2022-349** Acknowledge public comment period and public meeting for Lincoln Road Drainage Study and authorize publication of public notice of the same.
4. **2022-378** Approve and authorize issuance of manual checks for CDBG/HOME Program Claims per attached Memorandum. {HOME/Entitlement CDBG}
5. **2022-387** Approve Plans and Specifications for the Jaycee Park Field Improvements project and authorize advertisement for bids.
6. **2022-388** Approve Plans and Specifications for the FTA Sidewalk Hardy Street – Kamper Park project and authorize advertisement for bids.
7. **2022-385** Approve Plans and Specifications for the Lincoln Road Paving Project and authorize advertisement for bids.

- 8. 2022-391** Approve Plans and Specifications for the Bobby L. Chain Airport Hangar 6 Door Replacement project and authorize re-advertisement for bids for same.

- 9. 2022-350** Acknowledge the issuance of corrected cemetery deed to Dillard & Sandra Ball due to incorrect description (as recorded in MB 2021-252).

- 10. 2022-351** Approve the City's purchase of four (4) grave spaces, located in the West Half (W1/2) of Lot 147, Section 25, at Highland Cemetery. Minute Book# 1986-1, Page# 185, in the amount of \$ 700.00, from Patricia Ruth Shaw, Authorize manual check for the same.

- 11. 2022-354** Approve the City's purchase of (3) three grave spaces, located in the South Half (S ½) of the Northeast Quarter (NE ¼), Lot 8, Section 30, North Half (N ½) of the Southeast Quarter (SE ¼), Lot 8, Section 30, and South Half (S ½) of the Southeast Quarter (SE ¼), Lot 8, Section 30 at Highland Cemetery, Minute Book 2012-1/203, and Minute Book 2012-1/236 in the amount of \$ 525.00, from Louis R. & Debbie Brown, Authorize manual check for the same.

- 12. 2022-355** Approve the City's purchase of (2) grave spaces, located at South Half (S ½) of the Southeast Quarter (SE ¼), Lot 43, Section 28, and North Half (N ½) of the Northeast Quarter (NE ¼), Lot 43, Section 28, at Highland Cemetery. Minute Book# 2003-1/187-198, in the amount of \$ 350.00 from M. Ellen Dearman, Authorize manual check for the same.

- 13. 2022-374** Approve the sale of grave spaces per attached, Memo's, Receipts, and Deeds.

- 14. 2022-399** Approve claims docket for the period ending May 31, 2022.

In Memoriam:

- Ms. Mary Ola Barber

Meeting Adjourn



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ronda Kennedy, Clerk of Council
cc:
Date: Tuesday, June 7, 2022
Re: Approve the minutes for the May 16 & 17, 2022 meetings of the City Council.
File Number: 2022-404
Minute Book #

Summary

According to Miss. Code Ann. § 21-15-33, "the minutes of every municipality must be adopted and approved by a majority of all the members of the governing body of the municipality at the next regular meeting or within thirty (30) days of the meeting thereof, whichever occurs first....."

Recommendation Statement

I recommend approval of the minutes.

Please place this on the June 7, 2022 City Council meeting for consideration.



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Ann Jones, Chief Administrative Officer

cc: Wiley Quinn, Code Enforcement Division Manager

Date: Tuesday, June 7, 2022

Re: Adopt a Resolution setting Public Hearing on Tuesday, July 5th, 2022 at 4:00 p.m. in the City Council Chambers located at City Hall to determine if certain properties are in such a state of uncleanness so as to be a menace to the health and safety of the community, according to the provision of MS Code 1972, Section 21-19-11.
File Number: 2022-375
Minute Book #

Summary

Set Public Hearing 07 05 2022, Unsafe Properties

Recommendation Statement

I recommend the setting of a Public Hearing to consider the state of the listed attached properties to determine if these properties are in such a state of uncleanness so as to be a menace to the health and safety of the community, according to the provision of MS Code 1972, Section 21-19-11.

Please place this on the June 7, 2022 City Council meeting for consideration.

Prepared by:
City of Hattiesburg
Code Enforcement
P.O. Box 1898
Hattiesburg, Mississippi 39403-1898

Return to:
City of Hattiesburg
City Clerk’s Office
P.O. Box 1898
Hattiesburg, Mississippi 39403-1898

RESOLUTION

WHEREAS, complaint has been made to the City of Hattiesburg, Mississippi, that the following properties to wit:

	Address	PPIN	Ward	Violations
1.	100 Short Railroad Street	6377	5	AB, DB, OGL
2.	101 Short Railroad Street	6370	5	AB, DB, OGL
3.	103 Short Railroad Street	6371	5	AB, DB, OGL
4.	104/106 Ellis Drive	5478	1	US, DS, ES
5.	118 Ellis Drive	10817	1	US, DS, ES
6.	120 Ellis Drive	10816	1	US, DS, ES
7.	134 Ruby Avenue	13994	5	AB, DB, OGL
8.	209 Unetta Street	21167	2	DB, OGL
9.	213 Unetta Street	21169	2	DB, OGL

10.	310 ATT Avenue	10521	5	AB, DB, OGL
11.	401 Buschman Street	18546	2	ES, PT, DB, AG&R
12.	402 Dumas Avenue	19906	5	AB, DB, OGL
13.	601 Tipton Street	19100	2	DB, OGL
14.	4301 Mamie Street	17780	3	US, AG&R, VS, PO

are in such a state of uncleanness so as to be a menace to the health and safety of the community; and

WHEREAS, it is in the public interest that the City Council, on its own motion, hold hearings as provided by Section 21-19-11 of the Mississippi Code of 1972, as annotated and amended, to determine whether or not the above properties are in such a state of uncleanness so as to be a menace to the health and safety of the community.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Hattiesburg, Mississippi, that the owners of the above-described properties be notified, as provided by law, of a hearing to be held by the City Council in the City Council Chambers located at City Hall in Hattiesburg, Mississippi, at 4:00 p.m. on Tuesday, July 5, 2022, to determine whether or not the above- described properties are in such a state of uncleanness so as to be a menace to the health and safety of the community.

The above and foregoing Resolution, having been first reduced to writing, was introduced by Council member _____, seconded by Council member _____, and was adopted by the following vote, to-wit:

YEAS:

NAYS:

ABSENT:

The President thereby declared the motion carried and the resolution adopted, this the 7th day of June, 2022.

(SEAL)

ATTEST:

ADOPTED:

CLERK OF COUNCIL

PRESIDENT

The above and foregoing Resolution, having been submitted to and approved by the Mayor, this the 7th day of June, 2022.

ATTEST:

APPROVED:

CITY CLERK

MAYOR



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

COUNCIL - WARD THREE
Carter Carroll

COUNCIL - WARD FOUR
Dave Ware

COUNCIL - WARD FIVE
Nicholas Brown

MEMORANDUM

TO: Mayor and City Council

FROM: Wiley Quinn, Code Enforcement Manager

DATE: June 7th, 2022

RE: Set Public Hearing

The Code Enforcement Division requests that the City Council hold a Public Hearing on Tuesday, July 5, 2022 to determine if the following properties are in such a state of uncleanness so as to be a menace to the health and safety of the community, according to the provisions of MS Code 1972, Section 21-19-11.

	Address	PPIN	Ward	Violations	Proposed Actions	Estimated Cost	Estimated Penalty
1.	100 Short Railroad Street	6377	5	AB, DB, OGL	Cut/Clean, Close, Demo	\$3,600	\$1,500
2.	101 Short Railroad Street	6370	5	AB, DB, OGL	Cut/Clean, Close, Demo	\$3,500	\$1,500
3.	103 Short Railroad Street	6371	5	AB, DB, OGL	Cut/Clean, Close, Demo	\$3,500	\$1,500
4.	104/106 Ellis Drive	5478	1	US, DS, ES	Cut/Clean, Demo	\$15,000	\$7,500
5.	118 Ellis Drive	10817	1	US, DS, ES	Cut/Clean, Demo	\$15,000	\$7,500

6.	120 Ellis Drive	10816	1	US, DS, ES	Cut/Clean, Demo	\$15,000	\$7,500
7.	134 Ruby Avenue	13994	5	AB, DB, OGL	Cut/Clean, Close, Secure	\$1,500	\$1,500
8.	209 Unetta Street	21167	2	DB, OGL	Cut/Clean, Close, Secure	\$3,500	\$1,500
9.	213 Unetta Street	21169	2	DB, OGL	Cut/Clean, Close, Secure	\$3,500	\$1,500
10.	310 ATT Avenue	10521	5	AB, DB, OGL	Cut/Clean, Demo	\$5,000	\$1,500
11.	401 Buschman Street	18546	2	ES, PT, DB, AG&R	Close, Clean, Secure	\$3,500	\$1,500
12.	402 Dumas Avenue	19906	5	AB, DB, OGL	Cut/Clean, Close, Secure	\$1,500	\$1,500
13.	601 Tipton Street	19100	2	DB, OGL	Cut/Clean, Close, Secure	\$3,500	\$1,500
14.	4301 Mamie Street	17780	3	US, AG&R, VS, PO	Cut/Clean, Demo	\$4,500	\$1,500

Garbage & Rubbish=GAR/RUB
 Dilapidated Building=DB
 Imminent Danger=ID
 Open Storage=OS
 Abandoned Vehicle=AV
 Vacant Structure=VS
 Hazardous Tree = HT
 Protective Treatment = PT

Accumulation of Garbage and Rubbish = AG&R
 Dangerous Structure=DS
 Overgrown Lot=OGL
 Unsafe Structure=US
 Abandoned Structure=AS
 Owner Responsibility=OR
 Exterior Structure = ES
 Prohibited Occupancy = PO



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ann Jones, Chief Administrative Officer
cc:
Date: Tuesday, June 7, 2022
Re: Adopt a Resolution appointing voting delegates for the City of Hattiesburg for the 2022 Mississippi Municipal League election.
File Number: 2022-402
Minute Book #

Summary

Adopt a Resolution appointing voting delegates for the City of Hattiesburg for the 2022 Mississippi Municipal League election.

Recommendation Statement

I recommend this item be added to the Council Agenda for consideration.

Please place this on the June 7, 2022 City Council meeting for consideration.

RESOLUTION

**RESOLUTION APPOINTING
MISSISSIPPI MUNICIPAL LEAGUE
2022 VOTING DELEGATES
FOR THE CITY OF HATTIESBURG**

WHEREAS, the Mississippi Municipal League amended the bylaws of the association to provide for a ballot election, to be conducted by the officers of the Mississippi Municipal Clerks and Collectors Association, to be held each year at the summer convention, to elect a Second Vice President from the Southern District; and

WHEREAS, the amended bylaws require the governing authority board (Alderman, City Council, City Commission) to designate in its minutes the voting delegate and one alternate to cast the vote for each member municipality.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of Hattiesburg. In accordance with the bylaws of the Mississippi Municipal League, the voting delegate(s) for the 2022 Mississippi Municipal League election to be held at the annual convention on June 28th are as follows:

Voting Delegate: City of Hattiesburg Mayor

First Alternate: City of Hattiesburg City Council President

That public interest and necessity requiring same, this Resolution shall become effective upon passage. The above and foregoing Resolution, after having been first reduced to writing, was introduced by _____, seconded by _____, and was adopted by the following vote, to-wit:

YEAS: NAYS:

The President thereby declared the motion carried and the Resolution adopted, this the 7th day of June, 2022.

(S E A L)

ATTEST: ADOPTED:

CLERK OF COUNCIL

PRESIDENT

The above and foregoing Resolution having been submitted to and approved by the Mayor, this the 7th day of June, 2022..

ATTEST: APPROVED:

CITY CLERK

MAYOR



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Adopt a Resolution declaring property Identified as all or part of Forrest County PPIN 032303, 032304, and 021676 necessary for public use, authorize the mayor or his representative to make a fair market value offer for the property and to execute any and all documents necessary to complete the acquisition of the subject property.
File Number: 2022-395
Minute Book #

Summary

Adopt a Resolution declaring property Identified as all or part of Forrest County PPIN 032303, 032304, and 021676 necessary for public use, authorize the mayor or his representative to make a fair market value offer for the property and to execute any and all documents necessary to complete the acquisition of the subject property.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

REAL PROPERTY APPRAISAL REVIEW REPORT

Parcel Number(s)	PPIN #S 32303; 32304; 21676
Owner	Martin Luther King Avenue Baptist Church / Hattiesburg Public School District, et al
Occupied / Leased	Leased
County	Forrest
Project Number	108639-81100
FAP Number	FLBD-8769-00(001)
Project Description	Hall Avenue West Project / Bay Street to West Pine Street
Effective Date of Review Report	1/19/2022
Review Report Date	03/10/2022
Review Report Requested for	Original Appraisal

Prepared For



City of Hattiesburg

c/o Toby Banks, Mayor
P.O. Box 1898
Hattiesburg, MS 39403

This Appraisal Review Report Was Prepared By

John B. "Jeb" Stewart, SR/WA
State Licensed Certified General Real Estate Appraiser # 231
3340 N. Liberty Street, Canton, MS 39046

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Appraisal Review of Fair Market Value

Identification of the Appraisal Report Under Review	
Owner:	Martin Luther King Avenue Baptist Church / Hattiesburg Public School District
Parcel No:	PPIN #'s 32303; 32304; 21676
Project No:	108639-81100
County:	Forrest

Identification of Client and Intended Users

The City of Hattiesburg requested an appraisal review of the property described in this report. The intended user of this appraisal review report is the City of Hattiesburg and such employees or agents authorized by the City of Hattiesburg to utilize the information contained herein.

Intended Use of the Appraisal Review Report

The opinions, reasons, and conclusions contained in this appraisal review report approve or recommend an estimate of just compensation, contained in the appraisal report under review, as prescribed under the laws of the State of Mississippi, payable for the acquisition of specified real property rights, being acquired for public use. The estimate of just compensation approved or recommended in this appraisal review report includes the fair market value of the property, damages to the remaining property, if any, and such curative costs as are permitted by the Laws of the State of Mississippi and serves as the basis for the establishment of the amount believed to be just compensation for the acquisition of the "real property" described herein

Fair Market Value Defined

Fair Market Value as defined in the appraisal report under review is "the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress".

Does this acquisition involve relocation assistance?

☐ Yes

☒ No

The basis for this estimate is: ☒ Sales Comparison Approach

☐ Cost Approach

☐ Income Approach

Appraisal Effective Date: 01/19/2022

Report Date: 03/09/2022

Appraisal By: George Null, MAI; GA-679

Other Appraisals By:

Date:

Remainder:

Uneconomic Remnant

☐ Yes

☒ No

Estate Appraised and Under Review

☒

Fee

Area of Whole Tract

2.26 Acres

☐

Easement

Area of Remaining Tract

1.88 Acres

☒

Other

Area to be Acquired

0.38 Acres

The appraisal report considered under this appraisal review is:

☐ **Accepted** (meets all requirements but is not selected as recommended or approved)

☐ **Not Accepted** (refer to reviewer's comments and conclusions)

☒ **Recommended** (as the basis for the establishment of the amount believed to be just compensation)

☐ **Approved** (as the basis for the establishment of the amount believed to be just compensation)

Parcel No. PPIN #'S 32303; 32304; 21676

Project No. 108639-81100

Review Appraisal Report

Purpose of the Review Report	<i>Evaluate compliance with relevant USPAP, client requirement, and applicable regulations. If purpose of the assignment includes the development of the reviewer's opinion of value, then state whether the reviewer concurs or differs with the opinion of value under review.</i>
The purpose of this appraisal review report is to provide the client, City of Hattiesburg, with a recommended estimate of just compensation to be used as the basis for the establishment of the amount believed to be just compensation for the acquisition of real property rights defined in the appraisal report under review. It has been prepared to reach a final conclusion as to the reliability of the value presented. In addition, the purpose of this review is to assure that the appraisal under review meets the requirements of the Mississippi Department of Transportation, the Federal Highway Administration, and the <i>Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA)</i>, which are compatible with standards and practices of the current edition of the Appraisal Foundation's <i>Uniform Standards of Professional Appraisal Practice (USPAP)</i>, except to the extent that adherence to requirements of the Uniform Act, (P.L. 91-646, as amended, 42 U.S.C §4601, et seq. 49 CFR Part 24) required invocation of the USPAP Jurisdictional Exception Rule in certain instances, so as to conform with over-riding federal law relating to the valuation of real estate for government acquisition purposes.	

Scope of Work of the Review Report	<i>(State the nature, extent, and detail of the review process)</i>
The process of this review involved both a field inspection of the property appraised, field inspection of applicable comparable sales used, and a desk review of the appraisal report itself. The desk review involved verification that the appraisal report is in compliance with the requirements and needs of the Mississippi Department of Transportation, Mississippi State Law, regulations promulgated by the Federal Highway Administration, and the Uniform Standards of Professional Appraisal Practice. Also, the desk review is to assure that acceptable appraisal practice and techniques have been followed; proper data has been considered and explained, and that there are no relevant errors or mistakes in the report that would have an effect on the value or mislead the client. In regards to this review, Standards Rule 3-3(a) –(c) states: (a) When necessary for credible assignment results in the review of analyses, opinions and conclusions, the reviewer must: (i) Develop an opinion as to whether the analyses are appropriate within the context of the requirements applicable to that work. (ii) Develop an opinion as to whether the opinions and conclusions are credible within the context of the requirements applicable to that work; and (iii) Develop the reasons for any disagreement. (b) When necessary for credible assignment results in the review of a report, the reviewer must: (i) Develop an opinion as to whether the report is appropriate and not misleading within the context of the requirements applicable to that work; and (ii) Develop the reasons for any disagreement. (c) When the scope of work includes the reviewer developing his or her own opinion of value, review opinion, or real property appraisal consulting conclusion, the reviewer must comply with the Standard applicable to the development of that opinion. (i) The requirements of STANDARDS 1, 6, 7, and 9 apply to the reviewer's opinion of value for the property that is the subject of the appraisal review assignment. (ii) The requirements of STANDARD 3 apply to the reviewer's opinion of quality for the work that is the subject of the appraisal review assignment. d) The requirements of STANDARD 4 apply to the reviewer's analysis, recommendation, or opinion for the consulting problem that is the subject of the appraisal consulting assignment.	

Additions or Changes to the Scope of Work and Comments <i>(If necessary)</i>	<i>Describe the nature, extent and detail of the field/desk review or any other additional scope of work.</i>
None	

Effective Date and Subject of the Review Report	State the effective date of the opinion of the work under review, and the subject of an appraisal review assignment (i.e., all or part of an appraisal report, work file, or a combination of both)
The effective date of this appraisal review report is 1/19/2022. The same effective date as shown as the effective date in the appraisal is being utilized in this review. Review inspected the subject property and related comparable sales on 1/18/2022. The appraisal under review has been developed in compliance with USPAP Standard Rule 1 and reported in compliance with Standard Rule 2-2(b) as an Appraisal Report. The appraiser has invoked USPAP's Jurisdictional Exception provision in regards to Standard Rules 2-2(a)(v) and 2-2(b)(v); Standard Rule 1-3(a); and Standard Rule 1-4(f). Jurisdictional Exception is claimed based upon state law (Miss Code, Sec. 65-1-8) and federal laws and regulations (Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and "The Uniform Appraisal Standards for Federal Land Acquisitions"). An Appraisal Report is based upon the depth of analysis presented. Based on the data presented in the report under review along with reference to the Market Data Books, the appraisal report under review is considered to be an Appraisal Report.	

Ownership Interest Appraised in the Report Under Review	
Fee Simple with allocation to the leasehold and leased fee estates	

Summary of Approaches			
	Before Value	After Value	Difference
Sales Comparison Approach*	\$209,545	\$118,540	\$91,005
Cost Approach			
Income Approach			

*Land of Improved – "land only" with minor site improvements included.

Description of the Property Under Review	(Size - Before, After and Acquisition; Improvements; Location of acquisition; etc..)
The subject property is an improved urban tract of land located along the south side of Hall Avenue located in Blocks 65 and 66 of the D.D. McInnis Third Survey of the city of Hattiesburg situated within Section 16, Township 4 North, Range 13 West, Hattiesburg, Forrest County, MS. The tax ID numbers are PPIN #'S 32303; 32304; 21676. The subject property has a physical address of 110 Martin Luther King Avenue, Hattiesburg, MS 39401. Note; the subject property is part of a 16th Section Lease that was a paid-up lease with a 99-year lease term with approximately 24.4 years remaining. This equates to approximately 25% of the lease remaining. Hence; for appraisal purposes, the property will be valued in fee with 25% of the land value allocated to the leased fee interest and improvements with the remaining value or 75% going to the school board or leasehold interest. The total property consists 2.26 Acres or 98,446 sq. ft.± (2.26 x 43,560) consisting of three (3) tax parcels improved with a place of worship. This was based on the plat provided and the determination of the larger parcel which had a different highest and best use as the adjoining residential property. This residentially improved tract was valued within a separate report for these reasons. The subject property's special purpose larger parcel is currently improved with a two-story brick veneer church situated on a conventional foundation with an asphalt shingle roof. Related site improvements include paved parking and curbing; signage; specialty fence; and landscaping as well as ancillary structures. The church building was considered to be far removed from the proposed ROW (95 linear feet at its closest point) and not adversely affected by the acquisition; hence, was not discussed in detail or valued at this time. Related site improvements consists of Bradford pear trees, holly shrubs, ground cover, a 15' x 18' brick sign that is approximately 7 feet tall,	

Parcel No. PPIN #'S 32303; 32304; 21676

Project No. 108639-81100

additional shrubs trees and 24 (8 foot) wrought iron fence panels, some of which have custom design; and some chain link fence. Other related site improvements to include paved drives and parking. It should be noted that some of the fencing and additional landscaping is within the existing right of way

The subject property's larger parcel consists of a total of 2.26 acres more or less or 98,446 sq. ft.÷ being irregular in shape as shown by the plat provided. Reportedly, the subject property has approximately 163 linear feet of frontage along Hall Avenue (northern border) and 384 linear feet± along Martin Luther King Avenue (western border) with improved access being along Martin Luther King Avenue via two (2) paved/gravel drive. The access drive along Hall Avenue serviced the residence that was valued on a prior report and wasn't considered within this report.

Typical utilities are available on-site to include water, sewer, electricity, gas, and telephone. Additionally, typical utility easements are reportedly along local roadways; however, none adversely affecting the subject property. Being within the City of Hattiesburg, the subject property is also serviced by both police and fire protection.

As previously indicated, the subject property is an improved urban property being irregular in shape. The property enjoys access and frontage to Martin Luther King Avenue with addition exposure, frontage, and access along Hall Avenue. The topography of the site was level at road grade with drainage appearing to be adequate with none of the site being located within a designated flood zone. Being within the city, the subject property prescribes to city zoning of which the subject property is currently zoned B-2; Neighborhood Business District by the city of Hattiesburg. This zoning allows for primarily commercial uses with both residential and special purpose uses permitted. Hence, the property is currently a legally conforming property. Adjacent land uses consist of improved residential properties, commercial, and vacant land.

Within the highest and best use discussion, the appraiser discussed the current zoning; location; and most likely use of the subject property as well as the use of properties adjacent to and in close proximity to the subject property. The appraiser determined the highest and best use as vacant to be commercial or special purpose and as improved, its current use or special purpose.

The acquisition area consists of 0.38 acres more or less or 16,465 sq. ft.±. Site improvements within the acquisition area include 4 Bradford pear trees, 2 holly shrubs, 300 sf of ground cover, a 15' x 18' brick sign that is approximately 7 feet tall, eight additional shrubs trees and 24 (8 foot) wrought iron fence panels, some of which have custom design as well as approximately 1,500 sq. ft. of paved/gravel driveway. It was noted some landscaping and fencing is within the existing ROW.

In the after condition 1.88 acres more or less or 81,981 sq. ft.± will remain. The main improvements were not considered as they were far removed from the proposed acquisition – approximately 90 linear feet or more at the closest point. The existing access from Martin Luther King Avenue will remain. The frontage along Hall Avenue will be elevated due to the bridge crossing over the existing railroad. This access point will be closed in the after condition due to a proposed park/memorial in this area. The subject property maintains adequate access and exposure in the after condition according to the appraiser. The appraiser indicated that he researched proximity of other churches and found that these improvements were 90 linear feet or less from existing ROW; hence, no adverse effects were found for the remaining improvements. Damages were considered; however, the only damage items were cost to cure items such as fencing; landscaping; and signage. After the cost to cure, the property will reportedly be similar in the after condition as in the before condition.

Please note; any Extraordinary Assumptions within the appraisal apply to this appraisal review as well.

Comments	<i>State all known pertinent information sufficient for the client and intended users to adequately understand the rational for the reviewer's opinion and conclusions.</i>
The Jurisdictional Exception Rule has been invoked and explained. The appraiser gave an Acquisition Guide and other materials related to the subject property to a representative of the church and school board. The appraiser made a detailed inspection of the property at this time.	

The appraisal was completed as an Appraisal Report of Land; which is the correct format as the main improvements were not valued in the before condition or after condition as they were determined not to be adversely affected by the proposed ROW.

Within the appraisal, the appraiser considered all three approaches to value. The appraiser developed a total before and after "land" value using the market approach to value. The cost approach was not developed as "land only" was being valued. Additionally, the Income Approach was not developed due to the nature of the property being owner occupied/special purpose with Income Data being non-existent. As stated on Page 11 of the appraisal report, a jurisdictional exception is allowed to utilize only the Sales Comparison Approach when adequate data is available. The market data for the property as vacant with minor site improvements was adequate to provide a reliable value analysis.

After analyzing the market within their data base as well as searching the area for newer sales, the appraiser determined that the sales L-6 & L-9 required a modest time adjustment, 5% per year, otherwise known as a Market Conditions adjustment. The sales were all arm's length transactions; hence, no condition of sale adjustment was required. Note; the appraiser failed to make this adjustment as he has in other reports; hence, review will consider this adjustment on the noted sales in the final value reconciliation.

In the valuation of the subject's site identified consisting of 2.26 acres more or less or 98,446 sq. ft.±, the appraiser analyzed three (3) land sales ranging in size from 0.35 acres± to as large as 1.70 acres±. The sales ranged in price per square foot from a low of \$1.02/sq. ft. to a high of \$2.85/sq. ft. having occurred between 10/20 and 07/21.

All three (3) sales were considered similar to the subject property with all three (3) sales considered. Note; none of the sales were adjusted and a value was adopted via reconciliation of the sales utilized. For review purposes, the sales as adjusted ranged from a low of \$1.02 per sq. ft. to \$2.99 per sq. ft. For appraisal purposes, a unit value of \$2.00/sq. ft. was adopted or **\$196,890 RO**. The minor site improvements within the proposed acquisition area with a contributory value of **\$12,655** was added to the land value in before condition for a net indicated before value of **\$209,545**.

The contributory value of the minor site improvements within the acquisition area were based on prior quotes in the area as well as utilizing Marshall and Swift Cost Handbook, a nationally recognized cost source for real estate professionals.

The site improvements included the value of 1500 sq. ft. of gravel at a cost new of \$1.18/sf x 1500 = \$1,766 less 50% depreciation or **\$885 RO**. The landscaping was based on a cost estimate from a local nursery at **\$11,770**.

In the after condition, the same sales were utilized with the after value of the subject site considered similar as in the before condition. Hence, the same unit value in the before condition was adopted in the after condition or \$2.00/sq. ft. for 83,891 square foot for an adopted value of **\$163,965 RO**. The estimated cost to cures to replace fencing and signage were deducted from the after value for a net indicated after value of **\$118,540**.

The cost to cure for the fence was estimated using Marshall and Swift Cost Handbook, a nationally recognized cost source for real estate professionals as a local fence company would not commit to a firm number with a wide range. The cost to cure for the signage was obtained from a local company with the estimate found in the addendum of the appraisal report along with estimated costs for landscaping.

The difference or estimated Just Compensation based on the Sales Comparison Approach is then **\$91,005**.

Conclusion

Address the completeness of the material under review, adequacy and relevance of the data, appropriateness of the appraisal methods and techniques, and the appropriateness and reasonableness of the work under review, and state any disagreements. (State the opinions, reasons, conclusions required in SR 3-1(d-g) given the scope of work defined)

As this is a partial acquisition from an improved tract of land whereas the appraiser concluded the main improvements were not adversely affected, the appraiser completed a total before value of the subject property's site in the before and after condition. In the before condition, the contributory value of the site improvements not being replaced as a cost to cure were added to the land value for a net indicated before land value. In the after

condition, the cost to cures for the fencing and signage was deducted from the after-site value for a net indicated after land value. The appraiser has properly applied the Sales Comparison Approach for the value of the "land only" in both the before and after condition. The Cost and Income approaches to value were not considered necessary due to the available market data being adequate.

The following opinions were developed as a result of my review of the appraisal that is the subject of this report.

The value opinions stated in the report under review were developed in compliance with the applicable standards and requirements. I recommend the appraisal report for use as the establishment of Just Compensation due the owner as a result of the acquisition. The valuation techniques and analysis were acceptable, supported, and not misleading. As the value opinions were acceptable, the reviewer wasn't required to develop an independent value conclusion.

I recommend the appraiser's conclusion in regards to valuation of the subject property in the before and after condition. The final value conclusion is based on the Sales Comparison Approach.

The estimated due compensations is then **\$91,005**.

The estimate of just compensation, which includes fair market value of the property, damages to the remaining property, if any, and such curative costs as are permitted by the Laws of the State of Mississippi, is \$91,005 and is recommended as the basis for the establishment of the amount believed to be just compensation.

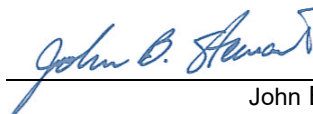
The recommended estimate of just compensation includes the following amounts compensable under State Law but not eligible for Federal reimbursements: (if none, state "none") None

Recommended Distribution of Final Estimate of Value

Parcel	Land	Improvements	Damages	Total
PPIN #'S 32303; 32304; 21676 (School Board)	\$24,695	\$0	\$0	\$24,695
MLK Baptist Church (Q1)	\$8,230	\$12,655	\$45,425	\$63,310
Total: Ninety-One Thousand Five Dollars				

Date
3/10/2022

Review Appraiser



John B. "Jeb" Stewart, SR/WA
State Licensed Certified General Real Estate Appraiser # 231

Assumptions and Limiting Conditions

This appraisal review is subject to the following underlying assumptions and limiting conditions:

1. This review is of the property described in this report.
2. The reviewer has made no survey of the property and assumes that the areas and dimensions shown herein are correct. Any sketch or identified survey of the property included in this report is the only for the purpose of assisting the reader in visualizing the property.
3. The reviewer assumes that the proposed project will be constructed in accordance with plans provided to reviewer and within established proposed right-of-way limits except as when needed construction easements, either temporary or permanent in nature. Reviewer reserves the right to make changes or additions to this review when necessary if notified of any change, additions, or alterations in plans provided.
4. This review incorporates the assumptions and limiting conditions of the appraisal report under review and is based upon information, estimates, and opinions that were expressed in the appraisal report as well as other sources considered being reliable and believing them to be true and correct. The reviewer does not assume responsibility for the accuracy of such items that were furnished by other parties.
5. Possession of this report does not imply the right of publication and it may not be used without the consent of the City of Hattiesburg.
6. If relevant information or errors come to the attention of the review, the reviewer reserves the right to change and revise valuations in this report.
7. This report is to be used in its entirety. The reviewer is not responsible if any part of this report is used to the exclusion of the remainder.
8. The reviewer will not disclose the contents of this review or appraisal report, except as provided for in the Uniform Standards of Professional Appraisal Practice.
9. Reviewer assumes the property to be free and clear of any and all hazardous waste and material or environmental contaminants. Unless otherwise stated in the appraisal report, the reviewer has no knowledge of any hidden or unapparent conditions of the property or adverse conditions (including the presence of hazardous wastes, toxic substances, etc.) that would make the property more or less valuable, and has assumed that there are no such conditions and makes no guarantees or warranties, express or implied, regarding the condition of the property. The reviewer will not be responsible for any such conditions that do exist or for engineering or testing that might be required to discover whether such conditions exist. Because the reviewer is not an expert in the field of environmental hazards, the review report must not be considered an environmental assessment of the property.

There are no additional assumptions and limiting conditions applicable to this review appraisal.

Certificate of Review Appraiser

I certify that, to the best of my knowledge and belief:

The facts and data reported by the review appraiser and used in the review process are true and correct.

The analyses, opinions, and conclusions in this review report are limited only by the assumption and limiting conditions stated in this review report, and are my personal, unbiased professional analyses, opinions, and conclusions. The recommended estimate of just compensation has been reached independently based on appraisal(s) and other factual data or record without collaboration.

I have no present or prospective interest in the property that is the subject of this report and I have no personal interest or bias with respect to the parties involved. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.

My engagement in this assignment was not contingent upon developing or reporting predetermined results and my compensation is not contingent on the analyses, opinions, or conclusions reached or reported.

The real property appraisal review documented in this appraisal review report was completed in accordance with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC 4601 et seq.), and requirements for appraisal review as outlined in 49 CFR 24, Subpart B, dated January 4, 2005. To the extent appropriate under the Laws of the State of Mississippi, the real property appraisal review documented in this appraisal review report was completed in conformity with the Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA), which are compatible with standards and practices of the Appraisal Foundation's Uniform Standards of Professional Appraisal Practice (USPAP), except to the extent that compliance with the Uniform Act, 49 CFR 24, and the UASFLA required invocation of the (USPAP) Jurisdictional Exception Rule in certain instances, so as to conform with the over-riding federal law relating to the valuation of real estate for government acquisition purposes.

I did personally inspect the subject property of the work under review, and I did personally inspected the market comparable sales sited in the appraisal report under review, and I did not personally verify the factual data presented in the appraisal report under review.

I understand that this estimate may be used in connection with Federal Aid Highway Project.

Unless expressly stated otherwise in this report, no one provided significant professional assistance to the review appraiser signing this review report.

The value estimate is based on the assumption that the property is not negatively affected by the existence of hazardous substances or detrimental environmental conditions unless otherwise stated in this report. The reviewer is not an expert in the identification of hazardous substances or detrimental environmental conditions. The reviewer's routine inspection of and inquisition about the subject property did not develop any information that indicated any apparent significant hazardous substances or detrimental environmental condition which would affect the property negatively unless otherwise stated in the report. It is possible that tests and inspections made by a qualified hazardous substances or environmental expert would reveal the existence of hazardous substances or detrimental environmental conditions on or around the property that would negatively affect its value. The reviewer reserves the right to make necessary adjustments, if needed, in this report of any hazardous substances or detrimental environmental conditions are discovered on or around the property being appraised. The review process has been made with the assumption that the appraised property and other properties around the appraised property are free and clear of any hazardous substances or detrimental environmental conditions.

I have performed a prior review on an appraisal of the subject property before the most recent revision within the past three-year period immediately preceding acceptance of this assignment.

Based upon my independent review of the attached appraisal report and the exercise of my professional judgment, the recommended estimate of just compensation is \$91,005.

Review Appraiser (sig.):

(print name)

(license)

John B. "Jeb" Stewart, SR/WA

State Licensed Certified General Real Estate

Appraiser # 231

Date: 3/10/2022

Parcel No. PPIN #'S 32303; 32304; 21676

Project No. 108639-81100

Review Appraisal Report

**APPRAISAL REPORT
of
Land with Improvements**

Parcel Number(s)	2-038C-16-002.00 / PPIN #32303 / 2-038C-16-003.00 / PPIN #32304 / 2-038C-16-005.00 / PPIN #21676
Owner	Martin Luther King Avenue Baptist Church / Hattiesburg Public School District
Vacant / Occupied / Leased	Leased
County	Forrest
Project Description	Hall Avenue West Project
Effective Date of the Appraisal	01/19/2022
Report Date	03/09/2022
Report Requested for	Original Appraisal

Prepared For

City of Hattiesburg
c/o Lamar Rutland, P.E.
Director of Engineering

This Appraisal and Appraisal Report Was Prepared By



6760 US Hwy 98, Suite 2 Hattiesburg, MS 39402
601-271-9044 (T) 601-271-9099 (F)

George Null, MAI
State Certified General
Real Estate Appraiser, GA-679

Possession of this report does not carry or imply a right of use and/or publication. This real property appraisal report is the property of the City of Hattiesburg and may not be utilized or cited in whole or in part without the express written consent of an authorized agent or official of the City of Hattiesburg.

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Appraisal Report

County	Forrest County		
Owner(s):	Hattiesburg Public School District (HPSD)	Address:	110 Martin Luther King Avenue Hattiesburg, MS 39401
Phone:	(601) 264-6010 (Michael Ainsworth, 16 th Section Lands Manager) and (601) 620-8509 (Dr. Michael Battle)		
Occupant(s):	Martin Luther King Baptist Church	Address:	110 Martin Luther King Avenue Hattiesburg, MS 39401
Phone:	(601)543-3647, c/o Mike Bethley		
Estate Appraised:	☒ Fee ☐ Easement ☒ Quit-Claim	Area of Whole Tract Area of Remaining Tract Area to be Acquired	+/- 2.26 Acres +/- 1.88 Acres +/- 0.38 Acres

Within the scope of the assignment and consistent with USPAP Standard Rules 1 and 2-2, the following analyses, opinions and conclusions have been developed and are reported in this **Appraisal Report**. Within the Scope of Work which is described in more detail later in this report, it may be necessary to invoke the Jurisdictional Exception Rule of the USPAP in certain instances so as to maintain conformity, and compliance with certain laws of the State of Mississippi, and certain Federal Regulations promulgated pursuant to The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto found at 49 C.F.R. Part 24.

Property Owner Contact Record

Subject Property Inspection Dates:	01/19/2022, 01/27/2022
The property owner or their designated representative was offered an opportunity to accompany the appraiser performing this appraisal during the appraisal inspection of the property. A letter, LPA acquisition guide, ROW packet, contact letter and plat map were given to the property owner during the property inspection on January 19th, 2022. On Tuesday January 18th, 2022, George Null contacted Mike Bethley to set up an inspection for the subject property. On January 19th, 2022, George Null, GA-679 met with Mr. Mike Bethley at the property, and showed him a copy of the site plan, and explained to him the right of way process. The subject of this report is the 16th section land leased by the church. I researched the Secretary of State website and there was no active lease information found. According to the title attorney this is a 99 year lease with approximately 24.4 years remaining on the lease. We walked the property and discussed the site improvements in the right of way, as well as the proximity to the church. The right of way will come within about 95 feet to the closest point of the church. Mr. Bethley said that this was to close for the church to continue operations. I measured the exterior of the church and did an exterior inspection of the improvements. Improvements located in the acquisition area are 4 Bradford pear trees, 2 holly shrubs, 300 sf of ground cover, a 15' x 18' brick sign that is approximately 7 feet tall, eight additional shrubs trees and 24 (8 foot) wrought iron fence panels, some of which have custom design. In addition, there is approximately 1,500 sf of a paved/gravel driveway. There is also a chain link fence along approximately 50 feet in length north of the acquisition area. These improvements will be removed in the after condition. It should be noted that some of the fencing and additional landscaping is in the existing right of way. The remaining improvements include the church and associated parking, drives and miscellaneous. Mr. Bethley was cordial but adamant about the proximity and the increased traffic and noise due to the bridge location. I documented this inspection with photographs found in this report.	
Contact Comments	
Is the Property being Leased or Rented? ☒ Yes ☐ No	
Lessor: Hattiesburg Public School District	Lessee: Martin Luther King Baptist Church
Terms: 99 year lease, beginning 07/01/1946	

Appraiser:
 (signature)
 (print name)
 (license type)



George Null, MAI
 State Certified General Real Estate Appraiser, GA-679

Date: 03/09/2022

Parcel No. PPIN# 21676 / PPIN# 32303 and PPIN# 32304 **Project No.** Hall Avenue West Project

Summary of Facts and Findings

Project No. FLBD-8769-00(001) LPA / 108639-81100	Parcel No. 2-038C-16-002.00 / PPIN #32303 and 2-038C-16-003.00 / PPIN #32304
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Property Owner: (Leased Fee) Hattiesburg Public School District (HPSD) Address: 110 Martin Luther King Avenue, Hattiesburg, MS 39401 Phone: (601) 264-6010 (Michael Ainsworth, 16 th Section Lands Manager) and (601) 620-8509 (Dr. Michael Battle)	Leasehold (Tenants) MLK Ave. Baptist Church; Address: 110 Martin Luther King Avenue Hattiesburg, MS 39401 Phone: (601)543-3647 (Mike Bethley)
---	--

Identification of the Property Appraised:	<i>Brief description of property identification, such as Section, Township, Range, Lot and Block, Street Address, etc.</i>
The subject property is located along the south side of Hall Avenue. The properties are partially located in Blocks 65 and 66 of the D.D. McInnis Third Survey of the City of Hattiesburg in Section 16, Township 4 North, Range 13 West, Forrest County, Mississippi.	

Estate Appraised:	<i>(Fee, Easement, Other)</i>
Fee Simple (with allocations to the leasehold and leased fee interests)	

Size of the Whole Tract (Before):	+/- 2.26 Acres
Size of the Remaining Parcel (After):	+/- 1.88 Acres
Size of the Area to be Acquired:	+/- 0.38 Acres or 16,465 square feet

Highest and Best Use Before (Whole Tract):	Special Purpose
Highest and Best Use After (Whole Tract):	Special Purpose

Size of the Larger Parcel(s) <i>(If different from the Whole Tract)</i>	+/- 2.26 Acres
Highest and Best Use of the Larger Parcel(s)	Special Purpose

Unit Value of the Land (Before)	\$2.00/sf
Unit Value of the Land and Improvements (Before)	N/A
Unit Value of the Land (After)	\$2.00/sf
Unit Value of the Land and Improvements (After)	N/A

Improvements:	
Improvements located in the acquisition area are 4 Bradford pear trees, 2 holly shrubs, 300 sf of ground cover, a 15' x 18' brick sign that is approximately 7 feet tall, eight additional shrubs trees and 24 (8 foot) wrought iron fence panels, some of which have custom design. In addition, there is approximately 1,500 sf of a paved/gravel driveway. There is also a chain link fence along approximately 50 feet in length north of the acquisition area. These improvements will be removed in the after condition. It should be noted that some of the fencing and additional landscaping is in the existing right of way. The remaining improvements include the church and associated parking, drives and miscellaneous.	

Total Before Value:	\$209,545
Total After Value:	\$118,540
Just Compensation:	\$91,005

Allocation of Compensation for All interest: <i>(List all interest such as Q interest, Temporary Easements, Warranty Deeds, etc.)</i> As stated, the church has 24.4 years remaining on a 99 year lease or 24.6% of the initial term. This was rounded to a 25% interest in the land for the leasehold interest. The Hattiesburg Public School District retains the remaining 75% interest in the land. All improvement values were allocated to the leasehold interest.				
Parcel No.	Land	Improvements	Damages	Total
MLK Baptist Church	\$8,230	\$12,655	\$45,425	\$66,310
Hattiesburg Public Schools	\$24,695	\$0	\$0	\$24,695

Effective Date of the Appraisal:	01/19/2022
Date of Report:	03/09/2022

Certification of Appraiser

I certify that, to the best of my knowledge and belief:

The statements of fact contained in this report are true and correct;

The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and legal instructions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions;

I have no present or prospective interest in the property appraised and no personal interest or bias with respect to the parties involved;

Neither my engagement or my compensation for completing this appraisal assignment was contingent upon my developing or reporting a predetermined result, predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal;

The real property appraisal documented in this appraisal report was completed in accordance with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC 4601 et seq.), and requirements for appraisals as outlined in 49 CFR 24, Subpart B, dated January 4, 2005. To the extent appropriate under the Laws of the State of Mississippi, the real property appraisal documented in this appraisal report was completed in conformity with the standards and practices of the Appraisal Foundation's Uniform Standards of Professional Appraisal Practice (USPAP), except to the extent that compliance with the Uniform Act, 49 CFR 24, required invocation of the (USPAP) Jurisdictional Exception Rule in certain instances, so as to conform with the over-riding federal law relating to the valuation of real estate for government acquisition purposes.

This appraisal conforms with the appropriate State laws, regulations, policies, and procedures applicable to the appraisal of real property rights proposed to be acquired by a government entity or other local public agency;

Unless expressly stated otherwise in this report, I made a personal inspection of the property appraised and the property owner, or his/her designated representative, was given the opportunity to accompany me on the inspection;

George Null made a personal inspection of the property that is the subject of this report on 01/19/2022;

Any decrease or increase in the fair market value of the real property prior to the date of valuation caused by the public improvement for which such property is to be acquired, or by the likelihood that the property would be acquired for such improvement, other than that due to physical deterioration within the reasonable control of the owner, was disregarded in determining the compensation for the property;

No one has provided significant professional assistance to me in the performance of this appraisal.

I have not performed any services regarding the subject property by the appraiser within the three (3) year period immediately preceding acceptance of the assignment, as an appraiser or any other capacity; If applicable: _____ ;

I have not revealed the findings and results of this appraisal report to anyone other than the proper officials of the City of Hattiesburg, and I will not do so until authorized by the client or until required by law.

My analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation;

The use of this report is subject to requirements of the Uniform Standards of Professional Appraisal Practice relating to review by its duly authorized representatives;

George Null is state certified by the State of Mississippi as a General Real Estate Appraiser, License No. GA-679, and as of the date of this report, has completed the continuing education program required to maintain that license.

Based upon my independent appraisal and the exercise of my professional judgment, it is my opinion that the valuation of the subject property is as follows:

Fair Market Value of the Whole Tract (as defined in this report)	Before	<u>\$209,545</u>
Fair Market Value of the Remainder Property	After	<u>\$118,540</u>
The difference between the Fair Market Value of the whole tract and the remainder is		<u>\$91,005</u>

as of 01/19/2022, and is my opinion of just compensation, for the acquisition of the real property rights described in this appraisal report.

Date **03/09/2022**

Appraiser (sig.)



(name)

George Null, MAI

(License)

State Certified General Real

Estate Appraiser, #GA-679

Appraisal Scope of the Work

Identification of Client and Intended Users

The City of Hattiesburg requested appraisal of the property described in this report. The intended user of this appraisal report is the City of Hattiesburg and such employees or agents authorized by the City of Hattiesburg to utilize the information contained herein. There are no other intended users.

Intended Use of the Appraisal Report

The facts, analyses, opinions, and conclusions contained in this appraisal report establish an estimate of just compensation, as prescribed under the laws of the State of Mississippi, payable for the acquisition of specified real property rights, being acquired for public use. The estimate of just compensation in this appraisal report includes the fair market value of the property and such curative costs as are permitted by the Laws of the State of Mississippi, and, upon determination by appraisal review that this appraisal report complies with all applicable standards and requirements, serves as the basis for the establishment of the amount believed to be just compensation for the acquisition of the “real property” described herein. There are no other intended uses.

Purpose of the Appraisal

The purpose of the appraisal is to render an opinion as to the Fair Market Value of specified real property as of the stated date and, through application of the Before and After Rule as prescribed under the laws of the State of Mississippi, the valuation of the remainder of specified real property. The difference between these two valuations is the value being sought by the client and is reported to the client as the “fair market value of the area to be acquired and damages, if any, to the remainder”.

Parameters of Data Search

The scope of the assignment is to collect and verify as completely as possible, comparable sales, and rentals, if applicable, from within the subject area, or other areas that, in the opinion of the appraiser, are reasonably comparable to the subject area, so that a value conclusion may be derived.

Sources of the data, utilized for this appraisal, include county deed records, real estate brokers, real estate appraisers, and other individuals knowledgeable in the local real estate market and, as applicable and appropriate, other individuals knowledgeable in specific types of property. One or more of the principals involved in the transactions, grantor, grantee, attorney, financier, broker of the transaction, or their representatives, have verified the market sales used in this report. Mississippi is a non-disclosure State. Other than the recordation of a deed, there is no legal requirement for grantors, grantees, or other parties to a transaction, to disclose any information relative to the transfer of real property. Since there is no legal requirement for the deed to include the transaction price when it is recorded, it is possible that there are transactions for which purchase price data could not be obtained.

Extent of Property Inspection

Per the **USPAP Scope of Work Rule**, “*The report must contain sufficient information to allow intended users to understand the scope of work performed*”. The extent of the subject property inspection, including interior and exterior areas, is required content of the appraisal report per the USPAP scope of work rule and per guidance on Federal regulation requirements (49 CFR Part 24). The “extent of the inspection process” includes but is not limited to: a declaration as to the part or parts of the property that were actually viewed or not viewed during the inspection; for structures and other improvements, whether such items were physically measured by the appraiser, whether interior and/or exterior inspection was performed for each item, and a declaration regarding the level of detail associated with the inspection of tangible property. The following is a description of the extent of the inspection performed on the subject property for this appraisal assignment

On January 19th, 2022, George Null, GA-679 met with Mr. Mike Bethley at the property, and showed him a copy of the site plan, and explained to him the right of way process. The subject of this report is the 16th section land leased by the church, excluding the rental house. I researched the Secretary of State website and there was no active lease information found. According to the title attorney, the lease is a 99 year lease with approximately 24.4 years remaining on the lease. We walked the property and discussed the site improvements in the right of way, as well as the proximity to the church. The right of way will come within about 95 feet to the closest point of the church. Mr. Bethley said that this was too close for the church to continue operations. I measured the exterior of the church and did an exterior inspection of the improvements. Improvements located in the acquisition area are 4 Bradford pear trees, 2 holly shrubs, 300 sf of

ground cover, a 15' x 18' brick sign that is approximately 7 feet tall, eight additional shrubs trees and 24 (8 foot) wrought iron fence panels, some of which have custom design. In addition, there is approximately 1,500 sf of a paved/gravel driveway. There is also a chain link fence along approximately 50 feet in length north of the acquisition area. These improvements will be removed in the after condition. It should be noted that some of the fencing and additional landscaping is in the existing right of way. The remaining improvements include the church and associated parking, drives and miscellaneous. I documented this inspection with photographs found in this report.

Valuation Process

The data obtained is to be analyzed, when appropriate, via the Cost, Income, and Sales Comparison Approaches to Value, with appropriate support for any adjustments made and the value conclusions. The values derived via these three approaches, if applied, are then reconciled into final opinions of value for the subject property for both the before condition and after condition, respectively. The just compensation opinion thus derived by this process encompasses the value of the partial acquisition, improvements within the acquisition, damages to the remainder (if any), including any curative costs impacted by the acquisition in accordance with the Uniform Act and the Laws of the State of Mississippi.

Property Rights Appraised

The property rights appraised in this report consist of fee simple ownership.

"Fee Simple Estate" is defined as: "Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power and escheat." Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th ed., s.v. "fee simple estate", (Chicago: Appraisal Institute, 2015), PDF e-book.

Property Estate(s) Appraised:	List and describe, if necessary, the property right(s) appraised (i.e., fee simple, easement, other)
Fee Simple. It should be noted that the property is subject to a long term ground lease to the trustees of Martin Luther King Baptist Church. A Quitclaim (Q) for the Martin Luther King Baptist Church deed is being valued in this report.	

Fair Market Value Defined

Fair Market Value is value in exchange. It is "the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress". (See the *Terms and Definitions* section of this report for the source of this definition)

Assumptions and Limiting Conditions

This appraisal is subject to the following underlying assumptions and limiting conditions:

The appraiser certifies that to the best of his or her acknowledge and belief, the statements contained in this appraisal report, subject to the limiting conditions set forth below are correct.

This appraisal is of the property described in this report.

The appraiser has made no survey of the property and assumes that the areas and dimensions shown herein are correct. Any sketch or identified survey of the property included in this report is only for the purpose of assisting the reader in visualizing the property.

Certain information in this report was obtained from and/or furnished by sources believed to be reliable; however, the absolute accuracy of information is not guaranteed. If relevant information or errors come to the attention of the appraiser, the appraiser reserves the right to change, alter, revise, or void the opinions contained in this report in part or in their entirety.

Possession of this report does not imply the right of publication and it may not be used without the consent of the City of Hattiesburg. This report is to be used in its entirety. The appraiser is not responsible if any part of this report is used to the exclusion of the remainder.

I am not familiar with any engineering studies made to determine the bearing capacity of the land or that indicate any mineral contents of a significant nature.

The appraiser has no knowledge of the existence of hazardous materials on the property unless otherwise stated in this report. The appraiser, however, is not qualified to detect such substances. The presence of any such substances, which may be potentially hazardous materials, may affect the value of the property. However, as directed by the client, City of Hattiesburg, this value estimate is predicated on the assumption that there are no such materials on or in the property that would cause a loss in value.

To the best of my knowledge no portion of the value assigned to the subject property is for items, which are non-compensable according to established law of the State of Mississippi.

This property has been appraised as though free of all liens, unless otherwise stated herein. No responsibility is assumed for matters legal in nature, nor is any opinion of title rendered herewith. Good title is assumed.

Certain background and other relevant information applicable to the appraisal of this property and for this appraisal report is given in the project data brochure, which is incorporated herein by reference.

This appraisal was performed within requirements of regulation, law, and supplemental appraisal standards that are applicable to appraisals performed for governmental acquisitions and thus, certain valuation opinions and conclusions stated in this appraisal report are affected by these requirements. Applicable Mississippi Law is found at Mississippi Code Section 65, Section 43, Section 11, and also found in certain published decisions of the Mississippi Supreme Court as they pertain to property acquisition by Eminent Domain. Applicable Federal Law is found in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto found at 49 C.F.R. Part 24,

The reported value estimate assumed no impact on value because of "Section 404 wetlands", as defined by the U. S. Army Corps of Engineers. The client is urged to seek advice of an expert to determine any potential impact on wetlands on the property.

There are no additional assumptions and limiting conditions applicable to this appraisal.
--

Extraordinary Assumptions and Hypothetical Conditions

Standard Rule 1-2(f) and (g) and Standard Rule 2-2 (a)(xi) and (b)(xi) of the *Uniform Standards of Professional Appraisal Practice* require the appraiser to identify and state all extraordinary assumptions and hypothetical conditions when developing and reporting an appraisal.

- identify any extraordinary assumptions necessary in the assignment. An extraordinary assumption may be used in an assignment only if:

- (i) the extraordinary assumption is required to properly develop credible opinions and conclusions;
- (ii) the appraiser has a reasonable basis for the extraordinary assumption; and
- (iii) use of the extraordinary assumption results in a credible analysis;

- identify any hypothetical conditions necessary in the assignment. A hypothetical condition may be used in an assignment only if:

- (i) use of the hypothetical condition is clearly required for legal purposes, for purposes of reasonable analysis, or for purposes of comparison; and
- (ii) use of the hypothetical condition results in a credible analysis; and
- (h) determine the scope of work necessary to produce credible assignment results in accordance with the SCOPE OF WORK RULE.24

USPAP- 2020-2021 Standards Rule 1-2 – (f)-(g)

USPAP 2020-2021, pg. 4 defines extraordinary assumption as “assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser’s opinions or conclusions. Uncertain information might include physical, legal or economic characteristics of the subject property; or conditions external to the property, such as market conditions or trends, or the integrity of data used in an analysis.

USPAP 2020-2021, pg. 4 defines hypothetical condition as “a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for purpose of analysis.” Hypothetical conditions are contrary to known facts about physical, legal, or economic characteristic of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

An appraiser cannot make an assumption or accept an instruction that is unreasonable or misleading, nor can an appraiser make an assumption that corrupts the validity of the value estimate. Written legal instructions that have proper foundation must be accepted and must be included in the appraisal report.

Following, if applicable, are all extraordinary assumptions and/or hypothetical conditions that affected the analyses, opinions, and conclusions of this report which are explained in the scope of work:
--

The appraisal of the AFTER condition is performed under the hypothetical condition that, as of the appraised date of value, the proposed real property acquisition is completed, any associated construction for the project is complete, and that the construction is consistent with the plats and plans described in this report.
--

Following, if applicable, are appraiser instructions that affected the analyses, opinions, and conclusions of this report:

None

Statement on The Use of Significant Professional Assistance and The Use of Consultant's Report(s)

If professional assistance was provided to the appraiser, the name of the individual(s) providing such assistance must be stated below. This includes both professional appraisal assistance and providers of subsidiary assistance, e.g., appraisers, registered foresters, architects, attorneys, planning and permitting consultants, engineers, cost estimators, marketing consultants, etc., etc.

If applicable, the following is a description of any necessary or appropriate steps that were performed in the completion of this appraisal assignment that were not previously noted in the scope of work, including a list of the individual(s) providing professional assistance and the type and extent of assistance provided.

Survey plats were provided to the appraiser from Clearpoint Consulting Engineers, P.A. Wetlands and flood zone maps were referenced from online databases.

Declaration of Jurisdictional Exception to the Uniform Standards of Professional Appraisal Practice

In conformity with the requirements of USPAP Standard Rule 2-1(a, b, & c), this section of the appraisal report references those specific laws and regulations that prescribe methods and procedures of appraisal and appraisal reporting contrary to that required by USPAP. Application of the Jurisdictional Exception Rule of the USPAP is hereby declared.

Linking Estimate of Value to Specific Exposure Time:

The Comment to USPAP Standards Rule 1-2(c) states *“when reasonable exposure time is a component of the definition for the value opinion being developed, the appraiser must also develop an opinion of reasonable exposure time linked to that value opinion”*. The Comment to USPAP Standards Rule 2-2(a)(v) and 2-2(b)(v) states *“when an opinion of reasonable exposure time has been developed in compliance with Standards Rule 1-2(c), the opinion must be stated in the report”*. Under Federal appraisal standards, “exposure time” statements are not permitted to appear in appraisal reports prepared for governmental acquisitions. Therefore, pursuant to the authority conveyed to the public agency through Miss. Code, Sec. 65-1-8 all real property appraisals prepared for the client, whether by staff employees or contracted fee appraisers, shall invoke a Jurisdictional Exception to the requirements of USPAP 2-2(a)(v) and 2-2(b)(v) in order to maintain compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646.

Consideration of Land Use Regulations:

USPAP Standard Rule 1-3(a) requires analysis of the effect existing land use regulations and reasonably probable modifications to same. This requirement is contrary to Federal appraisal requirements found at 49 CFR 24.103(b). All real property appraisals performed for the local public agencies/ government authorities, whether by staff employees or contracted fee appraisers, must disregard any recent rezoning if such rezoning was a consequence of, or in anticipation of, the government project for which the appraisal is being conducted. Therefore, pursuant to requirements of Federal regulation at 49 CFR 24.103(b), all real property appraisals shall invoke a Jurisdictional Exception to the requirements of USPAP 1-3(a) in order to maintain compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto .

Consideration of Anticipated Public Projects:

USPAP Standard Rule 1-4(f) requires the appraiser to analyze the effect on value of anticipated public improvements located on or off the property appraised. The appraisal requirements of USPAP Standard Rule 1-4(f) are contrary to State and Federal Law regarding appraisals performed for government acquisitions. All real property appraisals performed for the City of Hattiesburg, whether by staff employees or contracted fee appraisers, must disregard any decrease or increase in the fair market value of real property caused by the government project for which the appraisal is being conducted. Therefore, per Mississippi Law found in the Miss. Code, at Sec. 43-37-31 and Federal Law found in Title III, Sec. 301(3) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto found at 49 C.F.R. Part 24.103(b) all real property appraisals performed for the City of Hattiesburg shall invoke a Jurisdictional Exception to the requirements of USPAP 1-4(f).

Valuation by Market Approach Only (a.k.a. Sales Comparison Method):

Unless specifically prohibited by Law, all real property appraisals performed for the purpose of governmental acquisitions within the scope of The Uniform Act are authorized to omit cost and income approaches to valuation where sufficient sales data exists to produce a reliable opinion of value by use of the Market Approach alone (*a.k.a. Sales Comparison Approach*). Therefore, pursuant to Federal Law under the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto found at 49 C.F.R. Part 24.103(a)(3), all real property appraisals performed for local public agencies shall invoke Jurisdictional Exception to the requirements of Standard Rule 1-4(b, c), and Standard Rule 2-2(a)(xi) as it pertains to same.

Additions to the Scope of Work and Comments (If necessary)	
The Scope of Work included:	
a) an inspection of the subject property and the research and collection of data pertaining to recent economic development and real estate activity in Forrest County, Mississippi, as well as other parts of the state. The Sales Comparison approach to value was used. Information was collected from courthouse records, files of reliable real estate professionals, property owners and developers, the search of public records through the use of commercial sources of data such as printed comparable data services and computerized databases. Search parameters such as dates of sales, leases, locations, sizes, and types of properties were started with relatively narrow constraints and, if necessary, were expanded until the appraiser had either retrieved data sufficient (in the appraiser's opinion) to estimate market value, or until the appraiser believed that he had reasonably exhausted the available pool of data. Efforts were made to verify the data with persons directly involved in the transactions such as buyers, seller, brokers, or agents. At the appraiser's discretion, some data was used without personal verification if, in	

the appraiser's opinion, the data appeared to be correct. In addition, the appraiser considered any appropriate listings or properties found through observation during appraiser's data collection process. The appraiser reported only the data deemed to be pertinent to the valuation problem;

b) has investigated and analyzed any pertinent easements or restriction, on the fee simple ownership of the subject property. It is the client's responsibility to supply the appraiser with a title report. If a title report is not available, the appraiser will rely on a visual inspection and identify any readily apparent easements or restrictions;

c) has analyzed the data found and has reached conclusions regarding the market value, as defined in the report, of the subject property as of the date of value using appropriate valuation approach(es) identified above;

d) has prepared the appraisal in compliance with the Uniform Standards of Professional Appraisal Practice as promulgated by The Appraisal Foundation and the Code of Professional Ethics and Certification Standard of the Appraisal Institute;

e) has prepared an Appraisal Report, as defined in USPAP, which includes photographs of the subject property, descriptions of the subject neighborhood, the site, and any improvements on the site, a description of the zoning, a highest and best use analysis, a summary of the most important sales used in the appraiser's valuation, a reconciliation and conclusion, and other data deemed by the appraiser to be relevant to the assignment. Pertinent data and analyses not included in the report may be retained in the appraiser's files.

Area & Neighborhood Data

Area Defined	<i>Brief description of the subject area boundaries or general limits, including the county or counties, prominent cities and prominent geographic features, i.e. Interstate or U.S. Highways, navigable waterways, etc.)</i>		
The subject property is located along the south side of Hall Avenue, in downtown Hattiesburg, Forrest County, Mississippi. This area is primarily older residential homes and vacant land. At the southern end of Bay Street there is the police station, a closed gas station, and a funeral home. The zoning class changes to B-2 zoning at this intersection. There is consistent traffic along Hall Avenue, although not strong enough to command a commercial use.			
Subject Location	☒ Urban	☐ Suburban	☐ Rural
Population Growth Rate	☐ Increasing	☒ Stable	☐ Decreasing
Primary Shopping/Trade Center – Area	Hattiesburg		
Primary Shopping/Trade Center – County	Forrest		
Nearest Employment Center	Hattiesburg		

Neighborhood Defined	<i>(Brief description of the neighborhood area boundaries or general limits, including, if applicable, community name or other name reference utilized by area residents)</i>				
The subject property is located along the south side of Hall Avenue. Bay Street is to the east and connects North Main Street and James Street. Martin Luther King Avenue is to the west and connects with Hall Avenue. The traffic counts for Bay Street are 5,300, 5,900 for Hall Avenue, and 1,600 for Martin Luther King Avenue. The surrounding uses are predominantly commercial and residential.					
The subject neighborhood is the southeastern residential area of Hattiesburg and south of the more commercialized downtown Hattiesburg area to the north.					
Neighborhood Zoning	☐ Res.	☒ Comm.	☐ Ind.	☐ Other	☐ None
Neighborhood Utilities	☒ Elec.	☐ Gas	☒ Water		
	☒ All	☐ Part	☒ Sewerage		
	☐ Other				
Neighborhood Imp's	☒ Storm Sewer	☒ Crb/Gtr	☒ Sidewalk	☒ Street Lights	
	☐ Other				
Schools	Hattiesburg Public Schools & William Carey University to the south				
Recreational Facilities					
Fire	Hattiesburg				
Police	Hattiesburg				
Other					

Comments:	<i>(Comments regarding but not limited to real estate activity, recently completed or imminent public projects, significant private business projects / expansions / cutbacks, or other items worthy of noting, if applicable)</i>
The downtown Hattiesburg market is stable to slightly increasing, with increased investment and demand in the area. There is continued attempts at revitalizing the downtown area with restaurants, bars, and retail shopping. Some of the historic homes have been revitalized and remodeled as well. Several restaurants have closed since COVID began, while some have remained open. The continued interest in downtown Hattiesburg presents a stable, but cautious outlook for the area.	

Site Description

(Before – Acquisition - After)

Site Description — Before

An analysis of the subject site is particularly important in estimating its highest and best use and for separate valuation from the improvements. The following is a discussion of the subject site in the Before Condition.

Information, regarding the total ownership, has been obtained by the appraiser from current county records, the acquisition map and other reliable sources, including a physical inspection of the site. (A survey and/or metes and bounds description of the total subject property has not been provided to the appraiser)

Present Use of Site: Special Purpose as a religious facility

Legal Description of the Total Ownership: +/- 0.38 Acres or +/- 16,465 sf effecting three parcels (PPIN#'s 32303, 32304, and 21676) located in Blocks 65 and 66 of the D.D. McInnis Third Survey of the City of Hattiesburg in Section 16, Township 4 North, Range 13 West, Forrest County, Mississippi. See the plat on the following pages for a more precise legal description.

Location: The subject property is located along the south side of Hall Avenue in Hattiesburg, Forrest County, Mississippi. Hall Avenue is a busy corridor with several historic Hattiesburg homes that have been renovated over the years.

Dimensions/Area/Shape: The subject property is irregular in shape with access along Martin Luther King Avenue. The property contains approximately +/- 2.26 acres and is contained in three tax parcels.

Frontage/Access: The subject property has +/- 163' of frontage along Hall Avenue along its northern border and +/- 383.7' of frontage along Martin Luther King Avenue along its western border. The property has access to both Hall Avenue and Martin Luther King Avenue.

Topography: The subject property is a fairly level lot and is not located in a flood zone area or designated wetlands.

Flood Plain and Drainage Data: According the FEMA National Flood Hazard map, identified as panel #: 28035C0108D, dated March 2nd, 2010, the property is located in a flood zone X, which is not a designated flood zone area.



WETLANDS MAP



Hall Ave. Project



January 17, 2022

Wetlands

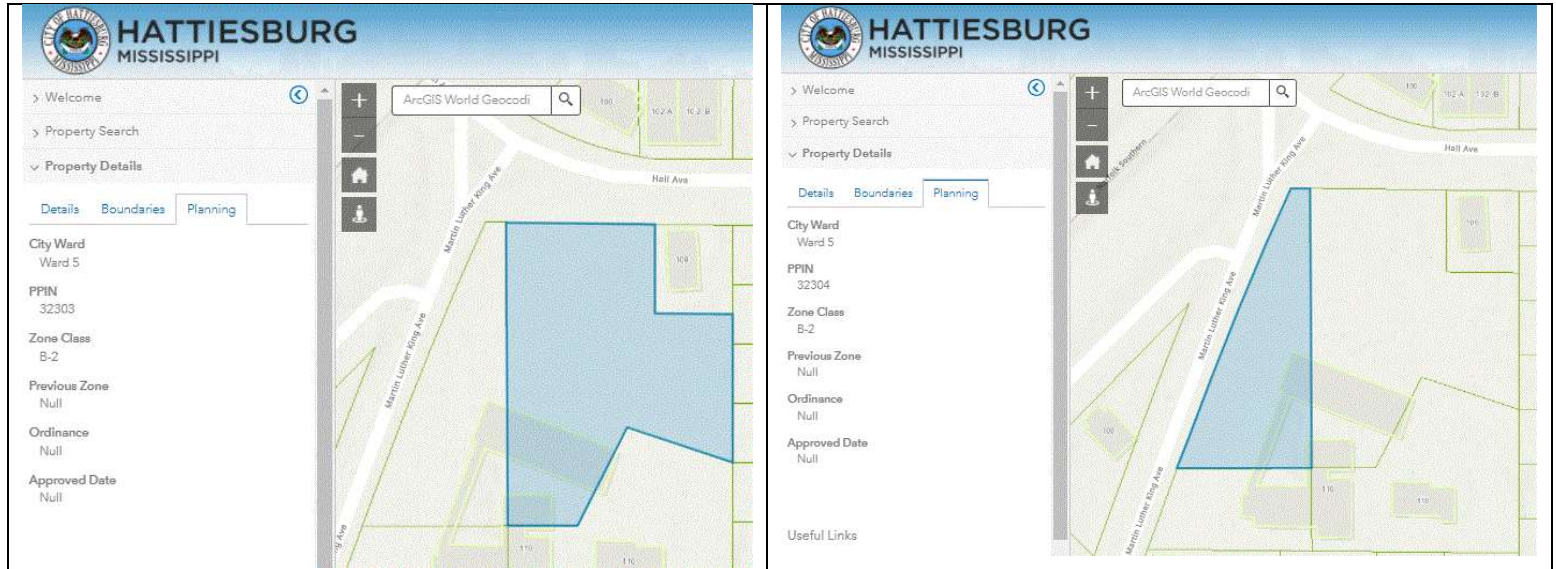
	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or completeness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

**** No wetlands are indicated on the subject property from the map found above.**

Use Restrictions: The property is zoned B-2, Neighborhood Business District by the City of Hattiesburg. This zoning allows for primarily commercial uses, with special purpose uses permitted. Please see the addend of this report for the full zoning ordinances.



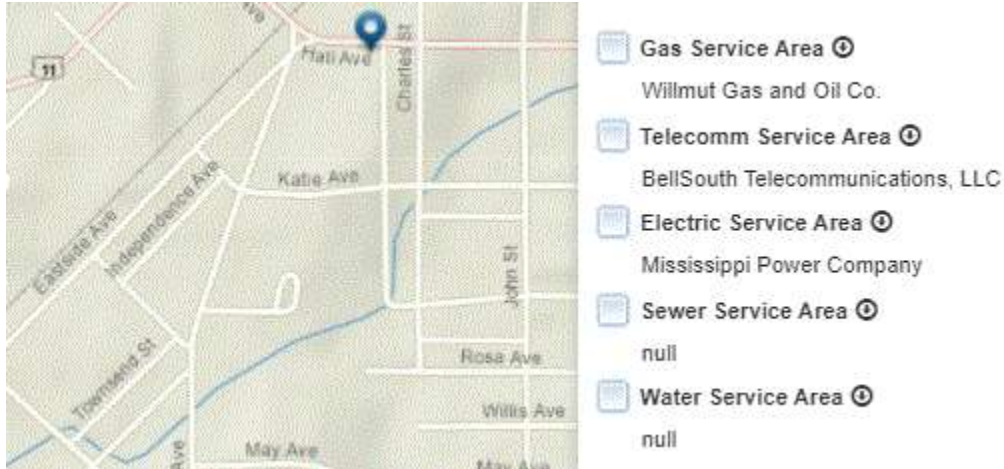
4.5.9 B-2 Neighborhood Business District.	
Description and Purpose.	Characteristic Development Type
The purpose of the B-2 District is to provide for retail and personal service uses in locations convenient to residential neighborhoods consistent with comprehensive planning policies. This district is consistent with the Neighborhood Business District in the Comprehensive Plan.	
District Uses and Use Standards	See Section 5
District Dimensional Standards	See Section 6
District Development Standards	See Section 7
District Sign Standards	See Section 10

Site Improvements: Improvements located in the acquisition area are 4 Bradford pear trees, 2 holly shrubs, 300 sf of ground cover, a 15' x 18' brick sign that is approximately 7 feet tall, eight additional shrubs trees and 24 (8 foot) wrought iron fence panels, some of which have custom design. In addition, there is approximately 1,500 sf of a paved/gravel driveway. There is also a chain link fence along approximately 50 feet in length north of the acquisition area. These improvements will be removed in the after condition. It should be noted that some of the fencing and additional landscaping is in the existing right of way. The remaining improvements include the church and associated parking, drives and miscellaneous.

Adjacent Land Uses: Residential & Commercial (Convenience Store)

Easements/Encumbrances: None

Utilities:



Utility Service	Supplier	Utility Service	Supplier
Electricity	Mississippi Power Company	Sewer	City of Hattiesburg
Gas	Willmut Gas And Oil Co.	Water	City of Hattiesburg
Garbage Collection	City of Hattiesburg	Telephone	BellSouth Telecomm.

Comments:	<i>Include additional narrative, as needed.</i>
The subject is located in a mostly residential area of Hattiesburg, with scattered commercial and older residential homes that were built between 1930-1960. Several of these homes are historical homes that have been renovated. The age of the house located on the subject property is unknown, according to the Forrest County Tax Assessor's website.	

Site Description — Area of Acquisition

Location: The acquisition area is +/- 0.38 acres or +/-16,465 sf contained on PPIN#s 32303 and 32304. The acquisition encompasses the northern portion of both parcels located along the south side of Hall Avenue.

Following the acquisition, there will be +/- 1.88 acres remaining on the Martin Luther King Avenue Baptist Church property, that is the subject of this report.

Dimensions/Area/Shape: The fee simple acquisition area contains a +/- 0.38 acres or +/- 16,465 sf area contained in two rectangular parcels. The dimensions are approximately 80' x 200', more or less.

Site Improvements: Improvements located in the acquisition area are 4 Bradford pear trees, 2 holly shrubs, 300 sf of ground cover, a 15' x 18' brick sign that is approximately 7 feet tall, eight additional shrubs trees and 24 (8 foot) wrought iron fence panels, some of which have custom design. In addition, there is approximately 1,500 sf of a paved/gravel driveway. There is also a chain link fence along approximately 50 feet in length north of the acquisition area. These improvements will be removed in the after condition. It should be noted that some of the fencing and additional landscaping is in the existing right of way. The remaining improvements include the church and associated parking, drives and miscellaneous.



A photo of the property and acquisition area is shown above.

Rights to be Acquired for Each Parcel: Fee Simple



View of the proposed Hall Avenue West Project.

SURVEY



Site Description — After

Dimensions/Area/Shape: Following the acquisition, the larger parcel and subject property of this report will have +/- 1.88 acres remaining.

Frontage/Access:



- Topography:** Same as in before condition.
- Flood Plain and Drainage Data:** Same as in before condition.
- Use Restrictions:** Same as in before condition.
- Off-Site Public Improvements:** Same as in before condition.
- Easements/Encumbrances:** Same as in before condition.
- Utilities:** Same as in before condition.

Comments:	Include additional narrative, as needed.
There will be an elevated bridge with a clear height of approximately 19 feet constructed in the proposed right of way. The proposed right of way will be at about 90 feet or more at its closest point. I researched proximity of existing churches and churches that had sold in the area and found that most existing churches are 90 feet or less from the existing right of way. The gravel/paved road along the northeastern boundary will be closed. The property will no longer have access along Hall Avenue. It will retain two access points off of Martin Luther King Avenue, which was still considered to be adequate.	

Items of Real Property Appraised

The property to be appraised in this report is +/- 2.26 acres of land and the effected site improvements. The church buildings were not affected and not valued in this report.

Items of Personal Property Not Appraised

None.



Front view of the church from Martin Luther King Avenue.



Additional view of the subject property.



Additional view of the subject property and the proposed acquisition area.



View of the trees and fencing located within the proposed acquisition area.



View of the fencing located within the proposed acquisition area.



View of the corner of Hall Avenue and Martin Luther King Avenue with acquisition area to the right.



View of the sign located within the proposed acquisition area.



View of the landscape trees and fencing partially located in the city right of way and partially within the proposed acquisition area.



Additional view of the parking lot improvements located outside the proposed acquisition area.



Additional view of the proposed acquisition area.

Whole Tract and Larger Parcel Declaration

Whole Tract Declaration

On those properties where the total ownership and the Larger Parcel are not one-in-the-same, it is possible for a property to contain several Larger Parcels (Highest & Best Use areas). The acquisition may affect more than one Larger Parcel (H&BU area), it is essential that there be a clear declaration by the appraiser as to what part and/or parts of the total ownership are being appraised. This section of the appraisal report declares exactly what was valued in the appraisal process and includes:

- The size of the contiguous total ownership provided to the appraiser by the client
- Declaration of the Larger Parcels (H&BU areas) within the total ownership that are unaffected
- Identification and delineation of the affected Larger Parcels (H&BU areas) described by the following methods as appropriate:
 - a. Clearly visible physical features- road, creek, ditch, fence, tree line, etc.
 - b. Subdivision boundary, Zoning line, corporate limits, county line, section line, etc.
 - c. Dimensioned area as determined by the appraiser

Total "Whole Tract" Declaration and Summary	(Ac./S.F.)
According to the Tax Assessor's website, the tract is irregular in shape and contains a total of +/- 2.41 acres, more or less. The adjacent property is owned by the Hattiesburg Public School District is 0.15 acres and is subject to a long term lease to Martin Luther King Baptist Church. This was considered the whole tract.	

Declaration of the Larger Parcel

There are three conditions or tests that are considered in determining the larger parcel, unity of ownership, unity of use, and contiguity. In certain instances, the larger parcel may not include all the lands that are contiguous and under identical ownership. In determining the larger parcel to be appraised, reliance on unity of ownership and unit of use will be given substantial weight. In determining the larger parcel, the following is noted:

Larger Parcel(s) Summary	(Dimensions, Size, and Use)
The 0.15 acre lot was considered to have a highest and best use as residential, and therefore, was valued as a separate larger parcel. The +/- 2.26 acres has a highest and best use as special purpose and was valued as the larger parcel of this appraisal report.	

Highest and Best Use Analysis

Highest and best use is defined in *The Dictionary of Real Estate Appraisal, Sixth Edition, 2015, page 109*, compiled by the Appraisal Institute as:

“The reasonably probable use of property that results in the highest value. The four criteria that the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity.”

In order to arrive at a highest and best use estimate, the land is first analyzed as if vacant. Later, the total property, including any existing improvements, is analyzed. In estimating the highest and best use of the subject site, as if vacant and improved, you must first carefully study the existing land use patterns and trends in the area. In estimating the highest and best use of the subject property, the appraiser has considered very carefully the following factors:

1. The land and location is considered in relationship to the local area.
2. The physical characteristics of the land and improvements, including the land's overall size, shape, road frontage, topography, soil and sub-soil conditions and available utilities.
3. In analyzing the highest and best use of the subject, as applicable and appropriate, the Sales Comparison Approach, Cost Approach, and Income Approach are considered.

The procedure used in this report to estimate highest and best use of the subject site was to consider, in sequence, the site's utility, its legal use, its possible and most feasible use, and, finally, the optimum or highest and best use.

Highest and Best Use Analysis	<i>(Address legal permissibility, physical possibility, financial feasibility, maximum productivity, in Before & After for all larger parcels or whole tract as applicable)</i>
Physically possible: The site has access to Hall Avenue and Martin Luther King Avenue and is physically large enough for a wide variety of uses. The +/- 2.26 acre site is not physically limited by its size, and any sort of commercial, industrial, retail or single family use would be physically possible on the site. Legally permissible: The site is zoned B-2 by the City of Hattiesburg. This zoning district is intended for business uses. However, the special purpose use is a permitted use. Financially feasible: The site is located in Hattiesburg and is legally restricted to B-2 zoning class. The Hall Avenue corridor has seen good interest in renovating older historic homes and cottages, due to their close proximity to downtown Hattiesburg. There is less commercial activity in recent years. <u>Highest and Best Use As Vacant:</u> The subject property contains +/- 2.26 acres. The property has a physical access point off of Hall Avenue and Martin Luther King Avenue and is in an area of commercial uses. For this reason, the highest and best use as vacant is as a commercial or special purpose use. <u>Highest and Best Use As Improved:</u> Using the land value adopted later in this report, the value as an improvement would exceed this land value. Thus, the improvements contribute and the HABU of the property, “as improved” was determined to be for special purpose use as a religious facility.	

HIGHEST AND BEST USE IN THE AFTER CONDITION

Following the acquisition, the improvements will remain on the larger parcel. Therefore, the highest and best use in the after condition is the same as a special purpose use.

Ownership History and Tax Information

Ownership History

In developing a real property appraisal an appraiser must:

1. Analyze any current agreement of sale, option, or listing of the subject property, if such information is available to the appraiser in the normal course of business.
2. Analyze any prior sales of the subject property that occurred within the following minimum time period of five years.
3. Discuss below (as applicable) the quality and quantity of data available and analyze within the approaches used and the applicability or suitability of the data.
4. When there is a sale of the subject property to the current owner for an undisclosed price, the appraiser must state that he or she attempted to obtain the purchase price and other terms of the transaction without success. (If transaction price could not be verified please explain below.)

Ownership History					
Property Transactions during the last five years to Date:					
Date	Grantor	Grantee	Consideration	Book/Page	Ver.
3/5/2015	Deacons of MLK Baptist Church	Trustees of MLK Baptist Church	N/A	1197/302	Title
Explanation: There have been no transfers in ownership in the last five years. However, for reference the most recent conveyance which was listed.					

Tax Information			
Tax Parcel I.D. Number	PPIN # 21676	True Value – Land	\$17,770
Millage Rate		True Value – Improvements	\$33,420
Property Assessment Rate			
Special Assessments			

Approaches to Value

All standard techniques used by appraiser in estimating of market value can be grouped into the following three main approaches to value: 1) Sales Comparison Approach, 2) Cost Approach, and 3) Income Approach. One or more of these approaches are used in all appraisal assignments. Use of these approaches will depend on the type of property being appraised and quantity and quality of data available for analysis.

Sale Comparison Approach: A set of procedures in which a value indication is derived by comparing the property being appraised to similar properties that have been sold recently, applying appropriate units of comparison, and making adjustments to the sale prices of comparables based on the elements of comparison. The sales comparison approach may be used to value improved properties, vacant land, or land being considered as though vacant; it is the most common and preferred method of land valuation when comparable sales data are available.

Cost Approach: A set of procedures through which a value indication is derived for the fee simple interest in a property by estimating the current cost to construct a reproduction of, or replacement for, the existing structure; deducting depreciation from the reproduction or replacement cost; and adding the estimated land value, plus an entrepreneurial profit. Adjustments may then be made to the indicate fee simple value of the subject property to reflect the value of the property interest being appraised.

Income Approach: A set of procedures through which an appraiser derives a value indication for an income-producing property by converting its anticipated benefits (cash flows and reversion) into property value. This conversion can be accomplished in two ways. One year's income expectancy can be capitalized at a market-derived capitalization rate or at a capitalization rate that reflects a specified income pattern, return on investment, and change in the value of the investment. Alternatively, the annual cash flows for the holding period and the reversion can be discounted at a specified yield rate.

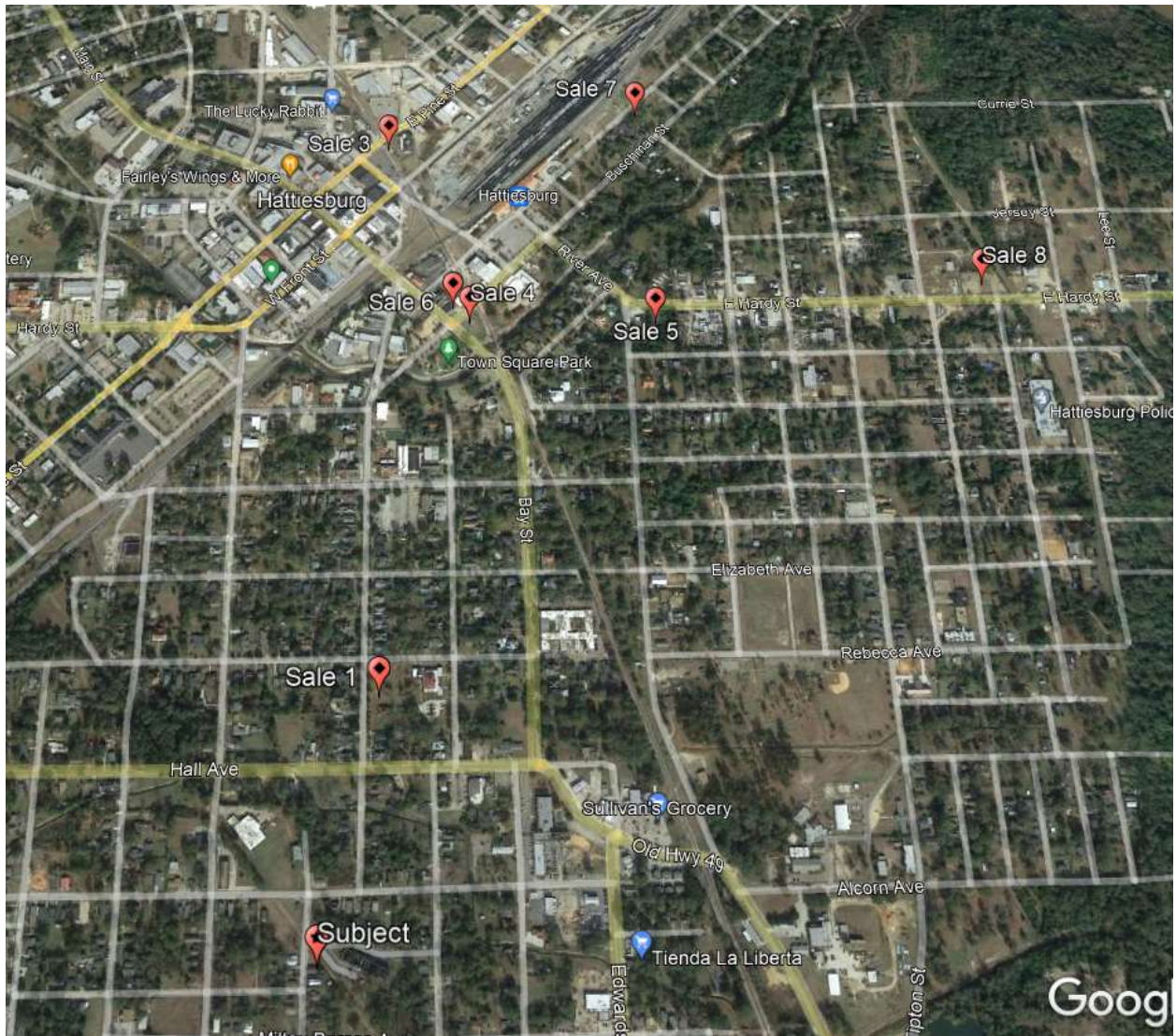
The Dictionary of Real Estate Appraisal, Fourth Edition, Appraisal Institute

Approach to Value Utilized in this Appraisal Assignment Are:

☐ Cost Approach ☐ Income Approach ☒ Sales Comparison Approach

Reason(s) for excluding any of the usual approaches to value	
The property to be appraised is an improved special purpose property. The building is dated, and not affected by the acquisition. Thus, the Cost and Income approaches were not utilized. The value of the property is valued using the Sales Comparison approach presented on the following pages. The initial sales grid values the residential lot, with a valuation of the improvements following.	

LAND SALES MAP



Sales Comparison Approach – (Land) – Before Value

☐ Complete Take

☒ Partial Take

Sq. Ft.

▼

Item	Subject	Comp Sale #	L-5	Comp Sale #	L-6	Comp Sale #	L-9
Location		East Hardy Street		101 Main Street		700 4th Street	
Sales Price			\$32,500		\$43,500		\$175,000
Price Per SF			\$1.02		\$2.85		\$2.36
	Description	Description	+/- Adj.	Description	+/- Adj.	Description	+/- Adj.
Property Rights Conveyed	Fee, Ease,						
Adjusted Price			\$1.02		\$2.85		\$2.36
Financing	Typical						
Adjusted Price			\$1.02		\$2.85		\$2.36
Condition of Sale	Arms-Length						
Adjusted Price/ SF							
Market Conditions	Date of Sale	7/20/21	0%	11/24/20	0%	10/9/20	0%
Adjusted Price / SF							\$0.00
Location		Similar	\$0.00	Similar	\$0.00	Similar	\$0.00
Size (Sq. Ft.)	98,010 sf	0.735	\$0.00	0.350	\$0.00	1.700	\$0.00
Topography	Flat, level	flat, level	\$0.00	flat, level	\$0.00	Flat, level	\$0.00
Utilities	W-P-S	Similar	\$0.00	Similar	\$0.00	Similar	\$0.00
Zoning	B-2	B-1	\$0.00	B-3	\$0.00	B-2	\$0.00
Net Adjustment		(+/-)	0%	(+/-)	0%	(+/-)	0%
		Net %	0.00%	Net %	0.00%	Net %	0.00%
		Gross %	0.00%	Gross %	0.00%	Gross %	0.00%
Adjusted Sales Price			\$1.02		\$2.85		\$2.36

Adopted Unit Value, Before (Land Only): \$2.00/sf

Size	Unit of Measure	Rate		
98,446 sf	Sq. Ft. @	\$2.00	Per SF	\$196,892
Add (Landscaping, cost to cure, other - See Attached):				\$12,655
Total Before Value (Land Only):				\$209,547
r/o				\$209,545

Sales Comparison Approach – (Land) – After Value

☐ Complete Take

☒ Partial Take

Sq. Ft. ▼

Item	Subject	Comp Sale #		Comp Sale #		Comp Sale #	
Proximity to Subject							
Sales Price							
Price Per Unit (Sq. Ft.)			#DIV/0!		#DIV/0!		#DIV/0!
	Description	Description	+/- Adj.	Description	+/- Adj.	Description	+/- Adj.
Property Rights Conveyed	Fee, Ease,						
Adjusted Price			#DIV/0!		#DIV/0!		#DIV/0!
Financing	Typical						
Adjusted Price			#DIV/0!		#DIV/0!		#DIV/0!
Condition of Sale	Arms-Length						
Adjusted Price			#DIV/0!		#DIV/0!		#DIV/0!
Market Conditions	Date of Sale						
Adjusted Price			#DIV/0!		#DIV/0!		#DIV/0!
Location							
Size (Sq. Ft.)							
Topography							
Utilities							
Other							
Net Adjustment		(+/-)	\$0.00	(+/-)	\$0.00	(+/-)	\$0.00
		Net %		Net %		Net %	
		Gross %	#DIV/0!	Gross %	#DIV/0!	Gross %	#DIV/0!
Adjusted Sales Price			#DIV/0!		#DIV/0!		#DIV/0!

SAME AS PREVIOUS

Adopted Unit Value, After (Land Only): \$2.00

Size	Unit of Measure	Rate	
81981.000	Sq. Ft. @	\$2.00	\$163,962
		Less Cost to Cure (fencing):	(\$45,425)
		Less Easements (See Attached):	\$0
		Less Other (See Attached):	
		Total After Value (Land Only):	\$118,537
		R/O	\$118,540
		Difference in Before and After:	\$91,005

Parcel No. PPIN# 21676 / PPIN# 32303 and PPIN# 32304 Project No. Hall Avenue West Project

Explanation of Adjustment-(Land)

(Before and After)

Before Value – Land Adjustments

Property Rights Conveyed: All of the sales were fee simple conveyances. No property rights adjustments were required.

Financing: No adjustments applied

Conditions of Sale: No adjustments applied

Market Conditions: The sales spanned from 2020 to 2021. There is limited lot sales activity in the downtown Hattiesburg market, so the overall availability of sales is limited. There is one sale in the brochure that indicates a 7% annual appreciation. No market conditions adjustments were applied to these sales.

Location: All of the sales are located in Forrest County and are generally similar in location. Therefore, no adjustments were made.

Size: Site size is an adjustment in which comparables site size is compared to the subject. Depending on the market segment, variation in site size can have effect up to a point on the price per square foot index. Typically, if a comparable site is larger than the subject site, an upward adjustment is applied to reflect economies of scale. Conversely, if a comparable site is smaller than the subject site, a downward adjustment may need to be applied. Although in this case, the larger lots sold for higher unit rates. Therefore, the sales were not adjusted for their size.

Topography: The subject is a level, special purpose lot that does not have any physical deficiencies. The sales were all considered similar in topography.

Zoning: The subject is zoned B-2, Neighborhood Business District. All of the sales had similar commercial business zoning. These sales were considered similar, and no adjustments were made.

Before Value - Reconciliation of Land Sales

The sales had adjusted per square foot values ranging from \$1.02 to \$2.85 per square foot. Sale #9 was considered the most similar overall, due to it being recent and similar in size. Overall, considering the other adjusted values, a value of \$2.00 per square foot was adopted for the subject property.

Site Improvement Values

Improvements located in the acquisition area are 4 Bradford pear trees, 2 holly shrubs, 300 sf of ground cover, a 15' x 18' brick sign that is approximately 7 feet tall, eight additional shrubs trees and 24 (8 foot) wrought iron fence panels, some of which have custom design. In addition, there is approximately 1,500 sf of a paved/gravel driveway. There is also a chain link fence along approximately 50 feet in length north of the acquisition area. These improvements will be removed in the after condition. It should be noted that some of the fencing and additional landscaping is in the existing right of way. The remaining improvements include the church and associated parking, drives and miscellaneous.

See the breakdown of each item below. Cost estimates can be found in the addenda of this report.

Improvements in the R.O.W.	Compensation
Gravel – 1500 SF in the R.O.W. @	\$885
Landscaping (12 Bradford pear trees, 2 shrubs, ground cover and small plants)	\$11,770
Total	\$12,655

Landscaping:

The cost estimate for the landscaping was taken from a previous project and is found in the addenda. Additional costs were checked and included from Section 66 of the Marshal and Swift guide. In total the landscaping in the proposed right-of-way includes;

12 Trees @ \$725 =	\$8,700
2 shrubs @ \$275 =	\$550
300 square feet of ground cover and small plants @ \$2.50/sf =	\$750
Subtotal =	\$10,000
Contingency @ 10% =	\$1,000
Tax @ 7% =	\$770
Total =	\$11,770

Driveway/Gravel analysis:

Paving was thin in places and appeared to be aged, therefore a 50% depreciation was included.
1,500 square feet x \$1.00 + 10% Contingency + 7% tax) – 50% depreciation = **\$885 (ro)**.

Explanation of Adjustment-(Land)

(Before and After)

After Value – Land Adjustments

Property Rights Conveyed: Same adjustments as in the before condition

Financing: Same adjustments as in the before condition

Conditions of Sale: Same adjustments as in the before condition

Market Conditions: Same adjustments as in the before condition

Location: Same adjustments as in the before condition

Size: Same adjustments as in the before condition

Topography: Same adjustments as in the before condition

Utilities: Same adjustments as in the before condition

Other: Same adjustments as in the before condition

Explanations of damages (if any): No damages are indicated to the property in the After condition.

Cost to Cure Items Deducted from After Value	Compensation
Chain Link Fence – 50 LF @ \$27.20/LF x 1.10x (contingency =\$1,496) + 7% tax	\$1,601 (Cost to cure item)
Wrought Iron Fence – (24) 8 ft. panels	\$31,920 (Cost to cure item)
Brick Signage (15' x 18' x 7' sign)	\$11,900
Total	\$45,421
Rounded Total for Cost to Cure Items	\$45,425

Sign analysis:

As per the quote from MSP Enterprises, LLC., the quote to rebuild the sign as in the Before Condition is estimated at \$11,898 or \$11,900, rounded. This includes the labor and materials for the new brick sign and landscaping. This was a cost to cure item.

Fencing:

A portion of the fencing is in the city right of way. However, since this is needed to secure the perimeter, a cost to cure the entire fencing (including) the portion in the existing right of way was calculated.

To establish a cost for this fencing, I contacted two different fencing companies. One company (Jefcoat fencing) did not provide a quote for wrought iron fencing. They had provided a quote for the chain link fencing for a previous assignment, and I utilized that quote for the chain link fencing evaluation. I contacted the second fence company, Red's Wrought Iron Fencing, and he stated that the cost would be between \$100 and \$200/LF. I asked for a more specific range however did not provide a specific number. Therefore, I researched Marshall & Swift Cost Guide, Section 66, Page 4, Yard Improvements, and found a cost of \$28.25/sf. The subject is 192' x 5' or 960 sf @ \$28.25 = \$27,120. This would equate to \$141.25/LF based on 192 feet of fencing. A 10% contingency was added which equaled \$2,712 to account for any custom work or other miscellaneous costs. Therefore, the total cost equals \$29,832. Adding 7% tax, would yield a total cost of \$31,920 for the wrought iron fencing.

The chain link fencing was estimated using the \$27.20/LF net cost per the estimate (Jefcoat Fencing). There is approximately 50 feet of chain link fencing @ \$27.20/LF which equals \$1,360. A 10% contingency was added which equaled \$136 to account for any miscellaneous costs. Therefore, the total cost equals \$1,496. Adding 7% tax, would yield a total cost of \$1,601 for the chain link fencing. The total cost to cure for all fencing equals \$33,525 (rounded).

Thus, the total value of the site improvements equal \$45,425. The \$33,525 in fencing is being paid for as a cost to cure, thus the remaining site improvements equaled a total of \$24,555 which was rounded to \$24,600 and included as site improvements in the Before condition on the following page.

After Value - Reconciliation of Land Sales:

In the after condition, 1.88 acres or +/- 81,981 sf remain. Overall, the site (as vacant) retains the same functionality, use, and highest and best use. Due to this, the same unit value was adopted in the after condition, or \$2.00/sf. To calculate the after value, the following calculation was done.

Thus, the total value of the site improvements in the After condition equaled \$0. The \$33,525 in fencing is being paid for as a cost to cure, thus it was deducted from the After value on the following pages.

In the after condition, there is a park planned that will be located in the proposed right of way where the existing sign and landscaping are located. This park is shown on the following page and indicates a vegetative buffer will be planted in the existing right of way.



Final Reconciliation Of Value

	Before	After	Difference
Sales Comparison Approach	\$209,545	\$118,540	\$91,005
Cost Approach			
Income Approach			

Reconciliation	
During my research into the market, I found several comparable land sales in the Hattiesburg market. These sales were further analyzed based on their proximity to the subject and their highest and best use. The sales were inspected, verified, and compared to the subject property. In the before condition, I concluded to have a value of \$209,545 for the land and the effected site improvements. In the after condition, the remaining site was concluded to have a value of \$118,540. Thus, just compensation due to the owner is \$91,005.	

The difference between the Fair Market Value of the whole tract and the remainder is **\$91,005** as of 01/19/2022, and is my opinion of just compensation, for the acquisition of the real property rights described in this appraisal report.

Recommended Distribution Of Final Value Estimate

For Accounting And Acquisition Purposes Only (To Be Completed After Appraisal Made)

Fee/Leased Fee Interest									Acre(s) ▼
Parcel	Acq. Area		HBU	Land	Improvements		Damages		Total
					Item	Value	Item	Value	
32854	0.380	Acre(s)	Comm	\$24,695					\$24,695
									\$0
									\$0
									\$0
									\$0
Totals	0.380	Acre(s)		\$24,695		\$0		\$0	\$24,695

Easements (Permanent / Temporary)									
Parcel	Acq. Area		HBU	Land	Improvements		Damages		Total
					Item	Value	Item	Value	
									\$0
									\$0
									\$0
									\$0
									\$0
Totals	0.000			\$0		\$0		\$0	\$0

Quit-Claim Interest / Leasehold									
Parcel	Acq. Area		HBU	Land	Improvements		Damages		Total
					Item	Value	Item	Value	
Q1-21676	0.38 Ac	Acre(s)	Comm	\$8,230			Fencing	\$33,525	\$41,755
					Landscaping	\$11,770			\$11,770
					Driveway	\$885			\$885
							Signage	\$11,900	\$11,900
									\$0
Totals	0.000			\$8,230		\$12,655		\$45,425	\$66,310

Total of all Interests									\$91,005
------------------------	--	--	--	--	--	--	--	--	----------

Q1= The quitclaim interest for the Martin Luther King Baptist Church

Addenda

Terms and Definitions

Agency- the Federal Agency, State, State Agency, or person that acquires real property or displaces a person.

Appraisal- USPAP 2020-2021, pg. 3 defines an appraisal as the act or process of developing an opinion of value; an opinion of value.

Uneconomic Remnant- a parcel of real property in which the owner is left with an interest after the partial acquisition of the owner's property, and which the Agency has determined has little or no value or utility to the owner.

Total Ownership- the total amount of contiguous property, under the ownership of a single legal entity, as indicated by the map provided to the appraiser.

Whole Tract- that amount of property, within the "Total Ownership", as determined by the appraiser, to be affected by the acquisition. The *whole tract* is defined by the appraiser and may be determined to be the same as the total ownership, or some defined area that is less than the "Total Ownership".

Larger Parcel-¹ that tract, or tracts, of land which possess a unity of ownership and have the same, or an integrated, highest and best use. Elements of consideration by the appraiser in making a determination in this regard are contiguity, or proximity, as it bears on the highest and best use of the property, unity of ownership, and unity of highest and best use. Mississippi Case Law recognizes this concept but refers to it by use of the phrases "Highest and Best Use areas" or "Highest and Best Uses" ² Designation of the Larger Parcel, for appraisals performed in connection with the disposal of excess property, may require the adoption of a hypothetical condition regarding "unity of ownership".

Excess Property "(2)...whenever real property, with the exception of easements for highway purposes, has been acquired by the Mississippi Transportation Commission, in any manner, for public use and in the opinion of the commission all or any part thereof becomes unnecessary for public use, the same shall be declared on the minutes of the commission as excess property and sold at private sale at market value."³

Disposal as used in the appraisal of excess property, "means the sale of real property rights therein, including access or air rights, when no longer needed for highway right-of-way or other uses eligible for funding under title 23 of the [U.S.] Code"⁴

Fair Market Value- Fair Market Value is value in exchange. It is "the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress".⁵

Effective Date – The date on which the appraisal or review opinion applies. Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th Edition, s.v. "effective date." (Chicago: Appraisal Institute, 2015), PDF e-book

Date of the Report – The date on which the report is transmitted to the client. Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th Edition, s.v. "date of the report". (Chicago: Appraisal Institute, 2015), PDF e-book.

¹ The Uniform Appraisal Standards for Federal Land Acquisitions, Interagency Land Acquisition Conference, Published by the Appraisal Institute with the cooperation of the U.S. Department of Justice, Washington, D.C. 2000,

² Oughton v. Gaddis, 683 So.2d 390 (Miss. 1996)

³ Mississippi Code of 1972, Annotated, § 65-1-123

⁴ United States Code, 23 CFR 710.105

⁵ *Potters II v. State Highway Comm'n of Mississippi*, 608 So. 2d 1227, 1231 (Miss. 1992).

Highest and Best Use- The best or most valuable use to which the property, [.....], is adapted. Mere speculative uses cannot be considered. There must be some probability that the land would be used within a reasonable time for the particular use to which it is adapted. There must be a present demand for the land for such purpose or a reasonable expectation of such demand in the near future.⁶

Before and After Rule [Mississippi]- When part of a larger tract of land is taken for public use, the owner should be awarded the difference between the fair market value of the whole tract immediately before the taking, and the fair market value of that remain[ing] immediately after the taking, without considering general benefits or injuries resulting from the use to which the land taken is to be put, that are shared by the general public.⁷ Any decrease or increase in the fair market value of real property prior to the date of valuation caused by the public improvement for which such property is acquired or by the likelihood that the property would be acquired for such improvement, other than that due to physical deterioration within the reasonable control of the owner, will be disregarded in determining the compensation for the property.⁸

Before Value- The fair market value of the whole tract immediately before the taking.⁹

After Value- The fair market value of that remain[ing] immediately after the taking, without considering general benefits or injuries resulting from the use to which the land taken is to be put, that are shared by the general public.

Due Compensation¹⁰- Just Compensation¹¹ the value of the land taken and the damages, if any, which result... as a consequence of the taking, without considering either general benefits or injuries resulting from the use to which the land taken is to be put, shared by the general public.¹²

Damages to Remainder- *[In the context of valuation under the Before and After Rule, it is]* the depreciation in the fair market value of the remaining area, ...that is special, and not such as is common to all the property in the neighborhood.¹³ In determining damages, if any, to the remainder if less than the whole of a defendant's interest in property is taken, nothing shall be deducted there from on account of the supposed benefits incident to the public use for which the petitioner seeks to acquire the property.¹⁴

Cost-to-Cure Damages [the cost or costs associated with] the necessity of rebuilding fences and wells, the necessity of relocating roads, and other similar items. [Such] items are all part of the depreciated value of the property, since the landowner is required to do this construction in order to use the property in the manner in which it has been used or for which it is best adapted.¹⁵

Extraordinary Assumption –2020-2021 USPAP, pg. 4, defines extraordinary assumption as “ an assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which if found to be false, could alter the appraiser's opinions or conclusions. Uncertain information might include physical, legal, or economic characteristic of the subject property; or conditions external to the property, such as market conditions or trends, or the integrity of data used in an analysis.

Hypothetical Condition –2020-2021 USPAP, pg. 4, defines hypothetical condition as “a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for purpose of analysis.” Hypothetical conditions are contrary to known facts about physical, legal, or economic characteristic of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

⁶ MSHC v. Brooks, 123 So.2d 423, 427 (1960); MSHC v. Wagley, 231 So.2d 507 (1970);

⁷ Potters II v. MSHC, 608 So. 2d 1227 (Miss. 1992); MSHC v. Hillman, 189 Miss. 850, 198 So. 565 (1940)

⁸ Mississippi Code of 1972, Annotated, Section 43-37-3

⁹ Potters II v. MSHC, 608 So. 2d 1227 (Miss. 1992); MSHC v. Hillman, 189 Miss. 850, 198 So. 565 (1940)

¹⁰ Constitution of Mississippi, Article 3, § 17

¹¹ Mississippi Code of 1972, Annotated, Section 43-37-3

¹² MSHC v. Hillman, 198 So. 565;

¹³ MSHC v. Colonial Inn, Inc. 149 So.2d 851;

¹⁴ Mississippi Code of 1972, Annotated, Section 11-27-21;

¹⁵ Emerson v. MSHC, 208 So.2d 441

Intended User – USPAP 2020-2021, pg. 5 defines intended user as the client and any other party as identified, by name or type, as users of the appraisal or appraisal review by the appraiser on the basis of communication with the client at the time of the assignment.

Intended User – USPAP 2020-2021, pg. 5 defines intended user as the client and any other party as identified, by name or type, as users of the appraisal or appraisal review assignment results, as identified by the appraiser on the basis of communication with the client at the time of the assignment. (2020-2021 USPAP).

Jurisdictional Exception – an assignment condition established by applicable law or regulation, which precludes an appraiser from complying with a part of USPAP. 2020-2021 USPAP)

Supplemental Standards – requirements issued by government agencies, government sponsored enterprises, or other entities that establish public policy which add to the purpose, intent and content of the requirements of USPAP, that have a material effect on the development and reporting of assignment results.

Plottage - the increment of value created when two or more sites are combined to produce greater utility resulting in higher productivity or income than could be obtained from the individual smaller sites. Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th Edition, s.v. “plottage”. (Chicago: Appraisal Institute, 2015), PDF e-book.

Assemblage - the combining of two or more parcels, usually but not necessarily contiguous, into one ownership or use; the process that may create plottage value. Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th Edition, s.v. “assemblage”. (Chicago: Appraisal Institute, 2015), PDF e-book.

Assemblage Cost - the excess cost incurred to acquire individual adjacent parcels of real estate in a single ownership beyond the estimated cost of acquiring similar sites that do not form a specifically desired assemblage.

Scope of Work – “the Scope of Work is a written set of expectations that form an agreement or understanding between the appraiser and the agency as to the specific requirements of the appraisal, resulting in a report to be delivered to the agency by the appraiser. It includes identification of the intended use and intended user; definition of fair market value; statement of assumptions and limiting conditions; and certifications, the type and extent of research and analyses in an assignment. Either the appraiser or the agency may recommend modifications to the initial Scope of Work, but both parties must approve changes.”¹⁶

¹⁶ Federal Highway Administration, Guide For Preparing An Appraisal Scope of Work, October, 2005

Additional Photographs



View of the sign located within the proposed right of way.



View of the fencing and landscape trees located within the proposed and existing right of way.

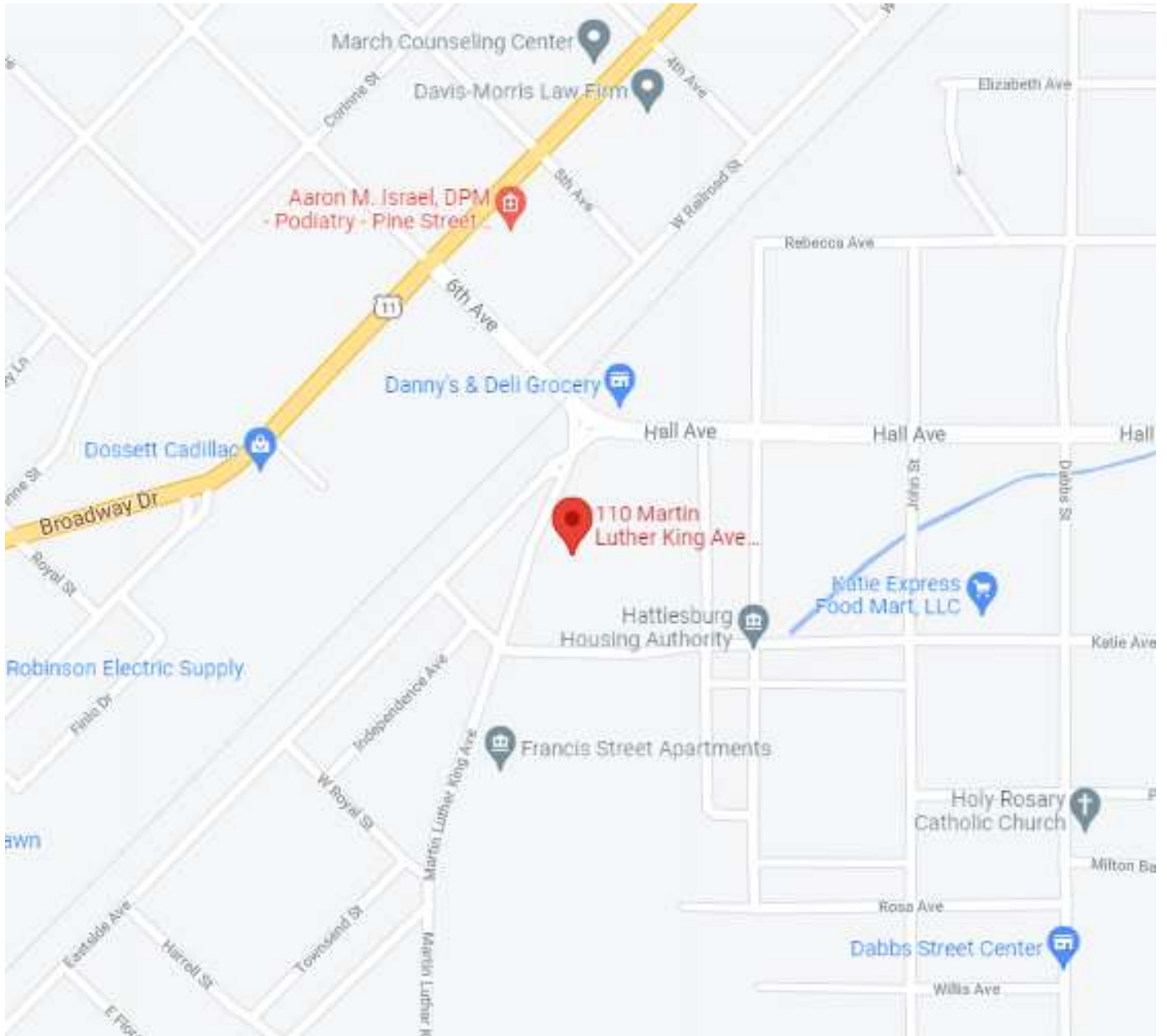


Additional view of the improvements located within the proposed right of way.



View of fencing located within the proposed right of way.

Location Map



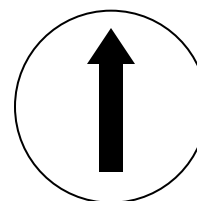
Sketch of Property¹⁷

AREAS

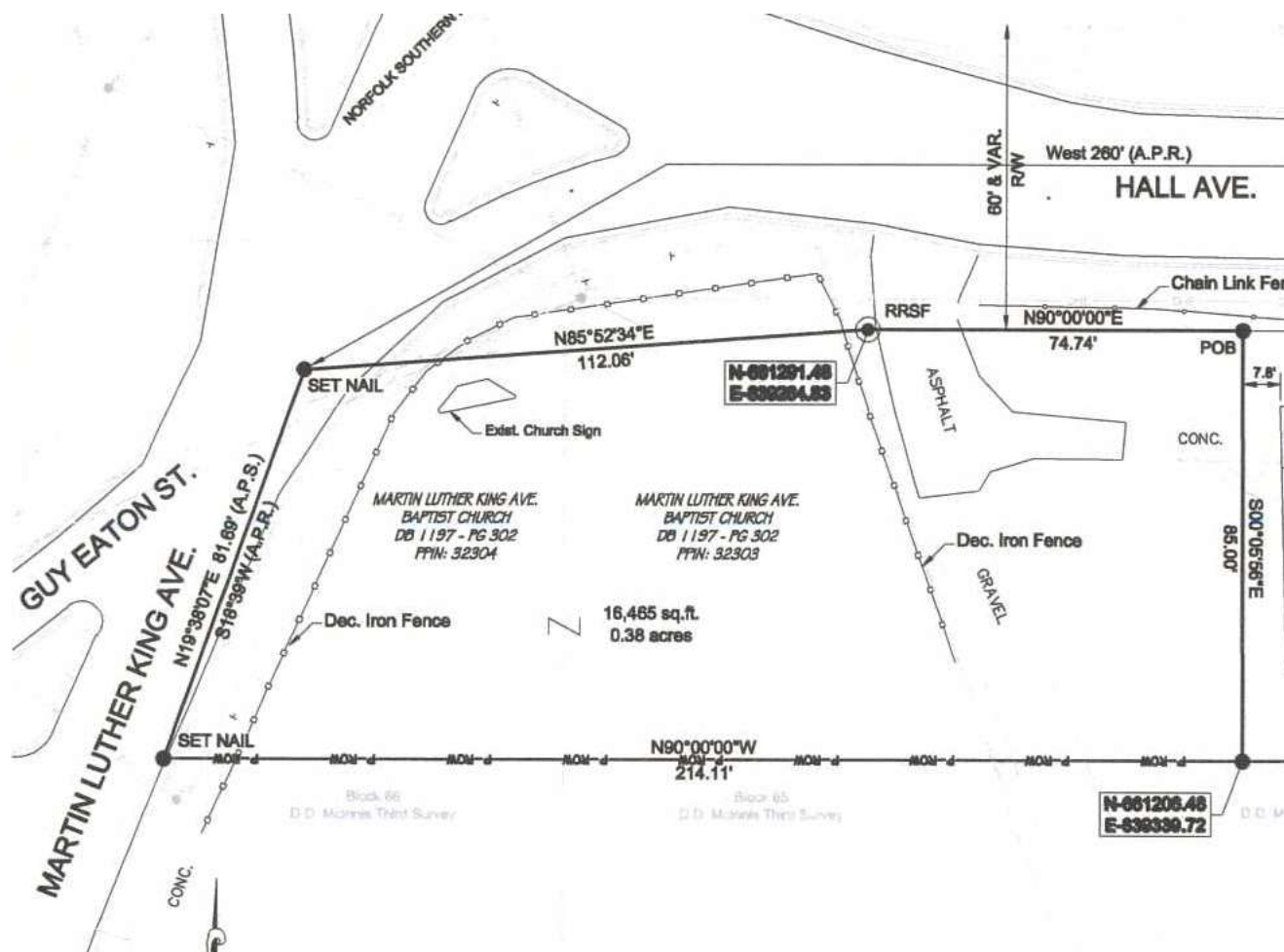
Area of Whole Tract - Before: 2.26 Acres

Area of Remaining Tract - After: 1.88 Acres

Area to be Acquired: 0.38 Acres



Directions North



¹⁷ **Sketch Must Show:** (Note: It is not required that the sketch be drawn to scale)

1. All boundary dimensions.
2. Location of all significant improvements.
3. Location of other significant features (creeks, woods, power lines, access limits, drives, fences, railroads, roads, etc.)
4. Relation of improvements to areas taken.
5. Area to be acquired.
6. Area of remainder(s).
7. Different uses (if appropriate).

Parcel No. PPIN# 21676 / PPIN# 32303 and PPIN# 32304 Project No. Hall Avenue West Project
Addenda

Acknowledgement of Appraiser Intern Assistance

In accordance with rules of the Mississippi Real Estate Appraiser Licensing and Certification Board as set forth in Rule 11, Part D, #3, and revisions dated June 15, 2000, per letter from Deputy Director Rick Moon, this appraisal report was prepared with the assistance of an Appraiser Intern. The Appraiser Intern named below:

- May not sign the report or certification,
- May not perform the final value analysis,
- Can assume NO responsibility for the appraisal or report,
- May in no circumstance hold self out as being a licensed appraiser, and
- Perform all appraisal-related activities under the direct supervision of the Certified General Appraiser named below.

In addition to the entries made by the Appraiser Intern and the Certified Appraiser in their respective "*Appraiser Intern Experience Log*", this page is provided to serve as further documentation of the Appraiser Intern's assistance in the preparation of this appraisal report.

DESCRIPTION OF SURVEY AREA
MARTIN LUTHER KING AVE. BAPTIST CHURCH
 PPIN# 32303 & 32304

A part of Blocks 65 and 66 of the D.D. McInnis Third Survey of the City of Hattiesburg, County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, said parcel also being described as follows, with bearings based upon Grid North derived from GPS observations and referenced to Mississippi State Plane Coordinate System (East Zone, NAD 83), with a convergence angle of $-00^{\circ} 14' 27.89''$ and using grid distances with a combined factor of 0.999971048 (determined at the northwest corner of Lot 1, Block 2 of Woodland Court subdivision):

Commencing at a found nail at the northwest corner of Lot 1, Block 2 of Woodland Court subdivision, thence run North $00^{\circ} 00' 00''$ East along the east line of Block 65 of the D.D. McInnis Third Survey for a distance of 16.06 feet to the southern right-of-way of Hall Avenue, said point also being the northeast corner of said Block 65; thence run South $90^{\circ} 00' 00''$ West along the south line of Hall Avenue for a distance of 75.00 feet to an iron pin set, to and for the Point of Beginning; thence run South $00^{\circ} 05' 56''$ East for a distance of 85.00 feet to an iron pin set; thence run North $90^{\circ} 00' 00''$ West for a distance of 214.11 feet to a nail set in pavement on the eastern right-of-way of Martin Luther King Avenue; thence run North $19^{\circ} 38' 07''$ East along said eastern right-of-way of Martin Luther King Avenue for a distance of 81.69 feet to a nail set in pavement on the southern right-of-way of Hall Avenue; thence run North $85^{\circ} 52' 34''$ East along said southern right-of-way of Hall Avenue for a distance of 112.06 feet to a railroad spike found in pavement; thence continue along the southern right-of-way of Hall Avenue South $90^{\circ} 00' 00''$ East for a distance of 74.74 feet back to the Point of Beginning. Said parcel contains 16,465 square feet, or 0.38 acres, more or less.



ROW 016 W (3/2011)

Grantee, prepared by and return to:

Mississippi Transportation Commission c/o
Mississippi Department of Transportation
Right of Way Division (Title Section)
P. O. Box 1850
Jackson, Mississippi 39215-1850
Phone: 601-359-7512

Grantor Address:

Martin Luther King Avenue Baptist Church
110 Martin Luther King Ave.
Hattiesburg, MS 39401
Phone: 601-582-1743

**SIXTEENTH SECTION PUBLIC SCHOOL TRUST LANDS
WARRANTY OF LEASEHOLD INTEREST**

INDEXING INSTRUCTIONS: Part
of Blocks 65 and 66 of the
D.D. McInnis Third Survey
of the City of Hattiesburg,
County of Forrest, State of
Mississippi

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

THE STATE OF MISSISSIPPI
COUNTY OF FORREST

For and in consideration of _____

_____/100

Dollars (\$ _____) the receipt and sufficiency of which is hereby acknowledged, I/we, the undersigned, hereby grant, bargain, sell, convey and warrant unto the Mississippi Transportation Commission, my/our, Sixteenth Section leasehold interest and all renewals, extensions and modifications thereof in the following described land:

A part of Blocks 65 and 66 of the D.D. McInnis Third Survey of the City of Hattiesburg, County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, said parcel also being described as follows, with bearings based upon Grid North derived from GPS observations and referenced to Mississippi State Plane Coordinate System (East Zone, NAD 83), with a convergence angle of $(-)00^{\circ} 14' 27.89''$ and using grid distances with a combined factor of 0.999971048 (determined at the northwest corner of Lot 1, Block 2 of Woodland Court subdivision);

Commencing at a found nail at the northwest corner of Lot 1, Block 2 of Woodland Court subdivision, thence run North 00 degrees 00 minutes 00 seconds East along the east line of Block 65 of the D.D. McInnis Third Survey for a distance of 16.06 feet to the southern right-of-way of Hall Avenue, said point also being the northeast corner of said Block 65; thence run South 90 degrees 00 minutes 00 seconds West along the south line of Hall Avenue for a distance of 75.00 feet to an iron pin set, to and for the Point of Beginning; thence run South 00 degrees 05 minutes 56 seconds East for a distance of 85.00 feet to an iron pin set; thence run North 90 degrees 00 minutes 00 seconds West for a distance of 214.11 feet to a nail set in pavement on the eastern right-of-way of Martin Luther King Avenue; thence run North 19 degrees 38 minutes 07 seconds East along said eastern right-of-way of Martin Luther King Avenue for a distance of 81.69 feet to a nail set in pavement on the southern right-of-way of Hall Avenue; thence run North 85 degrees 52 minutes 34 seconds East along said southern right-of-way of Hall Avenue for a distance of 112.06 feet to a railroad spike found in

Initial _____, _____
 Martin Luther King Avenue Baptist Church
 PARCEL 32303 and 32304

pavement; thence continue along the southern right-of-way of Hall Avenue South 90 degrees 00 minutes 00 seconds East for a distance of 74.74 feet back to the Point of Beginning. Said parcel contains 16,465 square feet, or 0.38 acres, more or less.

The grantor herein further warrants that the above described property is no part of his/ her homestead.

This conveyance includes all improvements located on the above described land and partially on Grantor's remaining land, if any. The Grantee herein, it Agents, and/or Assigns are hereby granted the right of Ingress and Egress on Grantor's remaining land for removing or demolishing said improvements. The consideration herein named is in full payment of all said improvements.

It is further understood and agreed that the consideration herein named is in full, complete and final payment and settlement of any claims or demands for damage accrued, accruing, or to accrue to the grantors herein, their heirs, assigns, or legal representatives, for or on account of the construction of the proposed highway, change of grade, water damage, and/or any other damage, right or claim whatsoever.

It is further understood and agreed that this instrument constitutes the entire agreement between the grantor and the grantee, there being no oral agreements or representations of any kind.

Initial _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

Witness our signature(s) this the ____ day of _____ A.D. 2022.

Signature _____

CLAUDE JACKSON, JR.

Signature _____

SAMUEL LEROY JOHNSON

Signature _____

EARNESTINE ARMSTONG

Signature _____

MICHAEL A. BETHLEY

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

STATE OF MISSISSIPPI

COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for said county and state, on this, _____ day of _____, 2022, within my jurisdiction, the within-named **Claude Jackson, Jr**, who acknowledged that he is a **Trustee of Martin Luther King Avenue Baptist Church**, a Mississippi unincorporated religious society, and that in said capacity, and that for and on behalf of said unincorporate religious society, and as its act and deed, he executed the above and foregoing instrument, after first having been duly authorized so to do.

_____(NOTARY PUBLIC)

My commission expires: _____

STATE OF MISSISSIPPI

COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for said county and state, on this, _____ day of _____, 2022, within my jurisdiction, the within-named **Samuel Leroy Johnson**, who acknowledged that he is a **Trustee of Martin Luther King Avenue Baptist Church**, a Mississippi unincorporated religious society, and that in said capacity, and that for and on behalf of said unincorporate religious society, and as its act and deed, he executed the above and foregoing instrument, after first having been duly authorized so to do.

_____(NOTARY PUBLIC)

My commission expires: _____

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

STATE OF MISSISSIPPI

COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for said county and state, on this, _____ day of _____, 2022, within my jurisdiction, the within-named **Earnestine Armstrong**, who acknowledged that she is a **Trustee of Martin Luther King Avenue Baptist Church**, a Mississippi unincorporated religious society, and that in said capacity, and that for and on behalf of said unincorporate religious society, and as its act and deed, she executed the above and foregoing instrument, after first having been duly authorized so to do.

(NOTARY PUBLIC)

My commission expires: _____

STATE OF MISSISSIPPI

COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for said county and state, on this, _____ day of _____, 2022, within my jurisdiction, the within-named **Michael A. Bethley**, who acknowledged that he is a **Trustee of Martin Luther King Avenue Baptist Church**, a Mississippi unincorporated religious society, and that in said capacity, and that for and on behalf of said unincorporate religious society, and as its act and deed, he executed the above and foregoing instrument, after first having been duly authorized so to do.

(NOTARY PUBLIC)

My commission expires: _____

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

NOW, THEREFORE, the undersigned hereby certifies that the Martin Luther King Avenue Baptist Church duly and properly noticed a meeting of the Congregation, that at least 20% of the members of the Congregation in good standing were in attendance, that a majority of the members in good standing present at the meeting voted in favor of authorizing the conveyance of land and leasehold interest to the City of Hattiesburg as set forth above, and appointed the trustees identified above to execute this deed and such other documents as reasonably necessary to effect said conveyance.

_____, Church Secretary

STATE OF MISSISSIPPI

COUNTY OF FORREST

PERSONALLY, came and appeared before me, the within named, _____, personally known to me or proven to me by sufficient photo identification, who after being duly sworn states under oath that she/he in her official capacity at Secretary of Martin Luther King Avenue Baptist Church, does hereby certify that the above and foregoing individuals were duly appointed as Trustees of Martin Luther King Avenue Baptist Church, and authorized to sign this deed.

SWORN AND SUBSCRIBED, before me this the ____ day of _____, 2022

_____ (NOTARY PUBLIC)

My commission expires: _____

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304



ROW 005 A (Revised 3/2011)

Grantee, prepared by and return to:

City of Hattiesburg, Mississippi

200 Forrest Street

Post Office Box 1898

Hattiesburg, MS 39403-1898

Phone: (601) 545-4540

Grantor Address:

Martin Luther King Avenue Baptist Church

110 Martin Luther King Ave.

Hattiesburg, MS 39401

Phone: 601-582-1743

WARRANTY DEED

INDEXING INSTRUCTIONS:

Part of Blocks 65 and 66 of the D.D. McInnis Third Survey of
the City of Hattiesburg, County of Forrest, State of
Mississippi

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

STATE OF MISSISSIPPI
COUNTY OF FORREST

For and in consideration of Ten and NO/100 Dollars (\$10.00) the receipt and sufficiency of which is hereby acknowledged, we, the undersigned, being the Trustees of Martin Luther King Avenue Baptist Church, hereby grant, bargain, sell, convey and warrant unto the City of Hattiesburg, Mississippi, a political subdivision of the State of Mississippi, the following described land:

A part of Blocks 65 and 66 of the D.D. McInnis Third Survey of the City of Hattiesburg, County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, said parcel also being described as follows, with bearings based upon Grid North derived from GPS observations and referenced to Mississippi State Plane Coordinate System (East Zone, NAD 83), with a convergence angle of $(-00^{\circ} 14' 27.89''$ and using grid distances with a combined factor of 0.999971048 (determined at the northwest corner of Lot 1, Block 2 of Woodland Court subdivision);

Commencing at a found nail at the northwest corner of Lot 1, Block 2 of Woodland Court subdivision, thence run North 00 degrees 00 minutes 00 seconds East along the east line of Block 65 of the D.D. McInnis Third Survey for a distance of 16.06 feet to the southern right-of-way of Hall Avenue, said point also being the northeast corner of said Block 65; thence run South 90 degrees 00 minutes 00 seconds West along the south line of Hall Avenue for a distance of 75.00 feet to an iron pin set, to and for the Point of Beginning; thence run South 00 degrees 05 minutes 56 seconds East for a distance of 85.00 feet to an iron pin set; thence run North 90 degrees 00 minutes 00 seconds West for a distance of 214.11 feet to a nail set in pavement on the eastern right-of-way of Martin Luther King Avenue; thence run North 19 degrees 38 minutes 07 seconds East along said eastern right-of-way of Martin Luther King Avenue for a distance of 81.69 feet to a nail set in pavement on the southern right-of-way of Hall Avenue; thence run North 85 degrees 52 minutes 34 seconds East along said southern right-of-way of Hall Avenue for a distance of 112.06 feet to a railroad spike found in pavement; thence continue along the southern right-of-way of Hall Avenue South 90 degrees 00 minutes 00 seconds East for a distance of 74.74 feet back to the Point of Beginning. Said parcel contains 16,465 square feet, or 0.38 acres, more or less.

Initial _____, _____, _____
 Martin Luther King Avenue Baptist Church
 PARCEL 32303 and 32304

This conveyance includes all improvements located on the above described land and partially on Grantor's remaining land, if any. The Grantee herein, it Agents, and/or Assigns are hereby granted the right of Ingress and Egress on Grantor's remaining land for removing or demolishing said improvements. The consideration herein named is in full payment of all said improvements.

It is further understood and agreed that the consideration herein named is in full, complete and final payment and settlement of any claims or demands for damage accrued, accruing, or to accrue to the grantors herein, their heirs, assigns, or legal representatives, for or on account of the construction of the proposed roadway project, change of grade, water damage, and/or any other damage, right or claim whatsoever.

It is further understood and agreed that the property described herein is "sixteenth section" land, and Grantors' conveyance is a conveyance of an unexpired portion of the sixteenth section lease for and to said property.

It is further understood and agreed that this instrument constitutes the entire agreement between the grantor and the grantee, there being no oral agreements or representations of any kind.

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

Witness our signature(s) this the ____ day of _____ A.D. 2022.

Signature _____

CLAUDE JACKSON, JR.

Signature _____

SAMUEL LEROY JOHNSON

Signature _____

EARNESTINE ARMSTONG

Signature _____

MICHAEL A. BETHLEY

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

STATE OF MISSISSIPPI

COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for said county and state, on this, _____ day of _____, 2022, within my jurisdiction, the within-named **Claude Jackson, Jr**, who acknowledged that he is a **Trustee of Martin Luther King Avenue Baptist Church**, a Mississippi unincorporated religious society, and that in said capacity, and that for and on behalf of said unincorporate religious society, and as its act and deed, he executed the above and foregoing instrument, after first having been duly authorized so to do.

(NOTARY PUBLIC)

My commission expires: _____

STATE OF MISSISSIPPI

COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for said county and state, on this, _____ day of _____, 2022, within my jurisdiction, the within-named **Samuel Leroy Johnson**, who acknowledged that he is a **Trustee of Martin Luther King Avenue Baptist Church**, a Mississippi unincorporated religious society, and that in said capacity, and that for and on behalf of said unincorporate religious society, and as its act and deed, he executed the above and foregoing instrument, after first having been duly authorized so to do.

(NOTARY PUBLIC)

My commission expires: _____

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

STATE OF MISSISSIPPI

COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for said county and state, on this, _____ day of _____, 2022, within my jurisdiction, the within-named **Earnestine Armstrong**, who acknowledged that she is a **Trustee of Martin Luther King Avenue Baptist Church**, a Mississippi unincorporated religious society, and that in said capacity, and that for and on behalf of said unincorporate religious society, and as its act and deed, she executed the above and foregoing instrument, after first having been duly authorized so to do.

(NOTARY PUBLIC)

My commission expires: _____

STATE OF MISSISSIPPI

COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for said county and state, on this, _____ day of _____, 2022, within my jurisdiction, the within-named **Michael A. Bethley**, who acknowledged that he is a **Trustee of Martin Luther King Avenue Baptist Church**, a Mississippi unincorporated religious society, and that in said capacity, and that for and on behalf of said unincorporate religious society, and as its act and deed, he executed the above and foregoing instrument, after first having been duly authorized so to do.

(NOTARY PUBLIC)

My commission expires: _____

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304

NOW, THEREFORE, the undersigned hereby certifies that the Martin Luther King Avenue Baptist Church duly and properly noticed a meeting of the Congregation, that at least 20% of the members of the Congregation in good standing were in attendance, that a majority of the members in good standing present at the meeting voted in favor of authorizing the conveyance of land and leasehold interest to the City of Hattiesburg as set forth above, and appointed the trustees identified above to execute this deed and such other documents as reasonably necessary to effect said conveyance.

_____, Church Secretary

STATE OF MISSISSIPPI

COUNTY OF FORREST

PERSONALLY, came and appeared before me, the within named, _____, personally known to me or proven to me by sufficient photo identification, who after being duly sworn states under oath that she/he in her official capacity at Secretary of Martin Luther King Avenue Baptist Church, does hereby certify that the above and foregoing individuals were duly appointed as Trustees of Martin Luther King Avenue Baptist Church, and authorized to sign this deed.

SWORN AND SUBSCRIBED, before me this the ____ day of _____, 2022

_____ (NOTARY PUBLIC)

My commission expires: _____

Initial _____, _____, _____
Martin Luther King Avenue Baptist Church
PARCEL 32303 and 32304



Legal Description(s) (attached)

MARTIN LUTHER KING AVE. BAPTIST CHURCH

PPIN# 32303 & 32304

A part of Blocks 65 and 66 of the D.D. McInnis Third Survey of the City of Hattiesburg, County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, said parcel also being described as follows, with bearings based upon Grid North derived from GPS observations and referenced to Mississippi State Plane Coordinate System (East Zone, NAD 83), with a convergence angle of (-)00° 14' 27.89" and using grid distances with a combined factor of 0.999971048 (determined at the northwest corner of Lot 1, Block 2 of Woodland Court subdivision):

Commencing at a found nail at the northwest corner of Lot 1, Block 2 of Woodland Court subdivision, thence run North 00 degrees 00 minutes 00 seconds East along the east line of Block 65 of the D.D. McInnis Third Survey for a distance of 16.06 feet to the southern right-of-way of Hall Avenue, said point also being the northeast corner of said Block 65; thence run South 90 degrees 00 minutes 00 seconds West along the south line of Hall Avenue for a distance of 75.00 feet to an iron pin set, to and for the Point of Beginning; thence run South 00 degrees 05 minutes 56 seconds East for a distance of 85.00 feet to an iron pin set; thence run North 90 degrees 00 minutes 00 seconds West for a distance of 214.11 feet to a nail set in pavement on the eastern right-of-way of Martin Luther King Avenue; thence run North 19 degrees 38 minutes 07 seconds East along said eastern right-of-way of Martin Luther King Avenue for a distance of 81.69 feet to a nail set in pavement on the southern right-of-way of Hall Avenue; thence run North 85 degrees 52 minutes 34 seconds East along said southern right-of-way of Hall Avenue for a distance of 112.06 feet to a railroad spike found in pavement; thence continue along the southern right-of-way of Hall Avenue South 90 degrees 00 minutes 00 seconds East for a distance of 74.74 feet back to the Point of Beginning. Said parcel contains 16,465 square feet, or 0.38 acres, more or less.

JACKSON, TULLOS, ROGERS & MORGAN, PLLC

ATTORNEYS AT LAW
309 SOUTH 40TH AVENUE
HATTIESBURG, MISSISSIPPI 39402

ROBERT T. JACKSON, SR.
ROBERT T. JACKSON, JR.
JOSEPH R. TULLOS
G. NEIL ROGERS
M. WILLIAM MORGAN
JOHN MADISON GUICE, JR.
JOHN B. HOWELL, III

MAILING ADDRESS:
P. O. BOX 15517
HATTIESBURG, MS 39404-5517

January 6, 2022

TELEPHONE: (601) 264-3309
FACSIMILE: (601) 264-6044

Mr. Lamar Rutland
Director of Engineering
City of Hattiesburg
P. O. Box 1898
Hattiesburg, MS 39403-1898

Re: Title examination and opinion relating to Tax Parcel 2-083C-16-002.00
(PPIN 32303) the property owned by MARTIN LUTHER KING AVENUE
BAPTIST CHURCH, located in Forrest County, Mississippi.

Dear Rutland:

Pursuant to your request that we examine title to the property hereinabove generally identified and hereinafter more particularly described and furnish you with our opinion relative to the status thereof, please be advised that we have made a careful and diligent search of the public records, properly indexed, of Forrest County, Mississippi, for a period of more than thirty-one (31) years prior to the date and time hereafter set forth as the same pertain to and affect the real property lying, being situated in Forrest County, Mississippi, more particularly described as follows, to wit:

**SEE EXHIBIT "A" WHICH IS ATTACHED HERETO AND MADE A PART
HEREOF AS IF FULLY COPIED AND SET OUT AT LENGTH IN WORDS
AND FIGURES HEREIN.**

From said examination, assuming that all instruments affecting title to said real property have been properly indexed on the Sectional Index of said County, we find the record title to the surface of the real property to be in the form of the unexpired portion of a Sixteenth Section Leasehold Interest vested in **MARTIN LUTHER KING AVENUE BAPTIST CHURCH**, subject to the following exceptions :

1. The subject property is encumbered by the following Deed of Trust: NONE
2. County and state ad valorem taxes for the years 2018, 2019 and 2020 have been paid. There is also a current liability for 2021 taxes which constitutes a lien on the subject property which will be due on January 1, 2022, and which will not be in default until on or after February 1, 2022.

PPIN: 32303
Amount: Exempt

3. Subject to any and all covenants and restrictions of record.
4. There is a potential gap in the chain of title, and it is recommended that a deed from Claude Jackson, Sr. be obtained and/or further investigation into the status of the interest in Claude Jackson, Sr.
5. Subject to any and all easements of record and of use affecting the property.
6. Subject to any and all prior and outstanding leases, exceptions, reservations and/or conveyances of oil, gas and/or other minerals and any geothermal energy resources lying in, on and under the above described real property.
7. Subject to any environmental condition existing upon the subject property, which would cause said property to be in violation of any State and/or Federal Environmental Protection Act. This certificate does not express an opinion as to any environmental condition which may be in violation of such laws and is subject to any such condition which may affect the title to said property or lien placed against said property by any lender, individual Corporation or otherwise.
8. Rights or claims of parties in possession not shown by public records.
9. Subject to any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
10. Subject to riparian and other rights created if subject property is bordered by or fronts water.
11. Subject to any and all entities in the chain of title having been validly formed and being in good standing under the laws in the state in which they were formed, including any allegations of forged or fraudulent contract, deed or other instruments affecting title or whether or not documents in the chain of title were executed to or from a party of sound and disposing mind or a nonexistent corporation, person or entity, or whether or not a person signing for or on behalf of a corporation, unincorporated association, or another person in a representative capacity was duly authorized to execute any documents in the chain of title in such capacity.
12. Subject to consequences of any allegations or determination that the lease under which title is being claimed is in violation of Article 4, Section 95 of the Mississippi Constitution of 1890, or that the statutory procedure as set forth by the legislature was not followed at the time the lease was executed.

This opinion does not in any manner constitute a guarantee of title to the hereinabove described lands, but is merely the opinion of this office with respect to the title to the property as

reflected by the records and instruments which are properly noted in the Sectional Index, and does not extend to problems of adverse possession, errors in survey, or facts which are not shown of record in the Forrest County Courthouse.

This opinion and certificate does not cover the status of the zoning of the subject property under the zoning ordinances of Forrest County, Mississippi, and is subject to any other land use restrictions of applicable governmental units. This opinion does not extend to or determine whether the subject real property lies within a flood hazard zone.

This opinion does not cover any state of facts which would be revealed by an accurate survey or by a physical inspection of the subject real property, including, but not limited to, encroachments, variation in area or in measurements, boundary line disputes, roadways, and matter not of record, including lack of access.

This opinion is addressed to **The City of Hattiesburg, Mississippi, a Municipal Corporation**, and the liability of the undersigned attorney extends only to the said City. The title research that is contained within this title opinion certificate is intended for the exclusive use of the party to whom it is addressed. The liability of the undersigned firm extends only to the addressee hereof and said liability terminates if this title opinion is used as an update for any other opinion, title insurance commitment or policy.

This opinion does not cover any state of facts affecting the record title to the subject real property subsequent and after **November 4, 2021, at 8:00 o'clock a.m.**, which date shall be deemed to be, and is, the date and time of this opinion and certificate.

Please be advised that, subject to the above date and time of this opinion and subject to the above-recited exceptions, **MARTIN LUTHER KING AVENUE BAPTIST CHURCH**, is the record owner of the unexpired portion of a Sixteenth Section Leasehold Interest in and to the subject property.

Any unauthorized duplications or reproductions of this certificate shall render this certificate void and relieve the undersigned from any and all liability hereunder. Further, this certificate may not be relied upon by any person or firm other than the above named addressee for any purpose whatsoever without the prior written consent of the undersigned. Subsequent reliance contrary hereto shall render this certificate void and relieve the undersigned of any liability hereunder.

Sincerely yours,

JACKSON, TULLOS, ROGERS & MORGAN, PLLC



Joseph R. Tullos

EXHIBIT "A"
2-083C-16-002.00 (PPIN 32303)

A part of Blocks 65 and 66 of the D. D. McInnis Third (3rd) Survey, Hattiesburg, Forrest County, Mississippi and more particularly described as beginning at the Northeast Corner of the above said Block 65; thence West and along the South margin of Hall Avenue 260 ft.; thence South 18° 39' West along the Eastern margin of Francis Street (now Martin Luther King Avenue) 383.7 ft.; thence South 88° 09' 30" East 206 ft.; thence North 01° 09 East 106.48 ft.; thence South 76° 29 East 182.6 ft. North 00° 32' 41" West along the East line of said Block 65 for 306.5 ft. to the point of beginning.



JACKSON, TULLOS, ROGERS & MORGAN, PLLC

ATTORNEYS AT LAW
309 SOUTH 40TH AVENUE
HATTIESBURG, MISSISSIPPI 39402

ROBERT T. JACKSON, SR.
ROBERT T. JACKSON, JR.
JOSEPH R. TULLOS
G. NEIL ROGERS
M. WILLIAM MORGAN
JOHN MADISON GURCE, JR.
JOHN B. HOWELL, III

MAILING ADDRESS:
P. O. BOX 15517
HATTIESBURG, MS 39404-5517

January 6, 2022

TELEPHONE: (601) 264-3309
FACSIMILE: (601) 264-6044

Mr. Lamar Rutland
Director of Engineering
City of Hattiesburg
P. O. Box 1898
Hattiesburg, MS 39403-1898

Re: Title examination and opinion relating to Tax Parcel 2-083C-16-003.00
(PPIN 32304), the property owned by MARTIN LUTHER KING AVENUE
BAPTIST CHURCH, located in Forrest County, Mississippi.

Dear Rutland:

Pursuant to your request that we examine title to the property hereinabove generally identified and hereinafter more particularly described and furnish you with our opinion relative to the status thereof, please be advised that we have made a careful and diligent search of the public records, properly indexed, of Forrest County, Mississippi, for a period of more than thirty-one (31) years prior to the date and time hereafter set forth as the same pertain to and affect the real property lying, being situated in Forrest County, Mississippi, more particularly described as follows, to wit:

**SEE EXHIBIT "A" WHICH IS ATTACHED HERETO AND MADE A PART
HEREOF AS IF FULLY COPIED AND SET OUT AT LENGTH IN WORDS
AND FIGURES HEREIN.**

From said examination, assuming that all instruments affecting title to said real property have been properly indexed on the Sectional Index of said County, we find the record title to the surface of the real property to be in the form of the unexpired portion of a Sixteenth Section Leasehold Interest vested in **MARTIN LUTHER KING AVENUE BAPTIST CHURCH**, subject to the following exceptions:

1. The subject property is encumbered by the following Deed of Trust: NONE
2. County and state ad valorem taxes for the years 2018, 2019 and 2020 have been paid. There is also a current liability for 2021 taxes which constitutes a lien on the subject property which will be due on January 1, 2022, and which will not be in default until on or after February 1, 2022.

PPIN: 32304
Amount: Exempt

3. Subject to any and all covenants and restrictions of record.
4. There is a potential gap in the chain of title, and it is recommended that a deed from Claude Jackson, Sr. be obtained and/or further investigation into the status of the interest in Claude Jackson, Sr.
5. Subject to any and all easements of record and of use affecting the property.
6. Subject to any and all prior and outstanding leases, exceptions, reservations and/or conveyances of oil, gas and/or other minerals and any geothermal energy resources lying in, on and under the above described real property.
7. Subject to any environmental condition existing upon the subject property, which would cause said property to be in violation of any State and/or Federal Environmental Protection Act. This certificate does not express an opinion as to any environmental condition which may be in violation of such laws and is subject to any such condition which may affect the title to said property or lien placed against said property by any lender, individual Corporation or otherwise.
8. Rights or claims of parties in possession not shown by public records.
9. Subject to any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
10. Subject to riparian and other rights created if subject property is bordered by or fronts water.
11. Subject to any and all entities in the chain of title having been validly formed and being in good standing under the laws in the state in which they were formed, including any allegations of forged or fraudulent contract, deed or other instruments affecting title or whether or not documents in the chain of title were executed to or from a party of sound and disposing mind or a nonexistent corporation, person or entity, or whether or not a person signing for or on behalf of a corporation, unincorporated association, or another person in a representative capacity was duly authorized to execute any documents in the chain of title in such capacity.
12. Subject to consequences of any allegations or determination that the lease under which title is being claimed is in violation of Article 4, Section 95 of the Mississippi Constitution of 1890, or that the statutory procedure as set forth by the legislature was not followed at the time the lease was executed.

This opinion does not in any manner constitute a guarantee of title to the hereinabove described lands, but is merely the opinion of this office with respect to the title to the property as

reflected by the records and instruments which are properly noted in the Sectional Index, and does not extend to problems of adverse possession, errors in survey, or facts which are not shown of record in the Forrest County Courthouse.

This opinion and certificate does not cover the status of the zoning of the subject property under the zoning ordinances of Forrest County, Mississippi, and is subject to any other land use restrictions of applicable governmental units. This opinion does not extend to or determine whether the subject real property lies within a flood hazard zone.

This opinion does not cover any state of facts which would be revealed by an accurate survey or by a physical inspection of the subject real property, including, but not limited to, encroachments, variation in area or in measurements, boundary line disputes, roadways, and matter not of record, including lack of access.

This opinion is addressed to **The City of Hattiesburg, Mississippi, a Municipal Corporation**, and the liability of the undersigned attorney extends only to the said City. The title research that is contained within this title opinion certificate is intended for the exclusive use of the party to whom it is addressed. The liability of the undersigned firm extends only to the addressee hereof and said liability terminates if this title opinion is used as an update for any other opinion, title insurance commitment or policy.

This opinion does not cover any state of facts affecting the record title to the subject real property subsequent and after **November 4, 2021, at 8:00 o'clock a.m.**, which date shall be deemed to be, and is, the date and time of this opinion and certificate.

Please be advised that, subject to the above date and time of this opinion and subject to the above-recited exceptions, **MARTIN LUTHER KING AVENUE BAPTIST CHURCH**, is the record owner of the unexpired portion of a Sixteenth Section Leasehold Interest in and to the subject property.

Any unauthorized duplications or reproductions of this certificate shall render this certificate void and relieve the undersigned from any and all liability hereunder. Further, this certificate may not be relied upon by any person or firm other than the above named addressee for any purpose whatsoever without the prior written consent of the undersigned. Subsequent reliance contrary hereto shall render this certificate void and relieve the undersigned of any liability hereunder.

Sincerely yours,

JACKSON, TULLOS, ROGERS & MORGAN, PLLC



Joseph R. Tullos

EXHIBIT "A"
Tax Parcel 2-083C-16-003.00 (PPIN 32304)

A part of Blocks 65 and 66 of the D. D. McInnis Third (3rd) Survey, Hattiesburg, Forrest County, Mississippi and more particularly described as beginning at the Northeast Corner of the above said Block 65; thence West and along the South margin of Hall Avenue 260 ft.; thence South 18° 39' West along the Eastern margin of Francis Street (now Martin Luther King Avenue) 383.7 ft.; thence South 88° 09' 30" East 206 ft.; thence North 01° 09 East 106.48 ft.; thence South 76° 29 East 182.6 ft. North 00° 32' 41" West along the East line of said Block 65 for 306.5 ft. to the point of beginning.





Forrest County, MS

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Forrest County Tax Assessor/Collector
601 Main St
Hattiesburg, MS 39401
(601) 582-4228

PPIN#	32304
PARCEL_ID#	2-038C-14-003.00
OWNERNAME	MARTIN LUTHER KING AVENUE BAPTIST
ADDRESS1	110 MARTIN LUTHER KING AVE
ADDRESS2	
CITY	HATTIESBURG
STATE	MS
ZIP	39401
SECTION	16
TOWNSHIP	04N
RANGE	12W
LEGAL1	PT OF BLK 66 OF D D MCINNIS 3RD SUBD ED AT THE NW 1/4 OF BLK 66 RUN E 20FT TH S 340FT TH 160FT TH NELY 380FT TO POB 1/409BK 613 PG 299 03/06
LEGAL2	
LEGAL3	
TAX_DIST	1110
CULT_ACT1	0
CULT_ACT2	0
UNCULT_ACT1	0
UNCULT_ACT2	0
TOTAL_AC	0
CULT_VAL1	70560
CULT_VAL2	0
UNCULT_VAL1	0
UNCULT_VAL2	0
LAND_VAL	70560
IMP_VAL1	0
IMP_VAL2	0
TOTALVALUE	70560
EXEMPT_CODE	11
HOMESTEAD	
DEED_BOOK	1197
DEED_PAGE	303
DEED_DATE	1425427200000
SITUS_ADDR	0




Forrest County, MS

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Forrest County Tax Assessor/Collector
601 Main St
Hattiesburg, MS 39401
(601) 582-8228

PPIN:	32303
PARCEL_ID:	2-038C-16-002.00
OWNERNAME:	MARTIN LUTHER KING AVENUE BAPTIST
ADDRESS1:	110 MARTIN LUTHER KING AVE
ADDRESS2:	
CITY:	HATTIESBURG
STATE:	MS
ZIP:	39401
SECTION:	16
TOWNSHIP:	04N
RANGE:	13W
LEGAL1:	PT OF BLK 65 OF D D MCINNIS 3RD SURCOMM NE/COR BLK 65 W 75 FOR POB W 135 S 360 E 46 N
LEGAL2:	106.5 SELY 182.6 N221.5 W 75 N 85 TO POB B543-P221 1/80BK 613 PG 399 03/06
LEGAL3:	
TAX_DIST:	1110
DIRT_AC1:	0
CULT_AC2:	0
UNCULT_AC1:	0
UNCULT_AC2:	0
TOTAL_L2:	0
CULT_VAL1:	24570
DIRT_VAL2:	0
UNCULT_VAL1:	0
DIRT_VAL2:	0
LAND_VAL:	24570
IMP_VAL1:	0
IMP_VAL2:	0
TOTAL_VALUE:	24570
EXEMPT_COD:	11
FRONTFEET:	
DEED_BOOK:	1197
DEED_PAGE:	302
DEED_DATE:	1425427200000
STATUS_ADDR:	208 FRANCIS STREET



Property Appraisal Link

FORREST COUNTY, MS

Current Date 1/19/2022

Tax Year 2021

PARCEL 2-038C-16-002.00
PPIN 032303
OWNER NAME
OWNER ADDRESS
PROPERTY ADDRESS
PROPERTY IS VACANT (Y/N) N
FIELD WORK BY **DATE:** //
CLASSIFIED BY **DATE:** //
REVIEWED BY O/S **DATE:** 5/21/2009
REALTOR CODE

APPRAISAL INQUIRY

ALT PARCEL NUMBER 230 -0628-065-001.01
SKETCH 1
 MARTIN LUTHER KING AVENUE BAPTIST
 110 MARTIN LUTHER KING AVE
 HATTIESBURG MS39401
 208 FRANCIS STREET

LEGAL DESCRIPTION

- 1 PT OF BLK 65 OF D D MCINNIS
- 2 3RD SURCOMM NE/COR BLK 65 W 75
- 3 FOR POB W 135 S 360 E 46 N
- 4 106.5 SELY 182.6 N221.5 W 75 N
- 5 85 TO POB B543-P221 1/80
- 6 BK 613 PG 399 03/06/1989
- 7 PREV #:H0628-38-001A

Block 065 Section 16 Township 04N Range 13W
 Book 1197 Page 302 Type WD Date 3/4/2015
 Book 1180 Page 214 Type WD Date 6/13/2014
 Book 1006 Page 744 Type WD Date 2/13/2007

LOT INFORMATION

LOT CODE 0628 **LOT SIZE** 210.0 X 420 **LOT VALUE** 24570

CODE	FRONT FT	DEPTH	PRICE	DEPTH TABLE	DEPTH %	ADJ. %	DESCRIPTION	ADJ PRICE	APPRAISED	CLASS
0628	210.00	420	100.00	9	1.17	1.00	1	117.00	24570	1

ACRE INFORMATION

ACRES TYPE **QUAL CLASS** **PRICE CODE** **CULTIVATED CODE** **PRICE** **ADJ. %** **DESCRIPTION** **APPRAISED** **MARKET**
 *** NO ACREAGE INFO ***

ACREAGE VALUE **OVERALL VALUE** 24570
LAND USE CODE CLASS 1 6910 RELIGIOUS SERVICES
LAND USE CODE CLASS 2 6910 RELIGIOUS SERVICES

BUILDING DESCRIPTIONS

NUMBER	CODE	BUILDING DESCRIPTION	VALUE	ELIGIBLE CLASS 1
*** NO BUILDING INFO ***				

TOTAL PARCEL VALUE 24570



View Tax



Property Link
FORREST COUNTY, MS

Current Date 1/19/2022

Tax Year 2021

Records Last Updated 1/19/2022

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Forrest County Tax Assessor/Collector
601 Main St
Hattiesburg, MS 39401
(601) 582-8228

PPIN:	32304
PARCEL_ID:	2-038C-16-003.00
OWNERNAME:	MARTIN LUTHER KING AVENUE BAPTIST
ADDRESS1:	110 MARTIN LUTHER KING AVE
ADDRESS2:	
CITY:	HATTIESBURG
STATE:	MS
ZIP:	39401
SECTION:	16
TOWNSHIP:	04N
RANGE:	13W
LEGAL1:	PT OF BLK 66 OF D D MCINNIS 3RD SUBEG AT THE NWC OF BLK 66 RUN E 20FTTH S 360FT TH
LEGAL2:	160FT TH NELY 380FT TO POB 1/80BK 613 PG 399 03/06
LEGAL3:	
TAX_DIST:	1110
CULT_AC1:	0
CULT_AC2:	0
IMPROV_AC1:	0
UNCULT_AC2:	0
TOTAL_AC:	0
CULT_VAL1:	70560
CULT_VAL2:	0
UNCUL_VAL1:	0
IMPROV_VAL2:	0
LAND_VAL:	70560
IMP_VAL1:	0
IMP_VAL2:	0
TOTALVALUE:	70560
EXEMPT_COD:	11
DEED_BOOK:	1197
DEED_PAGE:	302
DEED_DATE:	1425427200000
BITS_ADR:	0



Property Appraisal Link

FORREST COUNTY, MS

Current Date 1/19/2022

Tax Year 2021

APPRAISAL INQUIRY
PARCEL 2-038C-16-003.00 **ALT PARCEL NUMBER** 230 -0628-066-001.01
PPIN 032304 **SKETCH** 1
OWNER NAME MARTIN LUTHER KING AVENUE BAPTIST
OWNER ADDRESS 110 MARTIN LUTHER KING AVE
 HATTIESBURG MS39401

PROPERTY ADDRESS
PROPERTY IS VACANT (Y/N) N
FIELD WORK BY DATE: //
CLASSED BY DATE: //
REVIEWED BY O/S DATE: 5/21/2009
REALTOR CODE

LEGAL DESCRIPTION
 1 PT OF BLK 66 OF D D MCINNIS
 2 3RD SURBEG AT THE NWC OF BLK
 3 66 RUN E 20FTTH S 360FT TH
 4 160FT TH NELY 380FT TO POB
 5 1/80
 6 BK 613 PG 399 03/06/1989
 7 PREV #:H0628-39-001A

Block 066 Section 16 Township 04N Range 13W
 Book 1197 Page 302 Type WD Date 3/4/2015
 Book 1180 Page 214 Type WD Date 6/13/2014
 Book 1006 Page 744 Type WD Date 2/13/2007

LOT INFORMATION

LOT CODE 0628 LOT SIZE LOT VALUE 70560

CODE	FRONT FT	DEPTH	PRICE	DEPTH TABLE	DEPTH %	ADJ %	DESCRIPTION	ADJ PRICE	APPRAISED	CLASS
OVER	1.00		70560.00	99	1.00	1.00	SQUARE FT	70560.00	70560	1

ACRE INFORMATION

ACRES TYPE **QUAL CLASS** **PRICE CODE** **UNCULTIVATED CODE** **PRICE** **ADJ %** **DESCRIPTION** **APPRAISER** **MARKET**
 *** NO ACREAGE INFO ***

ACREAGE VALUE **OVERALL VALUE** 70560
LAND USE CODE CLASS 1 8180 FARMS(GENERAL)
LAND USE CODE CLASS 2 8180 FARMS(GENERAL)

BUILDING DESCRIPTIONS

NUMBER	CODE	BUILDING DESCRIPTION	VALUE	ELIGIBLE CLASS 1
*** NO BUILDING INFO ***				

TOTAL PARCEL VALUE 70560



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Property Link
FORREST COUNTY, MS

Current Date 1/19/2022

Tax Year 2021

Records Last Updated 1/19/2022

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Forrest County Tax Assessor/Collector
601 Main St
Hattiesburg, MS 39401
(601) 582-8228

PPIN:	21676
PARCEL ID:	2-038C-16-005.00
OWNERNAME:	MARTIN LUTHER KING AVENUE BAPTIST C
ADDRESS1:	110 MARTIN LUTHER KING AVENUE
ADDRESS2:	
CITY:	HATTIESBURG
STATE:	MS
ZIP:	39401
SECTION:	16
CORNER P.P.	04N
RANGE:	13W
LEGAL1:	PT OF BLK 65 OF D.D. MCINNIS 3RD SUR, BEG AT THE SE-CORNER OF BLK 65 RUN W 210' TH N 60'
LEGAL2:	TH E 40' TH N 106' THE S76 E 182' TH S 120' TO POB B543P221 8/84
LEGAL3:	
TAX_DIST:	1110
BLK_AC1:	0
CULT_AC2:	0
UNBLK_AC1:	0
UNCULT_AC2:	0
TOTAL_AC:	0
CULT_VAL1:	17770
CULT_VAL2:	0
UNCULT_VAL1:	0
UNCULT_VAL2:	0
LAND_VAL:	17770
IMP_VAL1:	33420
IMP_VAL2:	0
TOTALVALUE:	51190
EXEMPT_COD:	0
DEED_BOOK:	1325
DEED_PAGE:	0332
DEED_DATE:	1572825600000
SITUS_ADDR:	0



Property Appraisal Link

FORREST COUNTY, MS

Current Date 2/ 7/2022

Tax Year 2021

APPRaisal INQUIRY
ALT PARCEL NUMBER 230 -0628-065-001.00
SKETCH 1 [VIEW 01](#)
OWNER NAME MARTIN LUTHER KING AVENUE BAPTIST C
OWNER ADDRESS 110 MARTIN LUTHER KING AVENUE
 HATTIESBURG MS39401

PROPERTY ADDRESS
PROPERTY IS VACANT (Y/N) N
FIELD WORK BY CH DATE: 1/ 1/1982
CLASSED BY CH DATE: 1/ 1/1982
REVIEWED BY H/T DATE: 9/24/2015
REALTOR CODE

LEGAL DESCRIPTION
 1 PT OF BLK 65 OF D.D. MCINNIS
 2 3RD SUR. BEG AT THE SE-CORNER
 3 OF BLK 65 RUN W 210' TH N 60'
 4 TH E 40' TH N 106' THE S76 E
 5 182' TH S 120' TO POB B543
 6 P221 8/84
 7 PREV #:H0628-38-001

Block 065 Section 16 Township 04N Range 13W
 Book 1325 Page 0332 Type QCD Date 11/ 4/2019
 Book 1186 Page 549 Type QCD Date 10/ 1/2014

LOT INFORMATION

LOT CODE 0628 **LOT SIZE** **LOT VALUE** 17770

CODE	FRONT FT	DEPTH	PRICE	DEPTH/ABLE	DEPTH %	ADJ. %	DESCRIPTION	ADJ PRICE	APPRAISED	CLASS
0628	65.00	210	100.00	99	1.07	1.00	SQUARE FT	107.00	6960	1
0628	106.00	164	100.00	9	1.02	1.00		102.00	10810	1

ACRE INFORMATION

ACRES TYPE DUAL CLASS PRICE CODE UNCULTIVATED CODE PRICE ADJ. % DESCRIPTION APPRAISED MARKET
 *** NO ACREAGE INFO ***

ACREAGE VALUE **OVERALL VALUE** 17770
LAND USE CODE CLASS 1 1110 ONE FAMILY UNIT
LAND USE CODE CLASS 2 1110 ONE FAMILY UNIT

BUILDING DESCRIPTIONS

NUMBER	CODE	BUILDING DESCRIPTION	VALUE	ELIGIBLE CLASS 1
001	001	RESIDENCE	33420	Y

TOTAL PARCEL VALUE 51190



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Property Appraisal Link

FORREST COUNTY, MS

Current Date 2/7/2022

APPRAISAL INQUIRY

PARCEL 2-038C-16-005.00 ALT PARCEL NUMBER 230 -0628-065-001.00

PPIN 021676

SKETCH 1

OWNER NAME

MARTIN LUTHER KING AVENUE BAPTIST C

APPRAISAL SUMMARY - STRUCTURE CLASS R AND C

EXTERIOR	BRICK VENEER
ROOF TYPE	GABLE
ROOF MATERIAL	ASPHALT SHNG H/D
FLOORS	HARDWOOD/LAMINAT
INTERIOR	DRYWALL
PLUMBING	AVERAGE
ELECTRIC	AVERAGE
EXTRAS	3 Fix. Bath
	H&AC W/DUCTS

BASIC AREA	1440
UNITS: CONST 104	
CLASS D CLASS UNITS	
= TOTAL UNITS	104
X RATES: BASE 39.43 ADJ.	41.01
X INDEX 1.130 COST/SF	46.34
X ADJUSTED AREA	1569
= BASIC COST	72707
+ EXTRA FEATURES	10840
= ADJUSTED COST	83547
DEPRECIATION:	
STRAIGHT	
ADDITIONAL	
OVERRIDE	40
X CONDITION	40 %
= DEPRECIATED COST	33419
X NUMBER OF BUILDINGS	1
FINAL VALUE	33420
OVERRIDE VALUE	
YEAR BUILT	
OVERRIDE REASON XX	

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Sketch by Apex IV™



Property Link

FORREST COUNTY, MS

Current Date 2/ 7/2022

Tax Year 2021
Records Last Updated 2/ 7/2022**PROPERTY DETAIL**

OWNER MARTIN LUTHER KING AVENUE BAPT
125 DOGWOOD DR

HATTIESBURG 39402

ACRES : **NA**
LAND VALUE : 17770
IMPROVEMENTS : 33420
TOTAL VALUE: 51190
ASSESSED : 7679

PARCEL 2-038C-16-005.00
ADDRESS **NA**

TAX INFORMATION

YEAR 2021	TAX DUE	PAID	BALANCE
COUNTY	502.97	0.00	505.48
CITY	407.99	0.00	410.03
SCHOOL	507.43	0.00	509.97
TOTAL	1418.39	0.00	1425.48 .50% Penalty

LAST PAYMENT DATE **NA**

TAXES DELINQUENT PRIOR YEAR**MISCELLANEOUS INFORMATION**

EXEMPT CODE	LEGAL
HOMESTEAD CODE None	PT OF BLK 65 OF D.D. MCINNIS
TAX DISTRICT 1110	3RD SUR. BEG AT THE SE-CORNER
PPIN 021676	OF BLK 65 RUN W 210' TH N 60'
SECTION 16	TH E 40' TH N 106' THE S76 E
TOWNSHIP 04N	182' TH S 120' TO POB R543
RANGE 13W	P221 8/84
	PREV #:H0628-38-001
	MCINNIS D D 3RD ADD

Book 1325 **Page** 0332

PURCHASE COUNTY TAX SALE FILES**TAX SALES HISTORY, FOR UNPAID TAXES**

Year	Sold To	Redeemed Date/By
2020	STATE OF MISSISSIPPI	NOT REDEEMED
2019	STATE OF MISSISSIPPI	NOT REDEEMED
2018	STATE OF MISSISSIPPI	NOT REDEEMED
2017	STATE OF MISSISSIPPI	NOT REDEEMED
2016	STATE OF MISSISSIPPI	NOT REDEEMED
2015	STATE OF MISSISSIPPI	NOT REDEEMED
2014	STATE OF MISSISSIPPI	NOT REDEEMED
2013	STATE OF MISSISSIPPI	NOT REDEEMED

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Fencing Quote

PROPOSAL

Jefcoat Fence Company, Inc. of Hattiesburg
P. O. Box 1167
Hattiesburg, MS 39403
Phone: 601-583-0516
Fax 601-583-4990



"The Name that Secures Your Trust"
www.jefcoاتفenceofhattiesburg.com

QUOTE IS VALID FOR 15 DAYS.

Company	George null collins	From	Kenny Smith
		Date:	11/8/2021
Fax/Email		Cell Phone:	601 408 3303
Re:		Email:	kenny@jefcoاتفenceofhattiesburg.com

MS. CERTIFICATE OF RESPONSIBILITY # 16003-SC
MS. ELECTRONIC PROTECTION LICENSE #15024185

AS DEFINED BY FEDERAL GOVERNMENT WE ARE A SMALL DISADVANTAGED BUSINESS AND WOMEN OWNED SMALL BUSINESS

To provide materials and labor as follows to Install:

Install 250' of 6' black vinyl chainlink amount\$6800.71

Install 100' of 2- strand barbwire amount\$1599.65

Thank you
Kenny Smith
Asst. Manager 601-408-3303

ALL PRICES PLUS APPLICABLE SALES TAX, INSURANCE, AND BONDS.

NOTE: With a written contract that lists the insurance requirements, there is no additional insurance cost UNLESS insurance requirements are requested that are above our standard policies for each entity. Otherwise, there may be additional charges for named additional insured, completed operations, and auto for each entity. Jefcoat Fence Co. Inc. of Hattiesburg uses our carrier's accepted endorsements only.

ACCEPTANCE OF PROPOSAL

The above specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified.

Date of Acceptance: _____ Signature: _____

Parcel No. PPIN# 21676 / PPIN# 32303 and PPIN# 32304 Project No. Hall Avenue West Project
Addenda



Collins and Null

February 9, 2022

RE: MDOT – Sign Quote - Hattiesburg

WORK PROPOSAL

**** DENOTES DISCLAIMERS**

DESCRIPTION OF WORK	PRICE
Demo of old sign	\$1385
Labor and Material to lay new brick sign structure, paint, Landscaping of plants around and in sign bed, and new metal signage (front of sign 3 signs)	\$10,513
TOTAL FEE	\$11,898
**SEE ALL DISCLAIMERS BELOW FOR THIS PROJECT	

****Customer is responsible for marking utilities.**

****MSP is NOT responsible for damage to unmarked utilities.**

****Price is good for two weeks**

Respectfully Submitted,

Michael Patterson
 MSP Enterprises

January 20, 2021

4" cal. Trees	Qty	Rate	Amount
Bald Cypress	5	\$575.00	\$2,875.00
Magnolia	1	\$575.00	\$575.00
River Birch	2	\$575.00	\$1,150.00
Cedar	1	\$575.00	\$575.00
Crapemyrtle	1	\$525.00	\$525.00

\$150.00 per Tree installation

7 % sales tax add to total amount

Susan Campbell
Green Acres Nursery
6427 Hwy 11 N
Carriere, Ms. 39426
601-798-1441

YARD IMPROVEMENTS

QUANTITY DEDUCTIONS

For large installations greater than 400 linear feet of fencing or walls, such as industrial or subdivision uses, farms and highways, deduct the following:

600 linear feet.....	5%	4,500 linear feet.....	15%
2,000 linear feet.....	10%	6,000 linear feet.....	20%

CHAIN LINK FENCES

Average cost per linear foot of galvanized steel fence, including complete installation on 2" round or "H" posts set in concrete, 10' on centers. Rails, barbed wire and gates are given as additives to the base costs. Gates are priced on a per-gate basis.

TYPE OF MATERIAL	4'	6'	8'	10'	12'
2" mesh, #7 wire.....	17.40	25.25	33.25	40.75	48.00
#9 wire.....	14.95	21.75	28.75	35.25	41.75
#11 wire.....	12.85	18.55	24.35	30.00	35.75
Add for rails.....	2.88	2.88	3.10	3.10	3.10
Add for 3-strand barbed wire.....	3.71	3.71	4.16	4.16	4.16
Add for barbed coils.....	14.30	14.30	15.20	15.20	15.20
Add for privacy slats.....	8.68	13.20	17.80	22.75	27.25

Add 14% for aluminum or add 20% for vinyl-covered wire.
For fabric wind screen, add 0.71 - 1.39 per square foot.
For security micro-mesh, add 1.00 - 1.94 per square foot.

Gates, 3' wide.....	338.00	432.00	505.00	—	—
5' wide.....	439.00	605.00	740.00	910.00	1330.00
10' wide.....	725.00	910.00	1050.00	1180.00	1330.00
15' wide.....	915.00	1170.00	1370.00	1550.00	1720.00
20' wide.....	1130.00	1430.00	1660.00	1900.00	2100.00
25' wide.....	—	—	1780.00	2060.00	2240.00

Add 25% for sliding gates.

SECURITY GATE TURNSTILES

(Cost each, including installation.)

One-way, manual operation, galvanized aluminum.....	7900.00 - 9150.00
stainless steel.....	10500.00 - 14000.00
pedestal-type arm turnstile.....	13600.00 - 16300.00
Handicap gate.....	2030.00 - 5850.00
Add 100% for tandem gates, 25% for polycoated gates, 30% for electrically operated gates.	4850.00 - 7900.00

METAL FENCES, RAILING AND GRILLS

(Cost ranges per square foot.)

Hand forged wrought iron or modular, steel or aluminum.....	9.28 - 28.25
Gates.....	13.95 - 34.25
Add for bronze anodized or powder coated.....	6.97 - 13.60
For window grills and ornamental driveway gates, see Section 55.	—
Custom ornamental work can run two to three times the listed costs.	—

KENNEL RUNS

(Cost ranges per square foot of fencing.)

Wire mesh on steel posts (wall area).....	4.34 - 8.10
Mesh cover (roof area).....	5.41 - 9.93
Add for gates, each.....	227.00 - 432.00
For paneled self-supporting partitions, deduct 20%.	—

MASONRY WALLS

(Cost ranges per square foot, including normal foundations.)

4" concrete block with pilasters, reinforced.....	11.55 - 14.35
6" concrete block, reinforced.....	13.30 - 16.35
8" concrete block, reinforced.....	14.15 - 19.00
8" block piers or pilasters, each.....	179.00 - 459.00
Ornamental screen block.....	11.75 - 19.00
Add for each wythe of face block.....	1.39 - 3.94
Add for stucco finish, each side.....	3.32 - 5.41
Common brick, 8" thick.....	25.25 - 32.75
8" block back-up.....	21.75 - 29.25
add for each additional 4" thickness of common brick.....	6.73 - 9.83
6" brick piers or pilasters, each.....	338.00 - 1370.00
Add for each wythe of face brick.....	3.18 - 4.94
Concrete, precast, posts and solid panels.....	10.45 - 19.00
Add for wood grain or split face.....	3.10 - 7.38

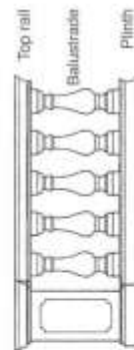
NOTE: For light residential subdivision installations using unskilled laborers, costs may be 25% lower.
For retaining walls, gabions, see Section 51. For stone walls, see Section 55.

CONCRETE RAIL FENCES

(Cost ranges per linear foot of post and split rail prefabricated concrete fences, installed.)

4' high, one rail.....	10.35 - 15.35
5' high, two rails.....	14.95 - 22.90
6' high, three rails.....	20.70 - 31.00
8' high, four rails.....	25.25 - 38.75

BALUSTRADING



Precast stone balustrading found in ornamental railings around pools, patios, garden paths, stairs, etc., will cost 248.00 to 820.00 per linear foot installed, excluding urns, statuary, etc. Because of the various styles and lengths of balustrades, costs should be built up individually.

Pier shaft

UNIT COSTS

Pier shaft, pedestal, pilaster, etc. (including cap and base), each.....	240.00 - 2575.00
Gate, fence piers, 8' each.....	3000.00 - 16300.00
Plinth or bottom rail, per lin. ft.....	43.50 - 87.00
Baluster, each.....	144.00 - 481.00
Ornamental block parapet screening, per lin. ft.....	117.00 - 185.00
Top rail, per lin. ft.....	84.00 - 119.00
add for lighting under rail, per lin. ft.....	83.00 - 118.00
For curved or stepped balustrading, add 135% to the cost.	—
For finials, urns, vases, statuary, etc., see Page 8. For lanterns, see Page 5.	—
For high-density foam polymer plastic, deduct 50%.	—

TRASH ENCLOSURES

Masonry-walled dumpster enclosures, each.....

2025.00 - 5750.00

CONCRETE EQUIPMENT PADS

Package air conditioning compressor pads, each.....

240.00 - 880.00

Transformer pads, reinforced, each.....

930.00 - 2750.00

QUALIFICATIONS OF GEORGE W. NULL, JR., MAI



My experience, in excess of 22 years, in the real estate appraisal field has granted me great competency in a wide range of real estate matters. Clients have included local, state and federal government agencies, utility companies, attorneys, large corporations and private property owners. Contact information: george@trustatlas.com

Professional Designations & Affiliations

- ☐ State Certified General Real Estate Appraiser (2002) - State of Mississippi, (GA-679)
- ☐ State Certified General Real Estate Appraiser (2019) - State of Louisiana, (G4358)
- ☐ State Certified General Real Estate Appraiser (2019) - State of Texas, (TX 1380889 G)
- ☐ Designated Member of the Appraisal Institute (2008) (MAI #12522)
- ☐ Active Member of the International Right-of-Way Association (2005)
- ☐ Member of the Gulf Coast Association of Realtors (2020)
- ☐ Member of Hattiesburg Multiple Listing Service (2005)
- ☐ Member of Jackson Multiple Listing Service (2020)
- ☐ Member of Starkville Multiple Listing Service (2019)

Professional Work History

Collins and Null Appraisals – (2001 to Present)

President of the company since 2003 and the Principal Appraiser. I appraise all forms of real estate, including commercial, industrial, residential, Rights-of-Way, partial interest and timber land. My experience also includes consultation for court proceedings, review of peer appraisals and expert witness testimony.

Atlas Right-of-Way Services – (2016 to Present)

Managing director of a full-service right-of-way company. Duties include management of right-of-way acquisition projects, annexation projects and market data brochures. This company was formed due to the need for additional services in relation to our right-of-way appraisal business.

Real Estate Development – (2003 to Present)

My experience has included development of multi-family, retail, office, industrial, agricultural, recreational and other commercial real estate development projects throughout the state of Mississippi.

Mississippi Department of Transportation – (1998 to 2001)

Senior R.O.W. Appraiser and Project Leader

Primary responsibility was supervision and appraisal of Right-of-Way for Road Project across the entire state of Mississippi. Acted as appraisal project manager on multiple projects. Included court testimony and expert witness duties.

Engineering Plus - Meridian, MS – (1996 to 1998)

Primary responsibility was assistance in preparation of plans for State Aid Road Projects for a civil engineering firm, which included CAD design of Bridges and Road Alignments, Implementation of Survey data, Site inspections, and determination of Right-of-Way Limits.

Academic Background

- ☐ BLA (Bachelor's in Landscape Architecture) received from Mississippi State University – (1996)
- ☐ BS in Agriculture (Contracting Option) received from Mississippi State University – (1996)

Professional Summary

My professional career began in the civil engineering industry in 1996, which included starting in the field with surveying. This later progressed into office-based CAD design for road and bridge projects. In 1998, I was hired by the Mississippi Department of Transportation as an entry level appraiser, where again my expertise led me to be team leader of an appraisal staff. This included performing real estate appraisals and expert witness testimonies in relation to right-of-way needed for road and bridge projects across the state of Mississippi. In 2001, I entered into a private practice where my expertise was expanded to the appraisal and consultation of all forms of real estate for a wide variety of clients. In 2002, I became General Certified, and followed this certification with the MAI designation from the Appraisal Institute in 2008. In addition to the appraisal business, I have been involved in the development of a variety of commercial projects around the state. In 2016, due to the expanding needs of our clients for assistance in right-of-way acquisition, we began Atlas Right-of-Way services, which is a full-service right-of-way company. This experience, in excess of 20 years, has granted me great competency in a wide range of real estate matters. Clients have included local, state and federal government agencies, utility companies, attorneys, large corporations and private property owners.

Court Testimony Experience

In addition to my appraisal experience, I have vast court testimony experience in the field of real estate valuation for condemnation, bankruptcy, diminution in value, inverse condemnation, partitioning, and other real estate related cases. This court testimony experience began in 2000 and exceeds 75 cases over the last 20 years. This experience includes testimony over the entire state from North Mississippi to the Delta to the Gulf Coast. Clients have included the Mississippi Department of Transportation, Mississippi Power, private property owners, the Department of Justice, Local Public Agencies, various other utility companies including electrical transmission corridors and gas pipeline right of ways.

This experience has included various settings including court room testimony, depositions, and mediations.

George W. Null, MAI

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Professional Education

The Appraisal of Partial Acquisitions (401) - Jackson, MS	IRWA	1998
Appraisal Principles Course (110) - Houston, TX	Appraisal Institute	1998
Appraisal Procedures Course (120) - Houston, TX	Appraisal Institute	1998
Basic Income Capitalization (310) - Nashville, TN	Appraisal Institute	1999
Advanced Income Capitalization (510) - Atlanta, GA	Appraisal Institute	2000
Principles of Land Acquisition (100) Jackson, MS	IRWA	2000
Skills of Expert Witness Testimony (214)- Gulfport, MS	IRWA	2000
Advanced Sales Comparison & Cost Approach (530) Atlanta, GA	Appraisal Institute	2001
Standards of Professional Practice (410) - Houston, TX	Appraisal Institute	2002
Highest and Best Use & Market Analysis (520)- Atlanta, GA	Appraisal Institute	2002
Report Writing & Valuation Analysis (540) - Atlanta, GA	Appraisal Institute	2002
Advanced Applications (550) - Chicago, IL	Appraisal Institute	2003
Conservation Easement Workshop - Vicksburg, MS	Tara Wildlife	2003
Standards of Professional Practice, USPAP (420) - Online	Appraisal Institute	2004
Completed Comprehensive Exam for MAI Designation, Nashville	Appraisal Institute	2004
Land Titles (C801) - Hattiesburg, MS	IRWA	2005
Land Valuation Adjustments - Tunica, MS	Appraisal Institute	2006
USPAP - Online Course	Appraisal Institute	2006

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REO Appraisal - Pearl, MS	Appraisal Institute	2008
Appraising Distressed Properties - Biloxi, MS	Appraisal Institute	2009
Introduction to Conservation Easement Valuation	Appraisal Institute	2010
Oil Spills and Property Values	Appraisal Institute	2010
USPAP Update	McKissock	2010
Commercial Real Estate - Where do we go now?	Appraisal Institute	2010
Attacking and Defending an Appraisal in Litigation	Appraisal Institute	2011
The Impact of Dodd-Frank on Appraisers and Their Bank Clients	Appraisal Institute	2012
Advanced Spreadsheet Modeling for Valuation Applications	Appraisal Institute	2013
Uniform Appraisal Standards for Federal Land Acquisitions	Appraisal Institute	2014
USPAP Update	Appraisal Institute	2014
105 The Uniform Act - Executive Summary	IRWA	2015
USPAP Update	Appraisal Institute	2015
Introduction to the Income Capitalization Approach -402	IRWA	2016
Easement Valuation – 403	IRWA	2016
Drone Technology and Its Impact on the Appraisal Industry	Appraisal Institute	2017
Fundamentals of Separating Real Property, Personal Property, and Intangible Business Assets	Appraisal Institute	2017

George W. Null, MAI
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USPAP Update course	Appraisal Institute	2018
Business Practices and Ethics	Appraisal Institute	2018
Advanced Residential Relocation Assistance	IRWA	2018
Online Business Practices and Ethics	Appraisal Institute	2019
Basic Appraisal Principles & Procedures Under the Uniform Act	FHWA	2019
USPAP Update course	Appraisal Institute	2020
Introduction to the Uniform Appraisal Dataset	McKissock	2020
Business Practices and Ethics	Appraisal Institute	2020



Revised Establishment of Just Compensation Offer

This document is prepared pursuant to Federal regulation at 49 CFR 24.102(d)

"Establishment and offer of just compensation. Before the initiation of negotiations, the Agency shall establish an amount which it believes is just compensation for the real property. The amount shall not be less than the approved appraisal of the market value of the property, taking into account the value of allowable damages or benefits to any remaining property. An Agency official must establish the amount believed to be just compensation".

The property that is the subject of this offer of just compensation is as follows:

Owner: Martin Luther King Avenue Baptist Church / Hattiesburg School District
Parcel No: PPIN # 32303; 32304; 21676
Project No: 108639-81100
County: Forrest

Under the authority conveyed to me by the City of Hattiesburg, and based on the recommended appraisal for the above-named property, which is inclusive of all compensable interests, I, *Toby Barker*, Mayor of the city of Hattiesburg, do hereby establish the City of Hattiesburg's offer of what is believed to be just compensation for the acquisition of the real property rights specified, in the amount of \$102,800.

Signed _____ Date _____

NOTICE TO ACQUISITION AGENTS

The "just compensation" figure specified above is the total offer for the property, inclusive of all interests. If more than one interest exists for the property, (T's, Q's, E's), please refer to the appraisal review report for allocation of this "just compensation" figure to the various interests that exist.

RESOLUTION

WHEREAS, upon careful consideration, the City of Hattiesburg, Mississippi, (hereinafter “City”), acting by and through the City Council, has determined it to be in the best interests of the citizens of the City to construct an overpass near the West end of Hall Avenue, located within the City limits; and

WHEREAS, to accomplish this project, the City finds it necessary to acquire for public use all or part of certain property belonging to the following landowners or their successors in title and/or other parties interested in said property which is more particularly described as Forrest County PPIN 032303, 032304, and 021676 and in the construction plans for the project, which plans are made a part hereof by reference; and

WHEREAS, an appraisal of the subject property was conducted by Collins & Null Appraisals, Inc., a licensed real estate appraiser, and said appraisal was reviewed by John B. “Jeb” Stewart, a licensed real estate appraiser, on April 4, 2022, showing the fair market value of said property to be \$102,800.00, said appraisal and review appraisal being attached hereto as Exhibit “A”; and

**Forrest County Parcels PPIN 032303, 032304, 021676
Martin Luther King Ave Baptist Church / Hattiesburg School District**

NOW, THEREFORE, LET IT BE KNOWN THAT the appraisal by Collins & Null Appraisals, Inc. dated April 4, 2022, of said property is approved, and the appraised value of \$102,800.00 is acknowledged to be just compensation for said parcel, and the Mayor or his representative is authorized to make a Fair Market Value offer to the owner(s) of said parcel, and, if accepted, the Mayor is authorized to execute any and all documents required to complete said transaction, including the issuance of a manual check in payment.

The above and foregoing Resolution, having been first reduced to writing, was introduced by Council member _____, seconded by Council member _____, and adopted by the following vote:

YEAS: NAYS: ABSENT:

The President thereby declared the motion carried and the Resolution adopted this the 7th Day of June, 2022.

(SEAL)

ATTEST:

ADOPTED:

CLERK OF COUNCIL

PRESIDENT

The above and foregoing Resolution having been submitted to and approved by the Mayor, this the 7th Day of June, 2022.

ATTEST:

APPROVED:

CITY CLERK

MAYOR



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Adopt a Resolution declaring property Identified as a portion of Forrest County Parcel No. 2-028G-05-072.00 (PPIN 024545) necessary for public use and authorize any and all proceedings necessary to acquire the aforementioned property pursuant to *Miss. Code Ann. 21-31-47*, as amended.
File Number: 2022-389
Minute Book #

Summary

Adopt a Resolution declaring property Identified as a portion of Forrest County Parcel No. 2-028G-05-072.00 (PPIN 024545) necessary for public use and authorize any and all proceedings necessary to acquire the aforementioned property pursuant to *Miss. Code Ann. 21-31-47*, as amended.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

RESOLUTION AND ORDER TO CONDEMN

WHEREAS, upon careful consideration, the City of Hattiesburg, Mississippi, (hereinafter “City”), acting by and through the City Council, has determined it to be in the best interests of the citizens of the City to construct and replace a bridge near 713 North 28th Avenue, located within the City limits; and

WHEREAS, to accomplish this project, the City finds it necessary to acquire for public use a portion of a certain property belonging to the following landowners or their successors in title and/or other parties interested in said property which is more particularly described as Forrest County Parcel No. 2-028G-05-072.00 PPIN 024545, and in the construction plans for the project, which plans are made a part hereof by reference; and

WHEREAS, an appraisal of 713 N. 28th Avenue, Hattiesburg, Mississippi, was conducted by Lightsey & Associates, a licensed real estate appraiser, on May 26, 2022, showing the fair market value of said property to be \$140.00, said appraisal being attached hereto as Exhibit “A”; and

Forrest County Parcel 2-028G-05-072.00 PPIN 024545 (Peppertree, LLC)

NOW, THEREFORE, LET IT BE KNOWN THAT the appraisal by Lightsey & Associates dated May 26, 2022, of said property is approved, and the appraised value of \$140.00 is acknowledged to be just compensation for said parcel, and the Mayor or his representative is authorized to make a Fair Market Value offer to the owner(s) of said parcel, and, if accepted, authorize the Mayor to execute any and all documents required to complete said transaction, including the issuance of a manual check in payment.

BE IT FURTHER RESOLVED that the City does hereby declare said property necessary for public use and orders that if an agreement is not reached, the City authorizes and requests the City Attorney and/or other necessary professionals to institute any and all proceedings necessary to acquire the above-described property for public use.

In support of this Resolution and Order to Condemn, the City acknowledges and declares its eligibility to obtain the necessary title to the property through eminent domain by virtue of the authority granted it in *Miss. Code Ann.* § 21-37-47.

The above and foregoing Resolution, having been first reduced to writing, was introduced by Council member _____, seconded by Council member _____, and adopted by the following vote:

YEAS: NAYS:

The President thereby declared the motion carried and the Resolution adopted this the 7th Day of June, 2022.

(SEAL)

ATTEST:

ADOPTED:

CLERK OF COUNCIL

PRESIDENT

The above and foregoing Resolution having been submitted to and approved by the Mayor, this the 7th Day of June, 2022.

ATTEST:

APPROVED:

CITY CLERK

MAYOR

APPRAISAL OF PROPERTY AT

713 NORTH 28th AVENUE

PPIN # 24545

HATTIESBURG, MS

LIGHTSEY & ASSOCIATES

P.O. Box 15489
Hattiesburg, MS 39404
(601) 549-5484

May 26, 2022

Mr. Lamar Rutland
City of Hattiesburg
P.O. Box 1898
Hattiesburg, MS 39403

RE: Appraisal of property at 713 North 28th Avenue, Hattiesburg, MS,
belonging to Peppertree, LLC

Dear Mr. Rutland:

In accordance with the your request, I have made an inspection and investigation of the property located 713 North 28th Avenue, Hattiesburg, Mississippi, for the purpose of forming an opinion of the Market Value, in fee simple, as of May 26, 2022, the effective date of the appraisal being the date the property was last inspected. The value opinion is both before and after the taking of a .007 acre parcel (285 sf) by the City of Hattiesburg in conjunction with the construction of a box culvert to facilitate a bridge replacement project on North 28th Avenue.

Market Value is defined as the most probable price in cash, terms equivalent to cash, or in other precisely revealed terms, for which the property will sell in an open and competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self interest, and assuming that neither is under undue duress.

NEIGHBORHOOD DESCRIPTION

The subject is located in northwest Hattiesburg, west of Highway 49 and north of the University of southern Mississippi. The neighborhood contains a mixture of residential and small commercial properties, most being in excess of 20 years old. There are a number of multi-family units in the area. Maintenance levels appear to be average. The neighborhood is in reasonable proximity to employment, shopping, and medical centers. Based on current trends and existing amenities, it appears that the area should remain viable for a number of years.

SITE DESCRIPTION

The subject site is located on the easterly side of North 28th Avenue, just to the north of West 7th Street. It has considerable frontage along North 28th Avenue and some frontage on West 7th Street. The site is generally rectangular in shape and contains approximately 4.82 acres. It appears to have adequate utility for use as a residential building site. The property does not appear to lie in a designated flood area, though this is subject to certification by a professional engineer or surveyor. All public utilities are connected or available to the site. A survey and plat map are included in the addenda of this report in order to assist the reader in visualizing the property. There were no adverse soil or subsoil conditions observed; however, no soil tests have been made as a part of this report. The property is zoned R-3, Multi Unit Residential, by the zoning authorities of the City of Hattiesburg. The present use appears to be in conformity with zoning requirements. The City intends to take a .007 acre parcel along the northerly property line to install a box culvert that will facilitate the replacement of a bridge across North 28th Avenue. The take is in the northwesterly corner of the site and is low lying along a creek. There are no improvements on the take portion. The remainder site will be approximately 4.813 acres. Following the take, public access and utility will remain essentially the same. There will, in the appraiser's opinion, be no damages to the remainder property.

IMPROVEMENTS DESCRIPTIONS

The subject property is improved with approximately nine apartment buildings with appropriate paved parking and swimming pool. These improvements are well removed from the acquisition area and are given no consideration in this appraisal report.

PROPERTY HISTORY

The subject property appears to have been under the present ownership since February of 2016, based on tax assessor's records. It is not known to be currently listed for sale or under contract.

TAXES

The total taxes for the subject property for 2021 are \$67,633.23. The total true value (tax value) of the property is \$2,441,060.00 with an assessed value of \$366,159.00.

HIGHEST AND BEST USE

In order to estimate the Highest and Best Use of the subject, the surrounding property uses as well as the four tests of Highest and Best Use were considered. These are 1)physically possible, 2)legally permissible, 3)financially feasible, and 4)maximally productive. After considering these factors, the Highest and Best Use of the site as vacant is estimated to be for multi unit development, both before and after the taking. The Highest and Best Use of the property as presently improved is estimated to be for multi unit residential, both before and after the taking.

INTENDED USE AND SCOPE OF THE APPRAISAL

This appraisal is intended to assist the client, Mr. Lamar Rutland of the City of Hattiesburg, in forming an opinion of value of the subject property both before and after the taking of a .007 acre parcel by the City of Hattiesburg for construction of a box culvert. In preparing this appraisal, the appraiser inspected the subject site; gathered information on comparable land sales and listings, confirmed and analyzed the data and applied the Sales Comparison Approach to value. As only the land was considered in this appraisal, this was the only approach deemed applicable to the subject's valuation.

APPRAISAL PROCESS

In good appraisal practice, three approaches to value are normally used to arrive at a value conclusion for a given property. These approaches are the Sales Comparison Approach, the Cost Approach, and the Income Approach. The Sales Comparison Approach is based on deriving a value indication by comparing properties that have been sold recently to the subject property and adjusting the sales price of the comparables for any basic differences. The Income Approach considers the present value of the future benefits of income and ownership. To estimate the income potential of the subject, comparable rents are obtained and reconciled to the subject, then a deduction is made for anticipated expenses. The resulting net income is then capitalized into value using a rate supported by market data. The Cost Approach provides a value indicator based on the cost to reproduce the improvements less any observed depreciation. The value estimate of the land developed through the Sales Comparison Approach is then added to the depreciated value estimate of the Improvements. As noted above, the appraiser has utilized the Sales Comparison Approach only as the land only is considered in this appraisal report.

LAND SALES

The following vacant land sales were utilized to arrive at opinion of value for the subject site.

LAND SALE NO. 1

Location: 311 North 39th Avenue
Date: 11/28/2016
Price: \$19,600
Size: .37 acre
Price/Acre: \$52,973
Zoning: R-3, Multi Family
Confirmation: MLS # 105941, /Coldwell Banker
Comments: Purchased for multi-family development.

LAND SALE NO. 2

Location: 3600 Essex Street
Date: 11/13/2015
Price: \$22,000
Size: .29 acre
Price/Acre: \$75,862
Zoning: R-2, Two Family Residential
Confirmation: MLS # 98952, /Realty Executives
Comments: Purchased for construction of a duplex.

LAND SALE NO. 3

Location: 4300 West 4th Street
Date: 01/20/2021
Price: \$106,000
Size: 9 acres
Price/Acre: \$11,777
Zoning: None
Confirmation: MLS # 122954/1st Choice Realty
Comments: Just outside city limits. Purchased for commercial or multi-family development.

LAND SALE NO. 4

Location: 3210 Oak Grove Road
Date: 05/08/2019
Price: \$200,000
Size: 8.12 acres
Price/Acre: \$24,630
Zoning: None
Confirmation: MLS # 117556/The Real Estate Center, LLC
Comments: Outside city limits. Purchased for future development of single-family or multi-family dwellings.

The above land sales indicate an unadjusted range in value from \$11,777 to \$75,862 per acre. Sales 1 and 2 are considerably smaller in size than the subject and are given less reliability than Sales 3 and 4 for this reason. After considering time, size, location, topography, and other pertinent factors, the value opinion of the subject site in the before and after condition is estimated to be \$20,000 per acre.

BEFORE VALUE

4.82 acres @ \$20,000	\$96,400.00
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AFTER VALUE

4.813 acres @ \$20,000	<u>96,260.00</u>
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Value Before Taking	\$96,400.00
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Value After Taking	96,260.00
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Damages	\$ -0-
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Just Compensation Due Owner	\$ 140.00
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I appreciate the opportunity to prepare this appraisal report for you. Should you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely

Stan Lightsey

Stan Lightsey
RA-16

ADDENDA

APPRAISER'S CERTIFICATION

I certify that, to the best of my knowledge and belief:

- the statements contained in this report are true and correct.**
- the reported analyses, opinions, and conclusions are limited only by the reporting assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.**
- I have no present or prospective interest in the property that is the subject of this report, and I have no personal interest with respect to the parties involved unless otherwise stated.**
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.**
- my engagement in this assignment was not contingent upon developing or reporting predetermined results.**
- My compensation for completing this assignment is not contingent upon the developing or reporting of a predetermined value or a direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.**
- no one provided significant appraisal assistance to the person signing this appraisal unless otherwise noted.**
- unless otherwise noted, the person signing this report has not performed an appraisal or rendered any other service regarding the subject property in the past three years.**

Stan Lightsey

Stan Lightsey

UNDERLYING ASSUMPTIONS AND LIMITING CONDITIONS

This appraisal is subject to the following limiting conditions:

The legal description furnished is assumed to be correct.

No responsibility is assumed for matters of a legal character nor does the appraiser render any opinion as to title which is assumed to be good. All existing liens and encumbrances have been disregarded unless otherwise noted and the property is appraised as though free and clear and under responsible ownership and competent management.

The appraiser believes to be accurate the information provided by others; but assumes no responsibility for its accuracy.

Possession of this report, or a copy thereof, does not carry with it the right of publication, and neither all nor any part of the contents of this report may be disseminated to the public through media of any type nor may be used for any other purpose other than that specified in the engagement by the client without the previous written consent of the appraiser and client particularly as to the value conclusions, the identity of the appraiser or the firm with which he is employed.

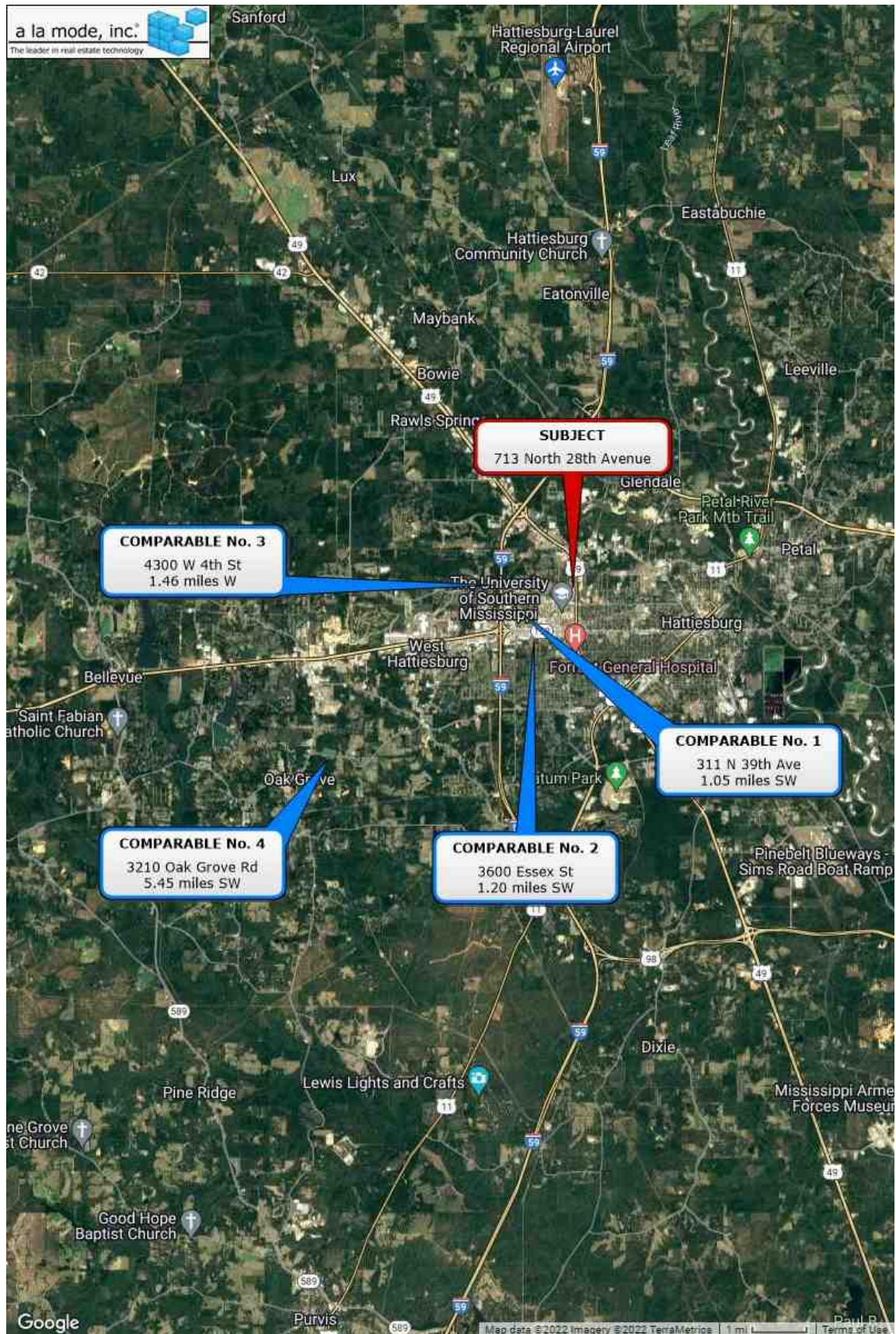
The appraiser will not be required to give testimony or appear in court by reason of this appraisal, with reference to the property in question, unless prior arrangements have been made.

The distribution of the total valuation in this report between land and improvements applies only under the existing program of utilization. The separate valuations for land and improvements must not be used in conjunction with any other appraisal and are invalid if so used.

Unless otherwise stated in this report, the existence of hazardous substances, including but not limited to asbestos, poly-chlorinated biphenyls, petroleum leakage, mold, or agricultural chemicals; which may or may not be present on the property, or other environmental conditions; were not called to the attention of nor did the appraiser become aware of such during the inspection of the property. The appraiser has no knowledge of the existence of such materials on or in the property unless otherwise stated. The appraiser is not an expert in the environmental field and is not qualified to test for such substances or conditions. If the presence of hazardous substances or environmental conditions may affect the value of the property, the value opinion is predicated on the assumption that there is no such condition in or on the property or in such proximity thereto that it would cause a loss in value. No responsibility is assumed for such conditions; nor for any expertise or knowledge required to discover them. The client is advised to retain an expert in the field of environmental impact on real estate if such conditions are suspected.

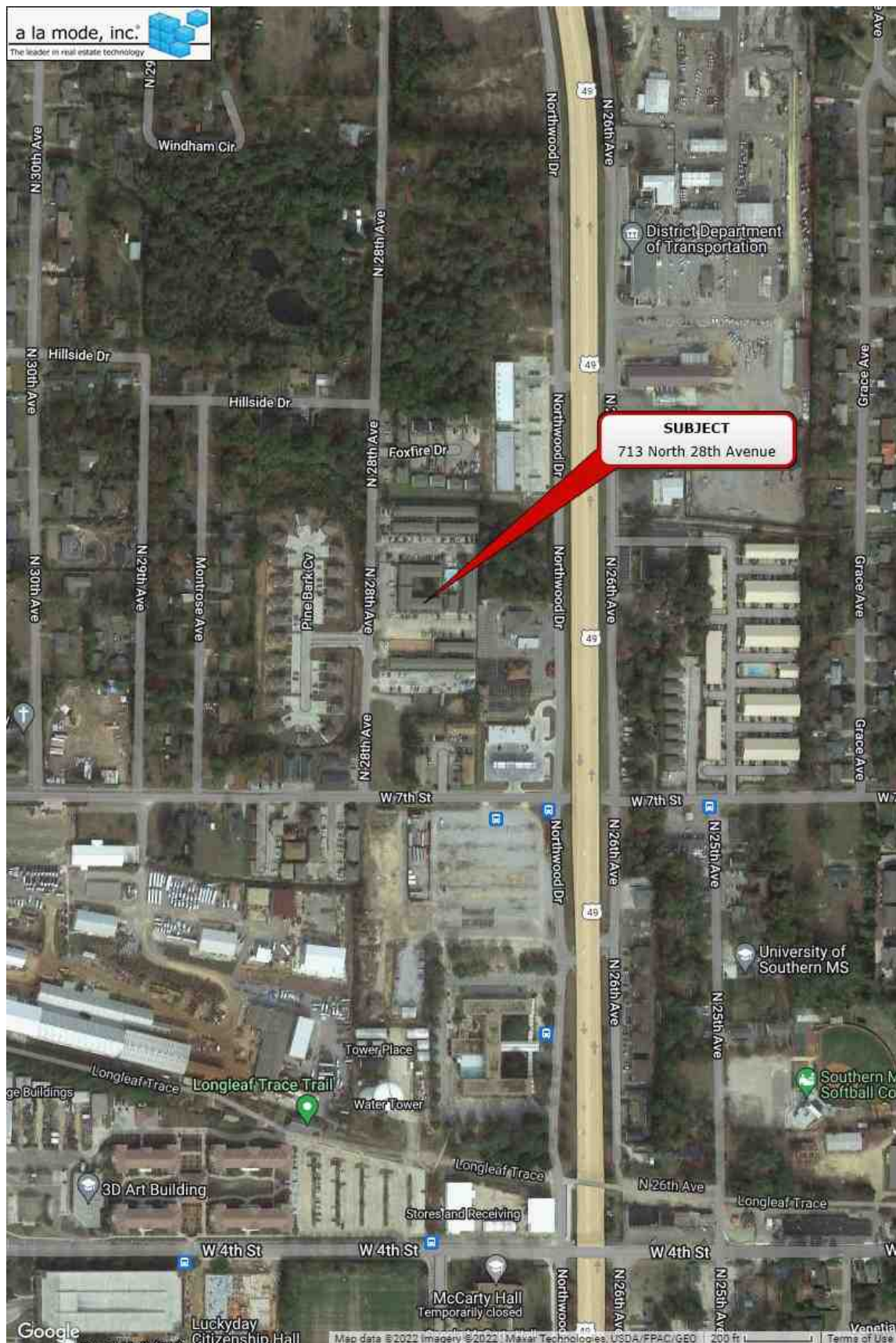
Location Map

Owner	Peppertree, LLC					
Property Address	713 North 28th Avenue					
City	Hattiesburg	County	Forrest	State	MS	Zip Code 39401
Client	City of Hattiesburg					



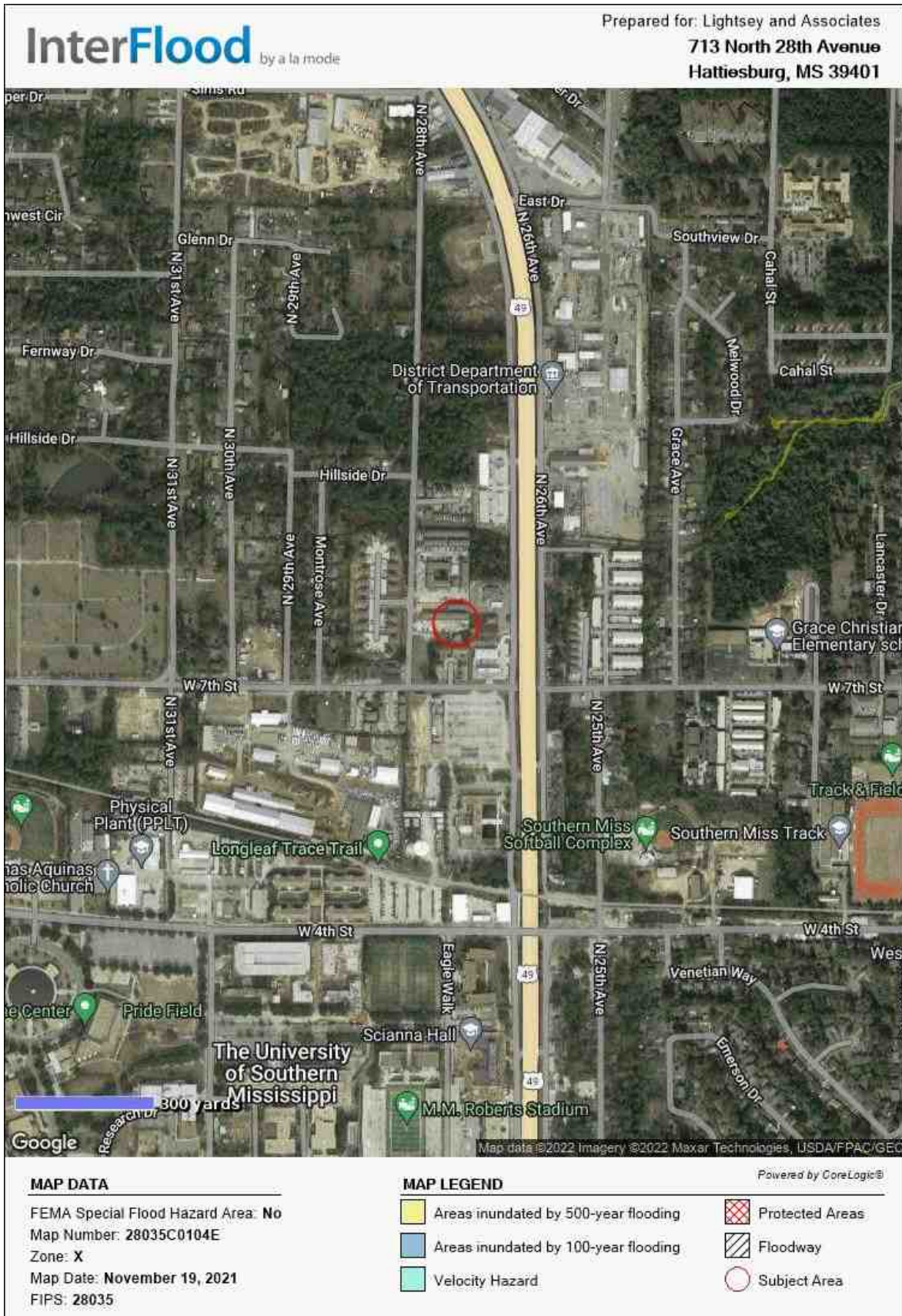
Location Map

Owner	Peppertree, LLC						
Property Address	713 North 28th Avenue						
City	Hattiesburg	County	Forrest	State	MS	Zip Code	39401
Client	City of Hattiesburg						



Flood Map

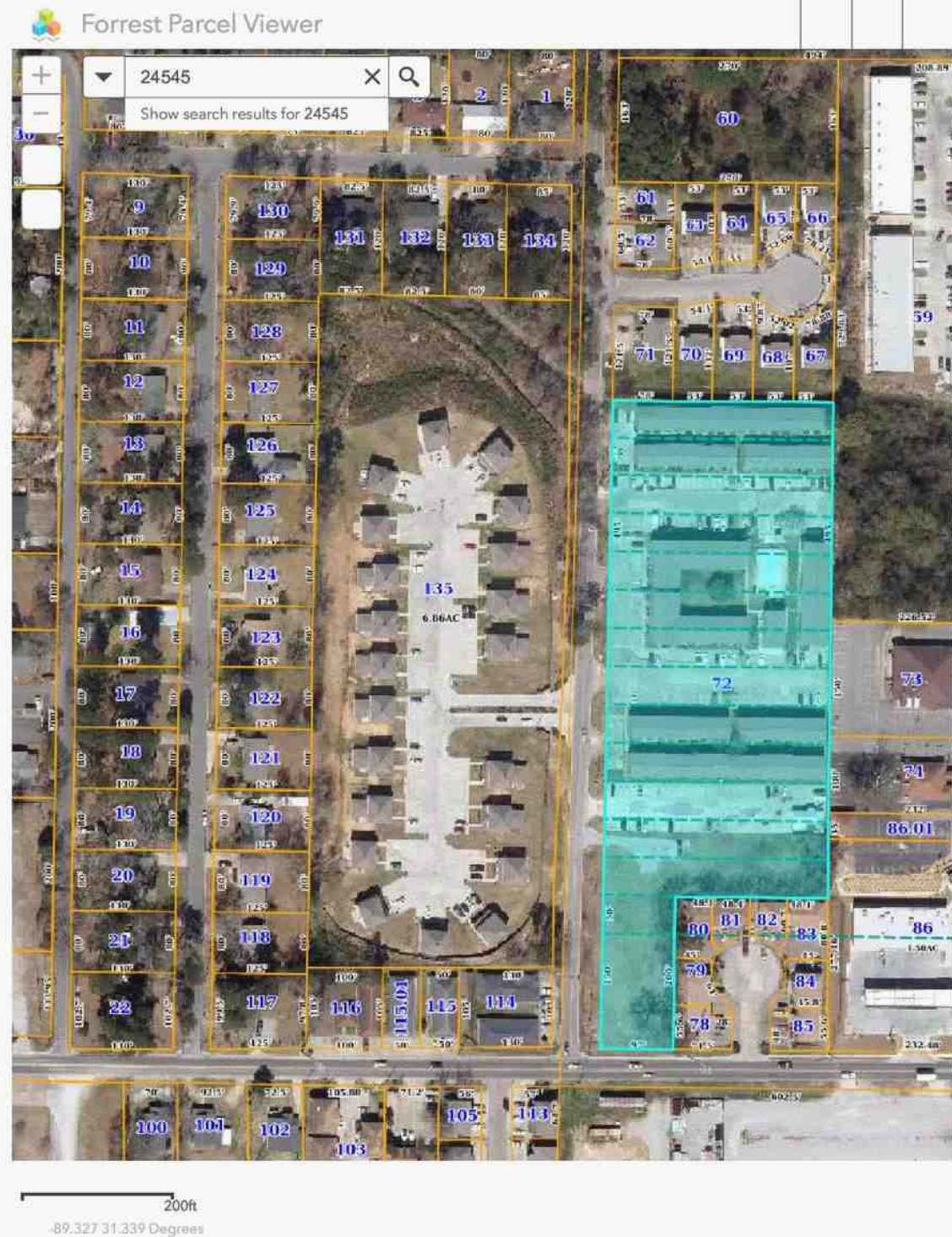
Owner	Peppertree, LLC					
Property Address	713 North 28th Avenue					
City	Hattiesburg	County	Forrest	State	MS	Zip Code 39401
Client	City of Hattiesburg					



Plat Map

5/26/22, 12:01 PM

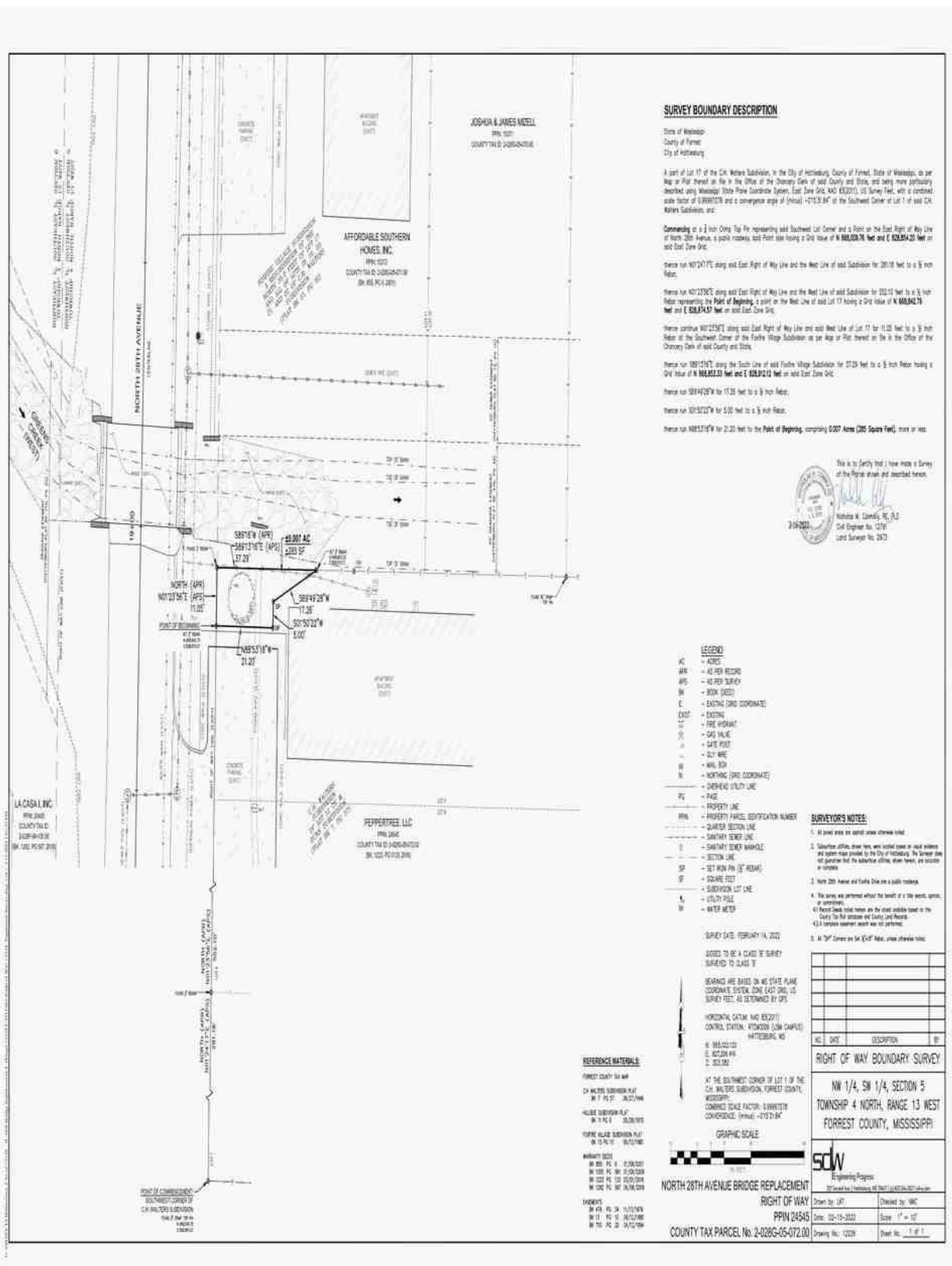
Forrest Parcel Viewer



<https://forrestms.maps.arcgis.com/apps/webappviewer/index.html?id=fc67997aeb1e4a8e93b5ec9b2615cc71>

1/1

Survey



Tax Data

5/26/22, 11:55 AM

Delta Computer Systems

Forrest County Mississippi



Delta Computer Systems, Inc.

Property Link FORREST COUNTY, MS

Current Date 5/26/2022

Tax Year 2021

Records Last Updated 5/26/2022

PROPERTY DETAIL

OWNER PEPPERTREE LLC
C/O HIGHLAND COMMERCIAL MORTGA
242 INVERNESS CENTER DRIVE
BIRMINGHAM AL 35242-0000

ACRES : **NA**
LAND VALUE : 350400
IMPROVEMENTS : 2090660
TOTAL VALUE: 2441060
ASSESSED : 366159

PARCEL 2-028G-05-072.00
ADDRESS 713 28TH AVENUE

TAX INFORMATION

YEAR 2021	TAX DUE	PAID	BALANCE
COUNTY	23983.41	23983.41	0.00
CITY	19454.03	19454.03	0.00
SCHOOL	24195.79	24195.79	0.00
TOTAL	67633.23	67633.23	0.00

LAST PAYMENT DATE 12 / 28 / 2021

MISCELLANEOUS INFORMATION

EXEMPT CODE	LEGAL	LOTS 5,6,7,8,9,10,11,12,13,14,
HOMESTEAD CODE None		15,&
TAX DISTRICT 1110		16 AND THE SOUTH 44' OF LOT 17
PPIN 024545		OF
SECTION 05		THE C H WALTERS SUB BLK 12 OF
TOWNSHIP 04N		THE
RANGE 13W		M DUNN SUB LESS AND EXCEPT
		LOT 5 AND PT OF LT 6 OF THE C

Book 1223

Page 133

PURCHASE COUNTY TAX SALE FILES

TAX SALES HISTORY, FOR UNPAID TAXES

Year	Sold To	Redeemed Date/By
NO TAX SALES FOUND		

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Photograph Addendum

Owner	Peppertree, LLC					
Property Address	713 North 28th Avenue					
City	Hattiesburg	County	Forrest	State	MS	Zip Code 39401
Client	City of Hattiesburg					



Subject site



Subject site

Photograph Addendum

Owner	Peppertree, LLC					
Property Address	713 North 28th Avenue					
City	Hattiesburg	County	Forrest	State	MS	Zip Code 39401
Client	City of Hattiesburg					



Street Scene

Establishment of Just Compensation Offer

This document is prepared pursuant to Federal regulation at 49 CFR 24.102(d)

"Establishment and offer of just compensation. Before the initiation of negotiations, the Agency shall establish an amount which it believes is just compensation for the real property. The amount shall not be less than the approved appraisal of the market value of the property, taking into account the value of allowable damages or benefits to any remaining property. An Agency official must establish the amount believed to be just compensation".

The property that is the subject of this offer of just compensation is as follows:

Owner: Peppertree LLC
Parcel No: 2-028G-05-072.00
PPIN: 024545
County: Forrest

Under the authority conveyed to me by the City of Hattiesburg, and based on the recommended appraisal for the above-named property, which is inclusive of all compensable interests, I, *Toby Barker*, Mayor of the city of Hattiesburg, do hereby establish the City of Hattiesburg's offer of what is believed to be just compensation for the acquisition of the real property rights specified, in the amount of \$140.

Signed _____ Date _____

NOTICE TO ACQUISITION AGENTS

The "just compensation" figure specified above is the total offer for the property, inclusive of all interests. If more than one interest exists for the property, (T's, Q's, E's), please refer to the appraisal review report for allocation of this "just compensation" figure to the various interests that exist.



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Adopt a Resolution authorizing the acquisition of an Airspace Easement over the Norfolk Southern Railroad and Authorize the Mayor to make a fair market value offer for same.
File Number: 2022-396
Minute Book #

Summary

Adopt a Resolution authorizing the acquisition of an Airspace Easement over the Norfolk Southern Railroad and authorizing the Mayor to make a fair market value offer for same.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

REAL PROPERTY APPRAISAL REVIEW REPORT

Parcel Number(s)	NORTHFOLK SOUTHERN RAILWAY
Owner	Hattiesburg Public School District
Occupied / Leased	Vacant
County	Forrest
Project Number	108639-81100
FAP Number	FLBD-8769-00(001)
Project Description	Hall Avenue West Project / Bay Street to West Pine Street
Effective Date of Review Report	4/04/2022
Review Report Date	04/22/2022
Review Report Requested for	Original Appraisal

Prepared For



City of Hattiesburg

c/o Toby Banks, Mayor
P.O. Box 1898
Hattiesburg, MS 39403

This Appraisal Review Report Was Prepared By

John B. "Jeb" Stewart, SR/WA
State Licensed Certified General Real Estate Appraiser # 231
3340 N. Liberty Street, Canton, MS 39046

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Appraisal Review of Fair Market Value

Identification of the Appraisal Report Under Review	
Owner:	Hattiesburg Public School District
Parcel No:	NORTHFOLK SOUTHERN RAILWAY
Project No:	108639-81100
County:	Forrest

Identification of Client and Intended Users

The City of Hattiesburg requested an appraisal review of the property described in this report. The intended user of this appraisal review report is the City of Hattiesburg and such employees or agents authorized by the City of Hattiesburg to utilize the information contained herein.

Intended Use of the Appraisal Review Report

The opinions, reasons, and conclusions contained in this appraisal review report approve or recommend an estimate of just compensation, contained in the appraisal report under review, as prescribed under the laws of the State of Mississippi, payable for the acquisition of specified real property rights, being acquired for public use. The estimate of just compensation approved or recommended in this appraisal review report includes the fair market value of the property, damages to the remaining property, if any, and such curative costs as are permitted by the Laws of the State of Mississippi and serves as the basis for the establishment of the amount believed to be just compensation for the acquisition of the "real property" described herein

Fair Market Value Defined

Fair Market Value as defined in the appraisal report under review is "the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress".

Does this acquisition involve relocation assistance?	☐ Yes	☒ No
The basis for this estimate is:	☒ Sales Comparison Approach	☐ Cost Approach
Appraisal Effective Date:	04/04/2022	Report Date: 04/22/2022
Appraisal By:	George Null, MAI; GA-679	
Other Appraisals By:		Date:
Remainder:	Uneconomic Remnant	☐ Yes ☒ No
Estate Appraised and Under Review	☒ Fee	Area of Whole Tract
	☒ Easement	Area of Remaining Tract
	☒ Other	Area to be Acquired
		0.29 Acres
		0.29 Acres
		Less Air Rights
		0.29 Acres
		Easement

The appraisal report considered under this appraisal review is:

- ☐ **Accepted** (meets all requirements but is not selected as recommended or approved)
- ☐ **Not Accepted** (refer to reviewer's comments and conclusions)
- ☒ **Recommended** (as the basis for the establishment of the amount believed to be just compensation)
- ☐ **Approved** (as the basis for the establishment of the amount believed to be just compensation)

Parcel No. NORTHFOLK SOUTHERN RAILWAY **Project No.** 108639-81100

Purpose of the Review Report	<i>Evaluate compliance with relevant USPAP, client requirement, and applicable regulations. If purpose of the assignment includes the development of the reviewer's opinion of value, then state whether the reviewer concurs or differs with the opinion of value under review.</i>
The purpose of this appraisal review report is to provide the client, City of Hattiesburg, with a recommended estimate of just compensation to be used as the basis for the establishment of the amount believed to be just compensation for the acquisition of real property rights defined in the appraisal report under review. It has been prepared to reach a final conclusion as to the reliability of the value presented. In addition, the purpose of this review is to assure that the appraisal under review meets the requirements of the Mississippi Department of Transportation, the Federal Highway Administration, and the <i>Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA)</i>, which are compatible with standards and practices of the current edition of the Appraisal Foundation's <i>Uniform Standards of Professional Appraisal Practice (USPAP)</i>, except to the extent that adherence to requirements of the Uniform Act, (P.L. 91-646, as amended, 42 U.S.C §4601, et seq. 49 CFR Part 24) required invocation of the USPAP Jurisdictional Exception Rule in certain instances, so as to conform with over-riding federal law relating to the valuation of real estate for government acquisition purposes.	

Scope of Work of the Review Report	<i>(State the nature, extent, and detail of the review process)</i>
The process of this review involved both a field inspection of the property appraised, field inspection of applicable comparable sales used, and a desk review of the appraisal report itself. The desk review involved verification that the appraisal report is in compliance with the requirements and needs of the Mississippi Department of Transportation, Mississippi State Law, regulations promulgated by the Federal Highway Administration, and the Uniform Standards of Professional Appraisal Practice. Also, the desk review is to assure that acceptable appraisal practice and techniques have been followed; proper data has been considered and explained, and that there are no relevant errors or mistakes in the report that would have an effect on the value or mislead the client. In regards to this review, Standards Rule 3-3(a) –(c) states: (a) When necessary for credible assignment results in the review of analyses, opinions and conclusions, the reviewer must: (i) Develop an opinion as to whether the analyses are appropriate within the context of the requirements applicable to that work. (ii) Develop an opinion as to whether the opinions and conclusions are credible within the context of the requirements applicable to that work; and (iii) Develop the reasons for any disagreement. (b) When necessary for credible assignment results in the review of a report, the reviewer must: (i) Develop an opinion as to whether the report is appropriate and not misleading within the context of the requirements applicable to that work; and (ii) Develop the reasons for any disagreement. (c) When the scope of work includes the reviewer developing his or her own opinion of value, review opinion, or real property appraisal consulting conclusion, the reviewer must comply with the Standard applicable to the development of that opinion. (i) The requirements of STANDARDS 1, 6, 7, and 9 apply to the reviewer's opinion of value for the property that is the subject of the appraisal review assignment. (ii) The requirements of STANDARD 3 apply to the reviewer's opinion of quality for the work that is the subject of the appraisal review assignment. d) The requirements of STANDARD 4 apply to the reviewer's analysis, recommendation, or opinion for the consulting problem that is the subject of the appraisal consulting assignment.	

Parcel No. NORTHFOLK SOUTHERN RAILWAY **Project No.** 108639-81100

Additions or Changes to the Scope of Work and Comments <i>(If necessary)</i>	<i>Describe the nature, extent and detail of the field/desk review or any other additional scope of work.</i>
None	

Effective Date and Subject of the Review Report	State the effective date of the opinion of the work under review, and the subject of an appraisal review assignment (i.e., all or part of an appraisal report, work file, or a combination of both)
The effective date of this appraisal review report is 4/04/2022. The same effective date as shown as the effective date in the appraisal is being utilized in this review. Review inspected the subject property and related comparable sales on 4/07/2022. The appraisal under review has been developed in compliance with USPAP Standard Rule 1 and reported in compliance with Standard Rule 2-2(b) as an Appraisal Report. The appraiser has invoked USPAP's Jurisdictional Exception provision in regards to Standard Rules 2-2(a)(v) and 2-2(b)(v); Standard Rule 1-3(a); and Standard Rule 1-4(f). Jurisdictional Exception is claimed based upon state law (Miss Code, Sec. 65-1-8) and federal laws and regulations (Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and "The Uniform Appraisal Standards for Federal Land Acquisitions"). An Appraisal Report is based upon the depth of analysis presented. Based on the data presented in the report under review along with reference to the Market Data Books, the appraisal report under review is considered to be an Appraisal Report.	

Ownership Interest Appraised in the Report Under Review	
Fee Simple; Permanent Easement for Air Rights; allocation for leasehold interest	

Summary of Approaches			
	Before Value	After Value	Difference
Sales Comparison Approach	\$25,415	\$18,960	\$6,455
Cost Approach			
Income Approach			

Description of the Property Under Review	(Size - Before, After and Acquisition; Improvements; Location of acquisition; etc..)
The subject property is the site of the Norfolk Southern Railroad ROW along the eastern side of Guy Eaton Street and south of Hall Avenue in Hattiesburg, MS. The railroad parcel is situated within SE ¼ SE ¼ Section 9, Township 4 North, Range 13 West, and Section 16, Township 4 North, Range 13 West, Hattiesburg, Forrest County, MS. The current use of the subject property is a railroad corridor. The total property consists of 16.23 acre of railroad ROW being 100' wide x 1.34 miles. Within both the "whole tract" discussion and the "larger parcel" discussion, the appraiser discussed the fact the property is a total of 16.23 acres more or less after the railroad ROW was reduced from 200 linear feet in width to 100 linear feet in width from the area within Section 16, T4N, R13W. Hence, the total tract is the 16.23 acres more or less. Within the larger parcel discussion, the appraiser discussed that the area of acquisition would be the "larger parcel" due to the nature of the total property being narrow and extremely elongated in shape being a railroad corridor. The larger parcel was considered the area from which the acquisition is sought or 0.29 acres more or less. The subject property's larger parcel consists of a total of 0.29 Acres or 12,707 sq. ft.± being irregular in shape. Currently there are no improved access points to the subject's larger parcel. Typical utilities are available on-site to include water, sewer, electricity, gas, and telephone. Additionally, typical utility easements are reportedly along local roadways; however, none adversely affecting the subject property. Being within the City of Hattiesburg, the subject property is also serviced by both police and fire protection. As previously indicated, the subject property is part of a transportation corridor or railroad corridor being irregular in shape. The topography of the site is considered level with drainage appearing to be adequate with the site(s)	

being located within flood zone X, 500-year flood zone. As the subject parcel is part of a railroad transportation corridor there are no tax id numbers and not subject to zoning. Adjacent land use include commercial, special purpose, and the railroad corridor.

Within the highest and best use discussion, the appraiser discussed the lack of zoning; location; and most likely use of the subject property as well as the use of properties adjacent to and in close proximity to the subject property. The appraiser determined the highest and best use as vacant to be assemblage to the adjoining commercial properties as these parcels are in an area of commercial uses.

The acquisition area consists of a permanent easement consisting of 0.29 acres or 12,707 sq. ft.±. The conveyance of the Air Rights is part of a separate agreement as part of the administrative functions of the city of Hattiesburg.

The 0.29 acres remains albeit encumbered with a permanent easement. The railroad will continue its use and will not be affected by the acquisition area. Damages were considered; however, none were found. The remainder will have an elevated bridge over the railroad; hence, for all practical purposes the permanent easement is for the air rights over the existing railroad ROW.

Please note; any Extraordinary Assumptions within the appraisal apply to this appraisal review as well.

Comments	State all known pertinent information sufficient for the client and intended users to adequately understand the rationale for the reviewer's opinion and conclusions.
The Jurisdictional Exception Rule has been invoked and explained. The appraiser gave an Acquisition Guide and other materials related to the subject property to the client as they are and have been in contact with the railroad. The appraiser made an inspection of the larger parcel on 4/04/2022. At this time the client was sent an email with exhibits and an LPA Acquisition Guide. The appraisal was completed as an Appraisal Report of Land; which is the correct format as "land only" was being valued in the before condition and after condition. Within the appraisal, the appraiser considered all three approaches to value. The appraiser developed a total before value using the market approach to value. The cost approach was not utilized as "land only" was being valued. Additionally, the Income Approach was not developed due to the lack of income data for vacant land. The market data for the property as vacant was adequate to provide a credible assignment result. As the subject property is part of a transportation (railroad) corridor, an across the fence valuation was made. In the valuation of the subject's site identified consisting of 0.29 acres more or less or 12,707 sq. ft.± , the appraiser analyzed three (3) land sales ranging in size from 0.35 acres± to as large as 1.70 acres±. The sales ranged in price per square foot from a low of \$1.02/sq. ft. to a high of \$2.85/sq. ft. having occurred between 10/20 and 07/21. After analyzing the market within their data base as well as searching the area for newer sales, the appraiser determined that the sales all required a modest time adjustment, 5% per year, otherwise known as a Market Conditions adjustment. The sales were all arm's length transactions; hence, no condition of sale adjustment was required. Sales L-6 and L-9 (second and third sale analyzed) were adjusted 5% for time. All three (3) sales were considered somewhat similar to the subject property with all three (3) sales considered. After adjustments for the elements of comparison discussed, the adjusted range in value was between a low of \$1.02/sq. ft. to a high of \$2.99/sq. ft. For appraisal purposes, a unit value of \$2.00/sq. ft. was adopted or <u>\$25,415 RO.</u> The acquisition was for a permanent easement; hence, the 0.29 acres more or less or 12,707 sq. ft. ± will remain. This remainder will be encumbered by a permanent easement. The appraiser analyzed an older sale whereas an easement was purchased in fee simple for approximately 45% of the adjoining fee value. Also considered was a valuation matrix for loss of property rights for various easements with air right easements ranging up to	

Parcel No. NORTHFOLK SOUTHERN RAILWAY Project No. 108639-81100

25% of loss in fee value. For the purpose of the appraisal report, the appraiser deducted 25% from the before value in addition to a nominal value of \$100 for the Hattiesburg School District in case the railroad ceased to exist and the ROW within the 16th Section reverted back to the school board. The \$100 (Q1) was deducted to not penalize the railroad to make sure title was clear.

The net indicated after value is then \$25,415 less \$6,355 (25% x \$25,415) less \$100 = **\$18,960.**

The difference or estimated Just Compensation based on the Sales Comparison Approach is then **\$6,455.**

Conclusion	<i>Address the completeness of the material under review, adequacy and relevance of the data, appropriateness of the appraisal methods and techniques, and the appropriateness and reasonableness of the work under review, and state any disagreements. (State the opinions, reasons, conclusions required in SR 3-1(d-g) given the scope of work defined)</i>
As this is an acquisition of a permanent easement from a transportation (railroad) corridor with the valuation based on an across the fence method, the appraiser completed a total before and after value of the subject property's larger parcel. The appraiser has properly applied the Sales Comparison Approach for the value of the property in both the before and after condition. As vacant land was being valued, the Cost Approach wasn't utilized. Additionally, the Income Approach was not developed due to the lack of income data for similar properties. The following opinions were developed as a result of my review of the appraisal that is the subject of this report. The value opinions stated in the report under review were developed in compliance with the applicable standards and requirements. I recommend the appraisal report for use as the establishment of Just Compensation due the owner as a result of the acquisition. The valuation techniques were acceptable, supported, and not misleading. As the value opinions were acceptable, the reviewer wasn't required to develop an independent value conclusion. I recommend the appraiser's conclusion in regards to valuation of the subject property in the before and after condition. The final value conclusion is based on the Sales Comparison Approach. The estimated due compensations is then \$6,455.	

The estimate of just compensation, which includes fair market value of the property, damages to the remaining property, if any, and such curative costs as are permitted by the Laws of the State of Mississippi, is \$6,455 and is recommended as the basis for the establishment of the amount believed to be just compensation.

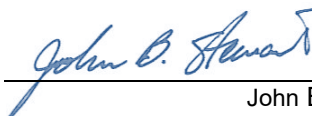
The recommended estimate of just compensation includes the following amounts compensable under State Law but not eligible for Federal reimbursements: (if none, state "none") None

Recommended Distribution of Final Estimate of Value

Parcel	Land	Improvements	Damages	Total
Hattiesburg Public School District	\$100	\$0	\$0	\$100
NORTHFOLK SOUTHERN RAILWAY	\$6,355	\$0	\$0	\$6,355
Total: Six Thousand Three Hundred Fifty-Five Dollars				

Date
4/22/2022

Review Appraiser



John B. "Jeb" Stewart, SR/WA
State Licensed Certified General Real Estate Appraiser # 231

Parcel No. NORTHFOLK SOUTHERN RAILWAY Project No. 108639-81100

Review Appraisal Report

Assumptions and Limiting Conditions

This appraisal review is subject to the following underlying assumptions and limiting conditions:

1. This review is of the property described in this report.
2. The reviewer has made no survey of the property and assumes that the areas and dimensions shown herein are correct. Any sketch or identified survey of the property included in this report is the only for the purpose of assisting the reader in visualizing the property.
3. The reviewer assumes that the proposed project will be constructed in accordance with plans provided to reviewer and within established proposed right-of-way limits except as when needed construction easements, either temporary or permanent in nature. Reviewer reserves the right to make changes or additions to this review when necessary if notified of any change, additions, or alterations in plans provided.
4. This review incorporates the assumptions and limiting conditions of the appraisal report under review and is based upon information, estimates, and opinions that were expressed in the appraisal report as well as other sources considered being reliable and believing them to be true and correct. The reviewer does not assume responsibility for the accuracy of such items that were furnished by other parties.
5. Possession of this report does not imply the right of publication and it may not be used without the consent of the City of Hattiesburg.
6. If relevant information or errors come to the attention of the review, the reviewer reserves the right to change and revise valuations in this report.
7. This report is to be used in its entirety. The reviewer is not responsible if any part of this report is used to the exclusion of the remainder.
8. The reviewer will not disclose the contents of this review or appraisal report, except as provided for in the Uniform Standards of Professional Appraisal Practice.
9. Reviewer assumes the property to be free and clear of any and all hazardous waste and material or environmental contaminants. Unless otherwise stated in the appraisal report, the reviewer has no knowledge of any hidden or unapparent conditions of the property or adverse conditions (including the presence of hazardous wastes, toxic substances, etc.) that would make the property more or less valuable, and has assumed that there are no such conditions and makes no guarantees or warranties, express or implied, regarding the condition of the property. The reviewer will not be responsible for any such conditions that do exist or for engineering or testing that might be required to discover whether such conditions exist. Because the reviewer is not an expert in the field of environmental hazards, the review report must not be considered an environmental assessment of the property.

There are no additional assumptions and limiting conditions applicable to this review appraisal.

Certificate of Review Appraiser

I certify that, to the best of my knowledge and belief:

The facts and data reported by the review appraiser and used in the review process are true and correct.

The analyses, opinions, and conclusions in this review report are limited only by the assumption and limiting conditions stated in this review report, and are my personal, unbiased professional analyses, opinions, and conclusions. The recommended estimate of just compensation has been reached independently based on appraisal(s) and other factual data or record without collaboration.

I have no present or prospective interest in the property that is the subject of this report and I have no personal interest or bias with respect to the parties involved. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.

My engagement in this assignment was not contingent upon developing or reporting predetermined results and my compensation is not contingent on the analyses, opinions, or conclusions reached or reported.

The real property appraisal review documented in this appraisal review report was completed in accordance with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC 4601 et seq.), and requirements for appraisal review as outlined in 49 CFR 24, Subpart B, dated January 4, 2005. To the extent appropriate under the Laws of the State of Mississippi, the real property appraisal review documented in this appraisal review report was completed in conformity with the Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA), which are compatible with standards and practices of the Appraisal Foundation's Uniform Standards of Professional Appraisal Practice (USPAP), except to the extent that compliance with the Uniform Act, 49 CFR 24, and the UASFLA required invocation of the (USPAP) Jurisdictional Exception Rule in certain instances, so as to conform with the over-riding federal law relating to the valuation of real estate for government acquisition purposes.

I did personally inspect the subject property of the work under review, and I did personally inspected the market comparable sales sited in the appraisal report under review, and I did not personally verify the factual data presented in the appraisal report under review.

I understand that this estimate may be used in connection with Federal Aid Highway Project.

Unless expressly stated otherwise in this report, no one provided significant professional assistance to the review appraiser signing this review report.

The value estimate is based on the assumption that the property is not negatively affected by the existence of hazardous substances or detrimental environmental conditions unless otherwise stated in this report. The reviewer is not an expert in the identification of hazardous substances or detrimental environmental conditions. The reviewer's routine inspection of and inquisition about the subject property did not develop any information that indicated any apparent significant hazardous substances or detrimental environmental condition which would affect the property negatively unless otherwise stated in the report. It is possible that tests and inspections made by a qualified hazardous substances or environmental expert would reveal the existence of hazardous substances or detrimental environmental conditions on or around the property that would negatively affect its value. The reviewer reserves the right to make necessary adjustments, if needed, in this report of any hazardous substances or detrimental environmental conditions are discovered on or around the property being appraised. The review process has been made with the assumption that the appraised property and other properties around the appraised property are free and clear of any hazardous substances or detrimental environmental conditions.

I have not performed any services of the subject property within the past three-year period immediately preceding acceptance of this assignment.

Based upon my independent review of the attached appraisal report and the exercise of my professional judgment, the recommended estimate of just compensation is \$6,355.

Review Appraiser (sig.):

(print name)

(license)

John B. "Jeb" Stewart, SR/WA

State Licensed Certified General Real Estate
Appraiser # 231

Date: 4/22/2022

Parcel No. NORTHFOLK SOUTHERN RAILWAY Project No. 108639-81100

Review Appraisal Report

APPRAISAL REPORT

Parcel Number(s) Norfolk Southern Railway (No tax parcel exists)
Owner Hattiesburg Public School District
Vacant / Occupied / Leased Leased
County Forrest
Project Description Hall Avenue West Project
Effective Date of the Appraisal 04/04/2022
Report Date 04/22/2022
Report Requested for Original Appraisal

Prepared For

City of Hattiesburg
c/o Lamar Rutland, P.E.
Director of Engineering

This Appraisal and Appraisal Report Was Prepared By



6760 US Hwy 98, Suite 2 Hattiesburg, MS 39402
601-271-9044 (T) 601-271-9099 (F)

George Null, MAI
State Certified General
Real Estate Appraiser, GA-679

Possession of this report does not carry or imply a right of use and/or publication. This real property appraisal report is the property of the City of Hattiesburg and may not be utilized or cited in whole or in part without the express written consent of an authorized agent or official of the City of Hattiesburg.

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Appraisal Report

County	Forrest County		
Owner(s):	Hattiesburg Public School District	Address:	301 Mamie Street, Hattiesburg, MS 39401
Phone:	601) 264-6010 (Michael Ainsworth, 16 th Section Lands Manager) and (601) 620-8509 (Dr. Michael Battle)		
Occupant(s):	Norfolk Southern Railway Company	Address:	650 W Peachtree Street NW Atlanta, GA 30308
Phone:	(470) 463-6469 (Elvina Huggins)		

Estate Appraised:	☒ Fee ☒ Easement ☒ Quit-Claim	Area of Whole Tract Area of Remaining Tract Area to be Acquired	+/- 0.29 Acres +/- 0.29 Acres, less air rights +/- 0.29 Acres (Easement)
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Within the scope of the assignment and consistent with USPAP Standard Rules 1 and 2-2, the following analyses, opinions and conclusions have been developed and are reported in this **Appraisal Report**. Within the Scope of Work which is described in more detail later in this report, it may be necessary to invoke the Jurisdictional Exception Rule of the USPAP in certain instances so as to maintain conformity, and compliance with certain laws of the State of Mississippi, and certain Federal Regulations promulgated pursuant to The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto found at 49 C.F.R. Part 24.

Property Owner Contact Record

Subject Property Inspection Dates:	04/04/2022
The property owner or their designated representative was offered an opportunity to accompany the appraiser performing this appraisal during the appraisal inspection of the property. A letter, LPA acquisition guide, ROW packet, contact letter and plat map were emailed to the client, who is the point of contact to the railroad. Due to the city working on a more in depth railroad agreement, they asked we forward all communication to the city, which would in turn relay these request to the railroad. On April 4 th , 2022, George Null inspected the area that is the subject of this report, as well as the adjacent long term leasehold properties. I documented this inspection with photographs found in this report.	
Contact Comments	Lamar Rutland is the POC. Elvina Huggins is the representative to the railroad. I forwarded a letter to the client which in turn forwarded that letter to the Real Estate department at Norfolk Southern Railroad on April 19 th , 2022. A copy of this email is found in the addenda.
Is the Property being Leased or Rented? ☐ Yes ☒ No	
Lessor:	Lessee:
Terms: Perpetual easement as long as it utilized by the railroad.	

Appraiser:		
(signature)	George Null, MAI	
(print name)	State Certified General Real Estate Appraiser, GA-679	
(license type)		

Date: 04/22/2022

Summary of Facts and Findings

Project No. FLBD-8769-00(001) LPA / 108639-81100	Parcel No. Norfolk Southern Air Space
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Property Owner: (Fee Simple) Hattiesburg Public School District (HPSD) Address: 301 Mamie Street, Hattiesburg, MS 39401 Phone: (601) 264-6010 (Michael Ainsworth, 16 th Section Lands Manager) and (601) 620-8509 (Dr. Michael Battle)	Leasehold (Tenants): Norfolk Southern Railway Company Address: 650 W Peachtree Street NW Atlanta, GA 30308 Phone: (470) 463-6469 (Elvina Huggins)
--	---

Identification of the Property Appraised:	<i>Brief description of property identification, such as Section, Township, Range, Lot and Block, Street Address, etc.</i>
The subject property is a 0.29 acre portion of the Norfolk Southern Railroad Right of Way. The subject property is located in the NE1/4 of the NE1/4 of Section 16, Township 4North, Range 13 West, the City of Hattiesburg in Forrest County, Mississippi. The subject property is adjacent to a and a part of a transportation corridor for Norfolk Southern railroad. This area originally contained 32.46 acres of land across the entire 16 th section. This area was reduced in 1983 to a 100' R.O.W. which reduced the gross area to 16.23 acres. A 16.23 acre easement was purchased from the Hattiesburg Public school district in 1983 for \$158,800 by Alabama Great Southern railroad, with additional damages of \$135,532 for the use of an additional 16.23 acres of land for the former use of a 200' R.O.W. for 30.5 years. (1953-1983). This R.O.W. was reduced from 200' to 100' in 1983 per the Mutual Release of claims found in the addenda. This reduction in right-of-way left the whole property which contained this 16.23 acre parcel.	

Estate Appraised:	<i>(Fee, Easement, Other)</i>
Fee Simple. The property is appraised as a Fee Simple estate. It should be noted that due to School board policy and state law the conveyance will be a permanent easement, with a reverter clause in case the use as a road ever changes. However, due to the perpetual easement conveyance, the property was valued as being conveyed in Fee, with adjustments due to the partial interest of the railroad.	

Size of the Whole Tract (Before):	+/- 0.29 Acres
Size of the Remaining Parcel (After):	+/- 0.29 Acres, less air rights
Size of the Area to be Acquired:	+/- 0.29 Acres

Highest and Best Use Before (Whole Tract):	Railroad Corridor
Highest and Best Use After (Whole Tract):	Railroad Corridor

Size of the Larger Parcel(s) <i>(If different from the Whole Tract)</i>	+/- 0.29 Acres
Highest and Best Use of the Larger Parcel(s)	Railroad Corridor

Unit Value of the Land (Before)	\$2.00
Unit Value of the Land and Improvements (Before)	\$2.00
Unit Value of the Land (After)	\$2.00
Unit Value of the Land and Improvements (After)	\$2.00

Improvements:	
The subject property is improved with a railroad corridor. The acquisition entails obtaining an easement for air rights across the existing railroad corridor property.	

Total Before Value:	\$25,415
Total After Value:	\$18,960
Just Compensation:	\$6,455

Allocation of Compensation for All interest: <i>(List all interest such as Q interest, Temporary Easements, Warranty Deeds, etc.)</i>				
Parcel No.	Land	Improvements	Damages	Total
Q1 - Hattiesburg Public Schools	\$100	\$0	\$0	\$100
W-Norfolk Southern Railroad	\$6,355	\$0	\$0	\$6,355

*Note since the easement is perpetual, with no annual lease payments, the school board interest was considered nominal and a value of \$100 was included for any nominal interest.

Effective Date of the Appraisal:	04/04/2022
Date of Report:	04/22/2022

Certification of Appraiser

I certify that, to the best of my knowledge and belief:

The statements of fact contained in this report are true and correct;

The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and legal instructions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions;

I have no present or prospective interest in the property appraised and no personal interest or bias with respect to the parties involved;

Neither my engagement or my compensation for completing this appraisal assignment was contingent upon my developing or reporting a predetermined result, predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal;

The real property appraisal documented in this appraisal report was completed in accordance with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC 4601 et seq.), and requirements for appraisals as outlined in 49 CFR 24, Subpart B, dated January 4, 2005. To the extent appropriate under the Laws of the State of Mississippi, the real property appraisal documented in this appraisal report was completed in conformity with the standards and practices of the Appraisal Foundation's Uniform Standards of Professional Appraisal Practice (USPAP), except to the extent that compliance with the Uniform Act, 49 CFR 24, required invocation of the (USPAP) Jurisdictional Exception Rule in certain instances, so as to conform with the over-riding federal law relating to the valuation of real estate for government acquisition purposes.

This appraisal conforms with the appropriate State laws, regulations, policies, and procedures applicable to the appraisal of real property rights proposed to be acquired by a government entity or other local public agency;

Unless expressly stated otherwise in this report, I made a personal inspection of the property appraised and the property owner, or his/her designated representative, was given the opportunity to accompany me on the inspection;

George Null made a personal inspection of the property that is the subject of this report on 04/04/2022;

Any decrease or increase in the fair market value of the real property prior to the date of valuation caused by the public improvement for which such property is to be acquired, or by the likelihood that the property would be acquired for such improvement, other than that due to physical deterioration within the reasonable control of the owner, was disregarded in determining the compensation for the property;

No one has provided significant professional assistance to me in the performance of this appraisal.

I have not performed any services regarding the subject property by the appraiser within the three (3) year period immediately preceding acceptance of the assignment, as an appraiser or any other capacity; If applicable: _____ ;

I have not revealed the findings and results of this appraisal report to anyone other than the proper officials of the City of Hattiesburg, and I will not do so until authorized by the client or until required by law.

My analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation;

The use of this report is subject to requirements of the Uniform Standards of Professional Appraisal Practice relating to review by its duly authorized representatives;

George Null is state certified by the State of Mississippi as a General Real Estate Appraiser, License No. GA-679, and as of the date of this report, has completed the continuing education program required to maintain that license.

Based upon my independent appraisal and the exercise of my professional judgment, it is my opinion that the valuation of the subject property is as follows:

Fair Market Value of the Whole Tract (as defined in this report)	Before	<u>\$25,415</u>
Fair Market Value of the Remainder Property	After	<u>\$18,960</u>
The difference between the Fair Market Value of the whole tract and the remainder is		<u>\$6,455</u>

as of 04/04/2022, and is my opinion of just compensation, for the acquisition of the real property rights described in this appraisal report.

Date **04/22/2022**

Appraiser (sig.)



(name)

George Null, MAI

(License)

State Certified General Real

Estate Appraiser, #GA-679

Appraisal Scope of the Work

Identification of Client and Intended Users

The City of Hattiesburg requested appraisal of the property described in this report. The intended user of this appraisal report is the City of Hattiesburg and such employees or agents authorized by the City of Hattiesburg to utilize the information contained herein. There are no other intended users.

Intended Use of the Appraisal Report

The facts, analyses, opinions, and conclusions contained in this appraisal report establish an estimate of just compensation, as prescribed under the laws of the State of Mississippi, payable for the acquisition of specified real property rights, being acquired for public use. The estimate of just compensation in this appraisal report includes the fair market value of the property and such curative costs as are permitted by the Laws of the State of Mississippi, and, upon determination by appraisal review that this appraisal report complies with all applicable standards and requirements, serves as the basis for the establishment of the amount believed to be just compensation for the acquisition of the “real property” described herein. There are no other intended uses.

Purpose of the Appraisal

The purpose of the appraisal is to render an opinion as to the Fair Market Value of specified real property as of the stated date and, through application of the Before and After Rule as prescribed under the laws of the State of Mississippi, the valuation of the remainder of specified real property. The difference between these two valuations is the value being sought by the client and is reported to the client as the “fair market value of the area to be acquired and damages, if any, to the remainder”.

Parameters of Data Search

The scope of the assignment is to collect and verify as completely as possible, comparable sales, and rentals, if applicable, from within the subject area, or other areas that, in the opinion of the appraiser, are reasonably comparable to the subject area, so that a value conclusion may be derived.

Sources of the data, utilized for this appraisal, include county deed records, real estate brokers, real estate appraisers, and other individuals knowledgeable in the local real estate market and, as applicable and appropriate, other individuals knowledgeable in specific types of property. One or more of the principals involved in the transactions, grantor, grantee, attorney, financier, broker of the transaction, or their representatives, have verified the market sales used in this report. Mississippi is a non-disclosure State. Other than the recordation of a deed, there is no legal requirement for grantors, grantees, or other parties to a transaction, to disclose any information relative to the transfer of real property. Since there is no legal requirement for the deed to include the transaction price when it is recorded, it is possible that there are transactions for which purchase price data could not be obtained.

Extent of Property Inspection

Per the **USPAP Scope of Work Rule**, “*The report must contain sufficient information to allow intended users to understand the scope of work performed*”. The extent of the subject property inspection, including interior and exterior areas, is required content of the appraisal report per the USPAP scope of work rule and per guidance on Federal regulation requirements (49 CFR Part 24). The “extent of the inspection process” includes but is not limited to a declaration as to the part or parts of the property that were actually viewed or not viewed during the inspection; for structures and other improvements, whether such items were physically measured by the appraiser, whether interior and/or exterior inspection was performed for each item, and a declaration regarding the level of detail associated with the inspection of tangible property. The following is a description of the extent of the inspection performed on the subject property for this appraisal assignment

The City of Hattiesburg contacted the railroad about the construction of the bridge over the railroad. They are seeking air rights to the property. The proposal for the bridge is being handled in a separate railroad agreement document by the City of Hattiesburg. Per the client’s instructions, they were to be the contact to the railroad. My inspection included walking the land beneath the proposed acquisition area.

Valuation Process

The data obtained is to be analyzed, when appropriate, via the Cost, Income, and Sales Comparison Approaches to Value, with appropriate support for any adjustments made and the value conclusions. The values derived via these three approaches, if applied, are then reconciled into final opinions of value for the subject property for both the before

condition and after condition, respectively. The just compensation opinion thus derived by this process encompasses the value of the partial acquisition, improvements within the acquisition, damages to the remainder (if any), including any curative costs impacted by the acquisition in accordance with the Uniform Act and the Laws of the State of Mississippi.

Property Rights Appraised

The property rights appraised in this report consist of fee simple ownership.

“Fee Simple Estate” is defined as: “Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power and escheat.” Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th ed., s.v. “fee simple estate”, (Chicago: Appraisal Institute, 2015), PDF e-book.

Property Estate(s) Appraised:	List and describe, if necessary, the property right(s) appraised (i.e., fee simple, easement, other)
The property is appraised as a Fee Simple estate. It should be noted that due to School board policy and state law the conveyance will be a permanent easement, with a reverter clause in case the use as a road ever changes. However, due to the perpetual easement conveyance, the property was valued as being conveyed in Fee, with adjustments for the rights acquired.	

Fair Market Value Defined

Fair Market Value is value in exchange. It is “the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress”. (See the *Terms and Definitions* section of this report for the source of this definition)

Assumptions and Limiting Conditions

This appraisal is subject to the following underlying assumptions and limiting conditions:

The appraiser certifies that to the best of his or her knowledge and belief, the statements contained in this appraisal report, subject to the limiting conditions set forth below are correct.

This appraisal is of the property described in this report.

The appraiser has made no survey of the property and assumes that the areas and dimensions shown herein are correct. Any sketch or identified survey of the property included in this report is only for the purpose of assisting the reader in visualizing the property.

Certain information in this report was obtained from and/or furnished by sources believed to be reliable; however, the absolute accuracy of information is not guaranteed. If relevant information or errors come to the attention of the appraiser, the appraiser reserves the right to change, alter, revise, or void the opinions contained in this report in part or in their entirety.

Possession of this report does not imply the right of publication and it may not be used without the consent of the City of Hattiesburg. This report is to be used in its entirety. The appraiser is not responsible if any part of this report is used to the exclusion of the remainder.

I am not familiar with any engineering studies made to determine the bearing capacity of the land or that indicate any mineral contents of a significant nature.

The appraiser has no knowledge of the existence of hazardous materials on the property unless otherwise stated in this report. The appraiser, however, is not qualified to detect such substances. The presence of any such substances, which may be potentially hazardous materials, may affect the value of the property. However, as directed by the client, City of Hattiesburg, this value estimate is predicated on the assumption that there are no such materials on or in the property that would cause a loss in value.

To the best of my knowledge no portion of the value assigned to the subject property is for items, which are non-compensable according to established law of the State of Mississippi.

This property has been appraised as though free of all liens, unless otherwise stated herein. No responsibility is assumed for matters legal in nature, nor is any opinion of title rendered herewith. Good title is assumed.

Certain background and other relevant information applicable to the appraisal of this property and for this appraisal report is given in the project data brochure, which is incorporated herein by reference.

This appraisal was performed within requirements of regulation, law, and supplemental appraisal standards that are applicable to appraisals performed for governmental acquisitions and thus, certain valuation opinions and conclusions stated in this appraisal report are affected by these requirements. Applicable Mississippi Law is found at Mississippi Code Section 65, Section 43, Section 11, and also found in certain published decisions of the Mississippi Supreme Court as they pertain to property acquisition by Eminent Domain. Applicable Federal Law is found in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto found at 49 C.F.R. Part 24,

The reported value estimate assumed no impact on value because of "Section 404 wetlands", as defined by the U. S. Army Corps of Engineers. The client is urged to seek advice of an expert to determine any potential impact on wetlands on the property.

There are no additional assumptions and limiting conditions applicable to this appraisal.
--

It is an additional assumption of this report that the any additional permits needed for construction over the railroad are being handled in a separate Agreement as part of the administrative process by the City of Hattiesburg.

Extraordinary Assumptions and Hypothetical Conditions

Standard Rule 1-2(f) and (g) and Standard Rule 2-2 (a)(xi) and (b)(xi) of the *Uniform Standards of Professional Appraisal Practice* require the appraiser to identify and state all extraordinary assumptions and hypothetical conditions when developing and reporting an appraisal.

- identify any extraordinary assumptions necessary in the assignment. An extraordinary assumption may be used in an assignment only if:

- (i) the extraordinary assumption is required to properly develop credible opinions and conclusions;
- (ii) the appraiser has a reasonable basis for the extraordinary assumption; and
- (iii) use of the extraordinary assumption results in a credible analysis;

- identify any hypothetical conditions necessary in the assignment. A hypothetical condition may be used in an assignment only if:

- (i) use of the hypothetical condition is clearly required for legal purposes, for purposes of reasonable analysis, or for purposes of comparison; and
- (ii) use of the hypothetical condition results in a credible analysis; and
- (h) determine the scope of work necessary to produce credible assignment results in accordance with the SCOPE OF WORK RULE.24

USPAP- 2020-2021 Standards Rule 1-2 – (f)-(g)

USPAP 2020-2021, pg. 4 defines extraordinary assumption as “assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser’s opinions or conclusions. Uncertain information might include physical, legal or economic characteristics of the subject property; or conditions external to the property, such as market conditions or trends, or the integrity of data used in an analysis.

USPAP 2020-2021, pg. 4 defines hypothetical condition as “a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results but is used for purpose of analysis.” Hypothetical conditions are contrary to known facts about physical, legal, or economic characteristic of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

An appraiser cannot make an assumption or accept an instruction that is unreasonable or misleading, nor can an appraiser make an assumption that corrupts the validity of the value estimate. Written legal instructions that have proper foundation must be accepted and must be included in the appraisal report.

Following, if applicable, are all extraordinary assumptions and/or hypothetical conditions that affected the analyses, opinions, and conclusions of this report which are explained in the scope of work:
--

The appraisal of the AFTER condition is performed under the hypothetical condition that, as of the appraised date of value, the proposed real property acquisition is completed, any associated construction for the project is complete, and that the construction is consistent with the plats and plans described in this report.
--

Following, if applicable, are appraiser instructions that affected the analyses, opinions, and conclusions of this report:

None

Statement on The Use of Significant Professional Assistance and The Use of Consultant's Report(s)

If professional assistance was provided to the appraiser, the name of the individual(s) providing such assistance must be stated below. This includes both professional appraisal assistance and providers of subsidiary assistance, e.g., appraisers, registered foresters, architects, attorneys, planning and permitting consultants, engineers, cost estimators, marketing consultants, etc., etc.

If applicable, the following is a description of any necessary or appropriate steps that were performed in the completion of this appraisal assignment that were not previously noted in the scope of work, including a list of the individual(s) providing professional assistance and the type and extent of assistance provided.

Survey plats were provided to the appraiser from Clearpoint Consulting Engineers, P.A. Wetlands and flood zone maps were referenced from online databases.

Declaration of Jurisdictional Exception to the Uniform Standards of Professional Appraisal Practice

In conformity with the requirements of USPAP Standard Rule 2-1(a, b, & c), this section of the appraisal report references those specific laws and regulations that prescribe methods and procedures of appraisal and appraisal reporting contrary to that required by USPAP. Application of the Jurisdictional Exception Rule of the USPAP is hereby declared.

Linking Estimate of Value to Specific Exposure Time:

The Comment to USPAP Standards Rule 1-2(c) states *“when reasonable exposure time is a component of the definition for the value opinion being developed, the appraiser must also develop an opinion of reasonable exposure time linked to that value opinion”*. The Comment to USPAP Standards Rule 2-2(a)(v) and 2-2(b)(v) states *“when an opinion of reasonable exposure time has been developed in compliance with Standards Rule 1-2(c), the opinion must be stated in the report”*. Under Federal appraisal standards, “exposure time” statements are not permitted to appear in appraisal reports prepared for governmental acquisitions. Therefore, pursuant to the authority conveyed to the public agency through Miss. Code, Sec. 65-1-8 all real property appraisals prepared for the client, whether by staff employees or contracted fee appraisers, shall invoke a Jurisdictional Exception to the requirements of USPAP 2-2(a)(v) and 2-2(b)(v) in order to maintain compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646.

Consideration of Land Use Regulations:

USPAP Standard Rule 1-3(a) requires analysis of the effect existing land use regulations and reasonably probable modifications to same. This requirement is contrary to Federal appraisal requirements found at 49 CFR 24.103(b). All real property appraisals performed for the local public agencies/ government authorities, whether by staff employees or contracted fee appraisers, must disregard any recent rezoning if such rezoning was a consequence of, or in anticipation of, the government project for which the appraisal is being conducted. Therefore, pursuant to requirements of Federal regulation at 49 CFR 24.103(b), all real property appraisals shall invoke a Jurisdictional Exception to the requirements of USPAP 1-3(a) in order to maintain compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto.

Consideration of Anticipated Public Projects:

USPAP Standard Rule 1-4(f) requires the appraiser to analyze the effect on value of anticipated public improvements located on or off the property appraised. The appraisal requirements of USPAP Standard Rule 1-4(f) are contrary to State and Federal Law regarding appraisals performed for government acquisitions. All real property appraisals performed for the City of Hattiesburg, whether by staff employees or contracted fee appraisers, must disregard any decrease or increase in the fair market value of real property caused by the government project for which the appraisal is being conducted. Therefore, per Mississippi Law found in the Miss. Code, at Sec. 43-37-31 and Federal Law found in Title III, Sec. 301(3) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto found at 49 C.F.R. Part 24.103(b) all real property appraisals performed for the City of Hattiesburg shall invoke a Jurisdictional Exception to the requirements of USPAP 1-4(f).

Valuation by Market Approach Only (a.k.a. Sales Comparison Method):

Unless specifically prohibited by Law, all real property appraisals performed for the purpose of governmental acquisitions within the scope of The Uniform Act are authorized to omit cost and income approaches to valuation where sufficient sales data exists to produce a reliable opinion of value by use of the Market Approach alone (*a.k.a. Sales Comparison Approach*). Therefore, pursuant to Federal Law under the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended, 42 U.S.C §4601, et seq., and regulations promulgated pursuant thereto found at 49 C.F.R. Part 24.103(a)(3), all real property appraisals performed for local public agencies shall invoke Jurisdictional Exception to the requirements of Standard Rule 1-4(b, c), and Standard Rule 2-2(a)(xi) as it pertains to same.

Additions to the Scope of Work and Comments (If necessary)	
The Scope of Work included:	
a) an inspection of the subject property and the research and collection of data pertaining to recent economic development and real estate activity in Forrest County, Mississippi, as well as other parts of the state. The Sales Comparison approach to value was used. Information was collected from courthouse records, files of reliable real estate professionals, property owners and developers, the search of public records through the use of commercial sources of data such as printed comparable data services and computerized databases. Search parameters such as dates of sales, leases, locations, sizes, and types of properties were started with relatively narrow constraints and, if necessary, were expanded until the appraiser had either retrieved data sufficient (in the appraiser's opinion) to estimate market value, or until the appraiser believed that he had reasonably exhausted the available pool of data. Efforts were made to verify the data with persons directly involved in the transactions such as buyers, seller, brokers, or agents. At the appraiser's discretion, some data was used without personal verification if, in	

the appraiser's opinion, the data appeared to be correct. In addition, the appraiser considered any appropriate listings or properties found through observation during appraiser's data collection process. The appraiser reported only the data deemed to be pertinent to the valuation problem;

b) has investigated and analyzed any pertinent easements or restriction, on the fee simple ownership of the subject property. It is the client's responsibility to supply the appraiser with a title report. If a title report is not available, the appraiser will rely on a visual inspection and identify any readily apparent easements or restrictions;

c) has analyzed the data found and has reached conclusions regarding the market value, as defined in the report, of the subject property as of the date of value using appropriate valuation approach(es) identified above;

d) has prepared the appraisal in compliance with the Uniform Standards of Professional Appraisal Practice as promulgated by The Appraisal Foundation and the Code of Professional Ethics and Certification Standard of the Appraisal Institute;

e) has prepared an Appraisal Report, as defined in USPAP, which includes photographs of the subject property, descriptions of the subject neighborhood, the site, and any improvements on the site, a description of the zoning, a highest and best use analysis, a summary of the most important sales used in the appraiser's valuation, a reconciliation and conclusion, and other data deemed by the appraiser to be relevant to the assignment. Pertinent data and analyses not included in the report may be retained in the appraiser's files.

Area & Neighborhood Data

Area Defined	<i>Brief description of the subject area boundaries or general limits, including the county or counties, prominent cities and prominent geographic features, i.e. Interstate or U.S. Highways, navigable waterways, etc.)</i>
The subject property is located along the east side of West Pine Street, in downtown Hattiesburg, Forrest County, Mississippi. This area is primarily older commercial properties.	
Subject Location	☒ Urban ☐ Suburban ☐ Rural
Population Growth Rate	☐ Increasing ☒ Stable ☐ Decreasing
Primary Shopping/Trade Center – Area	Hattiesburg
Primary Shopping/Trade Center – County	Forrest
Nearest Employment Center	Hattiesburg

Neighborhood Defined	<i>(Brief description of the neighborhood area boundaries or general limits, including, if applicable, community name or other name reference utilized by area residents)</i>
The subject parcels are located along the west and east sides of the Norfolk Southern Railroad Right of Way and along the west side of Guy Eaton Street. West Pine Street is to the west and connects to Hall Avenue. Guy Eaton Street and Martin Luther King Avenue are to the east and connects with Hall Avenue. The traffic counts for Hall Avenue are 5,900, 2,400 for Guy Eaton Street, 1,600 for Martin Luther King Avenue, and 13,000 for West Pine Street. The surrounding uses are predominantly commercial and residential. The subject neighborhood is the southeastern residential area of Hattiesburg and south of the more commercialized downtown Hattiesburg area to the north.	
Neighborhood Zoning	☐ Res. ☒ Comm. ☐ Ind. ☐ Other ☐ None
Neighborhood Utilities	☒ Elec. ☐ Gas ☒ Water ☒ All ☐ Part ☒ Sewerage ☐ Other
Neighborhood Imp's	☒ Storm Sewer ☒ Crb/Gtr ☒ Sidewalk ☒ Street Lights ☐ Other
Schools	Hattiesburg Public Schools & William Carey University to the south
Recreational Facilities	
Fire	Hattiesburg
Police	Hattiesburg
Other	

Comments:	<i>(Comments regarding but not limited to real estate activity, recently completed or imminent public projects, significant private business projects / expansions / cutbacks, or other items worthy of noting, if applicable)</i>
The downtown Hattiesburg market is stable to slightly increasing, with increased investment and demand in the area. There are various projects that continue to support the revitalizing of the downtown area with restaurants, bars, and retail shopping. Some of the historic homes have been revitalized and remodeled as well. Several restaurants have closed since COVID began, while some have remained open. The continued demand in downtown Hattiesburg presents a stable, to growing outlook for the area.	

Site Description

(Before – Acquisition - After)

Site Description — Before

An analysis of the subject site is particularly important in estimating its highest and best use and for separate valuation from the improvements. The following is a discussion of the subject site in the Before Condition.

Information, regarding the total ownership, has been obtained by the appraiser from current county records, the acquisition map and other reliable sources, including a physical inspection of the site. (A survey and/or metes and bounds description of the total subject property has not been provided to the appraiser)

Present Use of Site: Norfolk Southern Railway right of way.

Legal Description of the Total Ownership: +/- 0.29 Acres or +/- 12,707 sf affecting the air space over the Norfolk Southern Railway right of way located in the NE1/4 of the NE1/4 of Section 16, Township 4 North, Range 13 West, City of Hattiesburg, Forrest County, Mississippi. See the plat on the following pages for a more precise legal description.

The easement is between the Grantor, Norfolk Southern Railroad and the City of Hattiesburg as the Grantee. This is for an easement for an elevated highway right-of-way, and other construction purposes, referenced as the "Structure", on and across the land of Norfolk Southern. This is further described as the parcel containing +/- 0.29 acres (12,707 square feet), more or less, situated in the Southeast ¼ of the Southeast ¼, of Section 9, Township 4 North, Range 13 West, and Section 16, Township 4 North, Range 13 West, City of Hattiesburg, Forrest County, Mississippi. A copy of this proposed easement can be found in the addenda of this report.

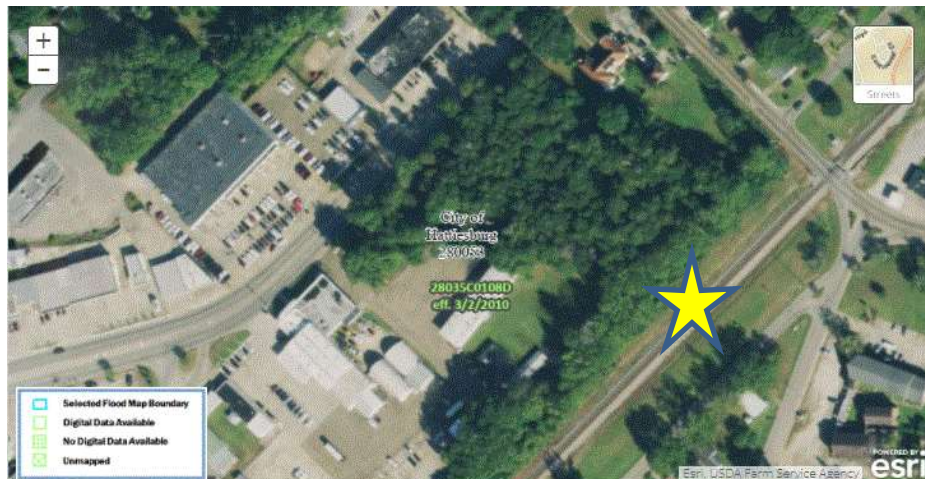
Location: The subject property is located above the Norfolk Southern Railroad Right of Way in its air rights and along the eastern side of Guy Eaton Street and the south side of Hall Avenue in Hattiesburg, Forrest County, Mississippi. Hall Avenue is a busy corridor with several historic Hattiesburg homes that have been renovated over the years.

Dimensions/Area/Shape: The subject property is irregular in shape and is part of the air rights above by the railroad right of way. The property contains approximately +/- 0.29 acres which are irregular in shape. It has dimensions of roughly 139' x 102', with an additional 279' x 16' strip on the North side.

Frontage/Access: The subject property has +/- 107 feet of frontage along the west side of Guy Eaton Street. The tract could be accessed from the north across adjacent property from Hall Avenue.

Topography: The subject properties are fairly level and are not located in a flood zone area or designated wetlands.

Flood Plain and Drainage Data: According the FEMA National Flood Hazard map, identified as panel #: 28035C0108D, dated March 2nd, 2010, the property is located in a flood zone X, which is not a designated flood zone area.



WETLANDS MAP



**** No wetlands are indicated on the subject property from the map found above.**

Use Restrictions: The subject acquisition area is located in the Norfolk Southern Railroad Right of Way with obvious restrictions due to the railroad corridor. However, it is not subject to zoning.

Site Improvements: Norfolk Southern Railway

Adjacent Land Uses: Norfolk Southern Railway

Easements/Encumbrances: The subject property is formerly a part of a transportation corridor for Norfolk Southern railroad. This area originally contained 32.46 acres of land across the entire 16th section. This area was reduced in 1983 to a 100' R.O.W. which reduced the gross area to 16.23 acres. A 16.23 acre perpetual easement was purchased from the Hattiesburg Public school district in 1983 for \$158,800 by Alabama Great Southern railroad, with additional damages of \$135,532 for the use of an additional 16.23 acres of land for the former use of a 200' R.O.W. for 30.5 years. (1953-1983). This R.O.W. was reduced from 200' to 100' in 1983 per the Mutual Release of claims found in the addenda. This reduction in right-of-way left a 16.23 acre parcel. A crossing document will have to be obtained by the city to cross the railway, however, according to the title work, the railroad does not have an annual lease on the property. According to the Secretary of State website there is no annual lease it appears it is an perpetual easement was purchased, a copy is found in the addenda. Their rights were acquired in 1983 via a mutual release document described later in this report. Due to the perpetual easement, no annual lease payments are made to the school board.

Utilities:



-  **Telecomm Service Area** ⓘ
BellSouth Telecommunications, LLC
-  **Water Service Area** ⓘ
null
-  **Electric Service Area** ⓘ
Mississippi Power Company
-  **Sewer Service Area** ⓘ
null
-  **Gas Service Area** ⓘ
Willmut Gas and Oil Co.

Utility Service	Supplier	Utility Service	Supplier
Electricity	Mississippi Power Company	Sewer	City of Hattiesburg
Gas	Willmut Gas and Oil Co.	Water	City of Hattiesburg
Garbage Collection	City of Hattiesburg	Telephone	BellSouth Telecomm.

Comments:	<i>Include additional narrative, as needed.</i>
It should be noted that the conveyance of the Air Rights is a part of a separate Agreement as part of the administrative process by the City of Hattiesburg.	

Site Description — Area of Acquisition

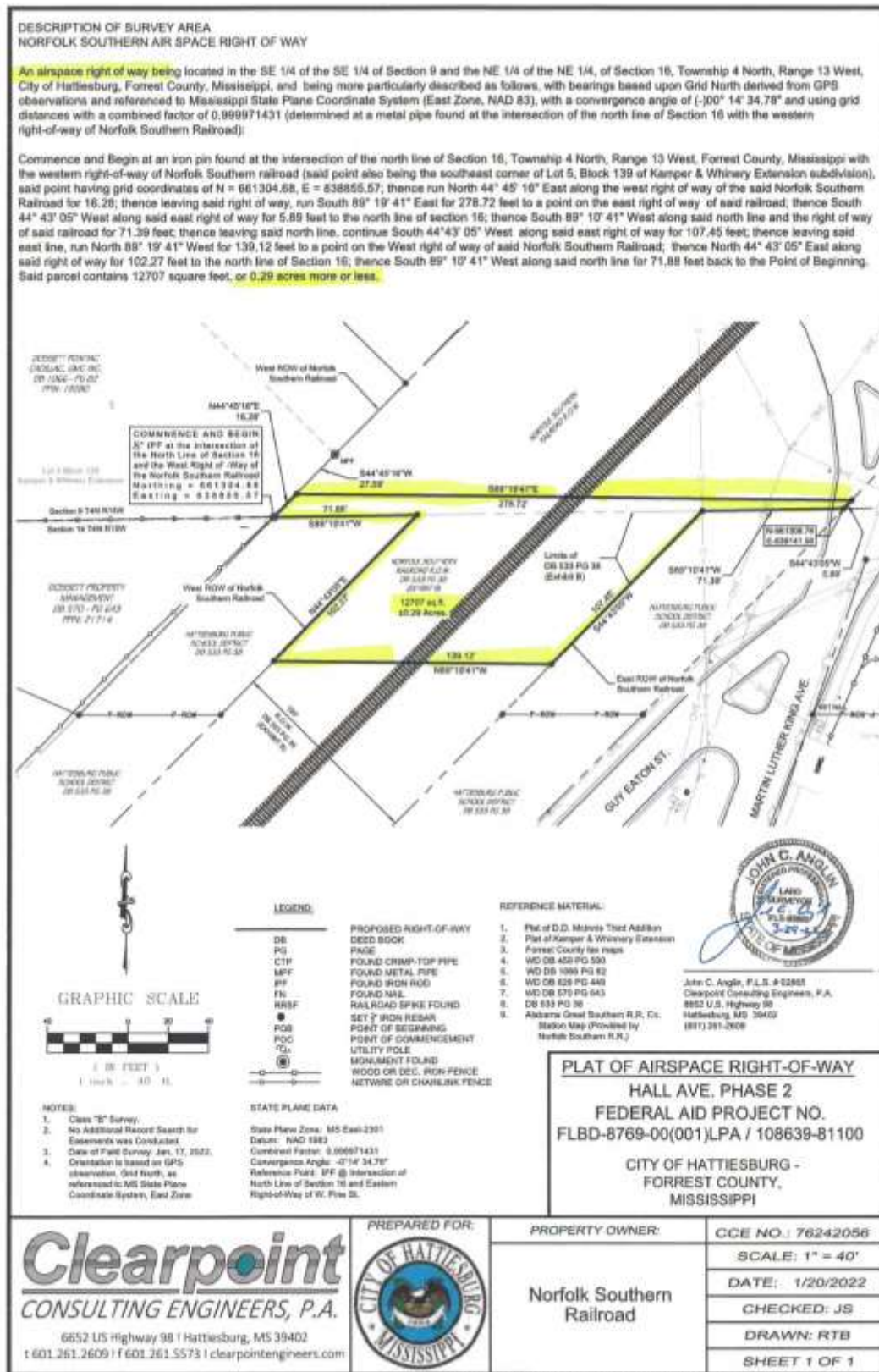
Location: The acquisition area is +/- 0.29 acres or +/-12,707 sf in air rights located in the railway right of way.

Dimensions/Area/Shape: The fee simple acquisition area contains a +/- 0.29 acres or +/- 12,707 sf area. **There is only an acquisition of rights via an easement, and the acreage remains the same in the after condition.**

Site Improvements: Norfolk Southern Railway

Rights to be Acquired for Each Parcel: Air Rights

SURVEY



Site Description — After

Dimensions/Area/Shape: Following the acquisition, the property will have 0.29 acres remaining, less the air rights.

Frontage/Access: Similar to the before condition.



Topography: Similar to the before condition.

Flood Plain and Drainage Data: Similar to the before condition.

Use Restrictions: Similar to the before condition.

Off-Site Public Improvements: Similar to the before condition.

Easements/Encumbrances: Similar to the before condition.

Utilities: Similar to the before condition.

Comments:	<i>Include additional narrative, as needed.</i>
An easement over the railroad. The remainder is similar in use, as to the before condition, less the air rights that are being acquired.	

Items of Real Property Appraised

The property to be appraised in this report is +/- 0.29 acres in air rights in the Norfolk Southern Railway right-of-way.

Items of Personal Property Not Appraised

None.



View of existing railroad right-of-way.



Additional view of the existing railroad right-of-way and proposed acquisition area.



Additional view of the existing railroad right-of-way and proposed acquisition area.



View of the proposed acquisition area above the existing railroad corridor.



Additional view of the existing railroad right-of-way and proposed acquisition area.



Additional view of the existing railroad right-of-way and proposed acquisition area.

Whole Tract and Larger Parcel Declaration

Whole Tract Declaration

On those properties where the total ownership and the Larger Parcel are not one-in-the-same, it is possible for a property to contain several Larger Parcels (Highest & Best Use areas). The acquisition may affect more than one Larger Parcel (H&BU area), it is essential that there be a clear declaration by the appraiser as to what part and/or parts of the total ownership are being appraised. This section of the appraisal report declares exactly what was valued in the appraisal process and includes:

- The size of the contiguous total ownership provided to the appraiser by the client
- Declaration of the Larger Parcels (H&BU areas) within the total ownership that are unaffected
- Identification and delineation of the affected Larger Parcels (H&BU areas) described by the following methods as appropriate:
 - a. Clearly visible physical features- road, creek, ditch, fence, tree line, etc.
 - b. Subdivision boundary, Zoning line, corporate limits, county line, section line, etc.
 - c. Dimensioned area as determined by the appraiser

Total "Whole Tract" Declaration and Summary	(Ac./S.F.)
The subject property is adjacent to and formerly a part of a transportation corridor for Norfolk Southern railroad. This area originally contained 32.46 acres of land across the entire 16 th section. This area was reduced in 1983 to a 100' R.O.W. which reduced the gross area to 16.23 acres. A 16.23 acre easement was purchased from the Hattiesburg Public school district in 1983 for \$158,800 by Alabama Great Southern railroad, with additional damages of \$135,532 for the use of an additional 16.23 acres of land for the former use of a 200' R.O.W. for 30.5 years. (1953-1983). This R.O.W. was reduced from 200' to 100' in 1983 per the Mutual Release of claims found in the addenda. This reduction in right-of-way left surplus property that adjoins the railroad. This surplus property is contained in this relinquished 16.23 acre parcel. This former transportation corridor which is now surplus property contains 16.23 acres of land and is considered the Whole Tract.	

Declaration of the Larger Parcel

There are three conditions or tests that are considered in determining the larger parcel, unity of ownership, unity of use, and contiguity. In certain instances, the larger parcel may not include all the lands that are contiguous and under identical ownership. In determining the larger parcel to be appraised, reliance on unity of ownership and unit of use will be given substantial weight. In determining the larger parcel, the following is noted:

Larger Parcel(s) Summary	(Dimensions, Size, and Use)
As stated, the property is part of a Transportation Corridor that spans 100' by about 1.34 miles, being an existing railroad corridor. Due to this irregular shape and location the highest and best use is for assemblage onto adjacent tracts or as a utility or transportation corridor. From this corridor the 0.29 acres in the acquisition area has a consistent highest and best use, ownership and although not contiguous due to the railroad, was considered to have continuity for the purposes of determining the larger parcel. This +/- 0.29 acres was determined to be the larger parcel of this appraisal report.	
The whole tract 0.29 acre was determined to be the larger parcel of this report. Areas of land that are utilized for railroad easements and similar corridor type uses sell rarely, therefore we utilized the "across-the-fence" method of appraisal valuation. In this method, the area of land is divided into two areas along its centerline and combined with the adjoining parcels of land lying on either side. These tracts are then appraised to find the value of the area of land to be acquired. After combining the concluded value of the separate parcels of land into one parcel, an analysis of the acquisition area is made to value the easement rights being acquired. Due to the similar uses of land on either side of the parcel was valued using the same unit of value.	

Highest and Best Use Analysis

Highest and best use is defined in *The Dictionary of Real Estate Appraisal, Sixth Edition, 2015, page 109*, compiled by the Appraisal Institute as:

“The reasonably probable use of property that results in the highest value. The four criteria that the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity.”

In order to arrive at a highest and best use estimate, the land is first analyzed as if vacant. Later, the total property, including any existing improvements, is analyzed. In estimating the highest and best use of the subject site, as if vacant and improved, you must first carefully study the existing land use patterns and trends in the area. In estimating the highest and best use of the subject property, the appraiser has considered very carefully the following factors:

1. The land and location is considered in relationship to the local area.
2. The physical characteristics of the land and improvements, including the land's overall size, shape, road frontage, topography, soil and sub-soil conditions and available utilities.
3. In analyzing the highest and best use of the subject, as applicable and appropriate, the Sales Comparison Approach, Cost Approach, and Income Approach are considered.

The procedure used in this report to estimate highest and best use of the subject site was to consider, in sequence, the site's utility, its legal use, its possible and most feasible use, and, finally, the optimum or highest and best use.

Highest and Best Use Analysis	(Address legal permissibility, physical possibility, financial feasibility, maximum productivity, in Before & After for all larger parcels or whole tract as applicable)
Physically possible: The parcel is a part of a Transportation corridor. This parcel is elongated with limited use. The parcel is physically limited by its shape. Adjacent owners could utilize these parcels through an assemblage onto the adjacent properties. These adjacent uses are commercial and special purpose properties. Legally permissible: These parcels are not zoned by the City of Hattiesburg. The 100 foot easement will be severely limited for development options, due to the existing railroad corridor. Development of a parcel of an elongated tract of land would have limited development options, however the parcel could be divided in the center and combined with the adjoining parcels. This would be the basis for the “across-the-fence” method of valuing the parcel. Financially feasible: Due to the narrow shape, the most feasible use of the property is for assemblage. <u>Highest and Best Use As Vacant:</u> The property is irregular in shape. However, these are in an area of commercial uses. For this reason, the highest and best use as vacant is for assemblage onto adjacent properties. <u>Highest and Best Use As Improved:</u> Not Applicable	

HIGHEST AND BEST USE IN THE AFTER CONDITION

The acquisition is only for the air rights. Therefore, the highest and best use in the after condition is the same as in the before.

Ownership History and Tax Information

Ownership History

In developing a real property appraisal an appraiser must:

1. Analyze any current agreement of sale, option, or listing of the subject property, if such information is available to the appraiser in the normal course of business.
2. Analyze any prior sales of the subject property that occurred within the following minimum time period of five years.
3. Discuss below (as applicable) the quality and quantity of data available and analyze within the approaches used and the applicability or suitability of the data.
4. When there is a sale of the subject property to the current owner for an undisclosed price, the appraiser must state that he or she attempted to obtain the purchase price and other terms of the transaction without success. (If transaction price could not be verified, please explain below.)

Ownership History					
Property Transactions during the last five years to Date:					
Date	Grantor	Grantee	Consideration	Book/Page	Ver.
12/19/1983	Hattiesburg Municipal Separate School District	The Alabama Great Southern Railroad Company	N/A	533/38	Deed
Explanation: There have been no transfers in ownership in the last five years. It should be noted that a 16.23 acre easement, that is the whole tract and includes the acquisition area was purchased from the Hattiesburg Public school district in 1983 for \$158,800 by Alabama Great Southern railroad, with additional damages of \$135,532 for the use of an additional 16.23 acres of land or the 200' R.O.W. for 30.5 years. (1953-1983). This R.O.W. was reduced from 200' to 100' in 1983 per the Mutual Release of claims found in the addenda.					

Tax Information			
Tax Parcel I.D. Number	N/A	True Value – Land	\$0.00
Millage Rate		True Value – Improvements	\$0.00
Property Assessment Rate			
Special Assessments			

Approaches to Value

All standard techniques used by appraiser in estimating of market value can be grouped into the following three main approaches to value: 1) Sales Comparison Approach, 2) Cost Approach, and 3) Income Approach. One or more of these approaches are used in all appraisal assignments. Use of these approaches will depend on the type of property being appraised and quantity and quality of data available for analysis.

Sale Comparison Approach: A set of procedures in which a value indication is derived by comparing the property being appraised to similar properties that have been sold recently, applying appropriate units of comparison, and making adjustments to the sale prices of comparables based on the elements of comparison. The sales comparison approach may be used to value improved properties, vacant land, or land being considered as though vacant; it is the most common and preferred method of land valuation when comparable sales data are available.

Cost Approach: A set of procedures through which a value indication is derived for the fee simple interest in a property by estimating the current cost to construct a reproduction of, or replacement for, the existing structure; deducting depreciation from the reproduction or replacement cost; and adding the estimated land value, plus an entrepreneurial profit. Adjustments may then be made to the indicate fee simple value of the subject property to reflect the value of the property interest being appraised.

Income Approach: A set of procedures through which an appraiser derives a value indication for an income-producing property by converting its anticipated benefits (cash flows and reversion) into property value. This conversion can be accomplished in two ways. One year's income expectancy can be capitalized at a market-derived capitalization rate or at a capitalization rate that reflects a specified income pattern, return on investment, and change in the value of the investment. Alternatively, the annual cash flows for the holding period and the reversion can be discounted at a specified yield rate.

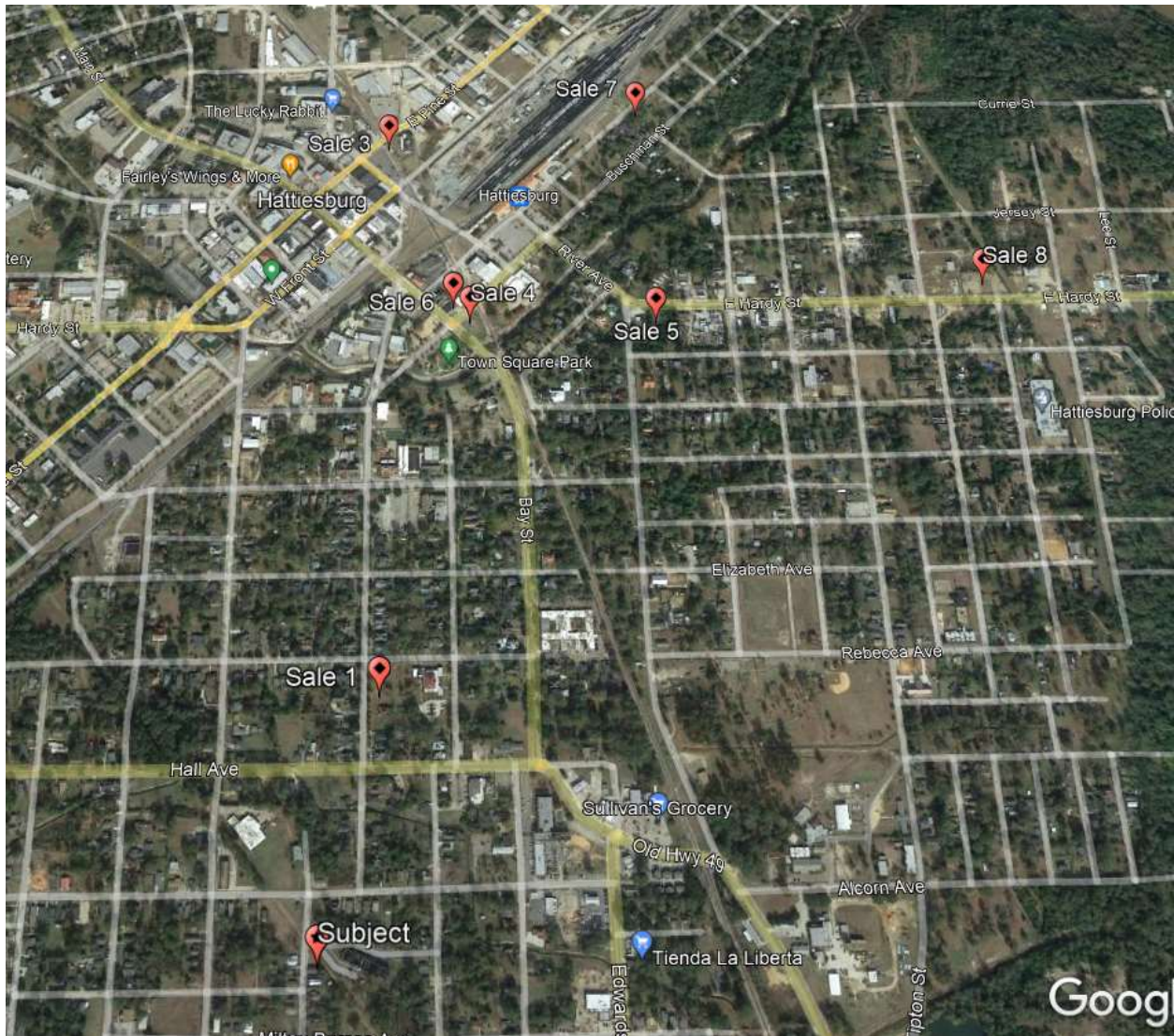
The Dictionary of Real Estate Appraisal, Fourth Edition, Appraisal Institute

Approach to Value Utilized in this Appraisal Assignment Are:

☐ Cost Approach ☐ Income Approach ☒ Sales Comparison Approach

Reason(s) for excluding any of the usual approaches to value	
The property to be appraised is an unimproved property. Thus, the Cost and Income approaches were not utilized. The value of the property is valued using the Sales Comparison approach presented on the following pages. The initial sales grid values the lots as vacant.	

LAND SALES MAP



Sale of an Easement (Utilized in Final Reconciliation)

Property Type Commercial
Address E/S of Canal Road and S/S of I-10, Gulfport, Harrison County, MS

Sale Data

Grantor Oasis Real Estate Investments, Inc.
Grantee Normand Children Diversified Class Trust
Sale Date April 01, 2009
Deed Book/Page 2009/2333
Property Rights Fee Simple
Conditions of Sale Arm's Length
Financing Cash to Seller
Verification Confirmed with Cliff Frisby by Jonathon Null; June 09, 2011
Sale Price \$1,099,250

Land Data

Topography Mostly level
Utilities Electric, Water
Shape L-Shaped
Rail Service Borders railroad

Land Size Information

Gross Land Size 6.800 Acres or 296,208 SF
Front Footage 502 ft I-10 (No access); 53 ft Canal Road

Indicators

Sale Price/Gross Acre \$161,654
Sale Price/Gross SF \$3.71

Remarks

This land has frontage along the I-310 Port Connector Road, where construction ceased in 2012. It has no access to the proposed road. Access is on Canal Road about 2,000 ft. south of I-10. This site is bordered on the south by a 100' overhead powerline easement and by the subject Railroad line.

The sale was actually 5.33 acres in fee plus an additional 1.47 acres in easement. The owner considered that he sold 6.8 acres for +/- \$160,000 per acre, which actually calculated out to \$161,654 per acre. The main portion of the 5.33 acres are accessed by a 1.47 acre easement from Canal Road to the west. After purchasing the 5.33 acres and the 1.47 acre easement, the buyers went back to the Grantor and purchased the 1.47 acre easement in fee for an additional \$150,000. This equates to a total purchase price of \$1,249,250 for 6.8 acres in fee or \$4.22 per square foot. The buyers were not allowed to build their trucking facility without full ownership of the easement road, which is the reason they went back and purchased the 1.47 acres in fee. This 1.47 acre sale is discussed further on the following pages. The Grantor stated that he priced the entire sale of 6.8 acres at \$160,000 per acre, which includes the easement road. He paid an additional \$150,000 or \$102,041 per acre for the remaining rights in excess of the easement. Thus, the fee simple rights, less the easement indicated a value of \$2.34/sf or 55.5% of the fee simple value.

The land is mostly level and about 24-25 feet above sea level. Seller stated that about 2.2 acres of wetlands had to be mitigated by the buyer. A truck sales operation was under construction on the site in 2011. Water and sewer main lines were within about 300 feet of the main part of the site.

The buyer originally had +/-22.25 acres prior to MDOT purchasing approximately 16 acres for the Highway 601 Connector. Frisby stated that the Norman's owned 3.95 acres immediately to the north, of the 5.33 acres purchased, and they needed this additional land to construct their trucking facility. The grantor (Frisby) stated that the Norman's wanted to be west of the Highway 601 Connector and his property was the only available site. Frisby was in negotiations with the Norman's to sell an additional 8 acres adjacent for \$1.5 million. This 8 acres has frontage along Canal Road and would adjacent to their existing site. According to research of the land rolls in 2016, this purchase did not go through, and the adjacent 8 acres is still owned by Oasis.

Frisby stated that he has other properties owned in partnership with the Norman's, but this was an arm's length transaction.

Parcel # 0709L-02-001.000

PPIN # 90881



Sales Comparison Approach – (Land) – Before Value

☒ Complete Take

☐ Partial Take

Sq. Ft.

Item	Subject	Comp Sale #	L-5	Comp Sale #	L-6	Comp Sale #	L-9
Location		East Hardy Street		101 Main Street		700 4th Street	
Sales Price			\$32,500		\$43,500		\$175,000
Price Per SF			\$1.02		\$2.85		\$2.36
	Description	Description	+/- Adj.	Description	+/- Adj.	Description	+/- Adj.
Property Rights Conveyed	Fee, Ease,						
Adjusted Price			-0-		\$2.85		\$2.36
Financing	Typical						
Adjusted Price			\$1.02		\$2.85		\$2.36
Condition of Sale	Arms-Length						
Adjusted Price / SF							
Market Conditions	Date of Sale	7/20/21	0%	11/24/20	5%	10/9/20	5%
Adjusted Price / SF			\$1.02		\$2.99		\$2.48
Location		Similar	\$0.00	Similar	\$0.00	Similar	\$0.00
Size (Sq. Ft.)	0.29 AC	0.735	\$0.00	0.350	\$0.00	1.700	\$0.00
Topography	Flat, level	flat, level	\$0.00	flat, level	\$0.00	Flat, level	\$0.00
Utilities	W-P-S	Similar	\$0.00	Similar	\$0.00	Similar	\$0.00
Zoning	N/A	B-1	\$0.00	B-3	\$0.00	B-2	\$0.00
Utility or Use			-0-		-0-		-0-
Additional Adjustments		(+/-)	0	(+/-)	0	(+/-)	0
		Net %	0	Net %	0	Net %	0
		Gross %	0	Gross %	0	Gross %	0
Adjusted Sales Price			\$1.02		\$2.99		\$2.48

Adopted Unit Value, Before (Land Only): \$2.00

Size	Unit of Measure	Rate	
12,707 sf	SF	\$2.00	Per Acre
			\$25,414
Add (Timber, minor site improvements, other - See Attached):			\$0
			\$0
			\$0
Total Before Value (Land Only):			\$25,414
r/o			\$25,415

Sales Comparison Approach – (Land) – After Value

☒ Complete Take

☐ Partial Take

Sq. Ft. ▼

Item	Subject	Comp Sale #		Comp Sale #		Comp Sale #	
Proximity to Subject							
Sales Price							
Price Per Unit (Sq. Ft.)			#DIV/0!		#DIV/0!		#DIV/0!
	Description	Description	+/- Adj.	Description	+/- Adj.	Description	+/- Adj.
Property Rights Conveyed	Fee, Ease,						
Adjusted Price			#DIV/0!		#DIV/0!		#DIV/0!
Financing	Typical						
Adjusted Price			#DIV/0!		#DIV/0!		#DIV/0!
Condition of Sale	Arms-Length						
Adjusted Price			#DIV/0!		#DIV/0!		#DIV/0!
Market Conditions	Date of Sale						
Adjusted Price			#DIV/0!		#DIV/0!		#DIV/0!
Location							
Size (Sq. Ft.)							
Topography							
Utilities							
Other							
Net Adjustment		(+/-)	\$0.00	(+/-)	\$0.00	(+/-)	\$0.00
		Net %		Net %		Net %	
		Gross %	#DIV/0!	Gross %	#DIV/0!	Gross %	#DIV/0!
Adjusted Sales Price			#DIV/0!		#DIV/0!		#DIV/0!

SAME AS PREVIOUS

Adopted Unit Value, After (Land Only): \$2.00

Size	Unit of Measure	Rate	
12707	Acres @	\$2.00	\$25,414
Less Cost to Cure:			\$0
Less Easements (See Attached):			(\$6,355)
Less Other (See Attached):			\$100
Total After Value (Land Only):			\$18,959
R/O			\$18,960
Difference in Before and After:			\$6,455

Explanation of Adjustment-(Land)

(Before and After)

Before Value – Land Adjustments

Property Rights Conveyed: All of the sales were fee simple conveyances. No property rights adjustments were required.

Financing: No adjustments applied

Conditions of Sale: No adjustments applied

Market Conditions: The sales spanned from 2020 to 2021. There is limited lot sales activity in the downtown Hattiesburg market, so the overall availability of sales is limited. There is one sale in the brochure that indicates a 7% annual appreciation. Other benchmark studies indicate a 3% rate over a much broader group of sales. The current market is strong and an annual appreciation rate of 5% per year has been applied to land sales L-6 & L-9.

Location: All of the sales are located in Forrest County and are generally similar in location. Therefore, no adjustments were made.

Size: Site size is an adjustment in which comparables site size is compared to the subject. Depending on the market segment, variation in site size can have effect up to a point on the price per square foot index. Typically, if a comparable site is larger than the subject site, an upward adjustment is applied to reflect economies of scale. Conversely, if a comparable site is smaller than the subject site, a downward adjustment may need to be applied. Although in this case, the larger lots sold for higher unit rates. The subject is a former railroad corridor and extends north and south of the larger parcel. For all of these reasons, the sales were not adjusted for their size.

Topography: The subject is a level, commercial / special purpose property along the edge of the railroad. This is former railroad right of way thus, it is graded and cleared for the former railroad use. The sales were all considered similar in topography.

Use / Zoning: The subject parcels are not zoned. The sales had commercial business zoning. The highest and best use was assemblage onto the adjacent commercial uses. These lots are cleared and graded and would be marketable, with a discount due to the limited number of adjacent buyers. Thus, a value below the average was adopted. These sales were considered similar, and no adjustments were made.

Before Value - Reconciliation of Land Sales

The sales had adjusted per lot values ranging from \$1.02 to \$2.85 per square foot. The sale of the property in Gulfport indicated 31.5% of its fee value was paid for the easement rights or \$1.33/sf or \$57,935 per acre. Overall, considering the adjusted values and the assemblage use of the property, a value of \$2.00 per square foot or \$60,00 per acre was adopted for the subject property. This unit value was used for land value on the following pages.

After Value - Reconciliation of Land Sales:

There is the same acreage in the remainder, thus the total after value of the property was similar, less the compensation for the easement.

Additional Comments on Before and After Values

In addition to the "across-the-fence" method, we had a sale of an easement on Land Sale 1. This sold for \$2.34/sf. This was the fee simple purchase of a property, encumbered by an ingress/egress easement. This purchase acquired all remaining rights. The subject easement will leave rights to the Grantor, which will be more valuable, to the property owner, thus an after value above \$0 exists. The easement that sold was adjacent to a railroad. This easement sold for 44.5% of the fee simple value paid previously for the parent tract. For further support I also reviewed an article on the valuation matrix published by the IRWA. A chart from this article is found below.

Easement Valuation Matrix

Percentage of Fee	Comments	Potential Types of Easements
90% - 100%	• Severe impact on surface use • Conveyance of future uses	Overhead electric, flowage easements, railroad right of way, irrigation canals, exclusive access easements
75% - 89%	• Major impact on surface use • Conveyance of future uses	Overhead electric, pipelines, drainage easements, railroad right of way, flowage easements
51% - 74%	• Some impact on surface use • Conveyance of ingress/egress rights	Pipelines, scenic easements
50%	• Balanced use by both owner and easement holder	Water or sewer lines, cable lines, telecommunications
26% - 49%	• Location along a property line • Location across non-usable land area	Water or sewer line, cable lines
11% - 25%	• Subsurface or air rights with minimal effect on use and utility • Location with a setback	Air rights, water or sewer line
0% - 10%	• Nominal effect on use and utility	Small subsurface easement

Considering, that this easement sold was based on surface rights being conveyed and the subject will retain surface rights a percentage less than 44.5% is indicated. The valuation matrix above indicates an 11-25% percentage of fee valuation for such an easement. I adopted 25% of fee simple value as the compensation for the subjects 0.29 acre easement area for the air rights. This amount equaled \$6,455 calculated below.

Calculation:

25,415 (Fee Simple Value) X 25% = \$6,353, Rounded to \$6,355

Final Reconciliation Of Value

	Before	After	Difference
Sales Comparison Approach	\$25,415	\$18,960	\$6,455
Cost Approach			
Income Approach			

Reconciliation	
During my research into the market, I found several comparable land sales in the Hattiesburg market. These sales were further analyzed based on their proximity to the subject and their highest and best use. The sales were inspected, verified, and compared to the subject property. I have considered the three approaches to value and have found the Sales Comparison Approach to be the most relevant. To perform this approach, we gathered comparable sales data and have made adjustments based on comparisons between the subject and comparable sales. We gathered sales in our research and have selected the most comparable. For this reason, we feel that the quantity and quality of data was relative to the scope of work. The data helped us derive a well-supported market value for the before and after conditions, thus determining just compensation. This appraisal was used to derive a total before and after value for the property. I determined the before value of \$25,415 based on the analysis of comparable sales using the "across the fence " method. I also considered the sale of an easement, which justified our values. The after value was determined to be \$18,960. Therefore, Just compensation would be \$6,455.	

The difference between the Fair Market Value of the whole tract and the remainder is **\$6,455** as of 04/04/2022, and is my opinion of just compensation, for the acquisition of the real property rights described in this appraisal report.

Recommended Distribution Of Final Value Estimate

For Accounting And Acquisition Purposes Only
(To Be Completed After Appraisal Made)

Fee/Leased Fee Interest

Acre(s) ▼

Parcel	Acq. Area		HBU	Land	Improvements		Damages		Total
					Item	Value	Item	Value	
HPSD	0.290	Acre(s)		\$100					\$100
									\$0
									\$0
									\$0
									\$0
Totals	0.290	Acre(s)		\$100		\$0		\$0	\$100

Easements (Permanent / Temporary)

Parcel	Acq. Area		HBU	Land	Improvements		Damages		Total
					Item	Value	Item	Value	
									\$0
									\$0
									\$0
									\$0
									\$0
Totals	0.000			\$0		\$0		\$0	\$0

Quit-Claim Interest / Leasehold

Parcel	Acq. Area		HBU	Land	Improvements		Damages		Total
					Item	Value	Item	Value	
Norfolk	0.290		\$6,355				\$0	\$0	\$6,355
									\$0
									\$0
									\$0
									\$0
Totals	0.000			\$0		\$0		\$0	\$6,355

Total of all Interests **\$6,455**

Addenda

Terms and Definitions

Agency- the Federal Agency, State, State Agency, or person that acquires real property or displaces a person.

Appraisal- *USPAP 2020-2021*, pg. 3 defines an appraisal as the act or process of developing an opinion of value; an opinion of value.

Uneconomic Remnant- a parcel of real property in which the owner is left with an interest after the partial acquisition of the owner's property, and which the Agency has determined has little or no value or utility to the owner.

Total Ownership- the total amount of contiguous property, under the ownership of a single legal entity, as indicated by the map provided to the appraiser.

Whole Tract- that amount of property, within the "Total Ownership", as determined by the appraiser, to be affected by the acquisition. The *whole tract* is defined by the appraiser, and may be determined to be the same as the total ownership, or some defined area that is less than the "Total Ownership".

Larger Parcel-¹ that tract, or tracts, of land which possess a unity of ownership and have the same, or an integrated, highest and best use. Elements of consideration by the appraiser in making a determination in this regard are contiguity, or proximity, as it bears on the highest and best use of the property, unity of ownership, and unity of highest and best use. Mississippi Case Law recognizes this concept but refers to it by use of the phrases "Highest and Best Use areas" or "Highest and Best Uses"² Designation of the Larger Parcel, for appraisals performed in connection with the disposal of excess property, may require the adoption of a hypothetical condition regarding "unity of ownership".

Excess Property "(2)...whenever real property, with the exception of easements for highway purposes, has been acquired by the Mississippi Transportation Commission, in any manner, for public use and in the opinion of the commission all or any part thereof becomes unnecessary for public use, the same shall be declared on the minutes of the commission as excess property and sold at private sale at market value."³

Disposal as used in the appraisal of excess property, "means the sale of real property rights therein, including access or air rights, when no longer needed for highway right-of-way or other uses eligible for funding under title 23 of the [U.S.] Code"⁴

Fair Market Value- Fair Market Value is value in exchange. It is "the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress".⁵

Effective Date – The date on which the appraisal or review opinion applies. Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th Edition, s.v. "effective date." (Chicago: Appraisal Institute, 2015), PDF e-book

Date of the Report – The date on which the report is transmitted to the client. Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th Edition, s.v. "date of the report". (Chicago: Appraisal Institute, 2015), PDF e-book.

¹ The Uniform Appraisal Standards for Federal Land Acquisitions, Interagency Land Acquisition Conference, Published by the Appraisal Institute with the cooperation of the U.S. Department of Justice, Washington, D.C. 2000,

² Oughton v. Gaddis, 683 So.2d 390 (Miss. 1996)

³ Mississippi Code of 1972, Annotated, § 65-1-123

⁴ United States Code, 23 CFR 710.105

⁵ *Potters II v. State Highway Comm'n of Mississippi*, 608 So. 2d 1227, 1231 (Miss. 1992).

Highest and Best Use- The best or most valuable use to which the property, [.....], is adapted. Mere speculative uses cannot be considered. There must be some probability that the land would be used within a reasonable time for the particular use to which it is adapted. There must be a present demand for the land for such purpose or a reasonable expectation of such demand in the near future.⁶

Before and After Rule [Mississippi]- When part of a larger tract of land is taken for public use, the owner should be awarded the difference between the fair market value of the whole tract immediately before the taking, and the fair market value of that remain[ing] immediately after the taking, without considering general benefits or injuries resulting from the use to which the land taken is to be put, that are shared by the general public.⁷ Any decrease or increase in the fair market value of real property prior to the date of valuation caused by the public improvement for which such property is acquired or by the likelihood that the property would be acquired for such improvement, other than that due to physical deterioration within the reasonable control of the owner, will be disregarded in determining the compensation for the property.⁸

Before Value- The fair market value of the whole tract immediately before the taking.⁹

After Value- The fair market value of that remain[ing] immediately after the taking, without considering general benefits or injuries resulting from the use to which the land taken is to be put, that are shared by the general public.

Due Compensation¹⁰- Just Compensation¹¹ the value of the land taken and the damages, if any, which result... as a consequence of the taking, without considering either general benefits or injuries resulting from the use to which the land taken is to be put, shared by the general public.¹²

Damages to Remainder- *[In the context of valuation under the Before and After Rule, it is]* the depreciation in the fair market value of the remaining area, ...that is special, and not such as is common to all the property in the neighborhood.¹³ In determining damages, if any, to the remainder if less than the whole of a defendant's interest in property is taken, nothing shall be deducted there from on account of the supposed benefits incident to the public use for which the petitioner seeks to acquire the property.¹⁴

Cost-to-Cure Damages [the cost or costs associated with] the necessity of rebuilding fences and wells, the necessity of relocating roads, and other similar items. [Such] items are all part of the depreciated value of the property, since the landowner is required to do this construction in order to use the property in the manner in which it has been used or for which it is best adapted.¹⁵

Extraordinary Assumption –2020-2021 USPAP, pg. 4, defines extraordinary assumption as “ an assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which if found to be false, could alter the appraiser's opinions or conclusions. Uncertain information might include physical, legal, or economic characteristic of the subject property; or conditions external to the property, such as market conditions or trends, or the integrity of data used in an analysis.

Hypothetical Condition –2020-2021 USPAP, pg. 4, defines hypothetical condition as “a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for purpose of analysis.” Hypothetical conditions are contrary to known facts about physical, legal, or economic characteristic of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

⁶ MSHC v. Brooks, 123 So.2d 423, 427 (1960); MSHC v. Wagley, 231 So.2d 507 (1970);

⁷ Potters II v. MSHC, 608 So. 2d 1227 (Miss. 1992); MSHC v. Hillman, 189 Miss. 850, 198 So. 565 (1940)

⁸ Mississippi Code of 1972, Annotated, Section 43-37-3

⁹ Potters II v. MSHC, 608 So. 2d 1227 (Miss. 1992); MSHC v. Hillman, 189 Miss. 850, 198 So. 565 (1940)

¹⁰ Constitution of Mississippi, Article 3, § 17

¹¹ Mississippi Code of 1972, Annotated, Section 43-37-3

¹² MSHC v. Hillman, 198 So. 565;

¹³ MSHC v. Colonial Inn, Inc. 149 So.2d 851;

¹⁴ Mississippi Code of 1972, Annotated, Section 11-27-21;

¹⁵ Emerson v. MSHC, 208 So.2d 441

Intended User – USPAP 2020-2021, pg. 5 defines intended user as the client and any other party as identified, by name or type, as users of the appraisal or appraisal review by the appraiser on the basis of communication with the client at the time of the assignment.

Intended User – USPAP 2020-2021, pg. 5 defines intended user as the client and any other party as identified, by name or type, as users of the appraisal or appraisal review assignment results, as identified by the appraiser on the basis of communication with the client at the time of the assignment. (2020-2021 USPAP).

Jurisdictional Exception – an assignment condition established by applicable law or regulation, which precludes an appraiser from complying with a part of USPAP. 2020-2021 USPAP)

Supplemental Standards – requirements issued by government agencies, government sponsored enterprises, or other entities that establish public policy which add to the purpose, intent and content of the requirements of USPAP, that have a material effect on the development and reporting of assignment results.

Plottage - the increment of value created when two or more sites are combined to produce greater utility resulting in higher productivity or income than could be obtained from the individual smaller sites. Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th Edition, s.v. “plottage”. (Chicago: Appraisal Institute, 2015), PDF e-book.

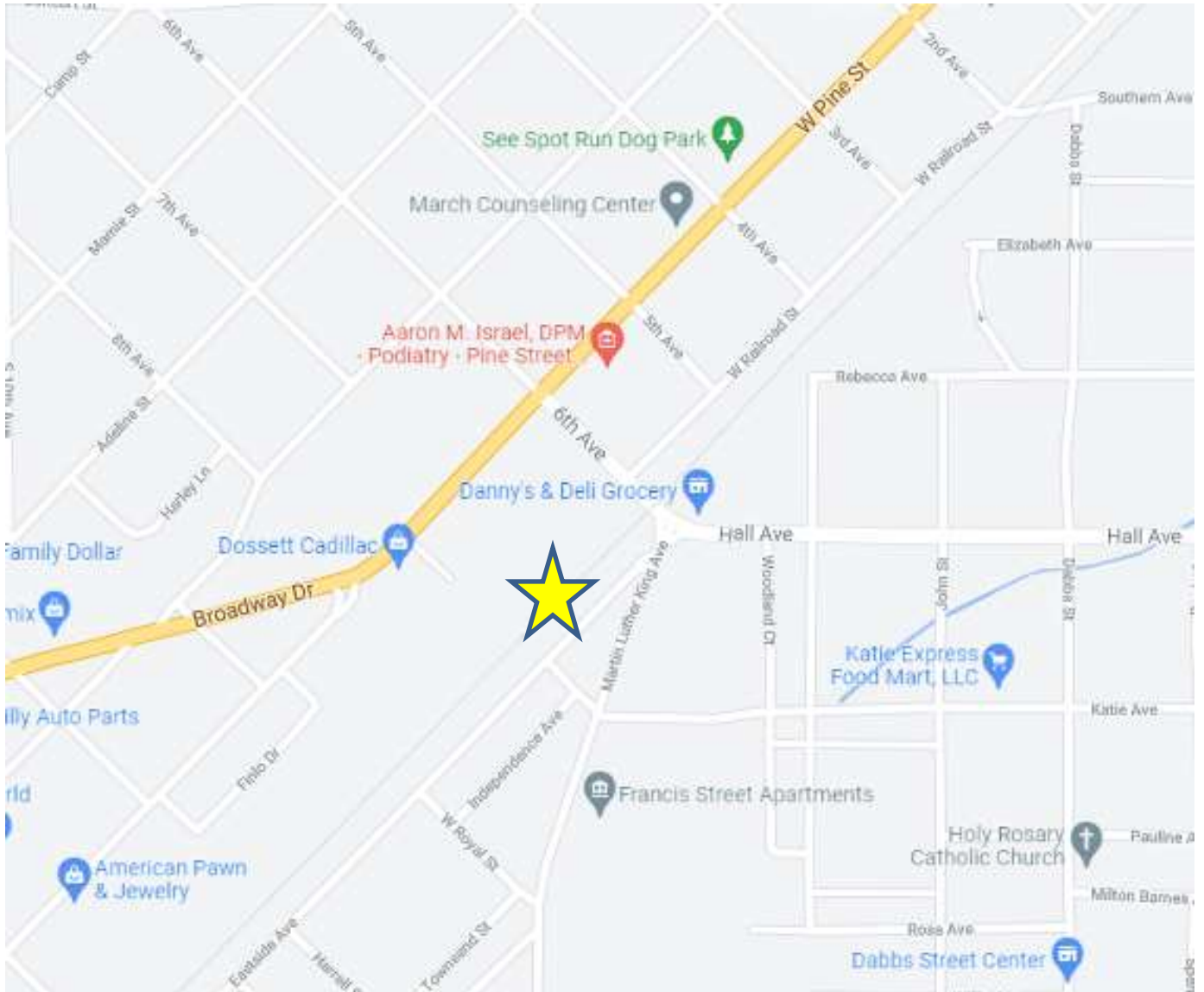
Assemblage - the combining of two or more parcels, usually but not necessarily contiguous, into one ownership or use; the process that may create plottage value. Source: Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 6th Edition, s.v. “assemblage”. (Chicago: Appraisal Institute, 2015), PDF e-book.

Assemblage Cost - the excess cost incurred to acquire individual adjacent parcels of real estate in a single ownership beyond the estimated cost of acquiring similar sites that do not form a specifically desired assemblage.

Scope of Work – “the Scope of Work is a written set of expectations that form an agreement or understanding between the appraiser and the agency as to the specific requirements of the appraisal, resulting in a report to be delivered to the agency by the appraiser. It includes identification of the intended use and intended user; definition of fair market value; statement of assumptions and limiting conditions; and certifications, the type and extent of research and analyses in an assignment. Either the appraiser or the agency may recommend modifications to the initial Scope of Work, but both parties must approve changes.”¹⁶

¹⁶ Federal Highway Administration, Guide For Preparing An Appraisal Scope of Work, October, 2005

Location Map



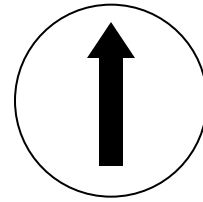
Sketch of Property¹⁷

AREAS

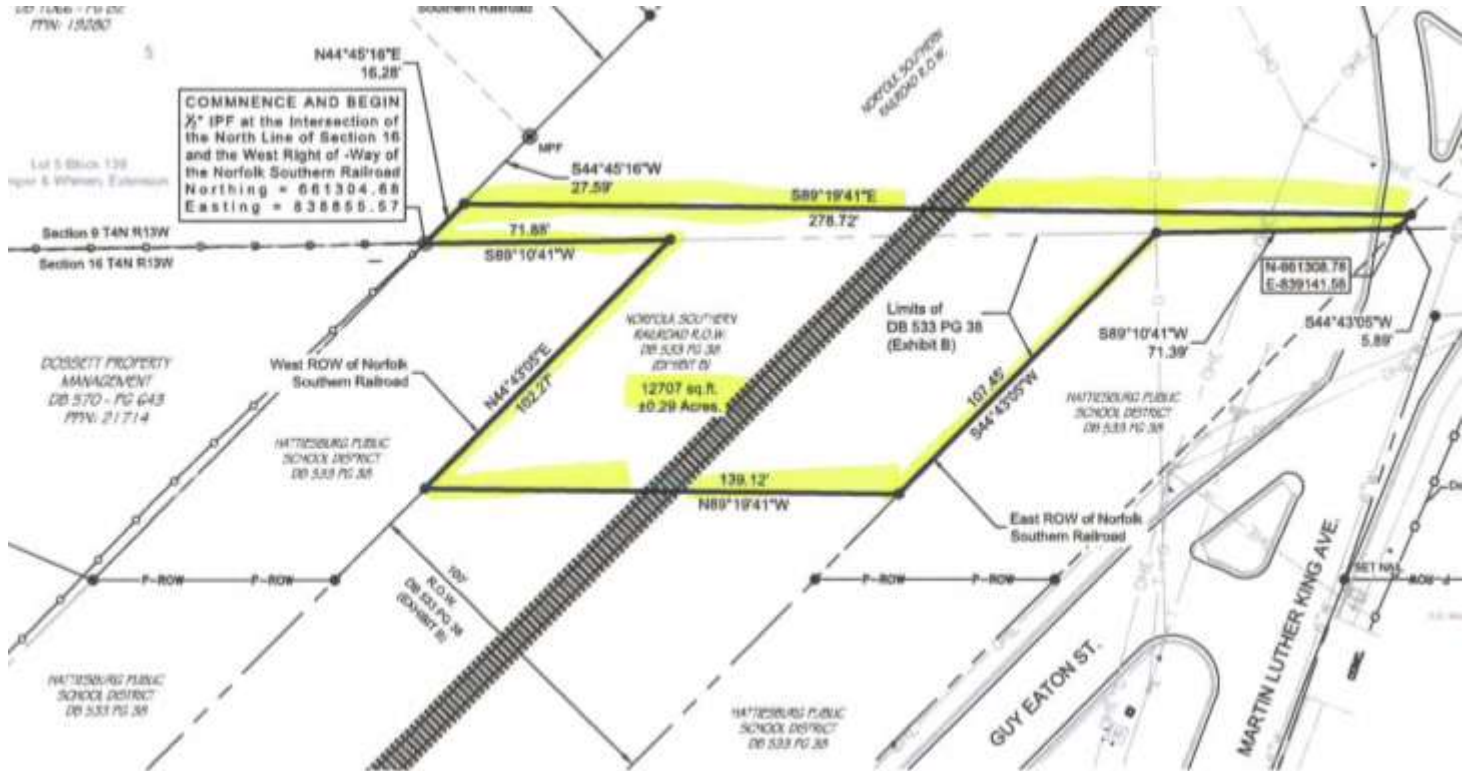
Area of Whole Tract - Before: +/- 0.29 Acres

Area of Remaining Tract - After: +/- 0.00 Acres

Area to be Acquired: +/- 0.29 Acres



Directions North



¹⁷ **Sketch Must Show:** (Note: It is not required that the sketch be drawn to scale)

1. All boundary dimensions.
2. Location of all significant improvements.
3. Location of other significant features (creeks, woods, power lines, access limits, drives, fences, railroads, roads, etc.)
4. Relation of improvements to areas taken.
5. Area to be acquired.
6. Area of remainder(s).
7. Different uses (if appropriate).

Parcel No. Norfolk Southern Railway / Hattiesburg Public School District **Project No.** 108639-811100

Addenda

Acknowledgement of Appraiser Intern Assistance

In accordance with rules of the Mississippi Real Estate Appraiser Licensing and Certification Board as set forth in Rule 11, Part D, #3, and revisions dated June 15, 2000, per letter from Deputy Director Rick Moon, this appraisal report was prepared with the assistance of an Appraiser Intern. The Appraiser Intern named below:

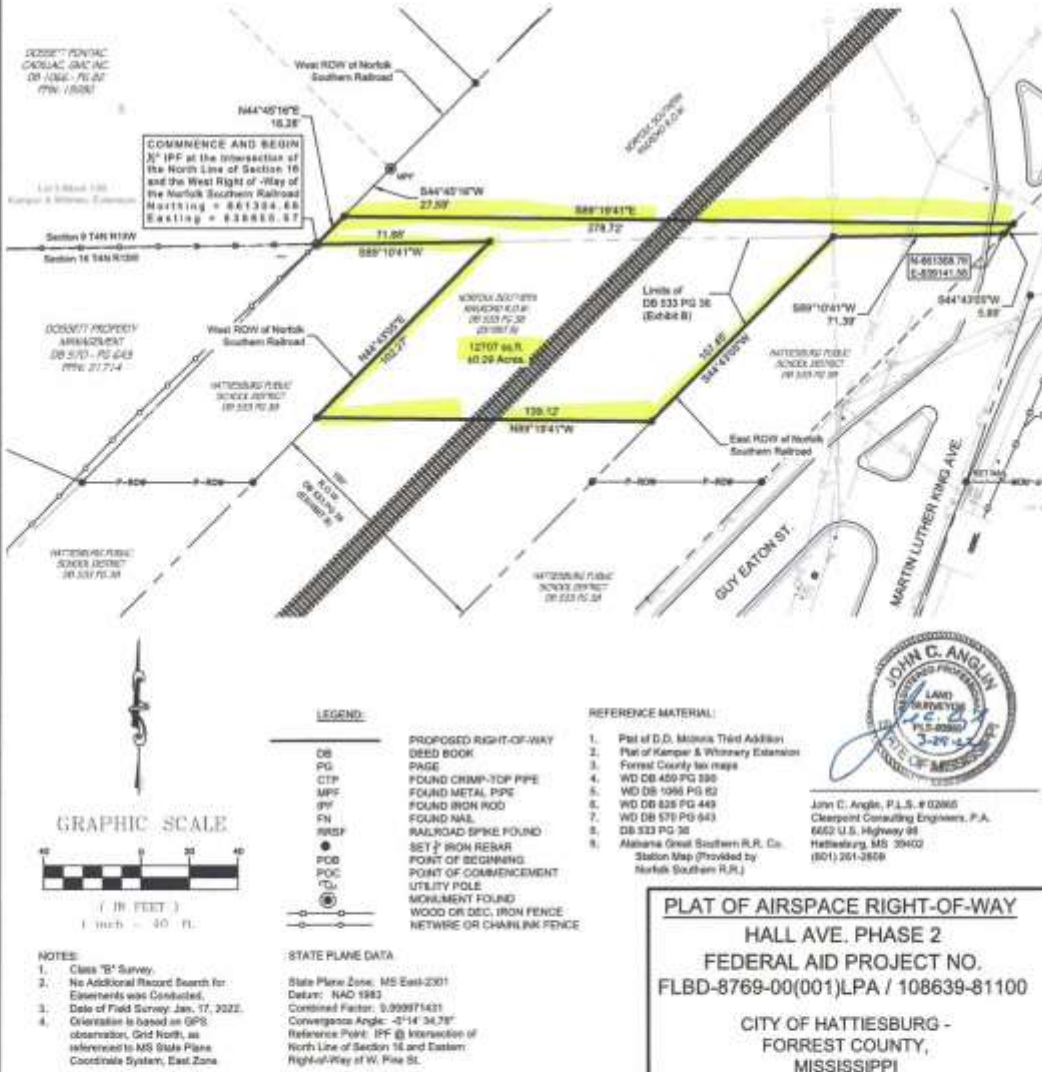
- May not sign the report or certification,
- May not perform the final value analysis,
- Can assume NO responsibility for the appraisal or report,
- May in no circumstance hold self out as being a licensed appraiser, and
- Perform all appraisal-related activities under the direct supervision of the Certified General Appraiser named below.

In addition to the entries made by the Appraiser Intern and the Certified Appraiser in their respective "*Appraiser Intern Experience Log*", this page is provided to serve as further documentation of the Appraiser Intern's assistance in the preparation of this appraisal report.

DESCRIPTION OF SURVEY AREA
NORFOLK SOUTHERN AIR SPACE RIGHT OF WAY

An airspace right of way being located in the SE 1/4 of the SE 1/4 of Section 9 and the NE 1/4 of the NE 1/4, of Section 16, Township 4 North, Range 13 West, City of Hattiesburg, Forrest County, Mississippi, and being more particularly described as follows, with bearings based upon Grid North derived from GPS observations and referenced to Mississippi State Plane Coordinate System (East Zone, NAD 83), with a convergence angle of $-100^{\circ} 14' 34.78''$ and using grid distances with a combined factor of 0.999971431 (determined at a metal pipe found at the intersection of the north line of Section 16 with the western right-of-way of Norfolk Southern Railroad):

Commence and Begin at an iron pin found at the intersection of the north line of Section 16, Township 4 North, Range 13 West, Forrest County, Mississippi with the western right-of-way of Norfolk Southern railroad (said point also being the southeast corner of Lot 5, Block 139 of Kamper & Whinery Extension subdivision), said point having grid coordinates of N = 661304.68, E = 838855.57; thence run North $44^{\circ} 45' 16''$ East along the west right of way of the said Norfolk Southern Railroad for 16.26; thence leaving said right of way, run South $89^{\circ} 10' 41''$ East for 278.72 feet to a point on the east right of way of said railroad; thence South $44^{\circ} 43' 05''$ West along said east right of way for 5.88 feet to the north line of section 16; thence South $89^{\circ} 10' 41''$ West along said north line and the right of way of said railroad for 71.39 feet; thence leaving said north line, continue South $44^{\circ} 43' 05''$ West along said east right of way for 107.45 feet; thence leaving said east line, run North $89^{\circ} 10' 41''$ West for 139.12 feet to a point on the West right of way of said Norfolk Southern Railroad; thence North $44^{\circ} 43' 05''$ East along said right of way for 102.27 feet to the north line of Section 16; thence South $89^{\circ} 10' 41''$ West along said north line for 71.88 feet back to the Point of Beginning. Said parcel contains 12707 square feet, or 0.29 acres more or less.



Clearpoint CONSULTING ENGINEERS, P.A. 6652 US Highway 98 Hattiesburg, MS 39402 1.601.261.2609 1.601.261.5573 clearpointengineers.com PREPARED FOR: 	PROPERTY OWNER:	CCE NO.: 76242056
	Norfolk Southern Railroad	SCALE: 1" = 40'
		DATE: 1/20/2022
		CHECKED: JS
		DRAWN: RTB
		SHEET 1 OF 1

Drawing Location: S:\76242056\RTB Laptop File\ROW-Model_RTB - Standard\ROW-Model_RTB.dwg

Legal Description(s)
(attached)

ROW 005 A (Revised 3/2011)

Grantee, prepared by and return to:

City of Hattiesburg, Mississippi

200 Forrest Street

Post Office Box 1898

Hattiesburg, MS 39403-1898

Phone: (601) 545-4540

Grantor Address:

Hattiesburg Public School District

301 Mamie Street

Hattiesburg, MS 39401

Phone: 601-582-5078

WARRANTY DEED

INDEXING INSTRUCTIONS: **Parcels**
of land being located in the NE 1/4 of
the NE 1/4 of Section 16, Township 4
North, Range 13 West, City of
Hattiesburg, Forrest County,
Mississippi

Initial _____, _____, _____

Hattiesburg Public School District
PARCEL 55555

STATE OF MISSISSIPPI

COUNTY OF FORREST

For and in consideration of Ten and NO/100 Dollars (\$10.00) the receipt and sufficiency of which is hereby acknowledged, we, the undersigned, hereby grant, bargain, sell, convey and warrant unto the City of Hattiesburg, Mississippi, a political subdivision of the State of Mississippi, the following described land:

Parcels of land being located in the NE 1/4 of the NE 1/4 of Section 16, Township 4 North, Range 13 West, City of Hattiesburg, Forrest County, Mississippi, and being more particularly described as follows, with bearings based upon Grid North derived from GPS observations and referenced to Mississippi State Plane Coordinate System (East Zone, NAD 83), with a convergence angle of $(-00^{\circ} 14' 34.78''$ and using grid distances with a combined factor of 0.999971431 (determined at a metal pipe found at the intersection of the north line of Section 16 with the eastern right-of-way of W. Pine St.):

PARCEL "A":

Commence and Begin at an iron pin found at the intersection of the north line of Section 16, Township 4 North, Range 13 West, Forrest County, Mississippi with the western right-of-way of Norfolk Southern railroad (said point also being the southeast corner of Lot 5, Block 139 of Kamper & Whinery Extension subdivision), thence run North 89 degrees 10 minutes 41 seconds East along the north line of said Section 16 for a distance of 71.88 feet to an iron pin set on the western right-of-way of Norfolk Southern railroad as described in Deed Book 533 Page 38 (Exhibit B); thence run South 44 degrees 43 minutes 05 seconds West along said railroad right-of-way for a distance of 139.64 feet to an iron pin set; thence run North 90 degrees 00 minutes 00 seconds West for a distance of 70.74 feet to an iron pin set on the east line of that property described in Deed Book 570 Page 643; thence run North 44 degrees 40 minutes 58 seconds East along the east line of said property for a distance of 138.10 feet back to the Point of Beginning. Said parcel contains 6988 square feet, or 0.16 acres, more or less.

PARCEL "B":

Commence at an iron pin found at the intersection of the north line of Section 16, Township 4 North, Range 13 West, Forrest County, Mississippi with the western right-of-way of Norfolk Southern railroad (said point also being the southeast corner of Lot 5, Block 139 of Kamper & Whinery Extension subdivision), thence run North 89 degrees 10 minutes 41 seconds East along the north line of said Section 16 for a distance of 214.65 feet to an iron pin set on the eastern right-of-way of Norfolk Southern railroad as described in Deed Book 533 Page 38 (Exhibit B), to and for the Point of Beginning; thence continue North 89 degrees 10 minutes 41 seconds East along the north line of said Section 16 for a distance of 71.39 feet to an iron pin set on the east line of that property described in Deed Book 533 Page 643 (Exhibit A); thence run South 44 degrees 43 minutes 05 seconds West along the east line of said property for a distance of 143.96 feet to an iron pin set; thence run North 90 degrees 00 minutes 00 seconds West for a distance of 70.37 feet to an iron pin set on the eastern right-of-way of said Norfolk Southern railroad; thence run North 44 degrees 43 minutes 05 seconds

Initial _____, _____, _____
Hattiesburg Public School District
PARCEL 55555

East along said right-of-way for a distance of 142.52 feet back to the Point of Beginning. Said parcel contains 7162 square feet, or 0.16 acres, more or less.

The grantor herein further warrants that the above described property is not homestead.

This conveyance includes all improvements located on the above described land and partially on Grantor's remaining land, if any. The Grantee herein, it Agents, and/or Assigns are hereby granted the right of Ingress and Egress on Grantor's remaining land for removing or demolishing said improvements. The consideration herein named is in full payment of all said improvements.

It is further understood and agreed that the consideration herein named is in full, complete and final payment and settlement of any claims or demands for damage accrued, accruing, or to accrue to the grantors herein, their heirs, assigns, or legal representatives, for or on account of the construction of the proposed roadway project, change of grade, water damage, and/or any other damage, right or claim whatsoever.

It is further understood and agreed that the lands conveyed herein are "sixteenth section" lands conveyed for the purposes of road right-of-way, associated utilities and infrastructure, and that should the lands fail to be used for those purposes, then said lands (or the portion thereof) not use used for road right-of-way shall revert to ownership and possession of Grantor or its successor in interest.

It is further understood and agreed that this instrument constitutes the entire agreement between the grantor and the grantee, there being no oral agreements or representations of any kind.

Witness our signatures this the ____ day of _____ A.D. 2022,

BOARD OF TRUSTEES OF HATTIESBURG

Initial _____, _____, _____
Hattiesburg Public School District
PARCEL 55555

PUBLIC SCHOOL DISTRICT

By: _____
BOARD PRESIDENT

By: _____
SUPERINTENDENT OF EDUCATION

Reviewed and approved by the Forrest County Board of Supervisors, on this the ____ day
of _____, 2022.

FORREST COUNTY BOARD OF
SUPERVISORS

By: _____
BOARD PRESIDENT

APPROVED
SECRETARY OF STATE

MICHAEL WATSON
Secretary of State (Seal)

STATE OF MISSISSIPPI
COUNTY OF FORREST

PERSONALLY APPEARED BEFORE ME, the undersigned authority in and for the
Initial _____, _____, _____ Hattiesburg Public School District
PARCEL 55555

said county and state of this the ____ day of _____, 2022, within my jurisdiction, the within named **Delores McNair**, who acknowledged that she is the President of the Board of Trustees of the Hattiesburg Public School District, and that in said representative capacity and she executed the above and foregoing instrument after first having been duly authorized so to do.

NOTARY PUBLIC

My Commission Expires:

STATE OF MISSISSIPPI
COUNTY OF FORREST

PERSONALLY APPEARED BEFORE ME, the undersigned authority in and for the said county and state of this the ____ day of _____, 2022, within my jurisdiction, the within named **Robert Williams**, who acknowledged that he is the Superintendent of Education of the Hattiesburg Public School District, and that in said representative capacity and he executed the above and foregoing instrument after first having been duly authorized so to do.

NOTARY PUBLIC

My Commission Expires:

STATE OF MISSISSIPPI
COUNTY OF FORREST

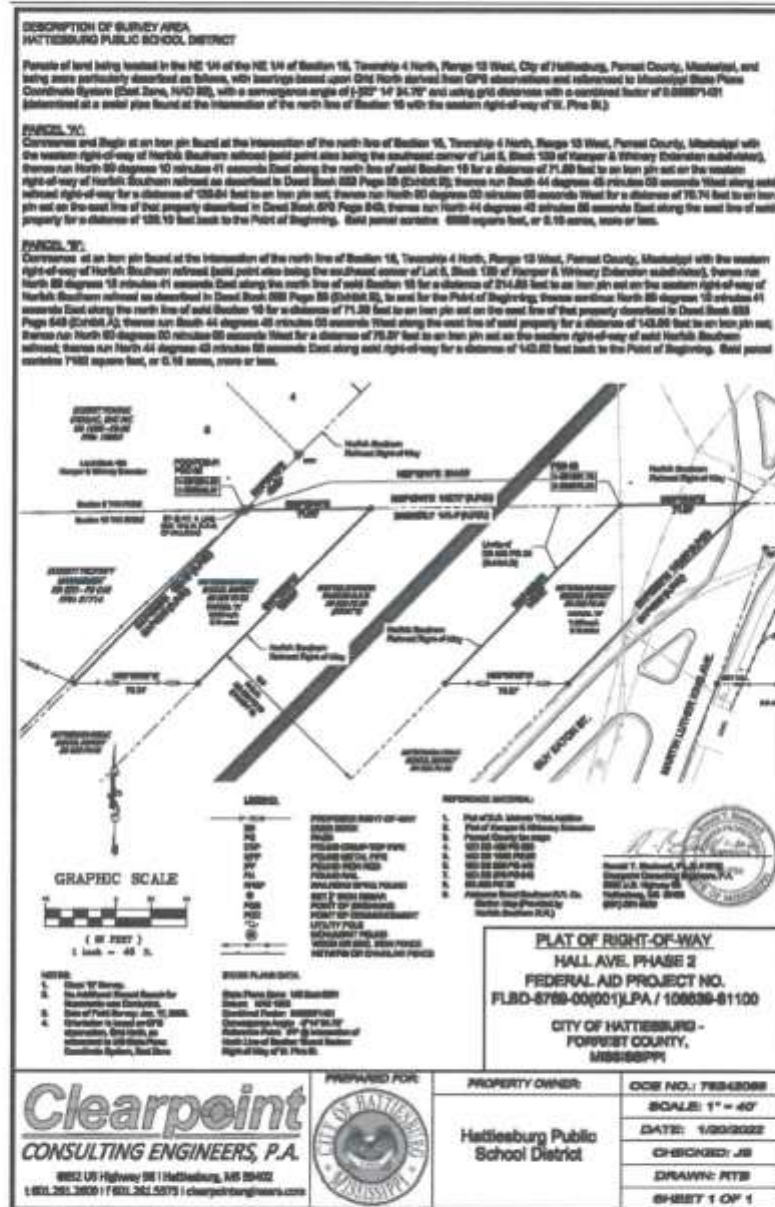
Initial _____, _____, _____
Hattiesburg Public School District
PARCEL 55555

PERSONALLY APPEARED BEFORE ME, the undersigned authority in and for the said county and state of this the ____ day of _____, 2022, within my jurisdiction, the within named **David Hogan**, who acknowledged that he is the President of the Forrest County Board of Supervisors in and for said county and that in said representative capacity and he executed the above and foregoing instrument after first having been duly authorized so to do.

My Commission Expires:

NOTARY PUBLIC

Initial _____ Hattiesburg Public School District
PARCEL 55555



Initial _____, _____, _____

Hattiesburg Public School District
PARCEL 55555

STATE OF MISSISSIPPI, COUNTY OF FORREST

I Certify that the foregoing was filed for record in my office at 2:30

o'clock, P. M. of the 15th day of DEC 83, and the same was recorded in

Book 533, Page 38, and is a Deed.

Given under my hand and seal at Hattiesburg, Mississippi, this 19 day of

Dec 1983. *[Signature]*
CLERK

STATE OF MISSISSIPPI

COUNTY OF FORREST

MUTUAL RELEASE OF ALL CLAIMS

KNOW ALL MEN BY THESE PRESENTS:

This Mutual Release executed on this the 1st day of November, 1983, by and between HATTIESBURG MUNICIPAL SEPARATE SCHOOL DISTRICT, an agency of the State of Mississippi, in Hattiesburg, Forrest County, Mississippi, hereinafter called "District", and THE ALABAMA GREAT SOUTHERN RAILROAD COMPANY, a corporation, domiciled in the State of Alabama but qualified to do business and doing business in the State of Mississippi, hereinafter called "AGS", WITNESSETH:

WHEREAS, AGS and its predecessor in title, New Orleans and Northeastern Railroad Company, a corporation, have operated a railroad over Section 16, Township 4 North, Range 13 West, Forrest County, Mississippi, consisting of a right of way 200 feet in width and comprising approximately 32.5 acres of land and has done so for more than 100 years prior to the date of this release; and,

WHEREAS, District is charged with the control and jurisdiction of Sixteenth Section school lands and has been since July 1, 1978; and,

WHEREAS, AGS claims that it and its predecessor in title, New Orleans and Northeastern Railroad Company, used and claimed said right of way as owner and user continuously since March 31, 1871, by virtue of Chapter LIX, Mississippi Laws of 1871, approved March 3, 1871, and thereafter under an instrument in Warranty Deed form dated June 26, 1882, from one D. D. McInnis who received a 99 year lease from the State of Mississippi dated July 3, 1854; and,

WHEREAS, District asserts that AGS and its successor only had a leasehold interest in said right of way which expired on July 2, 1953, and that District is due compensation for the use of the right of way since that date and in the future; and,

WHEREAS, disputes and differences have arisen between the parties with respect to said Sixteenth Section right of way, a description of said right of way being attached hereto as Exhibit "A" and made a part of this Release as if specifically copied herein and the parties having agreed to execute this mutual release in settlement of such disputes and differences;

NOW, THEREFORE, for and in consideration of the promises and the mutual relinquishment of their respective legal rights with reference to the above mentioned disputes and differences, the parties agree as follows:

1. AGS has paid to and District acknowledges receipt of the sum of One Hundred Fifty Eight Thousand Eight Hundred (\$158,800.00) Dollars, in cash, in exchange for a 100 foot Easement in substantially the form as set forth in Exhibit "B" attached hereto and made a part hereof as if specifically copied herein to settle the asserted future title, occupancy and use of said right of way in question and AGS acknowledges receipt of said Easement.
2. AGS has relinquished and is vacating the East and West 50 feet of the present 200 foot right of way claimed by AGS as described in Exhibit "A" heretofore, and henceforth will operate its railroad over the 100 foot right of way described in the Easement, Exhibit "B".

3. AGS has paid to and District acknowledges receipt of the sum of One Hundred Thirty Five Thousand Five Hundred Thirty Two (\$135,532.00) Dollars to settle the disputes and differences as between the parties as to compensation allegedly due District for the use of said 200 foot right of way from the period July 2, 1953, to the date of the Easement as aforesaid.
4. District acknowledges that the consideration paid for the Easement and for the use of said 200 foot right of way as set out in subparagraph 3 hereof is fair, reasonable and adequate and District by these presents does give up, extinguish and relinquish such rights, if any it has, to any further monetary payments or any demands it may have made heretofore or might hereinafter make as against AGS for prior use of any portion of said right of way.

It is understood and agreed that this is a full, complete and final release from any and all claims, demands, rights, benefits, suits and causes of actions of every kind and character which District and/or AGS, their predecessors, successors or assigns, may have or assert as against each other, arising out of the claimed ownership and use of the property described in Exhibit "A" hereof up to the date of this Release whether specifically described herein or not.

It is further understood and agreed that said parties have made no promise or agreement to do or omit to do any act or thing not herein set forth. The aforesaid considerations running from each to the other are not to be construed as an admission of any further liability or obligation on the part of either party, their predecessors, successors or assigns, both of whom acknowledge that the controversy between the parties has arisen because of doubtful, unsettled and unliquidated claims for damages. Both parties deny any liability each to the other. This settlement has been reached in order to put an end to differences, disputes and controversies and to avoid litigation. Both AGS and District covenant with each other that each has authority to execute this Mutual Release.

Witness the signature of the Hattiesburg Municipal Separate School District by its duly authorized officers, and the signature of The Alabama Great Southern Railroad Company, a corporation, by its duly authorized officers, on this the 1st day of November, 1983.

Executed by Hattiesburg Municipal
Separate School District as of
December 6, 1983.

HATTIESBURG MUNICIPAL SEPARATE
SCHOOL DISTRICT

By: [Signature]
CHAIRMAN

ATTEST:

[Signature]
SECRETARY

THE ALABAMA GREAT SOUTHERN
RAILROAD COMPANY

By: [Signature]
VICE PRESIDENT



[Signature]
Assistant Secretary

-2-

STATE OF MISSISSIPPI

COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for said county and state, Paul W. McMullan and Edgar H. Allen, III, Chairman and Secretary, respectively, of Hattiesburg Municipal Separate School District, Forrest County, Mississippi, who after being by me first duly sworn, acknowledged on oath that they signed and delivered the above and foregoing instrument on the day and year therein mentioned as the act and deed of and for and on behalf of Hattiesburg Municipal Separate School District, Forrest County, Mississippi, after being first duly authorized so to do.

Given under my hand and official seal, this the 6th day of December, 1983.

William E. B.
NOTARY PUBLIC



My Commission Expires: June 9, 1987

DISTRICT OF COLUMBIA

Personally appeared before me, the undersigned authority in and for said District of Columbia, James R. Cooper and R. D. Allen, Vice President and Assistant Secretary, respectively, of The Alabama Great Southern Railroad Company, a corporation, who after being by me first duly sworn, acknowledged on oath that they signed and delivered the above and foregoing instrument on the day and year therein mentioned as the act and deed of and for and on behalf of The Alabama Great Southern Railroad Company, a corporation, after being first duly authorized so to do.

Given under my hand and official seal, this the 1st day of November, 1983.

C. O. Anglin
NOTARY PUBLIC



My Commission Expires: May 31, 1987

Description of The Alabama Great Southern Railroad (also known as AGS)
right of way in Section 16, Township 4 North, Range 13 West, in Forrest
County, Mississippi.

Begin at the Northeast corner of Section 16, Township 4 North, Range 13 West and go Westerly along the North boundary line of said Section 16 for a distance of 250 feet, more or less, to a point in the Southeast right of way line of said Railroad, said point being 100 feet Southeasterly from and at right angles to the said line of the main track of said Railroad as presently located, and being the point of beginning; from said beginning point run thence South 44° 45' West along a line parallel to and at all points 100 feet Southeasterly from the centerline of said main track as measured perpendicular thereto for a distance of 7,270 feet, more or less, to the intersection with the West boundary line of said Section 16, run thence North along the West boundary line of said Section 16 and crossing the main line of the above Railroad for a distance of 282.8 feet, more or less, to a point which is 100 feet Northwesterly from and at right angles to the centerline of said Railroad and being the Northwest right of way line of said Railroad; thence run North 44° 45' East along the Northwest right of way line of said railroad along a line parallel to and at all points 100 feet Northwesterly from and at right angles to the said centerline of said main track as measured perpendicular thereto for a distance of 6,870 feet, more or less, to the intersection of the North boundary line of said Section 16; run thence Easterly along the North boundary line of said Section 16 crossing the main line of said Railroad for a distance of 282.8 feet, more or less, to the point of beginning. Said parcel of land is a strip 200 feet in width and being 7,070 feet long, more or less, as measured along the centerline of the above said railroad main track and containing 32.46 acres, more or less.

EXHIBIT A

Description of easement of The Alabama Great Southern Railroad (also known as AGS) right of way in Section 16, Township 4 North, Range 13 West, in Forrest County, Mississippi.

Begin at the Northeast corner of Section 16, Township 4 North, Range 13 West and go Westerly along the North boundary line of said Section 16 for a distance of 320.4 feet, more or less, to a point in the Southeast right of way line of said Railroad, said point being 50 feet Southeasterly from and at right angles to the said line of the main track of said Railroad as presently located, and being the point of beginning; from said beginning point run thence South $44^{\circ} 45'$ West along a line parallel to and at all points 50 feet Southeasterly from the centerline of said main track as measured perpendicular thereto for a distance of 7,170 feet, more or less, to the intersection with the West boundary line of said Section 16, run thence North along the West boundary line of said Section 16 and crossing the main line of the above Railroad for a distance of 141.4 feet, more or less, to a point which is 50 feet Northwesterly from and at right angles to the centerline of said Railroad and being the Northwest right of way line of said Railroad; thence run North $44^{\circ} 45'$ East along the Northwest right of way line of said railroad along a line parallel to and at all points 50 feet Northwesterly from and at right angles to the said centerline of said main track as measured perpendicular thereto for a distance of 5,970 feet, more or less, to the intersection of the North boundary line of said Section 16; run thence Easterly along the North boundary line of said Section 16 crossing the main line of said Railroad for a distance of 141.4 feet, more or less, to the point of beginning. Said parcel of land is a strip 100 feet in width and being 7,070 feet long, more or less, as measured along the centerline of the above said railroad main track and containing 16.23 acres, more or less.

EXHIBIT B

From: Rutland, Lamar <lrutland@hattiesburgms.com>
Sent: Monday, April 18, 2022 5:18 PM
To: Huggins, Elvina M. (Peggy) <Elvina.Huggins@nscorp.com>
Cc: George Null <george@trustatlas.com>
Subject: FW: City of Hattiesburg / Hall Avenue West Project - Railroad Air Rights

Elvina,

Please see the attached information regarding the property we would like to acquire from the Railroad, Along with the below link. Please understand that in order to meet the uniform regulations we are required to send this information to you. Please let me know if you have any questions.

Thanks

Lamar Rutland, P.E.
City of Hattiesburg
Director of Engineering
Ph (601)545-4540

From: Collins & Null Office - <collinsandnull@gmail.com>
Sent: Thursday, April 14, 2022 9:40 AM
To: Rutland, Lamar <lrutland@hattiesburgms.com>; George Null <george@trustatlas.com>
Subject: City of Hattiesburg / Hall Avenue West Project - Railroad Air Rights

Lamar,

I have attached a property contact letter, plat as well as the link to the online Citizen's Guide to Property Acquisitions.

[Citizens Guide to Property Acquisitions by Local Public Agencies in Mississippi.pdf \(ms.gov\)](#)

Please forward these documents to the POC for the railroad, so that they can be available for the inspection if they so request.

Thank you,
George W. Null, MAI

—
Office: (601) 271-9044
Fax: (601) 908-1388
6760 US Hwy 98, Ssa . 2
Hattiesburg, MS 39402



6760 US Hwy 98, Suite 2 Hattiesburg, MS 39402
601-271-9044 (T) 601-271-9099 (F)

April 14th, 2022

Elvina Huggins
Senior Property Services Business Partner
Norfolk Southern Railway Company | Real Estate Department
650 W Peachtree Street NW | Atlanta, GA 30308
t: 470.463.6469 | f: 404.653.3725
elvina.huggins@nscorp.com

RE: Norfolk Southern Railway Right-of-Way, Hattiesburg, MS 39402

To Mrs. Huggins,

The purpose of this letter is to inform you that the City of Hattiesburg is in the process of acquiring certain rights above the railroad right of way as part of a proposed bridge overpass project in Forrest County, Mississippi. The purpose of the proposed project is for the local public agency project #FLBD-8769-00(001) LPA/108639-81100 for a Hall Avenue West overpass Federal Aid Project.

Our firm will be conducting the real estate appraisals for the acquisition of these rights, in relation to this project. The purpose of this correspondence is to provide you the opportunity to meet with an appraiser from our company to discuss the project, as well as offer you or your representative an opportunity to accompany us during our site inspection. For visual reference, I have included the plat for the proposed MDOT right of way needed for the project.

The city will need to acquire rights in +/- 0.29 acres to complete this project. The areas indicated for your review are listed in the attached Plat. The 16th Section land is currently subject to a long term lease. Both the leasehold (tenant) and the leased fee interest (Hattiesburg Public School District) will be valued in these appraisals as well. I wanted to offer you an opportunity to meet with me or call me at your convenience. Please refer to the attached documents for more information.

If you have any questions concerning this matter, or if you would like to accompany us on the inspection, please contact our office at (601) 271-9044, or email us at collinsandnull@gmail.com.

Respectfully submitted,

George Null, MAI
Licensed Certified General
Real Estate Appraiser, GA-679
Collins and Null Appraisals, Inc.

1320

62387L

SIXTEENTH SECTION EASEMENT

FOR AND IN CONSIDERATION of the sum of One Hundred Fifty-eight Thousand Eight Hundred Dollars (\$158,800.00), cash in hand paid, and other good and valuable considerations, the receipt and sufficiency of all of which are hereby acknowledged and confessed, the Hattiesburg Municipal Separate School District, hereinafter sometimes called "Grantor", does hereby grant and convey unto The Alabama Great Southern Railroad Company, a corporation, its successors and assigns, hereinafter sometimes called "Grantee", a right of way and easement in FORREST COUNTY, MISSISSIPPI, for the purpose of the Grantee entering upon, using and occupying and constructing, reconstructing, maintaining and operating thereon a line or lines of railroad, together with all tracks, equipment, electric lines, telephone and telegraph lines, buildings and structures, and all other appliances and equipment necessary or convenient, in the sole judgment of Grantee, in connection with the maintenance and operation of said railroad lines, on, in, over, along, across and through a strip of land one hundred (100) feet in width, together with the right on the part of the Grantee, its successors, assigns, licensees and permittees to the exclusive occupancy and possession of said strip of land, which 100 foot strip is more particularly described in Exhibit One attached hereto and made a part hereof for all purposes.

The term of this easement shall be for so long as said strip of land is used by the Grantee, its successors or assigns,

for the purposes hereinabove stated, and this easement is granted and conveyed by virtue of Mississippi Code Annotated §29-3-1, et seq., and other applicable laws of the State of Mississippi, and by virtue of Resolution of the Grantor of December 6, 1983, as the same appears in Minute Book 20 of Grantor.

WITNESS the signature of the Hattiesburg Municipal Separate School District by its duly authorized officers on this 6 day of December, A. D., 1983.

HATTIESBURG MUNICIPAL SEPARATE
SCHOOL DISTRICT

By: [Signature]
Chairman, Board of Trustees,
Hattiesburg Municipal Separate
School District

ATTEST:

[Signature]
Secretary, Board of Trustees,
Hattiesburg Municipal Separate
School District

The consideration amount of \$158,800.00 as set by the Hattiesburg Municipal Separate School District in the above and foregoing Easement be and it is APPROVED by the Board of Supervisors of Forrest County, Mississippi, by Order dated the 8th day of December, 1982, as the same appears in Minute Book

This the 8th day of December, 1983.

ATTEST:

[Signature] Clerk
(S E A L)

FORREST COUNTY BOARD OF SUPERVISORS

By: [Signature]
President

16.23 ACRES, MORE OR LESS

Description of easement of The Alabama Great Southern Railroad (also known as AGS) right of way in Section 16, Township 4 North, Range 13 West, in Forrest County, Mississippi.

Begin at the Northeast corner of Section 16, Township 4 North, Range 13 West and go Westerly along the North boundary line of said Section 16 for a distance of 320.4 feet, more or less, to a point in the Southeast right of way line of said Railroad, said point being 50 feet Southeasterly from and at right angles to the said line of the main track of said Railroad as presently located, and being the point of beginning; from said beginning point run thence South 44° 45' West along a line parallel to and at all points 50 feet Southeasterly from the centerline of said main track as measured perpendicular thereto for a distance of 7,170 feet, more or less, to the intersection with the West boundary line of said Section 16, run thence North along the West boundary line of said Section 16 and crossing the main line of the above Railroad for a distance of 141.4 feet, more or less, to a point which is 50 feet Northwesterly from and at right angles to the centerline of said Railroad and being the Northwest right of way line of said Railroad; thence run North 44° 45' East along the Northwest right of way line of said railroad along a line parallel to and at all points 50 feet Northwesterly from and at right angles to the said centerline of said main track as measured perpendicular thereto for a distance of 6,970 feet, more or less, to the intersection of the North boundary line of said Section 16; run thence Easterly along the North boundary line of said Section 16 crossing the main line of said Railroad for a distance of 141.4 feet, more or less, to the point of beginning. Said parcel of land is a strip 100 feet in width and being 7,070 feet long, more or less, as measured along the centerline of the above said railroad main track and containing 16.23 acres, more or less.

EXHIBIT ONE

STATE OF MISSISSIPPI

COUNTY OF FORREST

THIS DAY personally came and appeared before me, the undersigned authority at law in and for said county and state, Paul W. McMullan and Edgar Allen, III, who acknowledged that they are the Chairman and Secretary, respectively, of the Board of Trustees of the Hattiesburg Municipal Separate School District, and that as such officers and being duly authorized so to do, they signed, executed and delivered the above and foregoing Sixteenth Section Easement on the day and year and for the purposes therein set forth as the act and deed of the Hattiesburg Municipal Separate School District.

GIVEN under my hand and official seal of office on this, the 6 day of December, A. D., 1983.


NOTARY PUBLIC

My Commission Expires:

December 17, 1984

(S E A L)

QUALIFICATIONS OF GEORGE W. NULL, JR., MAI



My experience, in excess of 22 years, in the real estate appraisal field has granted me great competency in a wide range of real estate matters. Clients have included local, state and federal government agencies, utility companies, attorneys, large corporations and private property owners. Contact information: george@trustatlas.com

Professional Designations & Affiliations

- ☐ State Certified General Real Estate Appraiser (2002) - State of Mississippi, (GA-679)
- ☐ State Certified General Real Estate Appraiser (2019) - State of Louisiana, (G4358)
- ☐ State Certified General Real Estate Appraiser (2019) - State of Texas, (TX 1380889 G)
- ☐ Designated Member of the Appraisal Institute (2008) (MAI #12522)
- ☐ Active Member of the International Right-of-Way Association (2005)
- ☐ Member of the Gulf Coast Association of Realtors (2020)
- ☐ Member of Hattiesburg Multiple Listing Service (2005)
- ☐ Member of Jackson Multiple Listing Service (2020)
- ☐ Member of Starkville Multiple Listing Service (2019)

Professional Work History

Collins and Null Appraisals – (2001 to Present)

President of the company since 2003 and the Principal Appraiser. I appraise all forms of real estate, including commercial, industrial, residential, Rights-of-Way, partial interest and timber land. My experience also includes consultation for court proceedings, review of peer appraisals and expert witness testimony.

Atlas Right-of-Way Services – (2016 to Present)

Managing director of a full-service right-of-way company. Duties include management of right-of-way acquisition projects, annexation projects and market data brochures. This company was formed due to the need for additional services in relation to our right-of-way appraisal business.

Real Estate Development – (2003 to Present)

My experience has included development of multi-family, retail, office, industrial, agricultural, recreational and other commercial real estate development projects throughout the state of Mississippi.

Mississippi Department of Transportation – (1998 to 2001)

Senior R.O.W. Appraiser and Project Leader

Primary responsibility was supervision and appraisal of Right-of-Way for Road Project across the entire state of Mississippi. Acted as appraisal project manager on multiple projects. Included court testimony and expert witness duties.

Engineering Plus - Meridian, MS – (1996 to 1998)

Primary responsibility was assistance in preparation of plans for State Aid Road Projects for a civil engineering firm, which included CAD design of Bridges and Road Alignments, Implementation of Survey data, Site inspections, and determination of Right-of-Way Limits.

Academic Background

- ☐ BLA (Bachelor's in Landscape Architecture) received from Mississippi State University – (1996)
- ☐ BS in Agriculture (Contracting Option) received from Mississippi State University – (1996)

Professional Summary

My professional career began in the civil engineering industry in 1996, which included starting in the field with surveying. This later progressed into office-based CAD design for road and bridge projects. In 1998, I was hired by the Mississippi Department of Transportation as an entry level appraiser, where again my expertise led me to be team leader of an appraisal staff. This included performing real estate appraisals and expert witness testimonies in relation to right-of-way needed for road and bridge projects across the state of Mississippi. In 2001, I entered into a private practice where my expertise was expanded to the appraisal and consultation of all forms of real estate for a wide variety of clients. In 2002, I became General Certified, and followed this certification with the MAI designation from the Appraisal Institute in 2008. In addition to the appraisal business, I have been involved in the development of a variety of commercial projects around the state. In 2016, due to the expanding needs of our clients for assistance in right-of-way acquisition, we began Atlas Right-of-Way services, which is a full-service right-of-way company. This experience, in excess of 20 years, has granted me great competency in a wide range of real estate matters. Clients have included local, state and federal government agencies, utility companies, attorneys, large corporations and private property owners.

Court Testimony Experience

In addition to my appraisal experience, I have vast court testimony experience in the field of real estate valuation for condemnation, bankruptcy, diminution in value, inverse condemnation, partitioning, and other real estate related cases. This court testimony experience began in 2000 and exceeds 75 cases over the last 20 years. This experience includes testimony over the entire state from North Mississippi to the Delta to the Gulf Coast. Clients have included the Mississippi Department of Transportation, Mississippi Power, private property owners, the Department of Justice, Local Public Agencies, various other utility companies including electrical transmission corridors and gas pipeline right of ways.

This experience has included various settings including court room testimony, depositions, and mediations.

George W. Null, MAI

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Professional Education

The Appraisal of Partial Acquisitions (401) - Jackson, MS	IRWA	1998
Appraisal Principles Course (110) - Houston, TX	Appraisal Institute	1998
Appraisal Procedures Course (120) - Houston, TX	Appraisal Institute	1998
Basic Income Capitalization (310) - Nashville, TN	Appraisal Institute	1999
Advanced Income Capitalization (510) - Atlanta, GA	Appraisal Institute	2000
Principles of Land Acquisition (100) Jackson, MS	IRWA	2000
Skills of Expert Witness Testimony (214)- Gulfport, MS	IRWA	2000
Advanced Sales Comparison & Cost Approach (530) Atlanta, GA	Appraisal Institute	2001
Standards of Professional Practice (410) - Houston, TX	Appraisal Institute	2002
Highest and Best Use & Market Analysis (520)- Atlanta, GA	Appraisal Institute	2002
Report Writing & Valuation Analysis (540) - Atlanta, GA	Appraisal Institute	2002
Advanced Applications (550) - Chicago, IL	Appraisal Institute	2003
Conservation Easement Workshop - Vicksburg, MS	Tara Wildlife	2003
Standards of Professional Practice, USPAP (420) - Online	Appraisal Institute	2004
Completed Comprehensive Exam for MAI Designation, Nashville	Appraisal Institute	2004
Land Titles (C801) - Hattiesburg, MS	IRWA	2005
Land Valuation Adjustments - Tunica, MS	Appraisal Institute	2006
USPAP - Online Course	Appraisal Institute	2006

George W. Null, MAI
Page 4

REO Appraisal - Pearl, MS	Appraisal Institute	2008
Appraising Distressed Properties - Biloxi, MS	Appraisal Institute	2009
Introduction to Conservation Easement Valuation	Appraisal Institute	2010
Oil Spills and Property Values	Appraisal Institute	2010
USPAP Update	McKissock	2010
Commercial Real Estate - Where do we go now?	Appraisal Institute	2010
Attacking and Defending an Appraisal in Litigation	Appraisal Institute	2011
The Impact of Dodd-Frank on Appraisers and Their Bank Clients	Appraisal Institute	2012
Advanced Spreadsheet Modeling for Valuation Applications	Appraisal Institute	2013
Uniform Appraisal Standards for Federal Land Acquisitions	Appraisal Institute	2014
USPAP Update	Appraisal Institute	2014
105 The Uniform Act - Executive Summary	IRWA	2015
USPAP Update	Appraisal Institute	2015
Introduction to the Income Capitalization Approach -402	IRWA	2016
Easement Valuation – 403	IRWA	2016
Drone Technology and Its Impact on the Appraisal Industry	Appraisal Institute	2017
Fundamentals of Separating Real Property, Personal Property, and Intangible Business Assets	Appraisal Institute	2017

George W. Null, MAI
Page 5

USPAP Update course	Appraisal Institute	2018
Business Practices and Ethics	Appraisal Institute	2018
Advanced Residential Relocation Assistance	IRWA	2018
Online Business Practices and Ethics	Appraisal Institute	2019
Basic Appraisal Principles & Procedures Under the Uniform Act	FHWA	2019
USPAP Update course	Appraisal Institute	2020
Introduction to the Uniform Appraisal Dataset	McKissock	2020
Business Practices and Ethics	Appraisal Institute	2020



Establishment of Just Compensation Offer

This document is prepared pursuant to Federal regulation at 49 CFR 24.102(d)

"Establishment and offer of just compensation. Before the initiation of negotiations, the Agency shall establish an amount which it believes is just compensation for the real property. The amount shall not be less than the approved appraisal of the market value of the property, taking into account the value of allowable damages or benefits to any remaining property. An Agency official must establish the amount believed to be just compensation".

The property that is the subject of this offer of just compensation is as follows:

Owner: Norfolk Southern Railroad, et al
Parcel No: Norfolk Southern Railroad (no tax parcel)
Project No: 108639-81100
County: Forrest

Under the authority conveyed to me by the City of Hattiesburg, and based on the recommended appraisal for the above-named property, which is inclusive of all compensable interests, I, *Toby Barker*, Mayor of the city of Hattiesburg, do hereby establish the City of Hattiesburg's offer of what is believed to be just compensation for the acquisition of the real property rights specified, in the amount of \$6,355.

Signed _____ Date _____

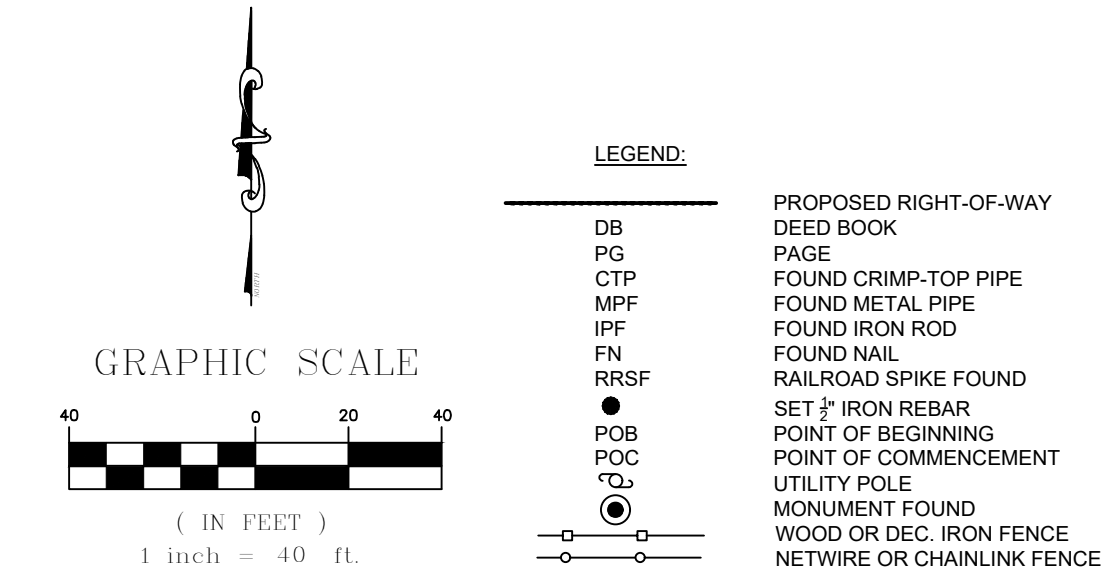
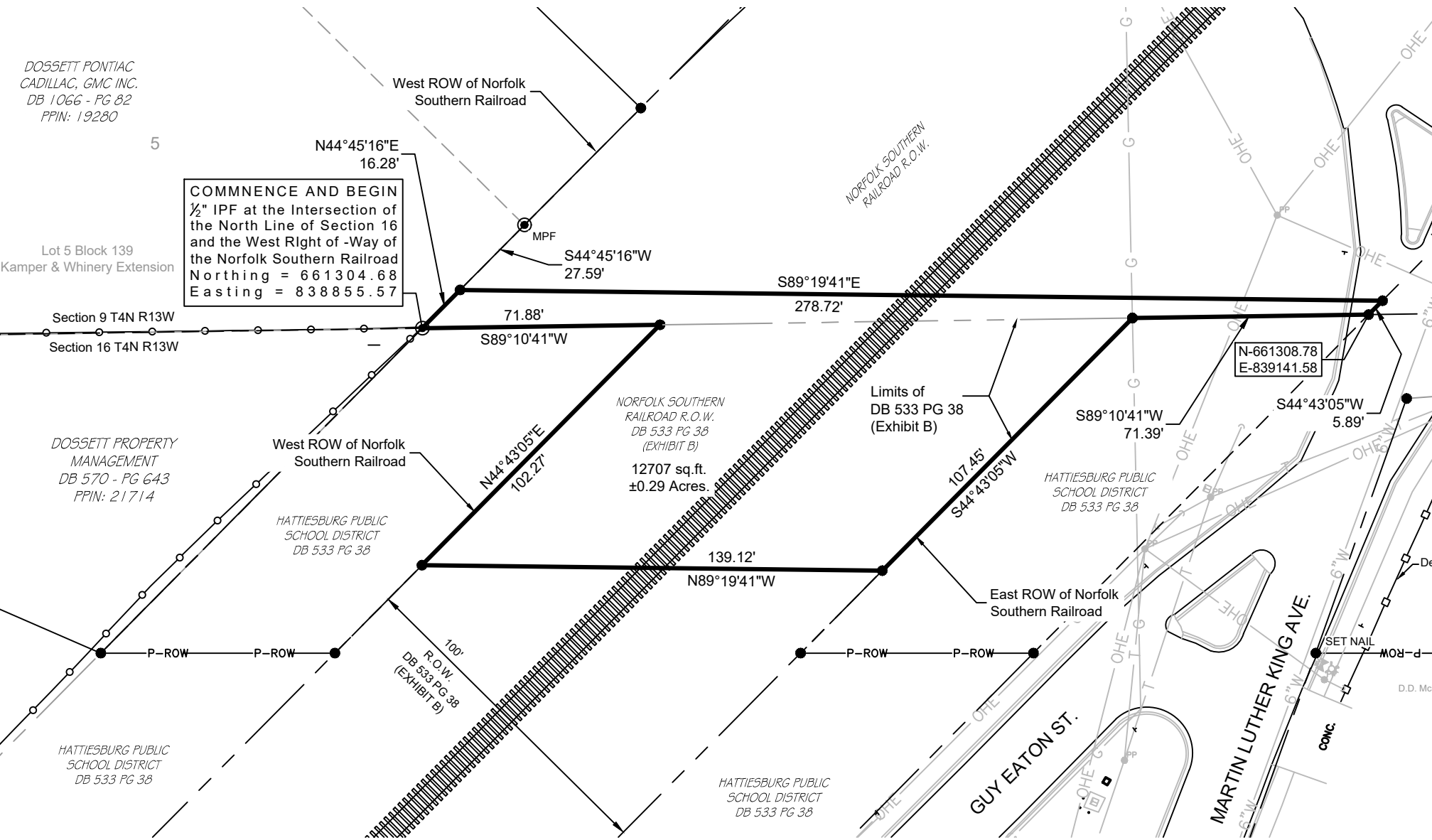
NOTICE TO ACQUISITION AGENTS

The "just compensation" figure specified above is the total offer for the property, inclusive of all interests. If more than one interest exists for the property, (T's, Q's, E's), please refer to the appraisal review report for allocation of this "just compensation" figure to the various interests that exist.

DESCRIPTION OF SURVEY AREA
NORFOLK SOUTHERN AIR SPACE RIGHT OF WAY

An airspace right of way being located in the SE 1/4 of the SE 1/4 of Section 9 and the NE 1/4 of the NE 1/4, of Section 16, Township 4 North, Range 13 West, City of Hattiesburg, Forrest County, Mississippi, and being more particularly described as follows, with bearings based upon Grid North derived from GPS observations and referenced to Mississippi State Plane Coordinate System (East Zone, NAD 83), with a convergence angle of (-)00° 14' 34.78" and using grid distances with a combined factor of 0.999971431 (determined at a metal pipe found at the intersection of the north line of Section 16 with the western right-of-way of Norfolk Southern Railroad):

Commence and Begin at an iron pin found at the intersection of the north line of Section 16, Township 4 North, Range 13 West, Forrest County, Mississippi with the western right-of-way of Norfolk Southern railroad (said point also being the southeast corner of Lot 5, Block 139 of Kamper & Whinery Extension subdivision), said point having grid coordinates of N = 661304.68, E = 838855.57; thence run North 44° 45' 16" East along the west right of way of the said Norfolk Southern Railroad for 16.28; thence leaving said right of way, run South 89° 19' 41" East for 278.72 feet to a point on the east right of way of said railroad; thence South 44° 43' 05" West along said east right of way for 5.89 feet to the north line of section 16; thence South 89° 10' 41" West along said north line and the right of way of said railroad for 71.39 feet; thence leaving said north line. continue South 44°43' 05" West along said east right of way for 107.45 feet; thence leaving said east line, run North 89° 19' 41" West for 139.12 feet to a point on the West right of way of said Norfolk Southern Railroad; thence North 44° 43' 05" East along said right of way for 102.27 feet to the north line of Section 16; thence South 89° 10' 41" West along said north line for 71.88 feet back to the Point of Beginning. Said parcel contains 12707 square feet, or 0.29 acres more or less.



NOTES:
1. Class "B" Survey.
2. No Additional Record Search for Easements was Conducted.
3. Date of Field Survey: Jan. 17, 2022.
4. Orientation is based on GPS observation, Grid North, as referenced to MS State Plane Coordinate System, East Zone

STATE PLANE DATA
State Plane Zone: MS East-2301
Datum: NAD 1983
Combined Factor: 0.999971431
Convergence Angle: -0°14' 34.78"
Reference Point: IPF @ Intersection of North Line of Section 16 and Eastern Right-of-Way of W. Pine St.

- REFERENCE MATERIAL:
- Plat of D.D. McInnis Third Addition
 - Plat of Kamper & Whinery Extension
 - Forrest County tax maps
 - WD DB 459 PG 590
 - WD DB 1066 PG 82
 - WD DB 828 PG 449
 - WD DB 570 PG 643
 - DB 533 PG 38
 - Alabama Great Southern R.R. Co. Station Map (Provided by Norfolk Southern R.R.)

JOHN C. ANGLIN
REGISTERED PROFESSIONAL
LAND
SURVEYOR
PLS-02865
3-29-22
STATE OF MISSISSIPPI

John C. Anglin, P.L.S. # 02865
Clearpoint Consulting Engineers, P.A.
6652 U.S. Highway 98
Hattiesburg, MS 39402
(601) 261-2609

PLAT OF AIRSPACE RIGHT-OF-WAY
HALL AVE. PHASE 2
FEDERAL AID PROJECT NO.
FLBD-8769-00(001)LPA / 108639-81100
CITY OF HATTIESBURG -
FORREST COUNTY,
MISSISSIPPI

Clearpoint
CONSULTING ENGINEERS, P.A.

6652 US Highway 98 | Hattiesburg, MS 39402
t 601.261.2609 | f 601.261.5573 | clearpointengineers.com



PROPERTY OWNER:

Norfolk Southern
Railroad

CCE NO.: 76242056
SCALE: 1" = 40'
DATE: 1/20/2022
CHECKED: JS
DRAWN: RTB
SHEET 1 OF 1

RESOLUTION

WHEREAS, upon careful consideration, the City of Hattiesburg, Mississippi, (hereinafter “City”), acting by and through the City Council, has determined it to be in the best interests of the citizens of the City to construct an overpass near the West end of Hall Avenue, located within the City limits; and

WHEREAS, to accomplish this project, the City finds it necessary to acquire for public use an airspace easement over the Norfolk Southern Railroad as identified in the construction plans for the project, which plans are made a part hereof by reference; and

WHEREAS, an appraisal of the subject property was conducted by Collins & Null Appraisals, Inc., a licensed real estate appraiser, and said appraisal was reviewed by John B. “Jeb” Stewart, a licensed real estate appraiser, on April 4, 2022, showing the fair market value of said property to be \$6,455.00, said appraisal and review appraisal being attached hereto as Exhibit “A”; and

**Norfolk Southern Railroad and
Hattiesburg Public School District**

NOW, THEREFORE, LET IT BE KNOWN THAT the appraisal by Collins & Null Appraisals, Inc. dated April 4, 2022, of said property is approved, and the appraised value of \$6,400.00 is acknowledged to be just compensation for said parcel, and the Mayor or his representative is authorized to make a Fair Market Value offer to the owner(s) of said parcel, and, if accepted, the Mayor is authorized to execute any and all documents required to complete said transaction, including the issuance of a manual check in payment.

The above and foregoing Resolution, having been first reduced to writing, was introduced by Council member _____, seconded by Council member _____, and adopted by the following vote:

YEAS:	NAYS:	ABSENT:
-------	-------	---------

The President thereby declared the motion carried and the Resolution adopted this the 7th Day of June, 2022.

(SEAL)

ATTEST:

ADOPTED:

CLERK OF COUNCIL

PRESIDENT

The above and foregoing Resolution having been submitted to and approved by the Mayor, this the 7th Day of June, 2022.

ATTEST:

APPROVED:

CITY CLERK

MAYOR



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Adopt a Resolution requesting initiation of the Fourth Street Pathway Project, from Thornhill Drive to 38th Avenue, from the Mississippi Department of Transportation, and authorize the Mayor to sign the Project Initiation Request Letter.
File Number: 2022-381
Minute Book #

Summary

Adopt a Resolution requesting initiation of the Fourth Street Pathway Project, from Thornhill Drive to 38th Avenue, from the Mississippi Department of Transportation, and authorize the Mayor to sign the Project Initiation Request Letter.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

CITY OF HATTIESBURG, MISSISSIPPI
RESOLUTION TO INITIATE THE
Fourth Street Pathway Project-Thornhill Drive to 38th Avenue

WHEREAS, the City of Hattiesburg requests that the Mississippi Department of Transportation initiate the Fourth Street Pathway Project, described herein; and

WHEREAS, the project will include a sidewalk and lighting along Fourth Street from Thornhill Drive to 38th Avenue; and

WHEREAS, the preliminary engineering costs will be paid by the City of Hattiesburg; and

WHEREAS, the City of Hattiesburg understands that the Federal Funds available for this project are \$669,634.75

NOW THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of Hattiesburg, that:

The Mayor and City Council request that the Mississippi Department of Transportation initiate the Fourth Street Pathway Project.

The above and foregoing Resolution, after having been first reduced to writing, was introduced by Councilperson _____, seconded by Councilperson _____, and was adopted by the following vote, to-wit:

YEAS:

NAYS:

The President thereby declared the motion carried and the Resolution adopted, this the 7th day of June 2022.

(S E A L)

ATTEST:

ADOPTED:

CLERK OF COUNCIL

PRESIDENT

The above and foregoing Resolution having been submitted to and approved by the Mayor, this the 7th day of June 2022.

ATTEST:

APPROVED:

CITY CLERK

MAYOR



MAYOR
Toby Barker

COUNCIL - WARD ONE

Jeffrey George

COUNCIL - WARD TWO

Deborah Denard Delgado

COUNCIL - WARD THREE

Carter Carroll

COUNCIL - WARD FOUR

Dave Ware

COUNCIL - WARD FIVE

Nicholas Brown

June 8, 2022

David H. Seyfarth, P.E.
Special Projects Engineer
Mississippi Department of Transportation
16499#B Highway 49
Saucier, MS 39574-9740

Reference: FOURTH STREET PATHWAY PROJECT – THORNHILL DR. TO 38TH AVE.
CITY OF HATTIESBURG, MISSISSIPPI
PROJECT INITIATION REQUEST

Dear Mr. Seyfarth,

The City of Hattiesburg respectfully requests that the Mississippi Department of Transportation initiate the above referenced project. This project will include sidewalk and lighting along Fourth street from Thornhill Drive and 38th Avenue.

Enclosed please find a copy of the resolution adopted by the City on June 7, 2022 which requests that the project be initiated by MDOT, vicinity map, copy of the TIP page showing the project, functional classification map, a copy of the LPA's Certificate, and our most recent audit report.

In an effort to facilitate the completion of the project, I am delegating authority to Lamar Rutland, P.E., Engineering Director for the city of Hattiesburg as the Chief LPA Official (lrutland@hattiesburgms.com)(601-545-4540). Mr. Rutland will also serve as the Project Director.

Thank you for your attention in this matter.

Sincerely,

Toby Barker
Mayor, City of Hattiesburg

Enclosures



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Approve Agreement with Shows, Dearman and Waits, Inc. for engineering services for the Forrest Avenue Sewer Replacement Project, and authorize the Mayor to execute in duplicate.
File Number: 2022-379
Minute Book #

Summary

Approve Agreement with Shows, Dearman and Waits, Inc. for engineering services for the Forrest Avenue Sewer Replacement Project, and authorize the Mayor to execute in duplicate.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

Prepared by



Issued and Published Jointly by



This Agreement has been prepared for use with EJCDC® C-700, Standard General Conditions of the Construction Contract, 2013 Edition. Their provisions are interrelated, and a change in one may necessitate a change in the other. For guidance on the completion and use of this Agreement, see EJCDC® E-001, Commentary on the EJCDC Engineering Services Agreements, 2013 Edition.

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AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of **June 7, 2022** ("Effective Date") between **the City of Hattiesburg** ("Owner") and **Shows, Dearman and Waits, Inc.** ("Engineer").

Owner's Project, of which Engineer's services under this Agreement are a part, is generally identified as follows: **Forrest Avenue Sewer Replacement Project** ("Project").

Other terms used in this Agreement are defined in Article 7.

Engineer's services under this Agreement are generally identified as follows:

Preparation of plans and specifications for the completion of design phase services for the Project, and provision of construction phase engineering and project representative services for the areas identified in Attachment A.

Owner and Engineer further agree as follows:

ARTICLE 1 – SERVICES OF ENGINEER

1.01 *Scope*

- A. Engineer shall provide, or cause to be provided, the services set forth herein and in Exhibit A.

ARTICLE 2 – OWNER'S RESPONSIBILITIES

2.01 *General*

- A. Owner shall have the responsibilities set forth herein and in Exhibit B.
- B. Owner shall pay Engineer as set forth in Article 4 and Exhibit C.
- C. Owner shall be responsible for all requirements and instructions that it furnishes to Engineer pursuant to this Agreement, and for the accuracy and completeness of all programs, reports, data, and other information furnished by Owner to Engineer pursuant to this Agreement. Engineer may use and rely upon such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement, subject to any express limitations or reservations applicable to the furnished items.
- D. Owner shall give prompt written notice to Engineer whenever Owner observes or otherwise becomes aware of:
 - 1. any development that affects the scope or time of performance of Engineer's services;
 - 2. the presence at the Site of any Constituent of Concern; or

3. any relevant, material defect or nonconformance in: (a) Engineer's services, (b) the Work, (c) the performance of any Constructor, or (d) Owner's performance of its responsibilities under this Agreement.

ARTICLE 3 – SCHEDULE FOR RENDERING SERVICES

3.01 Commencement

- A. Engineer is authorized to begin rendering services as of the Effective Date.

3.02 Time for Completion

- A. Engineer shall complete its obligations within a reasonable time. Specific periods of time for rendering services, or specific dates by which services are to be completed, are provided in Exhibit A, and are hereby agreed to be reasonable.
- B. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's services is impaired, or Engineer's services are delayed or suspended, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- C. If Owner authorizes changes in the scope, extent, or character of the Project or Engineer's services, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- D. Owner shall make decisions and carry out its other responsibilities in a timely manner so as not to delay the Engineer's performance of its services.
- E. If Engineer fails, through its own fault, to complete the performance required in this Agreement within the time set forth, as duly adjusted, then Owner shall be entitled, as its sole remedy, to the recovery of direct damages, if any, resulting from such failure.

ARTICLE 4 – INVOICES AND PAYMENTS

4.01 Invoices

- A. *Preparation and Submittal of Invoices:* Engineer shall prepare invoices in accordance with its standard invoicing practices and the terms of Exhibit C. Engineer shall submit its invoices to Owner on a monthly basis. Invoices are due and payable within 45 days of receipt.

4.02 Payments

- A. *Application to Interest and Principal:* Payment will be credited first to any interest owed to Engineer and then to principal.
- B. *Failure to Pay:* If Owner fails to make any payment due Engineer for services and expenses within 45 days after receipt of Engineer's invoice, then:
 1. amounts due Engineer will be increased at the rate of 1.5% per month (or the maximum rate of interest permitted by law, if less) from said forty-fifth day; and

2. Engineer may, after giving seven days written notice to Owner, suspend services under this Agreement until Owner has paid in full all amounts due for services, expenses, and other related charges. Owner waives any and all claims against Engineer for any such suspension.
- C. *Disputed Invoices:* If Owner disputes an invoice, either as to amount or entitlement, then Owner shall promptly advise Engineer in writing of the specific basis for doing so, and the dispute dealt with as set out in Mississippi Code Ann. Section 31-7-305.
- D. *Sales or Use Taxes:* If after the Effective Date any governmental entity takes a legislative action that imposes additional sales or use taxes on Engineer's services or compensation under this Agreement, then Engineer may invoice such additional sales or use taxes for reimbursement by Owner. Owner shall reimburse Engineer for the cost of such invoiced additional sales or use taxes; such reimbursement shall be in addition to the compensation to which Engineer is entitled under the terms of Exhibit C.

ARTICLE 5 – OPINIONS OF COST

5.01 *Opinions of Probable Construction Cost*

- A. Engineer's opinions (if any) of probable Construction Cost are to be made on the basis of Engineer's experience, qualifications, and general familiarity with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer. If Owner requires greater assurance as to probable Construction Cost, then Owner agrees to obtain an independent cost estimate.

5.02 *Designing to Construction Cost Limit*

- A. If a Construction Cost limit is established between Owner and Engineer, such Construction Cost limit and a statement of Engineer's rights and responsibilities with respect thereto will be specifically set forth in Exhibit F to this Agreement.

5.03 *Opinions of Total Project Costs*

- A. The services, if any, of Engineer with respect to Total Project Costs shall be limited to assisting the Owner in tabulating the various categories that comprise Total Project Costs. Engineer assumes no responsibility for the accuracy of any opinions of Total Project Costs.

ARTICLE 6 – GENERAL CONSIDERATIONS

6.01 *Standards of Performance*

- A. *Standard of Care:* The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality.

- B. *Technical Accuracy:* Owner shall not be responsible for discovering deficiencies in the technical accuracy of Engineer's services. Engineer shall correct deficiencies in technical accuracy without additional compensation, unless such corrective action is directly attributable to deficiencies in Owner-furnished information.
- C. *Consultants:* Engineer may retain such Consultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by Owner.
- D. *Reliance on Others:* Subject to the standard of care set forth in Paragraph 6.01.A, Engineer and its Consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.
- E. *Compliance with Laws and Regulations, and Policies and Procedures:*
 - 1. Engineer and Owner shall comply with applicable Laws and Regulations.
 - 2. Engineer shall comply with any and all policies, procedures, and instructions of Owner that are applicable to Engineer's performance of services under this Agreement and that Owner provides to Engineer in writing, subject to the standard of care set forth in Paragraph 6.01.A, and to the extent compliance is not inconsistent with professional practice requirements.
 - 3. This Agreement is based on Laws and Regulations and Owner-provided written policies and procedures as of the Effective Date. The following may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, or compensation:
 - a. changes after the Effective Date to Laws and Regulations;
 - b. the receipt by Engineer after the Effective Date of Owner-provided written policies and procedures;
 - c. changes after the Effective Date to Owner-provided written policies or procedures.
- F. Engineer shall not be required to sign any document, no matter by whom requested, that would result in the Engineer having to certify, guarantee, or warrant the existence of conditions whose existence the Engineer cannot ascertain. Owner agrees not to make resolution of any dispute with the Engineer or payment of any amount due to the Engineer in any way contingent upon the Engineer signing any such document.
- G. The general conditions for any construction contract documents prepared hereunder are to be in accordance with local, state and federal law.
- H. Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Site, nor for any failure of a Constructor to comply with Laws and Regulations

applicable to that Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.

- I. Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish and perform the Work in accordance with the Construction Contract Documents.
- J. Engineer shall not be responsible for any decision made regarding the Construction Contract Documents, or any application, interpretation, clarification, or modification of the Construction Contract Documents, other than those made by Engineer or its Consultants.
- K. Engineer is not required to provide and does not have any responsibility for surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction insurance or surety bonding requirements.
- L. Engineer's services do not include providing legal advice or representation.
- M. Engineer's services do not include (1) serving as a "municipal advisor" for purposes of the registration requirements of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission, or (2) advising Owner, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, or other similar matters concerning such products or issuances.
- N. While at the Site, Engineer, its Consultants, and their employees and representatives shall comply with the applicable requirements of Contractor's and Owner's safety programs of which Engineer has been informed in writing.

6.02 *Design Without Construction Phase Services*

- A. Engineer shall be responsible only for those Construction Phase services expressly required of Engineer in Exhibit A, Paragraph A1.05. With the exception of such expressly required services, Engineer shall have no design, Shop Drawing review, or other obligations during construction, and Owner assumes all responsibility for the application and interpretation of the Construction Contract Documents, review and response to Contractor claims, Construction Contract administration, processing of Change Orders and submittals, revisions to the Construction Contract Documents during construction, construction observation and review, review of Contractor's payment applications, and all other necessary Construction Phase administrative, engineering, and professional services. Owner waives all claims against the Engineer that may be connected in any way to Construction Phase administrative, engineering, or professional services except for those services that are expressly required of Engineer in Exhibit A.

6.03 *Use of Documents*

- A. All Documents are instruments of service, and Engineer shall retain an ownership and property interest therein (including the copyright and the right of reuse at the discretion of the Engineer) whether or not the Project is completed.

- B. If Engineer is required to prepare or furnish Drawings or Specifications under this Agreement, Engineer shall deliver to Owner at least one original printed record version of such Drawings and Specifications, signed and sealed according to applicable Laws and Regulations.
- C. Owner may make and retain copies of Documents for information and reference in connection with the use of the Documents on the Project. Engineer grants Owner a limited license to use the Documents on the Project, extensions of the Project, and for related uses of the Owner, subject to receipt by Engineer of full payment due and owing for all services relating to preparation of the Documents, and subject to the following limitations: (1) Owner acknowledges that such Documents are not intended or represented to be suitable for use on the Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Project, on any other project, or for any other use or purpose, without written verification or adaptation by Engineer; (2) any such use or reuse, or any modification of the Documents, without written verification, completion, or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Owner's sole risk and without liability or legal exposure to Engineer or to its officers, directors, members, partners, agents, employees, and Consultants; (3) such limited license to Owner shall not create any rights in third parties.
- D. If Engineer at Owner's request verifies the suitability of the Documents, completes them, or adapts them for extensions of the Project or for any other purpose, then Owner shall compensate Engineer at rates or in an amount to be agreed upon by Owner and Engineer.

6.04 *Electronic Transmittals*

- A. Owner and Engineer may transmit, and shall accept, Project-related correspondence, Documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, in accordance with a mutually agreeable protocol.
- B. If this Agreement does not establish protocols for electronic or digital transmittals, then Owner and Engineer shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

6.05 *Insurance*

- A. Engineer shall procure and maintain insurance as set forth in Exhibit G. Engineer shall cause Owner to be listed as an additional insured on any applicable general liability insurance policy carried by Engineer.
- B. Section Deleted
- C. Owner shall require Contractor to purchase and maintain policies of insurance covering workers' compensation, general liability, motor vehicle damage and injuries, and other

insurance necessary to protect Owner's and Engineer's interests in the Project. Owner shall require Contractor to cause Engineer and its Consultants to be listed as additional insureds with respect to such liability insurance purchased and maintained by Contractor for the Project.

- D. Upon written request the Engineer shall deliver to the Owner certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of Engineer's services and at renewals thereafter during the life of the Agreement.
- E. All policies of property insurance relating to the Project, including but not limited to any builder's risk policy, shall allow for waiver of subrogation rights and contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insured thereunder or against Engineer or its Consultants. Owner and Engineer shall take appropriate measures in other Project-related contracts to secure waivers of rights consistent with those set forth in this paragraph.
- F. All policies of insurance shall contain a provision or endorsement that the coverage afforded will not be canceled or reduced in limits by endorsement, and that renewal will not be refused, until at least 10 days prior written notice has been given to the primary insured. Upon receipt of such notice, the receiving party shall promptly forward a copy of the notice to the other party to this Agreement.
- G. At any time, Owner may request that Engineer or its Consultants, at Owner's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by Owner, and if commercially available, Engineer shall obtain and shall require its Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by Owner, and Exhibit G will be supplemented to incorporate these requirements.

6.06 *Suspension and Termination*

A. *Suspension:*

- 1. *By Owner:* Owner may suspend the Project for up to 90 days upon seven days written notice to Engineer.
- 2. *By Engineer:* Engineer may, after giving seven days written notice to Owner, suspend services under this Agreement if Owner has failed to pay Engineer for invoiced services and expenses, as set forth in Paragraph 4.02.B, or in response to the presence of Constituents of Concern at the Site, as set forth in Paragraph 6.10.D.

B. *Termination:* The obligation to provide further services under this Agreement may be terminated:

- 1. For cause,

- a. by either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.
 - b. by Engineer:
 - 1) upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or
 - 2) upon seven days written notice if the Engineer's services for the Project are delayed or suspended for more than 90 days for reasons beyond Engineer's control, or as the result of the presence at the Site of undisclosed Constituents of Concern, as set forth in Paragraph 6.10.D.
 - 3) Engineer shall have no liability to Owner on account of such termination.
 - c. Notwithstanding the foregoing, this Agreement will not terminate under Paragraph 6.06.B.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.
2. For convenience, by Owner effective upon Engineer's receipt of notice from Owner.
- C. *Effective Date of Termination:* The terminating party under Paragraph 6.06.B may set the effective date of termination at a time up to 30 days later than otherwise provided to allow Engineer to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.
- D. *Payments Upon Termination:*
1. In the event of any termination under Paragraph 6.06, Engineer will be entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all Reimbursable Expenses incurred through the effective date of termination. Upon making such payment, Owner shall have the limited right to the use of Documents, at Owner's sole risk, subject to the provisions of Paragraph 6.03.
 2. In the event of termination by Owner for convenience or by Engineer for cause, Engineer shall be entitled, in addition to invoicing for those items identified in Paragraph 6.06.D.1, to invoice Owner and receive payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with Engineer's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit C.

6.07 *Controlling Law*

- A. This Agreement is to be governed by the Laws and Regulations of the state in which the Project is located.

6.08 *Successors, Assigns, and Beneficiaries*

- A. Engineer is hereby bound and the successors, executors, administrators, and legal representatives of Engineer (and to the extent permitted by Paragraph 6.08.B the assigns of Engineer) are hereby bound to the Owner to this Agreement and to the successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, money that is due or may become due) in this Agreement without the written consent of the other party, except to the extent that any assignment, subletting, or transfer is mandated by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- C. Unless expressly provided otherwise in this Agreement:
 - 1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Constructor, other third-party individual or entity, or to any surety for or employee of any of them.
 - 2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.
 - 3. Owner agrees that the substance of the provisions of this Paragraph 6.08.C shall appear in the Construction Contract Documents.

6.09 *Dispute Resolution*

- A. Owner and Engineer agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice prior to invoking other provisions of this Agreement, or exercising their rights at law.

6.10 *Environmental Condition of Site*

- A. Owner represents to Engineer that as of the Effective Date to the best of Owner's knowledge no Constituents of Concern, other than those disclosed in writing to Engineer, exist at or adjacent to the Site.
- B. If Engineer encounters or learns of an undisclosed Constituent of Concern at the Site, then Engineer shall notify (1) Owner and (2) appropriate governmental officials if Engineer reasonably concludes that doing so is required by applicable Laws or Regulations.
- C. It is acknowledged by both parties that Engineer's scope of services does not include any services related to unknown or undisclosed Constituents of Concern. If Engineer or any other party encounters, uncovers, or reveals an undisclosed Constituent of Concern, then

Owner shall promptly determine whether to retain a qualified expert to evaluate such condition or take any necessary corrective action.

- D. If investigative or remedial action, or other professional services, are necessary with respect to undisclosed Constituents of Concern, or if investigative or remedial action beyond that reasonably contemplated is needed to address a disclosed or known Constituent of Concern, then Engineer may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until such portion of the Project is no longer affected.
- E. If the presence at the Site of undisclosed Constituents of Concern adversely affects the performance of Engineer's services under this Agreement, then the Engineer shall have the option of (1) accepting an equitable adjustment in its compensation or in the time of completion, or both; or (2) terminating this Agreement for cause on seven days' notice.
- F. Owner acknowledges that Engineer is performing professional services for Owner and that Engineer is not and shall not be required to become an "owner," "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, which are or may be encountered at or near the Site in connection with Engineer's activities under this Agreement.

6.11 *Shared Negligence*

- A. *Percentage Share of Negligence:* To the fullest extent permitted by Laws and Regulations, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, shall not exceed the percentage share that the party's negligence bears to the total negligence of Owner, Engineer, and all other negligent entities and individuals.

6.12 *Records Retention*

- A. Engineer shall maintain on file in legible form, for a period of five years following completion or termination of its services, all Documents, records (including cost records), and design calculations related to Engineer's services or pertinent to Engineer's performance under this Agreement. Upon Owner's request, Engineer shall provide a copy of any such item to Owner at cost.

6.13 *Miscellaneous Provisions*

- A. *Notices:* Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.
- B. *Survival:* All express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason.

- C. *Severability*: Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Engineer, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- D. *Waiver*: A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.
- E. *Accrual of Claims*: To the fullest extent permitted by Laws and Regulations, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of Substantial Completion.

ARTICLE 7 – DEFINITIONS

7.01 *Defined Terms*

- A. Wherever used in this Agreement (including the Exhibits hereto) terms (including the singular and plural forms) printed with initial capital letters have the meanings indicated in the text above, in the exhibits, or in the following definitions:
 - 1. *Addenda*—Written or graphic instruments issued prior to the opening of bids which clarify, correct, or change the bidding requirements or the proposed Construction Contract Documents.
 - 2. *Additional Services*—The services to be performed for or furnished to Owner by Engineer in accordance with Part 2 of Exhibit A of this Agreement.
 - 3. *Agreement*—This written contract for professional services between Owner and Engineer, including all exhibits identified in Paragraph 8.01 and any duly executed amendments.
 - 4. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Construction Contract.
 - 5. *Basic Services*—The services to be performed for or furnished to Owner by Engineer in accordance with Part 1 of Exhibit A of this Agreement.
 - 6. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Construction Contract Price or the Construction Contract Times, or other revision to the Construction Contract, issued on or after the effective date of the Construction Contract.
 - 7. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth in the Construction Contract, seeking an adjustment in Construction Contract Price or Construction Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Construction

Contract Documents or the acceptability of Work under the Construction Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Construction Contract.

8. *Constituent of Concern*—Asbestos, petroleum, radioactive material, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, State, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
9. *Construction Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
10. *Construction Contract Documents*—Those items designated as “Contract Documents” in the Construction Contract, and which together comprise the Construction Contract.
11. *Construction Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Construction Contract Documents.
12. *Construction Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve milestones, if any, in the Construction Contract; (b) achieve Substantial Completion; and (c) complete the Work.
13. *Construction Cost*—The cost to Owner of the construction of those portions of the entire Project designed or specified by or for Engineer under this Agreement, including construction labor, services, materials, equipment, insurance, and bonding costs, and allowances for contingencies. Construction Cost does not include costs of services of Engineer or other design professionals and consultants; cost of land or rights-of-way, or compensation for damages to property; Owner’s costs for legal, accounting, insurance counseling, or auditing services; interest or financing charges incurred in connection with the Project; or the cost of other services to be provided by others to Owner. Construction Cost is one of the items comprising Total Project Costs.
14. *Constructor*—Any person or entity (not including the Engineer, its employees, agents, representatives, and Consultants), performing or supporting construction activities relating to the Project, including but not limited to Contractors, Subcontractors, Suppliers, Owner’s work forces, utility companies, other contractors, construction managers, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.
15. *Consultants*—Individuals or entities having a contract with Engineer to furnish services with respect to this Project as Engineer’s independent professional associates and consultants; subcontractors; or vendors.

16. *Contractor*—The entity or individual with which Owner enters into a Construction Contract.
17. *Documents*—Data, reports, Drawings, Specifications, Record Drawings, building information models, civil integrated management models, and other deliverables, whether in printed or electronic format, provided or furnished in appropriate phases by Engineer to Owner pursuant to this Agreement.
18. *Drawings*—That part of the Construction Contract Documents that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date*—The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, the date on which this Agreement is signed and delivered by the last of the parties to sign and deliver.
20. *Engineer*—The individual or entity named as such in this Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Construction Contract Price or the Construction Contract Times.
22. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
23. *Owner*—The individual or entity named as such in this Agreement and for which Engineer's services are to be performed. Unless indicated otherwise, this is the same individual or entity that will enter into any Construction Contracts concerning the Project.
24. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the services to be performed or furnished by Engineer under this Agreement are a part.
25. *Record Drawings*—Drawings depicting the completed Project, or a specific portion of the completed Project, prepared by Engineer as an Additional Service and based on Contractor's record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications, as delivered to Engineer and annotated by Contractor to show changes made during construction.
26. *Reimbursable Expenses*—The expenses incurred directly by Engineer in connection with the performing or furnishing of Basic Services and Additional Services for the Project.
27. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site during the Construction Phase. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative. The duties and responsibilities of the Resident Project Representative, if any, are as set forth in Exhibit D.

28. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
29. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Construction Contract Documents.
30. *Site*—Lands or areas to be indicated in the Construction Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
31. *Specifications*—The part of the Construction Contract Documents that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
32. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
33. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Construction Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
34. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
35. *Total Project Costs*—The total cost of planning, studying, designing, constructing, testing, commissioning, and start-up of the Project, including Construction Cost and all other Project labor, services, materials, equipment, insurance, and bonding costs, allowances for contingencies, and the total costs of services of Engineer or other design professionals and consultants, together with such other Project-related costs that Owner furnishes for inclusion, including but not limited to cost of land, rights-of-way, compensation for damages to properties, Owner’s costs for legal, accounting, insurance counseling, and auditing services, interest and financing charges incurred in connection with the Project, and the cost of other services to be provided by others to Owner.
36. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Construction Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Construction Contract Documents.

37. *Work Change Directive*—A written directive to Contractor issued on or after the effective date of the Construction Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

B. *Day:*

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

ARTICLE 8 – EXHIBITS AND SPECIAL PROVISIONS

8.01 *Exhibits Included:*

- A. Exhibit A, Engineer’s Services.
- B. Exhibit B, Owner’s Responsibilities.
- C. Exhibit C, Payments to Engineer for Services and Reimbursable Expenses.
- D. Exhibit D, Duties, Responsibilities and Limitations of Authority of Resident Project Representative.
- E. Exhibit E, DELETED
- F. Exhibit F, DELETED
- G. Exhibit G, Insurance.
- H. Exhibit H, DELETED
- I. Exhibit I, DELETED
- J. Exhibit J, DELETED
- K. Exhibit K, DELETED

8.02 *Total Agreement*

- A. This Agreement, (together with the exhibits included above) constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a written instrument duly executed by both parties.

8.03 *Designated Representatives*

- A. With the execution of this Agreement, Engineer and Owner shall designate specific individuals to act as Engineer’s and Owner’s representatives with respect to the services to be performed or furnished by Engineer and responsibilities of Owner under this Agreement. Such an individual shall have authority to transmit instructions, receive information, and render decisions relative to this Agreement on behalf of the respective party whom the individual represents.

8.04 *Engineer's Certifications*

- A. Engineer certifies that it has not engaged in corrupt, fraudulent, or coercive practices in competing for or in executing the Agreement. For the purposes of this Paragraph 8.04:
1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the selection process or in the Agreement execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the selection process or the execution of the Agreement to the detriment of Owner, or (b) to deprive Owner of the benefits of free and open competition;
 3. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the selection process or affect the execution of the Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

Owner: City of Hattiesburg

By: _____

Print name: Mayor Toby Barker

Title: Mayor

Date Signed: _____

Address for Owner's receipt of notices:

P.O. Box 1898

Hattiesburg, MS 39401

Designated Representative (Paragraph 8.03.A):

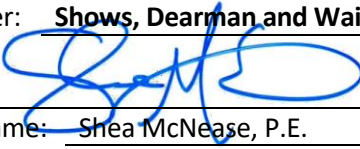
Lamar Rutland, P.E.

Title: Director of Engineering

Phone Number: 601-545-4540

E-Mail Address: lrutland@hattiesburgms.com

Engineer: Shows, Dearman and Waits, Inc.

By: 

Print name: Shea McNease, P.E.

Title: President

Date Signed: _____

Engineer License or Firm's Certificate No. (if required):

E-4

State of: Mississippi

Address for Engineer's receipt of notices:

301 Second Avenue

Hattiesburg, MS 39401

Designated Representative (Paragraph 8.03.A):

Shea McNease, PE

Title: President

Phone Number: 601-544-1821

E-Mail Address: shea@sd-w.com

This is **EXHIBIT A**, consisting of **14** pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **6/7/2022**.

Engineer's Services

Article 1 of the Agreement is supplemented to include the following agreement of the parties.

Engineer shall provide Basic and Additional Services as set forth below.

PART 1 – BASIC SERVICES

A1.01 Study and Report Phase - *SECTION DELETED*

A1.02 Preliminary Design Phase

- A. After issuance by Owner of any instructions of for use of Project Strategies, Technologies, and Techniques, or for inclusion of sustainable features in the design; and indication by Owner of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by Owner, (1) Engineer and Owner shall discuss and resolve any necessary revisions to Engineer's compensation (through application of the provisions regarding Additional Services, or otherwise), or the time for completion of Engineer's services, resulting from the selected solution, related Project Strategies, Technologies, or Techniques, sustainable design instructions, or specific modifications to the Project, and (2) upon written from Owner, Engineer shall:
1. Prepare Preliminary Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications, and written descriptions of the Project.
 2. In preparing the Preliminary Design Phase documents, use any specific applicable Project Strategies, Technologies, and Techniques authorized by Owner and include sustainable features, as appropriate, pursuant to Owner's instructions.
 3. Provide necessary field surveys and topographic and utility mapping for Engineer's design purposes. Comply with the scope of work and procedure for the identification and mapping of existing utilities selected and authorized by Owner pursuant to advice from Engineer based on ASCE 38, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data". If no such scope of work and procedure for utility mapping has been selected and authorized, then at a minimum the utility mapping will include Engineer contacting utility owners and obtaining available information.
 4. Visit the Site as needed to prepare the Preliminary Design Phase documents.
 5. Advise Owner if additional reports, data, information, or services of the types described in Exhibit B are necessary and assist Owner in obtaining such reports, data, information, or services.
 6. Continue to assist Owner with Project Strategies, Technologies, and Techniques that Owner has chosen to implement.

7. Based on the information contained in the Preliminary Design Phase documents, prepare a revised opinion of probable Construction Cost, and assist Owner in tabulating the various cost categories which comprise Total Project Costs.
 8. Obtain and review Owner's instructions regarding Owner's procurement of construction services (including instructions regarding advertisements for bids, instructions to bidders, and requests for proposals, as applicable), Owner's construction contract practices and requirements, insurance and bonding requirements, electronic transmittals during construction, and other information necessary for the finalization of Owner's bidding-related documents (or requests for proposals or other construction procurement documents), and Construction Contract Documents. Also obtain and review copies of Owner's design and construction standards, Owner's standard forms, general conditions (if other than EJCDC® C-700, Standard General Conditions of the Construction Contract, 2013 Edition), supplementary conditions, text, and related documents or content for Engineer to include in the draft bidding-related documents (or requests for proposals or other construction procurement documents), and in the draft Construction Contract Documents, when applicable.
 9. Perform or provide the following other Preliminary Design Phase tasks or deliverables:
N/A
 10. Furnish 1 review copies of the Preliminary Design Phase documents, opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables to Owner within 180 days of authorization to proceed with this phase, and review them with Owner. Within 15 days of receipt, Owner shall submit to Engineer any comments regarding the furnished items.
 11. Revise the Preliminary Design Phase documents, opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables in response to Owner's comments, as appropriate, and furnish to Owner 1 copies of the revised Preliminary Design Phase documents, revised opinion of probable Construction Cost, and any other deliverables within 60 days after receipt of Owner's comments.
- B. Engineer's services under the Preliminary Design Phase will be considered complete on the date when Engineer has delivered to Owner the revised Preliminary Design Phase documents, revised opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables.

A1.03 *Final Design Phase*

- A. After acceptance by Owner of the Preliminary Design Phase documents, revised opinion of probable Construction Cost as determined in the Preliminary Design Phase, and any other Preliminary Design Phase deliverables, subject to any Owner-directed modifications or changes in the scope, extent, character, or design requirements of or for the Project, and upon authorization from Owner, Engineer shall:
1. Prepare final Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by Contractor.
 2. Visit the Site as needed to assist in preparing the final Drawings and Specifications.

Exhibit A – Engineer's Services

EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services.

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3. Provide technical criteria, written descriptions, and design data for Owner's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design; assist Owner in consultations with such authorities; and revise the Drawings and Specifications in response to directives from such authorities, as appropriate.
 4. Advise Owner of any recommended adjustments to the opinion of probable Construction Cost.
 5. After consultation with Owner, include in the Construction Contract Documents any specific protocols for the transmittal of Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website. Any such protocols shall be applicable to transmittals between and among Owner, Engineer, and Contractor during the Construction Phase and Post-Construction Phase, and unless agreed otherwise shall supersede any conflicting protocols previously established for transmittals between Owner and Engineer.
 6. Assist Owner in assembling known reports and drawings of Site conditions, and in identifying the technical data contained in such reports and drawings upon which bidders or other prospective contractors may rely.
 7. In addition to preparing the final Drawings and Specifications, assemble drafts of other Construction Contract Documents based on specific instructions and contract forms, text, or content received from Owner.
 8. Prepare or assemble draft bidding-related documents (or requests for proposals or other construction procurement documents), based on the specific bidding or procurement-related instructions and forms, text, or content received from Owner.
 9. Perform or provide the following other Final Design Phase tasks or deliverables: N/A
 10. Furnish for review by Owner, its legal counsel, and other advisors, 1 copies of the final Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables, within 270 days of authorization to proceed with the Final Design Phase, and review them with Owner. Within 15 days of receipt, Owner shall submit to Engineer any comments regarding the furnished items, and any instructions for revisions.
 11. Revise the final Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables in accordance with comments and instructions from the Owner, as appropriate, and submit 1 final copies of such documents to Owner within 60 days after receipt of Owner's comments and instructions.
- B. Engineer's services under the Final Design Phase will be considered complete on the date when Engineer has delivered to Owner the final Drawings and Specifications, other assembled

Construction Contract Documents, bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables.

- C. In the event that the Work designed or specified by Engineer is to be performed or furnished under more than one prime contract, or if Engineer's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast-tracking), Owner and Engineer shall, prior to commencement of the Final Design Phase, develop a schedule for performance of Engineer's services during the Final Design, Bidding or Negotiating, Construction, and Post-Construction Phases in order to sequence and coordinate properly such services as are applicable to the work under such separate prime contracts. This schedule is to be prepared and included in or become an amendment to Exhibit A whether or not the work under such contracts is to proceed concurrently.
- D. The number of prime contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established under this Agreement is one (1). If more prime contracts are awarded, Engineer shall be entitled to an equitable increase in its compensation under this Agreement.

A1.04 *Bidding or Negotiating Phase*

- A. After acceptance by Owner of the final Drawings and Specifications, other Construction Contract Documents, bidding-related documents (or requests for proposals or other construction procurement documents), and the most recent opinion of probable Construction Cost as determined in the Final Design Phase, and upon written authorization by Owner to proceed, Engineer shall:
 - 1. Assist Owner in advertising for and obtaining bids or proposals for the Work, assist Owner in issuing assembled design, contract, and bidding-related documents (or requests for proposals or other construction procurement documents) to prospective contractors, and, where applicable, maintain a record of prospective contractors to which documents have been issued, attend pre-bid conferences, if any, and receive and process contractor deposits or charges for the issued documents.
 - 2. Prepare and issue Addenda as appropriate to clarify, correct, or change the issued documents.
 - 3. Provide information or assistance needed by Owner in the course of any review of proposals or negotiations with prospective contractors.
 - 4. Consult with Owner as to the qualifications of prospective contractors.
 - 5. Consult with Owner as to the qualifications of subcontractors, suppliers, and other individuals and entities proposed by prospective contractors, for those portions of the Work as to which review of qualifications is required by the issued documents.
 - 6. If the issued documents require, the Engineer shall evaluate and determine the acceptability of "or equals" and substitute materials and equipment proposed by prospective contractors, provided that such proposals are allowed by the bidding-related documents (or requests for proposals or other construction procurement documents)

prior to award of contracts for the Work. Services under this paragraph are subject to the provisions of Paragraph A2.02.A.2 of this Exhibit A.

7. Attend the bid opening, prepare bid tabulation sheets to meet Owner's schedule, and assist Owner in evaluating bids or proposals, assembling final contracts for the Work for execution by Owner and Contractor, and in issuing notices of award of such contracts.
 8. If Owner engages in negotiations with bidders or proposers, assist Owner with respect to technical and engineering issues that arise during the negotiations.
 9. Perform or provide the following other Bidding or Negotiating Phase tasks or deliverables:
N/A
- B. The Bidding or Negotiating Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective contractors (except as may be required if Exhibit F is a part of this Agreement).

A1.05 *Construction Phase*

- A. Upon successful completion of the Bidding and Negotiating Phase, and upon written authorization from Owner, Engineer shall:
1. *General Administration of Construction Contract:* Consult with Owner and act as Owner's representative as provided in the Construction Contract. The extent and limitations of the duties, responsibilities, and authority of Engineer shall be as assigned in EJCDC® C-700, Standard General Conditions of the Construction Contract (2013 Edition), prepared by the Engineers Joint Contract Documents Committee, or other construction general conditions specified in this Agreement. If Owner, or Owner and Contractor, modify the duties, responsibilities, and authority of Engineer in the Construction Contract, or modify other terms of the Construction Contract having a direct bearing on Engineer, then Owner shall compensate Engineer for any related increases in the cost to provide Construction Phase services. Engineer shall not be required to furnish or perform services contrary to Engineer's responsibilities as a licensed professional. All of Owner's instructions to Contractor will be issued through Engineer, which shall have authority to act on behalf of Owner in dealings with Contractor to the extent provided in this Agreement and the Construction Contract except as otherwise provided in writing.
 2. *Resident Project Representative (RPR):* Provide the services of an RPR at the Site to assist the Engineer and to provide more extensive observation of Contractor's work. Duties, responsibilities, and authority of the RPR are as set forth in Exhibit D. The furnishing of such RPR's services will not limit, extend, or modify Engineer's responsibilities or authority except as expressly set forth in Exhibit D.
 3. *Selection of Independent Testing Laboratory:* Assist Owner in the selection of an independent testing laboratory to perform the services identified in Exhibit B, Paragraph B2.01.
 4. *Pre-Construction Conference:* Participate in a pre-construction conference prior to commencement of Work at the Site.

5. *Electronic Transmittal Protocols:* If the Construction Contract Documents do not specify protocols for the transmittal of Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, then together with Owner and Contractor jointly develop such protocols for transmittals between and among Owner, Contractor, and Engineer during the Construction Phase and Post-Construction Phase.
6. *Original Documents:* If requested by Owner to do so, maintain and safeguard during the Construction Phase at least one original printed record version of the Construction Contract Documents, including Drawings and Specifications signed and sealed by Engineer and other design professionals in accordance with applicable Laws and Regulations. Throughout the Construction Phase, make such original printed record version of the Construction Contract Documents available to Contractor and Owner for review.
7. *Schedules:* Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.
8. *Baselines and Benchmarks:* As appropriate, establish baselines and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.
9. *Visits to Site and Observation of Construction:* In connection with observations of Contractor's Work while it is in progress:
 - a. Make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, to observe as an experienced and qualified design professional the progress of Contractor's executed Work. Such visits and observations by Engineer, and the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of the Work or to involve detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Construction Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment, as assisted by the Resident Project Representative, if any. Based on information obtained during such visits and observations, Engineer will determine in general if the Work is proceeding in accordance with the Construction Contract Documents, and Engineer shall keep Owner informed of the progress of the Work.
 - b. The purpose of Engineer's visits to the Site, and representation by the Resident Project Representative, if any, at the Site, will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for Owner a greater degree of confidence that the completed Work will conform in general to the Construction Contract Documents and that Contractor has implemented and maintained the integrity of the design concept of the completed Project as a functioning whole as indicated in the Construction Contract Documents. Engineer shall not, during such visits or as a result of such observations of the Work, supervise, direct, or have control over the Work, nor shall Engineer have authority over or responsibility for

Exhibit A – Engineer's Services

EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services.

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the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to any Constructor's work in progress, for the coordination of the Constructors' work or schedules, nor for any failure of any Constructor to comply with Laws and Regulations applicable to furnishing and performing of its work. Accordingly, Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish or perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents.

10. *Defective Work:* Reject Work if, on the basis of Engineer's observations, Engineer believes that such Work is defective under the terms and standards set forth in the Construction Contract Documents. Provide recommendations to Owner regarding whether Contractor should correct such Work or remove and replace such Work, or whether Owner should consider accepting such Work as provided in the Construction Contract Documents.
11. *Compatibility with Design Concept:* If Engineer has express knowledge that a specific part of the Work that is not defective under the terms and standards set forth in the Construction Contract Documents is nonetheless not compatible with the design concept of the completed Project as a functioning whole, then inform Owner of such incompatibility, and provide recommendations for addressing such Work.
12. *Clarifications and Interpretations:* Accept from Contractor and Owner submittal of all matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. With reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Construction Contract Documents.
13. *Non-reviewable Matters:* If a submitted matter in question concerns the Engineer's performance of its duties and obligations, or terms and conditions of the Construction Contract Documents that do not involve (1) the performance or acceptability of the Work under the Construction Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer will not provide a decision or interpretation.
14. *Field Orders:* Subject to any limitations in the Construction Contract Documents, Engineer may prepare and issue Field Orders requiring minor changes in the Work.
15. *Change Orders and Work Change Directives:* Recommend Change Orders and Work Change Directives to Owner, as appropriate, and prepare Change Orders and Work Change Directives as required.
16. *Differing Site Conditions:* Respond to any notice from Contractor of differing site conditions, including conditions relating to underground facilities such as utilities, and hazardous environmental conditions. Promptly conduct reviews and prepare findings, conclusions, and recommendations for Owner's use.

17. *Shop Drawings, Samples, and Other Submittals:* Review and approve or take other appropriate action with respect to Shop Drawings, Samples, and other required Contractor submittals, but only for conformance with the information given in the Construction Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Construction Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer shall meet any Contractor's submittal schedule that Engineer has accepted.
18. *Substitutes and "Or-equal":* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor, but subject to the provisions of Paragraph A2.02.A.2 of this Exhibit A.
19. *Inspections and Tests:*
 - a. Receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Construction Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Construction Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Construction Contract Documents. Engineer shall be entitled to rely on the results of such inspections and tests.
 - b. As deemed reasonably necessary, request that Contractor uncover Work that is to be inspected, tested, or approved.
 - c. Pursuant to the terms of the Construction Contract, require special inspections or testing of the Work, whether or not the Work is fabricated, installed, or completed.
20. *Change Proposals and Claims:* (a) Review and respond to Change Proposals. Review each duly submitted Change Proposal from Contractor and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer will not resolve the Change Proposal. (b) Provide information or data to Owner regarding engineering or technical matters pertaining to Claims.
21. *Applications for Payment:* Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:
 - a. Determine the amounts that Engineer recommends Contractor be paid. Recommend reductions in payment (set-offs) based on the provisions for set-offs stated in the Construction Contract. Such recommendations of payment will be in writing and will constitute Engineer's representation to Owner, based on such observations and review, that, to the best of Engineer's knowledge, information and belief,

Contractor's Work has progressed to the point indicated, the Work is generally in accordance with the Construction Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Construction Contract Documents, and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work. In the case of unit price Work, Engineer's recommendations of payment will include final determinations of quantities and classifications of the Work (subject to any subsequent adjustments allowed by the Construction Contract Documents).

- b. By recommending payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on Engineer responsibility to supervise, direct, or control the Work, or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes Contractor has used the money paid to Contractor by Owner; to determine that title to any portion of the Work, including materials or equipment, has passed to Owner free and clear of any liens, claims, security interests, or encumbrances; or that there may not be other matters at issue between Owner and Contractor that might affect the amount that should be paid.
22. *Contractor's Completion Documents:* Receive from Contractor, review, and transmit to Owner maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Construction Contract Documents, certificates of inspection, tests and approvals, and Shop Drawings, Samples, and other data approved as provided under Paragraph A1.05.A.17. Receive from Contractor, review, and transmit to Owner the annotated record documents which are to be assembled by Contractor in accordance with the Construction Contract Documents to obtain final payment. The extent of Engineer's review of record documents shall be to check that Contractor has submitted all pages.
23. *Substantial Completion:* Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with Owner and Contractor, visit the Site to review the Work and determine the status of completion. Follow the procedures in the Construction Contract regarding the preliminary certificate of Substantial Completion, punch list of items to be completed, Owner's objections, notice to Contractor, and issuance of a final certificate of Substantial Completion. Assist Owner regarding any remaining engineering or technical matters affecting Owner's use or occupancy of the Work following Substantial Completion.

24. *Other Tasks:* Perform or provide the following other Construction Phase tasks or deliverables: N/A
 25. *Final Notice of Acceptability of the Work:* Conduct a final visit to the Project to determine if the Work is complete and acceptable so that Engineer may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, Engineer shall also provide a notice to Owner and Contractor in the form attached hereto as Exhibit E (“Notice of Acceptability of Work”) that the Work is acceptable (subject to the provisions of the Notice and Paragraph A1.05.A.21.b) to the best of Engineer’s knowledge, information, and belief, and based on the extent of the services provided by Engineer under this Agreement.
 26. *Standards for Certain Construction-Phase Decisions:* Engineer will render decisions regarding the requirements of the Construction Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth in the Construction Contract for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.
- B. *Duration of Construction Phase:* The Construction Phase will commence with the execution of the first Construction Contract for the Project or any part thereof and will terminate upon written recommendation by Engineer for final payment to Contractors. If the Project involves more than one prime contract as indicated in Paragraph A1.03.D, then Construction Phase services may be rendered at different times in respect to the separate contracts. Subject to the provisions of Article 3, Engineer shall be entitled to an equitable increase in compensation if Construction Phase services (including Resident Project Representative services, if any) are required after the original date for completion and readiness for final payment of Contractor as set forth in the Construction Contract.

A1.06 *Post-Construction Phase*

- A. Upon written authorization from Owner during the Post-Construction Phase, Engineer shall:
1. Together with Owner, visit the Project to observe any apparent defects in the Work, make recommendations as to replacement or correction of defective Work, if any, or the need to repair of any damage to the Site or adjacent areas, and assist Owner in consultations and discussions with Contractor concerning correction of any such defective Work and any needed repairs.
 2. Together with Owner, visit the Project within one month before the end of the Construction Contract’s correction period to ascertain whether any portion of the Work or the repair of any damage to the Site or adjacent areas is defective and therefore subject to correction by Contractor.
 3. Perform or provide the following other Post-Construction Phase tasks or deliverables: N/A

- B. The Post-Construction Phase services may commence during the Construction Phase and, if not otherwise modified in this Exhibit A, will terminate twelve months after the commencement of the Construction Contract's correction period.

PART 2 – ADDITIONAL SERVICES

A2.01 *Additional Services Requiring Owner's Written Authorization*

- A. If authorized in writing by Owner, Engineer shall provide Additional Services of the types listed below. These services are not included as part of Basic Services and will be paid for by Owner as indicated in Exhibit C.
1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans, or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.
 2. Services to make measured drawings of existing conditions or facilities, to conduct tests or investigations of existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner or others.
 3. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer, or the Project's design requirements, including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Construction Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date or are due to any other causes beyond Engineer's control.
 4. Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those agreed to in Paragraph A1.01.A.1 and 2.
 5. Services required as a result of Owner's providing incomplete or incorrect Project information to Engineer.
 6. Providing renderings or models for Owner's use, including services in support of building information modeling or civil integrated management.
 7. Undertaking investigations and studies including, but not limited to:
 - a. detailed consideration of operations, maintenance, and overhead expenses;
 - b. the preparation of feasibility studies (such as those that include projections of output capacity, utility project rates, project market demand, or project revenues) and cash flow analyses, provided that such services are based on the engineering and technical aspects of the Project, and do not include rendering advice regarding municipal financial products or the issuance of municipal securities;

- c. preparation of appraisals;
 - d. evaluating processes available for licensing, and assisting Owner in obtaining process licensing;
 - e. detailed quantity surveys of materials, equipment, and labor; and
 - f. audits or inventories required in connection with construction performed or furnished by Owner.
8. Furnishing services of Consultants for other than Basic Services.
 9. Providing data or services of the types described in Exhibit B, when Owner retains Engineer to provide such data or services instead of Owner furnishing the same.
 10. Providing the following services:
 - a. Services attributable to more prime construction contracts than specified in Paragraph A1.03.D.
 - b. Services to arrange for performance of construction services for Owner by contractors other than the principal prime Contractor, and administering Owner's contract for such services.
 11. Services during out-of-town travel required of Engineer, other than for visits to the Site or Owner's office as required in Basic Services (Part 1 of Exhibit A).
 12. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructability review requested by Owner; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other documents as a result of such review processes.
 13. Preparing additional bidding-related documents (or requests for proposals or other construction procurement documents) or Construction Contract Documents for alternate bids or cost estimates requested by Owner for the Work or a portion thereof.
 14. Assistance in connection with bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services, except when such assistance is required to complete services required by Paragraph 5.02.A and Exhibit F.
 15. Preparing conformed Construction Contract Documents that incorporate and integrate the content of all Addenda and any amendments negotiated by Owner and Contractor.
 16. Providing Construction Phase services beyond the original date for completion and readiness for final payment of Contractor, but only if such services increase the total quantity of services to be performed in the Construction Phase, rather than merely shifting performance of such services to a later date.
 17. Preparing Record Drawings, and furnishing such Record Drawings to Owner.

Exhibit A – Engineer's Services

EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services.

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18. Supplementing Record Drawings with information regarding the completed Project, Site, and immediately adjacent areas obtained from field observations, Owner, utility companies, and other reliable sources.
19. Conducting surveys, investigations, and field measurements to verify the accuracy of Record Drawing content obtained from Contractor, Owner, utility companies, and other sources; revise and supplement Record Drawings as needed.
20. Preparation of operation, maintenance, and staffing manuals.
21. Protracted or extensive assistance in refining and adjusting of Project equipment and systems (such as initial startup, testing, and balancing).
22. Assistance to Owner in training Owner's staff to operate and maintain Project equipment and systems.
23. Assistance to Owner in developing systems and procedures for (a) control of the operation and maintenance of Project equipment and systems, and (b) related recordkeeping.
24. Preparing to serve or serving as a consultant or witness for Owner in any litigation, arbitration, lien or bond claim, or other legal or administrative proceeding involving the Project.
25. Overtime work requiring higher than regular rates.
26. Providing construction surveys and staking to enable Contractor to perform its work other than as required under Paragraph A1.05.A.8; any type of property surveys or related engineering services needed for the transfer of interests in real property; and providing other special field surveys.
27. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner.
28. Extensive services required during any correction period, or with respect to monitoring Contractor's compliance with warranties and guarantees called for in the Construction Contract (except as agreed to under Basic Services).
29. Other additional services performed or furnished by Engineer not otherwise provided for in this Agreement.

A2.02 *Additional Services Not Requiring Owner's Written Authorization*

- A. Engineer shall advise Owner that Engineer is commencing to perform or furnish the Additional Services of the types listed below. For such Additional Services, Engineer need not request or obtain specific advance written authorization from Owner. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice to cease from Owner.
 1. Services in connection with Work Change Directives and Change Orders to reflect changes requested by Owner.

2. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or equal" items; services after the award of the Construction Contract in evaluating and determining the acceptability of a proposed "or equal" or substitution which is found to be inappropriate for the Project; evaluation and determination of an excessive number of proposed "or equals" or substitutions, whether proposed before or after award of the Construction Contract.
3. Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.
4. Additional or extended services arising from (a) the presence at the Site of any Constituent of Concern or items of historical or cultural significance, (b) emergencies or acts of God endangering the Work, (c) damage to the Work by fire or other causes during construction, (d) a significant amount of defective, neglected, or delayed Work, (e) acceleration of the progress schedule involving services beyond normal working hours, or (f) default by Contractor.
5. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of the Work by Owner prior to Substantial Completion.
6. Evaluating unreasonable or frivolous requests for interpretation or information (RFIs), Change Proposals, or other demands from Contractor or others in connection with the Work, or an excessive number of RFIs, Change Proposals, or demands.
7. Reviewing a Shop Drawing or other Contractor submittal more than three times, as a result of repeated inadequate submissions by Contractor.
8. While at the Site, compliance by Engineer and its staff with those terms of Owner's or Contractor's safety program provided to Engineer subsequent to the Effective Date that exceed those normally required of engineering personnel by federal, State, or local safety authorities for similar construction sites.

This is **EXHIBIT B**, consisting of 3 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated 6/7/2022.

Owner's Responsibilities

Article 2 of the Agreement is supplemented to include the following agreement of the parties.

B2.01 In addition to other responsibilities of Owner as set forth in this Agreement, Owner shall at its expense:

- A. Provide Engineer with all criteria and full information as to Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations.
- B. Give instructions to Engineer regarding Owner's procurement of construction services (including instructions regarding advertisements for bids, instructions to bidders, and requests for proposals, as applicable), Owner's construction contract practices and requirements, insurance and bonding requirements, electronic transmittals during construction, and other information necessary for the finalization of Owner's bidding-related documents (or requests for proposals or other construction procurement documents), and Construction Contract Documents. Furnish copies (or give specific directions requesting Engineer to use copies already in Engineer's possession) of all design and construction standards, Owner's standard forms, general conditions (if other than EJCDC® C-700, Standard General Conditions of the Construction Contract, 2013 Edition), supplementary conditions, text, and related documents and content for Engineer to include in the draft bidding-related documents (or requests for proposals or other construction procurement documents), and draft Construction Contract Documents, when applicable. Owner shall have responsibility for the final content of (1) such bidding-related documents (or requests for proposals or other construction procurement documents), and (2) those portions of any Construction Contract other than the design (as set forth in the Drawings, Specifications, or otherwise), and other engineering or technical matters; and Owner shall seek the advice of Owner's legal counsel, risk managers, and insurance advisors with respect to the drafting and content of such documents.
- C. Furnish to Engineer any other available information pertinent to the Project including reports and data relative to previous designs, construction, or investigation at or adjacent to the Site.
- D. Following Engineer's assessment of initially-available Project information and data and upon Engineer's request, obtain, furnish, or otherwise make available (if necessary through title searches, or retention of specialists or consultants) such additional Project-related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services. Such additional information or data would generally include the following:
 - 1. Property descriptions.
 - 2. Zoning, deed, and other land use restrictions.
 - 3. Utility and topographic mapping and surveys.

4. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.
 5. Explorations and tests of subsurface conditions at or adjacent to the Site; geotechnical reports and investigations; drawings of physical conditions relating to existing surface or subsurface structures at the Site; hydrographic surveys, laboratory tests and inspections of samples, materials, and equipment; with appropriate professional interpretation of such information or data.
 6. Environmental assessments, audits, investigations, and impact statements, and other relevant environmental, historical, or cultural studies relevant to the Project, the Site, and adjacent areas.
 7. Data or consultations as required for the Project but not otherwise identified in this Agreement.
- E. Arrange for safe access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under the Agreement.
- F. Recognizing and acknowledging that Engineer's services and expertise do not include the following services, provide, as required for the Project:
1. Accounting, bond and financial advisory (including, if applicable, "municipal advisor" services as described in Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) and the municipal advisor registration rules issued by the Securities and Exchange Commission), independent cost estimating, and insurance counseling services.
 2. Legal services with regard to issues pertaining to the Project as Owner requires, Contractor raises, or Engineer reasonably requests.
 3. Such auditing services as Owner requires to ascertain how or for what purpose Contractor has used the money paid.
- G. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of samples, materials, and equipment required by the Construction Contract Documents (other than those required to be furnished or arranged by Contractor), or to evaluate the performance of materials, equipment, and facilities of Owner, prior to their incorporation into the Work with appropriate professional interpretation thereof. Provide Engineer with the findings and reports generated by testing laboratories, including findings and reports obtained from or through Contractor.
- H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by Engineer and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.

- I. Advise Engineer of the identity and scope of services of any independent consultants employed by Owner to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.
- J. If Owner designates a construction manager or an individual or entity other than, or in addition to, Engineer to represent Owner at the Site, define and set forth as an attachment to this Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of Engineer.
- K. If more than one prime contract is to be awarded for the Work designed or specified by Engineer, then designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of Engineer as an attachment to this Exhibit B that is to be mutually agreed upon and made a part of this Agreement before such services begin.
- L. Inform Engineer in writing of any specific requirements of safety or security programs that are applicable to Engineer, as a visitor to the Site.
- M. Examine all alternative solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer (including obtaining advice of an attorney, risk manager, insurance counselor, financial/municipal advisor, and other advisors or consultants as Owner deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.
- N. Inform Engineer regarding any need for assistance in evaluating the possible use of Project Strategies, Technologies, and Techniques, as defined in Exhibit A.
- O. Advise Engineer as to whether Engineer's assistance is requested in identifying opportunities for enhancing the sustainability of the Project.
- P. Place and pay for advertisement for Bids in appropriate publications.
- Q. Furnish to Engineer data as to Owner's anticipated costs for services to be provided by others (including, but not limited to, accounting, bond and financial, independent cost estimating, insurance counseling, and legal advice) for Owner so that Engineer may assist Owner in collating the various cost categories which comprise Total Project Costs.
- R. Attend and participate in the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Site visits to determine Substantial Completion and readiness of the completed Work for final payment.
- S. Authorize Engineer to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement, as required.
- T. Perform or provide the following: N/A

This is **EXHIBIT C**, consisting of 7 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated 6/7/2022.

Payments to Engineer for Services and Reimbursable Expenses
COMPENSATION PACKET BC-3: Basic Services – Percentage of Construction Cost

Article 2 of the Agreement is supplemented to include the following agreement of the parties:

ARTICLE 2 – OWNER’S RESPONSIBILITIES

C2.01 Compensation for Basic Services (other than Resident Project Representative) – Percentage of Construction Cost Method of Payment

- A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative, if any, as follows:
1. *General:* An amount equal to **nine (9)** percent of the Construction Cost. This amount includes compensation for Engineer’s Services and services of Engineer’s Consultants, if any. The percentage of Construction Cost noted herein accounts for labor, overhead, profit, and expenses (other than any expressly allowed Reimbursable Expenses).
 2. As a basis for payment to Engineer, Construction Cost will be based on one or more of the following determinations with precedence in the order listed for Work designed or specified by Engineer:
 - a. For Work designed or specified and incorporated in the completed Project, the actual final price of the Construction Contract(s), as duly adjusted by Change Orders.
 - b. For Work designed or specified but not constructed, the lowest bona fide Bid received from a qualified bidder for such Work; or, if the Work is not bid, the lowest bona fide negotiated proposal for such Work.
 - c. For Work designed or specified but not constructed upon which no such Bid or proposal is received, Engineer’s most recent opinion of probable Construction Cost.
 - d. Labor furnished by Owner for the Project will be included in the Construction Cost at current market rates including a reasonable allowance for overhead and profit. Materials and equipment furnished by Owner will be included at current market prices.
 - e. For purposes of determining Construction Cost under this provision, no deduction is to be made from Construction Contract pricing on account of any penalty, liquidated damages, or other amounts withheld from payments to Contractor(s).
 3. *Reimbursable Expenses:* In addition to the Percentage of Construction Cost, Engineer is also entitled to reimbursement from Owner for the following Reimbursable Expenses: **NONE**.

4. *Progress Payments:*

- a. The portion of the amounts billed for Engineer's services that is on account of the Percentage of Construction Cost will be based upon Engineer's estimate of the percentage of the total services actually completed during the billing period. If any Reimbursable Expenses are expressly allowed, Engineer may also bill for any such Reimbursable Expenses incurred during the billing period.
- b. Upon conclusion of each phase of Basic Services, Owner shall pay such additional amount, if any, as may be necessary to bring total compensation paid during such phase on account of the percentage of Construction Cost to the following estimated percentages of total compensation payable on account of the percentage of Construction Cost for all phases of Basic Services:

Preliminary Design Phase	30%
Final Design Phase	60%
Bidding or Negotiating Phase	10%
	100%

- c. Engineer may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered, but shall not exceed the total estimated compensation amount unless approved in writing by Owner.

COMPENSATION PACKET RPR-2:
Resident Project Representative – Standard Hourly Rates

Article 2 of the Agreement is supplemented to include the following agreement of the parties:

C2.04 *Compensation for Resident Project Representative Basic Services – Standard Hourly Rates Method of Payment*

A. *Owner shall pay Engineer for Resident Project Representative Basic Services as follows:*

1. *Resident Project Representative Services:* For services of Engineer's Resident Project Representative under Paragraph A1.05.A of Exhibit A, an amount equal to the cumulative hours charged to the Project by each class of Engineer's personnel times Standard Hourly Rates for each applicable billing class for all Resident Project Representative services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this paragraph is estimated to be **\$78,500.00** based upon part-time RPR services on an eight-hour workday, Monday through Friday, over a **120 day** construction schedule.

B. *Compensation for Reimbursable Expenses:*

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01, and are directly related to the provision of Resident Project Representative or Post-Construction Basic Services, Owner shall pay Engineer **NONE**.

C. *Other Provisions Concerning Payment Under this Paragraph C2.04:*

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of **1.2**.
2. *Factors:* The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
3. *Estimated Compensation Amounts:*
 - a. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
 - b. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that the total compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof, allowing Owner to consider its options, including suspension or termination of Engineer's services for Owner's convenience. Upon notice Owner and Engineer promptly shall review the matter of services remaining to be performed and

compensation for such services. Owner shall either exercise its right to suspend or terminate Engineer's services for Owner's convenience, agree to such compensation exceeding said estimated amount, or agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Owner decides not to suspend Engineer's services during negotiations and Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, then Engineer shall be paid for all services rendered hereunder.

4. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

**COMPENSATION PACKET AS-1:
Additional Services – Standard Hourly Rates**

Article 2 of the Agreement is supplemented to include the following agreement of the parties:

C2.05 Compensation for Additional Services – Standard Hourly Rates Method of Payment

- A. Owner shall pay Engineer for Additional Services, if any, as follows:
1. *General:* For services of Engineer's personnel engaged directly on the Project pursuant to Paragraph A2.01 or A2.02 of Exhibit A, except for services as a consultant or witness under Paragraph A2.01.A.20, (which if needed shall be separately negotiated based on the nature of the required consultation or testimony) an amount equal to the cumulative hours charged to the Project by each class of Engineer's personnel times Standard Hourly Rates for each applicable billing class for all Additional Services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any.
- B. *Compensation For Reimbursable Expenses:*
1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01 and are directly related to the provision of Additional Services, Owner shall pay Engineer as mutually agreed upon by both parties.
 2. The amounts payable to Engineer for Reimbursable Expenses, if any, will be the Additional Services-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such Additional Services, the latter multiplied by a factor of 1.1.
 3. The Reimbursable Expenses Schedule will be adjusted annually (as of January 1, 2023) to reflect equitable changes in the compensation payable to Engineer.
- C. *Other Provisions Concerning Payment for Additional Services:*
1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of 1.2.
 2. *Factors:* The external Reimbursable Expenses and Engineer's Consultant's Factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
 3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

This is **Appendix 2 to EXHIBIT C**, consisting of **1** pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated **6/7/2022**.

Standard Hourly Rates Schedule - 2020

A. *Standard Hourly Rates:*

1. Standard Hourly Rates are set forth in this Appendix 2 to this Exhibit C and include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.
2. The Standard Hourly Rates apply only as specified in Article C2.

B. *Schedule:*

Hourly rates for services performed on or after the date of the Agreement are:

Senior Engineer	\$175/Hour
Project Engineer	\$150/Hour
Junior Engineer	\$125/Hour
Engineering Intern	\$115/Hour
Graduate Engineer	\$105/Hour
Senior AutoCad Technician	\$105/Hour
AutoCad Technician	\$ 90/Hour
Senior Resident Project Representative	\$ 95/Hour
Resident Project Representative	\$ 85/Hour
Field Crew	\$175/Hour
Administrative	\$ 45/Hour

This is **EXHIBIT D**, consisting of 5 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated 6/7/2022.

Duties, Responsibilities, and Limitations of Authority of Resident Project Representative

Article 1 of the Agreement is supplemented to include the following agreement of the parties:

ARTICLE 1 - SERVICES OF ENGINEER

D1.01 *Resident Project Representative*

- A. Engineer shall furnish a Resident Project Representative ("RPR") to assist Engineer in observing progress and quality of the Work. The RPR may provide full time representation or may provide representation to a lesser degree. RPR is Engineer's representative at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions.
- B. Through RPR's observations of the Work, including field checks of materials and installed equipment, Engineer shall endeavor to provide further protection for Owner against defects and deficiencies in the Work. However, Engineer shall not, as a result of such RPR observations of the Work, supervise, direct, or have control over the Work, nor shall Engineer (including the RPR) have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to the Work or any Constructor's work in progress, for the coordination of the Constructors' work or schedules, or for any failure of any Constructor to comply with Laws and Regulations applicable to the performing and furnishing of its work. The Engineer (including RPR) neither guarantees the performances of any Constructor nor assumes responsibility for any Constructor's failure to furnish and perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents. In addition, the specific terms set forth in Exhibit A, Paragraph A1.05, of this Agreement are applicable.
- C. The duties and responsibilities of the RPR are as follows:
 - 1. *General:* RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner only with the knowledge of and under the direction of Engineer.
 - 2. *Schedules:* Review the progress schedule, schedule of Shop Drawing and Sample submittals, schedule of values, and other schedules prepared by Contractor and consult with Engineer concerning acceptability of such schedules.
 - 3. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.

4. *Safety Compliance:* Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
5. *Liaison:*
 - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Construction Contract Documents.
 - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
6. *Clarifications and Interpretations:* Receive from Contractor submittal of any matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. Report to Engineer regarding such RFIs. Report to Engineer when clarifications and interpretations of the Construction Contract Documents are needed, whether as the result of a Contractor RFI or otherwise. Transmit Engineer's clarifications, interpretations, and decisions to Contractor. ,
7. *Shop Drawings and Samples:*
 - a. Record date of receipt of Samples and Contractor-approved Shop Drawings.
 - b. Receive Samples that are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
 - c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal, if RPR believes that the submittal has not been received from Contractor, or has not been approved by Contractor or Engineer.
8. *Proposed Modifications:* Consider and evaluate Contractor's suggestions for modifications to the Drawings or Specifications, and report such suggestions, together with RPR's recommendations, if any, to Engineer. Transmit Engineer's response (if any) to such suggestions to Contractor.
9. *Review of Work; Defective Work:*
 - a. Report to Engineer whenever RPR believes that any part of the Work is defective under the terms and standards set forth in the Construction Contract Documents, and provide recommendations as to whether such Work should be corrected, removed and replaced, or accepted as provided in the Construction Contract Documents.

- b. Inform Engineer of any Work that RPR believes is not defective under the terms and standards set forth in the Construction Contract Documents, but is nonetheless not compatible with the design concept of the completed Project as a functioning whole, and provide recommendations to Engineer for addressing such Work. ; and
- c. Advise Engineer of that part of the Work that RPR believes should be uncovered for observation, or requires special testing, inspection, or approval.

10. *Inspections, Tests, and System Start-ups:*

- a. Consult with Engineer in advance of scheduled inspections, tests, and systems start-ups.
- b. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
- c. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
- d. Observe whether Contractor has arranged for inspections required by Laws and Regulations, including but not limited to those to be performed by public or other agencies having jurisdiction over the Work.
- e. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work, record the results of these inspections, and report to Engineer.

11. *Records:*

- a. Maintain at the Site orderly files for correspondence, reports of job conferences, copies of Construction Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Construction Contract, RFIs, Engineer's clarifications and interpretations of the Construction Contract Documents, progress reports, approved Shop Drawing and Sample submittals, and other Project-related documents.
- b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, deliveries of equipment or materials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.
- c. Upon request from Owner to Engineer, photograph or video Work in progress or Site conditions.
- d. Record and maintain accurate, up-to-date lists of the names, addresses, fax numbers, e-mail addresses, websites, and telephone numbers (including mobile numbers) of all Contractors, Subcontractors, and major Suppliers of materials and equipment.

- e. Maintain records for use in preparing Project documentation.
- f. Upon completion of the Work, furnish original set of all RPR Project documentation to Engineer.

12. *Reports:*

- a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Furnish to Engineer and Owner copies of all inspection, test, and system start-up reports.
- d. Immediately inform Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, possible force majeure or delay events, damage to property by fire or other causes, or the discovery of any potential differing site condition or Constituent of Concern.

13. *Payment Requests:* Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

14. *Certificates, Operation and Maintenance Manuals:* During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

15. *Completion:*

- a. Participate in Engineer's visits to the Site regarding Substantial Completion, assist in the determination of Substantial Completion, and prior to the issuance of a Certificate of Substantial Completion submit a punch list of observed items requiring completion or correction.
- b. Participate in Engineer's visit to the Site in the company of Owner and Contractor, to determine completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.
- c. Observe whether all items on the final punch list have been completed or corrected, and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.

D. Resident Project Representative shall not:

1. Authorize any deviation from the Construction Contract Documents or substitution of materials or equipment (including "or-equal" items).
2. Exceed limitations of Engineer's authority as set forth in this Agreement.
3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers, or any Constructor.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of the Work, by Contractor or any other Constructor.
5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.

This is **EXHIBIT G**, consisting of 2 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated 6/7/2022.

Insurance

Paragraph 6.05 of the Agreement is supplemented to include the following agreement of the parties:

G6.05 Insurance

A. The limits of liability for the insurance required by Paragraph 6.05.A and 6.05.B of the Agreement are as follows:

1. By Engineer:

a. Workers' Compensation: Statutory

b. Employer's Liability --

- 1) Bodily injury, each accident: \$100,000
- 2) Bodily injury by disease, each employee: \$100,000
- 3) Bodily injury/disease, aggregate: \$500,000

c. General Liability --

- 1) Each Occurrence (Bodily Injury and Property Damage): \$1,000,000
- 2) General Aggregate: \$2,000,000

d. Excess or Umbrella Liability --

- 1) Per Occurrence: \$2,000,000
- 2) General Aggregate:

e. Automobile Liability --Combined Single Limit (Bodily Injury and Property Damage):

\$1,000,000

f. Professional Liability --

- 1) Each Claim Made \$1,000,000
- 2) Annual Aggregate \$1,000,000

g. Other (specify): N/A

B. *Additional Insureds:*

1. The following individuals or entities are to be listed on Owner's general liability policies of insurance as additional insureds:
 - a. Shows, Dearman and Waits, Inc.
Engineer
 - b. N/A
Engineer's Consultant
 - c. N/A
Engineer's Consultant
 - d. N/A
[other]
2. During the term of this Agreement the Engineer shall notify Owner of any other Consultant to be listed as an additional insured on Owner's general liability policies of insurance.
3. The Owner shall be listed on Engineer's general liability policy as provided in Paragraph 6.05.A.

Forrest Avenue Sewer Rehabilitation Attachment A

0 150 300 600 900 1,200 Feet



Grand Total: \$725,000.00

— Sewer Replacement

Presented By: SHOWS, DEARMAN, & WAITS, INC.
301 2nd Ave || Hattiesburg, MS 39401 || (p) 601.544.1821 || sd-w.com

Project #12233
Date: 04/11/2022
Scale: 1"=300'



Memorandum

To: Mayor Toby Barker and Members of City Council

From:

cc:

Date: Tuesday, June 7, 2022

Re: Approve Contract with Shows, Dearman and Waits, Inc., for engineering services related to the development of Storm Water Mapping and Modeling, in an amount not to exceed \$96,437.00 and authorize the Mayor to execute in duplicate.
File Number: 2022-405
Minute Book #

Summary

Approve contract with Shows, Dearman and Waits, Inc., for engineering services related to the development of Storm Water Mapping and Modeling, in the amount of \$96,437.00 and authorize the Mayor to execute in duplicate.

Recommendation Statement

I recommend approval of the Engineering Services Contract.

Please place this on the June 7, 2022 City Council meeting for consideration.



Engineering Progress

June 1, 2022

City of Hattiesburg
Post Office Box 1898
Hattiesburg MS 39403-1898

Attn: Lamar Rutland, P.E.

RE: Development of Storm Water Mapping and Modeling

Dear Mr. Rutland:

As has been discussed previously, the City of Hattiesburg has an aging and extensive storm water system. To date, there has been no comprehensive record keeping on the system in terms of mapping. Therefore, the extent, condition, size and materials of the system are not entirely known by the City of Hattiesburg. SDW, Inc. has been a Hattiesburg owned and operated engineering firm since 1963. We have a large database of topographic information that could potentially be used to ascertain the feasibility of a city-wide storm water system map. The intent of this project would be to determine the amount of useful information contained in the SDW, Inc. file database from approximately the last 10 years. Then convert the useful information to a Geospatial Information System database. This database would then be used to produce a map of the known locations of storm water infrastructure. The GIS database and maps would be delivered to the City of Hattiesburg upon completion of the project.

Completion of this project would allow the City of Hattiesburg to recognize where informational gaps exist and budget to obtain or verify the required information. This project would also lay the foundation to begin to inspect the condition of existing infrastructure and eventually produce a flow model of the system. Due to the speculative nature of this phase of the project, SDW, Inc. proposes an hourly not to exceed contract in the amount of **\$96,437**.

I appreciate this opportunity to provide you with these services and look forward to continued relationship with the City of Hattiesburg. Should you have questions or comments, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Shea McNease', is written over the word 'Sincerely,'.

Shea McNease, P.E.
Project Engineer

Approved;

Honorable Toby Barker, Mayor



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Approve Subcontract with J.L. McCool Contractors, Inc. for the State Aid Project No. DECD-001-018(35)BO identified as Highway 49, Camp, Adeline and Mamie Project and authorize the Mayor to execute subcontract in multiples.
File Number: 2022-348
Minute Book #

Summary

Approve subcontract with J.L. McCool Contractors, Inc. for the State Aid Project No. DECD-001-018(35)BO identified as Highway 49, Camp, Adeline and Mamie project; authorize the Mayor to execute subcontract in multiples.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

Board of Supervisors City of Hattiesburg
Forrest _____ County

Office of State Aid Road Construction
Mississippi Department of Transportation

Request No. 4

Project No. DECD-001-018(35)BO

Date 03/10/22

Gentlemen:

I (we) (the prime contractor) (a subcontractor) propose to subcontract the following items to _____

J.L. McCool Contractors, Inc.

in accordance with Special Provisions in our contract governing subletting a portion of the contract. In the event of your disapproval of this subcontracting or of your disapproval of performance of such subcontractor at any time, I (we) agree to perform such item or items of work with my (our) own organization in full compliance with all applicable terms of our contract. I (we) understand that this procedure does not relieve us of any of the responsibility under our contract.

I certify that said party is particularly experienced and equipped for such work and that the attached subcontract is the sole agreement for the work and that all pertinent provisions and requirements of the contract have been explained to this proposed subcontractor, and that when applicable, federally required contract provisions are physically incorporated into the agreement furnished to the subcontractor.

The prices shown below are the prime contract unit price:

Spec. Pay Item No.	Item	Quantity	Unit	Prime Cont. Unit Price	Amount
	SEE ATTACHMENT	1	LS	\$	\$ 171,445.75
				\$	\$
				\$	\$
				\$	\$
				\$	\$

I (we) hereby certify that the persons or firms are designated hereon as subcontractors with the knowledge and consent of the persons or firms named.

Date 03/10/22, 20__

Walters Construction Co. Inc

By: [Signature] Prime Contractor

Address: 2051 HWY 84 East Laurel MS 39443

Approval recommended: [Signature] 05-11, 2022

County Engineer

Approved: [Signature]
City of Hattiesburg
County

(By order of the Board, dated _____)

By _____

Approved recommended: President Mayor, 20__

State Aid District Engineer

Total this Request 4 \$ 171,445.75 = ____ %

Previous Request 3 \$ 1,564,170.12 = ____ %

Total to Date 4 \$ 1,735,615.87 = ____ %

I (we) hereby certify that the use of our names as subcontractor on the above items was, and is, with our knowledge and consent.

Date 3-10, 2022

J.L. McCool Contractors, Inc.

By: [Signature] (Sub) Subcontractor

Address: PO Box 1765, Pascagoula, MS 39568

Approved: _____, 20__

State Aid Engineer

Approved: _____, 20__

Executive Director, Mississippi Department of Transportation

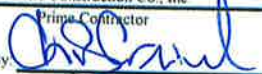
ATTACHMENT

Subcontractor: J.L. McCool Contractors, Inc.
 Project: Hwy 49, Camp St., Adeline St., & Mamie St.
 Location: Forrest County
 Number: DECD-001-018(35)B
 Request No.: 4

Pay Item	Pay Item Description	Quantity	Unit	TOTAL THIS REQUEST: \$ 171,445.75		
				Prime Contract Unit	Extension	
				Price		
S-200-A	MOBILIZATION	1.000	LS	\$ 45,000.00	\$ 45,000.00	
S-202-C	REMOVAL OF TRAFFIC STRIPE (ALL TYPES)	7,665.000	LF	\$ 2.30	\$ 17,629.50	
S-202-D	REMOVAL OF LEGEND (ALL TYPES)	14.000	SY	\$ 45.80	\$ 641.20	
S-619-E	4" WIDE TEMPORARY TRAFFIC STRIPE	15,500.000	MILE	\$ 0.30	\$ 4,650.00	
S-619-F	DETAIL TRAFFIC STRIPE	2,035.000	LF	\$ 1.15	\$ 2,340.25	
S-621-B	4" WIDE THERMOPLASTIC TRAFFIC STRIPE (CONTINUOUS WHITE) (90 MILS)	0.025	MILE	\$ 5,725.00	\$ 143.13	
S-621-C	4" WIDE THERMOPLASTIC EDGE STRIPE (CONTINUOUS WHITE) (60 MILS)	0.376	MILE	\$ 5,725.00	\$ 2,152.60	
S-621-E-1	4" WIDE THERMOPLASTIC TRAFFIC STRIPE (CONTINUOUS YELLOW) (90 MILS)	472.000	LF	\$ 2.30	\$ 1,085.60	
S-621-F	4" WIDE THERMOPLASTIC EDGE STRIPE (CONTINUOUS YELLOW) (90 MILS)	0.261	MILE	\$ 5,725.00	\$ 1,494.23	
S-621-G-1	THERMOPLASTIC DETAIL STRIPE (4" EQUIVALENT LENGTH) (WHITE) (90 MILS)	316.000	LF	\$ 2.30	\$ 726.80	
S-621-G-2	THERMOPLASTIC DETAIL STRIPE (4" EQUIVALENT LENGTH) (YELLOW) (90 MILS)	2,316.000	LF	\$ 2.30	\$ 5,326.80	
S-621-H-1	THERMOPLASTIC LEGEND (WHITE) (1 20 MILS)	3,408.000	LF	\$ 3.40	\$ 11,587.20	
S-621-H-2	THERMOPLASTIC LEGEND (WHITE) (1 20 MILS)	1,795.000	SF	\$ 11.45	\$ 20,552.75	
S-621-H-3	THERMOPLASTIC LEGEND (YELLOW) (60 MILS)	88.000	LF	\$ 3.45	\$ 303.60	
626-A	6" THERMOPLASTIC TRAFFIC STRIPE SKIP WHITE	0.374	MILE	\$ 5,725.00	\$ 2,141.15	
626-B	6" THERMOPLASTIC TRAFFIC STRIPE CONTINUOUS WHITE	0.780	MILE	\$ 5,725.00	\$ 4,465.50	
626-C	6" THERMOPLASTIC EDGE STRIPE CONTINUOUS WHITE	0.913	MILE	\$ 5,725.00	\$ 5,226.93	
626-E	6" THERMOPLASTIC TRAFFIC STRIPE CONTINUOUS YELLOW	0.391	MILE	\$ 5,725.00	\$ 2,238.48	
626-F	6" THERMOPLASTIC EDGE STRIPE CONTINUOUS YELLOW	1.156	MILE	\$ 5,725.00	\$ 6,618.10	
626-G	THERMOPLASTIC DETAIL STRIPE SKIP WHITE (2' STRIP - 6' GAP)	92.000	LF	\$ 2.30	\$ 211.60	
626-G	THERMOPLASTIC DETAIL STRIPE WHITE	8,557.000	LF	\$ 2.30	\$ 19,681.10	
626-G	THERMOPLASTIC DETAIL STRIPE YELLOW	957.000	LF	\$ 2.30	\$ 2,201.10	
626-G	THERMOPLASTIC DETAIL STRIPE, BLUE	347.000	LF	\$ 9.15	\$ 3,175.05	
626-H	THERMOPLASTIC LEGEND, BLUE	46.000	SF	\$ 28.50	\$ 1,311.00	
S-627-C	RED-CLEAR REFLECTIVE RAISED MARKERS	326.000	EA	\$ 11.50	\$ 3,749.00	
S-627-D	TWO-WAY YELLOW REFLECTIVE RAISED MARKERS	317.000	EA	\$ 11.50	\$ 3,645.50	
628-E	COLD PLASTIC DETAIL STRIPE, YELLOW	344.000	LF	\$ 9.15	\$ 3,147.60	

Walters Construction Co., Inc.

Prime Contractor

By: 

J.L. McCool Contractors, Inc.

(Sub) Subcontractor

By: 



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Approve Change Order with Hanco Corp. General Contractors for various miscellaneous items for the Hattiesburg Public Safety Complex Project, for an increase to the contract in the amount of \$137,792.54.
File Number: 2022-384
Minute Book #

Summary

Approve change order with Hanco Corp. General Contractors for various miscellaneous items for the Hattiesburg Public Safety Complex project thereby increasing the contract amount by \$137,792.54.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

4/5/2022

Larry Albert

Albert and Associates Architects, PA

Project: Hattiesburg Public Safety Complex

Re: Change Order Proposal for Misc. Items requested as detailed below

Dear Mr. Albert:

Per request we would like to provide you with a proposal for changes as referenced above. Hanco Corporation will complete additional work per lump sum price per item as described.

1. Additional requested electrical Items as described in Chain Electric's Proposal.

- A. Additional CCTV security cameras- Install 5ea additional new CCTV security cameras, (2) on south exterior of building above the employee secure parking area, (1) on west exterior of building between southwest corner and loading dock, and (2) in covered parking garage area.
- B. Additional Cat-5 Cables for watch dog system. Install (5) CAT-5 cables from Comm Room to same locations as additional CCTV Security Cameras for Watch Dog receivers.
- C. Additional TV Monitor locations in dispatch- Install circuits and receptacles, data outlets, and cable, and CATV outlets and cable for (4) additional TV monitor locations in Dispatch
- D. Additional work to add 12 ea additional circuits and receptacles to the 911 work stations

Chain Elect Proposal	\$40,148.00
Hanco Ceiling removal/Replacement	\$3,628.00
Overhead	\$4,377.00
Profit	\$4,377.00
Bonds, Tax, Insurance	\$3,151.00
Total	\$55,681.00

2. Additional work to furnish and install 6 ea 2" Hardwood wood blinds in the interrogation room hallways.

Material	\$2,352.00
Labor	\$1,200.00
Overhead	\$355.00
Profit	\$355.00
Bonds, Tax, Insurance	\$255.00
Total	\$2,798.00

3. **Additional work to furnish and install cast aluminum letters with medium bronze finish to read "METHODIST HOSPITAL" above the main entry door.** Letters will be approximately 5" tall and ½" thick.

Material	\$3,740.00
Labor	\$1,700.00
Overhead	\$544.00
Profit	\$544.00
Bonds, Tax, Insurance	\$391.00

Total **\$6,919.00**

4. **Additional Work to Furnish and Install (2) decorative light fixtures at the entrance of the Historic Hospital.**

Chain Electric Proposal	\$5,461.00
Sheetrock patch and repaint	\$750.00
Overhead	\$621.00
Profit	\$621.00
Bonds, Tax, Insurance	\$447.00

Total **\$7,900.00**

5. **Construct 6ea louvers using 8 ga McNichol's perforated metal with 1" round holes.**

McNichol's metal material	\$6,167.10
Labor	\$3,900.00
Scissor lift rental	\$700.00
Finish carpentry	\$1,200.00
Painting	\$1,500.00
Overhead	\$1,346.00
Profit	\$1,346.00
Bonds, Tax, Insurance	\$969.54

Total **\$17,128.54**

6. **Install wood paneling to match "Cherry" accent wall on the reception desk in the police lobby per McNeil Cabinets scope of work**

Subcontractor's Proposal	\$4,150.00
Cleaning	\$500.00
Overhead	\$465.00
Profit	\$465.00
Bonds, Tax, Insurance	\$334.00

Total **\$5,914.00**

7. **Stained Concrete in the courtyard. Stained concrete will start east of the corridor b101 stop and transition at the half wall located on column line 6.**

Material and Labor	\$4,920.00
Overhead	\$492.00
Profit	\$492.00
Bonds, Tax, Insurance	\$354.00
Total	\$6,258.00

8. **Furnish and install building plaques. One each 32"x60" Bronze plaque and a 12" x 24" Bronze plaque.**

Material	\$8,800.00
Install	\$1560.00
Overhead	\$1036.00
Profit	\$1036.00
Bonds, Tax, Insurance	\$745.00
Total	\$13,177.00

9. **Furnish and Install signage to read "Police Administration" in blue and "Courtroom" in bronze.**

Material	\$7,540.00
Labor	\$3,480.00
Overhead	\$1102.00
Profit	\$1102.00
Bonds, Tax, Insurance	\$793.00
Total	\$14,017.00

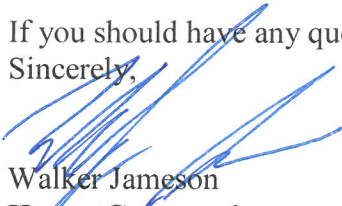
If all items are excepted add additional \$8,000.00 for supervision.

If all items are not accepted add \$1,300.00 per item for supervision

If any or all items are accepted, this will not delay substantial / final completion or final payment/ retainage release

If you should have any questions, please give me a call.

Sincerely,



Walker Jameson
Hanco Corporation



1308 W. Pine Street
P. O. Box 2058
Hattiesburg, MS 39403-2058
Telephone (601) 545-3800
FAX (601) 584-8320
e-mail: bchain@bchain.com

February 28, 2022

Hanco Corporation
6316 Hwy 49
Hattiesburg, MS 39401
Attn: Walker Jameson

Re: Hattiesburg Public Safety Complex (HPSC) – Electrical Change Order #7 – Install Decorative Light Fixtures on Historic Hospital Building

Please accept this as our Request for Change Order to install (2) decorative wall mounted light fixtures beside North Door of the Historic Hospital Building Portion of the Hattiesburg Public Safety Complex (HPSC) Project located in Hattiesburg, MS.

LIGHT FIXTURES	\$ 3,250.00
MISCELLANEOUS MATERIAL	\$ 726.00
LABOR AND EQUIPMENT	<u>\$ 1,485.00</u>
TOTAL CHANGE ORDER AMOUNT	<u>\$ 5,461.00</u>

*Prices do not include tax.

*Removal and replacement of sheetrock and finishing will be required and is not included in this proposal.

If you have any questions or concerns, please call me at 601-475-3811 or 601-596-5152.

Thank you,

Harvey Simmons
Manager, Commercial and Industrial Division



1308 W. Pine Street
P. O. Box 2058
Hattiesburg, MS 39403-2058
Telephone (601) 545-3800
FAX (601) 584-8320
e-mail: bchain@bchain.com

February 3, 2022

Hanco Corporation
6316 Hwy 49
Hattiesburg, MS 39401
Attn: Walker Jameson

Re: HPSC – Install Additional Electrical, CCTV Security Cameras, and Data/Comm – Electrical Change Order #5 (Revised from 1-24-2022)

Please accept this as our Request for Change Order to install the following additional electrical, CCTV, and data/comm as requested by the City of Hattiesburg Police Department at the Hattiesburg Public Safety Complex (HPSC) Project located in Hattiesburg, MS.

1-ADDITIONAL CCTV SECURITY CAMERAS – Install (5) total additional new CCTV Security Cameras, (2) on South Exterior of Building above the Employee Secure Parking Area, (1) on West Exterior of Building between southwest corner and Loading Dock, and (2) in Covered Parking Garage Area

TOTAL AMOUNT \$ 27,733.00

2-ADDITIONAL CAT-5 CABLES FOR WATCH DOG SYSTEM – Install (5) CAT-5 cables from Comm Room to same locations as additional CCTV Security Cameras for Watch Dog Receivers

TOTAL AMOUNT \$ 3,080.00

3-ADDITIONAL TV MONITOR LOCATIONS IN DISPATCH – Install circuits and receptacles, data outlets and cable, and CATV outlets and cable for (4) additional TV monitor locations in Dispatch Room

TOTAL AMOUNT \$ 7,370.00

TOTAL CHANGE ORDER AMOUNT \$ 38,183.00

*Price does not include tax.

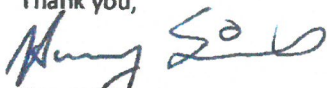
*South Exterior cameras will be mounted approximately 25ft above ground elevation.

*West Exterior camera will be mounted approximately 12ft above ground elevation.

*Covered Parking Garage cameras will be mounted below ceiling.

If you have any questions or concerns, please call me at 601-475-3811 or 601-596-5152.

Thank you,

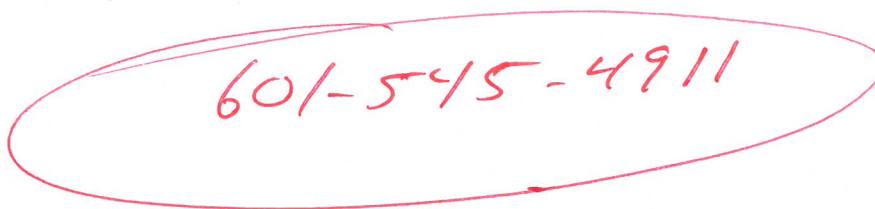
A handwritten signature in blue ink, appearing to read "Harvey Simmons", written over the printed name.

Harvey Simmons

Manager, Commercial and Industrial Division

Received: Monday, April 04, 2022 10:12 AM
From: Harvey Simmons <hsimmons@bchain.com>
To: "wjameson@hancocorp.com" <wjameson@hancocorp.com>
CC: Robert Lincoln <rlincoln@bchain.com>, Andrew Ezelle <aezelle@bchain.com>
Subject: RE: Watson meeting follow-up Hattisburg EMS Dispatch
Date: Mon, 4 Apr 2022 15:12:37 +0000

Attachment: image001.jpg
Attachment: image002.png
Attachment: image003.jpg



Walker,

The cost for HPSC – Electrical C.O. #8 to add (12) additional circuits and receptacles to the 911 workstations as requested is \$1,965.00. Let me know if/when this is approved and Chain will get this work done.

Thanks,

Harvey Simmons
Manager
Commercial and Industrial Division



1308 West Pine Street
Hattiesburg, Mississippi 39401
Office: 601.545.3800
Cell : 601.596.5152
~ **Proven Power** ~

From: wjameson@hancocorp.com <wjameson@hancocorp.com>
Sent: Tuesday, March 29, 2022 3:26 PM
To: Harvey Simmons <hsimmons@bchain.com>
Subject: fw: Watson meeting follow-up Hattisburg EMS Dispatch

Harvey
See below can you get me a price to add this?

Walker Jameson

Hanco Corporation
6316 US Hwy 49
Hattiesburg, MS 39401
601-583-6500
601-606-9175

-----Original Message-----

Date: Tuesday, March 29, 2022 3:20 PM
From: Lucy Sanguinetti <Lucy@ar-architects.com>
To: 'Walker Jameson' <wjameson@hancocorp.com>
cc: Larry Albert <larry@ar-architects.com>, 'Chris Hudson' <chudson@hancocorp.com>



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Approve Relocation Assistance in the amount of \$197,240.00 for the owners and/or tenants being displaced by the acquisition of 3 properties for the construction of the Hall Avenue West Overpass project.
File Number: 2022-394
Minute Book #

Summary

Approve a Relocation Assistance in the amount of \$197,240.00 for relocation assistance to the owners and/or tenants being displaced by the acquisition of 3 properties for the construction of the Hall Avenue West Overpass project.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

**City of Hattiesburg
Hall Avenue West Overpass Project
Relocation Assistance Estimates**

Property ID	Maximum Assistance Amount
PPIN 25251	105,000.00
PPIN 25261	3,500.00
PPIN 32854	27,740.00
PPIN 32854 Tenant	61,000.00
Total	197,240.00

Hensarling, Sharon

From: Rutland, Lamar
Sent: Thursday, May 26, 2022 3:48 PM
To: Hensarling, Sharon
Subject: FW: 25251 - Brown, et al - Relocation Assistance - Up To \$105,000

Lamar Rutland, P.E.
City of Hattiesburg
Director of Engineering
Ph (601)545-4540

From: mrdye@me.com <mrdye@me.com>
Sent: Thursday, May 26, 2022 1:57 PM
To: Rutland, Lamar <lrutland@hattiesburgms.com>
Subject: Fwd: 25251 - Brown, et al - Relocation Assistance - Up To \$105,000

Lamar,
Email sent earlier today.

Begin forwarded message:

From: mrdye@me.com
Subject: 25251 - Brown, et al - Relocation Assistance - Up To \$105,000
Date: May 26, 2022 at 10:54:26 AM CDT
To: "Lamar Rutland, P.E." <lrutland@hattiesburgms.com>

Lamar,

The appraised value of the Brown's land and home is \$48,750.
The home has a 1 car carport, 1,107 sq ft of heated space, two bedrooms, and is in fair condition.

We are seeing two relocation assistance challenges affecting finding a replacement dwelling to offer:
First, lower priced homes are in high demand in this seller's market.
Demand is driving up prices and reducing time a home is available on the market.
Second, the home we offer has to be comparable and decent, safe, and sanitary.
Making a long story short, the home we offer has to be as good or better than the Brown home and in a good state of repair.

We've been searching for replacement housing in anticipation of MDOT's approval of the environmental document.

On Monday, we searched multiple listing service and found 47 homes for sale in Hattiesburg in a price range from \$50,000 to \$150,000.

Most were recently closed or had a pending or contingent sale, meaning they are not currently available on the market.

We did find that 10 homes are currently available in this price range.

We visited all 10 homes and found two homes near the upper part of this range that could be offered.

There is no guarantee that these two homes will still be available in a week or so.

We recommend the City approve up to \$105,000 for relocation assistance for this parcel.

Adding acquisition proceeds of \$48,750 gives us \$153,750 to offer a home (up to \$150,000), provide moving expenses (\$1,850), and pay closing costs (up to \$1,900).

Being mindful this is an up to amount, we will be watching the market to minimize cost and will work expeditiously to compute and offer a home before it becomes unavailable.

Once a home is offered, it sets the maximum amount the Browns are eligible to receive.

The Browns could purchase this home or begin monitoring the market for a home within the amount offered.

Payment will later be requested and based on the amount the Browns actually spend to replace their home.

Therefore, no payment is being requested at this time, but authorization for up to \$105,000 for relocation assistance.

Sincerely,

Mark Dye, SR/WA-RAC

Relocation Agent

ROW-681

Revised: 1/2004

City of Hattiesburg, Mississippi
Relocation Assistance Officer's Statement

File 25261
Project 108639/802000
County Forrest

On April 27, 2022 I contacted
The Estate of Ralph D. Lindsey and gave
relocation advisory assistance. Details of this assistance are summarized below:

MISCELLANEOUS PERSONAL PROPERTY
DEED NOT SIGNED

DOCUMENTATION FOR COMPUTATION
MOVING EXPENSE OFFER

The Estate of Ralph D. Lindsey has personal property stored in the proposed right of way that needs to be moved. The appraiser observed the personal property at the displacement site and noted in the appraisal report as items of personal property not appraised. The relocation agent has obtained an inventory of the personal property to be moved. (See ROW 708, Inventory of Personal Property.) The relocation agent obtained the owner's signature on the inventory form for the owner to acknowledge the inventory is a true and accurate list of the personal property stored, and that the City would pay for moving expenses.

Since there is a significant amount of personal property to be moved from this residential site, moving estimates from two qualified movers were obtained. John Fayard Moving and Warehousing provided an estimate in the amount of \$3,850.00. Crossroad Moving and Delivery provided a lower estimate in the amount of \$3,500.00. Since the lower of the two moving cost estimates is required to be used, it is recommended that \$3,500.00 for moving expenses be offered to the owner of the miscellaneous personal property.

Moving Cost Summary

John Fayard Moving and Warehousing	\$3,850.00
<u>Crossroad Moving and Delivery</u>	<u>\$3,500.00</u>
Moving Expense Offer Amount (Lower Estimate)	\$3,500.00

April 27, 2022
Date


Signature

Hensarling, Sharon

From: Rutland, Lamar
Sent: Thursday, May 26, 2022 1:41 PM
To: Hensarling, Sharon
Cc: Jones, Ann
Subject: FW: 32854 - MLK Baptist Church - Relocation Assistance - Up to \$

Sharon- Lets put this on the next agenda.

Lamar Rutland, P.E.
City of Hattiesburg
Director of Engineering
Ph (601)545-4540

From: mrdye@me.com <mrdye@me.com>
Sent: Thursday, May 26, 2022 11:39 AM
To: Rutland, Lamar <lrutland@hattiesburgms.com>
Subject: 32854 - MLK Baptist Church - Relocation Assistance - Up to \$

Lamar,

MLK Baptist Church receives income by renting a home on a parcel we are to acquire.

Regulatory amounts of up to \$2,500 for searching and \$25,000 for reestablishment expenses are eligible payments a landlord may receive.

Moving expenses for personal property in the rental home in the amount of \$240 has been determined based on local mover's hourly rates.

Therefore, relocation expenses for this displacement are expected not to exceed $(\$2,500 + \$25,000 + \$240) = \$27,740$.

We recommend the City approve up to \$27,740 for this displacement.

Sincerely,
Mark Dye, SR/WA-RAC
Relocation Agent

Hensarling, Sharon

From: Rutland, Lamar
Sent: Tuesday, May 31, 2022 7:57 AM
To: Hensarling, Sharon
Subject: FW: Build ROW - 32854 MLK Baptist Church - Tenant Relocation \$61,000

Lamar Rutland, P.E.
City of Hattiesburg
Director of Engineering
Ph (601)545-4540

From: mrdye@me.com <mrdye@me.com>
Sent: Monday, May 30, 2022 7:02 PM
To: Rutland, Lamar <lrutland@hattiesburgms.com>
Subject: Build ROW - 32854 MLK Baptist Church - Tenant Relocation \$61,000

Lamar,

I received a telephone call today concerning an inquiry last week for a 4 bedroom rental dwelling. The owner confirmed the dwelling does have 4 bedrooms, is in a good state of repair, and informed me the rental rate is \$1,800 per month with no utilities included. The church's tenant is now paying \$500 monthly rent plus utilities for a 3 bedroom dwelling. A four bedroom dwelling is needed because of the number of persons occupying the dwelling, considering their ages and gender. This is a decent, safe, and sanitary requirement that the replacement dwelling have an adequate number of rooms for the number of occupants.

Adding monthly utilities to consider the difference in size of the dwellings, the difference in base rent (rent + utilities) is \$1,408.58.

We multiply this difference by 42 to compute a rent supplement of \$59,160.36.

This makes the higher rental rate within the family's financial means for 42 months.

Within this 42 month period, the displaced family can make adjustments to their style of living or rent another dwelling so that replacement housing is within their financial means.

Add \$1,700 for moving expenses.

Total relocation expenses would be \$60,860.36

Please submit to the City Council requesting their approval for up to \$61,000 relocation expenses for the church's tenant.

This tenant relocation expense is unusually high, but is similar to the last tenant relocated needing four bedrooms. Apparently four bedroom dwellings are in short supply and have a considerably higher rental rate because of the increased size of the dwelling.

We spent most of last week looking for a four bedroom rental, and this is the only dwelling we've found.

We cannot issue the church's tenant a 90 day notice to vacate without offering another dwelling for rent.

We will inspect the dwelling 4 bedroom tomorrow to verify it is decent, safe, and sanitary and wait on approval from the City Council before making an offer.

We will continue to contact the tenant and church until the City's approval is obtained to determine if another four bedroom rental dwelling is available at a lesser amount.



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Acknowledge bids received on May 19, 2022 for the Midtown Overlay Infrastructure Improvements Project, and accept the bid from Grady Crawford Construction Company, Inc. in the amount of \$2,681,542.50, and authorize the Mayor to execute the contracts upon preparation.
File Number: 2022-382
Minute Book #

Summary

Acknowledge bids received on May 19, 2022 for the Midtown Overlay Infrastructure Improvements Project, and accept the bid from Grady Crawford Construction Company, Inc. in the amount of \$2,681,542.50, and authorize the Mayor to execute the contracts upon preparation.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.



Engineering Progress

May 19, 2022

City of Hattiesburg
P.O. Box 1898
Hattiesburg, MS 39403-1898

Attn: Lamar Rutland, P.E.

RE: Midtown Overlay Infrastructure Improvements
City of Hattiesburg, MS

Dear Lamar:

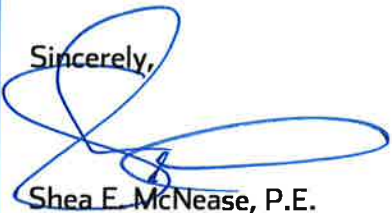
I have certified the enclosed bid tabulation that represents all bids that were received and opened at 10:00 a.m. on May 19, 2022 for the above referenced project.

I am recommending Grady Crawford Construction Co., Inc. of Baton Rouge, LA in the bid amount of Two Million, Six Hundred Eighty-One Thousand, Five Hundred Forty-Two Dollars and Fifty Cents (\$2,681,542.50).

Enclosed is a copy of the original bid from Grady Crawford Construction Co., Inc. and original bids from all other bidders.

Should you have any questions and/or comments, please, do not hesitate to contact me.

Sincerely,



Shea E. McNease, P.E.
Project Engineer

/sm

BID TAB				May 19, 2022		Grady Crawford Construction		Hemphill Construction Company	
Project:		Midtown Overlay				P.O. Box 967 Baton Rouge, LA 70821		P.O. Drawer 879 Florence, MS 39073	
Project No.		11298							
BASE BID									
Item No.	Item Description	Quantity	Unit	Unit Price	Amount	Unit Price	Amount		
	Sewer Pipe Items								
1	4" PVC Sewer Force Main Pipe	175	LF	\$41.00	\$7,175.00	\$100.00	\$17,500.00		
2	8" SDR 26 PVC Sewer Pipe (0'- 6') (Open Cut)	570	LF	\$57.00	\$32,490.00	\$155.00	\$88,350.00		
3	8" SDR 26 PVC Sewer Pipe (6'- 8') (Open Cut)	1770	LF	\$62.00	\$109,740.00	\$175.00	\$309,750.00		
4	8" SDR 26 PVC Sewer Pipe (8'- 10') (Open Cut)	240	LF	\$69.00	\$16,560.00	\$180.00	\$43,200.00		
5	8" SDR 26 PVC Sewer Pipe (10'- 12') (Open Cut)	40	LF	\$94.00	\$3,760.00	\$200.00	\$8,000.00		
6	10" SDR 26 PVC Sewer Pipe (8'- 10') (Open Cut)	225	LF	\$80.00	\$18,000.00	\$200.00	\$45,000.00		
7	10" SDR 26 PVC Sewer Pipe (10'- 12') (Open Cut)	230	LF	\$105.00	\$24,150.00	\$215.00	\$49,450.00		
8	10" SDR 26 PVC Sewer Pipe (12'- 14') (Open Cut)	425	LF	\$155.00	\$65,875.00	\$280.00	\$119,000.00		
9	12" SDR 26 PVC Sewer Pipe (8'- 10') (Open Cut)	330	LF	\$94.50	\$31,185.00	\$250.00	\$82,500.00		
10	12" SDR 26 PVC Sewer Pipe (10'- 12') (Open Cut)	75	LF	\$119.00	\$8,925.00	\$270.00	\$20,250.00		
11	12" SDR 26 PVC Sewer Pipe (12'- 14') (Open Cut)	465	LF	\$169.00	\$78,585.00	\$290.00	\$134,850.00		
12	12" SDR 26 PVC Sewer Pipe (14'- 16') (Open Cut)	150	LF	\$292.00	\$43,800.00	\$450.00	\$67,500.00		
13	12" SDR 26 PVC Sewer Pipe (Bored - No Casing)	60	LF	\$182.00	\$10,920.00	\$800.00	\$48,000.00		
14	10" DR 11 HDPE Sewer Pipe (Bored - No Casing)	325	LF	\$174.00	\$56,550.00	\$250.00	\$81,250.00		
15	Removal of Existing Sewer Line	1740	LF	\$3.00	\$5,220.00	\$2.00	\$3,480.00		
16	Abandonment of Existing Sewer Line (All Sizes)	4585	LF	\$3.00	\$13,755.00	\$2.00	\$9,170.00		
17	Tracer Wire System for Sewer	1	LS	\$19,000.00	\$19,000.00	\$30,000.00	\$30,000.00		
	Sewer Manhole Items								
18	48" Precast Concrete Sewer Manhole (0' - 6')	4	EA	\$3,678.00	\$14,712.00	\$7,000.00	\$28,000.00		
19	48" Precast Concrete Sewer Manhole (6' - 8')	7	EA	\$4,340.00	\$30,380.00	\$7,500.00	\$52,500.00		
20	48" Precast Concrete Sewer Manhole (8' - 10')	4	EA	\$5,105.00	\$20,420.00	\$8,000.00	\$32,000.00		
21	48" Precast Concrete Sewer Manhole (10' - 12')	2	EA	\$5,861.00	\$11,722.00	\$10,000.00	\$20,000.00		
22	48" Precast Concrete Sewer Manhole (12' - 14')	3	EA	\$6,695.00	\$20,085.00	\$11,500.00	\$34,500.00		
23	48" Precast Concrete Sewer Manhole (14' - 16')	1	EA	\$10,572.00	\$10,572.00	\$15,000.00	\$15,000.00		
24	60" Precast Concrete Sewer Manhole (10' - 12')	1	EA	\$10,683.00	\$10,683.00	\$20,000.00	\$20,000.00		
25	Demolition and Removal of Existing Manholes (All Types)	16	EA	\$575.00	\$9,200.00	\$1,500.00	\$24,000.00		
26	Abandonment of Existing Manhole	10	EA	\$418.00	\$4,180.00	\$1,500.00	\$15,000.00		
27	Drop Manhole Assembly (All Depths)	4	EA	\$2,425.00	\$9,700.00	\$1,000.00	\$4,000.00		

BID TAB Project: Midtown Overlay Project No. 11298 May 19, 2022				Grady Crawford Construction P.O. Box 967 Baton Rouge, LA 70821		Hemphill Construction Company P.O. Drawer 879 Florence, MS 39073	
BASE BID							
	Sewer Service Items						
28	4" Sanitary Sewer Service Cleanout	60	EA	\$662.00	\$39,720.00	\$1,210.00	\$72,600.00
29	4" SDR 26 PVC Pipe Sanitary Sewer Service (Incl Fittings) (All Depths)	1090	LF	\$34.00	\$37,060.00	\$60.00	\$65,400.00
30	6" SDR 26 PVC Pipe Sanitary Sewer Service (Incl Fittings) (All Depths)	1085	LF	\$45.00	\$48,825.00	\$65.00	\$70,525.00
31	8"x8"x6" PVC Service Tee	19	EA	\$251.00	\$4,769.00	\$700.00	\$13,300.00
32	10"x10"x6" PVC Service Tee	6	EA	\$544.00	\$3,264.00	\$920.00	\$5,520.00
33	10"x10"x6" HDPE Service Tee	6	EA	\$402.00	\$2,412.00	\$2,500.00	\$15,000.00
34	12"x12"x6" PVC Service Tee	8	EA	\$687.00	\$5,496.00	\$1,000.00	\$8,000.00
35	6" Insert-A-Tee for Mains Larger than 12" Diameter	4	EA	\$405.00	\$1,620.00	\$800.00	\$3,200.00
36	Existing Sewer Service Investigation	21	EA	\$125.00	\$2,625.00	\$2,200.00	\$46,200.00
	Water Pipe Items						
37	2" & Under 150 PSI PVC Water Pipe for Connections (Open Cut)	20	LF	\$25.50	\$510.00	\$10.00	\$200.00
38	6" Class 350 Ductile Iron Water Pipe (Open Cut)	2000	LF	\$58.50	\$117,000.00	\$150.00	\$300,000.00
39	Tracer Wire System for Water	1	LS	\$7,281.00	\$7,281.00	\$10,000.00	\$10,000.00
	Water Connection Items						
40	Cut and Cap Existing Lines	5	EA	\$363.00	\$1,815.00	\$1,000.00	\$5,000.00
41	Connection: Prop 6" to Exist 2" (Reducer & Coupling & other fittings)	1	EA	\$1,594.00	\$1,594.00	\$3,250.00	\$3,250.00
42	Connection: Prop 6" to Exist 6" (Coupling & other fittings)	1	EA	\$1,155.00	\$1,155.00	\$3,000.00	\$3,000.00
43	Connection: Prop 6" to Exist 6" (6"x6"x6" Tee & other fittings)	2	EA	\$3,146.00	\$6,292.00	\$3,500.00	\$7,000.00
44	Connection: Prop 6" to Exist 6" (Hot Tap w/ Valve & other fittings)	2	EA	\$4,945.00	\$9,890.00	\$8,000.00	\$16,000.00
45	Connection: Prop 6" to Exist 20" (Hot Tap w/ Valve & other fittings)	1	EA	\$8,198.00	\$8,198.00	\$9,000.00	\$9,000.00
46	Connection: Prop 6" to Prop 6" (6"x6"x6" Tee & other fittings)	3	EA	\$1,601.00	\$4,803.00	\$1,300.00	\$3,900.00
	Water Valve Items						
47	6" Gate Valve	6	EA	\$2,130.00	\$12,780.00	\$1,750.00	\$10,500.00

BID TAB				May 19, 2022		Grady Crawford Construction		Hemphill Construction Company	
Project:		Midtown Overlay				P.O. Box 967		P.O. Drawer 879	
Project No.		11298				Baton Rouge, LA 70821		Florence, MS 39073	
BASE BID									
	Water Fire Protection Items								
48	3 Way Fire Hydrant w/ Appurtenances (Incl. Tee, Valve, Hydrant, Brass Tag, Pipe, & other fittings)			3	EA	\$5,850.00	\$17,550.00	\$6,750.00	\$20,250.00
49	Removal of Existing Fire Hydrant			2	EA	\$1,669.00	\$3,338.00	\$800.00	\$1,600.00
	Water Service Items								
50	Residential Service Tap (All Sizes) (Incl: Open Cut Service Tubing, Tapping Saddle, Corp Stop, etc)			2	EA	\$639.00	\$1,278.00	\$1,500.00	\$3,000.00
51	Commercial Service Tap (All Sizes) (Incl: Open Cut Service Tubing, Tapping Saddle, Corp Stop, etc)			27	EA	\$1,424.00	\$38,448.00	\$1,650.00	\$44,550.00
52	Residential Service Tubing (Open Cut) (All Sizes)			40	LF	\$8.00	\$320.00	\$32.00	\$1,280.00
53	Residential Service Tubing (Bored) (All Sizes)			20	LF	\$15.00	\$300.00	\$32.00	\$640.00
54	Commercial Service Tubing (Open Cut) (All Sizes)			505	LF	\$13.00	\$6,565.00	\$40.00	\$20,200.00
55	Commercial Service Tubing (Bored) (All Sizes)			450	LF	\$20.00	\$9,000.00	\$40.00	\$18,000.00
56	Remove and Reset Water Meter			17	EA	\$1,458.00	\$24,786.00	\$850.00	\$14,450.00
	Miscellaneous Construction Items								
57	Crushed Aggregate (Size 610)			5800	Ton	\$65.00	\$377,000.00	\$65.00	\$377,000.00
58	Select Fill Material (Class 9, Group C), LVM			8000	CY	\$13.80	\$110,400.00	\$22.00	\$176,000.00
59	Concrete Pavement for Driveway and Parking Lot Repair (All Depths)			505	SY	\$120.00	\$60,600.00	\$200.00	\$101,000.00
60	Concrete Pavement for Street Repair (All Depths)			130	SY	\$117.00	\$15,210.00	\$215.00	\$27,950.00
61	9.5mm Hot Mix Asphalt for Driveway and Parking Lot Repair			100	Ton	\$416.00	\$41,600.00	\$400.00	\$40,000.00
62	9.5mm Hot Mix Asphalt for Street Paving & Repair			770	Ton	\$219.00	\$168,630.00	\$235.00	\$180,950.00
63	19mm Hot Mix Asphalt for Street Paving & Repair			1490	Ton	\$210.50	\$313,645.00	\$190.00	\$283,100.00
64	Cold Milling of Bituminous Pavement (All Depths)(for Tie-Ins)			400	SY	\$33.00	\$13,200.00	\$40.00	\$16,000.00
65	Concrete Sidewalk Repair (All Depths)			35	SY	\$75.00	\$2,625.00	\$130.00	\$4,550.00
66	Concrete Curb & Gutter (Match Existing Type)			950	LF	\$41.00	\$38,950.00	\$50.00	\$47,500.00
67	Concrete Ditch Paving Repair			90	SF	\$123.00	\$11,070.00	\$27.00	\$2,430.00
68	Loose RipRap, Size 200			6	Ton	\$1,386.00	\$8,316.00	\$165.00	\$990.00
69	Geotextile Fabric for RipRap			5	SY	\$15.00	\$75.00	\$7.00	\$35.00
70	Class "B" Concrete, Minor Structures			11	CY	\$1,417.50	\$15,592.50	\$2,200.00	\$24,200.00
71	Reinforcing Steel			200	LBS	\$11.50	\$2,300.00	\$2.50	\$500.00
72	10" & Under Corrugated HDPE Pipe (Dual Wall)			56	LF	\$57.00	\$3,192.00	\$65.00	\$3,640.00
73	12" Reinforced Concrete Pipe (Class III) (Rubber Gaskets)			48	LF	\$71.00	\$3,408.00	\$190.00	\$9,120.00

BID TAB				May 19, 2022		Grady Crawford Construction		Hemphill Construction Company	
Project:		Midtown Overlay				P.O. Box 967		P.O. Drawer 879	
Project No.		11298				Baton Rouge, LA 70821		Florence, MS 39073	
BASE BID									
74	15" Reinforced Concrete Pipe (Class III) (Rubber Gaskets)	144	LF	\$71.00	\$10,224.00	\$200.00	\$28,800.00		
75	18" Reinforced Concrete Pipe (Class III) (Rubber Gaskets)	16	LF	\$91.00	\$1,456.00	\$250.00	\$4,000.00		
76	30" Reinforced Concrete Pipe (Class III) (Rubber Gaskets)	16	LF	\$167.00	\$2,672.00	\$305.00	\$4,880.00		
77	Removal of Existing Pipe Cross Drains (All Sizes and Depths)	240	LF	\$20.00	\$4,800.00	\$10.00	\$2,400.00		
78	Remove and Replace Existing Chain Link Fence	210	LF	\$71.00	\$14,910.00	\$40.00	\$8,400.00		
79	Remove and Replace Existing Guardrail (in kind)	40	LF	\$283.50	\$11,340.00	\$110.00	\$4,400.00		
80	6" Thermoplastic Traffic Stripe, Detail Yellow	950	LF	\$5.00	\$4,750.00	\$4.00	\$3,800.00		
81	6" Thermoplastic Traffic Stripe, Skip Yellow	120	LF	\$5.00	\$600.00	\$4.00	\$480.00		
82	6" Thermoplastic Traffic Stripe, Detail White	385	LF	\$5.00	\$1,925.00	\$4.00	\$1,540.00		
83	Thermoplastic Legend Traffic Stripe, Yellow (6" Equivalent)	330	LF	\$9.00	\$2,970.00	\$7.00	\$2,310.00		
84	Thermoplastic Legend Traffic Stripe, White (6" Equivalent)	1050	LF	\$9.00	\$9,450.00	\$7.00	\$7,350.00		
85	Thermoplastic Legend Traffic Markings, White	66	LF	\$9.00	\$594.00	\$7.00	\$462.00		
86	Solid Sod (Incl. Sod, Top Soil, Fertilizer, Watering, etc.)	3750	SY	\$10.00	\$37,500.00	\$5.00	\$18,750.00		
87	Landscape Restoration (Inc. Top Soil, Plants, Mulch, Watering, etc.)	400	SF	\$20.00	\$8,000.00	\$5.00	\$2,000.00		
88	Clearing and Grubbing	1	Acre	\$15,000.00	\$15,000.00	\$5,000.00	\$5,000.00		
89	Temporary Erosion Control	1	LS	\$12,500.00	\$12,500.00	\$5,000.00	\$5,000.00		
90	Maintenance of Traffic	1	LS	\$101,000.00	\$101,000.00	\$202,593.00	\$202,593.00		
91	Mobilization	1	LS	\$150,000.00	\$150,000.00	\$800,000.00	\$800,000.00		
Bid Total:					\$2,681,542.50		\$4,590,945.00		


 Shea E. McNease, P.E.

Comments:

This is to certify that I have checked the tabulation of the bids received by the City of Hattiesburg on May 19, 2022, and that said tabulation is true and correct to the best of my belief.



Memorandum

To: Mayor Toby Barker and Members of City Council

From:

cc:

Date: Tuesday, June 7, 2022

Re: Approve Agreement between the City of Hattiesburg and the Mississippi Department of Human Services for participation in the Low-Income Household Water Assistance Program and authorize the Mayor to execute the same.
File Number: 2022-401
Minute Book #

Summary

Recommendation Statement

Please place this on the June 7, 2022 City Council meeting for consideration.

**Mississippi Department of Human Services
(MDHS) Division of Community Services (DCS)**

**Vendor Agreement
Low-Income Household Water Assistance Program**

The Low-Income Household Water Assistance Program (LIHWAP) provides assistance to eligible low-income households to pay home water and wastewater costs. Payments for assistance will be made by Pearl River Valley Opportunity, Inc. on behalf of eligible households

LIHWAP Agency

to the LIHWAP Vendor who provides the source of water/wastewater services. Checks or ACH deposit will be issued to the LIHWAP Vendor with a list of eligible households attached to it.

This vendor agreement is between:

LIHWAP Agency: Pearl River Valley Opportunity Inc.	Address, Phone Number and Email Address: 756 Hwy 98 Bypass PO Box 188 Columbia, MS 39429
LIHWAP Vendor Legal Name: City of Hattiesburg	Address, Phone Number and Email Address: P. O. Box 1898 Hattiesburg, MS 39403 (601) 943-6619 jthorne@hattiesburgms.com
Tax ID Number/EIN Number: 64-6000432	

Services provided and billed by LIHWAP Vendor (Mark an "X"):

Water Fees X Wastewater/Sewer Fees X Other _____
Stormwater Fees _____ Groundwater Fees _____

Counties served by your company _____

By signing this agreement and accepting payments on behalf of eligible households, the LIHWAP vendor assures:

- The account number is assigned to each household eligible for water/wastewater assistance;
- That eligible households will be charged in a normal business process, the difference between the actual cost of water/wastewater services and the amount of payment made through this program;
- That eligible households will not be treated adversely or differently because of such assistance;
- That there will be no discrimination either in the cost of goods supplied or services provided, against the households on whose behalf payments are made;
- That the amount paid by LIHWAP agency will be credited to individual eligible household account indicated on the listing that accompanies the check or ACH deposit;
- Provide water/wastewater services to each eligible and approved residential household for which payment is provided under LIHWAP;
- Restore water services upon payment for households that have been disconnected;
- After receiving LIHWAP payment for restoration of water services, maintain services for at least 60 days;

09/27/21

- To not refuse service or otherwise discriminate in the marketing and provision of service to any household because of race, religion, color, national origin, gender, familial status, source of income, level of income, disability, financial status or qualification for low-income services;
- To not take any adverse action on a household account when an application for assistance is pending, until such time that eligibility for services is determined;
- To not interrupt services if a pledge was sent to LIHWAP Vendor and the LIHWAP agency is meeting the obligations under this agreement;
- That it will cooperate with DCS by providing requested information to DCS regarding annual water/wastewater usage and cost for LIHWAP households, if applicable;
- To provide at no cost to the LIHWAP Agency, household, or MDHS-DCS, written information on a household's home water/wastewater costs, bill payment history or arrearage history for no more than the previous 12 monthly billing periods; and
- To report any instance of fraud, waste, and abuse concerning customer (household), LIHWAP agency, employee, or LIHWAP vendor, please contact the MDHS Division of Program Integrity at 1-800-299-6905. The report may result in an investigation being conducted and/or permanent disqualification from participating in the LIHWAP.

The LIHWAP vendor agrees to handle payments in the following manner:

- Payments must be applied **ONLY** to residential water/wastewater accounts of the individuals listed, except if: (a) the account is in the name of the spouse who lives at the same address; (b) the account is in the name of a deceased spouse; or (c) verification is obtained from vendor or landlord stating that applicant is responsible for affected utility bill;
- Payments must not be applied to account balances that have previously been written off or paid with other funds;
- Provide written reconciliation and confirmation on a regular basis to LIHWAP agency that benefits have been credited appropriately to households and their services have been restored on a timely basis or disconnection status has been removed if applicable;
- Payments must not be applied to business accounts;
- Payment must be applied only for home water/wastewater services. The following payments are prohibited: repairs, garbage collections, fraudulent services, meter tampering and returned check fees;
- If a credit balance results from the payment to a household's account, the credit balance must be refunded to the LIHWAP agency within 60 days. **CASH REFUNDS TO THE HOUSEHOLD OR LIHWAP AGENCY ARE STRICTLY PROHIBITED;**
- Should a credit balance result on an account in which the account holder dies (and there are no other adults in household), or moves out of the LIHWAP Vendor's service area, any amount exceeding the balance owed the LIHWAP Vendor must be refunded to the LIHWAP Agency within 60 days;
- Refund any interest resulting from unused LIHWAP payment made on behalf of the household;
- All household accounts should be credited immediately, but no later than ten (10) days after receipt of check from LIHWAP agency. It is important that all branch offices of LIHWAP vendor are contacted to ensure that household accounts are credited in a timely manner;
- The LIHWAP Vendor agrees to provide at least one contact person and phone number to the LIHWAP Agency who will ensure that all accounts are credited and answer questions concerning water/wastewater disconnections and payments;
- Refunds must be identified with the year credit occurred, name, address, and account number of the recipient;
- Reconnection fees shall be waived, unless prohibited by city ordinance, and a listing be provided to LIHWAP agency on a monthly basis;
- Cooperate with any Federal, State, or local investigation, audit, or program review. The LIHWAP vendor will allow LIHWAP Agency representatives access to all books and records

relating to LIHWAP households for the purpose of compliance verification with this Agreement;
and;

- Understand that failure to cooperate with any Federal, State, or local investigation, audit, or program review may result in the immediate disqualification from participation in the LIHWAP.

By signing this agreement and pledging payments of eligible households, the LIHWAP agency assures:

- To not provide pledges on behalf of households without having adequate funds to pay such pledge;
- Pledges will be made **only** on approved applications in the MDHS Virtual ROMA system;
- Payment will occur within twenty (20) business days after application has been approved; and
- Provide LIHWAP Vendor with a list of names, telephone numbers and email addresses of LIHWAP Agency staff designated to approve pledges on behalf of the agency.

The parties acknowledge that this Agreement and the services provided by the LIHWAP Vendor and the LIHWAP Agency are governed by and subject to the federal and state laws and regulations in accordance with the Low-Income Household Water Assistance Program supplemental terms and conditions.

The Mississippi Department of Human Services may terminate this agreement by written notice for failure of either party to comply with the provisions stated herein or when it is deemed to be in the best interest of the State, household, or to comply with applicable laws and regulations.



Signature of LIHWAP Agency Officer

Signature of LIHWAP Vendor Officer

Thomas Morris, Executive Director
Printed Name & Title

Printed Name & Title

January 16, 2021

Date

Date



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Ann Jones, Chief Administrative Officer

cc:

Date: Tuesday, June 7, 2022

Re: Approve Agreement between City of Hattiesburg and Art Makes Art Inc. to provide year-round after-school arts programs for children in the City of Hattiesburg to include children and adolescents in the amount of \$10,000 and authorize manual check for the same.
File Number: 2022-403
Minute Book #

Summary

Approve agreement between City of Hattiesburg and Art Makes Art Inc. to provide year-round after-school arts programs for children in the City of Hattiesburg to include children and adolescents in the amount of \$10,000. Authorize manual check for the same.

Recommendation Statement

I recommend this item be added to the Council Agenda for consideration.

Please place this on the June 7, 2022 City Council meeting for consideration.

Art Makes Art Inc.

Programming Proposal

Needs

There is a growing need for culturally enriching experiences for children of all ages in the City of Hattiesburg. The development of creative experiences is just as vital to a child's development as existing academic and athletic programs provided by public schools. Involvement in the arts will benefit all our city's children, especially adolescents ages 11-15 during after-school hours. An affordable and accessible after-school arts program available year-round would develop children's leadership skills, critical thinking, accountability, and sense of community. Developing these skills in young adults helps guide them to a successful future.

Goals

Abigail Allen has been an art and music facilitator in the city of Hattiesburg for over 15 years. Over time she has seen the community's interest in children's performing arts opportunities grow. Allen would like to broaden her reach in the City of Hattiesburg by establishing affordable after-school music and theater programming at the Hattiesburg Community Arts Center. This would include public access to programs like Center Stage.

Educational Philosophy

Music, theater, and art education have been a part of our country's educational system since the early 19th century. Music, theater, and art education are a vital and necessary part of education and can be used in the school system to reinforce other subject areas by teaching different cultures, providing students with the opportunity for personal success and educating our children on many levels about two of the oldest surviving art forms in civilization. The pressure on young people today is possibly greater than it has ever been. Students compete for good grades, teacher and parental approval, and popularity. Music, theater, and art education provide all students with an opportunity for personal success and a positive experience.

Much like the team sports that are supported in our schools and communities, music and theater provide children with opportunities to learn to work together towards a common goal. Fine arts education builds confidence and allows children to express themselves in a positive and creative way.

Finally, and most importantly, music, theater, and art are important for art's sake. These art forms are the oldest in existence. Unfortunately, without musicians and actors to perform it, these works are simply ink on paper. What a colorless world we would live in if there were no music, no movies, no concerts, or live theater to attend! These art forms add joy and emotion to the simplest parts of our daily lives. All children should be given the opportunity to learn to listen to music, read music, and make music alone and with others. All children should be given the opportunity to learn to stand tall and proud and express themselves clearly and confidently in the presence of others. Providing our children with competent and experienced music, theater, and art teachers to educate them is the best way to ensure that art will continue as a part of our world. We have all been affected by music and theater in some way throughout our lives. Teaching children about art provides them with the opportunity for personal and intellectual growth and the experience of creating art. It is our responsibility as adults in the world to ensure that music and theater will live for generations to come, and we can guarantee that it will continue to be a part of the world by teaching it to our children on a daily basis in our community.

Biography

Abigail Allen, a native Southern Californian, graduated from The Music Institute of Technology in 1988. Directly after graduating, she was hired by Sam Harris in the musical theater production of "Hardcopy". She then toured with Adam Ant as a back-up singer and worked as a singer-songwriter in the music industry for the next 15 years writing music for Melrose Place, Beverly Hills 90210, the Olympics ad campaigns, the X games and many more. In 1995, her band Swamp Boogie Queen was signed to a major recording deal with famed producer Phil Ramone. SBQ toured on and off for the next 7 years opening for Lynyrd Skynyrd and Kenny Wayne Shepherd. The group disbanded in 2005 and, quite by accident, she found herself in Hattiesburg, Mississippi. Abigail is now the program coordinator for the Hattiesburg Arts Council's smART Space. She also co-founded of Center Stage at Sacred Heart School, co-created Hattiesburlesque, and created the Art Makes Art Materials Exchange at the Hattiesburg Community Arts Center. She lives in the avenues with her beloved daughter Frances and husband Brad Allen and claims that you could not pay her \$10 billion to leave Hattiesburg.

Proposed Programming - Deliverables

Weeklong Summer Program for City of Hattiesburg – July 18-22

Monday through Friday sessions shall include dance, theater, creative movement, and various mediums of art techniques. Each session shall last one to three hours, dependent upon number of participants. These sessions will be led by Abigail Allen and her team of experienced instructors. The instructors value input from the participants to include activities that they are most excited about so that their creativity and individualism may be sparked.

Hawkins Elementary School – Tuesday/Thursday June Art Classes

Eight 45-minute art workshops in the month of June (Tuesday and Thursday) are to serve Hawkins Elementary and Hawkins community children exposing them to mediums of art that they are less likely to encounter during regular school hours. These classes will be led by Abigail Allen and will employ two local teaching artists to assist.

Budget will include materials and teachers. The space for these workshops will be Hawkins Elementary.

N.R. Burger Middle School – Fall Semester

Three pilot theater and creative movement program classes are to be held at NR Burger. These classes will be focused on improvisation, public speaking, social skills and creative problem-solving. At the end of the three sessions, students will present a short program for peers, community members and teachers. Classes will be led by Abigail Allen and will employ two local teaching artists.

Budget will include materials and teacher fees. The space for these workshops will be the Hattiesburg Community Arts Center which will be donated by the city of Hattiesburg.

Contract Amount: \$10,000

Art Makes Art Inc.

Mayor, City of Hattiesburg



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Jennifer Shows, Grants Coordinator

cc: Kermas Eaton, City Clerk

Date: Tuesday, June 7, 2022

Re: Approve a Subrecipient Agreement with Starter Homes of Mississippi to provide roof repairs in connection with the City's Roof Repair Initiative Program and authorize the Mayor to execute in triplicate. {Entitlement}
File Number: 2022-390
Minute Book #

Summary

Approve and authorize Mayor to execute in triplicate a Subrecipient Agreement with Starter Homes of Mississippi to provide roof repairs in connection with the City's Roof Repair Initiative Program. {Entitlement}

Recommendation Statement

I recommend approval of this item

Please place this on the June 7, 2022 City Council meeting for consideration.

**CITY OF HATTIESBURG
COMMUNITY DEVELOPMENT BLOCK GRANT
ROOF INITIATIVE PROGRAM (HOUSING)
STARTER HOMES OF MISSISSIPPI
SUBRECIPIENT AGREEMENT**

STARTER HOMES OF MISSISSIPPI

THIS contract (hereinafter the “AGREEMENT”), is made and entered into this _____ by and between the CITY OF HATTIESBURG, MISSISSIPPI, (hereinafter called the “GRANTEE”), located at 200 Forrest Street, Hattiesburg, Mississippi 39401 and Starter Homes of Mississippi (hereinafter called the “SUBRECIPIENT”), located in the City of Hattiesburg (_____) for an amount not to exceed **\$15,000.00 per project for a minimum of six (6) projects, and not to exceed a total amount of \$90,000.000 for the period covered in this agreement.** For the purposes of this agreement, project is defined as a roof repair as defined by the City of Hattiesburg’s Roof Initiative Program, and performed on a single-family, owner-occupied dwelling. This agreement shall terminate on or before _____, unless amended by written instrument as provided for herein.

WHEREAS, GRANTEE wishes to engage the SUBRECIPIENT to assist the Grantee in utilizing such funds for: The City’s Roof Initiative Program {Entitlement}

NOW, THEREFORE, it is agreed between the parties hereto that:

I. SCOPE OF SERVICE

A. Activities

The Subrecipient will procure and/or provide all skilled and unskilled labor in a manner satisfactory to the Grantee and consistent with any standards required as a condition of providing these funds. Subrecipient’s use of these funds shall be limited to the procurement of materials and services needed in performing eligible roof repairs for eligible applicants. Activities in such program must be eligible under the Community Development Block Grant Program.

B. General Administration

The City of Hattiesburg and the Subrecipient will maintain program and financial records documenting eligibility, provisions of services, and Subrecipient’s expenses relative to the project as a result of assistance provided through the CDBG Program.

C. National Objectives

The City of Hattiesburg certifies that the activities carried out with funds provided under this Agreement will meet one or more of the CDBG Program’s National Objectives:

- 1. Project benefits low-moderate income persons;
- 2. Project will aid in the prevention or elimination of slums and/or blight; or
- 3. Project meets community development needs having a particular urgency – as defined in S4 CFR Part 570.208.

D. Implementation Schedule

Unless amended by mutual written agreement by the Subrecipient and the Grantee, the Subrecipient will perform the described tasks in conformance with the schedule below:

TASKPROGRAM GOAL	DATE
Roof repairs to single-family, owner-occupied homes within the City limits	July 1, 2022 – August 31, 2022
Completion of 1 st Roof Repair	
Completion of 2 nd Roof Repair	
Completion of 3 rd Roof Repair	
Completion of 4 th Roof Repair	
Completion of 5 th Roof Repair	
Completion of 6 th Roof Repair	

E. Performance Monitoring

The Grantee will monitor the performance of the Subrecipient against the goals and performance standards required herein. Substandard performance as determined by the Grantee will constitute non-compliance with this Agreement. If action to correct such substandard performance is not taken by the Subrecipient within ten (10) calendar days after being notified by the Grantee, contract termination will begin and all funding will end. Subrecipient must return any unused funds promptly.

II. Time of Performance

Services of the Subrecipient shall start on the **1st day of July, 2022**, and end on the **31st day, August, 2022**. The term of this Agreement and the provisions shall be terminated, unless amended by written instrument.

III. Budget

It is understood that project costs by line item may vary depending on the scope of each project undertaken. As such, the “Per Project” maximum budget of \$12,000 is firm, and variances up to 10% of the total project cost require written approval from the Director of Urban Development. Cumulative variances of more than 10% over the life of this Agreement will require a formal Agreement Amendment.

Indirect costs shall not be applied in performance or administration of this agreement. The Grantee may require a more detailed budget breakdown, and the Subrecipient shall provide such supplementary budget information in a timely fashion in the form and content prescribed by the Grantee. Any amendments to this budget must be approved in writing by the Grantee and the Subrecipient.

IV. Payment

It is expressly agreed and understood that the total amount to be paid by the Grantee under this Agreement shall not exceed **\$90,000**. Drawdowns for the payment of eligible expenses shall be made against the line item budget specified in Paragraph III herein and in accordance with performance. The Subrecipient will be reimbursed, on no more than a monthly basis, provided verification of eligible expenses is provided.

Payments to the Subrecipient may be contingent upon the certification of the Subrecipient’s financial management system in accordance with the acceptable standards specified in OMB Circular A-110.

V. Notices

Communication and details concerning this Agreement shall be directed to the following Agreement representatives:

Grantee	Subrecipient
City of Hattiesburg Urban Development Director CDBG 601-545-4590 601-554-1006	Starter Homes of Mississippi Beth Norris, Executive Director

VI. Special Conditions

Lead and/or Asbestos Testing and/or Abatement

For eligible units assisted under this agreement, where it is necessary to test or abate lead or asbestos in the course of work, reasonable and necessary expenses for such testing and/or abatement will not be charged against the \$12,000 cap per unit or the \$72,000 cap for the gross amount of the Agreement. Such lead and/or asbestos testing and/or abatement expenses should be documented separately from routine unit expenses, and will be reimbursed independently. Requests for such funds and their subsequent reimbursement will follow the same procedure as routine requests for funds.

Prior to ordering lead or asbestos testing or abatement, the Subrecipient should consult the City of Hattiesburg Housing program Inspector. Under advisement from the Housing Program Inspector, the Subrecipient may proceed in ordering lead and/or asbestos testing and/or abatement in

accordance with subcontracting and procurement requirements contained herein. The Subrecipient may only use City-approved contractors for such testing and/or abatement.

Utilization of Funds

If the Subrecipient fails to comply with the terms of this Agreement, such as D. Implementation Schedule, the Grantee can terminate this Agreement without giving a 30-day notices. See General Conditions, Section H. Suspension or Termination.

VII. General Conditions

A. General Compliance

The Subrecipient agrees to comply with the requirements of Title 24 of the Code of Federal Regulations, Part 570 [the U.S. Housing and Urban Development regulations concerning Community Development Block Grants (CDBG)]. The Subrecipient also agrees to comply with all other applicable Federal, state and local laws, regulations, and policies governing the funds provided under this contract. The Subrecipient further agrees to utilize funds available under this Agreement to supplement rather than supplant funds otherwise available.

B. Independent Contractor

Nothing contained in this Agreement is intended to, or shall be construed in any manner, as creating or establishing the relationship of employer/employee between the parties. The Subrecipient shall at all times remain an “independent contractor” with respect to the services to be performed under this Agreement. The Grantee shall be exempt from payment of all Unemployment Compensation, FICA, retirement, life and/or medical insurance and Workers’ Compensation Insurance, as the Subrecipient is an independent contractor.

C. Liability and Hold Harmless

The Subrecipient shall not, without prior written permission of the City specifically authorizing them to do so, represent or hold themselves out to others as an agent of or on behalf of the City of Hattiesburg.

The Subrecipient shall hold harmless, defend and indemnify the Grantee from any and all claims, actions, suits, charges and judgments whatsoever that arise out of the Subrecipient’s performance or nonperformance of the services or subject matter called for in this Agreement.

D. Workers’ Compensation

The Subrecipient shall provide Workers’ Compensation Insurance coverage for all of its employees involved in the performance of this Agreement.

E. Insurance

The Subrecipient shall carry sufficient insurance coverage to protect Agreement assets from loss due to theft, fraud, and/or undue physical damage. The Subrecipient shall comply with insurance requirements of OMB Circular A-110, Bonding and Insurance.

F. Grantor Recognition

The Subrecipient shall insure recognition of the role of the grantor agency in providing services through this Agreement. All activities, facilities and items utilized pursuant to this Agreement shall be prominently labeled as to funding source. In addition, the Subrecipient will include a reference to the support provided herein in all publications made possible with funds made available under this Agreement.

G. Amendments

The Grantee or Subrecipient may amend this Agreement at any time provided that such amendments make specific reference to this Agreement, and are executed in writing, signed by a duly authorized representative of each organization, and approved by the Grantee’s governing body. Such amendments shall not invalidate this Agreement, nor relieve or release the Grantee or Subrecipient from its obligations under this Agreement.

The Grantee may, in its discretion, amend this Agreement to conform with Federal, state or local governmental guidelines, policies and available funding amounts, or for other reasons. If such amendments result in a change in the funding, the scope of services, or schedule of the activities to be undertaken as part of this Agreement, such modifications will be incorporated only by written amendment signed by both Grantee and Subrecipient.

This Agreement contains the entire understanding of the parties, and any change of any term or provision of the Agreement can be approved by the City Council. Any such amendment shall be attached to and made a part of this Agreement.

H. Suspension or Termination

Either party may terminate this Agreement at any time by giving written notice to the other party of such termination and specifying the effective date of such termination. Partial termination of the Scope of Services in Paragraph I. A above may only be undertaken with the approval of the Grantee. In the event of any termination for convenience and at any time, at the Grantee's option, all finished or unfinished documents, carpenter's materials, reports or other materials prepared by the Subrecipient under this Agreement shall, at the option of the Grantee, become the property of the Grantee, and the Subrecipient shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents or materials prior to termination.

The Grantee may also suspend or terminate this Agreement, in whole or in part without notice, if the Subrecipient materially fails to comply with any term of the Agreement with any of the rules, regulations or provisions referred to herein and all payments shall cease; and the Grantee may declare the Subrecipient ineligible for any further participation in the Grantee's Agreements, in addition to other remedies as provided by law. In the event there is probable cause to believe the Subrecipient is in noncompliance with any applicable rules or regulations, the Grantee may withhold up to fifteen (15) percent of said Agreement funds to be paid for past work until such time as the Subrecipient is found to be in compliance by the Grantee, or is otherwise adjudicated to be in compliance.

I. Networking and Coordination

There will be periodic networking and coordination meetings of all agencies receiving CDBG funds from the City of Hattiesburg. Meetings will be chaired by the Community Development Administrator or his designee. These meetings will provide opportunities for information sharing, technical assistance, updates of Federal, State and local requirements. The meeting will be approximately one hour at a mutually agreed upon time.

VIII. **Administrative Requirements**

A. Financial Management

1. Accounting Standards

The Subrecipient agrees to comply with OMB Circular A-110 and agree to adhere to the accounting principles and procedures required therein, utilize adequate internal controls, and maintain necessary source documentation for all cost incurred.

2. Cost Principles

The Subrecipient shall administer its program in conformance with OMB Circular A-122 "Cost Principles for Non-Profit, or A-21 "Cost Principles for Educational Institutions," as applicable. These principles shall be applied for all costs incurred whether charged on a direct or indirect basis.

If the Subrecipient is a governmental or quasi-governmental agency, the applicable sections of 24 CFR Part 85, "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local governments," and OMB Circular A-87 would apply to this Agreement.

B. Documentation and Record Keeping

1. Records to be Maintained

The Subrecipient shall maintain all records required by the Federal regulations specified in 24 CFR Part 570.506, which are pertinent to the activities to be funded under this Agreement. Such records shall include but not limited to:

- a. Records providing a full description of each activity undertaken;
- b. Records demonstrating that each activity undertaken meets one of the National Objectives of the CDBG program;

2. Retention

The Subrecipient shall retain all records pertinent to expenditures incurred under this Agreement for a period of five (5) years after the termination of all activities funded

under this Agreement. Records for non-expendable property acquired with funds under this must be retained for four (4) years after final disposition of such property. Records for any displaced person must be kept for five (5) years after he/she has received final payment. Notwithstanding the above, if there is litigation, claims, audits, negotiations or other actions that involve any of the records cited and that have started before expiration of the five-year period, then such records must be retained until completion of the actions and resolution of all issues, or the expiration of the five-year period, whichever occurs later.

3. Client Data

The Grantee shall conduct all activities related to determining the eligibility of its program participants. Such determinations must adhere to the same guidelines, policies, procedures, regulations used by the Grantee when determining eligibility for its several other CDBG programs. The Grantee and Subrecipient shall maintain client data demonstrating client eligibility for services provided. Such data shall include, but is not limited to, client name, address, income level or other basis for determining eligibility, and description of service provided.

4. Disclosures

The Subrecipient understands that client information collected under this Agreement is private and the use or disclosure of such information, when not directly connected with the administration of the Grantee's or Subrecipient's responsibilities with respect to services provided under this Agreement, is prohibited unless consent is obtained from such person receiving service and, in case of a minor, that of a responsible parent/guardian.

5. Property Records

The Subrecipient shall maintain real material inventory records which clearly identify materials purchased, and improved properties.

6. Close-Outs

The Subrecipient's obligation to the Grantee shall not end until all close-out requirements are completed. Activities during this close-out period shall include, but are not limited to: making final payments, disposing of program assets (including the return of all unused materials and determining the custodian ship of records.

7. Audits and Inspections

All Subrecipient records with respect to any matters covered by this Agreement shall be made available to the Grantee, their designees or the Federal Government, at any time during normal business hours, as often as the Grantee deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data. Any deficiencies noted in audit reports must be fully cleared by the Subrecipient within 30 days after receipt by the Subrecipient. Failure of the Subrecipient to comply with the above audit requirements will constitute a violation of this Agreement and may result in the withholding of future payments. The Subrecipient hereby agrees to have an annual agency audit conducted in accordance with current Grantee policy concerning Subrecipient audits and, as applicable OMB Circular A-133.

C. Reporting and Payment Procedures

1. Payment Procedures

The Grantee will pay to the Subrecipient funds available under this Agreement based upon information submitted by the Subrecipient and consistent with an approved budget and Grantee policy concerning payments. Payments will be made for eligible expenses actually paid by the Subrecipient (reimbursement). Payments will be adjusted by the Grantee in accordance with program income balances available in Subrecipient accounts. In addition, the Grantee reserves the right to liquidate funds available under this Agreement for costs incurred by the Grantee on behalf of the Subrecipient.

2. Progress Report

The Subrecipient shall submit progress reports to the Grantee in the form, content and frequency as required by the Grantee. The Progress Reports are due quarterly and/or whenever payment requests are submitted.

D. Procurement

1. Compliance

The Subrecipient shall comply with current Grantee policy concerning the purchase of materials and shall maintain inventory records.

2. OMB Standards

The Subrecipient shall procure all materials in accordance with the requirements of OMB Circular A-110, Procurement Standards, as well as, applicable sections of 24 CFR Part 85. Further, any subcontracts executed in connection with the implementation of this grant must adhere to the same standards.

3. Travel

The Subrecipient shall obtain written approval from the Grantee for any travel outside the metropolitan area with funds provided under this Agreement.

X. Personnel and Participant Conditions

A. Civil Rights

1. Compliance

The Subrecipient agrees to comply with Title VI of the Civil rights of 1964 as amended, title VIII of the Civil Rights Act of 1968 as amended, Section 104(b) and Section 109 of title I of Housing and Community Development Act of 1974 as amended, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Executive Order 11063, and with Executive Order 11246 as amended by Executive Order 11375 and 12086.

2. Non-discrimination

The Subrecipient will not discriminate against any employee or applicant for employment because of race, color, creed, religion, ancestry, national origin, sex, disability, age, marital/familial status, or status with regard to public assistance. The Subrecipient will take affirmative action to ensure that all employment practices are free from such discrimination. Such employment practices include but are not limited to the following: hiring, upgrading, demotion, transfer, recruitment, or recruitment advertising, layoff, termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Subrecipient agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting agency setting forth the provisions of this nondiscrimination clause.

3. Land Covenants

This Agreement is subject to the requirements of Title VI of the Civil Rights Act of 1964 and of 24 CFR 570.601 and 602. In regard to sale, lease, or other transfer of land acquired, cleared or improved with assistance provided under this contract, the Subrecipient shall cause or require a covenant running with the land to be inserted in the deed or lease for such transfer, prohibiting discrimination herein defined, in the sale, lease or rental, or in the use or occupancy of such land, or in any improvements erected thereon, providing that the City of Hattiesburg and the United States are beneficiaries of and entitled to enforce such covenants. The Subrecipient, in undertaking its obligation to carry out the program assisted hereunder, agrees to take such measures as are necessary to enforce such covenant, and will not itself so discriminate.

4. Section 504

The Subrecipient agrees to comply with any Federal regulations issued pursuant to compliance with Section 504 of the Rehabilitation Act of 1974, which prohibits the discrimination against persons with disabilities in any Federally assisted program. The Grantee shall provide the Subrecipient with any guidelines necessary for compliance with that portion of the regulations in force during the term of this Agreement.

B. Affirmative Action

1. Plan

The Subrecipient agrees that it shall be committed to carrying out pursuant to the Grantee's specifications an Affirmative Action Program in keeping with the principles as provided in President's Executive Order 11246 of September 24, 1965.

2. W/MBE

The subrecipient will use its best efforts to afford minority- and women- owned business enterprises the maximum practicable opportunity to participate in the performance of this Agreement. As used in this Agreement, the term "minority and female business enterprise" means a business that is at least fifty (51) percent owned and controlled by minority group members or women. For the purpose of this definition, "minority group members" are African-Americans, Spanish-speaking, Spanish surnamed, or Spanish- heritage Americans, Asian-Americans, and American Indians. The Subrecipient may rely on written representation by businesses regarding their status as minority and female business enterprises in lieu of an independent investigation.

3. Access to Records

The Subrecipient shall furnish and cause each of its own subrecipients or subcontractors to furnish all information and reports required hereunder and will permit access to its books, records and accounts by the Grantee, HUD, or its agents, or other authorized Federal officials for purposes of investigation to ascertain compliance with the rules, regulations and provisions stated herein.

4. Notifications

The Subrecipient will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understandings, a notice, provided by the agency contracting officer, advising the labor union or workers' representative of the Subrecipient's commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

5. EEO/AA Statement

The Subrecipient will, in all solicitations or advertisements for employees placed by or on behalf of the Subrecipient, state that it is an Equal Opportunity or Affirmative Action employer.

6. Subcontracting Provisions

The Subrecipient will include the provisions of Paragraph X. A, Civil Rights, and B, Affirmative Action, in every subcontract or purchase orders, specifically or by reference, so that such provisions will be binding upon each of its subrecipients or subcontracts.

C. Employment Restrictions

1. Prohibited Activity

The subrecipient is prohibited from using funds provided herein or personnel employed in the administration of the program for: political activities, sectarian or religious activities, lobbying, political patronage and/or nepotism activities.

2. Labor Standards

The Subrecipient agrees to comply with the requirements of the Secretary of Labor in accordance with the Davis-Bacon Act as amended, the provisions of Contract: Work Hours and Safety Standards Act, the Copeland "Anti- Kickback" Act and all other applicable Federal, State and local laws and regulations pertaining to labor standards insofar as those acts apply to the performance of this Agreement. The Subrecipient shall maintain documentation which demonstrates compliance with hour and wage requirements of this part. Such documentation shall be made available to the Grantee for review upon request.

The Subrecipient agrees that, except with respect to the rehabilitation of residential property containing less than eight (8) units, all contracts engaged in under in excess of \$2,000.00 for repair work financed in whole or part with the assistance provided under this Agreement, shall comply with Federal requirements adopted by the Grantee pertaining to such Agreements/Contracts and with the applicable requirements of the regulations of the Department of Labor, under 29 CFR Parts 1, 3, 5, and 7 governing the payment of wages and ratio of apprentices and trainees to journeyman workers; provide, that if wages higher than those required under the regulations are imposed by state or local laws, nothing hereunder is intended to relieve the Subrecipient of its obligation, if any, to require payment of the higher wage. The Subrecipient will cause or require to be inserted in full, in all contracts subject to such regulations, provisions meeting the requirements of this paragraph.

3. "Section 3" Clause

a. Compliance

Compliance with the provisions of Section 3, the regulations set forth in 24 CFR 135, and all applicable rules and orders issued hereunder prior to the execution of this Agreement, shall be a condition of the Federal financial assistance provided under this Agreement and binding upon the Grantee, the Subrecipient and any of the Subrecipient's subrecipients and subcontractors, their successors and assigns, to those sanctions specified by the Agreement through which Federal assistance is provided. The Subrecipient certifies and agrees that no contractual or other disability exist which would prevent compliance with these requirements.

The Subrecipient further agrees to comply with these "Section 3" requirements and to include the following language in all subcontracts executed under this Agreement:

"The work to be performed under this contract is a project assisted under a program providing direct Federal financial from HUD and is subject to the requirements of Section 3 of the Housing and Community Development Act of 1968, as amended, 12 U.S.C. 1701. Section 3 requires that to the greatest extent feasible, opportunities for training and employment be given to low- and very low-income residents of the project area and contracts for work in connection with the project be awarded to business concerns that provide economic opportunities for low- and very low-income persons residing in the metropolitan area in which the project is located."

The Subrecipient further agrees to ensure that opportunities for training and employment arising in connection with a housing rehabilitation, housing construction, or public construction project are given to low- and very low-income persons residing within the metropolitan area in which the CDBG funded project is located; and where feasible, priority should be given to low- and very low- income persons within the service area of the project or neighborhood in which the project is located, and to low- and very low-income participants in other HUD programs; and award contracts for work undertaken in connection to housing rehabilitation, housing construction, or other public construction

project are given to business concerns that provide economic opportunities for low- and very low-income persons residing within the metropolitan area in which CDBG funded projects are located; and where feasible, priority should be given to business concerns which provide economic opportunities to low-and very low-income residents within the service area or neighborhood in which projects are located, and to low-and very low-income participants in other HUD programs.

The subrecipient certifies and agrees that no contractual or other legal incapacity exists which would prevent compliance with these requirements.

b. Notifications

The Subrecipient agrees to send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or understanding, if any, a notice advising said labor organization or workers' representative of its commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

c. Subcontracts

The Subrecipient will include this Section 3 clause in every subcontract and will take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the grantor agency. The Subrecipient will not subcontract with any entity where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR 135 and will not let any subcontract unless the entity has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.

D. Conduct

1. Assignability

The Subrecipient shall not assign or transfer any interest in this Agreement without the prior written consent of the Grantee. Notice of any such assignment or transfer shall be furnished promptly to the Grantee.

2. Subcontracts

a. Approvals

The Subrecipient shall not enter into subcontracts with any agency or individual in the performance of this contract without the written consent of the Grantee prior to the execution of such agreement.

b. Monitoring

The Subrecipient will monitor all subcontracted services on a regular basis to assure contract compliance. Results of monitoring efforts shall be summarized in written reports and supported with documented evidence of follow-up actions to correct areas of noncompliance.

c. Content

The sub-recipient shall cause all the provisions of this Agreement in its entirety to be included in and made a part of any subcontract executed in the performance of this Agreement.

d. Selection Process

The Subrecipient shall undertake to ensure that all subcontracts let in the performance of this Agreement shall be awarded on a fair and open competition basis. Executed copies of all subcontracts shall be forwarded to the Grantee along with documentation concerning the selection process.

3. Hatch Act

The Subrecipient agrees that no funds provided, nor personnel employed under this Agreement, shall be in any way to any extent be engaged in the conduct of political activities in violation of Chapter 15 of the Title V of the United States Code.

4. Conflict of Interest

The Subrecipient agrees to abide by the provisions of 24 CFR 570.611 with respect to conflicts of interest and covenants that it presently has no financial interest and shall not acquire any financial interest, direct or indirect, which would conflict in any manner or degree with the performance of services required under this Agreement. The Subrecipient further covenants that in performance of this Agreement; no person having such a financial interest shall be employed or retained by the Subrecipient hereunder. These conflict of interest provisions apply to any person who is an employee, agent, consultant, officer, or elected official or appointed official of the Grantee, or any designated public agencies or subrecipients which are receiving funds under the CDBG Entitlement Program.

5. Lobbying

The Subrecipient hereby certifies that:

- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement, it will complete and submit Standard Form- LLL, "Disclosure form to Report Lobbying," in accordance with its instructions.
- c. It will require that the language of paragraph (d) of this certification be included in award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly; and
- d. Lobbying Certification – Paragraph D
This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000.00 and not more than \$100,000.00 for each such failure.

6. Copyright

If this Agreement results in any copyrightable materials or inventions, the Grantee and/or grantor agency reserves the right to royalty-free, non-exclusive and irrevocable license to reproduce, publish or otherwise use and to authorize others to use, the work for governmental purposes.

7. Religious Organization

The Subrecipient agrees that funds provided under this Agreement will not be utilized for religious activities, to promote religious interest, or for the benefit of a religious organization in accordance with the Federal regulations specified in 24 CFR 570.2000).

XI. Environmental Conditions

A. Air and Water

The Subrecipient agrees to comply with the following requirements in so far as they apply to the performance of this Agreement:

- Clean Air Act, 42 U.S.C., 7401, et seq...
- Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251, et seq., as amended 1318 relating to inspection, monitoring, entry, reports, and information as well as other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued hereunder;
- Environmental Protection Agency (EPA) regulations pursuant to 40 CFR, Part 50 as amended.

B. Flood Disaster Protection

In accordance with the requirements of the Flood Disaster Protection Act of 1973, the Subrecipient shall assure that for activities located in an area identified by FEMA as having special flood hazards, flood insurance under the National flood Insurance Program is obtained and maintained as a condition of financial assistance for acquisition or construction purposes (including rehabilitation).

C. Lead Based Paint

The Subrecipient agrees that any repair of residential structures with assistance provided under this Agreement shall be subject to HUD Lead- Based Paint Regulations at 24 CFR 570.608, and 24 CFR Part 35. Such regulations pertain to all HUD-assisted housing and require that all owners, prospective owners, and tenants of properties constructed prior to 1978 be properly notified that such properties may include lead-based paint. Such notification shall point out the hazards of lead-based paint and explain the symptoms, treatment and precautions that should be taken when dealing with lead-based paint poisoning and the advisability and availability of blood level screening for children under the age of seven. The notice should also point out that if lead-based paint is found on the property, abatement measures may be undertaken.

D. Historic Preservation

The Subrecipient agrees to comply with the Historic Preservation requirements set forth in the National Historic Preservation Act of 1966, as amended and the procedures set forth in 36 CFR, Part 800, Advisory Council on Historic Preservation Procedures for Protection of Historic Properties, insofar as they apply to the performance of this Agreement.

In general, this requires concurrence from the State Historic Preservation Officer for all rehabilitation and demolition of historic properties that are fifty years old or older or that are included on the Federal, state or local historic property list

XII. Severability

If any provision of this Agreement is held invalid, the remainder of the Agreement shall not be affected hereby and all other parts of this Agreement shall nevertheless be in full force and effect.

IN WITNESS THEREOF,

The City of Hattiesburg and AWARDDEE have caused their signatures to be hereunto affixed and duly attested:

City of Hattiesburg, Mississippi

Starter Homes of Mississippi

By: _____
Toby Barker, Mayor

By: _____
Beth Norris

Date: _____

Date: _____

Attest: _____
Kermas Eaton, City Clerk

Date: _____

Attest: _____

Date: _____



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Eric Proulx, Captain-Fleet

cc:

Date: Tuesday, June 7, 2022

Re: Declare and approve a sole source purchase for Watch Guard Interview Room Camera System in the amount of \$27,350.00 as a sole source purchase per section 37-7-1 of the Mississippi Code of 1972 as amended; Watch Guard is the sole manufacturer and exclusive distributor of this system.
File Number: 2022-376
Minute Book #

Summary

Declare and approve a sole source purchase for Watch Guard license and 1st year software warranties for Interview room camera systems in the amount of \$27,350.00 as a sole source purchase per section 37-7-1 of the Mississippi Code of 1972 as amended; Watch Guard is a sole manufacturer and exclusive distributor of this system.

Recommendation Statement

Please place this on the June 7, 2022 City Council meeting for consideration.



THE CITY OF HATTIESBURG

One of America's Great Small Cities!

Peggy Sealy, Chief of Police

April 8, 2022

Department of Finance
City of Hattiesburg Mayor and City Council

RE: Watch Guard Interview Room Camera System

Our Police Department is requesting the purchase of the Watch Guard Interview Room Camera Systems from Watch Guard doing business as Motorola Solutions. This system will work with our existing In Car Video Systems which will also work with our existing watch guard body cameras. The compatibility of the video recording system with our current Watch Guard products is a primary consideration for this purchase. Watch Guard provides the technology for the three (3) systems to be compatible.

Other companies make similar systems; however, the Watch Guard system allows our users the ability to save the recordings to our existing evidence library. The competitor's version of this system does not offer this selective form of product saving. This product is only available through Watch Guard, due to the patent of the product being owned by this company.

Please consider this a sole source request as no comparative or competitive quotations can be obtained. Watch Guard is the sole manufacturer and exclusive distributor of this product.

Sincerely,

Peggy Sealy
Chief of Police

PS/srh

		WatchGuard Video 415 E. Exchange Allen, TX 75002 (P) 800-605-6734 (F) 212-383-9661			
Issued To:	Hattiesburg Police Department Attention: Shannon Weaver Harris			Date:	02-18-22
Project Name:	(5) Interview Rooms EL4			Quote ID:	WDR-0371-01

Qty	Item #	Description
(5)	INT-4RE-2-DC	4RE Interview Room System with Dome and Covert Camera 4RE Interview Room Camera System - Dome and Covert Camera w/ cabling - Touch Screen Display - Integrated 200GB automotive grade hard drive 16GB USB removable thumb drive - Remote viewing software 1 Yr Hardware Warranty 4RE Firmware - Record-After-the-Fact® (RATF) technology - Multiple Resolution Encoding - H.264 High Profile Video Compression
Subtotal Price (Excluding sales tax)		\$25,975.00

Qty	Item #	Description
(1)	WGW00122-410	Quick Start Software Installation Service; Remote Install, Training, Configuration, Project Management, Consultation
Subtotal Price (Excluding sales tax)		\$500.00

Qty	Item #	Description
(1)	WGW00124	Warranty, 4RE, In-Car, 1st Year (Months 1-12)
Subtotal Price (Excluding sales tax)		\$0.00

Qty	Item #	Description
(5)	WGP02400-100	Evidence Library 4 Web 4RE In-Car Device License Key
Subtotal Price (Excluding sales tax)		\$750.00

Qty	Item #	Description
(1)	WGW00155-100	Evidence Library Software Maintenance, 1st Year (Months 1-12)
Subtotal Price (Excluding sales tax)		\$0.00

Qty	Item #	Description
(5)	FRT-ICV-01	Shipping - ICV Unit Freight delivery for each In Car Video Unit
Subtotal Price (Excluding sales tax)		\$125.00

Quote Notes:

1. This Quote is valid for 90 days from the Quote Date. Pricing may change thereafter.
2. Any sales transaction resulting from this Quote is based on and subject to the applicable Motorola's Standard Terms and Conditions, notwithstanding terms and conditions on purchase orders or other Customer ordering documents.
3. Motorola's Standard Terms and Conditions are found at www.motorolasolutions.com/product-terms.
4. Payment Terms: Equipment-Net 30 days upon shipment; Installation-Net 30 days upon completion; Services and Subscription Agreements-Net 30 days from receipt of Order.
5. The pricing in this Quote does not include any applicable taxes (e.g. sales/use tax).
6. UNLESS OTHERWISE NOTED IN THIS QUOTE / ORDER, INSTALLATION OF EQUIPMENT IS NOT INCLUDED

Quoted by:

Dana Reynolds - Customer Engagement Representative - 469-525-0242 - dana.reynolds@motorolasolutions.com

Total Price	\$27,350.00 (Excluding sales tax)
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26th of February 2021

Prospective WatchGuard Video Customer

Reference: WatchGuard Video Sole Source Letter

To whom it may concern:

WatchGuard Video is the exclusive and sole manufacturer of the 4RE Digital In-Car Video System, the High-Fidelity Wireless Microphone System, and the VISTA and V300 wearable camera systems. With the exception of the following agreements, these products are represented and sold only by WatchGuard Video Regional Sales Managers selling factory direct in protected sales territories. The exceptions to this are agreements allowing resellers to distribute WatchGuard products on a General Services Administration Contract (GSA), and State Contracts in Pennsylvania, Louisiana, and New Jersey. WatchGuard is the only company able to provide warranties and maintenance for the above-mentioned products.

Additionally, several important and unique features are available only with these products;

4RE

- 4RE is the only high-definition digital in-car video system available today that features the Patented multiple resolution encoding. This allows the front camera to record in two different IACP compliant resolutions simultaneously, allowing the most critical events to be saved in 720P high-definition and the routine events to be saved in 480P (864x480) resolution.
- 4RE exclusively offers the Panoramic X2 camera, manufactured only by WatchGuard Video, which is the industry's only dual lens, rotatable turret camera which houses a 68-degree rotatable camera and a 150 degree panoramic camera.

Wireless Microphone

- The Hi-Fi microphone has near CD quality high fidelity sound, a line of sight range of one to two miles, and superior building penetration capabilities.
- Using patent pending intelligent standby and a lithium polymer battery gives the microphone its extraordinary battery life of up to 24 hours of talk time, and up to 30 days of standby time.
- The wireless microphone holsters are manufactured exclusively for WatchGuard and manufactured to WatchGuard transmitter specification.



VISTA, VISTA WiFi, & VISTA XLT

- VISTA is constructed with industrial grade components and is manufactured in the U.S.A. It is capable of recording both High Definition and Standard Definition video, and battery life capable of recording at least 9 continuous hours of HD video. VISTA has other unique features, including:
 - The only wearable camera to integrate with the WatchGuard Video Evidence Library and Evidence Library Express video and evidence management applications.
 - Record-After-The-Fact which gives the ability to retrieve video not previously recorded as an event
 - Quick Connect Mobile Charger
 - VISTA XLT Point-of-View Mounting

V300

- The WatchGuard V300 HD body camera and its continuous-operation capabilities solve the dilemma of keeping cameras and officers productive beyond a 12-hour shift. A detachable battery is easily changed by the officer, and 128GB of memory ensures space for all recorded events. The only wearable camera to integrate with the WatchGuard Video Evidence Library and EvidenceLibrary.com video and evidence management applications.
 - Detachable Battery - Easily change the WatchGuard V300 detachable battery while on the go.
 - Wireless Uploading - Send critical video back to headquarters while still in the field.
 - Incident Recovery - Go back in time and capture video from events days after they happened, even when the record button was never pressed.
 - Natural Field of View - Eliminate the fisheye effect from wide-angle lenses that warps video footage. Distortion correction technology provides a clear and complete evidence review process.
 - Integrated with In-Car System - One or more WatchGuard V300 cameras and a 4RE in-car system can work seamlessly as a single system, capturing synchronized video of an incident from multiple vantage points.

Respectfully submitted,

Giles Tipword

MSSSI Vice President of Sales - North America

WatchGuard Video, Inc.



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Eric Proulx, Captain-Fleet

cc:

Date: Tuesday, June 7, 2022

Re: Declare and approve a sole source purchase for Watch Guard Body Camera and Car 4RE System in the amount of \$67,150.00 as a sole source purchase per section 37-7-1 of the Mississippi Code of 1972 as amended; Watch Guard is the sole manufacturer and exclusive distributor of this system.
File Number: 2022-377
Minute Book #

Summary

Declare and approve a sole source purchase for Watch Guard License and 1st year software warranties for Body Cameras and In-Car video system in the amount of \$67,150.00 as a sole source purchase per section 37-7-1 of the Mississippi Code of 1972 as amended; Watch Guard is a sole manufacturer and exclusive distributor of this system.

Recommendation Statement

Please place this on the June 7, 2022 City Council meeting for consideration.



THE CITY OF HATTIESBURG

One of America's Great Small Cities!

Peggy Sealy, Chief of Police

April 7, 2022

Department of Finance
City of Hattiesburg Mayor and City Council

RE: Watch Guard Body Camera's and In Car Video Systems

Our Police Department is requesting the purchase of the Watch Guard Body Camera's and In Car 4RE Systems from Watch Guard doing business as Motorola Solutions. This system will work with our existing In Car Video Systems which will work with our existing watch guard. The compatibility of the video recording system with our current Watch Guard products is a primary consideration for this purchase. Watch Guard provides the technology for the two systems to be compatible.

Other companies make similar systems; however, the Watch Guard system allows our users the ability to save the recordings to our existing evidence library. The competitor's version of this system does not offer this selective form of product saving. This product is only available through Watch Guard, due to the patent of the product being owned by this company.

Please consider this a sole source request as no comparative or competitive quotations can be obtained. Watch Guard is the sole manufacturer and exclusive distributor of this product.

Sincerely,

Peggy Sealy
Chief of Police

PS/srh

HATTIESBURG POLICE DEPARTMENT

300 KLONDYKE STREET • HATTIESBURG, MS 39401

CRIME STOPPERS

(601) 582-STOP (582-7867)

FAX (601) 545-4937

CELLULAR * C.S.



MOTOROLA SOLUTIONS

Quote For:

Hattiesburg Police Department

Attn: Shannon Weaver Harris

Reference:

(10) Vista 4RE BNDLS EL4

Quote By:

WatchGuard Video / Motorola Solutions

Dana Reynolds

Date: 04-05-22

Serving Law Enforcement with the Most Compelling, Quality Video Products

 MOTOROLA SOLUTIONS		Motorola Solutions 415 E. Exchange Allen, TX 75002 (P) 800-605-6734 (F) 212-383-9661		
Issued To:	Hattiesburg Police Department Attention: Shannon Weaver Harris		Date:	04-05-22
Project Name:	(10) Vista 4RE BNDLS EL4		Quote ID:	WDR-0444-01

Qty	Item #	Description
(10)	IV-BND-VW-PX-10	4RE (VISTA WiFi Integration Ready), Standard DVR with HD Panoramic Front Camera, Cabin Camera, VISTA WiFi Radio Base and Smart PoE Switch. VISTA WiFi sold separately. <u>Hardware</u> • 4RE/VISTA WiFi Bundle • Standard DVR Camera System • HD Panoramic Front Camera • Touch Screen Display • Integrated 200GB automotive grade hard drive • 32GB USB removable thumb drive • Rear facing cabin camera • Internal GPS • 1 Yr Hardware Warranty • Cabling and your choice of mounting bracket. • VISTA WiFi Radio Base • Smart PoE Switch <u>Software</u> • 4RE Firmware • Record-After-the-Fact® (RATF) technology • Multiple Resolution Encoding • H.264 High Profile Video Compression
Subtotal Price (Excluding sales tax)		\$47,550.00

Qty	Item #	Description
(10)	BW-VWF-11--	VISTA HD, WiFi Extended Wearable Camera, with Magnetic Center Mount • VISTA HD, WiFi Extended Wearable Camera, Enhanced ESD Protection • Magnetic Center Mount
Subtotal Price (Excluding sales tax)		\$9,950.00

Qty	Item #	Description
(10)	IV-ACK-BD-VW---	VISTA WiFi In-car Radio Base Bundle, includes Radio Base and Smart PoE Switch. - VISTA WiFi In-car Radio Base Bundle - WiFi Charging Radio Base - Smart PoE Switch - Cables and Brackets
Subtotal Price (Excluding sales tax)		\$5,000.00

Qty	Item #	Description
(10)	IV-ACK-WF-CP-DM	MikroTik Configured Wireless Kit, 802.11n, Drill Mount - MikroTik Configured Wireless Kit, 4RE In-Car 802.11n - Radio, Antenna, PoE, 2-10' Ethernet Cables - Drill Mount
Subtotal Price (Excluding sales tax)		\$2,000.00

Qty	Item #	Description
(10)	WGP02400-200	Evidence Library 4 Web VISTA Device License Key
Subtotal Price (Excluding sales tax)		\$1,500.00

Qty	Item #	Description
(10)	WGP02400-300	Evidence Library 4 Web 4RE Combo-Discount Device License Key
Subtotal Price (Excluding sales tax)		\$750.00

Qty	Item #	Description
(10)	FRT-BWC-01	Shipping - BWC Unit Freight delivery for each Body Worn Camera Unit
Subtotal Price (Excluding sales tax)		\$150.00

Qty	Item #	Description
(10)	FRT-ICV-01	Shipping - ICV Unit Freight delivery for each In Car Video Unit
Subtotal Price (Excluding sales tax)		\$250.00

Quote Notes:

1. This Quote is valid for 90 days from the Quote Date. Pricing may change thereafter.
2. Any sales transaction resulting from this Quote is based on and subject to the applicable Motorola's Standard Terms and Conditions, notwithstanding terms and conditions on purchase orders or other Customer ordering documents.
3. Motorola's Standard Terms and Conditions are found at www.motorolasolutions.com/product-terms.

4. Payment Terms: Equipment-Net 30 days upon shipment; Installation-Net 30 days upon completion; Services and Subscription Agreements-Net 30 days from receipt of Order.
5. The pricing in this Quote does not include any applicable taxes (e.g. sales/use tax).
6. UNLESS OTHERWISE NOTED IN THIS QUOTE / ORDER, INSTALLATION OF EQUIPMENT IS NOT INCLUDED

Quoted by:

Dana Reynolds - Customer Engagement Representative - 469-525-0242 - dana.reynolds@motorolasolutions.com

Total Price	\$67,150.00 (Excluding sales tax)
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WATCHGUARD 4RE®

HD PANORAMIC IN-CAR VIDEO SYSTEM

Simple controls, HD cameras, wireless uploads and full integration with body-worn cameras have made the WatchGuard 4RE the world leader for in-car video policing.



KEY FEATURES

INTUITIVE CONTROL – Icon-driven user interface and direct access keys make operation quick and simple.

FULLY INTEGRATED WITH BODY CAMERA – The WatchGuard 4RE In-Car system and one or more body-worn cameras can work seamlessly, capturing synchronized video of an event from multiple vantage points.

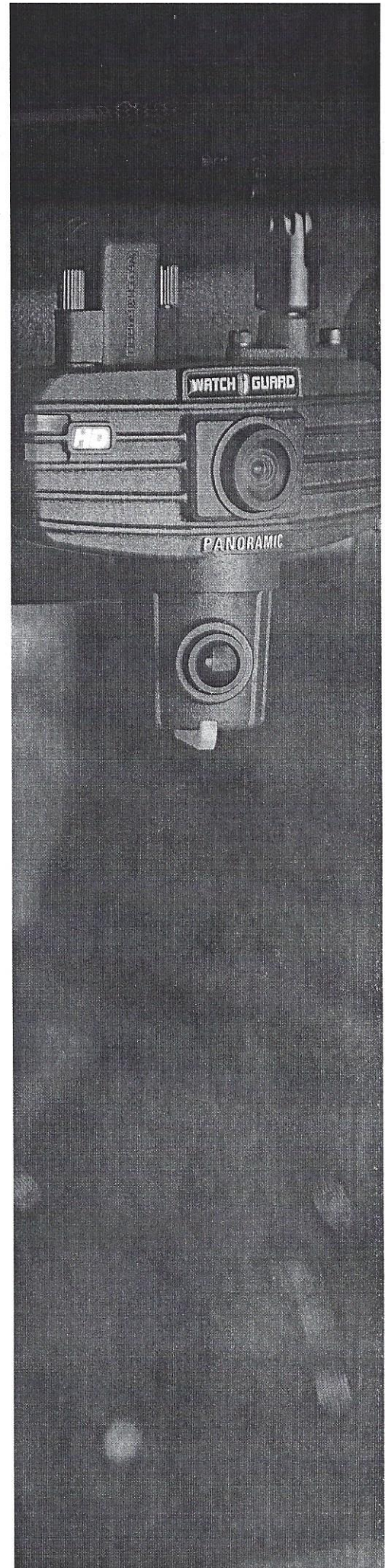
UPLOAD ANYWHERE, ANYTIME – Recorded events are uploaded wirelessly via cellular network from vehicle to evidence storage with no officer involvement.

SMART, EVENT-BASED RESOLUTION RECORDING – Record simultaneously in HD and SD and automatically save using a resolution configured to the event category.

FULL PANORAMIC HD COVERAGE – See everything in front of the patrol car with the stunning video quality of a rotatable HD camera and an HD panoramic camera, all in one compact, rugged housing.

NEVER MISS AN INCIDENT – RECORD AFTER THE FACT provides the power to go back in time and capture important evidence days after it happened, even when record wasn't pressed.

Dual Drive Architecture – Video is continuously recorded to the internal Solid State Hard Drive (SSHD) and all active recordings are written to both the internal hard drive and the removable USB Flash Drive, providing event transfer options and backup.



Full Coverage, Full Detail
Panoramic X2 Camera



Zero Impact On Line Of Sight
Zero Sightline (Zs) Camera



12X Optical Zoom
Hd Mini Zoom Camera



Infrared Illumination
Infrared Cabin Camera



Added Viewing
Side Or Rear-Facing Camera

SPECIFICATIONS

Hard Drive Storage Capacity
200GB

Certified to Military Specification
MIL STD 810-G

Operation Conditions
-40° F to 185° F

Integrated and GPS for Speed and Location
YES

Integrated Crash Detection
YES

Hours of Recording
Up to 80 hours

For more information, visit motorolasolutions.com/in-car



Motorola Solutions, Inc. 500 West Monroe Street, Chicago, IL 60661 U.S.A. motorolasolutions.com

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TWO-PIECE BODY CAMERA SYSTEM

THE SYSTEM



VISTA XLT DVR

Highly versatile WiFi and GPS enabled two-piece body camera system with amazingly small, lightweight, interchangeable head- and body-mounted HD cameras and full integration to 4RE® in-car video system.

CHOOSE YOUR CAMERA



VISTA XLT BODY-MOUNTED CAMERA

ORDER# VIS-XLT-WIF-001

Includes:

VISTA XLT DVR, your choice of DVR mount, camera mount, and cable.



VISTA XLT HEAD-MOUNTED CAMERA

ORDER# VIS-XLT-WIF-002

Includes:

VISTA XLT DVR, your choice of DVR mount, camera mount, and cable.

MOUNTS

DVR MOUNT



LEATHER MOUNT

ORDER# VIS-XLT-DVR-HOL



BELT CLIP MOUNT

ORDER# VIS-XLT-DVR-BLT

CAMERA MOUNT



MAGNETIC MOUNT

ORDER# VIS-XLT-MNT-MAG



SHIRT CLIP

ORDER# VIS-XLT-MNT-SRT



GLASSES MOUNT

ORDER# VIS-XLT-OAK-MNT

DOCKS AND ACCESSORIES



USB CHARGING AND UPLOAD DOCK

ORDER# VIS-CHG-BSE-KIT



WiFi IN-CAR UPLOAD DOCK

ORDER# VIS-CHG-WIF-BSE



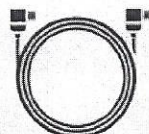
ETHERNET CHARGING AND UPLOAD STATION

ORDER# VIS-VTS-DTC-001



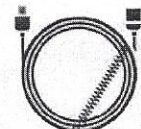
XLT CABLE STRAIGHT NO COIL 46" LONG

ORDER# WGP02441-100



XLT CABLE RIGHT ANGLE NO COIL 28" LONG

ORDER# WGP02440-101



XLT CABLE STRAIGHT WITH COIL 46" LONG

ORDER# WGP02441-200



CABLE MANAGEMENT CLIP

ORDER# VIS-XLT-COL-CLIP



OAKLEY GLASSES

ORDER# VIS-XLT-OAK-SUN

ONE-PIECE BODY CAMERA SYSTEM

CAMERAS



VISTA EXTENDED BODY CAMERA
ORDER# VIS-EXT-KIT-001

Ultra-rugged HD body-worn camera with simple controls, allowing officers to capture high quality video evidence.

Includes:

VISTA body camera, USB charging and uploading dock, and your choice of mount.



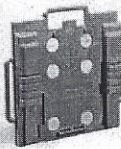
VISTA WiFi BODY CAMERA
ORDER# VIS-EXT-WIF-001

WiFi and GPS enabled body-worn camera with full integration to 4RE® in-car video system.

Includes:

VISTA WiFi body camera and your choice of mount.

MOUNTS



LOCKING MAGNETIC CHEST MOUNT
ORDER# VIS-MNT-KIT-001



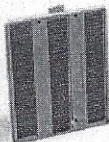
DUTY BELT CLIP
ORDER# VIS-BLT-CLP-001



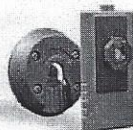
ROTATABLE SHIRT CLIP
ORDER# VIS-SHR-CLP-100



MOLLE LOOP MOUNT
ORDER# VIS-MNT-MOL-001



VELCRO PLATE MOUNT
ORDER# VIS-MNT-VEL-001



KLICK-FAST MOUNT (UK ONLY)
ORDER# VIS-MNT-KLK-001



TRIPOD MOUNT
ORDER# VIS-MNT-TRI-001



RAM MOUNT
ORDER# VIS-MNT-RAM-001

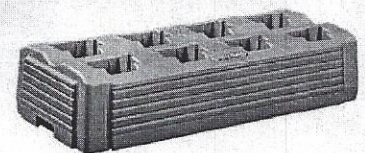
DOCKS AND ACCESSORIES



USB CHARGING AND UPLOAD DOCK
ORDER# VIS-CHG-BSE-KIT



WiFi IN-CAR UPLOAD DOCK
ORDER# VIS-CHG-WIF-BSE



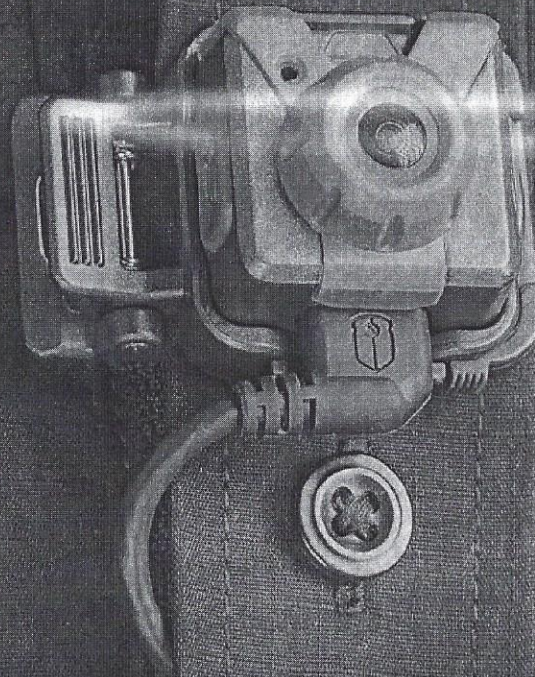
ETHERNET CHARGING AND UPLOAD STATION
ORDER# VIS-VTS-DTC-001



QUICKCONNECT MOBILE CHARGER
ORDER# VIS-CHG-MAG-001

	VISTA XLT	VISTA WIFI	VISTA
4RE IN-CAR INTEGRATION	YES	YES	NO
Wi-Fi AND GPS	YES	YES	NO
HD RECORDING	12 HOURS	9-11 HOURS	11 HOURS
SD RECORDING	13 HOURS	10-12 HOURS	12 HOURS

HD and SD recording time may vary based on environmental conditions and feature use.



VISTA XLT™ TWO-PIECE HD BODY-WORN CAMERA

Highly versatile two-piece body-worn camera system with amazingly small, lightweight, interchangeable head and body-mounted HD cameras that allow officers to adapt to changing assignments and uniform types.

FEATURES AND BENEFITS

VISTA XLT

ADAPT TO CHANGING ASSIGNMENTS AND UNIFORMS

Amazingly small, lightweight HD body-mounted camera is extremely comfortable to wear and easy to attach to any uniform, vest or jacket.

RECORD EVENTS FROM THE OPTIMAL PERSPECTIVE

Interchangeable head and body-mounted HD cameras allow officers the ability to record events from the optimal perspective using a single body camera system.

FULLY INTEGRATED WITH 4RE® IN-CAR SYSTEM

One or more VISTA XLT body-worn cameras and a 4RE in-car system can work seamlessly as a single system, capturing synchronized video of an event from multiple vantage points.

SIMPLE TO USE

One touch on the camera or DVR is all it takes to start or stop a recording.

GET IT DONE IN THE FIELD

Quickly categorize an incident immediately after ending a recording instead of wasting time in front of a computer back at the station.

NEVER MISS AN INCIDENT

Record-After-the-Fact® technology provides the power to go back in time and capture important evidence days after it happened – even when there wasn't time to press the record button.

DOCK AND GO FILE UPLOAD

Fully automatic uploading of events with no officer involvement via USB dock or eight slot Ethernet transfer station.

SMART DEVICE ACCESS

Manage VISTA XLT features, categorize events and stream live video using a Wi-Fi enabled smart device.

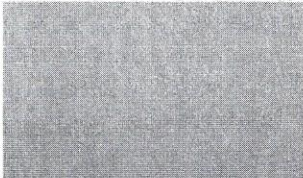
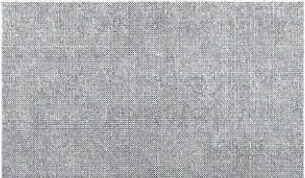


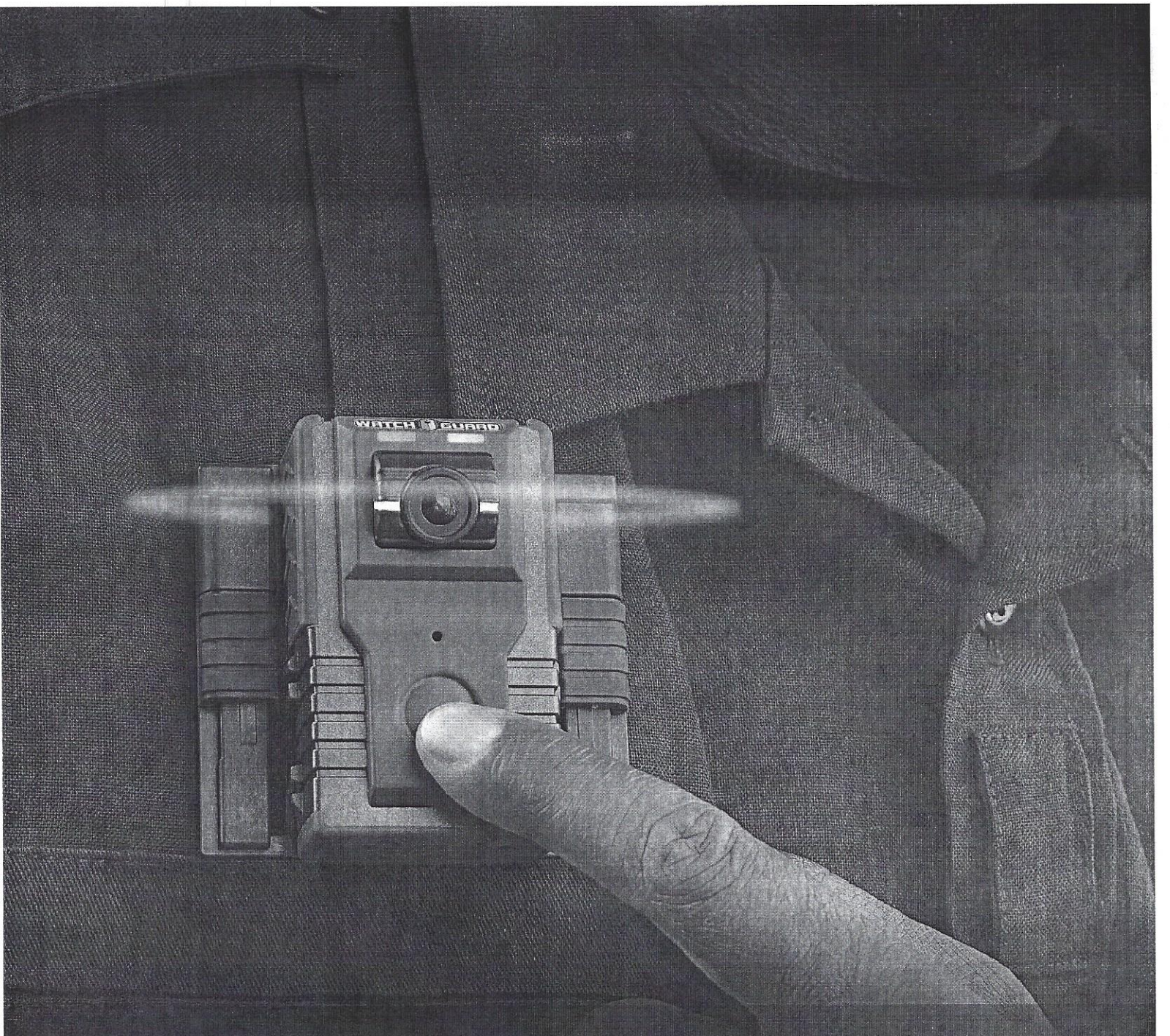
Clip mount makes moving between uniform types quick and easy.

DVR mounts securely and comfortably to duty belt.

Head-mounted camera for point-of-view recording.

TECHNICAL SPECIFICATIONS

	VISTA XLT	VISTA WiFi	VISTA Extended
Built-in Wi-Fi and GPS	Yes	Yes	No
Continuous HD Recording	12 Hours	9 Hours	11 Hours
Continuous SD Recording	13 Hours	10 Hours	12 Hours
DVR Size	3.3"H x 1.9"W x 1.3"D	3"H x 1.9"W x 1.3"D	3"H x 1.9"W x 1.3"D
DVR Weight	6.3 Ounces	5.3 Ounces	5.3 Ounces
Storage Capacity	32 GB	32 GB	32 GB
Field of View	130°	130°	130°
Selectable Resolution	720p / 480p	720p / 480p	720p / 480p
Body-Mounted Camera Size	1.1"H x 1.1"W x .93"D		
Head-Mounted Camera Size	.84"H x .84"W x 2.50"L		
Body-Mounted Camera Weight	.5 Ounces		
Head-Mounted Camera Weight	.4 Ounces		



VISTA® WIFI INTEGRATED HD BODY-WORN CAMERA

Wi-Fi and GPS enabled, ultra-rugged HD body-worn camera with simple controls, allowing officers to capture the highest quality video evidence individually or as part of an integrated in-car system.

FEATURES AND BENEFITS

VISTA WIFI

SIMPLE TO USE

One touch is all it takes to start or stop a recording.

EASY TO UNDERSTAND

No guessing about battery level, recording status or memory space when using the backlit LCD.

FULLY INTEGRATED WITH 4RE® IN-CAR SYSTEM

One or more VISTA WiFi body-worn cameras and a 4RE In-Car system can work seamlessly as a single system, capturing synchronized video of an event from multiple vantage points.

GET IT DONE IN THE FIELD

Quickly categorize an incident immediately after ending a recording instead of wasting time in front of a computer back at the station.

NEVER MISS AN INCIDENT

Record-After-the-Fact® technology provides the power to go back in time and capture important evidence days after it happened – even when there wasn't time to press the record button.

STUNNING VIDEO AND CD QUALITY AUDIO

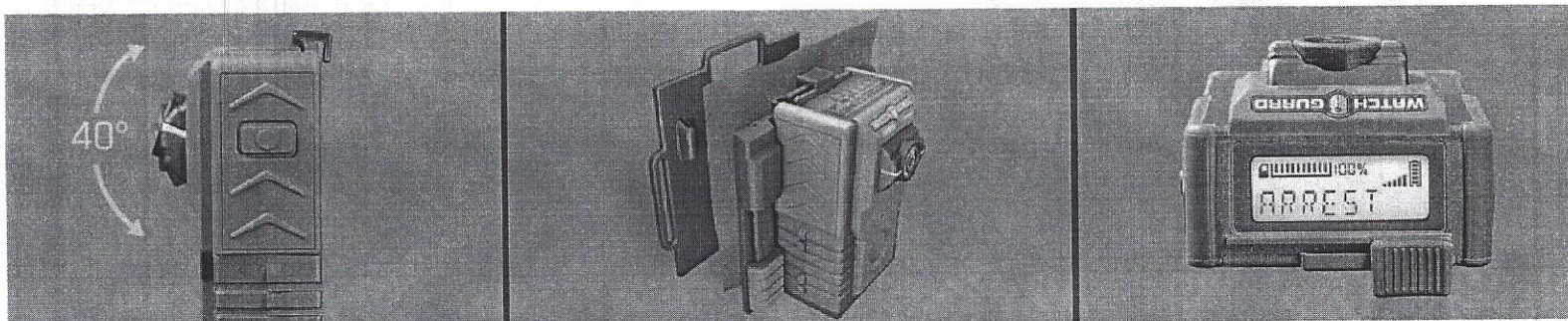
A setting sun, a car's dark interior and passing traffic don't stop the capture of great video and audio evidence.

DOCK AND GO FILE UPLOAD

Fully automatic uploading of events with no officer involvement via USB dock, ideal for individual officer use, or eight slot Ethernet transfer station for large agencies.

SMART DEVICE ACCESS

Manage VISTA WiFi features, categorize events and stream live video using a Wi-Fi enabled smart device.



Lens rotates 40° for optimal aiming from any mounting location.

Locking magnetic chest mount is our most popular.

Everything you need to know is displayed on a backlit screen.

TECHNICAL SPECIFICATIONS

	WIFI	STANDARD	EXTENDED
Continuous HD Recording	9 Hours	7 Hours	11 Hours
Continuous SD Recording	10 Hours	8 Hours	12.5 Hours
Storage Capacity	32 GB	32 GB	32 GB
Certified to Military Specification	MIL STD 810-G	MIL STD 810-G	MIL STD 810-F
Operating Conditions	-4° F to +149° F	-4° F to +149° F	-4° F to +149° F
Field of View	130°	130°	130°
Built-In Wi-Fi	Yes	No	No
Built-In GPS	Yes	No	No



26th of February 2021

Prospective WatchGuard Video Customer

Reference: WatchGuard Video Sole Source Letter

To whom it may concern:

WatchGuard Video is the exclusive and sole manufacturer of the 4RE Digital In-Car Video System, the High-Fidelity Wireless Microphone System, and the VISTA and V300 wearable camera systems. With the exception of the following agreements, these products are represented and sold only by WatchGuard Video Regional Sales Managers selling factory direct in protected sales territories. The exceptions to this are agreements allowing resellers to distribute WatchGuard products on a General Services Administration Contract (GSA), and State Contracts in Pennsylvania, Louisiana, and New Jersey. WatchGuard is the only company able to provide warranties and maintenance for the above-mentioned products.

Additionally, several important and unique features are available only with these products;

4RE

- 4RE is the only high-definition digital in-car video system available today that features the Patented multiple resolution encoding. This allows the front camera to record in two different IACP compliant resolutions simultaneously, allowing the most critical events to be saved in 720P high-definition and the routine events to be saved in 480P (864x480) resolution.
- 4RE exclusively offers the Panoramic X2 camera, manufactured only by WatchGuard Video, which is the industry's only dual lens, rotatable turret camera which houses a 68-degree rotatable camera and a 150 degree panoramic camera.

Wireless Microphone

- The Hi-Fi microphone has near CD quality high fidelity sound, a line of sight range of one to two miles, and superior building penetration capabilities.
- Using patent pending intelligent standby and a lithium polymer battery gives the microphone its extraordinary battery life of up to 24 hours of talk time, and up to 30 days of standby time.
- The wireless microphone holsters are manufactured exclusively for WatchGuard and manufactured to WatchGuard transmitter specification.



VISTA, VISTA WiFi, & VISTA XLT

- VISTA is constructed with industrial grade components and is manufactured in the U.S.A. It is capable of recording both High Definition and Standard Definition video, and battery life capable of recording at least 9 continuous hours of HD video. VISTA has other unique features, including:
 - The only wearable camera to integrate with the WatchGuard Video Evidence Library and Evidence Library Express video and evidence management applications.
 - Record-After-The-Fact which gives the ability to retrieve video not previously recorded as an event
 - Quick Connect Mobile Charger
 - VISTA XLT Point-of-View Mounting

V300

- The WatchGuard V300 HD body camera and its continuous-operation capabilities solve the dilemma of keeping cameras and officers productive beyond a 12-hour shift. A detachable battery is easily changed by the officer, and 128GB of memory ensures space for all recorded events. The only wearable camera to integrate with the WatchGuard Video Evidence Library and EvidenceLibrary.com video and evidence management applications.
 - Detachable Battery - Easily change the WatchGuard V300 detachable battery while on the go.
 - Wireless Uploading - Send critical video back to headquarters while still in the field.
 - Incident Recovery - Go back in time and capture video from events days after they happened, even when the record button was never pressed.
 - Natural Field of View - Eliminate the fisheye effect from wide-angle lenses that warps video footage. Distortion correction technology provides a clear and complete evidence review process.
 - Integrated with In-Car System - One or more WatchGuard V300 cameras and a 4RE in-car system can work seamlessly as a single system, capturing synchronized video of an incident from multiple vantage points.

Respectfully submitted,

Giles Tipword

MSSI Vice President of Sales - North America

WatchGuard Video, Inc.



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Acknowledge receipt of Final Judgement in Civil Action No. C020-1115 for the acquisition of property identified in the attached documentation as Forrest County Parcel PPIN 022501 for the Hall Avenue East Overpass Project and authorize the issuance of a manual check to the court in the amount of \$3,900.00.
File Number: 2022-392
Minute Book #

Summary

Acknowledge receipt of Final Judgement in Civil Action No. C020-1115 for the acquisition of property identified in the attached documentation as Forrest County Parcel PPIN 022501 for the Hall Avenue East Overpass Project and authorize the issuance of a manual check to the court in the amount of \$3,900.00.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

FILED

APR 20 2021

**IN THE SPECIAL COURT OF EMINENT DOMAIN
FORREST COUNTY, MISSISSIPPI**

Shirley Williams
FORREST COUNTY CIRCUIT CLERK

CITY OF HATTIESBURG, MISSISSIPPI

PLAINTIFF

VERSUS

CIVIL ACTION NO. C020-1115

ROXIE LEWIS

DEFENDANT

JUDGMENT

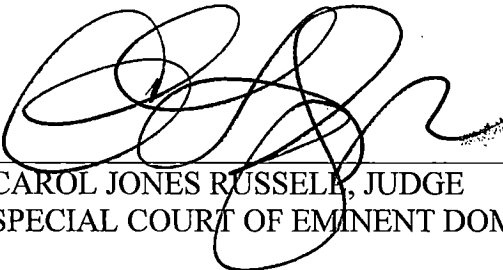
IN THIS CAUSE, Plaintiff, City of Hattiesburg, Mississippi, a municipal corporation, filed a Complaint to Condemn on December 22, 2020, to acquire certain property described in Exhibit "A" attached hereto and incorporated herein. The Court finds that process was served according to law and all parties are before the Court, and that the Court has jurisdiction over the parties and the subject matter.

THIS CAUSE came on to be heard on the 16th day of April, 2021. The Court called this matter for hearing and counsel for Plaintiff made an appearance on behalf of Plaintiff. At the request of Plaintiff, this matter was submitted to the Court pursuant to §11-27-13, Mississippi Code of 1972, Annotated, without a jury. The Court called on Plaintiff to provide testimony concerning the value of the property in question and public use thereof. Plaintiff, having filed a Statement of Value in this cause, offered testimony in support of said value as to the amount of just compensation that would be due Defendants as a result of this condemnation. Defendants, having filed no Statement of Value, offered no evidence as to the amount of just compensation due.

The Court, having heard and considered the testimony offered in this matter, FINDS, ADJUDICATES AND ORDERS as follows:

1. That the amount of just compensation due Defendants for the taking of Defendants' property as described in Exhibit "A" attached hereto is \$3,900.00, which is the total amount due inclusive of all interest, and that the subject property is being acquired by Plaintiff for a public use.
2. Based upon the testimony provided to the Court, the Court directs the Clerk, upon receipt of all compensation from Plaintiff, to disburse all such funds to all Defendants as their interests may appear.
3. That this Court does hereby vest title and possession to the property described in Exhibit "A" in Plaintiff, and it may be appropriated to the public use as prayed for in the Complaint; let Plaintiff pay the costs, for which execution may issue.
4. That a copy of this Judgment shall be certified and filed in the Land Deed records of the Chancery Clerk's office of Forrest County, Mississippi, and be enrolled according to law.

SO ORDERED AND ADJUDGED on this, the 16th day of April, 2021.


CAROL JONES RUSSELL, JUDGE
SPECIAL COURT OF EMINENT DOMAIN

Prepared and presented by:
Moran M. Pope, III
POPE & POPE, P.A.
Post Office Box 17527
Hattiesburg, MS 39404-7527
(601) 268-9997
Miss. Bar No. 4441
randypope@popelaw.com

Roxie Lewis - +/-0.07 Ac.

LEGAL DESCRIPTION (Proposed Right-of-Way Acquisition)

A parcel of land being part of Lot 6 of Block 16 of Omega Addition to the City of Hattiesburg, Forrest County, Mississippi, as per map or plat thereof on file in the office of Chancery Clerk of Forrest County, Mississippi, being more particularly described as follows:

Commencing a found 2" metal pipe at the Southwest Corner of Lot 6 of Block 16 of Said Omega Addition to the City of Hattiesburg, Mississippi, said point also being the Point of Beginning; thence run and along the eastern right-of-way boundary of Klondyke Street North 00 degrees 02 minutes 12 seconds East for a distance of 6.87 feet; thence leaving said eastern right-of-way boundary run North 73 degrees 30 minutes 55 seconds East for a distance of 124.82 feet to a point on the western boundary of a parcel of land being described in Deed Book 1089, Page 354 on file in the office of Chancery Clerk of Forrest County, Mississippi; thence run and along said western boundary South 00 degrees 11 minutes 32 seconds West for a distance of 42.43 feet to a found ½" metal pipe at the Southwest Corner of said Parcel said point also being a point on the northern right-of-way boundary of Hall Avenue; thence run and along said northern right-of-way boundary North 89 degrees 55 minutes 43 seconds West for a distance of 119.55 feet back to the POINT OF BEGINNING. Said parcel contains 0.07 acres (2,947 square feet), more or less.

Drawing Location: 8/76242036.dwg/PLAT8/76242036-PLAT8.dwg

Hattiesburg Publishing, Inc.

525 North Main Street, Suite C. • Hattiesburg, MS 39403
(601) 268-2331 tel • (601) 268-2965 fax

Proof of Publication

THE STATE OF MISSISSIPPI, LAMAR COUNTY, FORREST COUNTY
Personally appeared before me, the undersigned person, representing The PineBelt NEWS, a weekly newspapers published in Lamar County and Forrest County, Mississippi, who, being duly sworn, says that the notice, a true copy of which is hereto annexed, appeared in the issues of said newspapers as follows:

Total # of Words: 755 Published 3 times

Date 1st Published: Jan 28 Amt: 90.60

Date 2nd Published: Feb 4 Amt: 75.50

Date 3rd Published: Feb 11 Amt: 75.50

Date 4th Published: _____ Amt: _____

Date 5th Published: _____ Amt: _____

Subtotal Printer's Fee: 241.60

Proof of Publication Fee: 3.00

TOTAL: 244.60

(signed) K Christina Price
The PineBelt NEWS

Sworn to and subscribed before me in my Presence, this 11th
day of February, 2021, a Notary Public in
and for the County of Lamar, State of Mississippi:

(signed) Ethelene H. Bullock

FOR OFFICE USE ONLY:

- ☐ Em P: _____
- ☐ App: _____
- ☐ File Name: Pope& Pope - Summons Lewis
- ☐ Invoice #: _____
- ☐ Inv. Crt/Mld: _____
- ☐ Pymt Rec.d: _____
- ☐ POP sent: _____

Case: 1800120 cv 01415 Document #: 8 Filed: 02/23/2021 Page 1 of 1

IN THE SPECIAL COURT OF EMINENT DOMAIN

FORREST COUNTY, MISSISSIPPI
CITY OF HATTIESBURG,
MISSISSIPPI
A MUNICIPAL CORPORATION
PLAINTIFF
VERSUS
CIVIL ACTION NO. 20-1115
ROXIE LEWIS
DEFENDANT

SUMMONS BY PUBLICATION

THE STATE OF MISSISSIPPI
TO: HEIRS OF ROXIE LEWIS OR
PARTIES HAVING AN INTEREST IN
THE REAL PROPERTY DESCRIBED
AS FOLLOWS:

LEGAL DESCRIPTION (Proposed
Right-of-Way Acquisition)

A parcel of land being part of Lot 6 of
Block 16 of Omega Addition to the City
of Hattiesburg, Forrest County, Missis-
sippi, as per map or plat thereof on file
in the office of Chancery Clerk of Forrest
County, Mississippi, being more particu-
larly described as follows:

Commencing a found 2" metal pipe at
the Southwest Corner of Lot 6 of Block
16 of Said Omega Addition to the City of
Hattiesburg, Mississippi, said point also
being the Point of Beginning; thence run
and along the eastern right-of-way
boundary of Klondyke Street North 00
degrees 02 minutes 12 seconds East for
a distance of 6.87 feet; thence leaving
said eastern right-of-way boundary run
North 73 degrees 30 minutes 55 sec-
onds East for a distance of 124.82 feet
to a point on the western boundary of a
parcel of land being described in Deed
Book 1089, Page 354 on file in the office
of Chancery Clerk of Forrest County,
Mississippi; thence run and along said
western boundary South 00 degrees 11
minutes 32 seconds West for a distance
of 42.43 feet to a found 1/2" metal pipe at
the Southwest Corner of said Parcel said
point also being a point on the northern
right-of-way boundary of Hall Avenue;
thence run and along said northern right-
of-way boundary North 89 degrees 55
minutes 43 seconds West for a distance
of 119.55 feet back to the POINT OF BE-
GINNING. Said parcel contains 0.07
acres (2,947 square feet), more or less.

You have been made a Defendant in
the suit filed in this Court by the City of
Hattiesburg, Mississippi, Plaintiff, seek-
ing to acquire certain real property lo-
cated in the City of Hattiesburg,
Mississippi, in connection with the Hall
Avenue Overpass Project. Defendants
other than you in this action are none.

You are summoned to appear and de-
fend against this Complaint to Condemn
on the 16th day of April, 2021, at 9:00 o'-
clock A.M., at the Forrest County Juve-
nile Detention Facility, located at 110
Alcorn Avenue, Hattiesburg, Mississippi,
and in the case of your failure to appear
and defend, a judgment will be entered
for the things demanded in the complaint
of petition.

You are hereby given notice that the
complaint filed in this cause requests the
Court to grant the right of immediate title
and possession upon the appointment of
an appraiser pursuant to §11-27-83, Mis-
sissippi Code Annotated (1972), and
upon completion of service of process on
all Defendants, an Order will be pre-
sented to the Court to appoint a disinter-
ested, knowledgeable person qualified to
make an appraisal of the property de-
scribed in the Complaint. Upon filing the
appraisal by the Court-appointed ap-
praiser, each Defendant will be provided
notice that the appraisal report has been
filed and upon completion of the five (5)
days' notice thereof to Defendants,
Plaintiff will present an Order to the Court
vesting and confirming immediate title
and possession of the property as
prayed for in the Complaint, unless for
other cause shown or for uncertainty
concerning the immediate public need
for such property pursuant to §11-27-83,
the judge determines that such passing
of title and right of entry should be de-
nied.

You are hereby further given notice
that not less than ten (10) days prior to
the date for the hearing, you are required
to file a Statement of Value pursuant to
§11-27-7 of the Mississippi Code An-
notated (1972), which shall be treated as
pleadings in this action. The date of the
filing of the Complaint herein is the 11th
day of January, 2021, and the name and
address of the attorney for the Plaintiff is
Moran M. Pope, III, P. O. Box 17527,
Hattiesburg, MS 39404.

Other than the Statement of Value,
you are not required to file an answer or
other pleading, but you may do so if you
desire.

ISSUED UNDER MY HAND and the
Seal of said Court, this 25th day of Jan-
uary, 2021

GWEN WILKS
CIRCUIT COURT CLERK OF
FORREST COUNTY, MISSISSIPPI
(SEAL)

By: /s/ Chastity Pierce
DEPUTY CLERK

Prepared by:
Moran M. Pope, III
MSB #4441

Attorney for the City of Hattiesburg
P. O. Box 17527
Hattiesburg, MS 39404
Telephone: 601-268-9997
randypope@popelaw.com

Published January 28,
February 4, 11, 2021

FILED

FEB 23 2021

Chastity Pierce
FORREST COUNTY CIRCUIT CLERK



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Acknowledge receipt of fully executed Agreement for (1) Local Agency Highway-Railway Grade Separation Improvements and (2) Permanent Easement Both Encroachment and Airspace, with the Illinois Central Railroad Company.
File Number: 2022-383
Minute Book #

Summary

Acknowledge receipt of fully executed (1) Agreement for Local Agency Highway-Railway Grade Separation Improvements and (2) Permanent Easement Both Encroachment and Airspace, with the Illinois Central Railroad Company.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

Project No. Hall Avenue East
Vicinity ICRR Milepost K 94.44
Hall Avenue East
Hattiesburg, Mississippi
Forrest County

PERMANENT EASEMENT BOTH ENCROACHMENT AND AIRSPACE

KNOW ALL MEN BY THESE PRESENTS, that the ILLINOIS CENTRAL RAILROAD COMPANY, an Illinois corporation duly authorized to do business in the State of Mississippi, hereinafter referred to as Grantor, for and in consideration Three Thousand Five Hundred dollars (\$3,500.00), sufficiency of which is hereby acknowledged, does hereby grant, so far as it lawfully may, to the CITY of HATTIESBURG, hereinafter referred to as Grantee, a permanent easements for the purpose of construction, renewal and maintenance of an overhead highway bridge, drainage, grading, sodding and other highway construction and maintenance purposes, hereinafter called "Structure", over, upon and across the following described premises in the vicinity of Grantor's Beaumont Subdivision Bridge No. K 94.44 and track(s), Hattiesburg, Forrest County, Mississippi, as shown on the print attached hereto and made a part hereof, and more particularly described as follows:

DESCRIPTION:

ENCROACHMENT:

An Encroachment Easement being part of the Northeast 1/4 of Section 15, Township 4 North, Range 13 West, Forrest County, Mississippi, being more particularly described as follows, with bearings based upon Grid North derived from GPS observations and referenced to Mississippi State Plans Coordinate System (East Zone, NAD 83), with convergence angle of (-)00°14' 07.31" and using grid distances with a combined factor of 0.99997790 (determined at the Northeast Corner of Lot 2 of Block 1 of J.E. Arledge Survey of the City of Hattiesburg, Mississippi):

Commencing at the Northeast Corner of Lot 2 of Block 1 of said J.E. Arledge Survey of the City of Hattiesburg, Mississippi, said point also being a point on the southern right-of-way boundary of Hall Avenue; thence run and along said southern right-of-way boundary South 89 degrees 53 minutes 04 seconds East for a distance of 15.75 feet to a found 1/2" iron pin on the western right-of-way boundary of CN Railroad; thence leaving said eastern right-of-way boundary continue South 89 degrees 53 minutes 04 seconds East for a distance of 89.26 feet to a point on the eastern right-of-way boundary of said CN Railroad said point also being the Point of Beginning; thence run and along said eastern right-of-way boundary continue South 89 degrees 53 minutes 04 seconds East for a distance of 8.40 feet; thence run South 17 degrees 39 minutes 02

seconds East for a distance of 31.66 feet; thence leaving said eastern right-of-way boundary run West for a distance of 8.40 feet; thence run North 17 degrees 39 minutes 02 seconds West for a distance of 31.68 feet back to the POINT OF BEGINNING. Said parcel contains 0.006 acres (253 square feet), more or less.

AIRSPACE:

An Airspace Easement being part of the Southeast 1/4 of Section 10, Township 3 North, Range 13 West, and in part of the Northeast 1/4 of Section 15, Township 4 North, Range 13 West, Forrest County, Mississippi, being more particularly described as follows, with bearings based upon Grid North derived from GPS observations and referenced to Mississippi State Plans Coordinate System (East Zone, NAD 83), with convergence angle of (-)00°14' 07.31" and using grid distances with a combined factor of 0.99997790 (determined at the Northeast Corner of Lot 2 of Block 1 of J.E. Arledge Survey of the City of Hattiesburg, Mississippi):

Commencing at the Northeast Corner of Lot 2 of Block 1 of said J.E. Arledge Survey of the City of Hattiesburg, Mississippi; Said point also being the Point of Beginning; thence run North 17 degrees 25 minutes 28 seconds West for a distance of 29.86 feet to the Southeast Corner of Lot 16 of Block 122 of Kamper and Whinnery Survey #2 of the City of Hattiesburg, Mississippi; said point also being a point on the western right-of-way boundary of CN Railroad; thence run and along said eastern right-of-way boundary North 17 degrees 39 minutes 02 seconds West for a distance of 49.81 feet; thence leaving said eastern right-of-way boundary run East 104.94 feet to a point on the eastern right-of-way boundary of said CN Railroad; thence run and along said eastern right-of-way boundary South 17 degrees 39 minutes 02 seconds East for a distance of 79.93 feet; thence leaving said eastern right-of-way boundary continue South 17 degrees 39 minutes 02 seconds East for a distance of 31.68 feet; thence run East for a distance of 8.40 feet to a point on said eastern right-of-way boundary of CN Railroad; thence run and along said eastern right-of-way boundary South 17 degrees 39 minutes 02 seconds East for a distance of 20.99 feet; thence leaving said eastern right-of-way boundary run West for a distance of 97.59 feet to a point on the western right-of-way boundary of CN Railroad; thence run and along said western right-of-way boundary North 17 degrees 39 minutes 02 seconds West for a distance of 52.86 feet to a found 1/2" iron pin at the southern right-of-way boundary of Hall Avenue; thence run and along the southern right-of-way boundary North 89 degrees 53 minutes 28 seconds West for a distance of 15.87 feet back to the POINT OF BEGINNING. Said parcel contains 0.29 acres (12,636 square feet), more or less.

The grant aforesaid is made solely upon the conditions and limitations hereinafter contained, and the City, by its acceptance of the said grant, accepts such conditions

and limitations and agrees to the full, strict and prompt observance and performance thereof:

1. The easements granted in this indenture are limited to the uses and purposes hereinbefore expressed and for no other purpose whatever. The airspace easement is based on twenty four and one half (24.5) feet above top of existing rail.

2. Terms and conditions covering the construction and maintenance of said Structure across and upon said easement(s) and the expenses resulting therefrom shall be covered by a separate agreement between the Grantee and Grantor and, except as may be specifically provided in said separate agreement, all work set forth therein shall be performed at no expense to Grantor. It is expressly understood and agreed that no work of any sort shall be performed on said easement area(s) by the Grantee prior to the execution of said construction and maintenance agreement.

3. The Grantor reserves to itself, its grantees (other than the grantee named in this indenture), licensees, lessees, successors and assigns, the right not only to continue to keep and use or operate all tracks and other facilities or structures now upon or beneath the surface of, or above, the said described premises, but also the right to install and use or operate additional tracks, facilities and structures upon and beneath the surface of, or above, the said described premises and the Grantor reserves also the right to grant to others permission to install and use or operate other facilities and structures, including, but not limited to, underground pipes and conduits, upon and beneath the surface of the said premises, and overhead wires, cables, and poles or other structures for the support of such facilities and structures which may now or hereafter be on the said premises, provided that said installations can be made without interference with the use of the said premises as provided in this easement, impair the highway or interfere with the free and safe flow of traffic thereon. No attachments of any kind will be permitted to be installed on any structures or facility of the Grantee without the prior written consent of the Grantor, which consent will not be unreasonably withheld.

4. The Grantee shall, without charge or assessment therefore against the Grantor or the Grantor's property, and in accordance with plans and specifications which have been approved by Grantor's Vice President-Maintenance or his duly authorized representative, perform all work and furnish any material necessary for the construction and maintenance of the Structure. The Grantee shall also assume and pay all expense incurred by the Grantor incident to, or as a result of, the exercise of this grant. The Project covered under this agreement shall be subject to the current Grantor's Right of Entry form, by reference made a part hereof, and to all applicable Federal and State laws, rules, regulations, orders and approvals pertaining to agreements, specifications, award of contracts, acceptance of work and procedures in general. With respect to reimbursement for work performed by the Railroad on behalf of the Project, Local Agency and Railroad shall be governed by the applicable provisions of the Federal-Aid Policy Guide (FAPG), as currently amended, which is also made part of this agreement by reference.

5. The Grantee or its Contractor shall, at all times, conduct his work in a manner satisfactory to the Grantor's authorized representative, and shall exercise care so as to not damage the property of the Grantor or to interfere with the operations of the railroad. The authorized representative will, at all times, have jurisdiction over the safety of the railroad operation, and the decision of the representative as to procedures which may affect the safety of railroad operation shall be final, and the Grantee or its Contractor must be governed by such decision.

6. The Grantor does not warrant title to the said described premises in which the foregoing easement is granted and does not undertake to defend the State in the peaceable enjoyment thereof, but the grant of easement aforesaid shall be subject to the continuing lien of all lawful outstanding existing liens and superior rights, if any, in and to said premises.

7. If any work to be performed by or for the Grantee is let by contract, the Grantee shall require each contractor before coming upon the Grantor's tracks or waylands, to obtain from the Grantor's authorized representative permission for occupancy and use of the premises and to ascertain and comply with the Grantor's requirements for clearances, operation, and its current general safety regulations. Protective services and devices, including, but not limited to, switchtenders, flagmen, or watchmen as the Grantor may deem desirable to promote safety and continuity of rail traffic during the progress of the work, for which said contractor(s) shall be required to reimburse the Railroad promptly upon receipt of the bills, and the Grantee shall withhold final payment to the said contractor(s) until the Railroad has notified Grantee that all such bills have been settled. For any such work which is performed by the Railroad for the Grantee's own forces, Grantee hereby agrees to so reimburse the Railroad upon the receipt of bills. Cost and expense for work performed by Railroad, as referred to in this Article, shall consist of the actual cost of labor, materials and related items, plus Railroad's standard additives in effect at the time the work is performed.

8. The Railroad shall prepare the detailed drawings, plans (including surveys and other engineering services), estimates of cost and any required specifications for the improvements proposed. These detailed plans, estimates and specifications shall be submitted to Grantee for its approval. No approved plan or specification shall be changed by the Railroad without written permission from the Grantee, excepting for minor changes necessitated by actual field conditions encountered at the time of construction or substitutions of equivalent materials as may be agreed upon by Railroad's and Grantee's respective representatives.

9. The Grantee shall prepare the detailed drawings, plans and specifications as may be required for any proposed improvements and shall perform or arrange for the performance of said items of work at its sole cost, risk and expense, except as may otherwise be specifically provided for in this agreement.

10. Each party will provide the necessary construction engineering and inspection for carrying out its work and the costs for such services shall be borne by the project. Any costs which may be incurred by the Railroad for inspecting the work performed by or on behalf of the Grantee, as said work may affect the properties and facilities of the Railroad, or the safety or continuity of train operations, shall likewise be deemed a project expense.

11. In the event the work to be performed by Grantee on or in close proximity to the Railroad's property, track(s) or other facilities is let by contract, Grantee shall require its contractor(s) to furnish evidence of Workmen's Compensation coverage and to maintain at all times during the performance of any construction or reconstruction work the following types of insurance: (A) Contractor's Public Liability and Property Damage Insurance, including automobile coverage, with a combined single limit of \$5,000,000 per occurrence with an aggregate limit of \$10,000,000 for the term of the policy; (B) Contractor's Protective Public Liability and Property Damage Liability Insurance with the same limits as (A) if subcontractors are involved; and (C) Railroad Protective Public Liability and Property Damage Liability Insurance with the same limits as prescribed in (A) naming Illinois Central Railroad Company as the insured and in a form of acceptable to the Railroad, and said insurance shall be primary as it relates to this contract. The Railroad shall be furnished with an original of the Railroad Protective Policy, and, in addition, certificate(s) of insurance evidencing the other insurance coverages specified herein. The Railroad Protective Policy and the certificate(s) of insurance must meet with the approval of the Railroad before any work shall be commenced on Railroad's property or in close proximity to Railroad's tracks or other facilities by the said contractor(s).

12. After completion of the work contemplated under this agreement, the Grantee, at its sole cost and expenses, shall operate, own and perpetually maintain the grade separation structure and appurtenances constructed pursuant to this agreement. For the purpose of this Article, it is agreed maintenance shall include, but not limited to, routine inspections and repairs and any future rehabilitation, renewal and/or replacement of the structure, in whole or part as may be needed.

13. If the public use of the easement on the premises described in this indenture for the purposes expressed in it shall be abandoned or discontinued, the said easement shall thereupon cease and determine and the Grantee shall surrender or cause to be surrendered to the Grantor, or Grantor's successors or assigns, the peaceable possession of said described premises, and title to the said premises shall remain in the Grantor, or its successors or assigns, free and clear of all rights and claims of the Grantee and of the public for use and occupancy of the said premises. Full and complete title, ownership and use of the Grantor's premises and of the portions thereof herein involved are reserved to Grantor, and its successors or assigns, subject to the right, permission and authority expressly granted in this indenture. Upon termination of the easement for any reason, the Grantee shall restore the Grantor's premises to a like condition as at present, insofar as such restoration may in the opinion of Grantor's duly authorized representative be practicable.

14. Subject to the provisions of the foregoing Section 12, this indenture and the conditions contained in it shall run with the land and be binding upon the respective grantees, licensees, lessees, successors and assigns of the parties.

IN WITNESS WHEREOF, the Grantor has caused this indenture to be signed by its proper duly authorized officers as of the 3rd day of ~~February~~ ^{MAY}, 2022.

ILLINOIS CENTRAL RAILROAD COMPANY

By: James Fountain

TITLE: James Fountain, Senior Manager of Real Estate

State of ILLINOIS

}

County of COOK

} ss.

}

On this 3rd day of ~~July, 2020~~ ^{MAY 2022}, before me appeared James Fountain, to me personally known, who, being by me duly sworn did say that he is the Senior Manager of Real Estate of Illinois Central Railroad Company, and that the instrument was signed in behalf of the company by authority of its Board of Directors and that acknowledged the instrument to be the free act and deed of the company.

Sydney M. Cervantes
(Notary Public)

My commission expires: MARCH 23, 2025



APPROVED:

By: Toby Barker

Date: 2/23/2022

Toby Barker
Mayor
CITY of HATTIESBURG

AGREEMENT
FOR
LOCAL AGENCY HIGHWAY-RAILWAY
GRADE SEPARATION IMPROVEMENTS

THIS AGREEMENT, made and entered into this 23rd day of February 2022 by and between the CITY of HATTIESBURG in Forrest County of the State of Mississippi, hereinafter referred to as the "Local Agency" and the ILLINOIS CENTRAL RAILROAD COMPANY, hereinafter referred to as "Railroad";

WITNESSETH

Whereas, Hall Avenue does not cross the right-of-way and the tracks of Railroad as an at-grade highway crossing at the location listed on the attached Exhibit "A", by reference hereto made a part hereof; and

Whereas, in the interest of public safety and convenience, the parties hereto propose to construct a Highway-Railway Grade Separation at said location; and

Whereas, the parties hereto agree to accomplish the proposed improvements, all or in part, through the use of Federal, State and/or Local Agency funds which are provided under applicable Federal, State and/or Local Agency Act, Law and/or appropriation;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements of the parties hereto, to be by them respectfully kept and performed as hereinafter set forth, it is hereby agreed as follows:

ARTICLE I. For the purpose of identifying the plans, specifications, estimates and other documents, this project will be designed as "Bridge Project Hall Avenue East, at IC milepost K 94.44, DOT No. 931 470D, Hall Avenue East Bridge over ICRR in Hattiesburg, Mississippi."

ARTICLE II. The Project covered under this agreement shall be subject to the "SPECIAL PROVISIONS" attached hereto as Exhibit "B", by reference made a part

hereof, and to all applicable Federal and State laws, rules, regulations, orders and approvals pertaining to agreements, specifications, award of contracts, acceptance of work and procedures in general. With respect to reimbursement for work performed by the Railroad on behalf of the Project, Local Agency and Railroad shall be governed by the applicable provisions of the Federal-Aid Policy Guide (FAPG), as currently amended, which is also made part of this agreement by reference.

ARTICLE III. Terms and conditions covering the permanent easement and the expenses resulting therefrom shall be covered by a separate agreement between the Railroad and the Local Agency and, except as may be specifically provided in said separate agreement, all work set forth therein shall be performed at no expense to the Grantor. It is expressly understood and agreed that no work of any sort shall be done on said area prior to the execution of the easement agreement.

ARTICLE IV. The Railroad shall prepare the detailed drawings, plans (including surveys and other engineering services), estimates of cost and any required specifications for the improvements proposed listed under "WORK TO BE PERFORMED BY RAILROAD" on Exhibit "A". These detailed plans, estimates and specifications shall be submitted to Local Agency for its approval. No approved plan or specification shall be changed by the Railroad without written permission from the Local Agency, excepting for minor changes necessitated by actual field conditions encountered at the time of construction or substitutions of equivalent materials as may be agreed upon by Railroad's and Local Agency's respective representatives.

ARTICLE V. All items of work listed under "WORK TO BE PERFORMED BY RAILROAD" on Exhibit "A" shall be performed by the Railroad with its own forces or as otherwise provided herein on a force account basis. In the event the Railroad intends to use forces other than its own under a continuing contract or contracts, the Railroad shall indicate in its estimate(s) the item(s) of work to be performed under such contract or contract(s) and list in its estimate(s) the names of each contractor whose services will be used to perform the work. If the estimate of the cost for such work (including labor, materials and/or equipment) to be performed under any one contract or with any one contractor exceeds \$25,000, said contract or contracts shall be secured by competitive bids. Such contracts will be in compliance with the Civil Rights Act of 1964 and implementing regulations applicable to Federal-Aid projects as well as any applicable State statutes and implementing rules and regulations prohibiting discrimination in the solicitation or selection of contractors or subcontractors on the basis of race, color national origin or sex.

ARTICLE VI. The Local Agency shall prepare the detailed drawings, plans and specifications as may be required for any proposed improvements listed under "WORK TO BE PERFORMED BY LOCAL AGENCY" on Exhibit "A" and shall perform or

arrange for the performance of said items of work at its sole cost, risk and expense, except as may otherwise be specifically provided for in this agreement.

ARTICLE VII. In the event the work to be performed by Local Agency is to be let by contract, Local Agency shall require its contractor(s) before entering upon the tracks or premises of Railroad, or performing any work on or in close proximity thereof, to secure permission from the authorized representative of the Railroad for the occupancy and use of its premises and/or to confer with the Railroad relative to its requirements for clearances, operations and general safety regulations. The Railroad reserves the right to furnish Local Agency's contractor(s), at the sole cost and expense of said contractor(s), protective services such as, but not limited to, flagman, watchman or other as the Railroad may deem desirable to promote safety and continuity of rail traffic during the progress of the work, for which said contractor(s) shall be required to reimburse the Railroad promptly upon receipt of the bills, and the Local Agency shall withhold final payment to the said contractor(s) until the Railroad has notified Local Agency that all such bills have been settled. For any such work which is performed by the Railroad for the Local Agency's own forces, Local Agency hereby agrees to so reimburse the Railroad upon the receipt of bills. Cost and expense for work performed by Railroad, as referred to in this Article, shall consist of the actual cost of labor, materials and related items, plus Railroad's standard additives in effect at the time the work is performed.

ARTICLE VIII. In the event the work to be performed by Local Agency on or in close proximity to the Railroad's property, track(s) or other facilities is let by contract, Local Agency shall require its contractor(s) to furnish evidence of Workmen's Compensation coverage and to maintain at all times during the performance of any construction or reconstruction work the following types of insurance: (A) Contractor's Public Liability and Property Damage Insurance, including automobile coverage, with a combined single limit of \$5,000,000 per occurrence with an aggregate limit of \$10,000,000 for the term of the policy; (B) Contractor's Protective Public Liability and Property Damage Liability Insurance with the same limits as (A) if subcontractors are involved; and (C) Railroad Protective Public Liability and Property Damage Liability Insurance with the same limits as prescribed in (A) naming Illinois Central Railroad Company as the insured and a form of acceptable to the Railroad, and said insurance shall be primary as it relates to this contract. The Railroad shall be furnished with an original of the Railroad Protective Policy, and, in addition, certificate(s) of insurance evidencing the other insurance coverages specified herein. The Railroad Protective Policy and the certificate(s) of insurance must meet with the approval of the Railroad before any work shall be commenced on Railroad's property or in close proximity to Railroad's tracks or other facilities by the said contractor(s).

ARTICLE IX. Each party will provide the necessary construction engineering and inspection for carrying out its work as set forth in Exhibit "A" and the costs for such services shall be borne by the project. Any costs which may be incurred by the Railroad for inspecting the work performed by or on behalf of the Local Agency, as said work

may affect the properties and facilities of the Railroad, or the safety or continuity of train operations, shall likewise be deemed a project expense.

ARTICLE X. Subsequent to the award of any contract or contracts by Local Agency, and before any work is started on this project, a conference shall be held between the representatives of the Local Agency, the Railroad and the interested contractor(s), at a time and place as designated by the Local Agency's representative, for the purpose of coordinating the work to be performed by the several parties, and at which time a schedule of operations will be adopted. Such schedule of operations will provide sufficient lead time for the parties to order and assemble their respective materials.

ARTICLE XI. The Railroad will not assemble its materials nor begin its work without written authorization from the Local Agency to proceed. Upon receipt of authorization, the Railroad shall promptly commence to assemble the necessary materials and, as soon as possible thereafter, arrange to perform its work consistent with the schedule of operations adopted and in accordance with the approved plans and specifications, and shall notify, in writing, the agencies listed on Exhibit A before commencing work.

ARTICLE XII. The Local Agency agrees, to the extent it lawfully may, to indemnify the Railroad against and save it harmless from loss and damage to any property, and injury to or death of any persons, and from court cost and attorney's fees, and expenses incident thereto, arising out of any work to be performed hereunder by or on behalf of Local Agency and caused by the negligence of Local Agency, or any contractor for Local Agency, or their respective officers, agents or employees.

ARTICLE XIII. The Railroad agrees to indemnify the Local agency against and save it harmless from loss and damage to any property, and injury to or death of any persons, and from court cost and attorney's fees, and expenses incident thereto, arising out of any work to be performed hereunder by Railroad and caused by the negligence of Railroad or its officers, agents or employees.

ARTICLE XIV. The Railroad shall keep an accurate and detailed account of the actual cost and expense as incurred by it, or for its account, in the performance of the work it herein agrees to perform. The Railroad, for the performance of its work as herein contemplated, may bill the Local Agency monthly for the Local Agency's share of the costs and expenses incurred, including the cost of materials (including applicable sales, excise or value-added taxes) purchased, delivered and stored on the Railroad's property but not yet installed, provided said materials are designated for exclusive use on this project. The progressive invoices may be rendered on the basis of an estimated percentage of the work completed, plus allowable additives. The Local Agency, after verifying that the bills are reasonable and proper, shall promptly reimburse the Railroad for 100% of the amount billed, but not to exceed the Local Agency's share of the total of the estimate(s) contained in Exhibit "B". Payment under this paragraph shall not be claimed for any bill totaling less than \$500.

The Railroad, upon completion of its work, shall promptly render to the Local Agency a detailed final statement of its actual expense as incurred. After the Local Agency has checked the final statement and verified that it is reasonable and proper, insofar as they are able to ascertain, the Local Agency shall then reimburse the Railroad an amount, less previous payments, if any, equal to 100% of the amount of the Local Agency's share as billed. After The final inspection of the installation has been made, and the Local Agency, or at Local agency's request, the State, has audited the expenses as incurred by the Railroad, the Local Agency shall bill the Railroad for, and the Railroad shall promptly refund, any item or items of expense found as not being eligible for reimbursement.

For the purpose of this Article, the Local Agency's share of any costs and expenses shall be deemed to include all funds advanced to, or to be reimbursed to, Local Agency, regardless of source, for the purpose of defraying the cost and expense of this improvement project.

ARTICLE XV. The improvements contemplated herein shall be placed in service immediately after the same are complete, pending final inspection by representatives of the parties hereto and representatives of any participating State and/or Federal Agencies if State and/or Federal funds are utilized. The Local agency shall notify Railroad of the date on which the completed improvements will be ready for final inspection.

ARTICLE XVI. After completion of the work contemplated under this agreement, the Local Agency, at its sole cost and expenses, shall operate, own and perpetually maintain the grade separation structure and appurtenances constructed pursuant to this agreement. For the purpose of this Article, it is agreed maintenance shall include, but not limited to, routine inspections and repairs and any future rehabilitation, renewal and/or replacement of the structure, in whole or part as may be needed. In the event, however, of the structure being damaged as a direct result of a train accident or derailment caused by the sole negligence of Railroad, the Local Agency will perform or arrange for the performance of repairs and Railroad shall reimburse Local Agency for the actual cost thereof.

ARTICLE XVII. The Local Agency hereby certifies that for payment of its obligations incurred in connection with the construction of the proposed improvements, the necessary appropriations have been made and are evidenced by the attached resolution.

ARTICLE XVIII. In the event that delays or difficulties arise in securing necessary State or Federal approvals, or in acquiring rights of ways, or in settling damage claims, or for any other cause which in the opinion of the Local Agency renders it impracticable to proceed with the construction of the project, then at any time before

the construction is started, Local Agency may serve formal notice of cancellation upon the Railroad and this agreement shall thereupon terminate. In the event of cancellation, Local Agency shall reimburse the Railroad for all eligible cost and expense incurred by the Railroad prior to receipt of notice of cancellation and payment by Local Agency.

ARTICLE XIX. This agreement shall be binding on the parties hereto, their successors and assigns.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed in three counterparts, each of which shall be considered and original, by their fully authorized officials as of the day and date first written above.

WITNESS

Stacy Valentine
Engineering Assistant

Title:

ILLINOIS CENTRAL RAILROAD COMPANY

By: Paula Pienton

Paula Pienton
Chief Engineer Bridge and Structures

WITNESS

KSA

Title: City Clerk

CITY of HATTIESBURG

By: Toby Barker

Toby Barker
Mayor



CITY of HATTIESBURG
BRIDGE
PROJECT NO. HALL AVE. EAST

EXHIBIT A

CROSSING IDENTIFICATION:

RAILROAD: Illinois Central Railroad Company

RR MILEPOST: K 94.44

DOT Number 931 470D

ROAD NAME: Hall Avenue East

LOCATION Hattiesburg, Mississippi

EXISTING CONDITIONS:

New bridge Construction no crossing exists.

DESCRIPTION OF WORK TO BE PERFORMED BY RAILROAD:

1. Furnish flagmen as required (at contractor's expense).
2. Furnish and remove temporary at-grade crossing if requires. (at contractor's expense).
3. Construction Engineering or any Railroad equipment relocations (at Project expense)
4. Incidental work necessary for completion of above. (at Project expense)

DESCRIPTION OF WORK TO BE PERFORMED BY LOCAL AGENCY:

1. Construction of new concrete bridge, approach work and, in accordance with plans and specifications to be prepared by City and approved by Railroad.
2. Incidental work necessary for completion of above.

NOTIFY BEFORE COMMENCING WORK:

Illinois Central Railroad Company
c/o Josh Glause
Senior Manager of Engineering
2151 N. Mill St
Jackson, MS 39202
ph. (601)914-2652

Illinois Central Railroad Company
c/o Mr. J. W. Dinning
Manager Public Works
2151 N. Mill Street
Jackson, MS 39202
ph. (601)914-2658

EXHIBIT B SPECIAL PROVISIONS

RELATIVE TO FLAGGING AND OTHER PROTECTION OF RAILROAD COMPANY TRAFFIC AND FACILITIES DURING CONSTRUCTION ADJACENT AND ABOVE, ON OR ACROSS, THE PROPERTY OF, OR ON, ABOVE AND BENEATH THE TRACKS OF THE ILLINOIS CENTRAL RAILROAD COMPANY

The Licensee shall, before entering upon the property of Railroad Company for performance of any work, secure a fully executed right of entry license from Railroad Company's Engineering Manager or their authorized representative for the occupancy and use of Railroad Company's property. Licensee shall confer with Railroad Company relative to requirements for railroad clearances, operation and general safety regulations.

Prior to any entry onto Railroad Company's property, employees and/or contractor(s) of Licensee doing work shall determine by the guidelines hereinafter provided and by the work to be performed the level of safety training to be required.

All employees and/or contractor(s) of Licensee not hired by Railroad Company that will work on CN property are required to have minimum www.contractororientation.com.

- a. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

All employees and/or contractor(s) of Licensee hired by Railroad Company which will work on Railroad Company property are required to have minimum CN Safety and Security Awareness training, in addition to undergoing a background check. This training and background check must be obtained through the eRailSafe.com website. If not done before, the contractor must contact CN Special Agent James Conroy at 708-332-5947 or James.Conroy@cn.ca to be issued a vendor number prior to accessing the noted website. Minimum information required of the Licensee and/or their contractor when contacting either Special Agent James Conroy or e-RailSafe is Name, Address, Telephone, Contact Person for State Projects, DOT Contract Number, and the AAR/DOT Number. This training is good for a period of two years.

- a. EXCEPTION: Railroad Company has exempted those employees of contractors providing paving services at a road crossing under construction or repair from this requirement.
- b. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

All employees and/or contractor(s) of Licensee hired by Railroad Company, whose duties include and who are engaged in the inspection, construction, maintenance, or repair of railroad track, bridges, roadway, signal and communication systems, roadway facilities, or roadway machinery that will work foul of or have the potential to foul a live track are considered Roadway Workers under FRA regulations and CN Policy. They must complete the On-Track Safety Training course approved by Railroad Company and provided by R.R. Safety – AMR,

P.O. Box 75, Lomira, WI 53048, telephone (920) 517-1677, email rrsafetytraining@yahoo.com. This training must be repeated at least once each calendar year.

- a. EXCEPTION: Railroad Company has exempted those employees of contractors providing paving services at a road crossing under construction or repair from this requirement.
- b. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.
- c. All the employees and/or contractor(s) of Licensee who will operate on-track machinery or those who will provide protection for other employees and/or contractor(s) of Licensee must also be trained on CN US Operating Rules pertaining to their duties. They must take and pass the required examination. This training is good for a period of two years.
- d. "Potential to foul a live track" is considered, at a minimum, to be working within twenty-five feet of the track; or as otherwise to be determined by CN Design & Construction Department.

The employees, contractor(s) , and/or agents of the Licensee and/or its contractor shall qualify for, and make available for inspection to Railroad Company's employees or other authorized personnel at all times while on Railroad Company property, a photo identification issued by www.e-railsafe.com, along with at least one other government-issued form of identification. Licensee and/or their contractor shall bear all costs of compliance with the requirements of this Section. Railroad Company reserves the right to bar any of employees or agents of Licensee and/or their contractor from Railroad Company's property at any time for any reason.

Licensee and/or any contractor engaged on their behalf, shall at all times conduct work in a manner satisfactory to the Engineering Manager of Railroad Company, or their authorized representative, and shall exercise care so as to not damage the property of Railroad Company, or that belonging to any other grantees, licensees, permittees or tenants of Railroad Company, or to interfere with railroad operations.

Engineering Manager of Railroad Company, or their authorized representative, will at all times have jurisdiction over the safety of railroad operations., The decision of the Engineering Manager or their authorized representative as to procedures which may affect the safety of railroad operations shall be final, and Licensee and/or their contractor shall be governed by such decision.

All work shall be conducted in such a manner as will assure the safety of Railroad Company. Railroad Company's authorized representative shall have the right, but not the duty, to require certain procedures to be used or to supervise the work on Railroad Company's property.

Should any damage occur to Railroad Company property as a result of the authorized or unauthorized operations of Licensee and/or their contractor and Railroad Company deems it necessary to repair such damage or perform any work for the protection of its property or operations, the Licensee and/or their contractor, as the case may be, shall promptly reimburse Railroad Company for the actual cost of such repairs or work. For the purpose of these Special Provisions, actual cost shall be deemed to include the direct cost of any labor, materials,

equipment, or contract expense plus Railroad Company's current standard additives in each instance.

If the work requires the construction of a temporary grade crossing across the track(s) of Railroad Company, Licensee and/or their contractor shall make the necessary arrangements and execute Railroad Company's temporary grade crossing agreement for the construction, protection, maintenance, and later removal of such temporary grade crossing. The cost of such temporary grade crossing construction and later removal shall be prepaid to Railroad Company. Additional costs for repairs, maintenance or protection will be paid within thirty (30) days upon receipt of bill(s) therefor.

Licensee and/or their contractor shall at no time cross Railroad Company's property or tracks with vehicles or equipment of any kind or character, except at such temporary grade crossing as may be constructed as outlined herein, or at any existing and open public grade crossing. Operation over such crossing shall be at the direction and method of Railroad Company's Engineering Manager or their authorized representative.

Railroad Company may, at Licensee's and/or their contractor's sole cost, risk and expense, furnish whatever protective services it considers necessary, including, but not limited to, flagger(s), inspector(s), and stand-by personnel. Flagging protection, inspection services, or standby personnel required by Railroad Company for the safety of railroad operations because of work being conducted by Licensee and/or their contractor, or in connection therewith, will be provided by Railroad Company and the cost of Licensee and shall be prepaid to Railroad Company by Licensee and/or their contractor. Flagging protection, inspection services, or standby personnel, necessary or provided in excess of prepayment amounts will be billed at the proper rates and will be promptly paid by overnight delivery.

In the event Railroad Company is unable to furnish protective services at the desired time or on the desired date(s), or if Licensee's prepayment for such services is exhausted and not replenished by Licensee and/or their contractor, Licensee and/or their contractor shall not perform any work on Railroad Company's property until such time and date(s) that appropriate Railroad Company services can be made available and/or appropriate prepayment is received. It is understood that Railroad Company shall not be liable for any delay or increased costs incurred by Licensee and/or their contractor owing to Railroad Company's inability or failure to have appropriate protective services available at the time or on the date requested.

Licensee and/or their contractor shall request and secure flagging protection by written notice to Railroad Company using CN's "Request for Flagging Services" form. This form must be submitted at least ten (10) working days in advance of proposed performance of any work or access to Railroad Company's property.

Flagging protection will be required during any operation involving direct and potential interference with Railroad Company's tracks or traffic. This may include but is not limited to fouling of railroad operating clearances, reasonable proximity of accidental hazard to railroad traffic, work within twenty-five (25) feet horizontally of the nearest centerline of any railroad track, any work over any railroad track, or in any other condition that Railroad Company deems protective services necessary, which may include work on or off Railroad Company's property more than twenty-five (25) feet from the nearest centerline of any railroad track, such as any equipment extension (including but not limited to a crane boom) that will reach or has the potential to reach within twenty-five (25) feet of any track.

Licensee and/or their contractor shall request, prepay, and secure Railroad Company signal facility locates by written notice to Railroad Company along with submission of CN's "Request for Flagging Services" form at least ten (10) working days in advance of proposed

performance of any work or access to Railroad Company property. Notice to Railroad Company does not fulfill or satisfy any other notification requirements for utility locates for non-railroad facilities.

Railroad Company may require that prior to digging, trenching, or boring activities on or near Railroad Company property, or beneath any railroad track, an on-site meeting be conducted with Railroad Company's Signal Department representative. No digging, trenching or boring activities shall be conducted in the proximity of any known buried Railroad Company signal cables without Railroad Company's Signal Department representative being present.

The rate of pay for Railroad Company employees will be the prevailing hourly rate for not less than eight (8) hours for the class of labor at regular rates during regularly assigned work hours, and at overtime rates outside of regular hours and in accordance with Labor Agreements or Schedules plus Railroad Company's current standard additives in each instance.

Wage rates are subject to change, at any time, by law or agreement between Railroad Company and employees, and may be retroactive because of negotiations or a ruling by an authorized Governmental Agent. If the wage rates are changed, Licensee and/or their contractor shall pay on the basis of the new rates and/or additives.

No digging, trenching, or boring on Railroad Company property shall be conducted without Railroad Company's written approval of the plans that were furnished to Railroad Company's Engineering Manager at least thirty (30) in advance of the excavation.

The following temporary clearances are the minimum that must be maintained at all times during any operation on or adjacent to Railroad Company property:

Vertical: 22'-0" (7.00 m) above top of highest rail within 12'-0" (3.81 m) of the centerline of any track

Horizontal: 12'-0" (3.81 m) from centerline of the nearest track, measured at right angles thereto

If lesser clearances than the above are required for any part of the work, Licensee and/or their contractor shall secure written authorization from Railroad Company's Engineering Manager for such lesser clearances in advance of the start of that portion of the work.

No materials, supplies, or equipment will be stored within twenty-five (25) feet from the centerline of any railroad track, measured at right angles thereto.

Licensee and/or their contractor will be required upon the completion of the work to remove from within the limits of Railroad Company's property all machinery, equipment, surplus materials, false work, rubbish or temporary buildings, and to leave said property in a condition satisfactory to the Engineering Manager of Railroad Company or their authorized representative.

Nothing in these Special Provisions shall be construed to place any responsibility on Railroad Company for the quality or conduct of the work performed by Licensee and/or their contractor hereunder. Any approval given or supervision exercised by Railroad Company hereunder, or failure of Railroad Company to object to any work done, material used, or method of operation shall not be construed to relieve Licensee and/or their contractor of any obligations pursuant hereto or under the License these Special Provisions are appended to.

Exhibit C Sample ROE
IMPORTANT NOTICE

CORPORATIONS

License must be signed by the President or a Vice President of the Corporation or Company, or be accompanied by a certified resolution of the Board of Directors authorizing execution by a lesser official.

PARTNERSHIP

License must be signed by all of the partners.

MUNICIPALITIES OR GOVERNMENTAL AGENCIES

License must be accompanied by a certified resolution authorizing the official signing the License to execute on behalf of the Governmental Body. The resolution should not be certified by the same official who executed the License.

RIGHT OF ENTRY LICENSE AGREEMENT

Illinois Central Railroad Company (hereinafter called Railroad Company) hereby grants pursuant to this Right of Entry License Agreement (hereinafter called License) to **UNK, UNK, UNK, LA XXXXX, Telephone XXX-XXX-XXXX** (hereinafter called the Licensee) license and permission, at the Licensee's sole cost, risk and expense, to enter the Railroad Company's property in the vicinity of **Hall Avenue East, HATTIESBURG, MS, Railroad Milepost K 94.44, BEAUMONT Subdivision, DOT# 931470D for Installation of new overhead highway bridge** on, over and near Railroad Company's tracks and right-of-way, as generally shown on Location Exhibit, attached hereto and made a part hereof.

This License does not include the right to perform any utility work in the Railroad Company's right of way. Contact Joe Wojcik at 708-332-4739 to obtain a utility permit/maintenance number for any utility work.

Licensee shall pay to Railroad Company upon execution of this License the sum of **\$1000.00** for the privileges granted by this License. The aforesaid sum is not refundable in the event Licensee elects not to enter upon Railroad Company's property or in the event Railroad Company elects to terminate this License for any reason whatsoever.

Licensee shall not enter Railroad Company's premises for the purpose as set forth above without having first given Railroad Company's Engineering Manager or their authorized representative at least five (5) working days advance notice of the date Licensee plans to commence the work.

Railroad Company shall have the right, but not the duty, to require Licensee to furnish detailed plans prior to entry upon the premises and to view and inspect any activity or work on or above Railroad Company's property. If in the sole opinion of the authorized representative of Railroad Company any said activity or work is undesirable for any reason, Railroad Company shall have the right to terminate this License at once.

Railroad Company shall have the right, but not the duty, to restrict Licensee's activity on Railroad Company's property in any way that Railroad Company may, in its sole opinion, deem necessary from time to time and shall also have the right, but not the duty, to require Licensee to adopt and take any safety precautions that Railroad Company may, in its sole opinion, deem necessary from time to time. No work shall be performed or equipment located within twenty-five feet (25') of the centerline of the nearest railroad track without the expressed permission of Railroad Company's Engineering Manager or their duly authorized representative and then only when

either the track has been removed from service or Railroad Company flag protection is provided.

Railroad Company may, at Licensee's sole cost, risk and expense, furnish whatever protective services it considers necessary, including, but not limited to, flag protection, and inspectors.

Licensee shall at all times conduct its work in accordance with any and all "Special Provisions" which may be appended hereto which, by reference hereto, are hereby made a part hereof.

AS A CONSIDERATION AND AS A CONDITION, WITHOUT WHICH THIS LICENSE WOULD NOT HAVE BEEN GRANTED, LICENSEE AGREES TO INDEMNIFY AND SAVE HARMLESS RAILROAD COMPANY, ITS PARENTS, AFFILIATES, AND THEIR DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS AND TO ASSUME ALL LIABILITY FOR DEATH OR INJURY TO ANY PERSONS, INCLUDING, BUT NOT LIMITED TO, OFFICERS, EMPLOYEES, AGENTS, PATRONS AND LICENSEES OF THE PARTIES HERETO, AND FOR ALL LOSS, DAMAGE OR INJURY TO ANY PROPERTY, INCLUDING, BUT NOT LIMITED TO, THAT BELONGING TO THE PARTIES HERETO, TOGETHER WITH ALL EXPENSES, ATTORNEYS' FEES AND COSTS INCURRED OR SUSTAINED BY RAILROAD COMPANY, WHETHER IN DEFENSE OF ANY SUCH CLAIMS, DEMANDS, ACTIONS AND CAUSES OF ACTION OR IN THE ENFORCEMENT OF THE INDEMNIFICATION RIGHTS HEREBY CONFERRED, IN ANY MANNER OR DEGREE CAUSED BY, ATTRIBUTABLE TO OR RESULTING FROM THE EXERCISE OF THE RIGHTS HEREIN GRANTED, OR THE FAILURE OF LICENSEE TO CONFORM TO CONDITIONS OF THIS LICENSE, WORK PERFORMED BY RAILROAD COMPANY FOR LICENSEE UNDER THE TERMS OF THIS LICENSE OR THE CONSTRUCTION, MAINTENANCE, REPAIR, RENEWAL, ALTERATION, CHANGE, RELOCATION, EXISTENCE, PRESENCE, USE, OPERATION OR REMOVAL OF ANY STRUCTURE INCIDENT THERETO, OR FROM ANY ACTIVITY CONDUCTED ON OR OCCURRENCE ORIGINATING ON THE AREA COVERED BY THIS LICENSE, REGARDLESS OF ANY NEGLIGENCE OF RAILROAD COMPANY, ITS OFFICERS, EMPLOYEES AND AGENTS. SAID LICENSEE AGREES ALSO TO RELEASE, INDEMNIFY AND SAVE HARMLESS RAILROAD COMPANY, ITS OFFICERS, EMPLOYEES AND AGENTS FROM ALL LIABILITY TO LICENSEE, ITS OFFICERS, EMPLOYEES, AGENTS OR PATRONS, RESULTING FROM RAILROAD OPERATIONS AT OR NEAR THE AREA IN WHICH LICENSE IS TO BE EXERCISED, WHETHER OR NOT THE DEATH, INJURY OR DAMAGE RESULTING THEREFROM MAY BE DUE TO WHOLE OR IN PART TO THE NEGLIGENCE OF RAILROAD COMPANY, ITS OFFICERS, EMPLOYEES OR AGENTS. AT THE ELECTION OF RAILROAD COMPANY, LICENSEE, UPON NOTICE TO THAT EFFECT, SHALL ASSUME OR JOIN IN THE DEFENSE OF ANY CLAIM BASED UPON ALLEGATIONS PURPORTING TO BRING SAID CLAIM WITHIN THE COVERAGE OF THIS SECTION.

Before commencing work and until this License shall be terminated, Licensee shall provide and maintain the following insurance in form and amount with companies satisfactory to and as approved by Railroad Company.

- a. Statutory Workers Compensation and Employer's Liability insurance.
- b. Automobile Liability in an amount not less than \$1,000,000 dollars combined single limit.

- c. Commercial General Liability (occurrence form) in an amount not less than \$5,000,000 dollars per occurrence, with an aggregate limit of not less than \$10,000,000 dollars. The Policy must name Railroad Company and its Parents as additional insured in the following form:

Illinois Central Railroad Company and its Parents
Attn: John Dinning
2151 North Mill St
Jackson, MS 39202
601-914-2658 (Office)
john.dinning@cn.ca

If the commercial general liability policy required herein contains any exclusions related to doing business or undertaking construction or demolition on, near, or adjacent to railroad facilities; such exclusion must be removed through issuance of endorsement CG 24 17, or a similar endorsement approved by Railroad Company in its sole discretion prior to the commencement of work hereunder.

- d. In the event the privileges provided herein to Licensee involve any work that could result in the discharge, spillage, disposal, release or escape of any Hazardous Material or petroleum product onto the Railroad Company's property, Licensee shall purchase and maintain in effect at all times during the term of this License a Contractor's Pollution Liability policy in an amount not less than two million dollars (\$2,000,000) combined single limit (and with a deductible not to exceed \$50,000) insuring Railroad against any and all damages, costs, liabilities and expenses resulting from on- or off-site bodily injury (including death to any person), on or off-site loss, damage or destruction of property (including that belonging to the parties hereto), and on-or off-site cleanup costs (including expenses incurred in the investigation, removal, remediation, neutralization, or immobilization of contaminated soils, surface water, groundwater or any other contamination) growing out of or incidental to any discharge, spillage, disposal, release, or escape of any Hazardous Material or petroleum product arising therefrom. For purposes of this Agreement, the term "Hazardous Material" shall include, without limit, any flammable explosives, radioactive materials, hazardous materials, hazardous wastes, hazardous or toxic substances, or related materials defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. §§ 9601, et seq.), the Hazardous Material Transportation Act, as amended (49 U.S.C. §§ 1801, et seq.), the Resource Conservation and Recovery Act, as amended (42 U.S.C. §§ 6901 et seq.), the Toxic Substances Control Act, as amended (15 U.S.C. §§ 2601, et seq.), similar laws or ordinances enacted by any state, county or municipality in which the Property is located, or in the regulations adopted and publications promulgated pursuant to any of the above, as such laws or regulations now exist or may exist in the future.

Licensee is required to advise Railroad Company by thirty (30) day advance written notice when any work to be performed under this License may require Pollution Liability Insurance pursuant to the previous paragraph.

Before commencing work, Licensee shall deliver to Railroad Company a certificate of insurance evidencing the foregoing coverage, and upon request, Licensee shall deliver a certified, true and complete copy of the policy or policies at its sole cost and expense. The policies shall provide for not less than thirty (30) days prior written notice to Railroad Company

of cancellation of or any material change in, the policies, and shall contain the waiver of right of subrogation.

It is understood and agreed that the foregoing insurance coverage is not intended to, and shall not, relieve Licensee from or serve to limit Licensee's liability under the indemnity provisions of this License or any applicable agreement.

It is further understood and agreed that, so long as this License shall remain in force or until the Licensee's work is complete and Licensee shall have vacated the Railroad Company's property (whichever shall be later), Railroad Company shall have the right, from time to time, to revise the amount or form of insurance coverage provided as circumstances or changing economic conditions may require. Railroad Company shall give Licensee written notice of any such requested change at least thirty (30) days prior to the date of expiration of the then existing policy or policies; and Licensee agrees to, and shall, thereupon provide Railroad Company with certificates reflecting such revised policy or policies thereof.

If a contractor is to be employed by Licensee, then, before any work is commenced hereunder, Licensee shall establish, to the reasonable satisfaction of Railroad Company, that either (i) the contractor has in place insurance policies covering its own work that comply with the required insurance coverages, limits and terms applicable to Licensee, or (ii) the contractor is fully covered under Licensee's insurance policies.

Railroad Company's exercise or failure to exercise any rights under this License shall not relieve Licensee of any responsibility under this License, including, but not limited to, the obligation to indemnify Railroad Company as herein provided.

Cost and expense for work performed by Railroad Company, as referred to in this License, shall consist of the actual cost of labor, materials, equipment and other plus Railroad Company's standard additives in effect at the time the work is performed.

This License is revocable at the option and discretion of Railroad Company upon notice to Licensee, and shall not be transferred or assigned. Unless sooner revoked by Railroad Company, extended at request of Licensee and granted by Railroad Company in writing, or relinquished by act of Licensee, this License shall terminate on **Thursday, December 30, 2021**.

Upon termination of this License, Licensee shall remove all of its property, leaving Railroad Company's premises in a neat and safe condition satisfactory to Railroad Company's Engineering Manager or their authorized representative, failing which Railroad Company may remove said materials from its premises at Licensee's sole cost, risk and expense, or at its option, may deem such property as abandoned and henceforth owned by Railroad Company, with no compensation for Licensee whatsoever.

Illinois Central Railroad Company

By: 

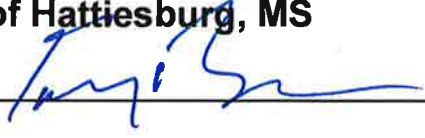
Print Name: John Dinning

Title: Manager of Public Works

Illinois Central Railroad Company

ACCEPTED:

City of Hattiesburg, MS

By: _____

Print Name: Toby Barker

Title: Mayor

Date: 2/23/2022

SPECIAL PROVISIONS

RELATIVE TO FLAGGING AND OTHER PROTECTION OF RAILROAD COMPANY TRAFFIC AND FACILITIES DURING CONSTRUCTION ADJACENT AND ABOVE, ON OR ACROSS, THE PROPERTY OF, OR ON, ABOVE AND BENEATH THE TRACKS OF THE CN

The Licensee shall, before entering upon the property of Railroad Company for performance of any work, secure a fully executed right of entry license from Railroad Company's Engineering Manager or their authorized representative for the occupancy and use of Railroad Company's property. Licensee shall confer with Railroad Company relative to requirements for railroad clearances, operation and general safety regulations.

Prior to any entry onto Railroad Company's property, employees and/or contractor(s) of Licensee doing work shall determine by the guidelines hereinafter provided and by the work to be performed the level of safety training to be required.

All employees and/or contractor(s) of Licensee not hired by Railroad Company that will work on CN property are required to have minimum www.contractororientation.com.

- b. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

All employees and/or contractor(s) of Licensee hired by Railroad Company which will work on Railroad Company property are required to have minimum CN Safety and Security Awareness training, in addition to undergoing a background check. This training and background check must be obtained through the eRailSafe.com website. If not done before, the contractor must contact e-RailSafe at 855-383-7434 to be issued either a vendor number or issued instructions on obtaining a non – railroad contractor vendor number prior to accessing the noted website. Minimum information required of the Licensee and/or their contractor when contacting e-Rail Safe is Name, Address, Telephone, Contact Person for State Projects, DOT Contract Number, and the AAR/DOT Number. This training is good for a period of two years.

- c. EXCEPTION: Railroad Company has exempted those employees of contractors providing paving services at a road crossing under construction or repair from this requirement.
- d. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

All employees and/or contractor(s) of Licensee hired by Railroad Company, whose duties include and who are engaged in the inspection, construction, maintenance, or repair of railroad track, bridges, roadway, signal and communication systems, roadway facilities, or roadway machinery that will work foul of or have the potential to

foul a live track are considered Roadway Workers under FRA regulations and CN Policy. They must complete the On-Track Safety Training course approved by Railroad Company and provided by:

R.R. Safety – AMR, LLC

Address: P.O. Box 489

Mercer, WI 54547

Telephone: (920) 517-1677

Email: rrsafetytraining@yahoo.com

This training must be repeated at least once each calendar year.

- e. EXCEPTION: Railroad Company has exempted those employees of contractors providing paving services at a road crossing under construction or repair from this requirement.
- f. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.
- g. All the employees and/or contractor(s) of Licensee who will operate on-track machinery or those who will provide protection for other employees and/or contractor(s) of Licensee must also be trained on CN US Operating Rules pertaining to their duties. They must take and pass the required examination. This training is good for a period of two years.
- h. "Potential to foul a live track" is considered, at a minimum, to be working within twenty-five feet of the track; or as otherwise to be determined by CN Design & Construction Department.

The employees, contractor(s), and/or agents of the Licensee and/or its contractor shall qualify for, and make available for inspection to Railroad Company's employees or other authorized personnel at all times while on Railroad Company property, a photo identification issued by www.e-railsafe.com, along with at least one other government-issued form of identification. Licensee and/or their contractor shall bear all costs of compliance with the requirements of this Section. Railroad Company reserves the right to bar any of employees or agents of Licensee and/or their contractor from Railroad Company's property at any time for any reason.

Licensee and/or any contractor engaged on their behalf, shall at all times conduct work in a manner satisfactory to the Engineering Manager of Railroad Company, or their authorized representative, and shall exercise care so as to not damage the property of Railroad Company, or that belonging to any other grantees, licensees, permittees or tenants of Railroad Company, or to interfere with railroad operations.

Engineering Manager of Railroad Company, or their authorized representative, will at all times have jurisdiction over the safety of railroad operations. The decision of the Engineering Manager or their authorized representative as to procedures which may affect the safety of railroad operations shall be final, and Licensee and/or their contractor shall be governed by such decision.

All work shall be conducted in such a manner as will assure the safety of Railroad Company. Railroad Company's authorized representative shall have the right, but not the duty, to require certain procedures to be used or to supervise the work on Railroad Company's property.

Should any damage occur to Railroad Company property as a result of the authorized or unauthorized operations of Licensee and/or their contractor and Railroad Company deems it necessary to repair such damage or perform any work for the protection of its property or operations, the Licensee and/or their contractor, as the case may be, shall promptly reimburse Railroad Company for the actual cost of such repairs or work. For the purpose of these Special Provisions, actual cost shall be deemed to include the direct cost of any labor, materials, equipment, or contract expense plus Railroad Company's current standard additives in each instance.

If the work requires the construction of a temporary grade crossing across the track(s) of Railroad Company, Licensee and/or their contractor shall make the necessary arrangements and execute Railroad Company's temporary grade crossing agreement for the construction, protection, maintenance, and later removal of such temporary grade crossing. The cost of such temporary grade crossing construction and later removal shall be prepaid to Railroad Company.

Additional costs for repairs, maintenance or protection will be paid within thirty (30) days upon receipt of bill(s) therefore.

Licensee and/or their contractor shall at no time cross Railroad Company's property or tracks with vehicles or equipment of any kind or character, except at such temporary grade crossing as may be constructed as outlined herein, or at any existing and open public grade crossing. Operation over such crossing shall be at the direction and method of Railroad Company's Engineering Manager or their authorized representative.

Railroad Company may, at Licensee's and/or their contractor's sole cost, risk and expense, furnish whatever protective services it considers necessary, including, but not limited to, flagger(s), inspector(s), and stand-by personnel. Flagging protection, inspection services, or standby personnel required by Railroad Company for the safety of railroad operations because of work being conducted by Licensee and/or their contractor, or in connection therewith, will be provided by Railroad Company and the cost of Licensee and shall be prepaid to Railroad Company by Licensee and/or their contractor. Flagging protection, inspection services, or standby personnel, necessary or provided in excess of prepayment amounts will be billed at the proper rates and will be promptly paid by overnight delivery.

In the event Railroad Company is unable to furnish protective services at the desired time or on the desired date(s), or if Licensee's prepayment for such services is exhausted and not replenished by Licensee and/or their contractor, Licensee and/or their contractor shall not perform any work on Railroad Company's property until such time and date(s) that appropriate Railroad Company services can be made available and/or appropriate prepayment is received. It is understood that Railroad Company shall not be liable for any delay or increased costs incurred by Licensee and/or their contractor owing to Railroad Company's inability or failure to have appropriate protective services available at the time or on the date requested.

Licensee and/or their contractor shall request and secure flagging protection by written notice to Railroad Company using CN's "Request for Flagging Services" form. This form must

be submitted at least ten (10) working days in advance of proposed performance of any work or access to Railroad Company's property.

Flagging protection will be required during any operation involving direct and potential interference with Railroad Company's tracks or traffic. This may include but is not limited to fouling of railroad operating clearances, reasonable proximity of accidental hazard to railroad traffic, work within twenty-five (25) feet horizontally of the nearest centerline of any railroad track, any work over any railroad track, or in any other condition that Railroad Company deems protective services necessary, which may include work on or off Railroad Company's property more than twenty-five (25) feet from the nearest centerline of any railroad track, such as any equipment extension (including but not limited to a crane boom) that will reach or has the potential to reach within twenty-five (25) feet of any track.

Licensee and/or their contractor shall request, prepay, and secure Railroad Company signal facility locates by written notice to Railroad Company along with submission of CN's "Request for Flagging Services" form at least ten (10) working days in advance of proposed performance of any work or access to Railroad Company property. Notice to Railroad Company does not fulfill or satisfy any other notification requirements for utility locates for non-railroad facilities.

Railroad Company may require that prior to digging, trenching, or boring activities on or near Railroad Company property, or beneath any railroad track, an on-site meeting be conducted with Railroad Company's Signal Department representative. No digging, trenching or boring activities shall be conducted in the proximity of any known buried Railroad Company signal cables without Railroad Company's Signal Department representative being present.

The rate of pay for Railroad Company employees will be the prevailing hourly rate for not less than eight (8) hours for the class of labor at regular rates during regularly assigned work hours, and at overtime rates outside of regular hours and in accordance with Labor Agreements or Schedules plus Railroad Company's current standard additives in each instance.

Wage rates are subject to change, at any time, by law or agreement between Railroad Company and employees, and may be retroactive because of negotiations or a ruling by an authorized Governmental Agent. If the wage rates are changed, Licensee and/or their contractor shall pay on the basis of the new rates and/or additives.

No digging, trenching, or boring on Railroad Company property shall be conducted without Railroad Company's written approval of the plans that were furnished to Railroad Company's Engineering Manager at least thirty (30) in advance of the excavation.

The following temporary clearances are the minimum that must be maintained at all times during any operation on or adjacent to Railroad Company property:

Vertical: 22'-0" (7.00 m) above top of highest rail within 12'-0" (3.81 m) of the centerline of any track

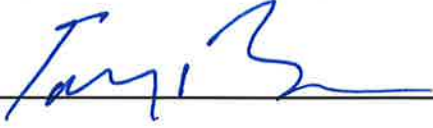
Horizontal: 12'-0" (3.81 m) from centerline of the nearest track, measured at right angles thereto

If lesser clearances than the above are required for any part of the work, Licensee and/or their contractor shall secure written authorization from Railroad Company's Engineering Manager for such lesser clearances in advance of the start of that portion of the work.

No materials, supplies, or equipment will be stored within twenty-five (25) feet from the centerline of any railroad track, measured at right angles thereto.

Licensee and/or their contractor will be required upon the completion of the work to remove from within the limits of Railroad Company's property all machinery, equipment, surplus materials, false work, rubbish or temporary buildings, and to leave said property in a condition satisfactory to the Engineering Manager of Railroad Company or their authorized representative.

Nothing in these Special Provisions shall be construed to place any responsibility on Railroad Company for the quality or conduct of the work performed by Licensee and/or their contractor hereunder. Any approval given or supervision exercised by Railroad Company hereunder, or failure of Railroad Company to object to any work done, material used, or method of operation shall not be construed to relieve Licensee and/or their contractor of any obligations pursuant hereto or under the License these Special Provisions are appended to.

Accepted:  _____

Print Name: Toby Barker, Mayor

Date: 2/23/2022

City of Hattiesburg, MS

REQUIREMENTS TO PROVIDE FLAGGING PROTECTION AND CABLE LOCATION FOR PROJECTS ON OR IN THE VICINITY OF CN PROPERTY

**(Hereinafter called "Railroad")
(Revised: Effective December 4th, 2018)**

NOTE: Flagging and/or Cable Locate fees may apply

A utility or contractor shall not commence, or carry on, any work for installation, maintenance, repair, changing or renewal of any FACILITY, under, over, on, or near RAILROAD property at any location without giving notice to the RAILROAD authorized representative at the RAILROAD's office located at Homewood, IL. If in the opinion of the RAILROAD the presence of an authorized representative of the RAILROAD is required to supervise the same, the RAILROAD shall render bills to the utility or contractor for all expenses incurred by it for such supervision. This includes all labor costs for flagmen or cable locate supplied by the RAILROAD to protect RAILROAD operation, and for the full cost of furnishing, installation and later removal of any temporary supports for said tracks, as the RAILROAD's Chief Engineer's Office may deem necessary.

A flagman is required any time any work is performed (i) under or across any Railroad track, regardless of whether said work involves a physical presence on the surface of the Railroad property; (ii) on the surface of the Railroad property within twenty-five (25) feet horizontally of the centerline of any railroad track; or (iii) on, near, or over Railroad property if the work may potentially encroach (intentionally or unintentionally) within twenty-five (25) feet from the centerline of any railroad track. Causes of potential encroachment include but are not limited to equipment that has the potential to swing, pivot, extend or mechanically fail. Potential encroachment must also account for a distance of one-half the length of the largest load that any equipment may lift. Additionally, Railroad reserves the right to require a flagman for work on Railroad property not meeting the above criteria when there are other conditions or considerations that would indicate the need for a flagman to safeguard Railroad's operations, property and safety of any person.

Cable Location

A cable location of RAILROAD owned facilities may be required prior to the start of any work based on the RAILROAD's review of the proposed project. The purpose of cable location is to identify and protect Signal & Communication cables that have been installed to provide power, signal control, and wayside communications. These cables are vital to a safe and reliable railway operation. The cable locate will be performed by a qualified RAILROAD employee.

The cost for a cable location is \$350.00, and must be prepaid by check before RAILROAD will undertake the cable locate work.

Outside contractors are prohibited from driving on, along, or across any track that does not have a CN installed crossing. They may utilize an existing public crossing. The practice of allowing rubber tired equipment to operate over track with no crossing is strictly prohibited. Exceptions to this rule will require the express approval from CN Engineering.

Prior to any project being started, the RAILROAD requires a "Request for Flagging Services and Cable Location" form to be completed and submitted, including check for prepayment based on the number of days and hours flagging protection will be required and also prepayment for cable location as necessary. Separate checks must be issued for flagging protection and cable location. You must have an agreement with a CN railroad subsidiary, such as a Right of Entry, Permit, License, or Formal Agreement in addition to any necessary flagging before you may enter CN property.

Request for Flagging Services and Cable Location

U.S.

Requests and inquiries must be directed to:

Flagging-US
17641 South Ashland Ave.
Homewood, IL 60430
Flagging_US@CN.CA

Is this a continuation of an existing project? Yes No

If YES, please provide your Service Order # _____

All blanks below must be completely filled in before any flagman request will be honored.

Work Authorization:

Right of Entry/License/Permit No.: _____

Dated: _____ Railroad: _____

Does your Right of Entry/License/Permit require a Railroad Cable Locate? Yes ☐ No ☐

You must have an agreement with a CN railroad subsidiary, such as a Right of Entry, Permit, License or Formal Agreement in addition to any necessary flagging before you may enter CN property.

Project Information:

Please submit a detailed map of the location where protection is being requested.

Street Location/Intersection _____ City/State _____

Railroad Milepost _____ Railroad Subdivision _____

Description of work being performed: _____

Location for flagman to report: _____

Name of Site Contact: _____ Site Contact Phone: () - Alt: () -

Requested Dates/Times:

Dates requested are subject to flagman availability. Minimum 5 business days advance notice required.

Requested Dates for Flagging Protection: _____, _____, _____, _____, _____, _____

Project Starting time: _____ Anticipated Ending Time: _____ Anticipated # Hours per Day: _____

*Flagmen start and end time may vary based on type of protection required.

Billing Information:

All blanks spaces must be filled out

Company Name: _____ Requestor Name: _____

Billing Address: _____

City: _____ State: _____ Zip: _____

CN required online training must be completed before Flagman Protection will be scheduled.

Prepayment must be received before Flagging Protection will be scheduled. There is an 8 hour minimum per day. The base rate per day for Flagman Protection is \$1,300.00 for 10 hours; this includes 2 overtime hours for flagman to set up/take down protection if needed. Additional overtime hours must be prepaid at the rate of \$150.00 per hour. Weekends and Holidays must be prepaid at the overtime rate with a \$1,500.00 / 10 hour minimum. Any prepayment for additional days or overtime not used can be refunded.

Railroad Cable Location must be prepaid, the cost is \$350.00 per locate.

Separate Checks must be issued for Flagging Protection and Cable Location. Checks should be made payable to the railroad subsidiary listed on your Right of Entry/Permit/License or, Formal Agreement.

If additional days of protection are required they must be prepaid in advance.
 2017.

Rates Effective January 1st

Company Phone: _____ Company Fax: _____ E-Mail: _____

**THIS COMPLETED FORM MUST BE SENT WITH A MAP, PREPAYMENT CHECK(S), AND PROOF OF INSURANCE TO:
US-FLAGGING / 17641 SOUTH ASHLAND AVE. HOMEWOOD, IL 60430**

I agree to pay for flagging services as requested: _____
(SIGN AND PRINT NAME)



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Wes Curry, Municipal Court Judge

cc:

Date: Tuesday, June 7, 2022

Re: Acknowledge receipt of the award for the Substance Abuse and Mental Health Services Administration (SAMSHA) Treatment Drug Courts Grant in the amount of \$385,230 for the continuation of the Hattiesburg Behavioral Health Court Treatment Expansion project, covering the period May 31, 2022 through May 30, 2023.
File Number: 2022-386
Minute Book #

Summary

SAMHSA – Hattiesburg Behavioral Health Court Treatment Expansion Continuation Award

Recommendation Statement

I recommend acknowledgement of the receipt of the award for the Substance Abuse and Mental Health Services Administration (SAMSHA) Treatment Drug Courts Grant in the amount of \$385,230 for the continuation of the Hattiesburg Behavioral Health Court Treatment Expansion project, covering the period May 31, 2022 through May 30, 2023.

Please place this on the June 7, 2022 City Council meeting for consideration.



Recipient Information

1. Recipient Name

HATTIESBURG, CITY OF
200 FORREST ST

HATTIESBURG, 39401

2. Congressional District of Recipient

04

3. Payment System Identifier (ID)

1646000432A1

4. Employer Identification Number (EIN)

646000432

5. Data Universal Numbering System (DUNS)

079448130

6. Recipient's Unique Entity Identifier

N4XZJLJ9AVM1

7. Project Director or Principal Investigator

Khadijah Muhammad

kmuhammad@hattiesburgms.com

601-545-4942

8. Authorized Official

Mrs. Jennifer Shows

jshows@hattiesburgms.com

601-545-4544

Federal Agency Information

9. Awarding Agency Contact Information

Lesley Schrier

Center for Substance Abuse Treatment

lesley.schrier@samhsa.hhs.gov

240-276-0566

10. Program Official Contact Information

Caroline Waterman

Center for Substance Abuse Treatment

Caroline.Waterman@samhsa.hhs.gov

240-276-1528

Federal Award Information

11. Award Number

5H79TI081923-04

12. Unique Federal Award Identification Number (FAIN)

H79TI081923

13. Statutory Authority

PHS Act, Title V, Section 509; 42 U.S.C 290bb-2

14. Federal Award Project Title

Hattiesburg Municipal Court - Hattiesburg Behavioral Health Court Treatment
Expansion

15. Assistance Listing Number

93.243

16. Assistance Listing Program Title

Substance Abuse and Mental Health Services_Projcts of Regional and National
Significance

17. Award Action Type

Non-Competing Continuation

18. Is the Award R&D?

No

Summary Federal Award Financial Information

19. Budget Period Start Date 05/31/2022 – End Date 05/30/2023

20. Total Amount of Federal Funds Obligated by this Action \$385,230

20a. Direct Cost Amount \$385,230

20b. Indirect Cost Amount \$0

21. Authorized Carryover \$0

22. Offset \$0

23. Total Amount of Federal Funds Obligated this budget period \$385,230

24. Total Approved Cost Sharing or Matching, where applicable \$0

25. Total Federal and Non-Federal Approved this Budget Period \$385,230

26. Project Period Start Date 05/31/2019 – End Date 05/30/2024

27. Total Amount of the Federal Award including Approved Cost \$1,540,920

Sharing or Matching this Project Period

28. Authorized Treatment of Program Income

Additional Costs

29. Grants Management Officer - Signature

Eileen Bermudez

30. Remarks

Acceptance of this award, including the "Terms and Conditions," is acknowledged by the recipient when funds are drawn down or otherwise requested from the grant payment system.



SAMHSA Treatment Drug Courts
Department of Health and Human Services
Substance Abuse and Mental Health Services Administration

Notice of Award

Issue Date: 05/13/2022

Center for Substance Abuse Treatment

Award Number: 5H79TI081923-04

FAIN: H79TI081923

Program Director: Khadijah Muhammad

Project Title: Hattiesburg Municipal Court - Hattiesburg Behavioral Health Court Treatment Expansion

Organization Name: HATTIESBURG, CITY OF

Authorized Official: Mrs. Jennifer Shows

Authorized Official e-mail address: jshows@hattiesburgms.com

Budget Period: 05/31/2022 – 05/30/2023

Project Period: 05/31/2019 – 05/30/2024

Dear Grantee:

The Substance Abuse and Mental Health Services Administration hereby awards a grant in the amount of \$385,230 (see "Award Calculation" in Section I and "Terms and Conditions" in Section III) to HATTIESBURG, CITY OF in support of the above referenced project. This award is pursuant to the authority of PHS Act, Title V, Section 509; 42 U.S.C 290bb-2 and is subject to the requirements of this statute and regulation and of other referenced, incorporated or attached terms and conditions.

Award recipients may access the SAMHSA website at www.samhsa.gov (click on "Grants" then SAMHSA Grants Management), which provides information relating to the Division of Payment Management System, HHS Division of Cost Allocation and Postaward Administration Requirements. Please use your grant number for reference.

Acceptance of this award including the "Terms and Conditions" is acknowledged by the grantee when funds are drawn down or otherwise obtained from the grant payment system.

If you have any questions about this award, please contact your Grants Management Specialist and your Government Project Officer listed in your terms and conditions.

Sincerely yours,
Eileen Bermudez
Grants Management Officer
Division of Grants Management

See additional information below

SECTION I – AWARD DATA – 5H79TI081923-04**Award Calculation (U.S. Dollars)**

Travel	\$9,625
Supplies	\$2,300
Contractual	\$361,145
Other	\$12,160
 Direct Cost	 \$385,230
Approved Budget	\$385,230
Federal Share	\$385,230
Cumulative Prior Awards for this Budget Period	\$0
 AMOUNT OF THIS ACTION (FEDERAL SHARE)	 \$385,230

SUMMARY TOTALS FOR ALL YEARS	
YR	AMOUNT
4	\$385,230
5	\$385,230

Note: Recommended future year total cost support, subject to the availability of funds and satisfactory progress of the project.

Fiscal Information:

CFDA Number: 93.243
EIN: 1646000432A1
Document Number: 19TI81923A
Fiscal Year: 2022

IC	CAN	Amount
TI	C96N363	\$385,230

IC	CAN	2022	2023
TI	C96N363	\$385,230	\$385,230

TI Administrative Data:

PCC: DCT-AD19 / OC: 4145

SECTION II – PAYMENT/HOTLINE INFORMATION – 5H79TI081923-04

Payments under this award will be made available through the HHS Payment Management System (PMS). PMS is a centralized grants payment and cash management system, operated by the HHS Program Support Center (PSC), Division of Payment Management (DPM). Inquiries regarding payment should be directed to: The Division of Payment Management System, PO Box 6021, Rockville, MD 20852, Help Desk Support – Telephone Number: 1-877-614-5533.

The HHS Inspector General maintains a toll-free hotline for receiving information concerning fraud, waste, or abuse under grants and cooperative agreements. The telephone number is: 1-800-HHS-TIPS (1-800-447-8477). The mailing address is: Office of Inspector General, Department of Health and Human Services, Attn: HOTLINE, 330 Independence Ave., SW, Washington, DC 20201.

SECTION III – TERMS AND CONDITIONS – 5H79TI081923-04

This award is based on the application submitted to, and as approved by, SAMHSA on the above-title project and is subject to the terms and conditions incorporated either directly or by reference in the following:

- a. The grant program legislation and program regulation cited in this Notice of Award.
- b. The restrictions on the expenditure of federal funds in appropriations acts to the extent those restrictions are pertinent to the award.
- c. 45 CFR Part 75 as applicable.
- d. The HHS Grants Policy Statement.
- e. This award notice, INCLUDING THE TERMS AND CONDITIONS CITED BELOW.

Treatment of Program Income:

Use of program income – Additive: Recipients will add program income to funds committed to the project to further eligible project objectives. Sub-recipients that are for-profit commercial organizations under the same award must use the deductive alternative and reduce their subaward by the amount of program income earned.

In accordance with the regulatory requirements provided at 45 CFR 75.113 and Appendix XII to 45 CFR Part 75, recipients that have currently active Federal grants, cooperative agreements, and procurement contracts with cumulative total value greater than \$10,000,000 must report and maintain information in the System for Award Management (SAM) about civil, criminal, and administrative proceedings in connection with the award or performance of a Federal award that reached final disposition within the most recent five-year period. The recipient must also make semiannual disclosures regarding such proceedings. Proceedings information will be made publicly available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)). Full reporting requirements and procedures are found in Appendix XII to 45 CFR Part 75.

SECTION IV – TI SPECIAL TERMS AND CONDITIONS – 5H79TI081923-04

REMARKS

Continuation Award

1. This Notice of Award (NoA) is issued to inform your organization that the application submitted for the **Grants to Expand Substance Abuse Treatment Capacity in Adult Treatment Drug Courts and Adult Tribal Healing to Wellness Courts/TI-19-002 program is being continued.**

1a) This award reflects approval of the budget submitted **December 27, 2021** as part of the continuation application by your Organization.

2. Key Staff

Key staff (or key staff positions, if staff has not been selected) are listed below:

Khadijah Muhammad, Project Director @ 50% level of effort (in-kind)

Organizations receiving Federal Funds may not exceed 100% level of effort for any program staff member (Key Personnel or otherwise) across all federally funded sources.

Any changes to key personnel—including level of effort involving separation from the project for more than three months or a 25 percent reduction in time dedicated to the project—requires prior approval and must be submitted as a post-award amendment in eRA Commons.

Note: If an organization is awarded a grant and chooses to move forward with hiring an individual for a Key Personnel position before receiving SAMHSA's formal approval, this will be done at the organization's own risk. If SAMHSA's review of the Key Personnel request results in the proposed individual not being approved or deemed not qualified for the position, the expectation is that the organization must submit a qualified candidate to be placed in the Key Personnel position. SAMHSA will not be liable for any costs incurred or pay for salaries of a Key Personnel that is not approved or deemed not qualified on this grant program.

For additional information on how to submit a post-award amendment, please visit the SAMHSA website: <https://www.samhsa.gov/grants/grants-management/post-award-changes>. Any technical questions regarding the submission process should be directed to the eRA Service Desk: <http://grants.nih.gov/support/>.

3. All responses to award terms and conditions and post award amendment requests must be submitted as .pdf documents in eRA Commons. For more information on how to respond to tracked terms and conditions or how to submit a post award amendment request please refer to <https://www.samhsa.gov/grants/grants-training-materials> under heading Grant Management Reference Materials for Grantees.

4. Recipients are expected to plan their work and ensure that funds are expended within the 12-month budget period reflected on this Notice of Award. If activities proposed in the approved budget cannot be completed within the current budget period, SAMHSA cannot guarantee the approval of any request for carryover of remaining unobligated funding.

SPECIAL TERMS

Risk Assessment

The Office of Financial Advisory Services (OFAS), SAMHSA may perform an administrative review of your organization's financial management system. If the review discloses material weaknesses or other financial management concerns, grant funding may be restricted in accordance with 45 CFR 75/2 CFR 200, as applicable. The restriction will affect your organization's ability to withdraw funds from the Payment Management System account, until the concerns are addressed.

SPECIAL CONDITIONS

SMA 170 Charitable Choice Form

By **June 30, 2022**, submit in eRA.

The SMA 170 Charitable Choice form was not included with application.

- https://www.samhsa.gov/sites/default/files/charchoice_assurance.pdf

** If your organization is not faith-based, indicate "Not Applicable" on the form (no need to sign) and submit.*

All responses to award terms and conditions must be submitted as .pdf documents in eRA Commons. For more information on how to respond to tracked terms and conditions please refer to <https://www.samhsa.gov/grants/grants-training-materials> under heading **How to Respond to Terms and Conditions.**

STANDARD TERMS AND CONDITIONS

Annual Programmatic Progress Report

By **August 28, 2023**, submit via eRA Commons.

The Programmatic Report is required on an annual basis and must be submitted as a .pdf to the View Terms Tracking Details page in the eRA Commons System no later than 90 days after the end of each 12-month budget period.

The Annual Programmatic Report must, at a minimum, include the following information:

- Data and progress for performance measures as reflected in your application regarding goals and evaluation activities.
- A summary of key program accomplishments to-date.
- Description of the changes, if any, that were made to the project that differ from the application for this budget period.
- Description of any difficulties and/or problems encountered in achieving planned goals and objectives including barriers to accomplishing program objectives, and actions to overcome barriers or difficulties.

Note: Recipients must also comply with the GPRA requirements that include the collection and periodic reporting of performance data as specified in the FOA or by the Grant Program Official (GPO). This information is needed in order to comply with PL 102-62, which requires that Substance Abuse and Mental Health Services Administration (SAMHSA) report evaluation data to ensure the effectiveness and efficiency of its programs.

The response to this term must be submitted as .pdf documents in eRA Commons. Please contact your Government Program Official (GPO) for program specific submission information.

For more information on how to respond to tracked terms and conditions please refer to <https://www.samhsa.gov/grants/grants-training-materials> under heading **How to Respond to Terms and Conditions.**

Additional information on reporting requirements is available at <https://www.samhsa.gov/grants/grants-management/reporting-requirements>.

Annual Federal Financial Report (FFR or SF-425)

All financial reporting for recipients of Health and Human Services (HHS) grants and cooperative agreements will be consolidated through a single point of entry, which has been identified as the Payment Management System (PMS). The Federal Financial Report (FFR or SF-425) initiative ensures all financial data is reported consistently through one source; shares reconciled financial data to the HHS grants management systems; assists with the timely

financial monitoring and grant closeout; and reduces expired award payments.

The FFR is required on an annual basis no later than 90 days after the end of each Budget Period. The FFR should reflect cumulative amounts. Additional guidance to complete the FFR can be found at <http://www.samhsa.gov/grants/grants-management/reporting-requirements>.

SAMHSA reserves the right to request more frequent submissions of FFRs. If so, the additional submission dates will be shown below.

Your organization is required to submit an FFR for this grant funding:

- **By August 28, 2023**, submit the Federal Financial Report (FFR)/(SF-425).

Effective January 1, 2021, recipients can connect seamlessly from the **eRA Commons FFR Module** to **PMS** by clicking the “**Manage FFR**” button on the “**Search for Federal Financial Report (FFR)**” page.

- Recipients who do not have access to PMS may use the following instructions on how to update user permission: <https://pms.psc.gov/grant-recipients/access-newuser.html>.
- Recipients who currently have access to PMS and are submitting or certifying the FFR on behalf of their organization, should login to PMS and update their permissions to request access to the FFR Module using the following instructions: <https://pms.psc.gov/grant-recipients/access-changes.html>.
 - Instructions on how to submit a FFR via PMS are available at <https://pmsapp.psc.gov/pms/app/help/ffr/ffr-grantee-instructions.html> (**Must be logged into PMS to access link**)

If you have questions about how to set up a PMS account for your organization, please contact the PMS Help Desk at PMSSupport@psc.hhs.gov or 1-877-614-5533.

Note: Recipients will use PMS to report all financial expenditures, as well as to drawdown funds; SAMHSA recipients will continue to use the eRA Commons for all other grant-related matters including submitting progress reports, requesting post-award amendments, and accessing grant documents such as the Notice of Award.

Standard Terms for Awards

Your organization must comply with the Standard Terms and Conditions for the Fiscal Year in which your grant was awarded. The Fiscal Year for your award is identified on Page 3 of your Notice of Award. SAMHSA's Terms and Conditions Webpage is located at: <https://www.samhsa.gov/grants/grants-management/notice-award-noa/standard-terms-conditions>.

Consistent Treatment of Costs

Recipients must treat costs consistently across all federal and non-federal grants, projects and cost centers. Recipients may not direct-charge federal grants for costs typically considered indirect in nature, unless done consistently. If part of the indirect cost rate, then it may not also be charged as a direct cost. *Examples of indirect costs include (administrative salaries, rent, accounting fees, utilities, office supplies, etc.).* If typical indirect cost categories are included in the budget as direct costs, it is SAMHSA's understanding that your organization has developed a cost accounting system adequate to justify the direct charges and to avoid an unfair allocation of these costs to the federal government. Also, note that all awards are subject to later review in accordance with the requirements of [45 CFR 75.364](#), [45 CFR 75.371](#), [45 CFR 75.386](#) and [45 CFR Part 75, Subpart F](#), *Audit Requirements*.

Compliance with Award Terms and Conditions

FAILURE TO COMPLY WITH THE ABOVE STATED TERMS AND CONDITIONS MAY

RESULT IN ACTIONS IN ACCORDANCE WITH [45 CFR 75.371](#), REMEDIES FOR NON-COMPLIANCE AND [45 CFR 75.372](#) TERMINATION. THIS MAY INCLUDE WITHHOLDING PAYMENT, DISALLOWANCE OF COSTS, SUSPENSION AND DEBARMENT, TERMINATION OF THIS AWARD, OR DENIAL OF FUTURE FUNDING.

All previous terms and conditions remain in effect until specifically approved and removed by the Grants Management Officer.

Staff Contacts:

Caroline Waterman, Program Official

Phone: 240-276-1528 **Email:** Caroline.Waterman@samhsa.hhs.gov

Lesley Schrier, Grants Specialist

Phone: 240-276-0566 **Email:** lesley.schrier@samhsa.hhs.gov



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Sylvester London, Division Manager
cc:
Date: Tuesday, June 7, 2022
Re: Acknowledge receipt of the two quote docket.
File Number: 2022-380
Minute Book #

Summary

Acknowledge receipt of the two quote docket for the period of April 25, 2022 through May 26, 2022 as provided for in 31-87-13(b) of the Mississippi Code of 1972

Recommendation Statement

Attached is the unadvertised bid docket for the period of April 25, 2022 through May 26, 2022 covering purchases requiring the obtaining of a minimum of two (2) bids as defined in Section 31-7-13 (B) of the Mississippi Code.

This report is submitted for your review, approval, and acknowledgement on the minutes of the City Council. Should there be any questions, please feel free to contact my office.

Please place this on the June 7, 2022 City Council meeting for consideration.

SUCCESSFUL BID/ OTHER BID	PURCHASE ORDER	BID AMOUNT	ITEM DESCRIPTION
SWIM DISTRIBUTORS SAMMY GRAHAM LLC	227721	\$ 28,826.55 \$ 57,550.00	PUMP POOLS
UNITED FENCE COMPANY JEFCOAT FENCE	227736	\$ 11,287.00 \$ 14,500.00	EASTSIDE PARK FENCE
AAMCO TRANSMISSION JEFFY'S AUTOMOTIVE REPAIR PINE BELT CDR JR	227846	\$ 8,032.00 \$ 8,853.15 \$ 9,239.88	ENGINE FOR TRUCK UNIT 18560
BW SULLIVAN BUILDING CONTRACTOR GULF COAST PLASTERING COMPANY	227904	\$ 9,950.00 \$ 10,850.00	REPAIR WALL CITY HALL
HUB CITY CONSTRUCTION BW SULLIVAN BUILDING CONTRACTOR	228132	\$ 43,950.00 \$ 48,700.00	CHAIN PARK BOARDWALK REPAIRS

CITY OF HATTIESBURG
UNADVERTISED BID RESULTS

OQ# 227721

ITEM PUMP POOLS

BID #1

WINNING BID

COMPANY SWIM DISTRIBUTORS OF BATON ROUGE LLC

BID

AMOUNT \$28,826.55

BID #2

COMPANY SAMMY GRAHAM LLC

BID

AMOUNT \$29,400.00

BID #3

COMPANY _____

BID

AMOUNT _____

BID #4

COMPANY _____

BID

AMOUNT _____

THANK YOU FOR SENDING A QUOTE FOR THIS PROJECT.


Sylvester London, DIVISION MANAGER



City of Hattiesburg
200 Forrest Street
Hattiesburg, MS 39401

Purchase Order

Fiscal Year 2022

Page 1 of 1

Bill To 1001
City of Hattiesburg
P.O. BOX 1898
Hattiesburg, MS 39401

Ship To 1020
315 Conti St
Hattiesburg, MS 39401

Purchase Order Number **00227721**

Purchase Order Date **04/27/2022**

Department **PARKS & REC ADMIN**

FID 64-6000432

Vendor 48745
SWIM DISTRIBUTORS OF BATON ROUGE LLC
11134 CEDAR PARK AVE
BATON ROUGE, LA 70809-4113

VENDOR PHONE NUMBER	VENDOR EMAIL	VENDOR NUMBER	REQUISITION NUMBER	BUYER NAME	DELIVERY REFERENCE
	EVILLEMARETTE@SWIMBR.COM	48745	228128	Chris McGee	

NOTES

PUMP POOLS TWO QUOTE

PLEASE SEND INVOICE TO CHMCGEE@HATTIESBURGMS.COM

ITEM #	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE
1	POOL PUMP, C-SERIES, CHK - 100, 3 PHASE, 220/240 VOLT, BRONZE COMPLETE WITH TRAP ASSEMBLY (2-QUOTE) GL #: 002315 - 551000	1.0000	EACH	\$18,000.0000	\$18,000.00
2	POOL PUMP, C-SERIES, CHK - 100, 3 PHASE, 220/240 VOLT, BRONZE COMPLETE WITH TRAP ASSEMBLY (2-QUOTE) GL #: 002300 - 559000	1.0000	EACH	\$5,700.0000	\$5,700.00
3	POOL PUMP, C-SERIES, CHK - 100, 3 PHASE, 220/240 VOLT, BRONZE COMPLETE WITH TRAP ASSEMBLY (2-QUOTE) GL #: 002300 - 560000	1.0000	EACH	\$5,126.5500	\$5,126.55

SUBMIT SEPARATE INVOICES FOR EACH ORDER. PREPAY SHIPPING CHARGES IF ANY AND ADD TO INVOICE. THE PO NUMBER MUST APPEAR ON ALL PACKAGES & INVOICES.


City Clerk

Total Ext. Price \$28,826.55

Purchase Order Total \$28,826.55

QUOTATION

Swim Distributors, LLC

11134 Cedar Park Avenue
Baton Rouge, LA 70809
UNITED STATES
2253088989



Order Number	
1021031	
Order Date	Page
04/11/2022 12:58:23	1 of 1

Quote Expires On: 05/11/2022

Bill To:

City of Hattiesburg Purchasing Division
PO Box 1898
Hattiesburg, MS 39403
US

Ship To:

City of Hattiesburg Purchasing Division
PO Box 1898
Hattiesburg, MS 39403
US

601-545-4624

Customer ID: 10916

PO Number					Ship Route	Taker		
QUOTE / PUMPS 041122						CRAIG.VILLEMARETTE		
Quantities					Item ID	Pricing	Unit	Extended
Ordered	Allocated	Remaining	UOM	Disp.	Item Description	UOM	Price	Price
3.0000	0.0000	3.0000	EA		MISC	EA	9,608.8500	28,826.55
				1.0	PRODUCT CODE MISC	1.0		

Order Line Notes: *****

* PART # 34-102-1442 PUMP, C-SERIES,
CHK-100, 3 PH. 220/440 V, BRONZE
COMPLETE W/ TRAP ASSEMBLY

Total Lines: 1

SUB-TOTAL: 28,826.55

TAX: 0.00

AMOUNT DUE: 28,826.55

U.S. Dollars



From: Paula <graham17824@bellsouth.net>
Sent: Monday, April 11, 2022 4:21 PM
To: London, Sylvester
Subject: Re: Quote

> On Apr 11, 2022, at 4:19 PM, Paula <graham17824@bellsouth.net> wrote:

1

CITY OF HATTIESBURG

CITY HALL

COVER SHEET

DATE: April 4, 2022

TO: Swim Distributors, LLC
11134 Cedar Park Ave.
Baton Rouge, LA 70809

PHONE: 225.308.8989

E-MAIL: cvillemarette@swimbr.com

PLEASE READ OUR QUOTE INSTRUCTIONS AND FOLLOW CAREFULLY. QUOTES
MUST BE RETURNED ON OR BEFORE THE DATE AND TIME INDICATED.

DO NOT HESITATE TO CALL 601.545.4624 IF YOU HAVE ANY QUESTIONS.

THANK YOU,

Chris McGee, Director
(601) 545-4624

INSTRUCTIONS FOR CITY OF HATTIESBURG 2-QUOTE

Please find attached specifications for the item(s) for which we require written bids. **ALL BIDS MUST HAVE PRICE, DELIVERY DATE, PRICE EXPIRATION, TOTAL BID PRICE, AND BE SIGNED AND DATED, AS REQUIRED BY LAW TO PROVIDE CONTINUITY OF THE BID PROCESS. DO NOT CHANGE THESE SPECIFICATIONS**

Payment terms are set by the State of Mississippi Purchasing Laws: payment will be made within 45 days of receipt of an invoice that has been signed/approved by Department that requested quote.

BIDS MAY BE MAILED TO: City of Hattiesburg
Purchasing Division
PO Box 1898
Hattiesburg, MS 39403-1898

or FAXED TO THE PURCHASING DEPARTMENT AT 601-545-6661

or EMAILED TO TWOQUOTE@HATTIESBURGMS.COM

or EMAILED TO (SLONDON@HATTIESBURGMS.COM)

If you do not intend to bid, please inform us.

Your assistance with our bid process will be most appreciated.

**PURCHASING DEPARTMENT
CITY OF HATTIESBURG**

**BIDS ARE DUE IN THE PURCHASING DEPARTMENT NO LATER THAN 5:00 P.M. ON
April 11, 2022**

CONTACT PERSON(S): Chris McGee (601) 545- 4624



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

COUNCIL - WARD THREE
Carter Carroll

COUNCIL - WARD FOUR
Dave Ware

COUNCIL - WARD FIVE
Nicholas Brown

MEMORANDUM

April 4, 2022

RE: 3 Pool Pump Units with the following specifications.

DEPT: Parks and Recreation Cultural Affairs

REQUESTED DATES: April 11, 2022-Price Due

April 22, 2022- Delivery Due

SPECIFICATIONS:

Commercial pool pump and motor (wet end) without strainer

10 hp standard efficiency 3-phase commercial bronze pump 220-240 volts

Should include everything needed to be installed to bronze strainer

Chris McGee

Director, Parks and Recreation

601.545.4624

CITY OF HATTIESBURG

CITY HALL

COVER SHEET

DATE: April 4, 2022

TO: E-Z Test Pool Supply, INC
26 Main Street
Plaistow, NH 03865

PHONE: 877.209.7773

E-MAIL: order.support@eztestpools.com

PLEASE READ OUR QUOTE INSTRUCTIONS AND FOLLOW CAREFULLY. QUOTES
MUST BE RETURNED ON OR BEFORE THE DATE AND TIME INDICATED.

DO NOT HESITATE TO CALL 601.545.4624 IF YOU HAVE ANY QUESTIONS.

THANK YOU,

Chris McGee, Director
(601) 545-4624

INTRUCTIONS FOR CITY OF HATTIESBURG 2-QUOTE

Please find attached specifications for the item(s) for which we require written bids. **ALL BIDS MUST HAVE PRICE, DELIVERY DATE, PRICE EXPIRATION, TOTAL BID PRICE, AND BE SIGNED AND DATED, AS REQUIRED BY LAW TO PROVIDE CONTINUITY OF THE BID PROCESS. DO NOT CHANGE THESE SPECIFICATIONS**

Payment terms are set by the State of Mississippi Purchasing Laws: payment will be made within 45 days of receipt of an invoice that has been signed/approved by Department that requested quote.

BIDS MAY BE MAILED TO: City of Hattiesburg
 Purchasing Division
 PO Box 1898
 Hattiesburg, MS 39403-1898

or FAXED TO THE PURCHASING DEPARTMENT AT 601-545-6661

or EMAILED TO TWOQUOTE@HATTIESBURGMS.COM

or EMAILED TO (SLONDON@HATTIESBURGMS.COM)

If you do not intend to bid, please inform us.

Your assistance with our bid process will be most appreciated.

**PURCHASING DEPARTMENT
CITY OF HATTIESBURG**

**BIDS ARE DUE IN THE PURCHASING DEPARTMENT NO LATER THAN 5:00 P.M. ON
April 11, 2022**

CONTACT PERSON(S): Chris McGee (601) 545- 4624



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

COUNCIL - WARD THREE
Carter Carroll

COUNCIL - WARD FOUR
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Nicholas Brown

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Chris McGee

Director, Parks and Recreation

601.545.4624

CITY OF HATTIESBURG

CITY HALL

COVER SHEET

DATE: April 4, 2022

TO: Pool Supply Unlimited
1426 E Spruce St.
Ontario, CA 91761

PHONE: 888.836.6025-Office
888.648.5677-Fax

E-MAIL: Sales@poolsupplyunlimited.com

PLEASE READ OUR QUOTE INSTRUCTIONS AND FOLLOW CAREFULLY. QUOTES
MUST BE RETURNED ON OR BEFORE THE DATE AND TIME INDICATED.

DO NOT HESITATE TO CALL 601.545.4624 IF YOU HAVE ANY QUESTIONS.

THANK YOU,

Chris McGee, Director
(601) 545-4624

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 PO Box 1898
 Hattiesburg, MS 39403-1898

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CITY OF HATTIESBURG**

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April 11, 2022**

CONTACT PERSON(S): Chris McGee (601) 545- 4624



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

COUNCIL - WARD THREE
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Chris McGee

Director, Parks and Recreation

601.545.4624

CITY OF HATTIESBURG
UNADVERTISED BID RESULTS

OQ# 227736

ITEM: EAST SIDE PARK FENCE

BID #1

WINNING BID

COMPANY UNITED FENCE COMPANY

BID

AMOUNT \$11,287.00

BID #2

COMPANY JEFCOAT FENCE COMPANY INC OF HATTIESBURG

BID

AMOUNT \$14,500.00

BID #3

COMPANY _____

BID

AMOUNT _____

BID #4

COMPANY _____

BID

AMOUNT _____

THANK YOU FOR SENDING A QUOTE FOR THIS PROJECT.


Sylvester London, DIVISION MANAGER



City of Hattiesburg
200 Forrest Street
Hattiesburg, MS 39401

Purchase Order

Fiscal Year 2022

Page 1 of 1

Bill To 1001
City of Hattiesburg
P.O. BOX 1898
Hattiesburg, MS 39401

Ship To 1014
212 West Front St
Centennial Building
Hattiesburg, MS 39401

Purchase Order Number **00227736**

Purchase Order Date **04/28/2022**

Department **ENGINEERING**

FID 64-6000432

Vendor 4504
UNITED FENCE COMPANY
255 MCLEOD ST
HATTIESBURG, MS 39401-3816

VENDOR PHONE NUMBER	VENDOR EMAIL	VENDOR NUMBER	REQUISITION NUMBER	BUYER NAME	DELIVERY REFERENCE
	UNITEDFENCECO@BELLSOUTH.NET	4504	228189	Sharon Waits	

NOTES

2-QUOTE EAST SIDE PARK FENCE

ITEM #	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE
1	2-QUOTE EAST SIDE PARK FENCE GL #: 086300 - 7295PR	1.0000	EACH	\$11,287.0000	\$11,287.00

SUBMIT SEPARATE INVOICES FOR EACH ORDER. PREPAY SHIPPING CHARGES IF ANY AND ADD TO INVOICE. THE PO NUMBER MUST APPEAR ON ALL PACKAGES & INVOICES.

Total Ext. Price \$11,287.00

Purchase Order Total **\$11,287.00**


City Clerk

Proposal

United Fence Co.

Phone: 601-582-0406
Fax: 601-582-0404

255 McLeod St.
Hattiesburg, MS 39401

Web: unitedfencehattiesburg.com
Email: unitedfenceco@bellsouth.net

PROPOSAL SUBMITTED TO		PHONE	DATE
City of Hattiesburg		601-554-1002	04/25/22
STREET		JOB NAME	
P.O. Box 1898			
CITY, STATE ZIP		JOB LOCATION	
Hattiesburg, Ms 39403-1898		East Side Park Fence	
ARCHITECT	DATE OF PLANS		JOB PHONE

We hereby submit specifications and estimates for:

Furnish & Install:

- 172' - 96" x 8ga Black Coated Chain Link Fence
- 150' - 60" x 8ga Black Coated Chain Link Fence
- 2 - 5' wide x 5' high Single Gates

All Materials Commercial Grade

Total Including All Materials & Labor

\$11,287.00

If not accepted, this Proposal will expire on May 9th, 2022

Lead time for is approximately two (2) Weeks after receipt of purchase order

Installation time is approximately four (4) days



Payment to be made as follows: in full on completion

Agreement: UFC agrees to install fencing as per agreement outlined in this Proposal. Location of the property lines and / or the fence lines is the sole responsibility of the customer. UFC in no way, assumes accuracy of the property lines and / or the fence lines, if survey markers are not clearly visible. If property lines are not clearly marked, a property survey may be required. All the customer's expense. UFC will advise the customer, to the best of our knowledge, of any local laws and regulations regarding fence height, style and location. The responsibility for complying with these laws and regulations rest with the customer. Customer is responsible for any required permits for the fencing.

Warranty: All work performed by UFC is guaranteed to be free from defects in workmanship for one (1) year. Wood fencing carries a workmanship warranty only. Wood products, by their very nature, tend to shrink, check, crack, warp, bow, and / or change color with the passage of time. Therefore, we cannot warranty the wood products themselves. Any warranty on wood products will be a manufacturer's warranty only. Some specialty products carry an extended warranty on materials. See individual product brochure for details.

Underground Obstructions: UFC will be responsible for having all public utilities located and marked prior to digging. Customer is responsible for locating and marking any private utility lines, sprinkler system lines, water lines, sewer / field lines and swimming pool lines. Customer assumes liability for any damages to these obstructions, if not properly marked by the customer.

The final invoice will be based on the completed project. More or less footage, and / or deviations from the original agreement, will be credited or debited to the final invoice. Special order materials cannot be returned for credit. All materials remain property of UFC until final invoice is paid in full. Customer agrees to allow UFC access to their property until work is completed and final invoice is paid in full.

Acceptance of Proposal

Authorized Signature: Kevin L. Fant

Customer Signature _____

Date of Acceptance _____

Special Instructions:

PROPOSAL

Jefcoat Fence Company, Inc. of Hattiesburg
P. O. Box 1167
Hattiesburg, MS 39403
Phone: 601-583-0516
Fax 601-336-7779



"The Name that Secures Your Trust"
www.jefcoattenceofhattiesburg.com

QUOTE IS VALID FOR 5 DAYS.

Company	City of Hattiesburg	From	CARLOS FLORES
		Date:	4/26/2022
Fax/Email		Cell Phone:	601 270 1687
Re:	East Slide Park Fence	Email:	carlos@jefcoattenceofhattiesburg.com

MS. CERTIFICATE OF RESPONSIBILITY # 16003-SC
MS. ELECTRONIC PROTECTION LICENSE #15024185

AS DEFINED BY FEDERAL GOVERNMENT WE ARE A SMALL DISADVANTAGED BUSINESS AND WOMEN OWNED SMALL BUSINESS

To provide materials and labor as follows to install:

- 172' of 8ft Black Vinyl Chain Link Fence
- 150' of 5ft Black Vinyl Chain Link
- (2) 5ft x 5' Single Gates

Amount \$14,500.00

Lead Time 4 Weeks

***Due to VOLATILITY of PRICING in the Current Fence Supply Chain, we reserve the right to renegotiate the selling price on any QUOTE 5 days beyond the original date. ***

All Take Down, Power, Conduits, Bollards, Concrete Coring & Grounding by others

Thank you
Carlos Flores C.A.G.O.I.
Vice President



4-26-22

CITY OF HATTIESBURG
UNADVERTISED BID RESULTS

OQ# 227846

ITEM: ENGINE FOR TRUCK UNIT 18560

BID #1

WINNING BID

COMPANY AAMCO TRANSMISSION (PINE ST)

BID

AMOUNT \$8,032.00

BID #2

COMPANY JERRY'S AUTOMOTIVE REPAIR INC

BID

AMOUNT \$8,853.15

BID #3

COMPANY PINE BELT CD JR

BID

AMOUNT \$9,239.88

BID #4

COMPANY _____

BID

AMOUNT _____

THANK YOU FOR SENDING A QUOTE FOR THIS PROJECT.


Sylvester London, DIVISION MANAGER



City of Hattiesburg
200 Forrest Street
Hattiesburg, MS 39401

Purchase Order

Fiscal Year 2022

Page 1 of 1

Bill To 1001
City of Hattiesburg
P.O. BOX 1898
Hattiesburg, MS 39401

Ship To 9999
MERCHANDISE WILL BE PICKED
UP

Purchase Order Number **00227846**

Purchase Order Date **05/05/2022**

Department **PARKS & REC MAINT DIV**

FID 64-6000432

Vendor 2035
AAMCO TRANSMISSION (PINE ST)
dba AAMCO TRANSMISSION
2101 W PINE ST
HATTIESBURG, MS 39402-2839

VENDOR PHONE NUMBER	VENDOR EMAIL	VENDOR NUMBER	REQUISITION NUMBER	BUYER NAME	DELIVERY REFERENCE
	william-lambert@att.net	2035	228310	Akira Lewis	

NOTES

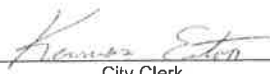
P&R TRUCK UNIT 18560 TWO QUOTE FOR ENGINE
PLEASE SEND INVOICE TO ALEWIS@HATTIESBURGMS.COM

ITEM #	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE
1	2012 DODGE RAM 3 YEAR/UNLIMITED MILES WARRANTY ON REMANUFACTURED MOTOR GL #: 002300 - 570000	1.0000	EACH	\$5,400.0000	\$5,400.00
2	MISCELLANEOUS PARTS AND FLUIDS GL #: 002300 - 570000	1.0000	EACH	\$250.0000	\$250.00
3	INTAKE MANIFOLD GL #: 002300 - 570000	1.0000	EACH	\$757.0000	\$757.00
4	LABOR TO INSTALL MOTOR GL #: 002300 - 638400	1.0000	EACH	\$1,625.0000	\$1,625.00

SUBMIT SEPARATE INVOICES FOR EACH ORDER. PREPAY SHIPPING CHARGES IF ANY AND ADD TO INVOICE. THE PO NUMBER MUST APPEAR ON ALL PACKAGES & INVOICES.

Total Ext. Price \$8,032.00

Purchase Order Total \$8,032.00


City Clerk



INTERNATIONAL CUSTOMER SERVICE
201 Galloway Rd., Horsham, PA 19044
Call Toll Free 1-800-523-0401

Globalone inc

2101 W Pine St
Hattiesburg, MS 39402
Tel: (601) 264-4500 • Fax: (601) 268-0555
10441@aamcoemail.com • <http://www.aamcohattiesburgms.com>

Repair Order J146187

Date: 04-29-2022 2:33 PM

Customer City of hattiesburg City of hattiesburg (F13010) Home: 7692235438
1 GOVERNMENT PLAZA
HATTIESBURG MS 39401
pthomas@hattiesburgms.com
Alternative Contact: City

Vehicle 2012 Ram 2500 Laramie Miles In: 0
5.7 GAS - white Miles Out: 0
3C6TD4CT4CG220974 License Plate: X1327 00

Customer Issues and Advisories Symptoms and Diagnostic Trouble Codes
bad motor

Work to be Performed

Parts

Advisory Notes

3 year/ unlimited miles warranty
wont arrive until after july

Labor	Tech	Hrs	Price	Total
Labor to install motor		13.00	125.00	1,625.00

Parts	Part No	Qty	Price	Total
remanufactured motor w/ install kit		1.00	5,400.00	5,400.00
miscellaneous parts and fluids		1.00	250.00	250.00
intake manifold		1.00	757.00	757.00

Parts	SubTotal	\$8,032.00
-------	----------	------------

Total Proposed Completed Date
04-29-2022 5:00 PM

Labor	1,625.00
Parts	6,407.00
Hazmat*	0.00
Supplies*	0.00
Taxes	0.00

Repair Order Total \$8,032.00

* Shop Supply & Hazmat Fees: This charge represents costs and profits (where applicable) to this repair facility for miscellaneous shop supplies, and/or waste removal

Authorization

Original Estimate Total:

Authorization Method: ☐ email ☐ text ☐ phone ☐ fax ☐ in person

Date: Contact Details:

Authorized By:

X

Customer Signature

Save replacement parts for inspection or return? (Core may apply)



Center#10441

Jerry's Automotive Repair Inc

5101 Hwy 42

Hattiesburg, Mississippi 39401

P (601) 582-2772 F (601) 544-1452

jerryscenter@bellsouth.net

Estimate Creation Date: 04/25/2022 10:22

Estimate #: 13536City of Hattiesburg Parks & Rec
Technician #1 Michael Roberson
(601) 606-14752012 Ram 2500 SLT 5.7L, V8, Gas, Asp N, VIN T, Des EZC,
16V, OHV, Canada
G 60971
3C6TD4CT4CG220974
Miles
Fleet #: 18560Towed in - Customer requested check engine

Type	Description	Part#/OpCode/Tax Option	Qty/Hrs	Price	Total
Part	PZ173 Engine Oil Filter		1.00	\$6.35	\$6.35
Part	Florescent Leak Detection Dye		1.00	\$6.00	\$6.00
Part	GO5 Antifreeze		2.00	\$25.95	\$51.90
Part	R134A Freon		3.00	\$24.95	\$74.85
Part	5W30 Mobil del vac full synthetic engine oil		6.00	\$8.45	\$50.70
Part	Jasper Engine - 3 year or 100,000 mile Nationwide Parts and Labor Warranty		1.00	\$7480.50	\$7480.50
Labor	Replace Engine	Engine Assembly R&R	13.00	\$79.00	\$1027.00
Labor	Evacuate and Recharge A/C System		1.40	\$79.00	\$110.60
Labor	Lubricate Chassis, Change Engine Oil and Filter		0.50	\$79.00	\$39.50
Discount	NOTE: CAN HAVE ENGINE HERE JUNE 16			\$0.00	\$0.00
					\$8847.40

Parts Total:	\$7670.30
Labor Total:	\$1177.10
Manufacture Information Access:	\$3.75
Waste Disposal:	\$2.00
Fees:	\$0.00
Subtotal:	\$8853.15
Sales Tax:	\$0.00
Total:	\$8853.15

Signature: _____ Date: _____

PINE BELT CDJR

Repair Order Number: _____ Advisor: Wayne Fletcher Date: 4/22/22 Tele #: (601) 544-2430
 Customer Name: City Of Hattiesburg Unit #18560 Mileage: _____ VIN: CG220974

Related Repairs	Hrs	Grid Price	Labor	Qty	Price	Parts	Avail?	Shop Sup	Tax	Total
Long Block Engine	21.0	130.00	\$2,730.00	1	\$5,980.00	\$5,980.00				
Misc fluids/gaskets/bolts				1	\$500.00	\$500.00				
Related Repairs Total			\$2,730.00			\$6,480.00				

Immediate Repairs	Hrs	Labor Rate	Labor	Qty	Price	Parts	Avail?	Other	Tax	Total
Immediate Repairs Total										
Related and Immediate Total			\$2,730.00			\$6,480.00				

Maintenance Needs	Hrs	Labor Rate	Labor	Qty	Price	Parts	Avail?	Other	Tax	Total
Maintenance Needs Total										

	Hrs	Labor Rate	Labor	Qty	Price	Parts	Avail?	Other	Tax	Total
TOTAL INVESTMENT			\$2,730.00			\$6,480.00		\$29.88		\$9,239.88

Approved By: _____

Date/Time: _____



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

COUNCIL - WARD THREE
Carter Carroll

COUNCIL - WARD FOUR
Dave Ware

COUNCIL - WARD FIVE
Nicholas Brown

TO: PURCHASING

FROM: GROUNDS MAINTENANCE

DATE: MARCH 3, 2022

RE: TWO QUOTE REQUEST

This is a request to bid on a new engine for a 2012 Dodge 2500 Pickup Truck Unit # 18560. Attached are three quotes from three different vendors.

Thank You,

Akira Lewis

CITY OF HATTIESBURG
UNADVERTISED BID RESULTS

OQ# 227904

ITEM: DAMAGE PLASTER WALL IN CITY HALL

BID #1

WINNING BID

COMPANY B W SULLIVAN BUILDING CONTRACTOR INC

BID

AMOUNT \$9,950.00

BID #2

COMPANY GULF COAST PLASTERING COMPANY INC

BID

AMOUNT \$10,850.00

BID #3

COMPANY _____

BID

AMOUNT _____

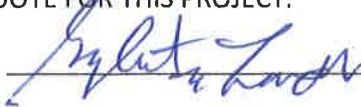
BID #4

COMPANY _____

BID

AMOUNT _____

THANK YOU FOR SENDING A QUOTE FOR THIS PROJECT.


Sylvester London, DIVISION MANAGER



City of Hattiesburg
200 Forrest Street
Hattiesburg, MS 39401

Bill To 1001
City of Hattiesburg
P.O. BOX 1898
Hattiesburg, MS 39401

Ship To 1005
200 Forrest St - 3rd Floor
Hattiesburg, MS 39401

Vendor 47013
B W SULLIVAN BUILDING CONTRACTOR INC
4451 HWY 49
HATTIESBURG, MS 39401

Purchase Order

Fiscal Year 2022

Page 1 of 1

Purchase Order Number **00227904**
Purchase Order Date **05/11/2022**
Department **MAYOR ADMIN**

FID 64-6000432

VENDOR PHONE NUMBER	VENDOR EMAIL	VENDOR NUMBER	REQUISITION NUMBER	BUYER NAME	DELIVERY REFERENCE
	SCOTT@BWSULLIVAN.COM	47013	228377	Archie Brewton	

NOTES

TWO QUOTE/DAMAGE PLASTER WALL IN CITY HALL
PLEASE EMAIL INVOICE TO ABREWTON@HATTIESBURGMS.COM

ITEM #	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE
1	TWO QUOTE/ PLASTER REPAIR ON WALL AT CITY HALL GL #: 001092 - 635000	1.0000	EACH	\$9,950.0000	\$9,950.00

SUBMIT SEPARATE INVOICES FOR EACH ORDER. PREPAY SHIPPING CHARGES IF ANY AND ADD TO INVOICE. THE PO NUMBER MUST APPEAR ON ALL PACKAGES & INVOICES.


City Clerk

Total Ext. Price \$9,950.00

Purchase Order Total \$9,950.00

B.W. SULLIVAN BUILDING CONTRACTOR, INC.

4451 US Highway 49
Hattiesburg, MS 39401-9305
Office 601-582-2933 Fax 601-582-2049

May 6, 2022

City of Hattiesburg
Purchasing Division
PO Box 1898
Hattiesburg, MS 39403-1898

RE: Plaster Repair at City Hall
200 Forrest Street
Hattiesburg, MS 39401

We propose to furnish all labor, materials, equipment and supervision to complete the damaged plaster wall at City Hall per the Scope of Work listed below for the sum of: Nine Thousand Nine Hundred Fifty Dollars and No Cents - \$9,950.00

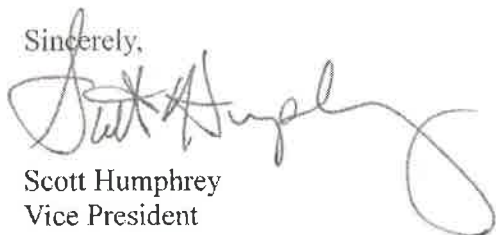
Scope of Work:

1. Remove and dispose of all damage from plaster areas on the West wall at stair landing between 2nd and 3rd floor of City Hall.
2. Furnish and install waterproofing once damaged plaster has been removed.
3. Furnish and install new plaster where damaged plaster has been removed on West facing wall.
4. Paint entire West facing wall, corner to corner, to match existing color.
5. Exterior work: remove existing mortar joints at cast stone, on West facing wall, above windows.
6. Exterior work: furnish and waterproof seal where mortar joints, on West facing wall, are removed from cast stone around windows.
7. Dispose of all debris, trash and clean site to current state.
8. Provide all equipment and work to complete job as requested.

We propose to complete the project withing 30 calendar days. This price expires 45 days from the date of this proposal.

Please let me know if you have any questions.

Sincerely,



Scott Humphrey
Vice President



GULF COAST PLASTERING COMPANY, INC.

P O BOX 23

COLUMBIA, MS 39429

mbowman@gulfcoastplaster.com

CR #: 20397-SC

PHONE/FAX: 601-736-9311

CELL: 601-441-2356

BID PROPOSAL

DATE: 05/05/2022

PROJECT: Plaster Repair at City Hall
200 Forrest Street, Hattiesburg, MS 39401

SCOPE OF WORK: Plaster Repair

Provide labor, materials and equipment to remove damaged plaster at the stair landing on the west wall between 2nd and 3rd floor. Install waterproofing to existing brick and install new plaster to match existing. Paint entire west wall from inside corner to inside corner. Remove existing mortar joints at cast stone and replace with backer rod and caulking at exterior of west wall. Furnish and install waterproofing at mortar joints in cast stone. Remove construction debris and trash daily.

This Quote is valid for 60 days.

BASE BID: 10,850.00

ALTERNATE:

ALTERNATE:

Mark Bowman

GULF COAST PLASTERING COMPANY, INC.

CITY OF HATTIESBURG
UNADVERTISED BID RESULTS

OQ# 228132

ITEM: CHAIN PARK BOARDWALK REPAIRS

BID #1

WINNING BID

COMPANY HUB CITY CONSTRUCTION INC

BID

AMOUNT \$43,950.00

BID #2

COMPANY B.W. SULLIVAN BUILDING CONTRACTOR INC

BID

AMOUNT \$48,700.00

BID #3

COMPANY _____

BID

AMOUNT _____

BID #4

COMPANY _____

BID

AMOUNT _____

THANK YOU FOR SENDING A QUOTE FOR THIS PROJECT.



Sylvester London, DIVISION MANAGER



City of Hattiesburg
200 Forrest Street
Hattiesburg, MS 39401

Bill To 1001
City of Hattiesburg
P.O. BOX 1898
Hattiesburg, MS 39401

Ship To 1014
212 West Front St
Centennial Building
Hattiesburg, MS 39401

Vendor 3140
HUB CITY CONSTRUCTION INC
607 CORRINE ST #C-6
HATTIESBURG, MS 39401

Purchase Order

Fiscal Year 2022 Page 1 of 1

Purchase Order Number **00228132**
Purchase Order Date **05/25/2022**
Department **ENGINEERING**

FID 64-6000432

VENDOR PHONE NUMBER	VENDOR EMAIL	VENDOR NUMBER	REQUISITION NUMBER	BUYER NAME	DELIVERY REFERENCE
	HUBCITYCONSTRUCTION1@GMAIL.COM	3140	228644	Sharon Waits	

NOTES

2-QUOTE CHAIN PARK BOARDWALK REPAIRS
PLEASE SEND INVOICE TO:
shensarling@hattiesburgms.com

ITEM #	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE
1	2-QUOTE CHAIN PARK BOARDWALK REPAIRS PER ATTACHED QUOTE REQUEST GL #: 002300 - 636000	1.0000	EACH	\$43,950.0000	\$43,950.00

SUBMIT SEPARATE INVOICES FOR EACH ORDER. PREPAY SHIPPING CHARGES IF ANY AND ADD TO INVOICE. THE PO NUMBER MUST APPEAR ON ALL PACKAGES & INVOICES.

City Clerk

Total Ext. Price \$43,950.00
Purchase Order Total \$43,950.00



Estimate

Date	Estimate #
5/13/2022	2417

Name / Address
City of Hattiesburg Job: Chain Park (Boardwalk)

Qty	Description	Total
	Remove all 2x6 deck boards on boardwalk. Repair multiple areas of 2x12 framing, repair couple areas of actual top cap of hand/guard rail. Install new 2x6 deck boards to be secured using deck screws. Haul off debris. (Material - \$19,950.00 and Labor - \$24,000)	43,950.00
Total		\$43,950.00



All Estimates Subject To Change Based On
Supply/Material Cost Fluctuation

Hub City Construction
607 Corinne Street - Suite C6
Hattiesburg, MS 39401

[Signature]
5/25/2022

B.W. SULLIVAN BUILDING CONTRACTOR, INC.

4451 Highway 49

Hattiesburg, Mississippi 39401

(601) 582-2933 * Fax: (601) 582-2049

QUOTE

May 25, 2022

Lamar Rutland

City of Hattiesburg

Via Email: lrutland@hattiesburgms.com

RE: Wood Deck Repairs

Chain Park

Hattiesburg, MS

Lamar,

We are pleased provide you with this quotation to furnish all labor, materials, equipment and supervision to complete the necessary repairs to the above referenced project for the sum of: **Forty Eight Thousand Seven Hundred Dollars and No Cents - \$48,700.00**

This quote is based upon the below Scope of Work.

SCOPE OF WORK:

- ** Remove/dispose of all 2 x 6 treated wood deck boards.**
- ** Remove/dispose of approximately 50% of all existing 2 x 12 treated joists which are rotted or decayed.**
- ** Furnish/install new 2 x 12 treated joists where rotted/decayed joists are removed.**
- ** Furnish/install new 2 x 6 treated wood deck board at entire wood deck.**
- ** Repair – as required – existing wood handrails.**
- ** All new treated wood to be installed with coated deck screws.**
- ** Clean up/removal of debris.**

Should you have any questions please feel free to contact me.

We genuinely appreciate the opportunity to work with you on this project.

Sincerely,



Scott Humphrey
Estimator/Project Manager

CITY OF HATTIESBURG TWO-QUOTE BID INSTRUCTIONS

Please find attached specifications for: Chain Park Boardwalk Repair

Contractor shall provide all labor, equipment and materials to repair the boardwalk at Chain Park. Contractor shall use treated lumber and coated deck screws to replace approximately 50% of joists, deck boards, and hand rails which are decayed or rotted. Contractor shall remove all debris and leave the site clean.

Bids are due in the Purchasing Department NO LATER THAN 5:00 P.M. ON: 5/25/2022

Contact Person(s): Lamar Rutland 601-545-4540 or 601-606-2077
 Slade Suber 610-554-1001

AS REQUIRED BY LAW TO PROVIDE CONTINUITY OF THE BID PROCESS, ALL BIDS MUST HAVE:

PRICE
PRICE EXPIRATION DATE
DELIVERY DATE

TOTAL BID PRICE
SIGNATURE OF AUTHORIZED BIDDER
DATE

Payment terms are set by the State of Mississippi Purchasing Laws: payment will be made within 45 days of receipt of an invoice that has been signed/approved by Department that requested quote.

BIDS MAY BE MAILED TO: City of Hattiesburg
 Purchasing Division
 PO Box 1898
 Hattiesburg, MS 39403-1898

or EMAILED TO: twoquote@hattiesburgms.com

or EMAILED TO: slondon@hattiesburgms.com

or FAXED TO THE PURCHASING DEPARTMENT AT 601-545-6661

If you do not intend to bid, please inform us by using one of the methods above.

Your assistance with our bid process is most appreciated.

PURCHASING DEPARTMENT
CITY OF HATTIESBURG



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ann Jones, Chief Administrative Officer
cc: Armendia Esters, Division Manager/MPO, Lamar Rutland
Date: Tuesday, June 7, 2022
Re: Acknowledge public comment period and public meeting for Lincoln Road Drainage Study and authorize publication of public notice of the same.
File Number: 2022-349
Minute Book #

Summary

Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization (HPFL-MPO) for the Lincoln Road Drainage Study.

Public comment period will begin June 9, 2022 and will end June 23, 2022.

Public Meeting will be held Thursday, June 16, 2022 at 6pm at the Train Depot Community Room.

Publication Date: Thursday, June 9, 2022 and Thursday, June 16, 2022

Recommendation Statement

I recommend approval of the public comment period and authorization of publication of public notice for the same.

Please place this on the June 7, 2022 City Council meeting for consideration.

NOTICE
PUBLIC COMMENT PERIOD AND PUBLIC MEETING
Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization
LINCOLN ROAD DRAINAGE STUDY

The Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization (HPFL-MPO) will hold a 15-day public comment period beginning **Thursday, June 9, 2022** for the public to review and provide comments regarding the Lincoln Road Drainage Study. The HPFL-MPO will hold a public meeting **Thursday, June 16, 2022** at 6pm at the Train Depot Community Room. This process is being conducted in accordance with State and Federal guidelines and the HPFL-MPO Public Participation Plan procedures.

The public comment period will be from June 9, 2022, to June 23, 2022.

The Lincoln Road Drainage Study will be available for review at www.hattiesburgms.com/mpo. A hard copy of the documents can be requested by contacting the MPO office at 601.545.6259. The official review and comment period will be held from June 9, 2022 – June 23, 2022.

Written comments regarding the Lincoln Road Drainage Study should be emailed to mpo@hattiesburgms.com or mailed to:

MPO Division Manager
P.O. Box 1898
Hattiesburg, MS 39403

Anyone who may require auxiliary aids or special accommodations to participate in this comment period should advise the HPFL-MPO by calling 601.545.6259 or emailing mpo@hattiesburgms.com for assistance.

PUBLISH three (3) times in the Legal Section of *Hub City SPOKES* on June 9, 2022; June 16, 2022; and June 23, 2022.



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Jennifer Shows, Grants Coordinator

cc: Kermas Eaton, City Clerk

Date: Tuesday, June 7, 2022

Re: Approve and authorize issuance of manual checks for CDBG/HOME Program Claims per attached Memorandum. {HOME/Entitlement CDBG}
File Number: 2022-378
Minute Book #

Summary

Approve and authorize issuance of manual checks for CDBG/HOME Program Claims per attached Memorandum. {HOME/Entitlement CDBG}

Recommendation Statement

I recommend issuance of manual checks for CDBG/HOME Program Claims per attached Memorandum

Please place this on the June 7, 2022 City Council meeting for consideration.



Where vision becomes reality

May 23, 2022

Mr. Kendrick Laster
City of Hattiesburg
Via Email: klaster@hattiesburgms.com

5/23/22 (PN)

**RE: Property Boundary Survey – 210 Barry Street
Barry St, City of Hattiesburg MS - PPIN 21404**

Dear Mr. Laster:

Thank you for selecting Clearpoint Consulting Engineers, P.A. as surveying consultants for performing a boundary survey of the above referenced property. As part of the survey, we will ensure that all property corners are monumented. We will also provide a stamped survey plat, which will meet or exceed the Standards of Practice for Class "B" Property Boundary Surveys as established by the State of Mississippi.

We propose to provide this survey for a fee of **\$1,200.00**.

We appreciate the opportunity to be of service and look forward to working with you on this project. Should you have any questions please feel free call.

Clearpoint Consulting Engineers, P.A.

Accepted:

A handwritten signature in blue ink, appearing to read "John C. Anglin".

John C. Anglin
Vice President

5-26-22

Date

A handwritten signature in blue ink, appearing to read "JCA", circled in blue.

A handwritten signature in blue ink, appearing to read "Ken Laster".

Ken Laster
City of Hattiesburg

5/24/22

Date

MEMORANDUM

TO: City of Hattiesburg Council Members

FROM: Jennifer Shows
Department of Urban Development

SUBJECT: Authorize issuance of manual check for CDBG/HOME Program claims

DATE: June 7, 2022

The following request for payment is being submitted for approval during the City Council's June 7, 2022 meeting. Please authorize and approve issuance of a manual check for the claims listed below:

Recipient: Helen O'Neal
Activity: Substantial Rehabilitation
Program: CDBG
Project Site: 303 J.C. Killingsworth Drive
Amount Requested: \$900.00
Purpose of Request: Temporary relocation (05/28/22-06/27/22)

Recipient: Lisa Means
Activity: Substantial Rehabilitation
Program: CDBG
Project Site: 515 Columbia Street
Amount Requested: \$900.00
Purpose of Request: Temporary relocation (05/28/22-06/27/22)

Recipient: Ardesia Eaton
Activity: Substantial Rehabilitation
Program: CDBG
Project Site: 1413 Arledge Street
Amount Requested: \$330.00
Purpose of Request: Temporary relocation (04/09/22-04/19/22)

Recipient: Clearpoint Consulting Engineers, P.A.
Activity: Reconstruction
Program: CDBG
Project Site: 210 Barry Street
Amount Requested: \$1,200.00
Purpose of Request: Boundary survey

Recipient: Bradley Construction Co., LLC
Activity: Substantial Rehabilitation
Program: CDBG
Project Site: 515 Columbia Street
Amount Requested: \$17,750.00
Purpose of Request: Reimbursement

Recipient: Bradley Construction Co., LLC
Activity: Substantial Rehabilitation
Program: CDBG
Project Site: 303 J.C. Killingsworth Drive
Amount Requested: \$5,950.00
Purpose of Request: Reimbursement

To: Urban Development Community Development Division
INVOICE

Bradley Construction Co. LLC
4117 HWY 26 West
Lucedale, MS 39452
601-947-0604
May 9, 2022

5/26/22

Homeowner Address: 303 Killingsworth

Completed Job Descriptions

1	Connected to City water and sewer	2,500.00
2	Installed Formica Countertop, sink, faucet, and hardware	1,500.00
3	Cabinet raised to 72" for refrigerator	250.00
4	Installed shelves and rods in closets	700.00
5	Installed doorknobs for interior doors	300.00
6	Reinstalled case opening	100.00
7	Moved existing shelf over commode	100.00
8	Installed thermostat	150.00
9	Completed return area where the insulation is showing and added grill vent	200.00
10	Made attic access code compliant	150.00

Total Amount Due \$5,950.00

Homeowner: _____

Contractor: Billy Bradley

Make all checks payable to Bradley Construction Co. LLC
Thank you for your business!
4117 Hwy 26 West Lucedale, MS 39452 Phone 601-947-0604,
Email Address: billyandgloriabradley@hotmail.com

XJL

To: Urban Development Community Development Division

INVOICE

Bradley Construction Co. LLC
4117 HWY 26 West
Lucedale, MS 39452
601-947-0604
May 26, 2022

PAID 5/26/22

Homeowner Address: 515 Columbia Street

Completed Job Descriptions

1	Prepared the structure for painting and painted exterior of house	6000.00
2	Installed code approved concrete steps with landing at rear exit of house, with hand and guardrails	1,500.00
3	Checked all windows for good seals	400.00
4	Sealed all gaps, holes, and cracks	500.00
5	Finished painting the interior of the structure	3,800.00
6	Filled gaps at all door frames and casings	1,500.00
7	Adjusted all interior doors and added doorstops	1,200.00
8	Installed shelves and rods in closets	1,500.00
9	Removed and replaced countertop and sink w/single handle spray faucet and plumbing to code	1,900.00
10	Reinstalled drain system to code	150.00
11	Adjusted and sealed all exterior doors	400.00
Total Amount due		\$17,750.00

Homeowner: _____

Contractor: Billy Bradley

Make all checks payable to Bradley Construction Co. LLC

Thank you for your business!

4117 Hwy 26 West Lucedale, MS 39452 Phone 601-947-0604,

Email Address: billyandgloriabradley@hotmail.com



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Lamar Rutland
cc:
Date: Tuesday, June 7, 2022
Re: Approve Plans and Specifications for the Jaycee Park Field Improvements project and authorize advertisement for bids.
File Number: 2022-387
Minute Book #

Summary

Approve Plans and Specifications for the Jaycee Park Field Improvements project and authorize advertisement for bids.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

ADVERTISEMENT FOR BIDS

**JAYCEE PARK FIELD IMPROVEMENTS
CITY OF HATTIESBURG, MISSISSIPPI**

Sealed bids will be received by the City of Hattiesburg, at the City Clerk's office, Mississippi, hereafter referred to as Owner, located at 200 Forrest Street, Hattiesburg, Mississippi, 39401, until **10:00 A.M., Local Time, Thursday, July 14, 2022**, for supplying all labor, equipment, and materials (as specified) necessary for the construction of the above referenced project. When bids are submitted electronically, the same requirements for submitting sealed bids shall apply. Electronic bids shall be submitted online at www.hattiesburgsbids.com and shall include a document representing the cover of the envelope containing the aforementioned criteria.

The above general outline of features of the work does not in any way limit the responsibility of the Contractor to perform all work and furnish all labor, equipment and materials required by the specifications and the drawings referred to therein.

Bidder must be qualified under Mississippi Law and show current Certificate of Responsibility issued by the Mississippi State Board of Public Contractors establishing his classification as to the value and type of construction on which he is authorized to bid.

Each Bidder shall write his Certificate of Responsibility Number on the outside of the sealed envelope containing his proposal.

Proposals shall be submitted in duplicate, sealed and deposited with the Owner prior to the hour and date hereinbefore designated. No bidder may withdraw his bid within 90 days after the actual date of the opening thereof. A duplicate proposal is not required if submitting bid electronically.

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so-called Golden Rule is followed state law requires a non-resident bidder is to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

Each Bidder must deposit with his proposal, a Bid Bond or Certified Check in an amount equal to five percent of his bid, payable to the Owner, as bid security. Bidders shall also submit a current financial statement, if requested, by the Owner. The successful bidder will be required to furnish a Payment Bond and Performance Bond each in the amount of 100 percent of the contract amount.

Bid documents are being made available via paper copy or pdf. All interested bidders are required to log-in or register for an account at www.hattiesburgsbids.com OR www.neel-schafferplans.com to view and order Bid Documents. All plan holders are required to have a valid email address for registration. Bid documents are non-refundable and must be purchased through the website. Questions regarding website registration and online orders please contact Plan House Printing at (601) 336-6378.

"Mississippi Standard Specifications for Road and Bridge Construction, 2017 Edition" as referred to herein, may be purchased from the Mississippi Department of Transportation.

The Owner hereby notifies all Bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged and women's business enterprises will be afforded the full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Engineer is Neel-Schaffer, Inc., 704 Hardy Street, Hattiesburg, Mississippi 39401; Phone No. (601) 545-1565, Fax No. (601)-545-2267. Russ Bryan, ASLA – Senior Project Manager (russ.bryan@neel-schaffer.com).

The Owner reserves the right to reject any and all bids and to waive any informalities or irregularities therein.

BY: _____
City Clerk
City of Hattiesburg, Mississippi

DATES OF PUBLICATION:

Wednesday, June 15, 2022

Wednesday, June 22, 2022

JAYCEE PARK
FIELD IMPROVEMENTS
CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY

MAYOR

TOBY BARKER

CHIEF ADMIN OFFICER

ANN JONES

ENGINEERING DIRECTOR

LAMAR RUTLAND, P.E.

COUNCIL MEMBERS

JEFFREY GEORGE	WARD 1
DEBORAH D. DELGADO	WARD 2
CARTER CARROLL	WARD 3
DAVE WARE	WARD 4
NICHOLAS BROWN	WARD 5

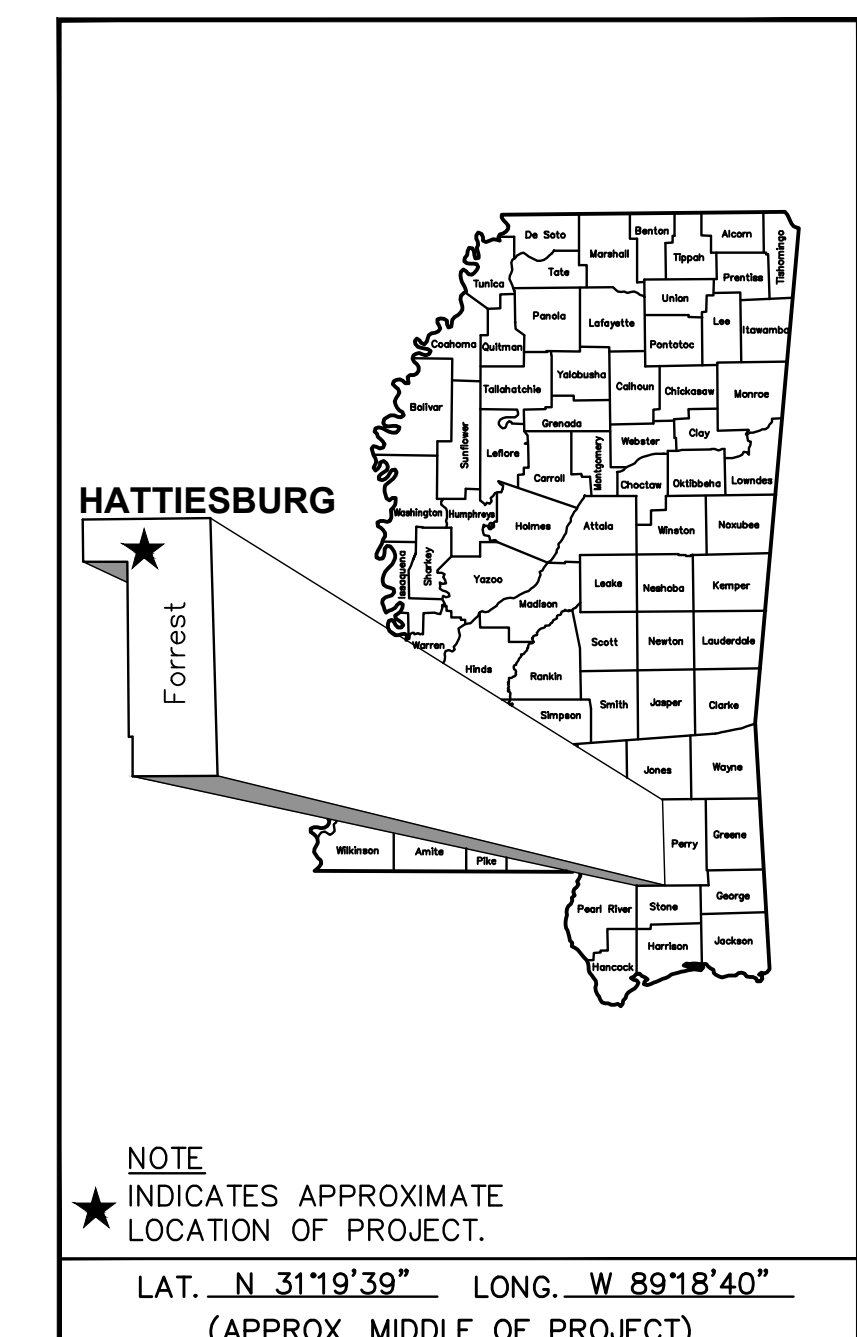
UTILITIES

TELEPAK DBA C SPIRE (FIBER)
UNITI (FIBER)
MISSISSIPPI POWER COMPANY (POWER)
SPIRE MS INC (GAS)
COMCAST CABLE (TV, TELEPHONE & FIBER)
AT & T (TELEPHONE)
CITY OF HATTIESBURG (WATER & SEWER)



PROJECT AREA

VICINITY MAP
PROJECT LOCATION



PREPARED BY :
NEEL-SCHAFER
Solutions you can build upon

FINAL REVIEW

RUSSELL BRYAN, ASLA
MISSISSIPPI LICENSE NO. 518

GENERAL NOTES

1. THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2017 EDITION, AS AMENDED, SHALL BE THE STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF THIS PROJECT UNLESS OTHERWISE INDICATED OR AMENDED IN THE SPECIAL PROVISIONS, PROPOSAL AND CONTRACT DOCUMENTS, AND EXCLUDING SECTIONS 100 AND 900.

2. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CANNOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION.

3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING GRADES AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.

4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, BRIDGES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHOULD BE EXERCISED IN UNDERCUT AREAS AND THE UNDERCUT DEPTH MAY BE ADJUSTED AT CROSS DRAINS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.

5. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES. THEREFORE, THE RISK OF A FAILURE OCCURRING DURING THE EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE WHAT BRACING, SHORING, OR GROUND SUPPORT SYSTEM THAT IS DEEMED NECESSARY TO PREVENT A FAILURE AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION, THE PUBLIC THAT MAY BE ABOVE THE EXCAVATION, OR ANY STRUCTURE ADJACENT TO THE EXCAVATION. ALL COSTS FOR ANY PROTECTIVE MEASURES INCLUDING THE MATERIALS AND LABOR FOR DESIGNING, DRAWING AND CONSTRUCTING THE FACILITY SHALL BE INCLUDED IN THE PRICE BID FOR CONTRACT ITEMS.

6. VOIDS CREATED BY THE REMOVAL OF POSTS, CONCRETE ANCHORS, FOOTINGS, ETC., SHALL BE BACKFILLED AND TAMPED IN ACCORDANCE WITH SECTION 203 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (COST ABSORBED).

7. PRIOR TO EXCAVATION AND EMBANKMENT CONSTRUCTION, ALL TOPSOIL SHALL BE STRIPPED AND STOCKPILED. AFTER COMPLETION OF EXCAVATION AND EMBANKMENT CONSTRUCTION, ALL SLOPES SHALL BE UNIFORMLY PLATED WITH THE STOCKPILED TOPSOIL. THE COST OF STRIPPING, STOCKPILING, PLACING AND SPREADING OF TOPSOIL IS TO BE INCLUDED IN OTHER ITEMS OF WORK.

8. ALL POST LENGTHS FOR SIGNS SHALL BE VERIFIED IN THE FIELD PRIOR TO FABRICATION.

9. SOME WORK MAY BE REQUIRED OUTSIDE THE PROJECT LIMITS BEYOND THE PROJECT LIMITS. NO ADDITIONAL COMPENSATION WILL BE MADE FOR SUCH WORK EXCEPT AS PROVIDED BY SPECIFIC PAY ITEMS SHOWN ON THE PLANS.

10. ALL SIGNS, SIGNALS, PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

11. ALL RAISED OBJECTS SHALL BE PLACED A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB.

12. CONTRACTOR SHALL MAKE THE APPLICATION FOR POWER SERVICE, COORDINATING WITH UTILITY COMPANY, IN ADVANCE OF REQUIRING THE ELECTRICAL SERVICE.

13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THROUGH AND LOCAL TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

14. THE CONTRACTOR SHALL PROVIDE ACCESS (INGRESS AND EGRESS) TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO NOTIFY BUSINESSES AND HOMEOWNERS 48 HOURS IN ADVANCE OF ACCESS RESTRICTIONS.

15. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER SUB-CONTRACTOR'S TO FACILITATE TIE-INS TO OTHER CONTRACTOR'S WORK, WHERE FEASIBLE AND PRACTICABLE.

16. CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR RELOCATION OF EXISTING POWER, GAS, TELEPHONE, AND CABLE TV UTILITIES. CONTRACTOR SHALL PROVIDE ACCESS TO THE UTILITY COMPANIES FOR RELOCATION ACTIVITIES AS REQUIRED.

17. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE VERIFICATION, PROTECTION, AND RELOCATION OF BENCHMARKS DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR RELOCATION OF BENCHMARKS.

18. CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTING ANY SIGNS THAT ARE IN DIRECT CONFLICT WITH CONSTRUCTION IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION (COST ABSORBED).

19. REMOVAL OF EXISTING AND TEMPORARY TRAFFIC STRIPING, TRAFFIC CONTROL SIGNS AND BARRICADES SHALL BE ABSORBED UNDER PAY ITEM FOR MAINTENANCE OF TRAFFIC.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE UTILITY COMPANIES IF ANY UTILITY POLES NEED TO BE SUPPORTED DURING CONSTRUCTION (COST ABSORBED).

21. THE CONTRACTOR SHALL REPAIR FENCES, RETAINING WALLS, GATES, SODDING, LANDSCAPING, ETC. DAMAGED DURING OVERALL CONSTRUCTION (COST ABSORBED).

22. THE EROSION CONTROL DEVICES REFERENCED IN THESE PLANS ARE A MINIMUM RESPONSIBILITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT SILT DOES NOT LEAVE THE RIGHT OF WAY OR CONTAMINATE WATERS OF THE U.S. DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF WORK AND MAINTAIN THE PLAN DURING CONSTRUCTION.

23. THE US DEPARTMENT OF TRANSPORTATION REGULATES ACCESSIBILITY FOR CONSTRUCTION SITES. THESE ARE LOCATED IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE US ACCESS BOARD (DEPARTMENT OF JUSTICE) REQUIRES THAT ALL PUBLIC RIGHT-OF-WAY BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES. REMINDER: THESE ARE FEDERAL REGULATIONS (A VIOLATION OF FEDERAL LAW). NO CHANGE ORDERS WILL BE GIVEN TO KEEP THESE REQUIREMENTS IN PLACE.

THE US DOT AND THE DOJ WILL BE CONTACTED IF THE CONTRACTOR FAILS TO KEEP THESE IN PLACE.

24. TREES, STUMPS AND OTHER CLEARED AND GRUBBED MATERIAL MAY NOT BE DISPOSED OF ON SITE.

25. BURNING WILL NOT BE ALLOWED ON SITE.

26. ALL BURNING OFF THE SITE SHALL BE IN COMPLETE ACCORDANCE WITH RULES AND REGULATIONS OF LOCAL AUTHORITIES HAVING JURISDICTION.

27. CONTRACTOR SHALL CONTROL AIR POLLUTION CAUSED BY DUST AND DIRT, AND COMPLY WITH GOVERNING REGULATIONS.

28. ALL TREES ARE TO REMAIN UNLESS OTHERWISE NOTED.

29. CONTRACTOR MAY CONSTRUCT SECTIONS OF THE SIDEWALK SIMULTANEOUSLY BUT WILL NEED TO COORDINATE DEMOLITION ACTIVITIES WITH CONSTRUCTION.

30. TREE MAINTENANCE IS NOTED IN THE PLANS AND SHALL BE INCLUDED AS 618-A001 MAINTENANCE OF TRAFFIC. THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN THE TREE PROTECTION ZONE (AREA BETWEEN THE TRUNK AND TEMPORARY ORANGE CONSTRUCTION FENCE) INCLUDE:

a. PARKING VEHICLES OR EQUIPMENT, STORAGE OF BUILDING MATERIALS, REFUSE, OR EXCAVATED SOILS, OR DUMPING POISONOUS MATERIAL ON OR AROUND TREES AND ROOTS. POISONOUS MATERIALS INCLUDE, BUT ARE NOT LIMITED TO PAINT, PETROLEUM PRODUCTS, CONCRETE, STUCCO MIX, DIRTY WATER OR ANY MATERIAL THAT MAY BE HARMFUL TO TREE HEALTH

b. THE USE OF TREE TRUNKS AS A BACKSTOP, WINCH SUPPORT, ANCHORAGE, AS A TEMPORARY POWER POLE, SIGNPOST OR OTHER SIMILAR FUNCTION

c. CUTTING OF TREE ROOTS BY UTILITY TRENCHING, FOUNDATION DIGGING, PLACEMENT OF CURBS AND TRENCHES, OR OTHER MISCELLANEOUS EXCAVATIONS WITHOUT PRIOR APPROVAL OF THE UNIVERSITY'S PROJECT REPRESENTATIVE AND SUPERINTENDENT OF GROUNDS.

d. SOIL DISTURBANCE OR GRADE CHANGE

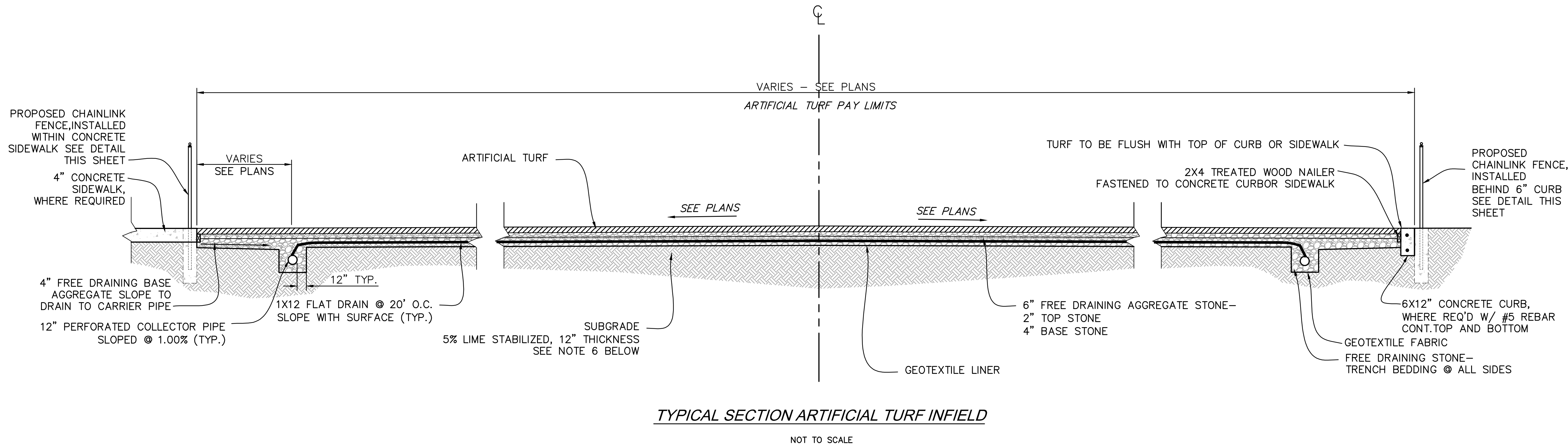
e. DRAINAGE CHANGES

31. CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS PRIOR TO EXCAVATION OCCURRING UNDER ANY MATURE TREE CANOPY. CONTRACTOR MAY BE REQUIRED TO HAND EXCAVATE OR AIR EXCAVATE THESE AREAS AS DIRECTED BY THE ENGINEER.

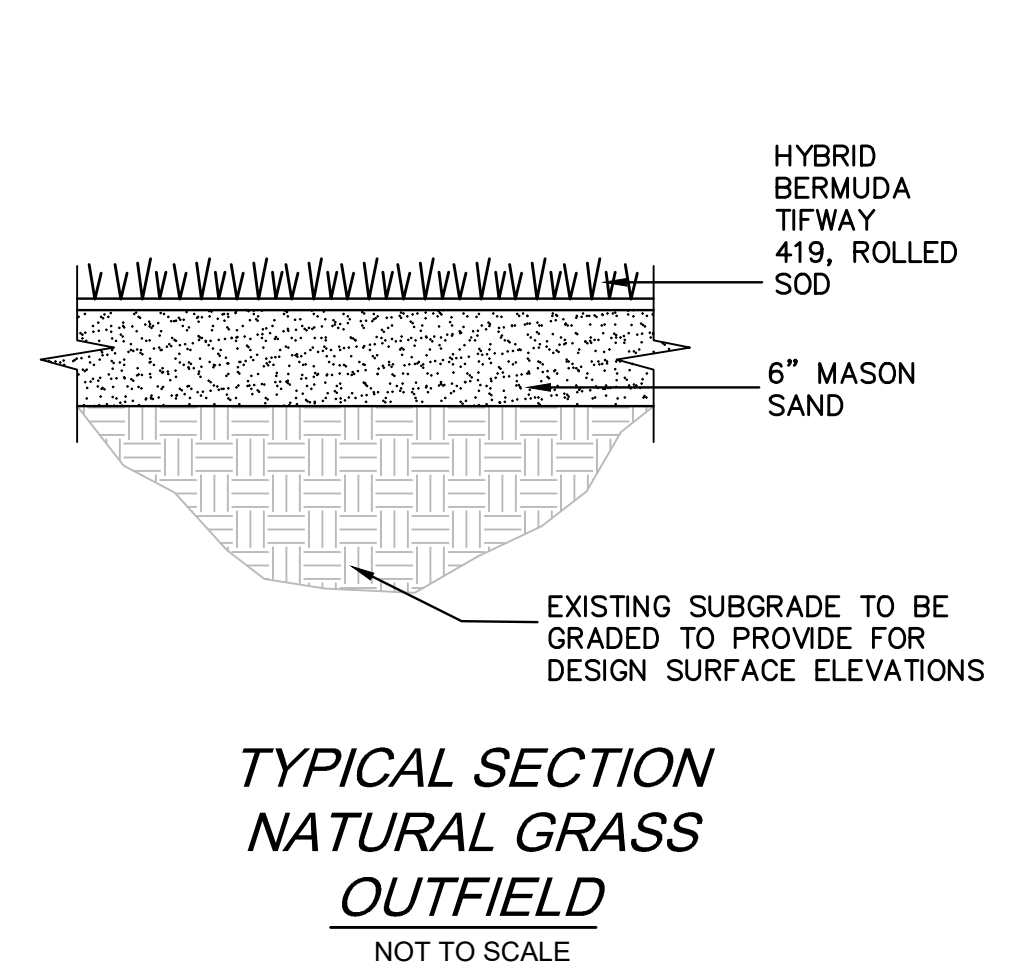
32. PRIOR TO CONSTRUCTION, VARIOUS TREES MAY NEED TO BE PRUNED AWAY FROM STRUCTURES OR PROPOSED CONSTRUCTION ACTIVITY. CONSTRUCTION OR CONTRACTOR PERSONNEL ARE NOT ALLOWED TO REMOVE TREES (EXCEPT THOSE NOTED TO BE REMOVED) AND SHALL NOT ATTEMPT PRUNING. ONLY PERSONNEL APPROVED BY THE UNIVERSITY'S PROJECT REPRESENTATIVE AND SUPERINTENDENT OF GROUNDS CAN PERFORM PRUNING OR REMOVAL OPERATIONS. THE UNIVERSITY WILL PROVIDE QUALIFIED TREE PRUNING SERVICES AND COORDINATE WITH THE CONTRACTOR.

<i>WKG.</i> <i>NO.</i>	<i>SHT.</i> <i>NO.</i>	<i>DESCRIPTION OF SHEET</i>	<i>WKG.</i> <i>NO.</i>	<i>SHT.</i> <i>NO.</i>	<i>DESCRIPTION OF SHEET</i>
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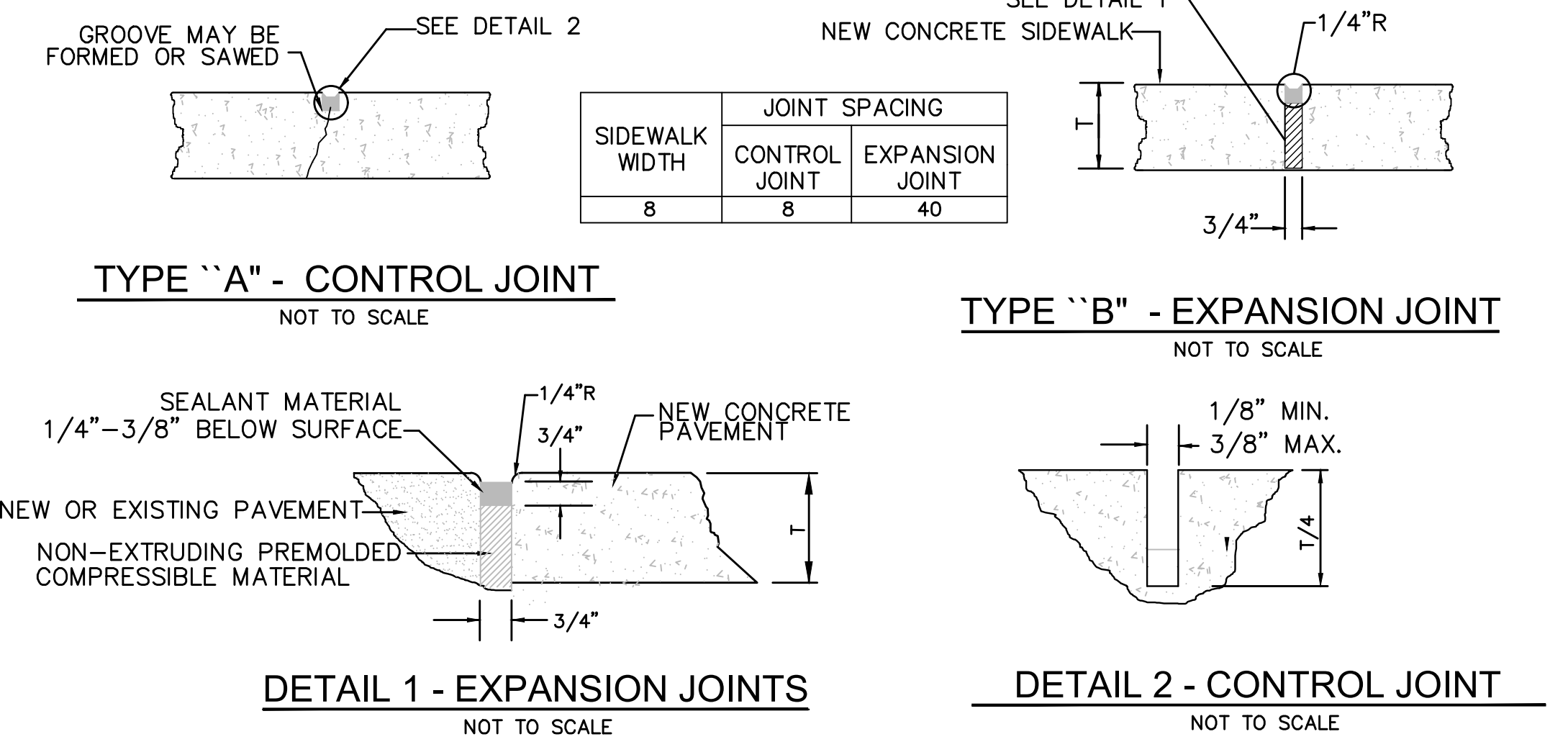
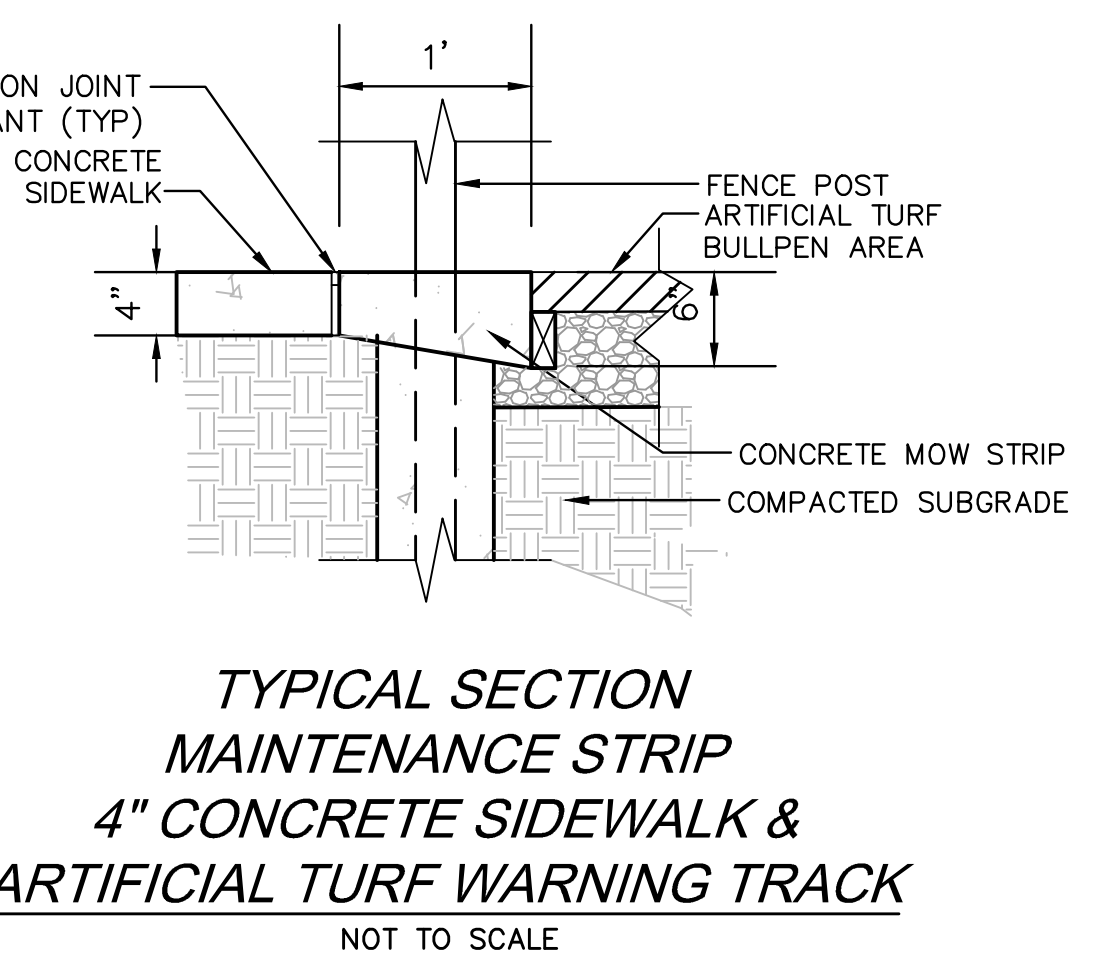
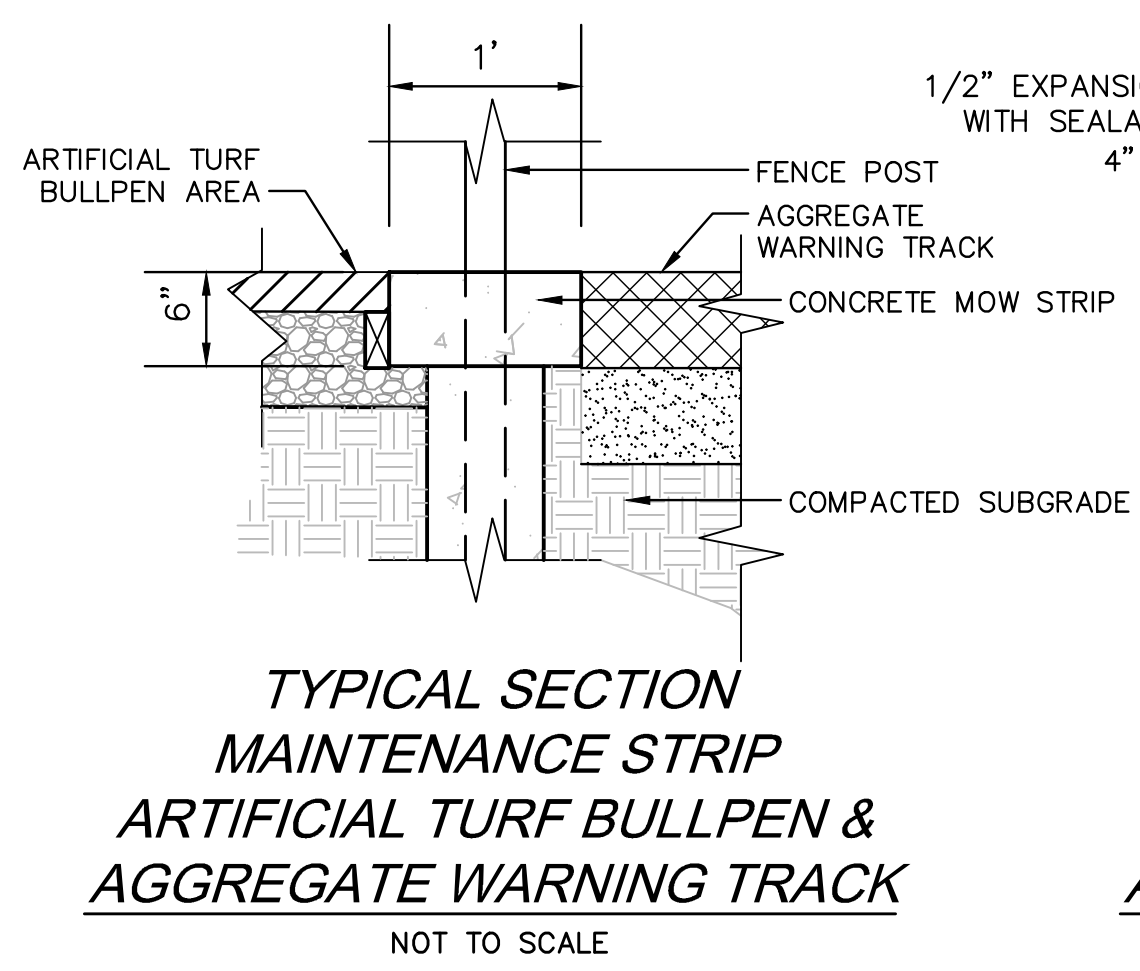
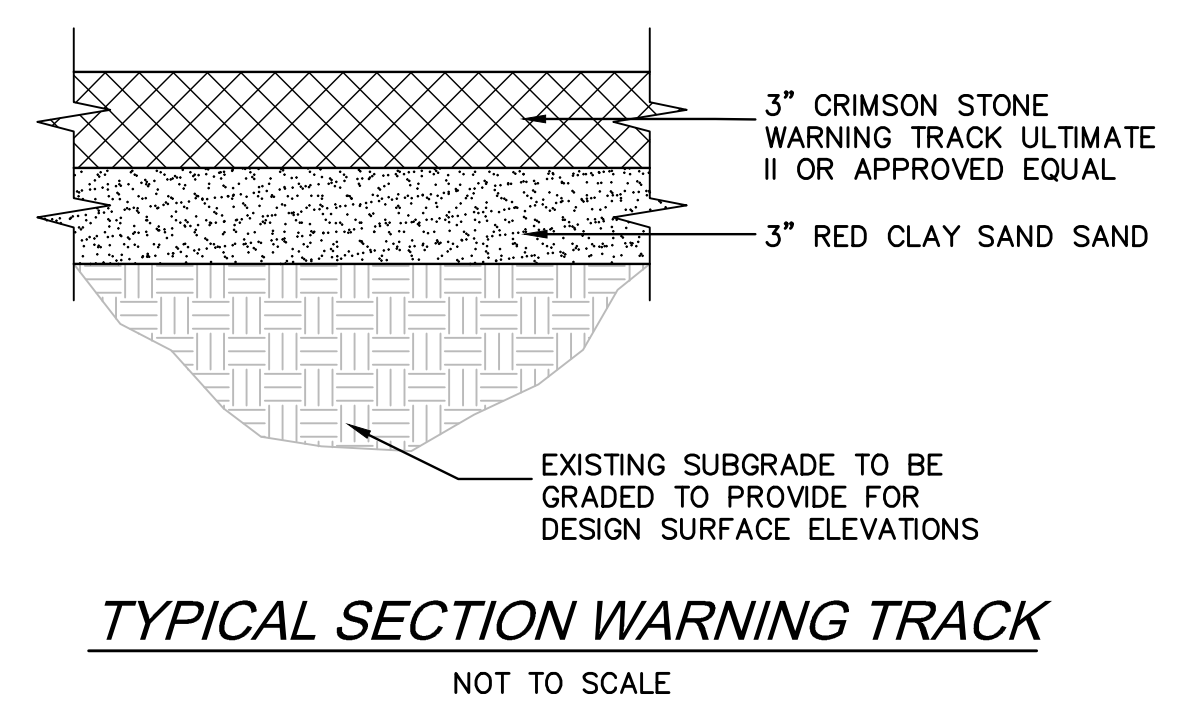
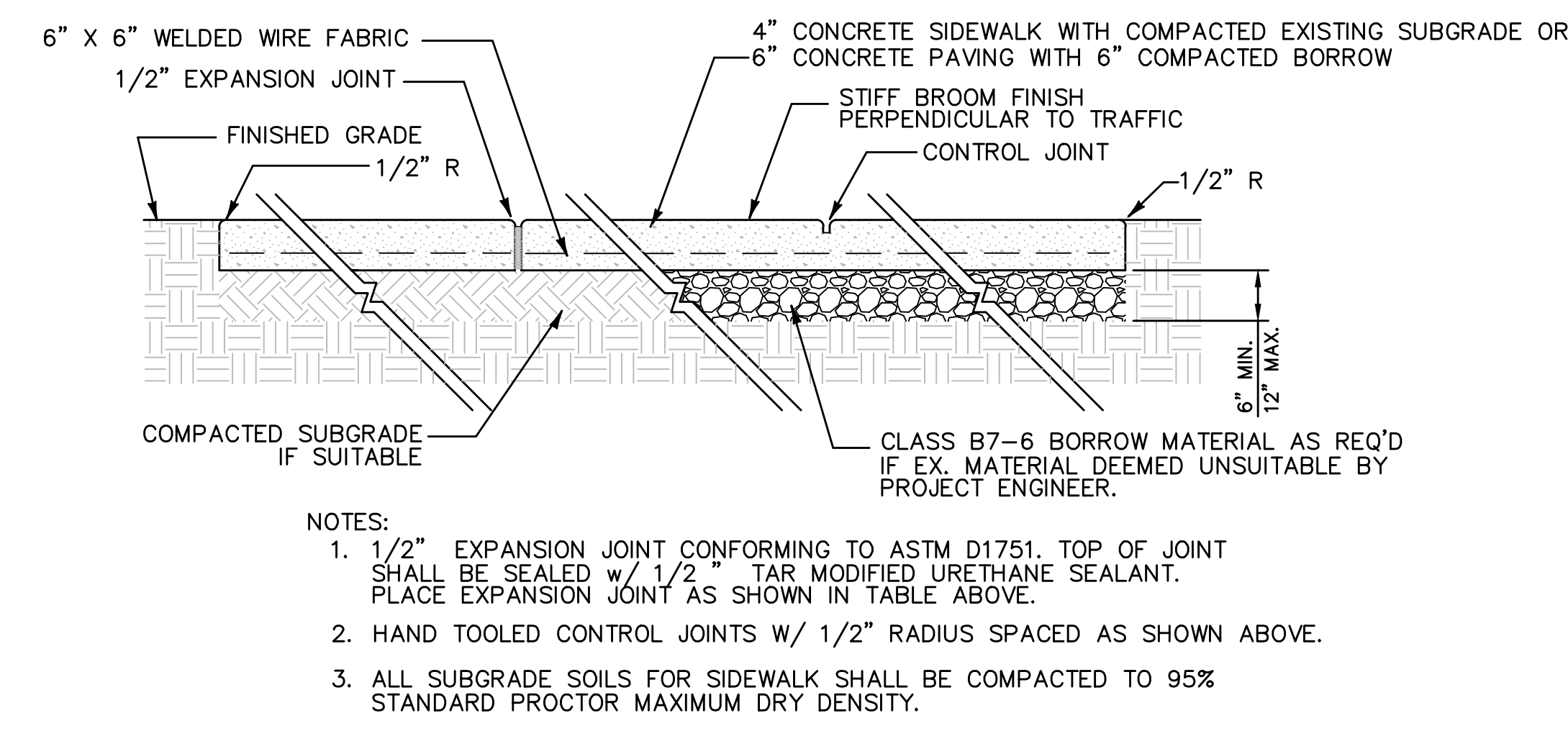
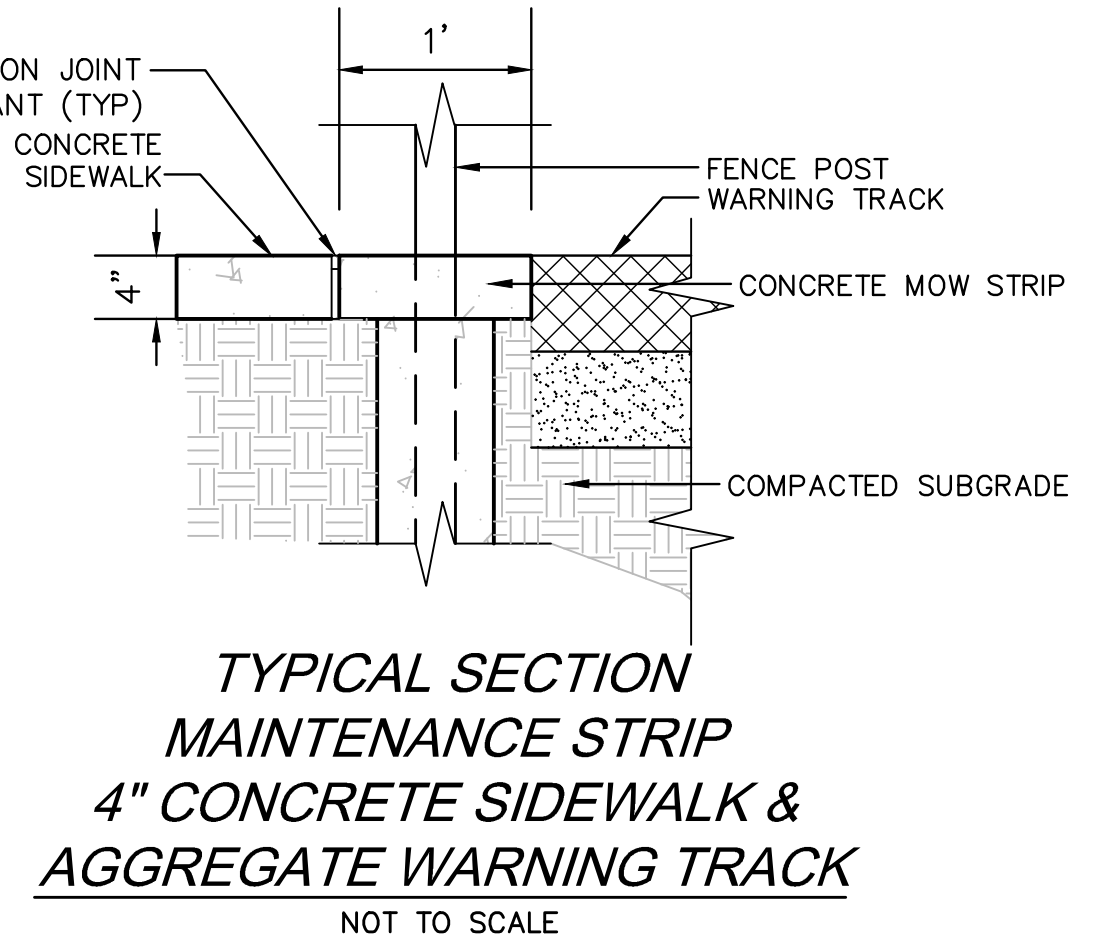
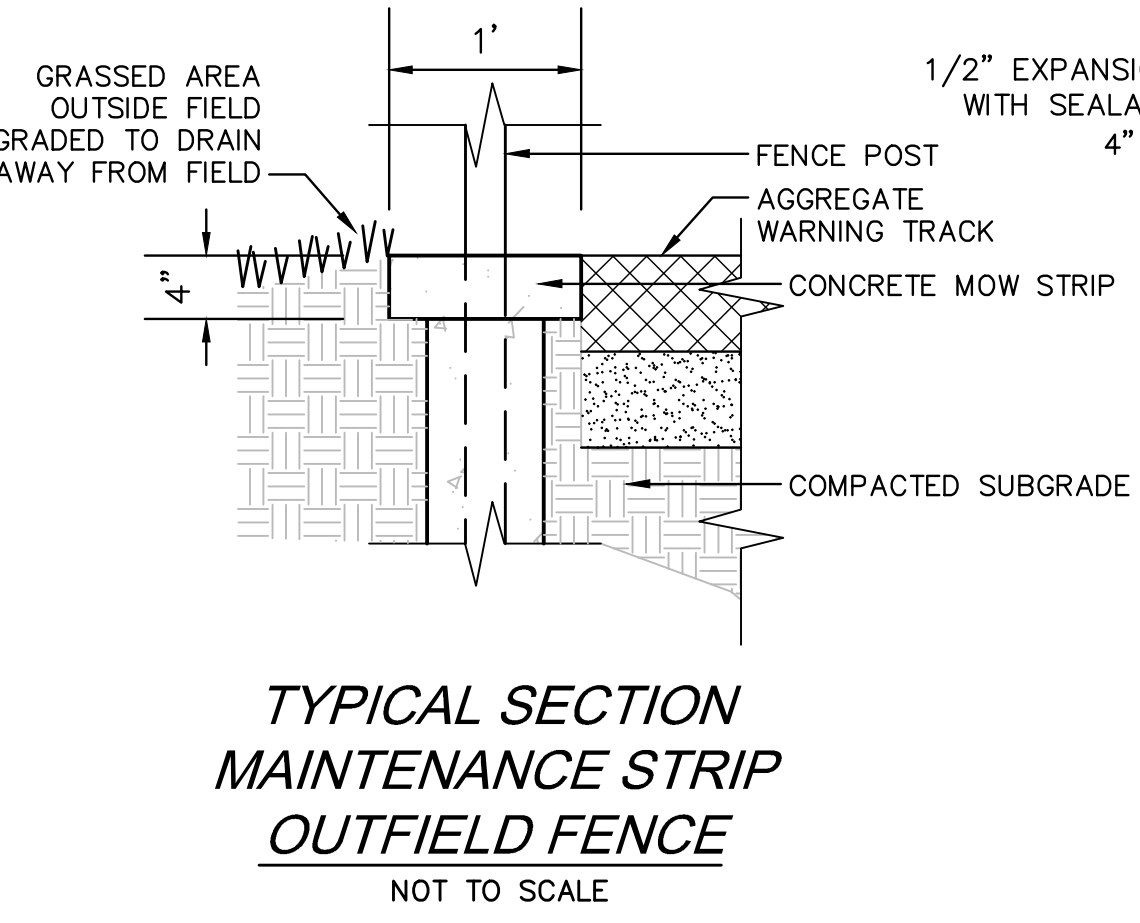
NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS				DRAWING INFORMATION		JAYCEE PARK FIELD IMPROVEMENTS CITY OF HATTIESBUG HATTIESBURG, MISSISSIPPI FORREST COUNTY	NEEL-SCHAFFER Solutions you can build upon	GENERAL NOTES & INDEX	
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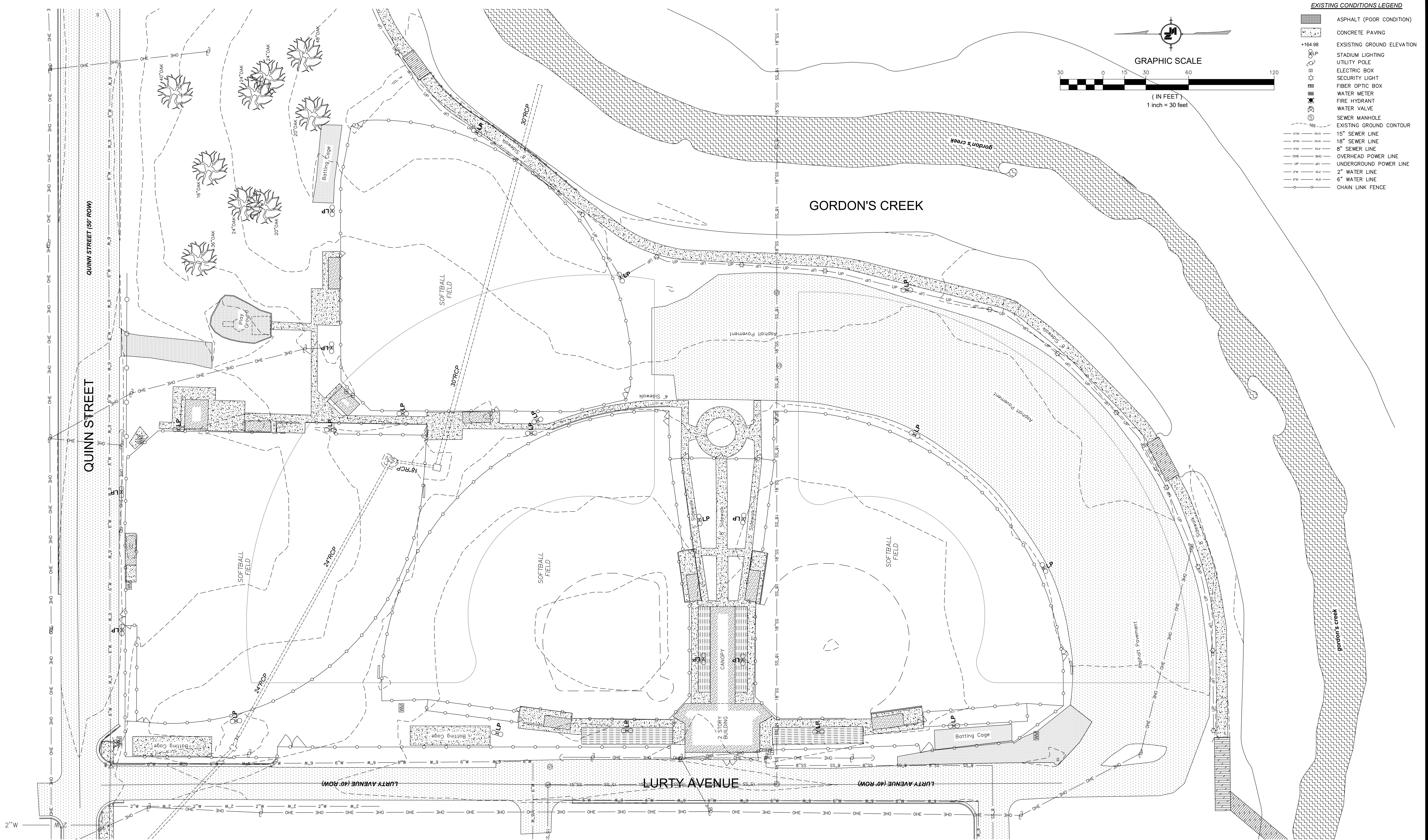
- NOTES:
1. ARTIFICIAL TURF PAY ITEM INCLUDES ALL ITEMS SHOWN IN TYPICAL SECTION (SEE NOTE 8). INFILL MATERIAL PAID PER ADD ALTS 1 & 2. EARTHWORK/GRADING TO BE MEASURED & PAID UNDER SEPERATE PAY ITEM.
 2. AFTER EXCAVATION OF EXISTING SOIL TO THE PROPER ELEVATIONS REQUIRED, THE NEW SUBGRADE WILL BE SHAPED AND COMPACTED TO DESIGNED DENSITY AND SLOPED TO ALLOW FOR DRAINAGE.
 3. NAILER TO BE INSTALL AROUND PERIMETER TO PROVIDE A SECURE EDGE FOR FASTENING THE SYNTHETIC TURF. IN ALL CASES, THE NAILER AND STONE ARE AT THE SAME ELEVATION. ATTACH NAILER TO CONCRETE CURB OR CONCRETE SIDEWALK, ACCORDING TO PLANS.
 4. GEOTEXTILE FABRIC WILL BE PLACED OVER THE SUBGRADE, AND COMPOSITE DRAINS ARE TO BE INSTALLED AT 20' O.C. - SEE DRAINAGE PLAN FOR LAYOUT.
 5. COMPOSITE DRAINS WILL DRAIN TO A 12" (MIN.) COLLECTOR PIPE WHICH WILL BE CONNECTED TO THE DRAINAGE SYSTEM OUTSIDE OF THE FIELD LIMITS - SEE DRAINAGE PLAN.
 6. FREE DRAINING AGGREGATE SHALL BE PLACED OVER THE COMPOSITE DRAINS AND THE PERIMETER COLLECTOR PIPE AND FINE GRADED.
 7. LIME STABILIZATION PENDING PROOF ROLL. THE USE OF LIME STABILIZATION TO BE DETERMINED BY THE ENGINEER.
 8. ARTIFICIAL TURF PAY ITEM INCLUDES CONCRETE PERIMETER CURB (WHERE CONCRETE SIDEWALK IS NOT REQUIRED), FLAT DRAIN PIPE, CARRIER PIPES, SELECT BEDDING & BACKFILL (IF REQ'D.), GEOTEXTILE FABRIC AND LINER, TOP STONE, BASE STONE, ARTIFICIAL TURF (WITH MARKINGS), AND ALL EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE INSTALLATION.



- NATURAL GRASS OUTFIELD NOTES:
1. NATURAL GRASS OUTFIELD PAY ITEM INCLUDES ALL ITEMS SHOWN IN TYPICAL SECTION (SEE NOTE 6). EARTHWORK/ GRADING TO BE MEASURED & PAID UNDER SEPERATE PAY ITEMS.
 2. AFTER EXCAVATION OF EXISTING SOIL TO THE PROPER ELEVATIONS REQUIRED, THE NEW SUBGRADE WILL BE SHAPED AND COMPACTED TO DESIGNED DENSITY AND SLOPED TO ALLOW FOR DRAINAGE.
 3. COMPOSITE DRAINS ARE TO BE INSTALLED AT 20' O.C. - SEE DRAINAGE PLAN FOR LAYOUT.
 4. COMPOSITE DRAINS WILL DRAIN TO A 12" (MIN.) COLLECTOR PIPE WHICH WILL BE CONNECTED TO THE DRAINAGE SYSTEM OUTSIDE OF THE FIELD LIMITS - SEE DRAINAGE PLAN.
 5. LIME STABILIZATION PENDING PROOF ROLL. THE USE OF LIME STABILIZATION TO BE DETERMINED BY THE ENGINEER.
 6. NATURAL GRASS OUTFIELD PAY ITEM INCLUDES PERFORATED DRAIN PIPE, CARRIER PIPES, SELECT BEDDING & BACKFILL (IF REQ'D.), SAND, ROLLED SOD (MAJNUM ROLL BY CLEVERDON FARMS - 33 SQ YD PER ROLL MINIMUM), AND ALL EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE INSTALLATION.

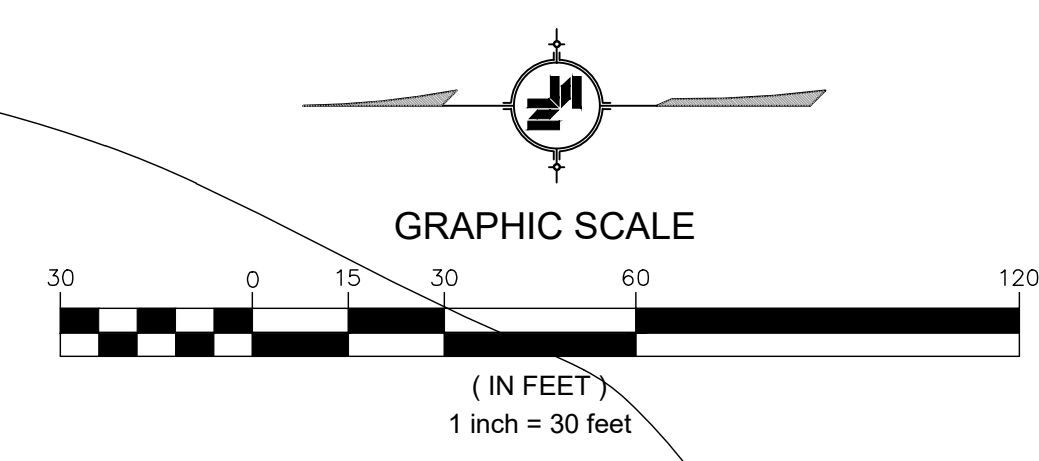


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					JAYCEE PARK FIELD IMPROVEMENTS CITY OF HATTIESBUG HATTIESBURG, MISSISSIPPI FORREST COUNTY		 NEEL-SCHAFFER <i>Solutions you can build upon</i>	TYPICAL SECTIONS	
								WORKING NUMBER: TS-1	DRAWING NUMBER: 3

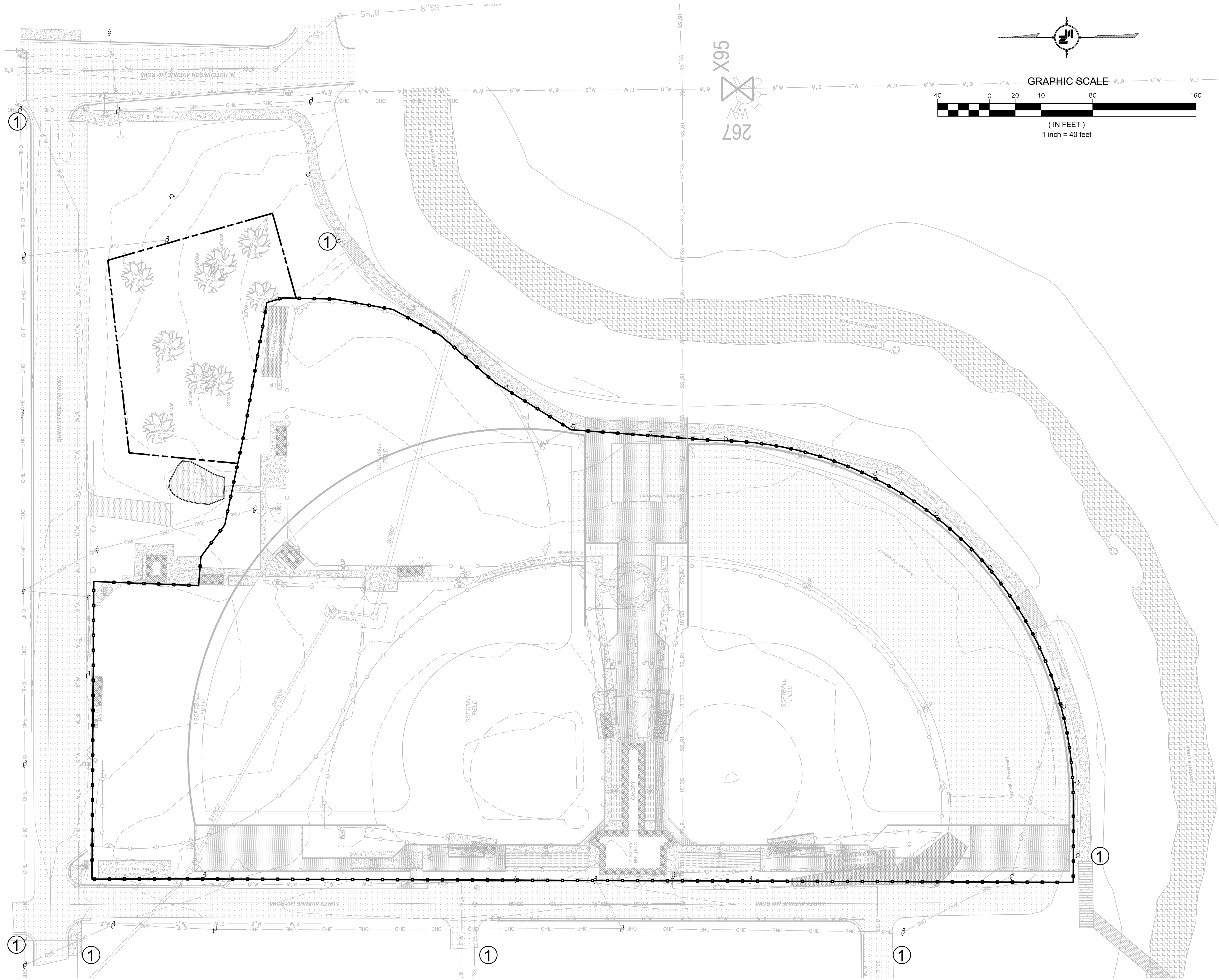


EXISTING CONDITIONS LEGEND

- ASPHALT (POOR CONDITION)
- CONCRETE PAVING
- EXISTING GROUND ELEVATION
- STADIUM LIGHTING
- UTILITY POLE
- ELECTRIC BOX
- SECURITY LIGHT
- FIBER OPTIC BOX
- WATER METER
- FIRE HYDRANT
- WATER VALVE
- SEWER MANHOLE
- EXISTING GROUND CONTOUR
- 15" SEWER LINE
- 18" SEWER LINE
- 8" SEWER LINE
- OVERHEAD POWER LINE
- UNDERGROUND POWER LINE
- 2" WATER LINE
- 6" WATER LINE
- CHAIN LINK FENCE



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	WORKING NUMBER:		DRAWING NUMBER:						
EX-1		4							



PEDESTRIAN NOTES:

1. CONTRACTOR TO COORDINATE FENCE INSTALLATION WITH OVERALL CONSTRUCTION SCHEDULING. FENCING SHOWN IS FOR ILLUSTRATION ONLY. LOCATION OF FENCE IS TO BE COORDINATED WITH THE OWNER.
2. THE SAFETY OF THE GENERAL PUBLIC WITHIN THE VICINITY OF CONSTRUCTION AREA IS EXTREMELY IMPORTANT. THE CONTRACTOR SHALL POST AND MAINTAIN, TO THE OWNER'S SATISFACTION, SIGNS THAT DIRECT THE GENERAL PUBLIC AROUND THE CONSTRUCTION AREAS USING THIS PLAN AS A MINIMUM REQUIREMENT. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO CONSTRUCTION. ADDITIONAL SIGNS REQUIRED BY THE OWNER WILL BE PAID FOR AS ADDITIONAL CONSTRUCTION SIGNS.
3. THIS DRAWING IS USED TO ILLUSTRATE THE UNIVERSITY'S INTENT. CONTRACTOR SHALL SUBMIT WITHIN 10 DAYS AFTER NOTICE OF AWARD A CONSTRUCTION SEQUENCING PLAN TO THE UNIVERSITY FOR THEIR REVIEW AND APPROVAL.
4. ITEMS ON THIS SHEET ARE INCLUDED IN MAINTENANCE OF TRAFFIC.
5. SEE WORKING NUMBER TC-2 FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
6. ADA COMPLIANT ACCESSIBLE ROUTES MUST BE MAINTAINED AT ALL TIMES THROUGHOUT CONSTRUCTION. IN ALL INSTANCES, PEDESTRIAN ACCESS ROUTES WILL NOT REQUIRE PERSONS WITH MOBILITY CONSIDERATIONS TO TAKE A DIFFERENT ROUTE FROM THAT OF A PERSON WITHOUT A MOBILITY CONSIDERATION.

TRAFFIC CONTROL NOTES:

1. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
2. CONTRACTOR TO MAINTAIN ACCESS TO UNIVERSITY FACILITIES AT ALL TIMES DURING CONSTRUCTION. PEDESTRIAN SIGNAGE AS REQUIRED BY THE ENGINEER OR THE UNIVERSITY SHALL BE PAID FOR UNDER THE PRICE BID FOR ADDITIONAL CONSTRUCTION SIGNS.
3. THE LOCATION AND SPACING OF SIGNS ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.
4. FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
5. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).
6. SEE SHEET TC-2 FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
7. DEMOLITION ACTIVITIES ARE TO CORRESPOND WITH CONSTRUCTION SEQUENCING.

CONSTRUCTION FENCING NOTES:

1. CONSTRUCTION FENCING SHALL BE INSTALLED FOR PEDESTRIAN SAFETY. ADDITIONAL AREAS MAY REQUIRE PROTECTION AS DETERMINED BY THE ENGINEER. ALL FENCING MUST BE MAINTAINED UNTIL PROJECT COMPLETION.
2. ALL ITEMS OF WORK SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.
3. CONSTRUCTION FENCE SHALL BE PORTABLE FOR THE DURATION OF THE PROJECT. FENCE SHALL BE A MINIMUM 0.148-INCH THICK GALVANIZED-STEEL, CHAIN LINK FENCING. FENCE SHALL BE A MINIMUM 6 FEET HIGH WITH GALVANIZED STEEL PIPE POST, MINIMUM 2-3/8 INCH O.D. LINE POST, WITH 1-5/8 INCH O.D. TOP AND BOTTOM RAILS. GALVANIZED-STEEL BASES SHALL BE PROVIDED FOR POST.
4. PARKING CLOSURE SHALL BE COORDINATED WITH UNIVERSITY PRIOR TO BEING CLOSED.
5. TREE PROTECTION FENCING SHALL BE ORANGE SAFETY FENCE SUPPORTED WITH T-POSTS.

LEGEND

CONSTRUCTION FENCE

TREE PROTECTION
REF. WKG NO. GN-1 FOR ADDITIONAL NOTES

ROAD WORK AHEAD
W20-1
36x36
MOUNTED ON U-SECTION POST
W/ TYPE III BARRICADE (WHERE SHOWN)

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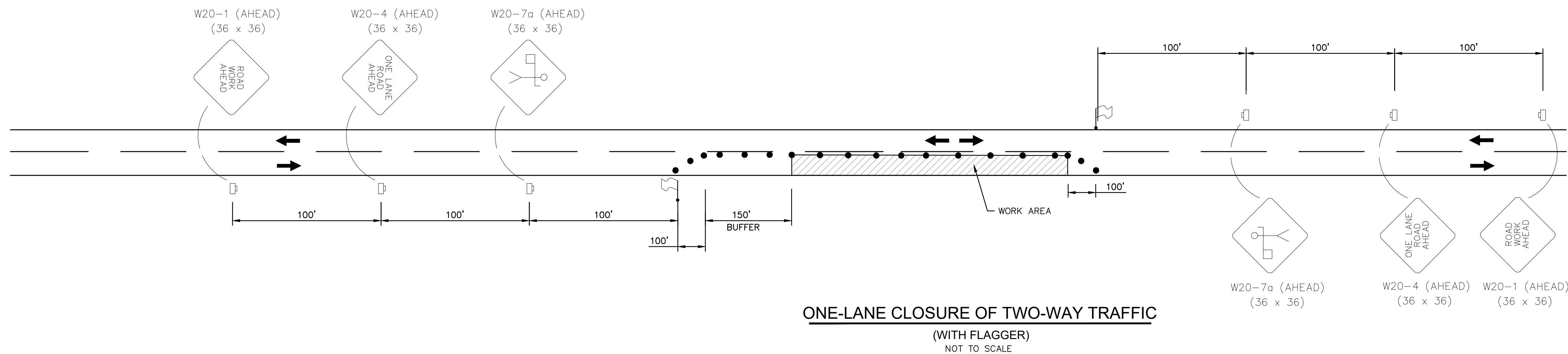
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JAYCEE PARK
FIELD IMPROVEMENTS

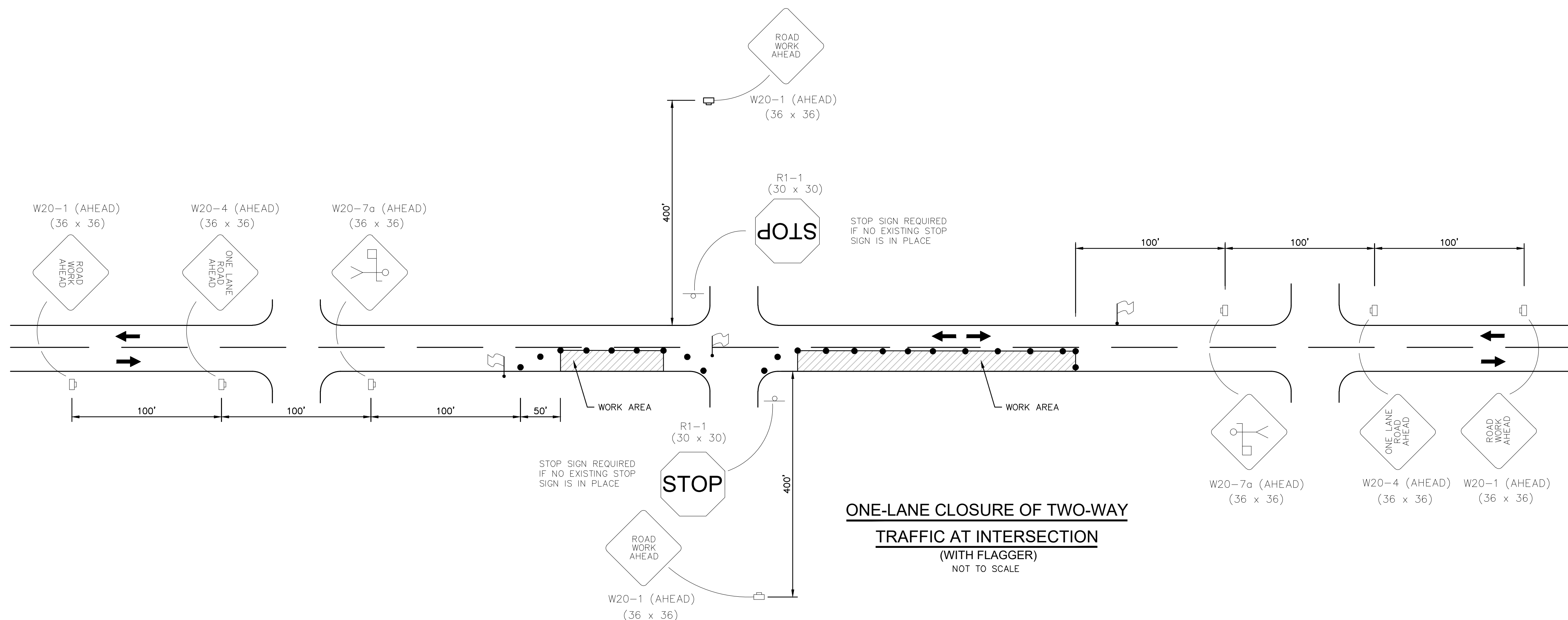
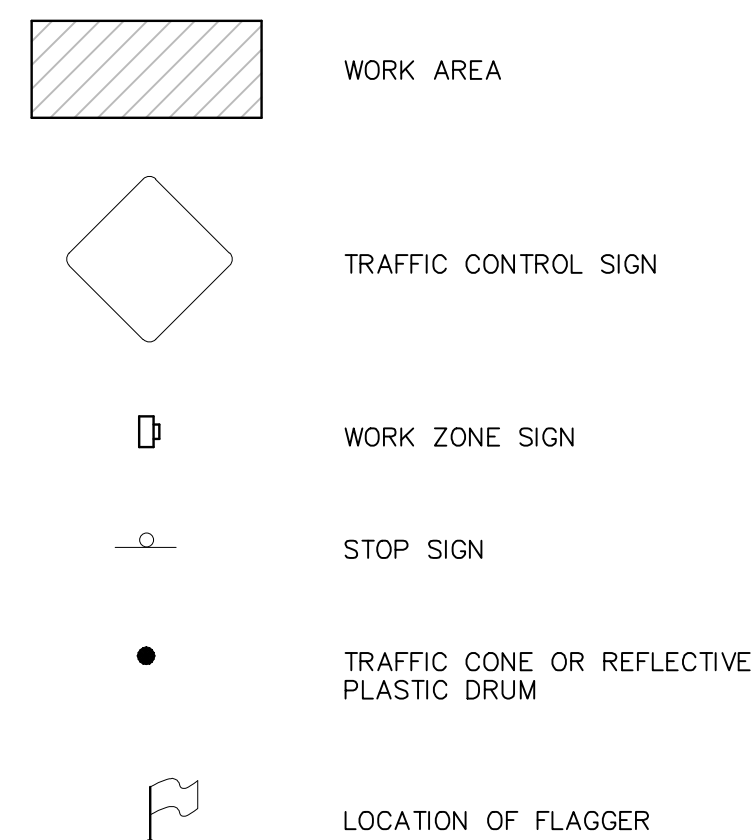
CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

TRAFFIC & PEDESTRIAN CONTROL PLAN	
WORKING NUMBER: TC-1	DRAWING NUMBER: 5



SYMBOLS



GENERAL NOTES:

1. CONTRACTOR SHALL SET UP ALL TRAFFIC CONTROL DEVICES AND SIGNS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORK.
2. WORK OPERATIONS SHALL BE CONFINED TO ONE TRAVEL LANE, LEAVING THE OPPOSING TRAVEL LANE OPEN TO TRAFFIC.
3. ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE ROADWAY.
4. FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
5. THE CONTRACTOR SHALL PROVIDE ACCESS (INGRESS AND EGRESS) TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO NOTIFY BUSINESSES AND HOMEOWNERS 48 HOURS IN ADVANCE OF ACCESS RESTRICTIONS.
6. CHANNELIZING DEVICES SHALL BE A MINIMUM HEIGHT OF 24".
7. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" X 36".
8. SPACING OF CHANNELIZING DEVICES ALONG LANE LINE AND WORK ZONE TO BE EQUAL TO THE POSTED SPEED (M.P.H.) X 1 IN FEET. (EXAMPLE 35 M.P.H. X 1 = 35')
9. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
10. WHEN THE WORK ZONE IS STATIONARY, THE W20-7a SIGN SHOULD BE PLACED 200 FEET IN ADVANCE OF THE FLAGGER AND SHOULD INDICATE 200' AS THE DISTANCE.
11. ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS.
12. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN PAY ITEMS 618 MAINTENANCE OF TRAFFIC
13. DISTANCES BETWEEN SIGNS ARE APPROXIMATE. SIGN SPACING SHOULD BE ADJUSTED FOR CURVES, HILLS, INTERSECTIONS, DRIVEWAYS, ETC., TO IMPROVE VISIBILITY.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THROUGH AND LOCAL TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

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JAYCEE PARK FIELD IMPROVEMENTS

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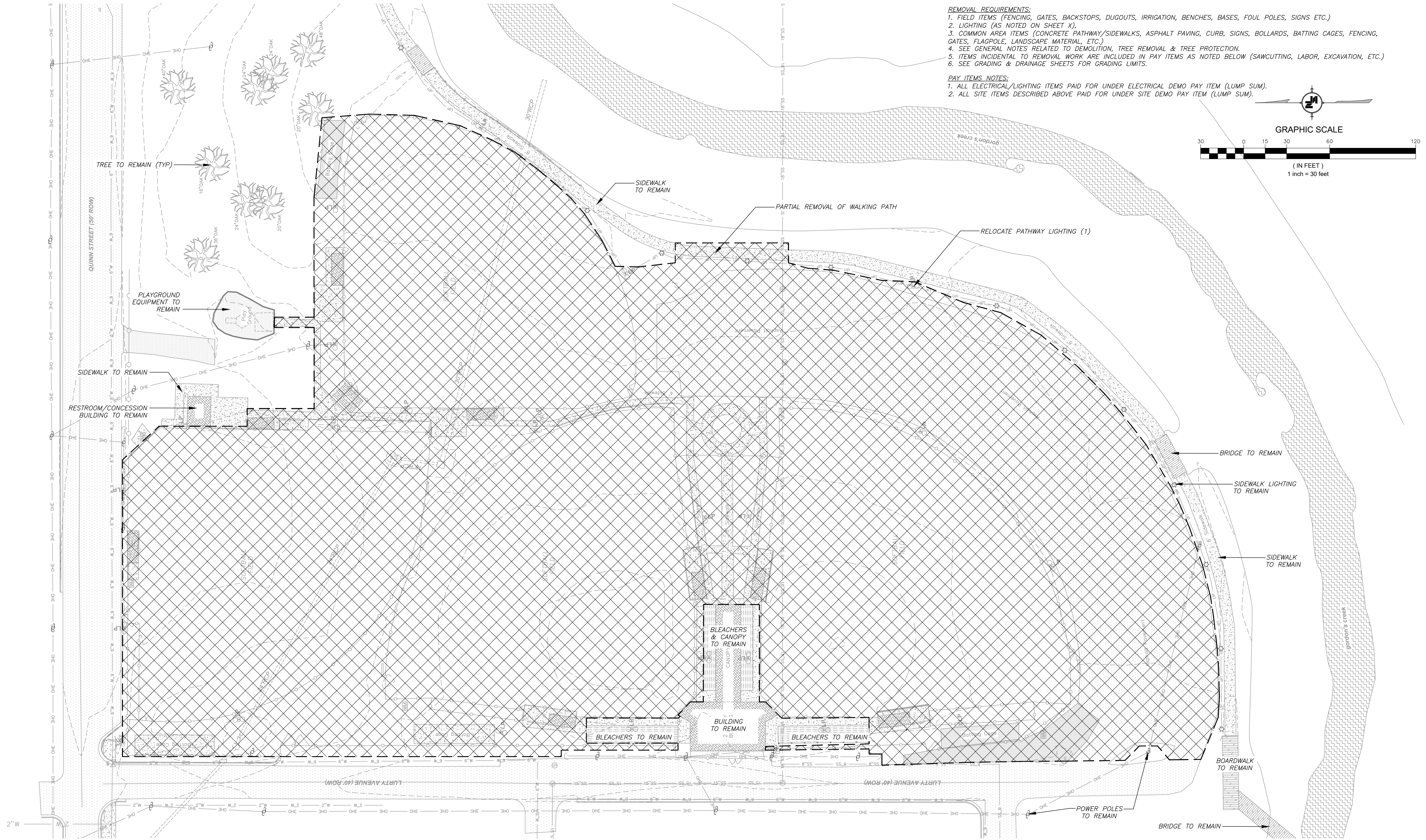
TRAFFIC & PEDESTRIAN CONTROL DETAILS

WORKING NUMBER:

TC-2

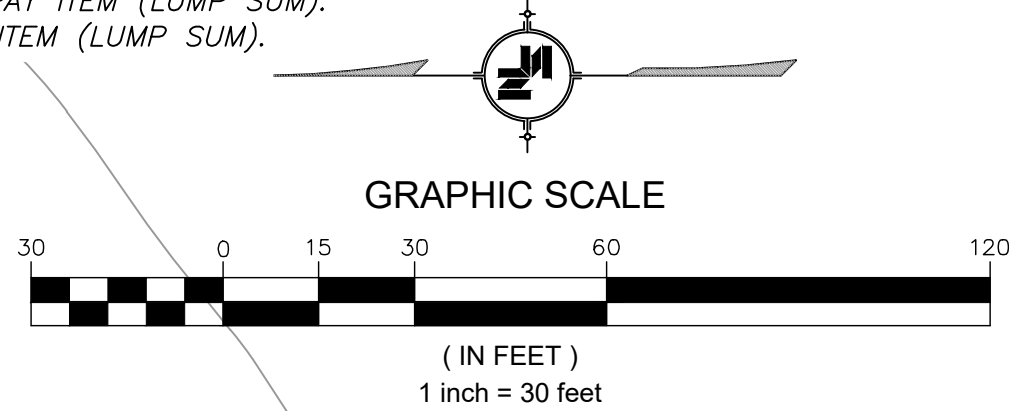
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- REMOVAL REQUIREMENTS:**
1. FIELD ITEMS (FENCING, GATES, BACKSTOPS, DUGOUTS, IRRIGATION, BENCHES, BASES, FOUL POLES, SIGNS ETC.)
 2. LIGHTING (AS NOTED ON SHEET X)
 3. COMMON AREA ITEMS (CONCRETE PATHWAY/SIDEWALKS, ASPHALT PAVING, CURB, SIGNS, BOLLARDS, BATTING CAGES, FENCING, GATES, FLAGPOLE, LANDSCAPE MATERIAL, ETC.)
 4. SEE GENERAL NOTES RELATED TO DEMOLITION, TREE REMOVAL & TREE PROTECTION.
 5. ITEMS INCIDENTAL TO REMOVAL WORK ARE INCLUDED IN PAY ITEMS AS NOTED BELOW (SAWCUTTING, LABOR, EXCAVATION, ETC.)
 6. SEE GRADING & DRAINAGE SHEETS FOR GRADING LIMITS.

- PAY ITEMS NOTES:**
1. ALL ELECTRICAL/LIGHTING ITEMS PAID FOR UNDER ELECTRICAL DEMO PAY ITEM (LUMP SUM).
 2. ALL SITE ITEMS DESCRIBED ABOVE PAID FOR UNDER SITE DEMO PAY ITEM (LUMP SUM).



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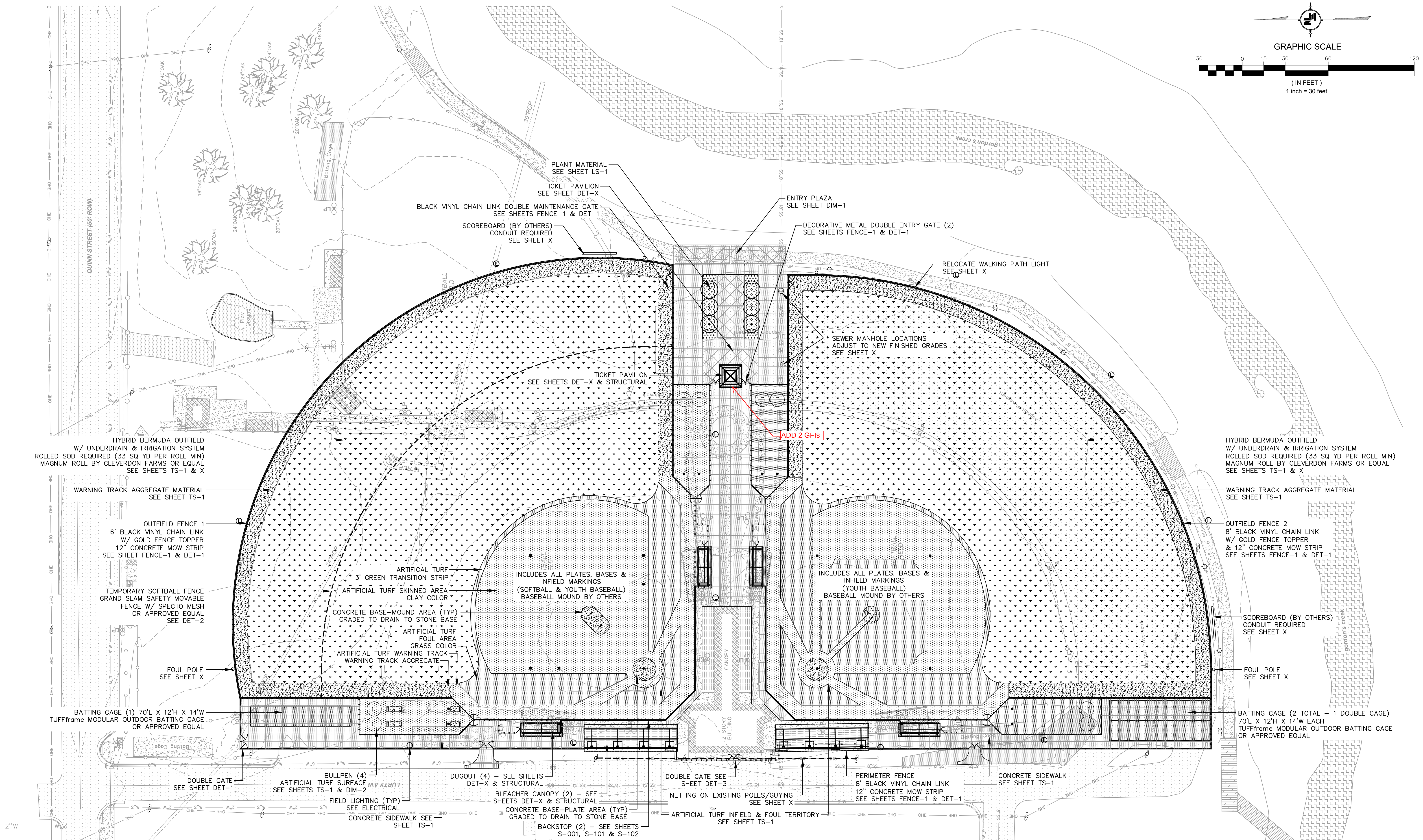
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JAYCEE PARK
FIELD IMPROVEMENTS

CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY



DEMOLITION PLAN	
WORKING NUMBER: DEMO-1	DRAWING NUMBER: 7



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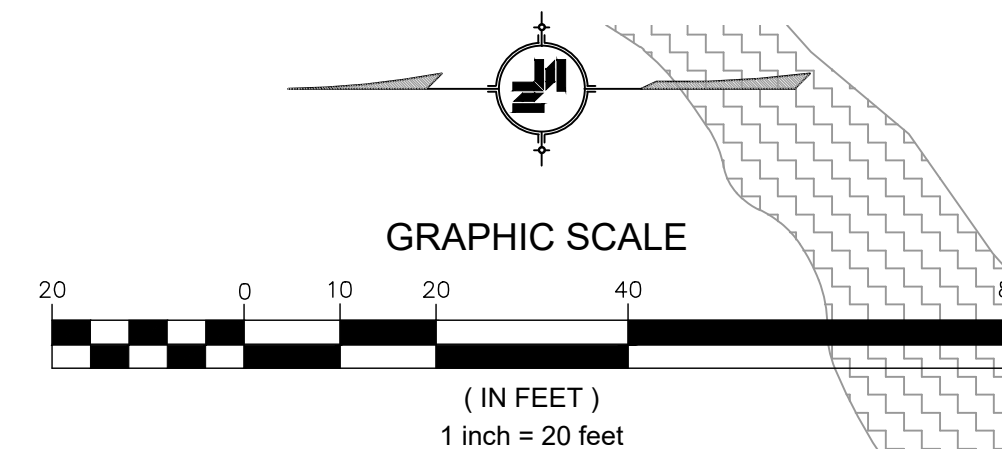
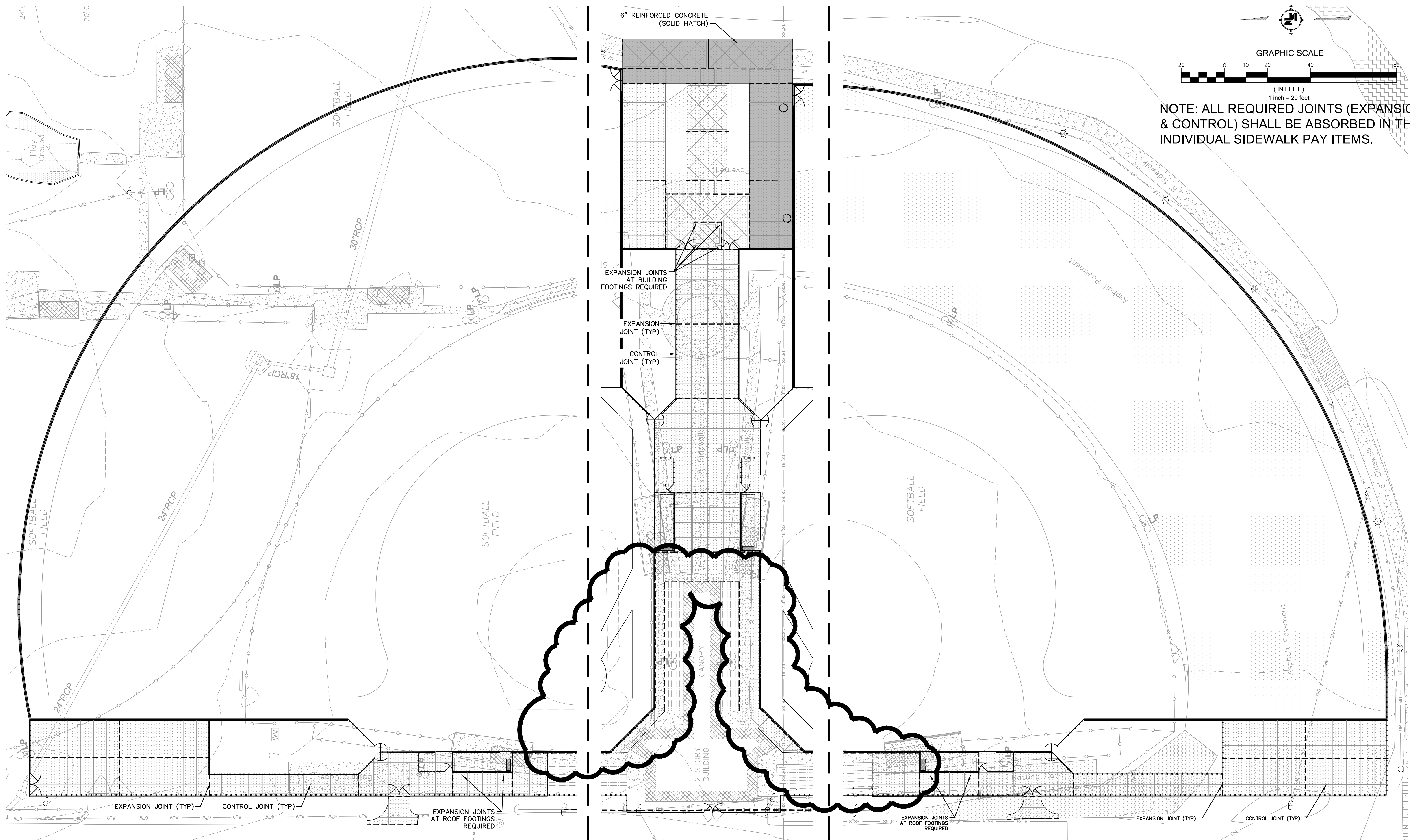
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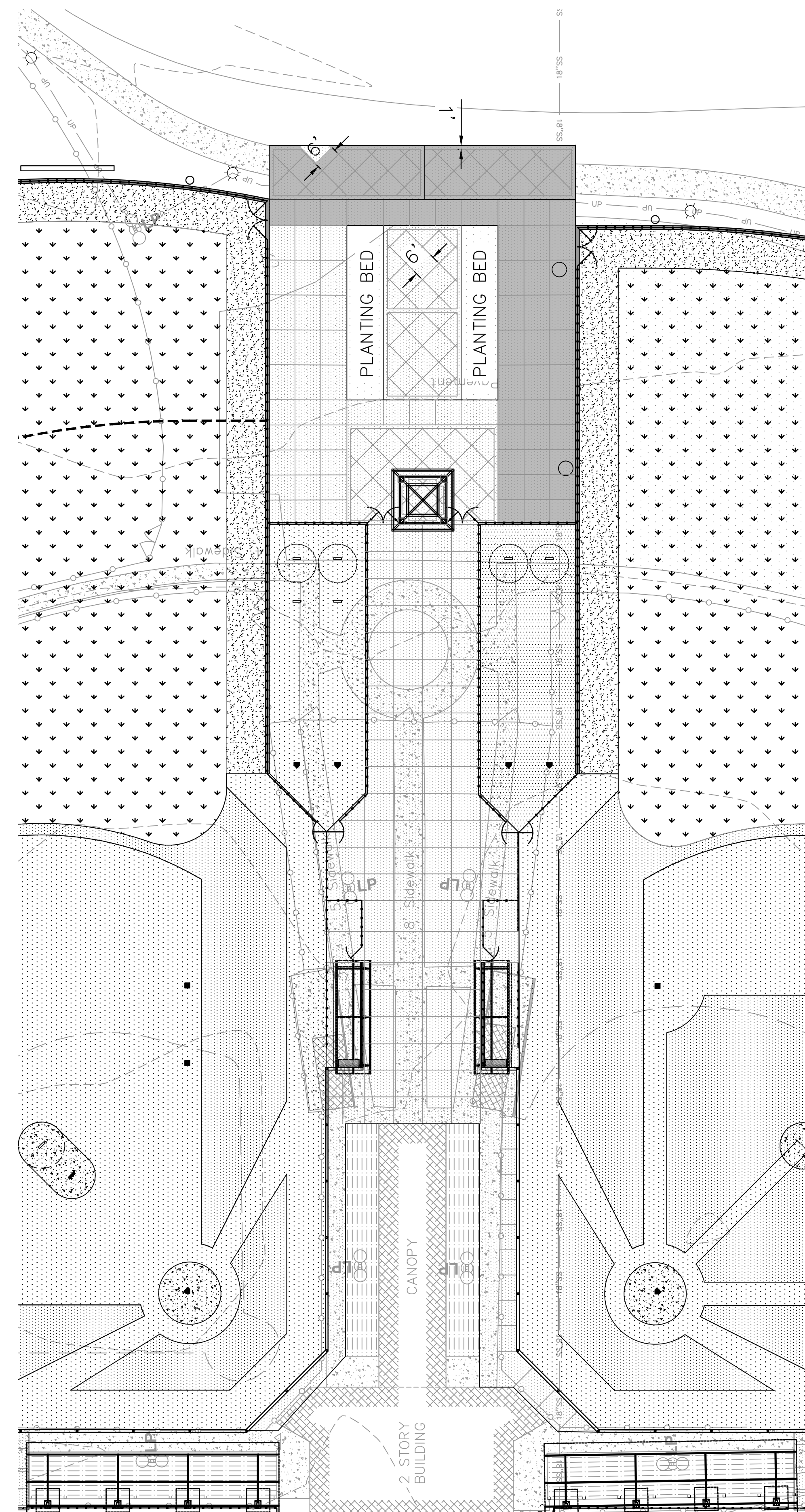
OVERALL SITE PLAN

WORKING NUMBER:	DRAWING NUMBER:
PLN-1	8



NOTE: ALL REQUIRED JOINTS (EXPANSION & CONTROL) SHALL BE ABSORBED IN THE INDIVIDUAL SIDEWALK PAY ITEMS.

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JAYCEE PARK FIELD IMPROVEMENTS CITY OF HATTIESBURG HATTIESBURG, MISSISSIPPI FORREST COUNTY NEEL-SCHAFER <i>Solutions you can build upon</i>					
PAVING PLAN				WORKING NUMBER:	DRAWING NUMBER:
PAVE-1					9



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				FILENAME: 17080_MASTER.dwg	
				SCALE: 1" = 20'	
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				DSGN: RPB	DATE: 5/2022
				DRWN: RPB	DATE: 5/2022
				CHKD: GPC	DATE: 6/2022
				QA/QC: MWE	DATE: 6/2022

JAYCEE PARK FIELD IMPROVEMENTS

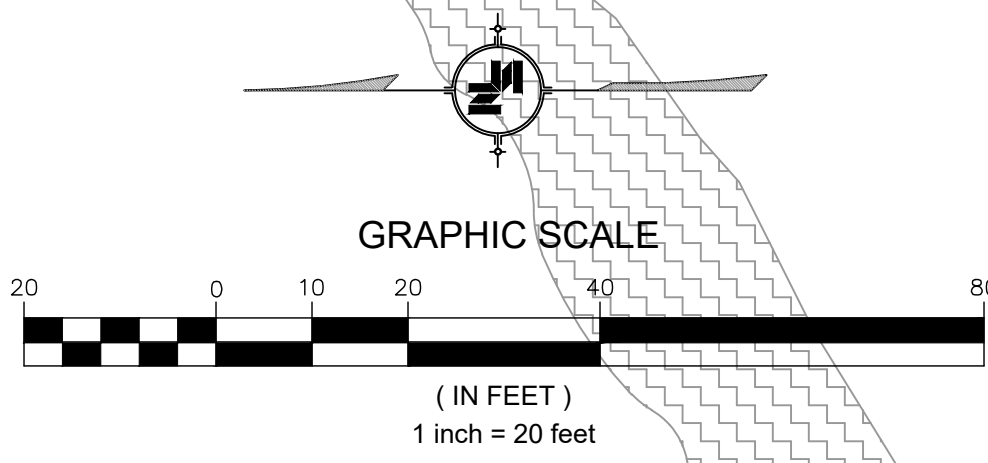
CITY OF HATTIESBUG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY



DIMENSION PLAN NORTH FIELD & ENTRY PLAZA

WORKING NUMBER:
DIM-1

DRAWING NUMBER:
10



NOT TO SCALE



BULLPEN TURF COLOR
NORTH FIELD - CLAY
SOUTH FIELD - GRASS

REVISIONS				DRAWING INFORMATION	
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CITY OF HATTIESBUG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY



WORKING NUMBER:
DIM-2

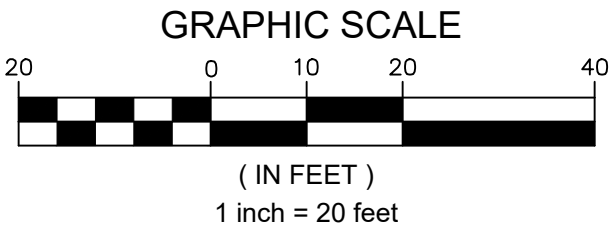
DRAWING NUMBER:
11

- NOTE:
1. PROPOSED DRAINAGE SYSTEM AND EXISTING DRAINAGE SYSTEM AND UTILITIES NOT SHOWN FOR CLARITY.
 2. CONTRACTOR TO VERIFY EXISTING GRADES WITH THE ENGINEER.
 3. CONTRACTOR SHALL PROOF ROLL THE SUB-GRADE WITH THE ENGINEER AND GEOTECHNICAL ENGINEER PRESENT.

LURTY AVENUE (40' ROW)

gordon's creek

EXISTING GRADE
164.92
165.38
FINISH GRADE



NOTICE TO DRAWING HOLDER

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JAYCEE PARK
FIELD IMPROVEMENTS

CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY



GRADING PLAN
NORTH FIELD

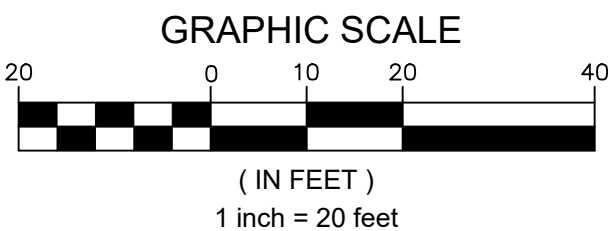
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- NOTE:
- 1. PROPOSED DRAINAGE SYSTEM AND EXISTING DRAINAGE SYSTEM AND UTILITIES NOT SHOWN FOR CLARITY.
 - 2. CONTRACTOR TO VERIFY EXISTING GRADES WITH THE ENGINEER.
 - 3. CONTRACTOR SHALL PROOF ROLL THE SUB-GRADE WITH THE ENGINEER AND GEOTECHNICAL ENGINEER PRESENT.

LURTY AVENUE (40' ROW)

Gordon's Creek

EXISTING GRADE
164.92
165.38
FINISH GRADE



NOTICE TO DRAWING HOLDER
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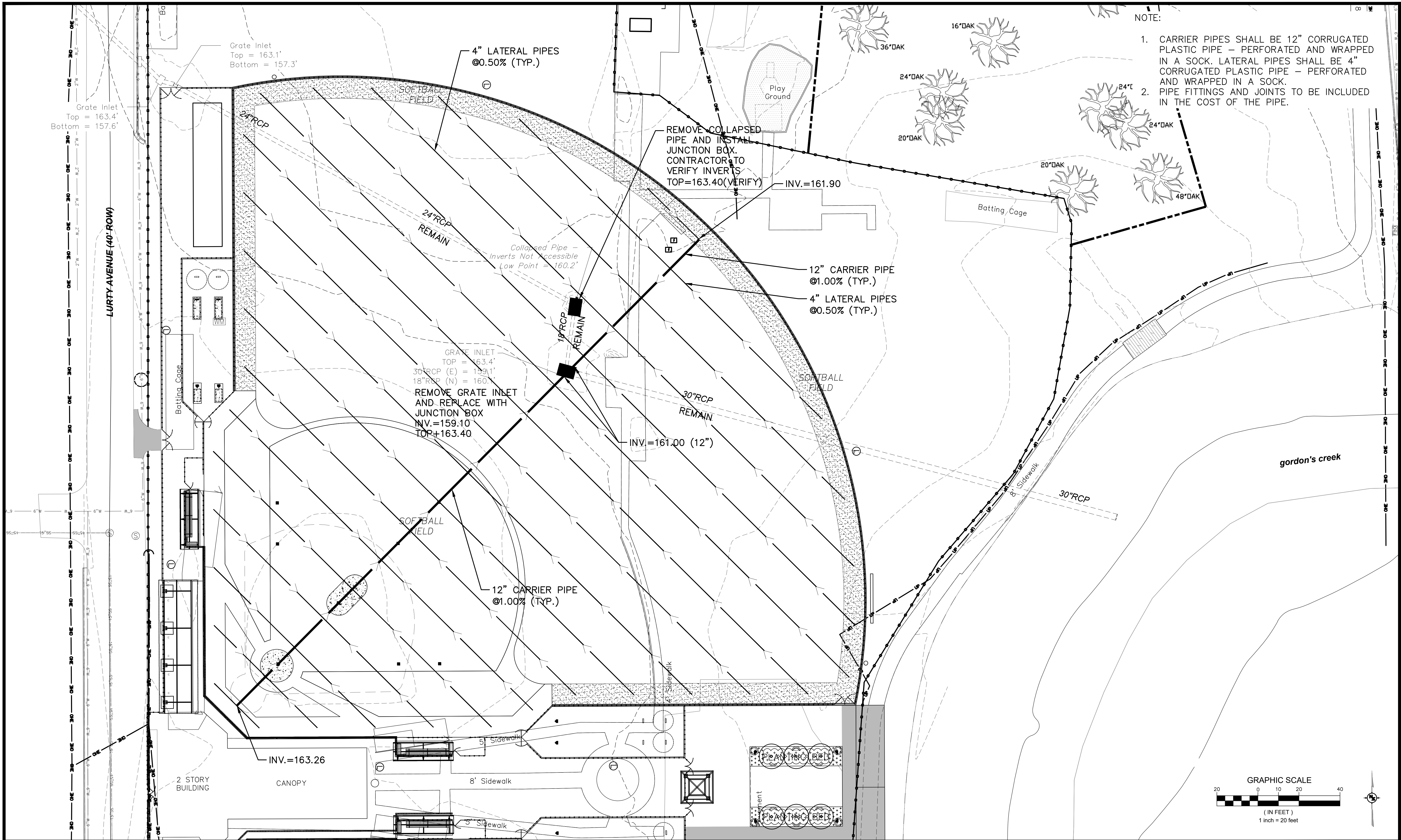
JAYCEE PARK
FIELD IMPROVEMENTS

CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY



GRADING PLAN
SOUTH FIELD

WORKING NUMBER: WKG-2	DRAWING NUMBER: 13
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NOTICE TO DRAWING HOLDER
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JAYCEE PARK
FIELD IMPROVEMENTS

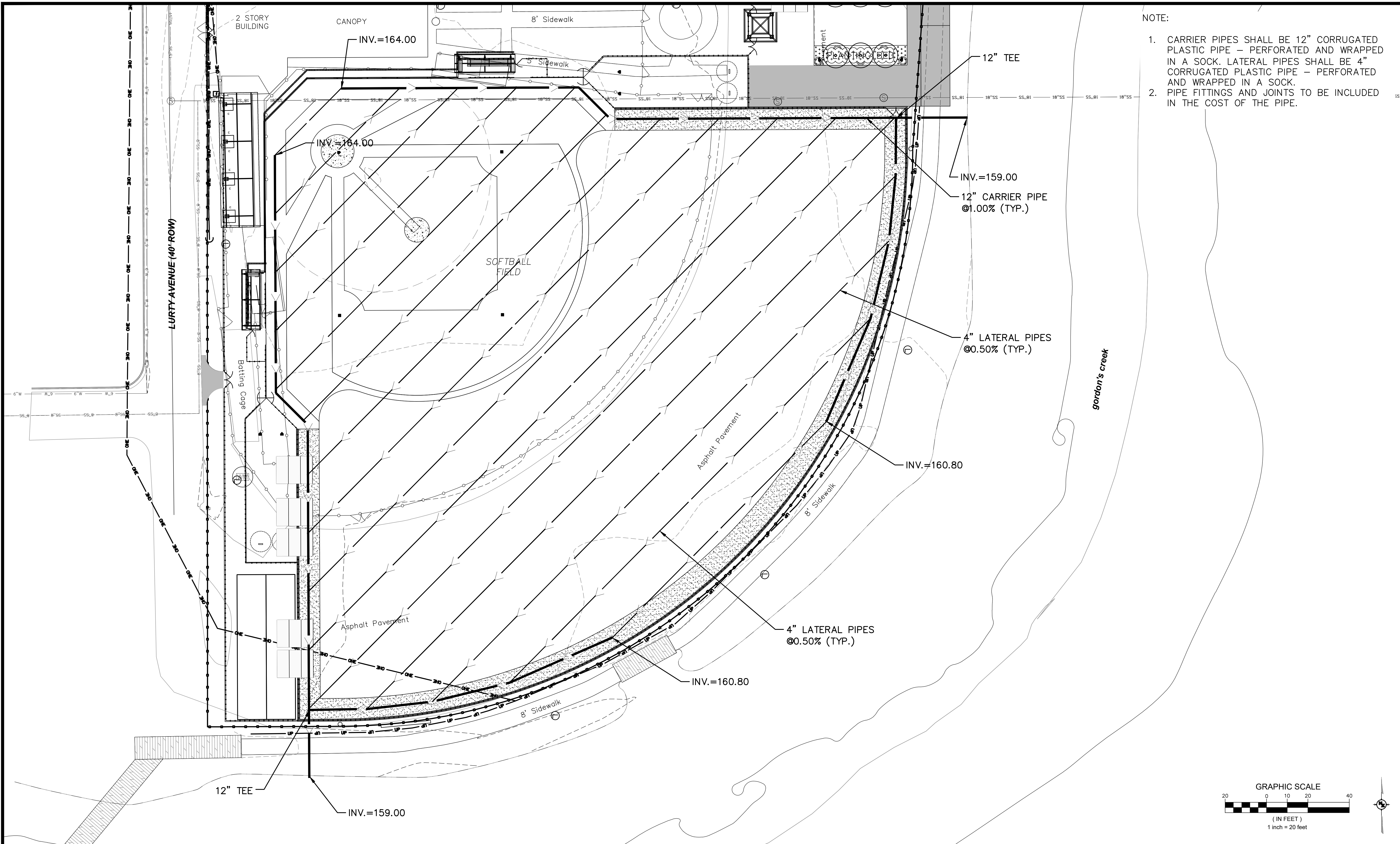
CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY



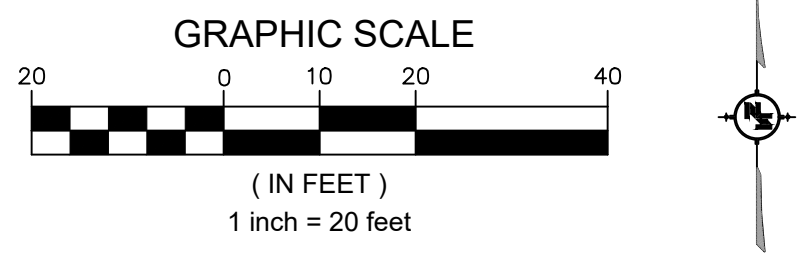
DRAINAGE LAYOUT
NORTH FIELD

WORKING NUMBER:
WKG-3

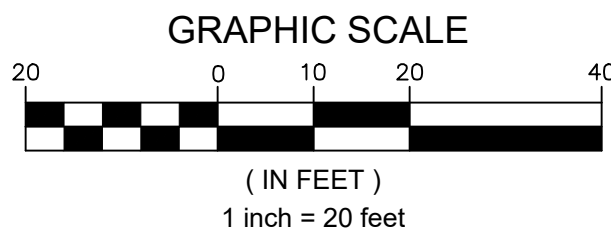
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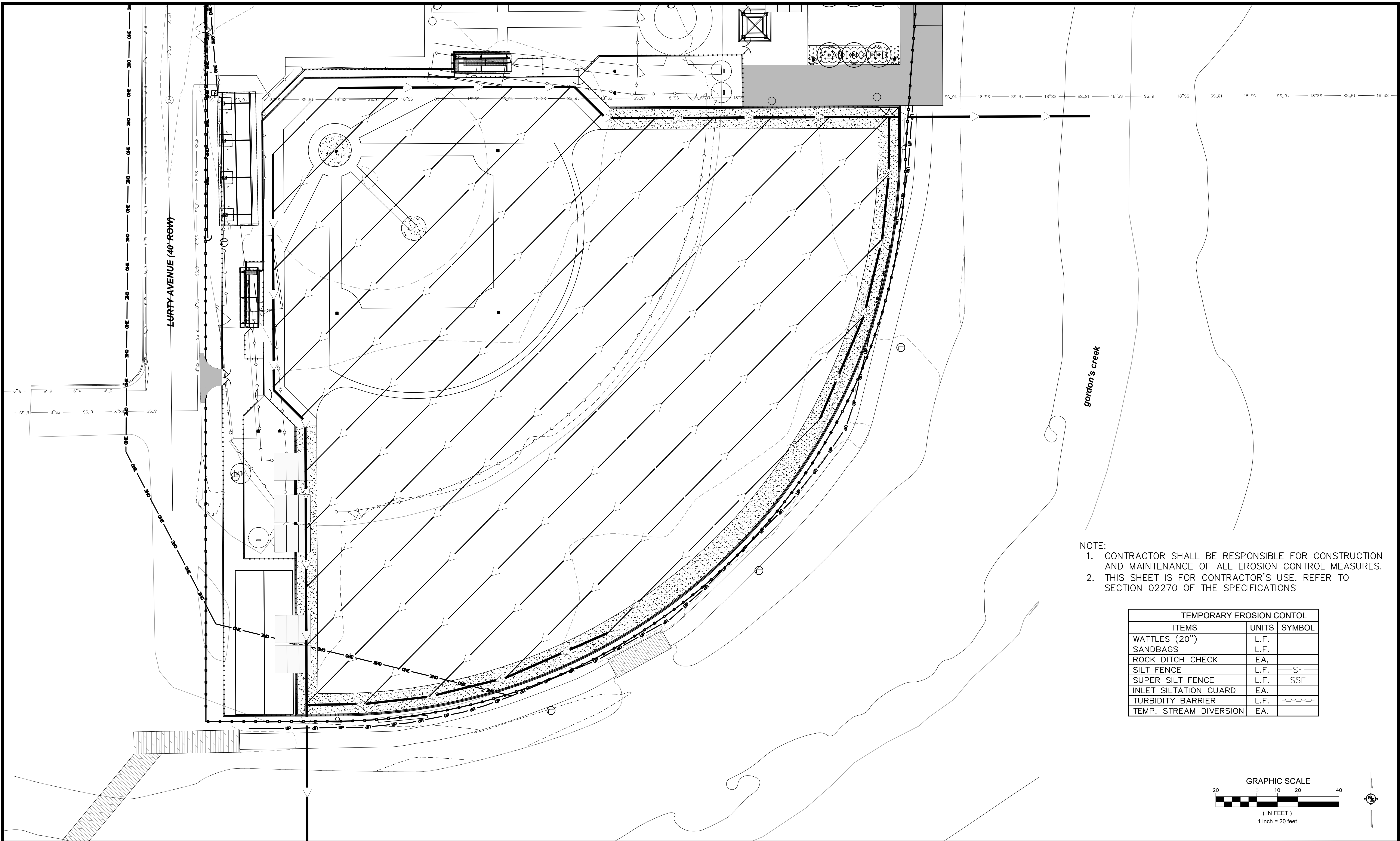
- NOTE:
1. CARRIER PIPES SHALL BE 12" CORRUGATED PLASTIC PIPE – PERFORATED AND WRAPPED IN A SOCK. LATERAL PIPES SHALL BE 4" CORRUGATED PLASTIC PIPE – PERFORATED AND WRAPPED IN A SOCK.
 2. PIPE FITTINGS AND JOINTS TO BE INCLUDED IN THE COST OF THE PIPE.



NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION		JAYCEE PARK FIELD IMPROVEMENTS CITY OF HATTIESBURG HATTIESBURG, MISSISSIPPI FORREST COUNTY		DRAINAGE LAYOUT SOUTH FIELD	
	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: NS.17080.000				
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					CHKD: GPC	DATE: 6/2022			
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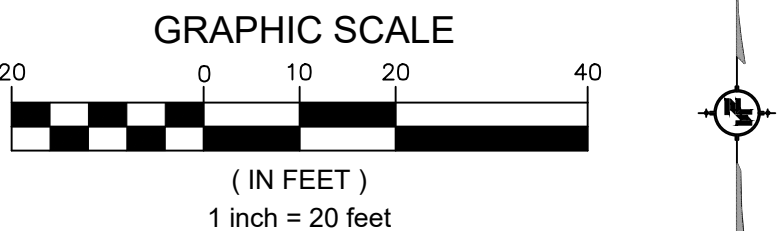


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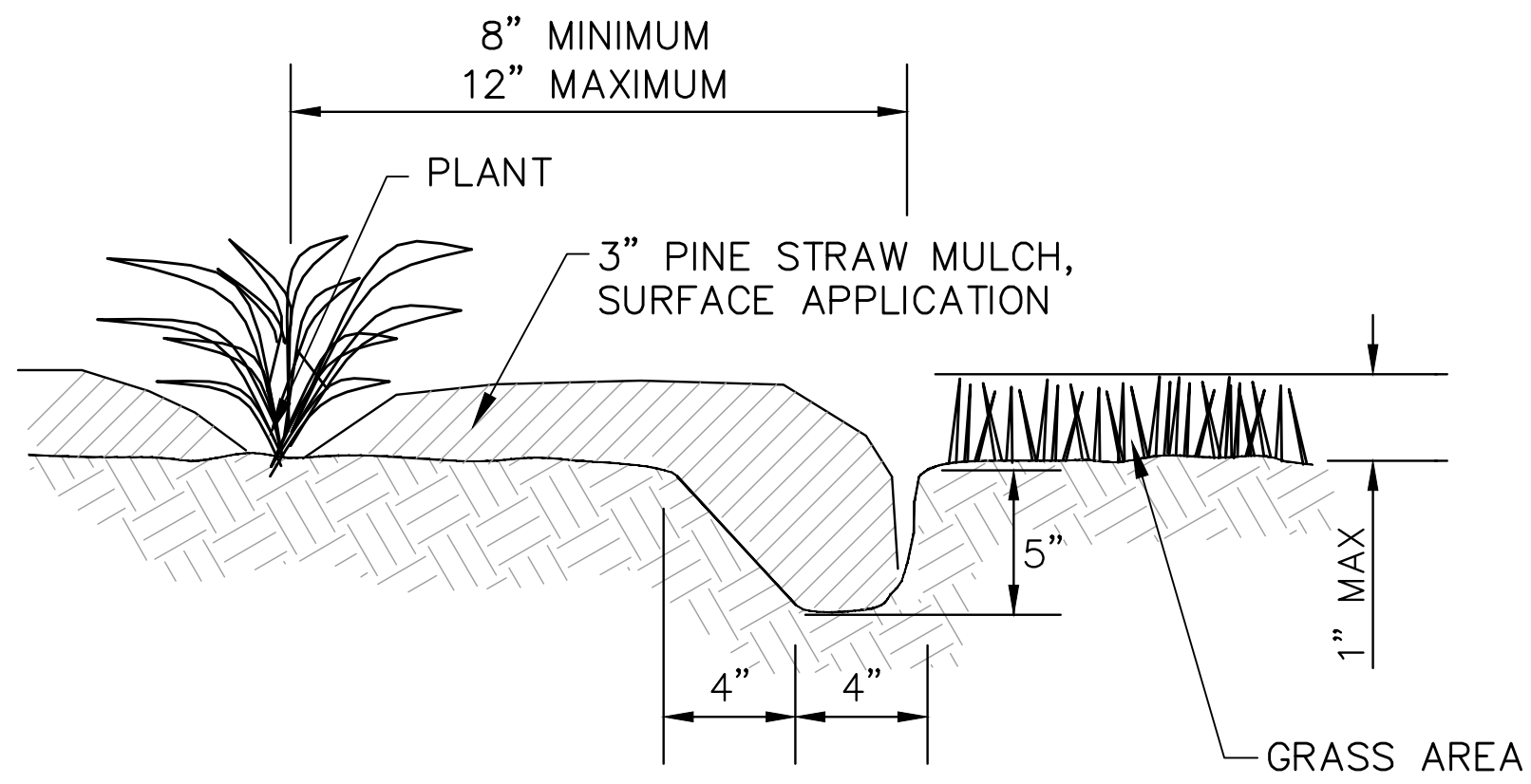
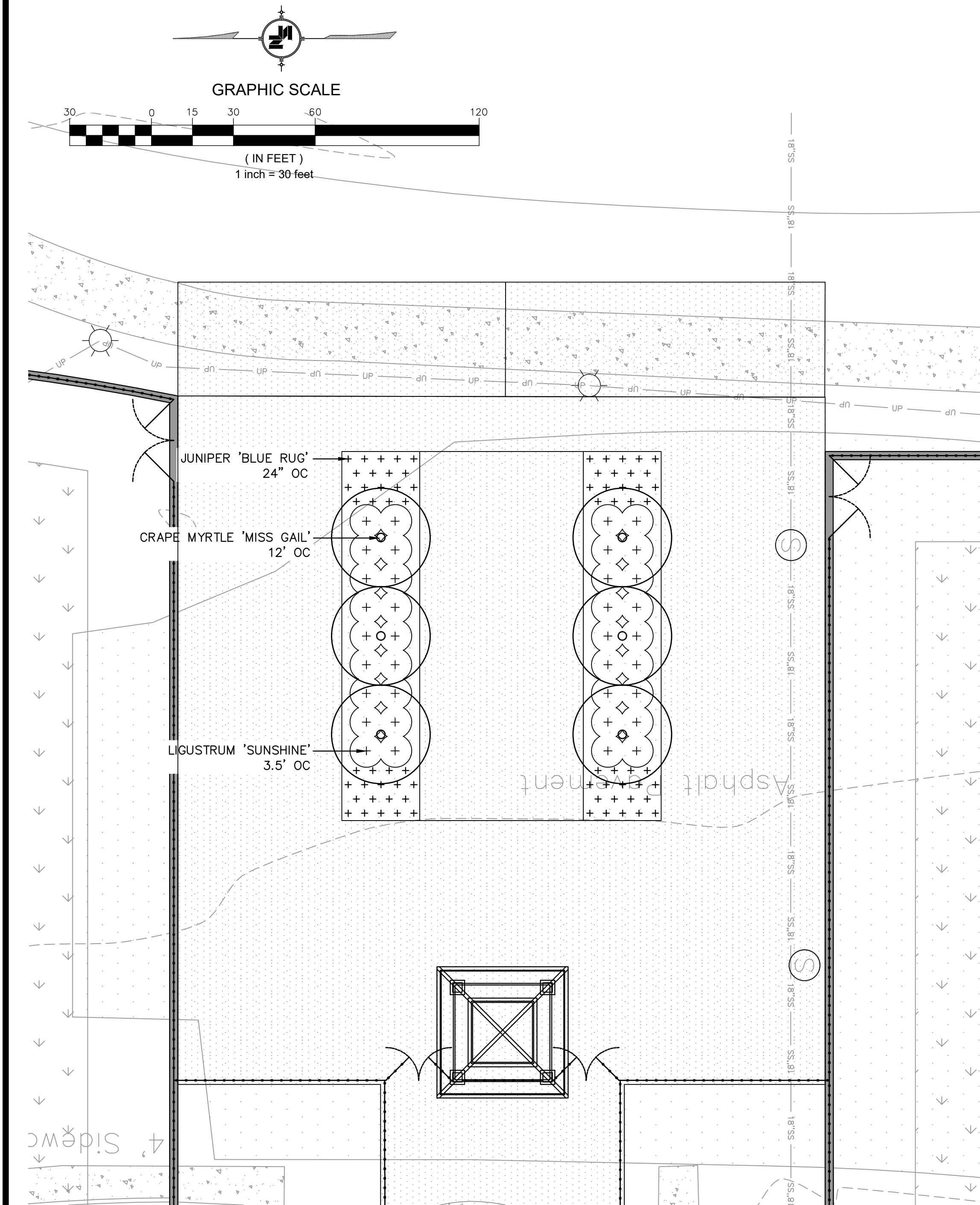


- NOTE:
1. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES.
 2. THIS SHEET IS FOR CONTRACTOR'S USE. REFER TO SECTION 02270 OF THE SPECIFICATIONS

TEMPORARY EROSION CONTROL		
ITEMS	UNITS	SYMBOL
WATTLES (20")	L.F.	
SANDBAGS	L.F.	
ROCK DITCH CHECK	EA.	
SILT FENCE	L.F.	
SUPER SILT FENCE	L.F.	
INLET SILTATION GUARD	EA.	
TURBIDITY BARRIER	L.F.	
TEMP. STREAM DIVERSION	EA.	

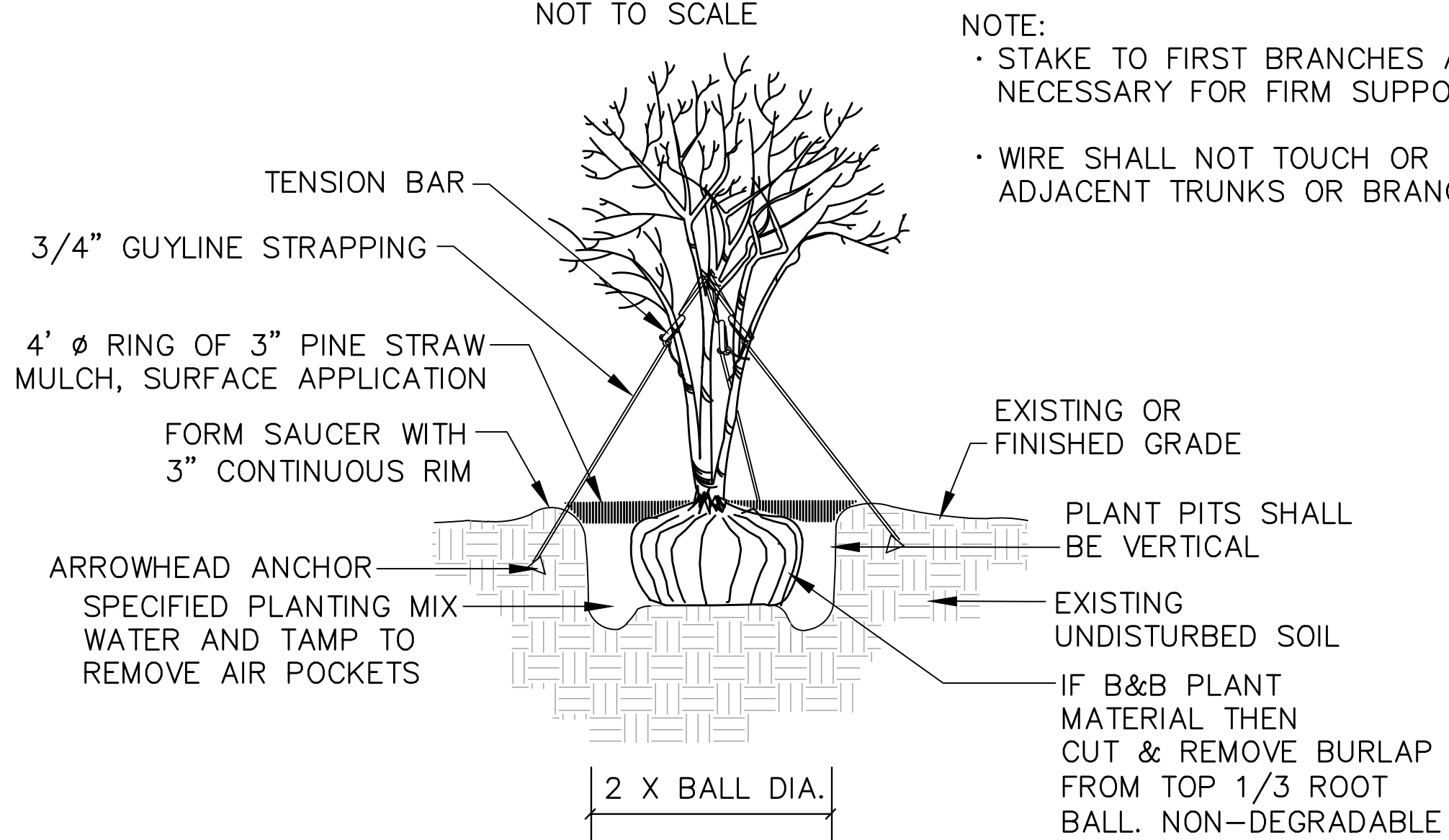


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									WORKING NUMBER: WKG-6	DRAWING NUMBER: 17



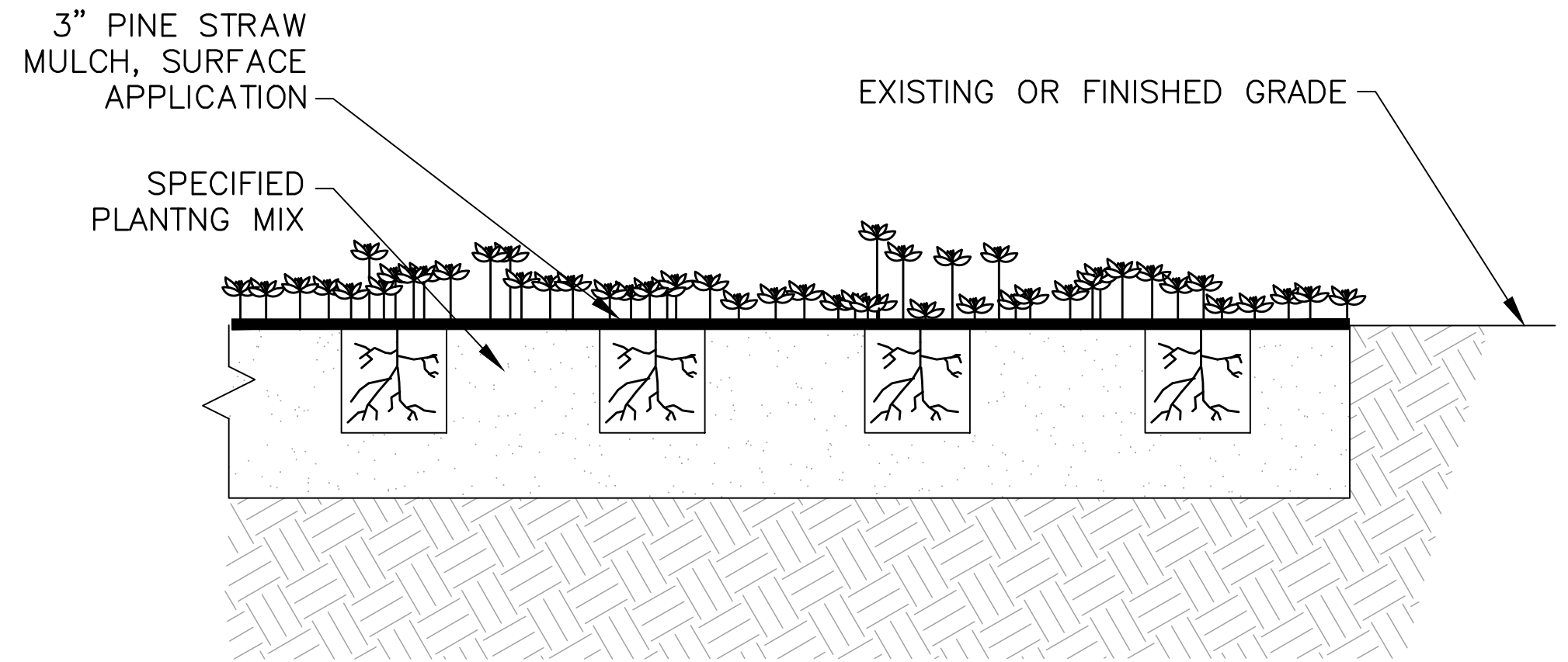
BED EDGING DETAIL

NOT TO SCALE



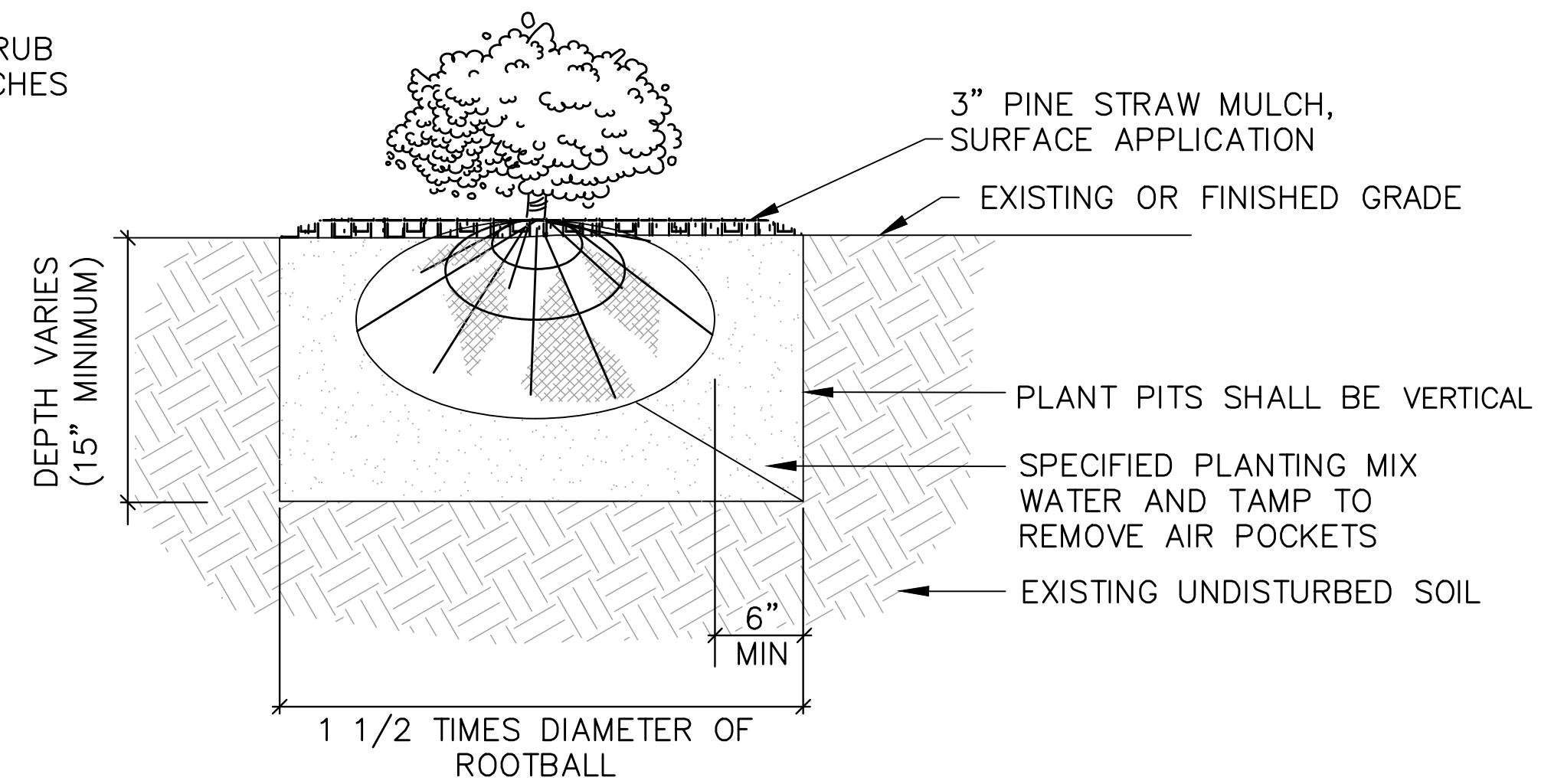
TYPICAL MULTI-TRUNK TREE PLANTING DETAIL

NOT TO SCALE



TYPICAL GROUNDCOVER PLANTING DETAIL

NOT TO SCALE



TYPICAL SHRUB PLANTING DETAIL

NOT TO SCALE

LANDSCAPE QUANTITIES & SCHEDULE – BASE BID							
LANDSCAPE ITEMS	QTY	SIZE/UNIT	SEASONAL APPLICATIONS–DATES & RATES				REQUIREMENTS
			SPRING & SUMMER		FALL & WINTER		
			RATES	DATES	RATES	DATES	
SOIL TEST	1						REQUIRED TO BE SUBMITTED IN ADVANCE OF ALL LANDSCAPE CONSTRUCTION ITEMS; COST ABSORBED IN BED PREP PAY ITEM
TOPSOIL FOR PLANT HOLES, CONTRACTOR FURNISHED	130	CU. YD.	PER CU. YD.	NOT APPLICABLE	PER CU. YD.	NOT APPLICABLE	24" DEPTH REQUIRED
TREE PLANTING, CRAPE MYRTLE 'MISS GAIL'	6	30 GALLON	EACH	BY REQUEST ONLY	EACH	OCTOBER 1 – APRIL 30	FULL & HEALTHY PLANT, WELL BRANCHED, MULTI-TRUNK TREE FORM, 9' H X 4' S
SHRUB PLANTING, LIGUSTRUM 'SUNSHINE'	36	3 GALLON	EACH	BY REQUEST ONLY	EACH	OCTOBER 1 – APRIL 30	FULL & HEALTHY PLANT
GROUNDCOVER PLANTING, JUNIPER 'BLUE RUG'	72	1 GALLON	EACH	BY REQUEST ONLY	EACH	OCTOBER 1 – APRIL 30	FULL & HEALTHY PLANT
BED PREPARATION	1760	SQ. FT.	PER SQ. FT.	NOT APPLICABLE	PER SQ. FT.	NOT APPLICABLE	APPLIED TO AREAS SHOWN IN PLANS TO RECEIVE SHRUB, GROUNDCOVER AND TREE PLANTING; REMOVE EXISTING GRASS AND POOR MATERIAL; ADD TREE BARK MULCH TYPE 3 AND ROTO-TILL INTO EXISTING SOIL TO A MINIMUM DEPTH OF 6"
PINE STRAW MULCH, BALE	36	BALE	PER BALE	NOT APPLICABLE	PER BALE	NOT APPLICABLE	1 BALE PER 50 SF OF BED AREA; COST ABSORBED IN BED PREP PAY ITEM
TREE BARK MULCH, TYPE III	11	CU. YD.	PER CU.YD.	NOT APPLICABLE	PER CU.YD.	NOT APPLICABLE	2" DEPTH PLACED AND ROTO-TILLED INTO SIGN & NORTH BED PREP AREAS; COST ABSORBED IN BED PREP PAY ITEM
FERTILIZER FOR WOODY PLANT MATERIAL, TABLET, 21 GRAM	174	EACH	PER EACH	NOT APPLICABLE	PER EACH	NOT APPLICABLE	5 PER 30 GALLON (30); 2 PER 3 GALLON (72); 1 PER 1 GALLON (72)

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**JAYCEE PARK
FIELD IMPROVEMENTS**

CITY OF HATTIESBUG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY

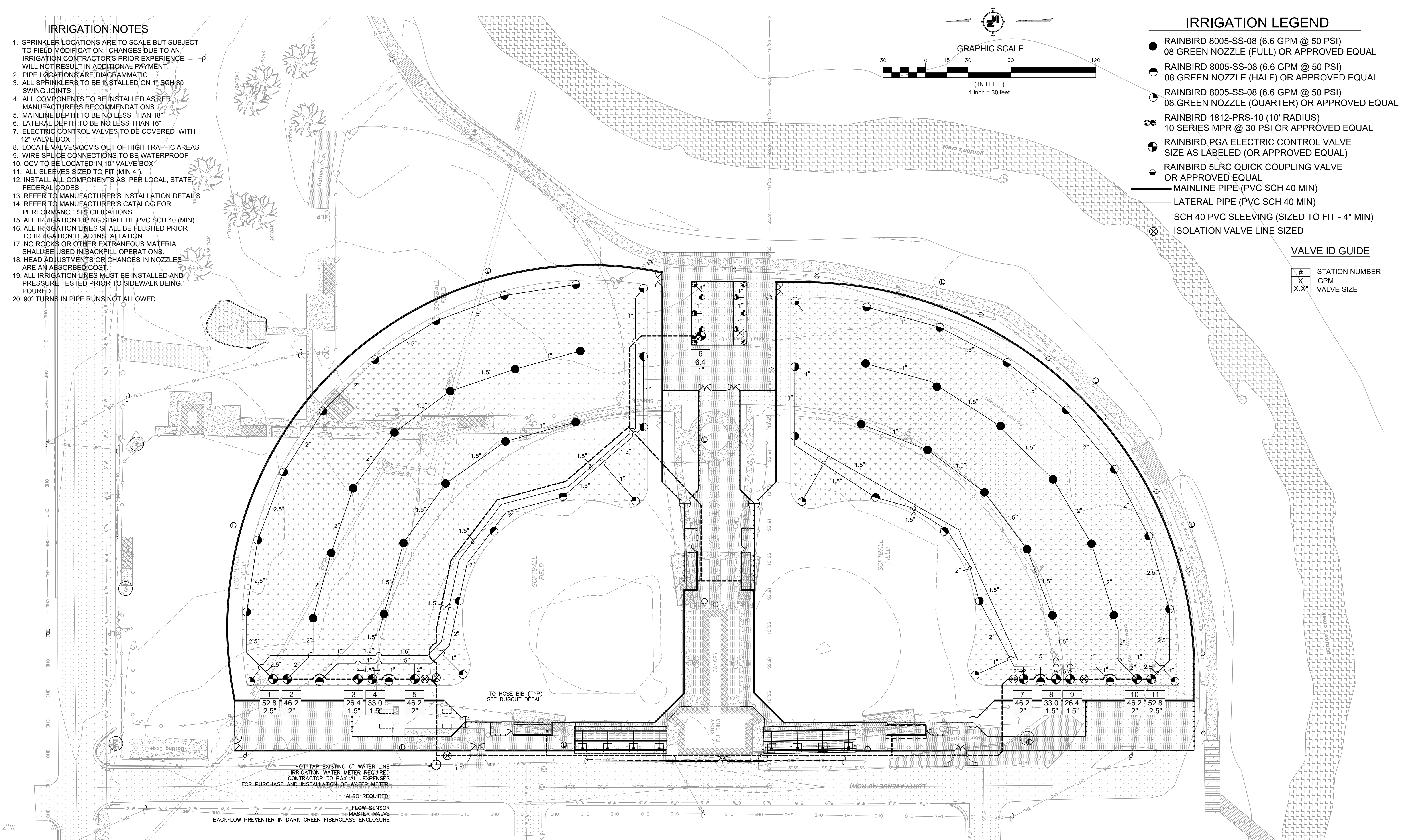


**PLANTING PLAN,
DETAILS & QUANTITIES**

WORKING NUMBER:
LS-1

DRAWING NUMBER:
18

1. SPRINKLER LOCATIONS ARE TO SCALE BUT SUBJECT TO FIELD MODIFICATION. CHANGES DUE TO AN IRRIGATION CONTRACTOR'S PRIOR EXPERIENCE WILL NOT RESULT IN ADDITIONAL PAYMENT.
2. PIPE LOCATIONS ARE DIAGRAMMATIC
3. ALL SPRINKLERS TO BE INSTALLED ON 1" SCH 80 SWING JOINTS
4. ALL COMPONENTS TO BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS
5. MAINLINE DEPTH TO BE NO LESS THAN 18"
6. LATERAL DEPTH TO BE NO LESSER THAN 16"
7. ELECTRIC CONTROL VALVES TO BE COVERED WITH 12" VALVE BOX
8. LOCATE VALVES/QCV'S OUT OF HIGH TRAFFIC AREAS
9. WIRE SPIKE CONNECTIONS TO BE WATERPROOF
10. QCV TO BE LOCATED IN 10" VALVE BOX
11. ALL SLEEVES SIZED TO FIT (MIN 4")
12. INSTALL ALL COMPONENTS AS PER LOCAL STATE FEDERAL CODES
13. REFER TO MANUFACTURER'S INSTALLATION DETAILS
14. REFER TO MANUFACTURER'S CATALOG FOR PERFORMANCE SPECIFICATIONS
15. ALL IRRIGATION PIPING SHALL BE PVC SCH 40 (MIN)
16. ALL IRRIGATION LINES SHALL BE FLUSHED PRIOR TO IRRIGATION HEAD INSTALLATION.
17. NO ROCKS OR OTHER EXTRANEOUS MATERIAL SHALL BE USED IN BACKFILL OPERATIONS.
18. HEAD ADJUSTMENTS OR CHANGES IN NOZZLES ARE AN ABSORBER COST.
19. ALL IRRIGATION LINES MUST BE INSTALLED AND PRESSURE TESTED PRIOR TO SIDEWALK BEING POURED.
20. 90° TURNS IN PIPE RUNS NOT ALLOWED.



- RAINBIRD 8005-SS-08 (6.6 GPM @ 50 PSI)
08 GREEN NOZZLE (FULL) OR APPROVED EQUAL
- RAINBIRD 8005-SS-08 (6.6 GPM @ 50 PSI)
08 GREEN NOZZLE (HALF) OR APPROVED EQUAL
- RAINBIRD 8005-SS-08 (6.6 GPM @ 50 PSI)
08 GREEN NOZZLE (QUARTER) OR APPROVED EQUAL
- RAINBIRD 1812-PRS-10 (10' RADIUS)
10 SERIES MPR @ 30 PSI OR APPROVED EQUAL
- RAINBIRD PGA ELECTRIC CONTROL VALVE
SIZE AS LABELED (OR APPROVED EQUAL)
- RAINBIRD 5LRC QUICK COUPLING VALVE
OR APPROVED EQUAL
- MAINLINE PIPE (PVC SCH 40 MIN)
- LATERAL PIPE (PVC SCH 40 MIN)
- SCH 40 PVC SLEEVING (SIZED TO FIT - 4" MIN)
- ⊗ ISOLATION VALVE LINE SIZED

#	STATION NUMBER
X	GPM
X.X"	VALVE SIZE

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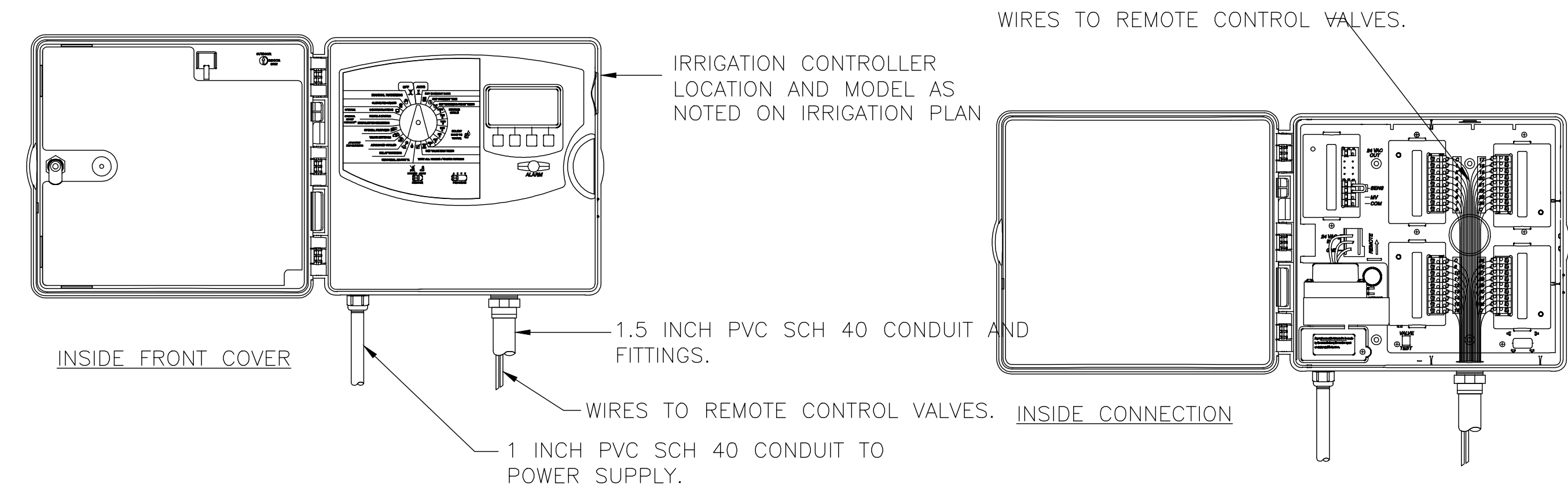
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CITY OF HATTIESBUG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY



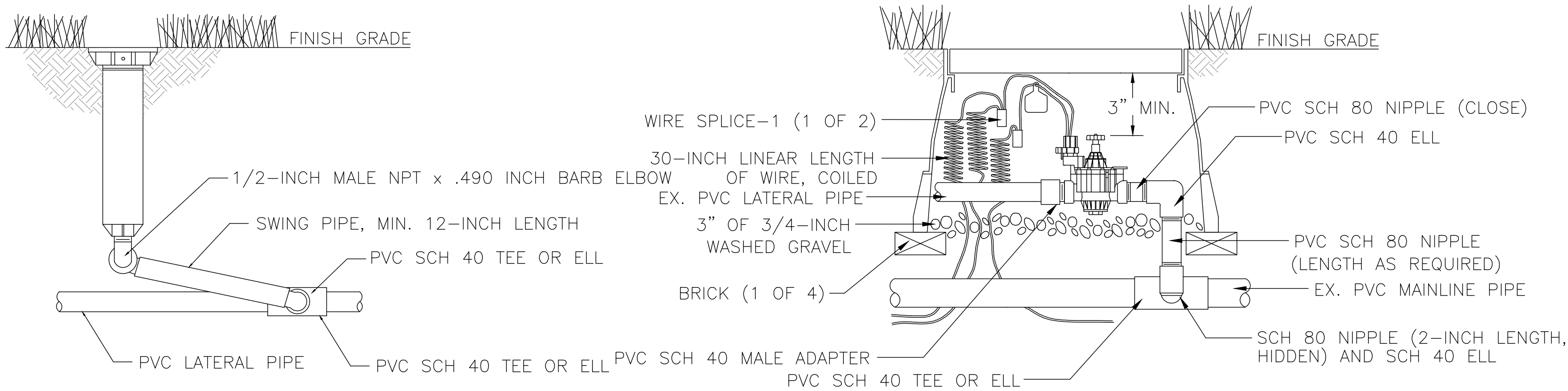
WORKING NUMBER:
IRR-1

DRAWING NUMBER:
19



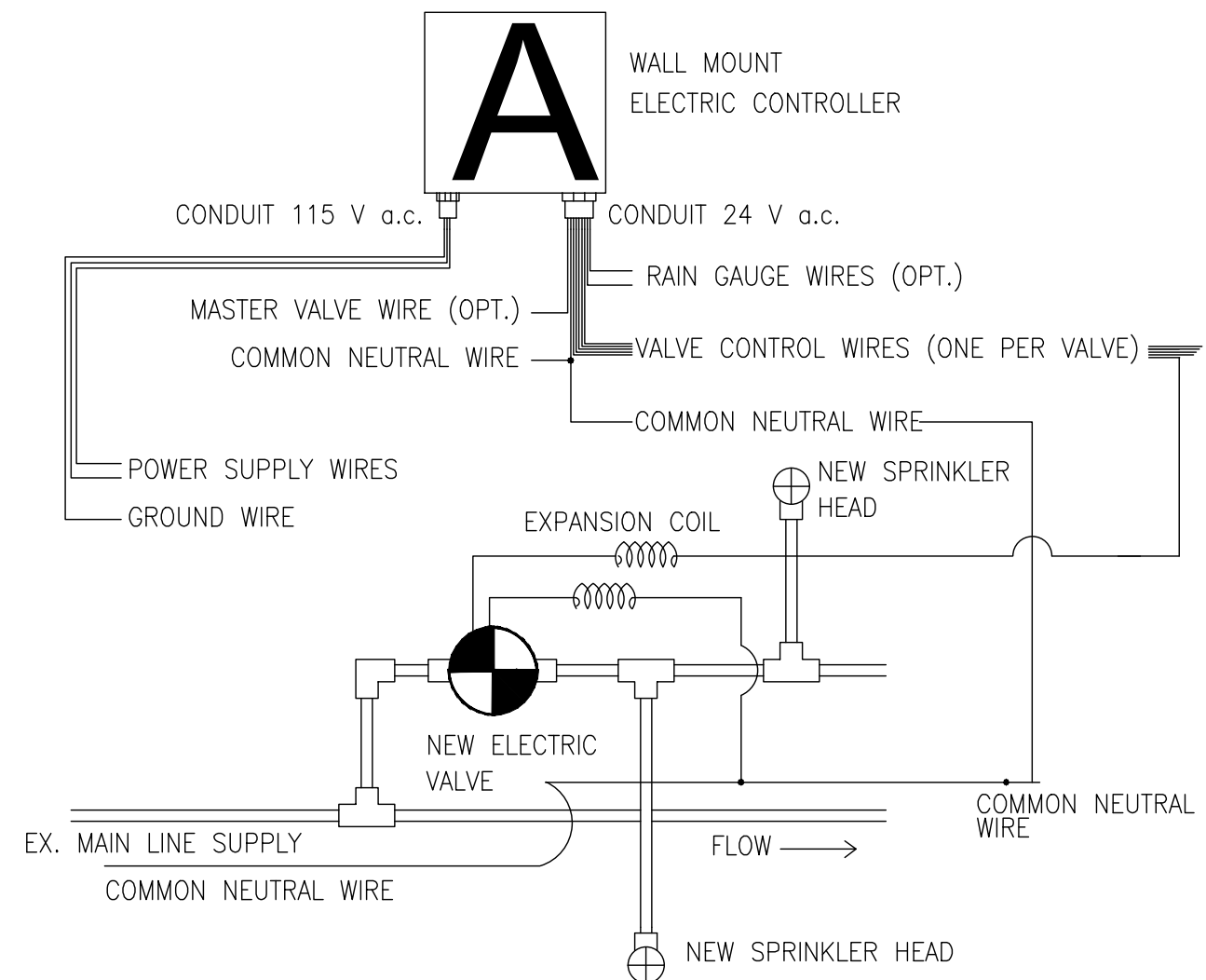
TYPICAL CONTROLLER DETAIL

NOT TO SCALE



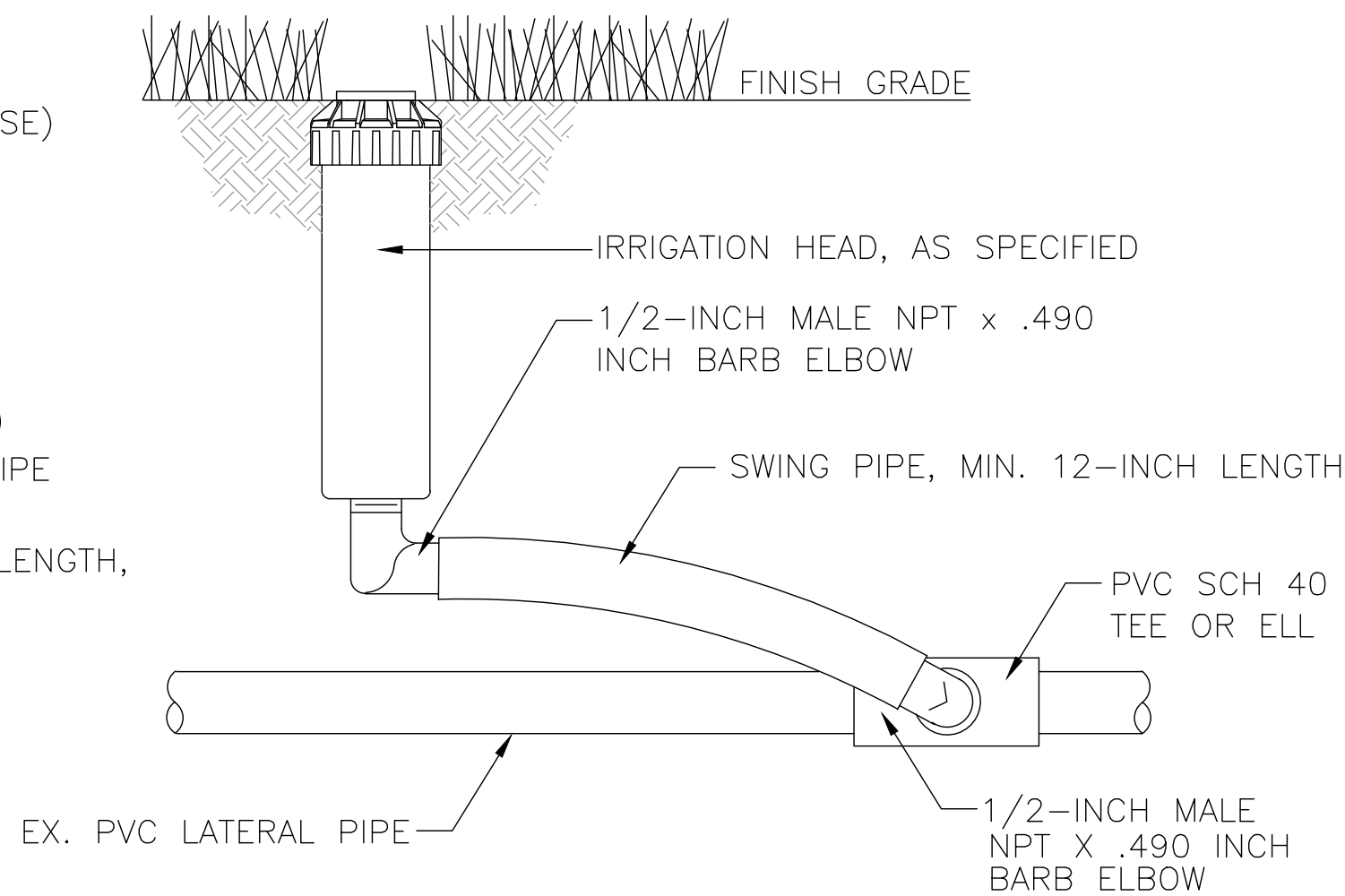
TYPICAL REMOTE CONTROL VALVE DETAIL

NOT TO SCALE



ELECTRIC CONTROLLER WIRING DIAGRAM

NOT TO SCALE



TYPICAL ROTOR HEAD DETAIL

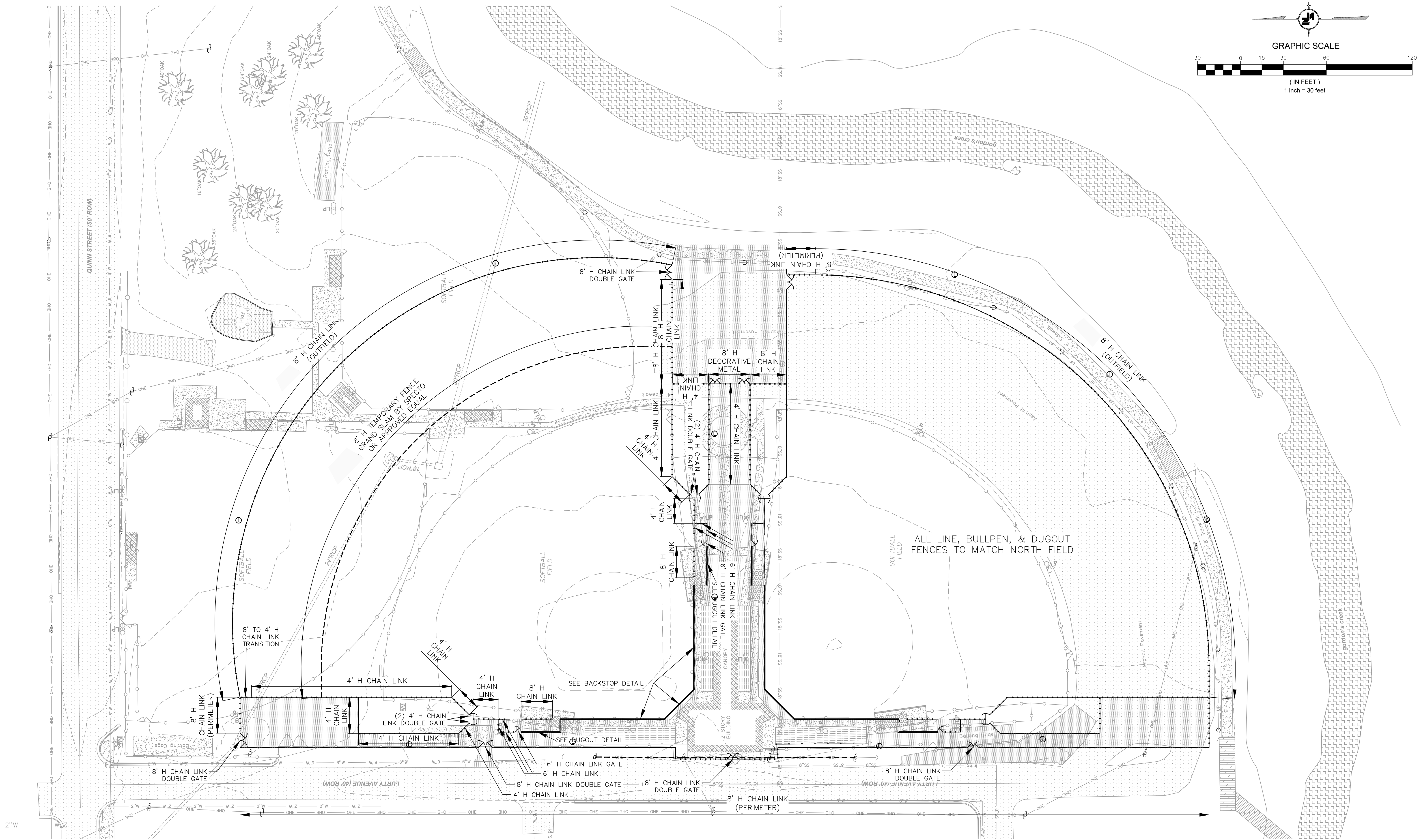
NOT TO SCALE

IRRIGATION QUANTITIES & SCHEDULE			
IRRIGATION ITEMS	SIZE/UNIT	QUANTITY	REQUIREMENTS
PIPING, 2.5" DIAMETER (MAIN)	LIN. FT.	1350	SCH 40 PVC (MIN)
PIPING, 2.5" DIAMETER (LATERAL)	LIN. FT.	300	SCH 40 PVC (MIN)
PIPING, 2" DIAMETER	LIN. FT.	950	SCH 40 PVC (MIN)
PIPING, 1.5" DIAMETER	LIN. FT.	1650	SCH 40 PVC (MIN)
PIPING, 1" DIAMETER	LIN. FT.	1300	SCH 40 PVC (MIN)
ELECTRIC CONTROL VALVE, 2.5"	EACH	2	RAINBIRD PGA VALVE OR APPROVED EQUAL; 2 WIRE SYSTEM
ELECTRIC CONTROL VALVE, 2"	EACH	4	RAINBIRD PGA VALVE OR APPROVED EQUAL; 2 WIRE SYSTEM
ELECTRIC CONTROL VALVE, 1.5"	EACH	4	RAINBIRD PGA VALVE OR APPROVED EQUAL; 2 WIRE SYSTEM
ELECTRIC CONTROL VALVE, 1"	EACH	1	RAINBIRD PGA VALVE OR APPROVED EQUAL; 2 WIRE SYSTEM
ISOLATION VALVE, SIZE PER LINE	EACH	5	BRONZE; PLASTIC NOT ALLOWED
QUICK COUPLING VALVE, SIZE PER LINE	EACH	1	BRONZE; PLASTIC NOT ALLOWED
TRENCH EXCAVATION AND BACKFILL	LIN. FT.	4000	
SPRINKLER HEAD, ROTOR	EACH	60	RAINBIRD 8005-SS-08 50 PSI OR APPROVED EQUAL
SPRINKLER HEAD, SPRAY	EACH	10	RAINBIRD 1812 MPR8 NOZZLE 30 PSI AS NOTED OR APPROVED EQUAL
ELECTRIC CONTROLLER	EACH	1	RAINBIRD ESP-LX-IVM; 2 WIRE SYSTEM W/ CENTRAL CONTROL RAINBIRD IQ COMMUNICATIONS CARTRIDGE & SOFTWARE
IRRIGATION SLEEVE	LIN. FT.	150	SIZED TO ACCOMMODATE; 4" SCH 40 PVC (MIN)
HOT TAP & METER	EACH	1	SEE PLAN NOTE
BACKFLOW PREVENTER	EACH	1	CITY APPROVED WITH ENCLOSURE
FLOW SENSOR	EACH	1	RAINBIRD FS SERIES OR APPROVED EQUAL
MASTER VALVE	EACH	1	RAINBIRD PGA OR APPROVED EQUAL

IRRIGATION VALVE SCHEDULE

BOTH FIELDS				
STATION	SIZE	P.S.I.	G.P.M.	NOTES
1	2.5"	50	52.8	FIELD 1 ROTOR / NOZZLE AS NOTED
2	2"	50	46.2	FIELD 1 ROTOR / NOZZLE AS NOTED
3	1.5"	50	26.4	FIELD 1 ROTOR / NOZZLE AS NOTED
4	1.5"	50	33.0	FIELD 1 ROTOR / NOZZLE AS NOTED
5	2"	50	46.2	FIELD 1 ROTOR / NOZZLE AS NOTED
6	1"	30	6.4	BED SPRAY 8 SERIES MPR NOZZLE
7	2"	50	46.2	FIELD 1 ROTOR / NOZZLE AS NOTED
8	1.5"	50	33.0	FIELD 1 ROTOR / NOZZLE AS NOTED
9	1.5"	50	26.4	FIELD 1 ROTOR / NOZZLE AS NOTED
10	2"	50	46.2	FIELD 1 ROTOR / NOZZLE AS NOTED
11	2.5"	50	52.8	FIELD 1 ROTOR / NOZZLE AS NOTED

NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION		JAYCEE PARK FIELD IMPROVEMENTS CITY OF HATTIESBUG HATTIESBURG, MISSISSIPPI FORREST COUNTY			IRRIGATION QUANTITIES & DETAILS	
	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: NS.17080.000				WORKING NUMBER: IRR-2	DRAWING NUMBER: 20
					FILENAME: 17080_MASTER.dwg					
					SCALE: N/A					
					SURVEYED BY: CLEARPOINT					
					DSGN: RPB DATE: 5/2022					
					DRWN: RPB DATE: 5/2022					
					CHKD: GPC DATE: 6/2022					
					QA/QC: MWE DATE: 6/2022					



NOTICE TO DRAWING HOLDER
NEEL-SCHAFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

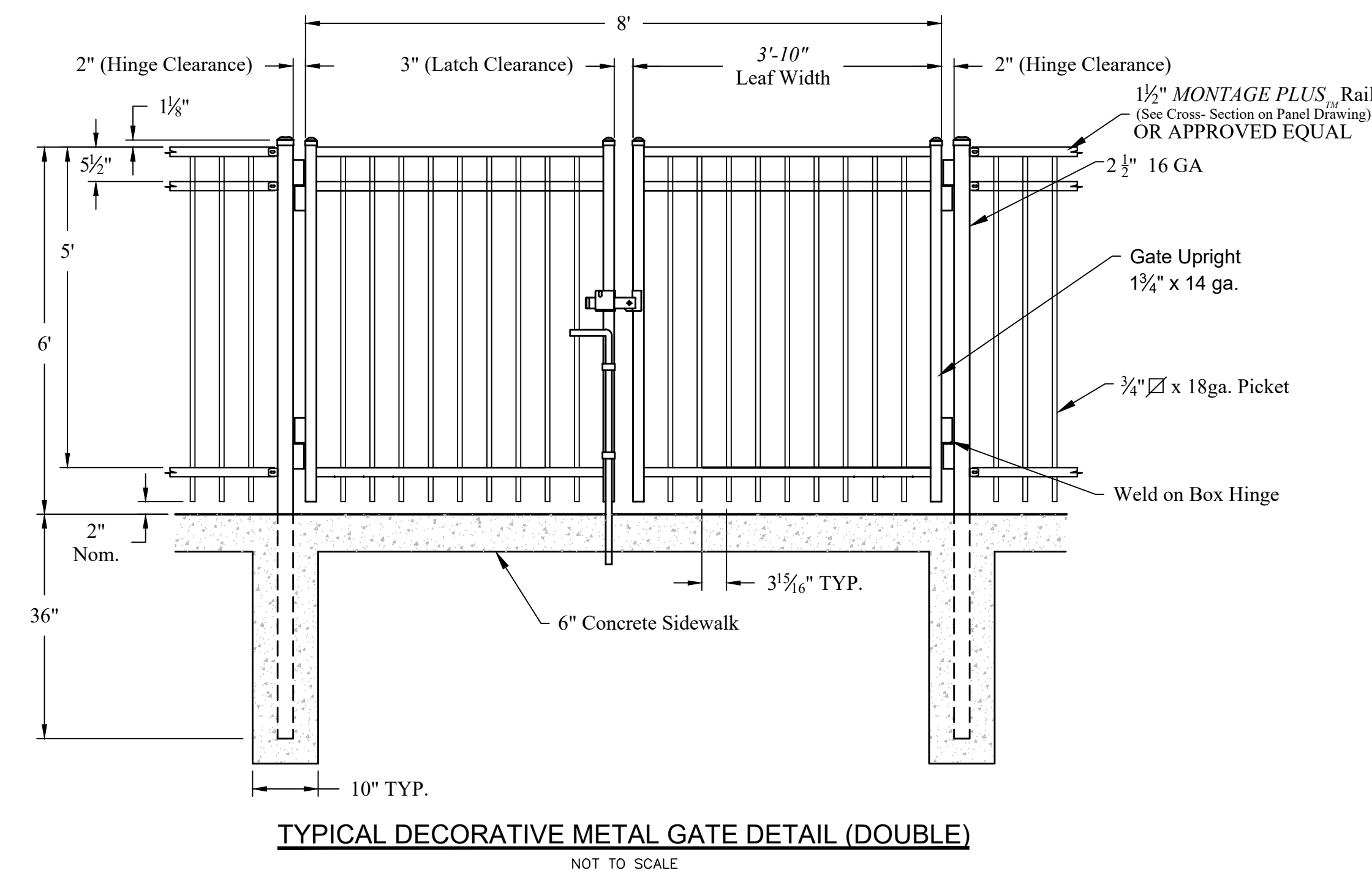
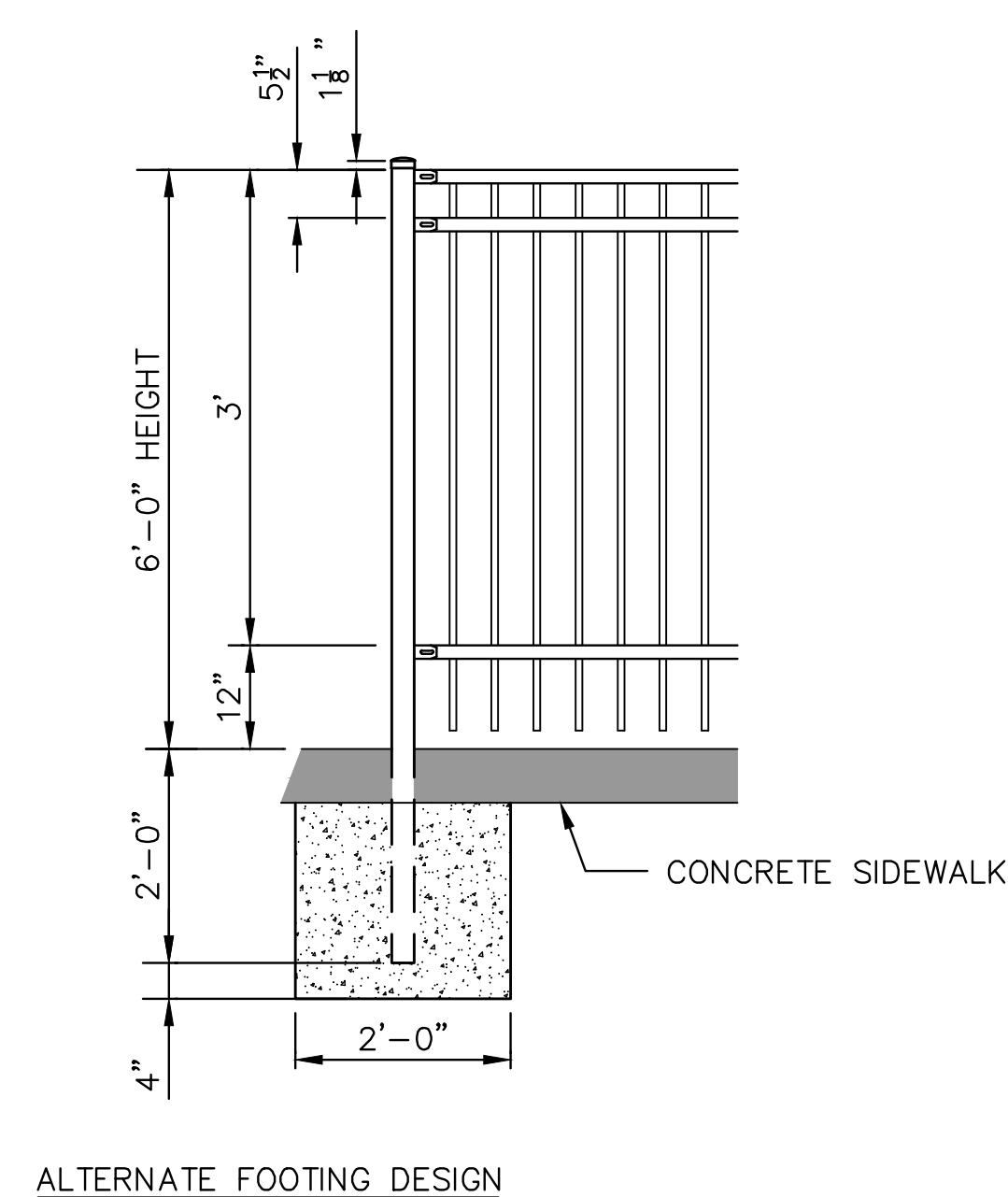
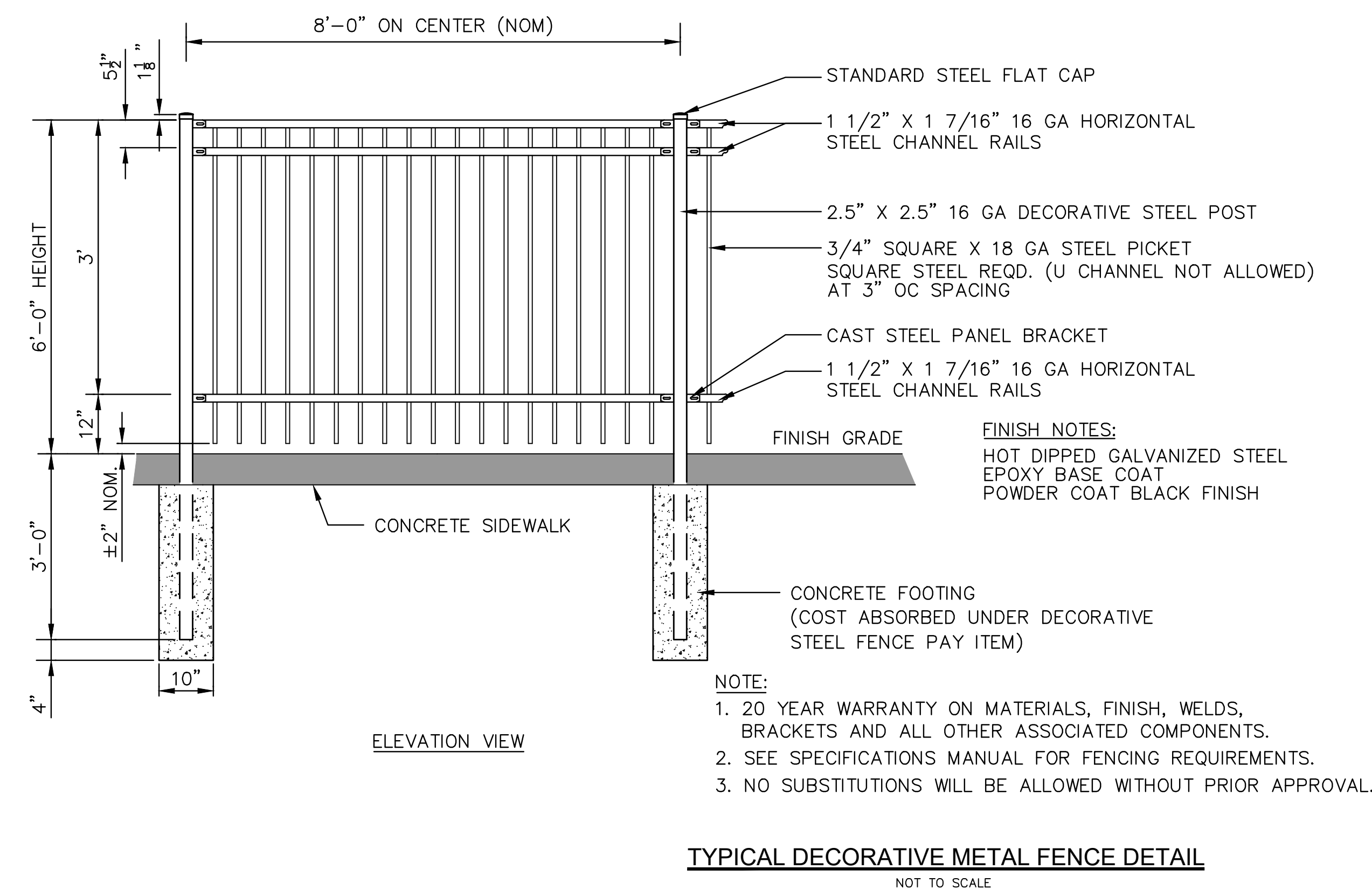
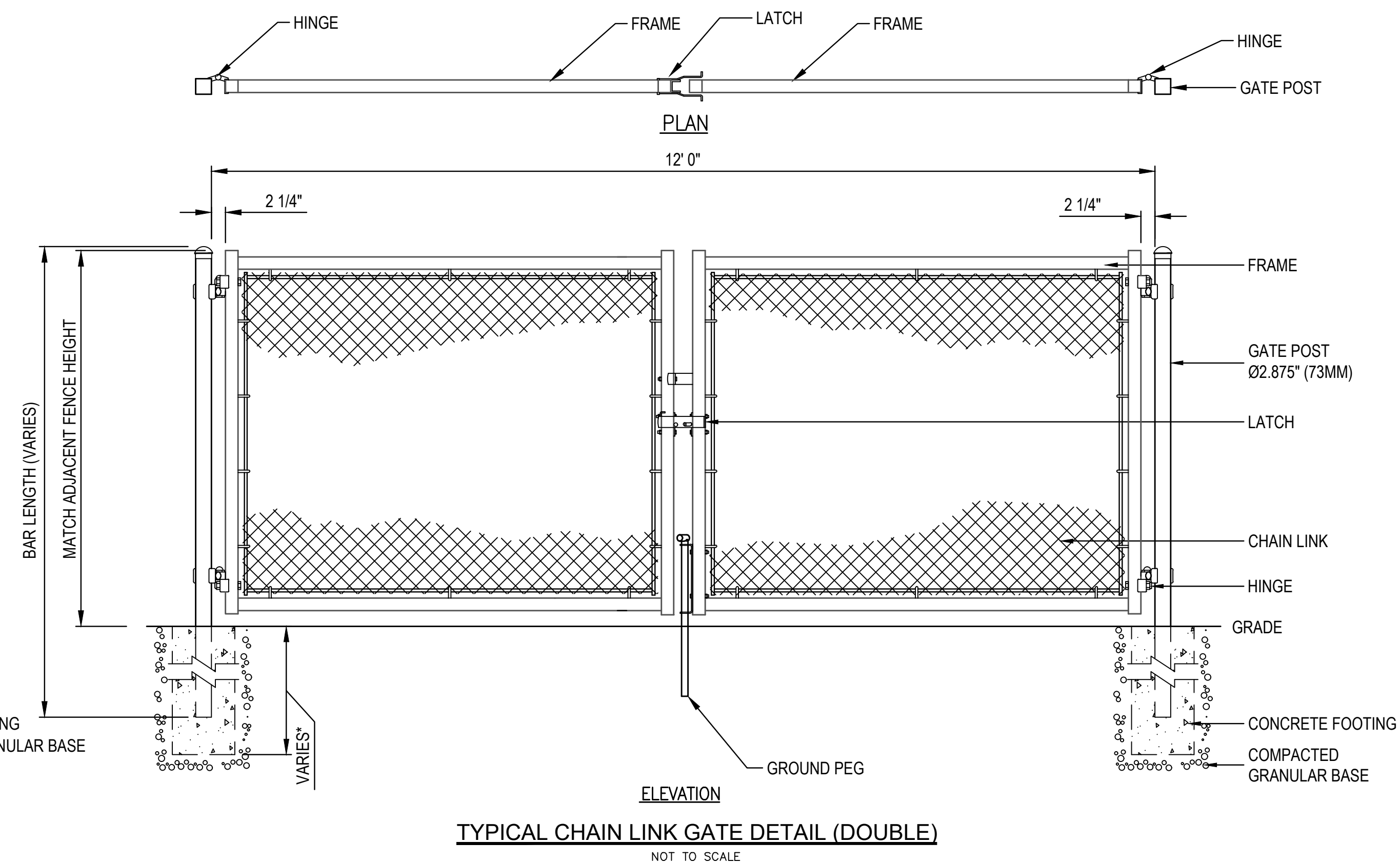
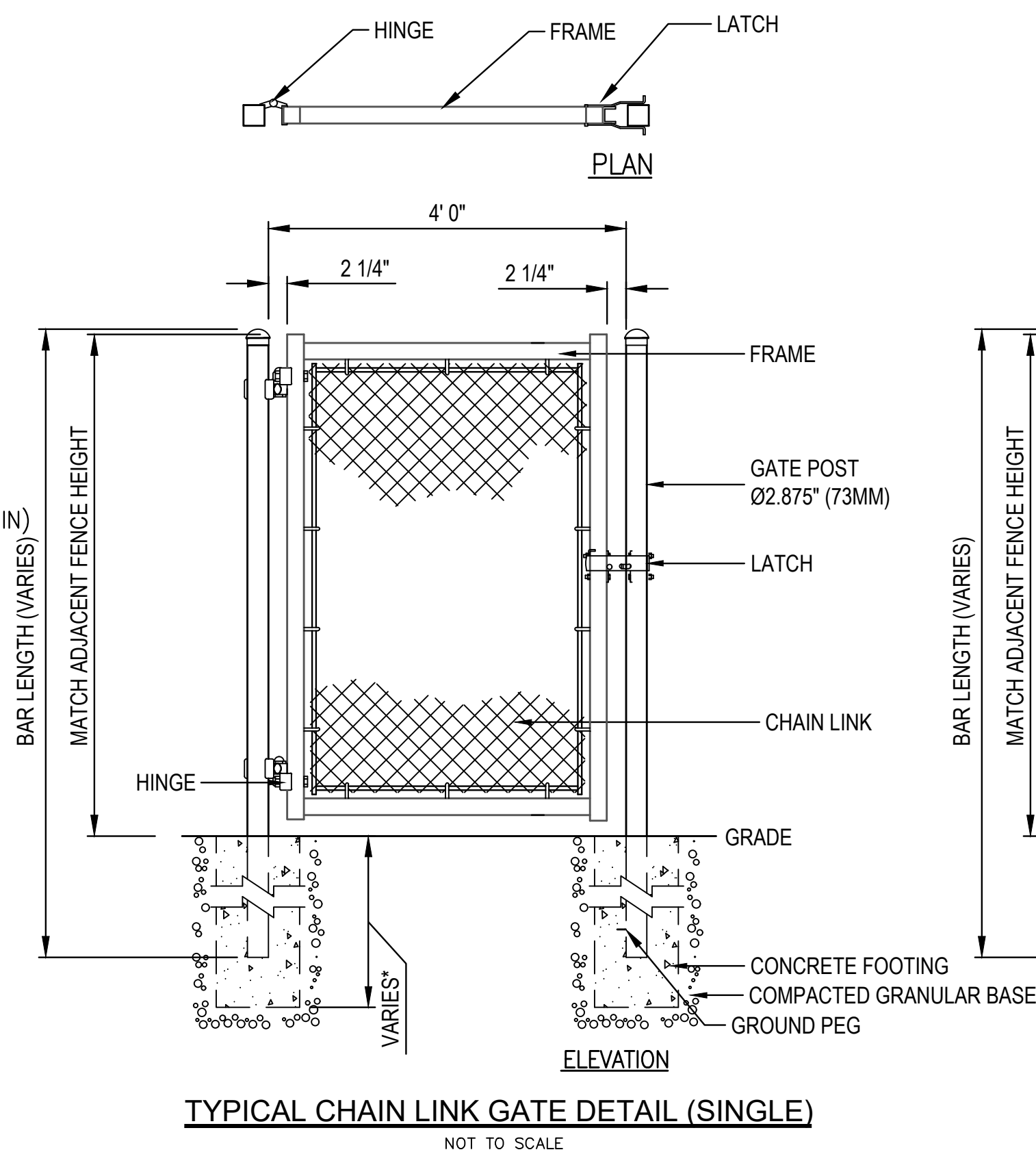
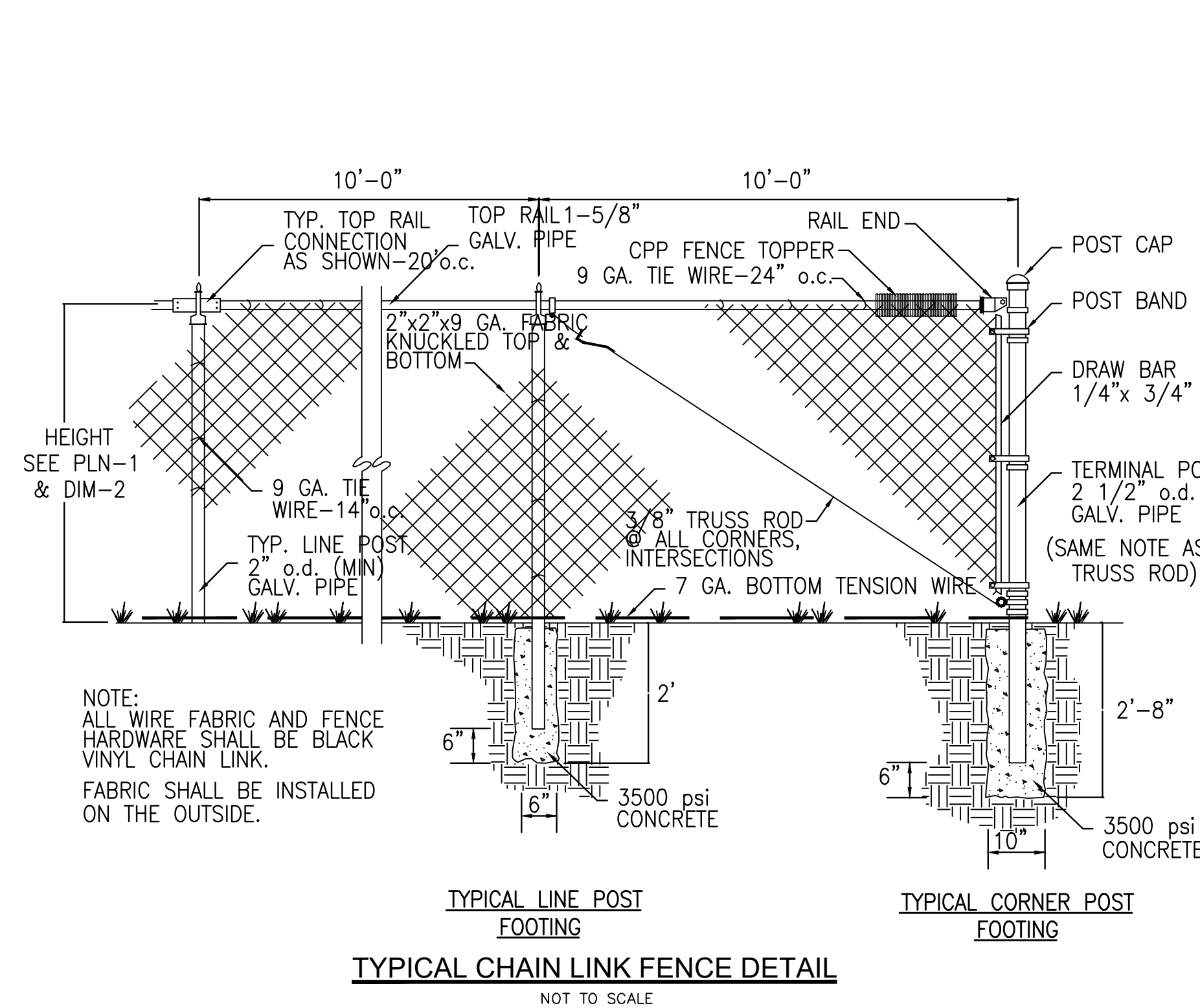
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			DSGN: RPB DATE: 5/2022	
			DRWN: RPB DATE: 5/2022	
			CHKD: GPC DATE: 6/2022	
			QA/QC: MWE DATE: 6/2022	

JAYCEE PARK
FIELD IMPROVEMENTS

CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY

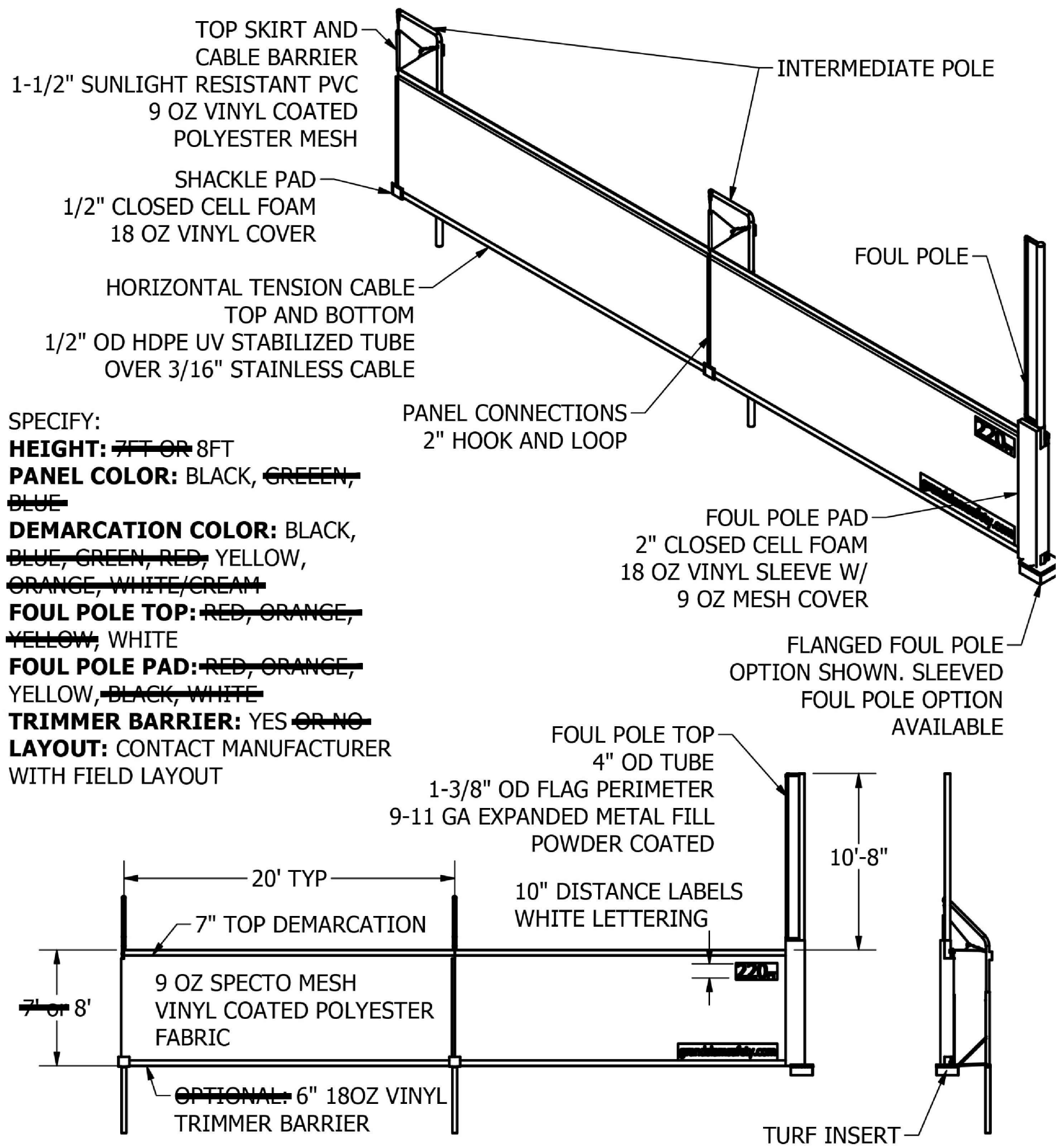


FENCE PLAN	
WORKING NUMBER: FENCE-1	DRAWING NUMBER: 21



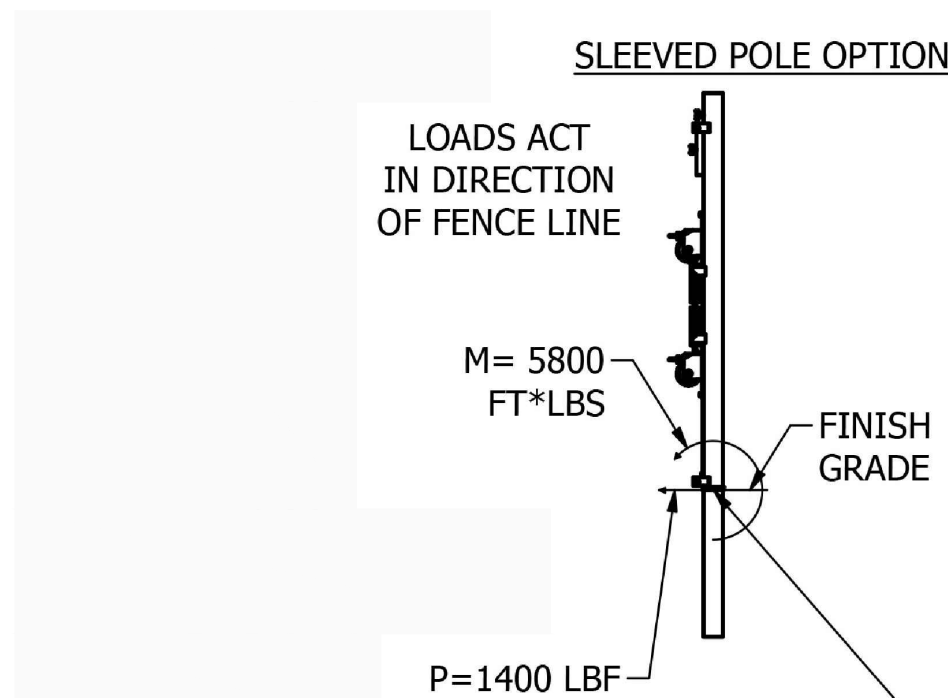
NOTE:
THE ALTERNATE FOOTING DESIGN IS REQUIRED WHEN EXISTING UNDERGROUND UTILITIES ARE IN CONFLICT WITH THE TYPICAL FOOTING DESIGN.

NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION										
	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: NS.17080.000									
					FILENAME: 17080_MASTER.dwg									
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JAYCEE PARK FIELD IMPROVEMENTS CITY OF HATTIESBURG HATTIESBURG, MISSISSIPPI FORREST COUNTY					NEEL-SCHAFFER <i>Solutions you can build upon</i>					DETAIL SHEET 1 FENCE DETAILS CHAIN LINK & DECORATIVE				
					WORKING NUMBER: DET-1					DRAWING NUMBER: 22				

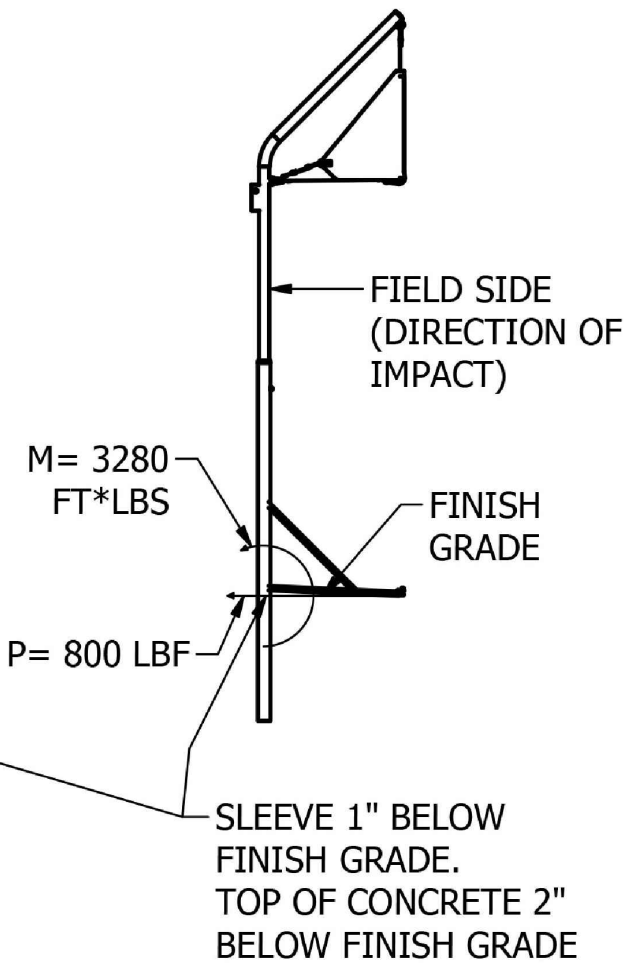


POLE LOADING DIAGRAMS

FOUL/END POLE LOADING



INTERMEDIATE POLE LOADING

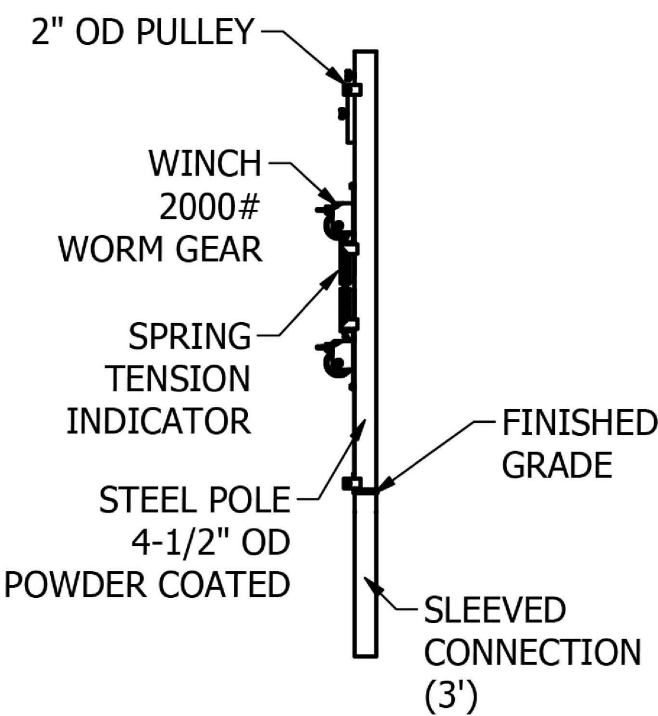
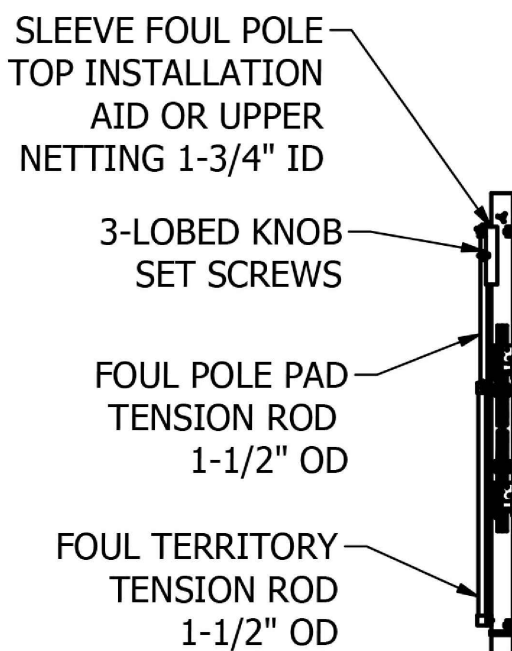


FOUNDATION DESIGN:

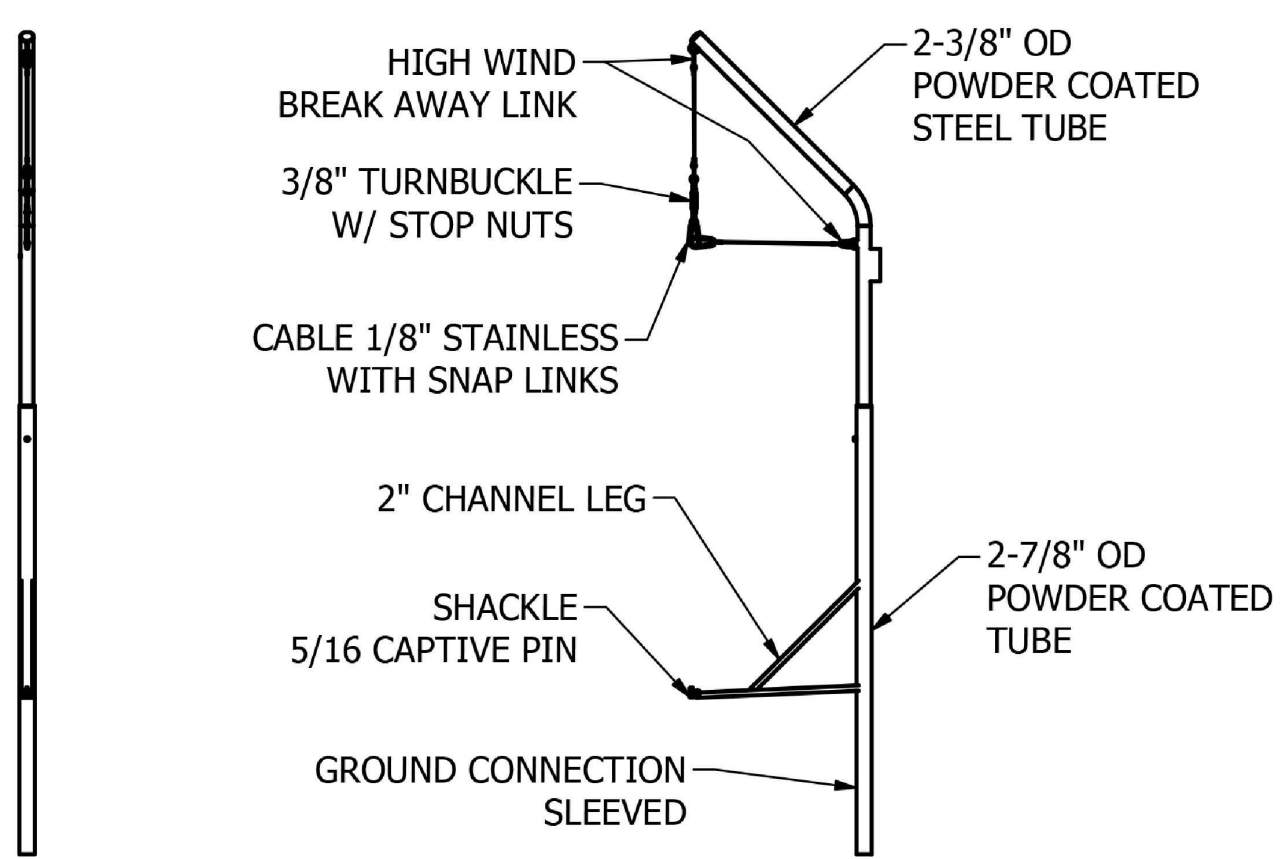
GRAND SLAM SAFETY (GSS) IS NOT RESPONSIBLE FOR THE DESIGN, SPECIFICATION, OR WORKMANSHIP OF THE FOUNDATIONS. ANCHOR BOLT AND SLEEVE DETAILS HAVE BEEN PROVIDED ONLY TO SHOW MINIMUM REQUIREMENTS NECESSARY TO ATTACH THE POLES TO THE FOUNDATIONS. IT REMAINS THE OWNER'S, OR THE OWNER'S ENGINEER'S RESPONSIBILITY TO DETERMINE ALLOWABLE SOIL BEARING VALUES; DESIGN, SPECIFY, AND FURNISH THE FOUNDATIONS, ANCHOR BOLTS, AND SLEEVES; CONSIDER ANY SPECIAL LOADING OR CONDITIONS OF THE PROJECT SITE; AND TO INCLUDE ALL APPLICABLE PROVISIONS OF THE APPROPRIATE BUILDING CODE RELATED TO THE DESIGN OF THE FOUNDATIONS.

ALL ULTIMATE LOADING SHOWN IN THIS DETAIL IS PROVIDED IN UNFACTORED FORM. MAXIMUM LOADS AT THE FOUL POLE LOCATIONS ARE LIMITED TO THE RELEASE POINT OF THE SLIP CLUTCH ON THE TENSION WINCH. MAXIMUM LOADS AT THE INTERMEDIATE (SUPPORT) POLE LOCATIONS ARE LIMITED TO THE BREAKING POINT OF THE BREAKAWAY LINK BETWEEN THE FABRIC FENCE CABLE AND THE POLE.

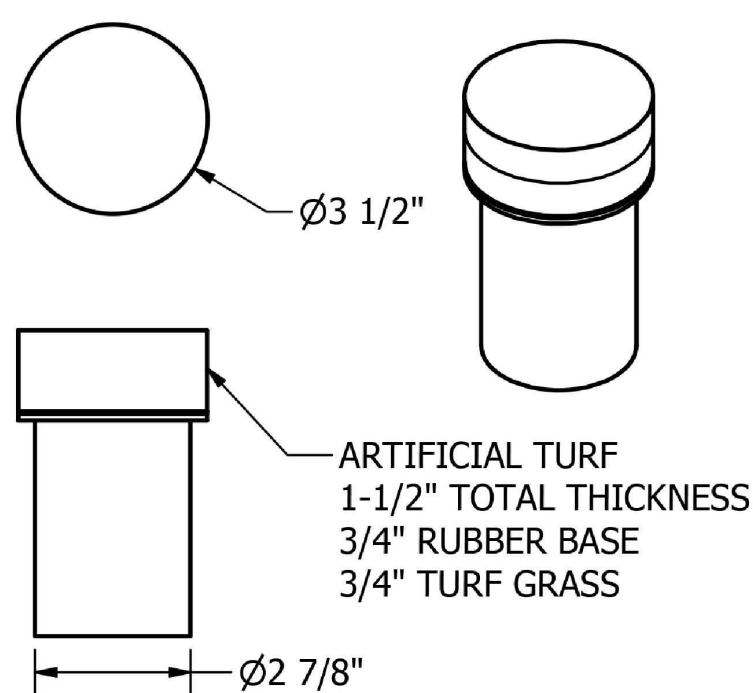
SLEEVED FOUL POLE OPTION



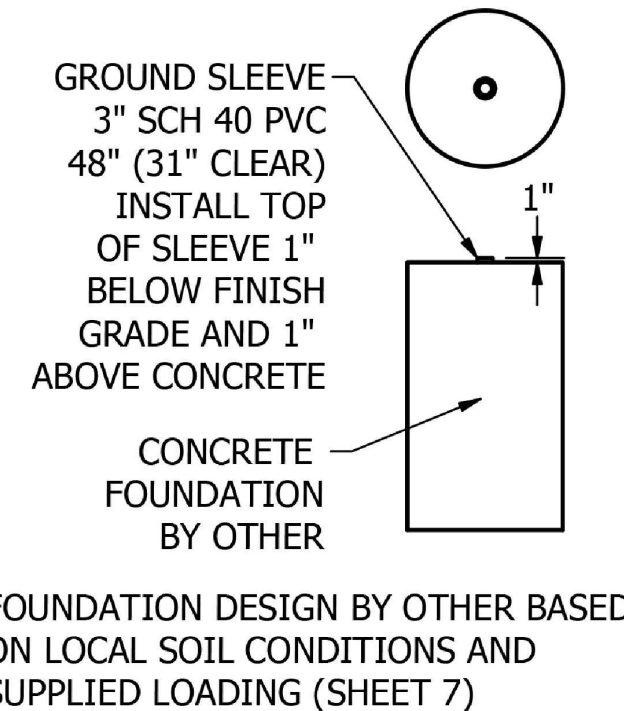
INTERMEDIATE POLE DETAIL



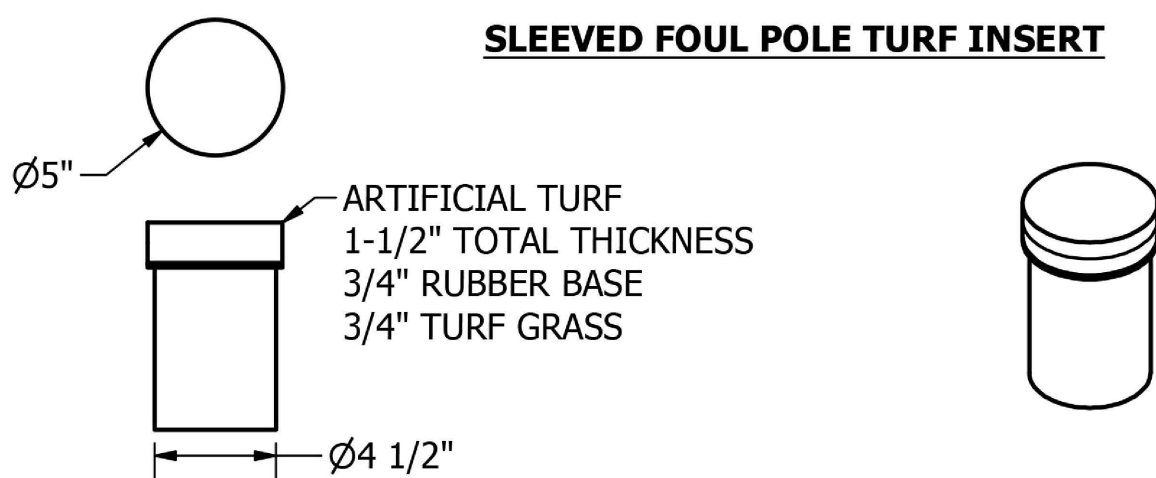
INTERMEDIATE POLE TURF INSERT



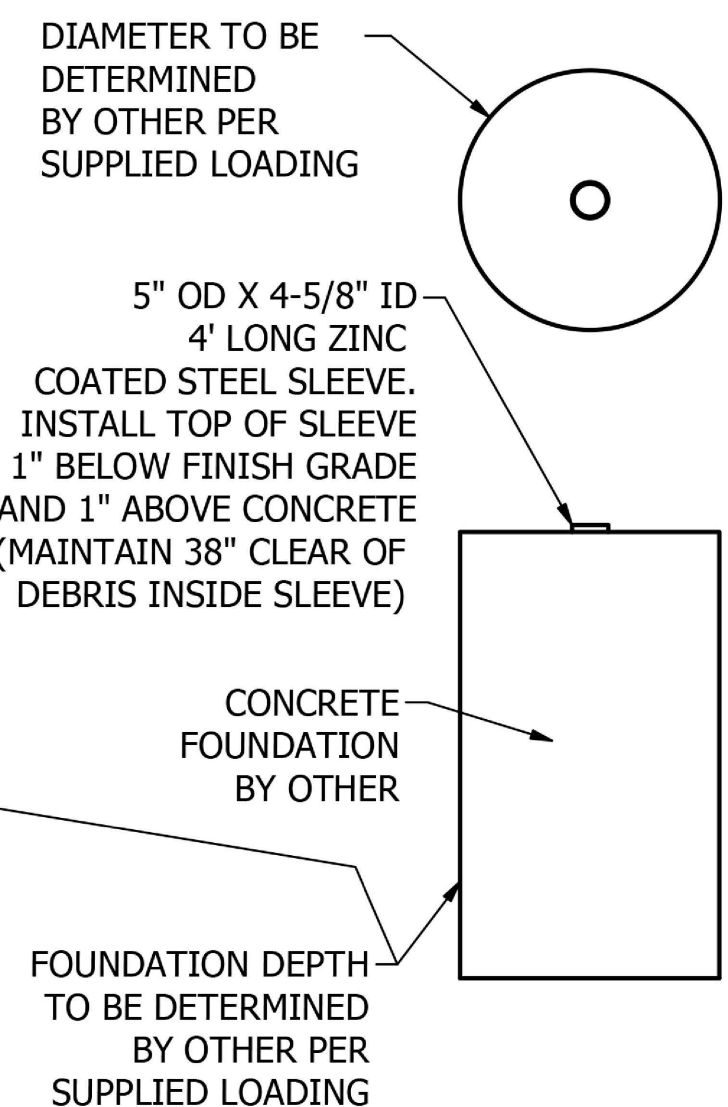
INTERMEDIATE POLE SLEEVED FOUNDATION



SLEEVED FOUL POLE TURF INSERT



SLEEVED FOUL POLE FOUNDATION



OF300 - SPECIFICATION SHEET

SPECTO OUTDOOR CONTAINMENT SYSTEM SHALL BE A SEMI-PERMANENT OR PERMANENT POLE SUPPORTED FENCE SYSTEM. THE SYSTEM SHALL BE DESIGNED TO BE IMPACTABLE BY ATHLETES. THE FENCE SYSTEM SHALL BE 7' OR 8' TO THE TOP OF THE IMPACTABLE PORTION WITH AN OPTIONAL 10' SPORTS NETTING. THE SPORTS NETTING MAY BE ATTACHED ABOVE THE MESH IMPACTABLE PORTION TO EFFECTIVELY INCREASE THE HOME RUN HEIGHT OR SET BACK FROM FENCE LINE TO ALLOW BALLS TO DROP BEHIND THE FENCE.

THE IMPACTABLE PORTION SHALL BE 9 OZ. PER SQUARE YARD VINYL COATED POLYESTER FABRIC MESH, SELF-EXTINGUISHING IN HORIZONTAL BURN MODE. CUSTOMER SHALL SPECIFY PANEL, DEMARCACTION AND FOUL POLE COLORS. FENCE SHALL BE 20' LENGTH PANELIZED CONSTRUCTION WITH LENGTH OF FOUL POLE PANELS CUSTOMIZED TO FIT FIELD DIMENSIONS. ADJACENT PANELS SHALL BE CONNECTED BY 2" HOOK AND LOOP VERTICAL SEAMS. SEAM CONNECTIONS SHALL BE REINFORCED WITH HORIZONTAL HOOK AND LOOP "L-STRAPS" AT THE TOP AND BOTTOM. THE HORIZONTAL TOP AND BOTTOM EDGES SHALL HAVE 7 INCHES TURNED BACK TO FORM A POCKET, AND SHALL BE CLOSED VIA 2" HOOK AND LOOP. A OPTIONAL 2" HOOK MAY BE ATTACHED TO THE FIELD SIDE 7" BELOW THE TOP TO ATTACH THE OPTIONAL SPORTS NETTING. A 6" SQUARE, 1/2" CLOSED CELL FOAM PAD COVERED BY 18 OZ PER SQUARE YARD VINYL SHALL BE SEWN TO THE PANEL TO COVER THE BOTTOM ATTACHMENT POINT BETWEEN PANELS. THE TOP 7" MAY BE A DIFFERENT COLOR TO ACT AS A DEMARCACTION LINE.

THE PANELS SHALL BE SUPPORTED VIA A TOP AND BOTTOM HORIZONTAL 3/16" CABLE, HAVING A 3500 LB BREAKING STRENGTH, ENCLOSED WITHIN A 1/2" OD HDPE UV STABILIZED TUBE. EACH CABLE SHALL CONTAIN A BREAK AWAY MECHANISM TO PROTECT THE FENCE COMPONENTS FROM EXCESS LOAD TO TO WINDS IN EXCESS OF 60 MPH. THE HORIZONTAL CABLES SHALL ROUTE OVER 2" DIAMETER STEEL PULLEYS AND TERMINATE TO THE FOUL POLES ON 2000# WORM GEAR DRIVEN WINCHES. PROPER TENSION SHALL BE INDICATED BY COMPRESSION SPRINGS WITH OPTIMAL COMPRESSED LENGTH INDICATORS. A TOP VERTICAL CABLE SUPPORT SHALL BE POSITIONED AT PANELS SEAMS AND CONSIST OF 1/8" CABLE HAVING A 1800# BREAKING STRENGTH AND A TURNBUCKLE WITH SNAP LINKS. THE TOP VERTICAL CABLE SUPPORT SHALL EXTEND UPWARD TO A VERTICAL ANCHOR POINT ON THE INTERMEDIATE POLE. THE CABLE SHALL BE SLEEVED WITH 1-1/2" SUNLIGHT RESISTANT PVC AND A VINYL COATED POLYESTER MESH SKIRT SECURED TO THE INTERMEDIATE POLE BY POLYESTER SHOCK CORD. AN ADDITIONAL 1/8" HORIZONTAL CABLE SHALL CONNECT THE TOP HORIZONTAL CABLE TO THE INTERMEDIATE POLE AT EACH PANEL SEAM. BOTH CABLES SHALL HAVE A BREAKAWAY LINK TO ALLOW THE FENCE TO COLLAPSE AT WINDS IN EXCESS OF 60 MPH. THE BOTTOM VERTICAL ANCHOR POINT SHALL BE SECURED FROM FORWARD AND BACKWARD MOVEMENT BY A 5/16" CAPTIVE PIN SHACKLE ATTACHED TO THE LEG OF THE INDERMEDIATE POLE.

THE FOUL POLES SHALL CONSIST OF 4" SCHEDULE 40 PIPE WITH A FLANGED BASE TO BE ANCHORED VIA 1" ANCHOR BOLTS IN A CONCRETE FOOTING (BY OTHER). THE FOUL POLE SHALL BE POWDER COATED, CUSTOMER TO SPECIFY COLOR, AND CONTAIN THE PULLEY, WINCHES AND TENSION INDICATORS FOR THE HORIZONTAL FENCE CABLES. A 2" THICK CLOSED CELL CORNER PAD IN A 18 OZ PER SQUARE YARD VINYL SLEEVE WITH A 9 OZ VINYL COATED POLYESTER MESH SHALL PROTECT THE ATHLETE FROM THE FOUL POLE AND IT'S HARDWARE. THE FOUL POLE PAD SHALL CONNECT TO THE ADJACENT FENCE PANEL VIA THE SAME 2" HOOK AND LOOP ASTHE PANEL TO PANEL CONNECTION. THE FOUL POLE PAD SHALL CONNECT TO THE FOUL POLE VIA A MESH TAB CONNECTED TO THE FOUL POLE TENSION ROD VIA 1" HOOK AND LOOP. THE TENSION ROD SHALL BE SECURED TO THE FOUL POLE BY 1-1/2" ID TUBE SLEEVES AND 3/8 SET SCREWS WITH 3-LOBED KNOBS. A SECOND TENSION ROD SHALL BE MOUNTED ON THE FOUL POLE TO BE UTILIZED FOR OPTIONAL FOUL TERRITORY FENCING. THE FOUL POLE TOP SHALL BE 4" OD TUBE WITH A 1-3/8 OD FLAG PERIMETER FILLED WITH 9-11GA EXPANDED METAL AND POWDER COATED. A FOUL POLE TOP INSTALLATION TOOL SHALL CONSIST OF 1-3/4" OD TUBE WITH PULLEYS AND 3/8" NYLON DOUBLE BRAIDED ROPE.

THE INTERMEDIATE POLES PROVIDE VERTICAL ATTACHMENT POINTS FOR THE HORIZONTAL TOP AND BOTTOM CABLE AT 10'-11" ABOVE THE PLAYING SURFACE AND ARE SET BACK 31-1/2" FROM CENTER OF POLE TO CENTERLINE OF FENCE, TO OFFSET FROM HARD STRUCTURE. POLE SHALL BE 2PC FOR EASE OF INSTALLATION AND REMOVAL WITH THE TOP PORTION 2" SCHEDULE 40 PIPE STEEL PIPE AND THE BOTTOM 2-1/2" SCH 40, BOTH POWDER COATED BLACK.

ACCESSORIES:

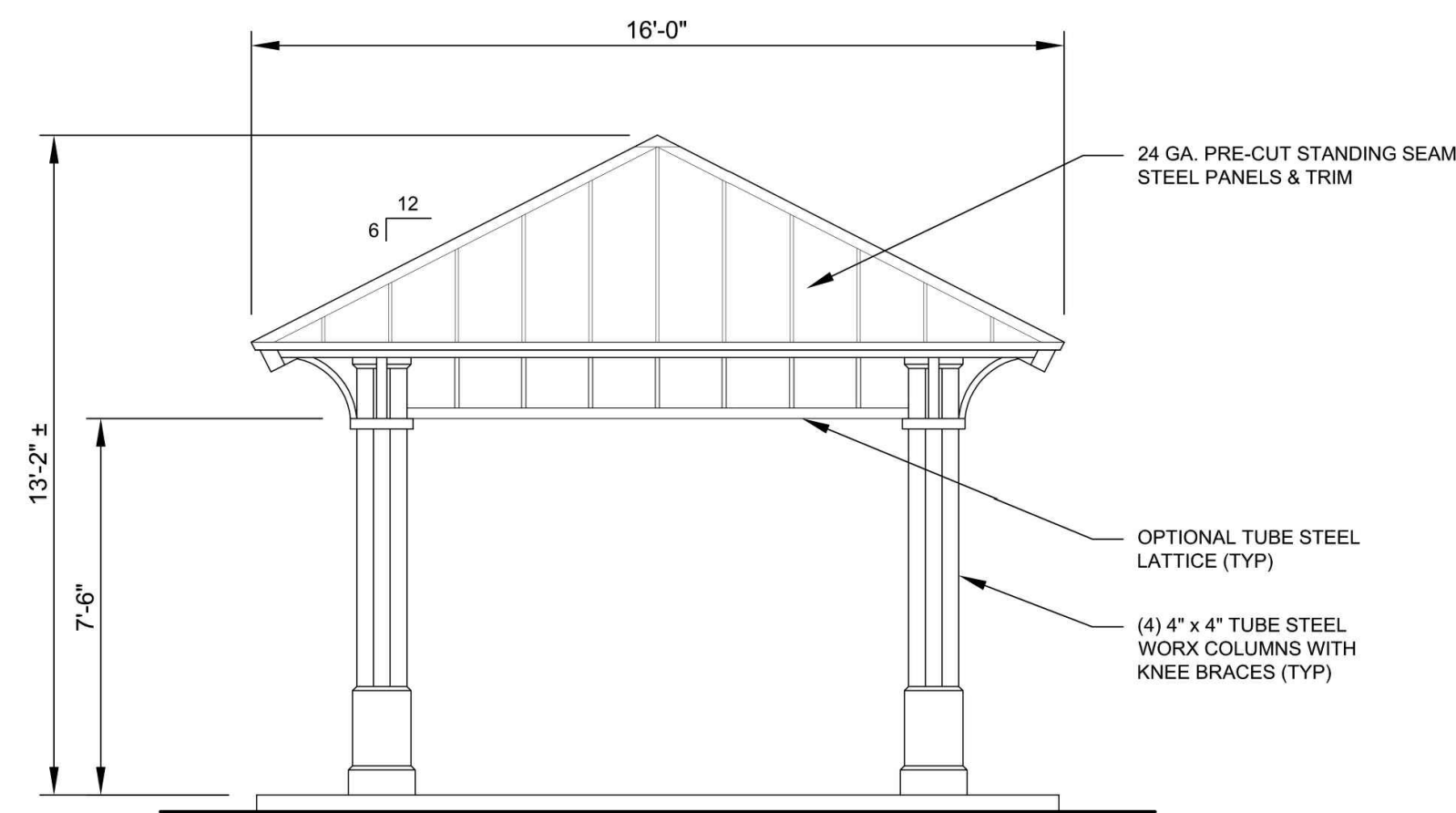
TRANSPORT CART: SHALL BE SUPPLIED STANDARD WITH ALL FENCES TO CONTAIN ALL THE SOFT COMPONENTS OF THE FENCING SYSTEM. CART SHALL CONSIST OF 2" SQUARE STEEL TUBE BLACK POWDER COATED FRAME, 2-5/16 PILLOW BLOCK BEARINGS, 18" OD TUBE TO ROLL THE FENCE ONTO, A 4' DIAMETER HAND WHEEL, (4) 10" OR 12" DIAMETER SWIVELING CASTERS, AND AN INTEGRATED NEAP WITH 2" BALL COUPLER. TOTAL STORAGE FOOT PRINT IS APPROXIMATELY 30 SQFT FOR A 220' ALL AROUND 7' HIGH SOFTBALL FENCE AND 36 SQFT FOR 360' ALL AROUND BY 8' HIGH BASEBALL FENCE.

POLE CART: SHALL BE SUPPLIED OPTIONAL AND SHALL BE DESIGNED TO HOUSE ALL THE HARD COMPONENTS OF THE FENCING SYSTEM. CART SHALL BE 2" SQUARE STEEL TUBE BLACK POWDER COATED FRAME, (2) 20.5 INCH DIAMETER WHEELS (FENCES UP TO 400 LINEAR FEET) OR (2) 26.3 DIAMETER WHEELS (FENCES OVER 400 LINEAR FEET), ALL WHEELS SHALL BE MOUNTED ON HUBS AND SPINDLES WITH TAPERED ROLLER BEARINGS AND AN INTEGRATED NEAP WITH 2" BALL COUPLER. TOTAL STORAGE FOOTPRINT IS APPROXIMATELY 70 SQFT FOR A 220' ALL AROUND 7' HIGH SOFTBALL FENCE AND 118 SQFT FOR 360' ALL AROUND BY 8' HIGH BASEBALL FENCE.

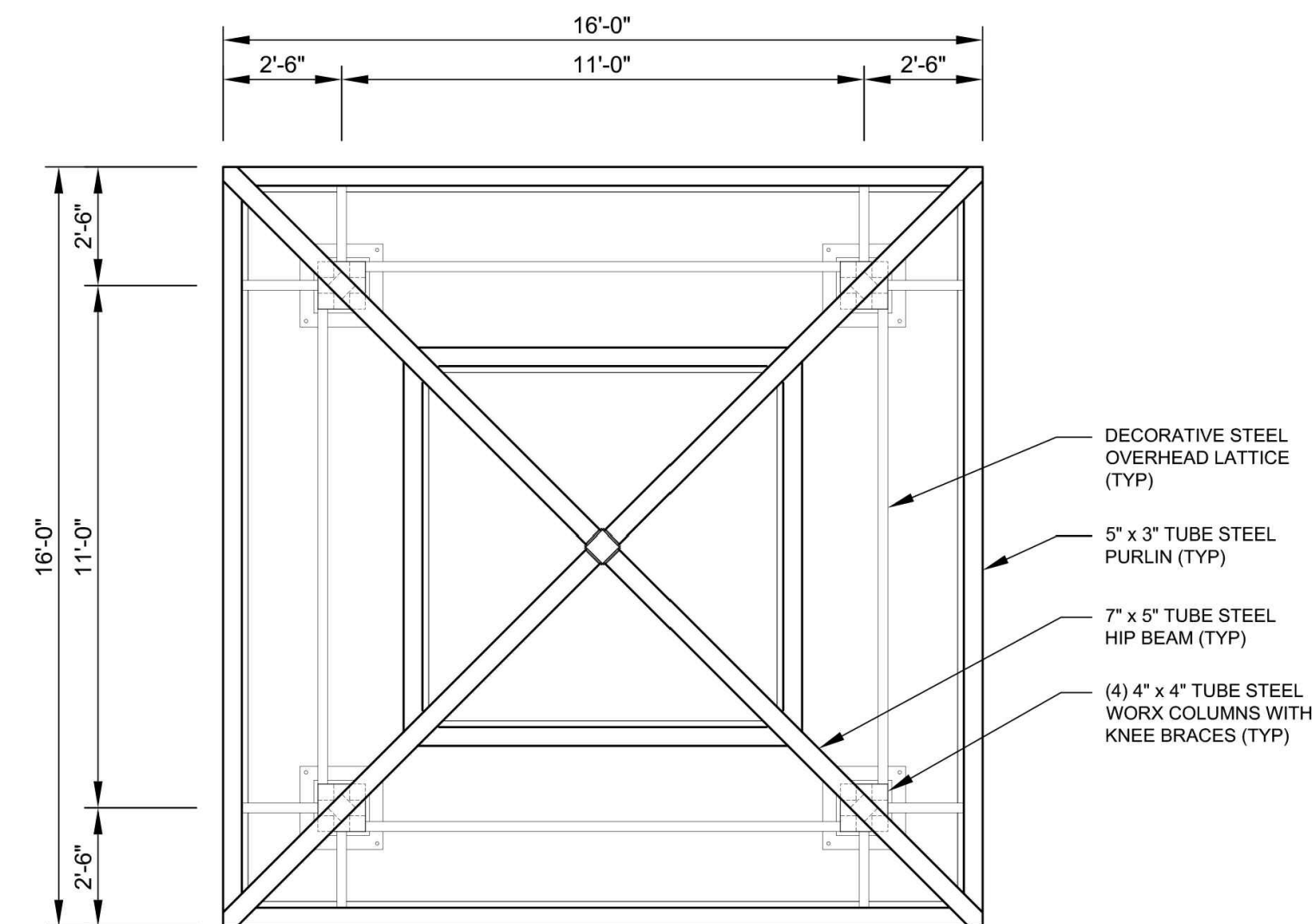
NOTES

1. TEMPORARY SOFTBALL FENCE SHALL BE GRAND SLAM SAFETY WITH SPECTO MESH AS DESCRIBED IN THE DETAILS & TEXT INCLUDED ON THIS SHEET OR APPROVED EQUAL.
2. ADDITIONAL FENCING TO ADDRESS FOUL TERRITORY REQUIRED.
3. FENCE TRANSPORTER CART & SUPPORT POST CART REQUIRED FOR EASE OF STORAGE.

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	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: NS.17080.000						WORKING NUMBER:	DRAWING NUMBER:
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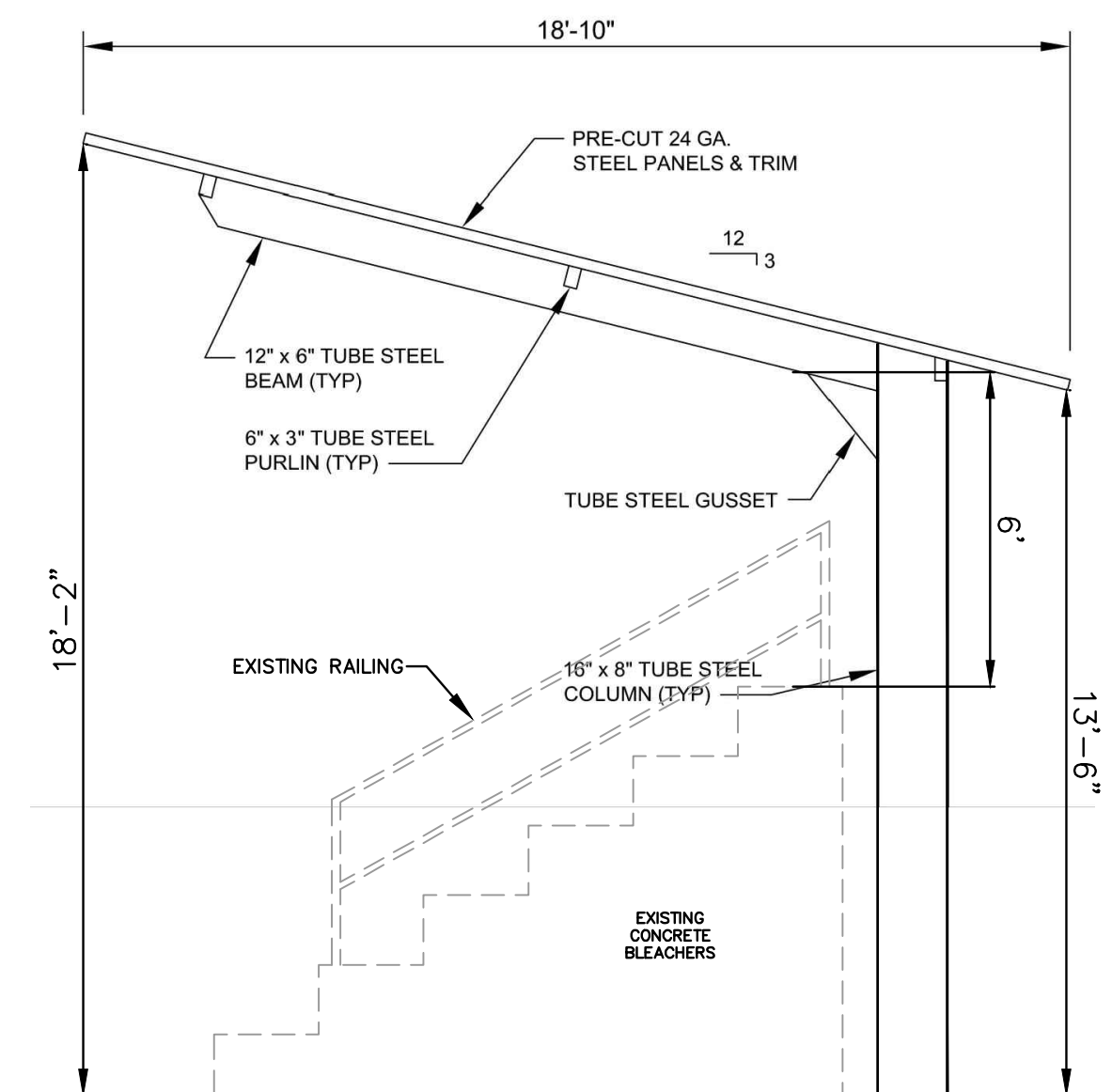


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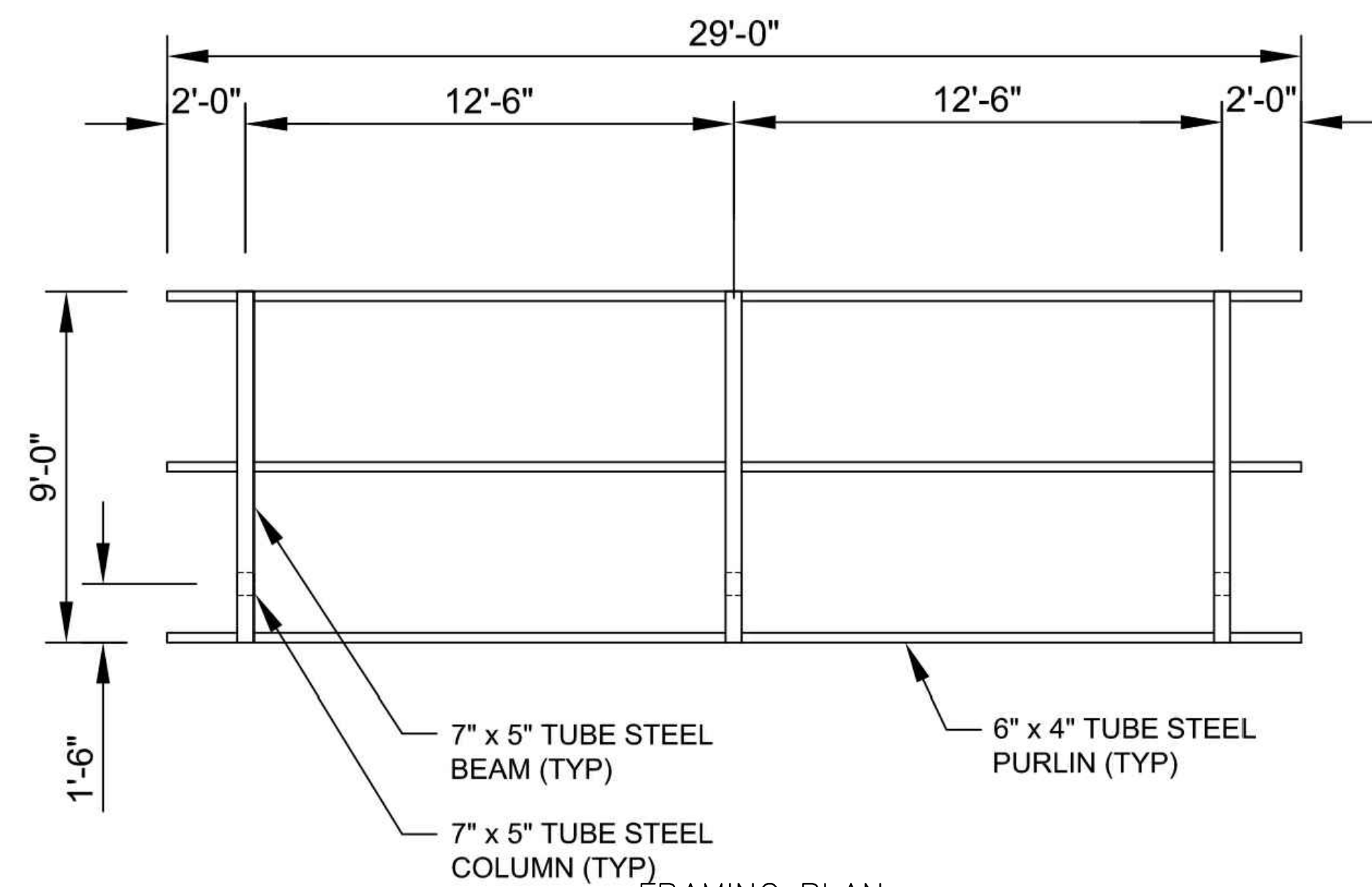


FRAMING PLAN
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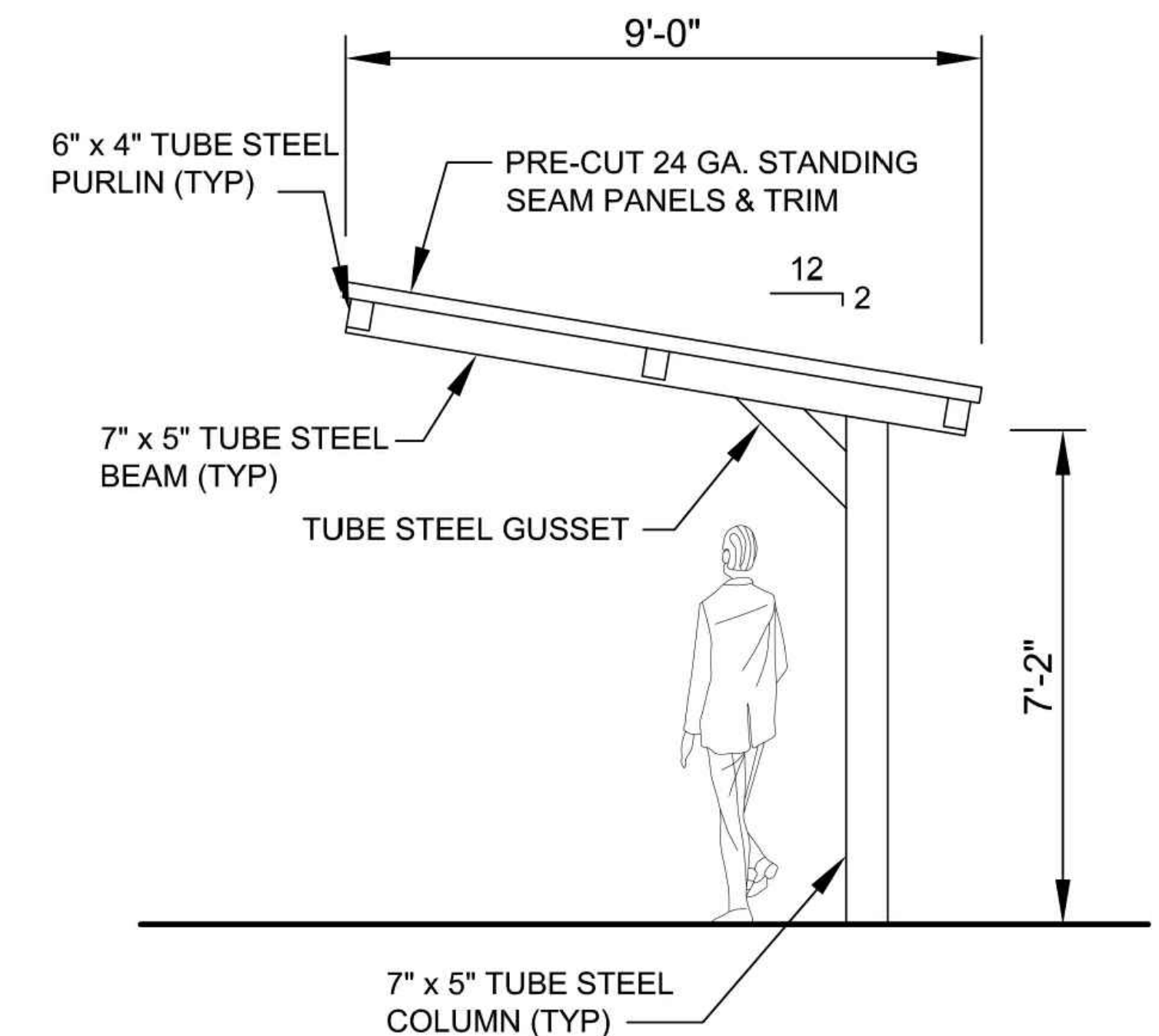
TICKET PAVILION DETAIL
NOT TO SCALE



ELEVATION

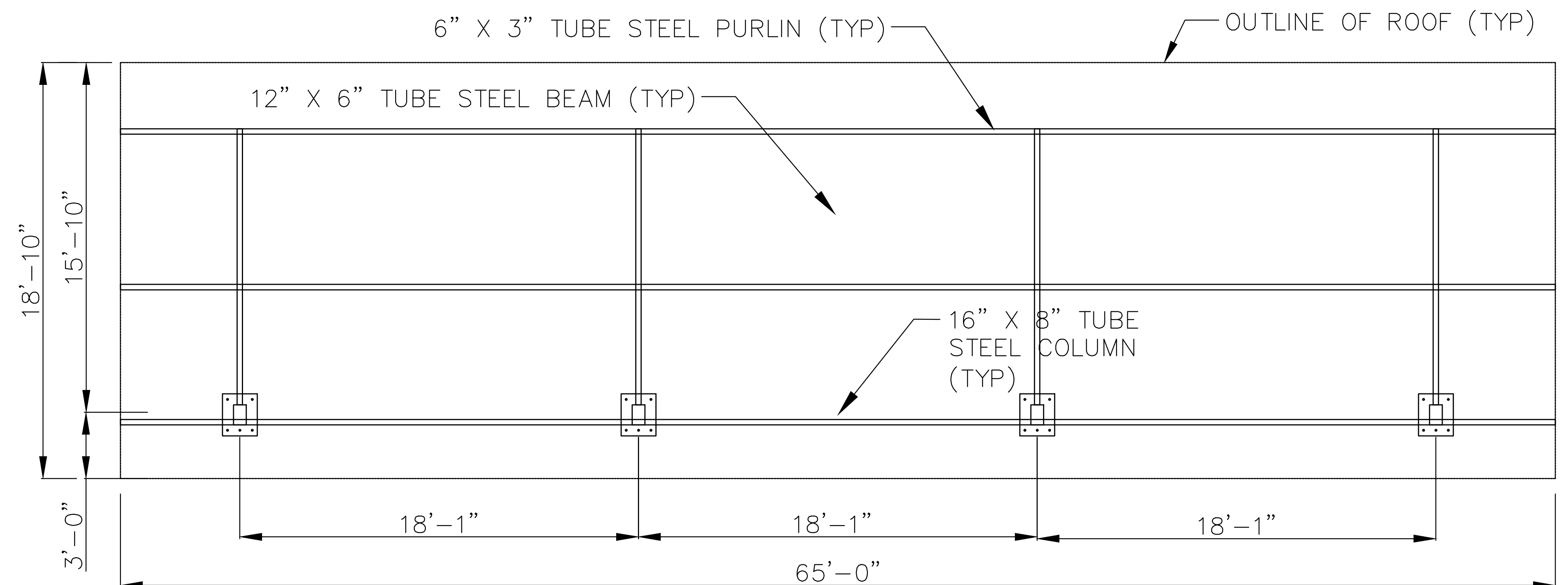


FRAMING PLAN



ELEVATION

DUGOUT ROOF DETAIL
NOT TO SCALE



FRAMING PLAN

BLEACHER COVER DETAIL
NOT TO SCALE

NOTICE TO DRAWING HOLDER

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REVISIONS			DRAWING INFORMATION	
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N-S PROJECT NO.: NS.17080.000	
FILENAME: 17080_MASTER.dwg	
SCALE: N/A	
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JAYCEE PARK FIELD IMPROVEMENTS

CITY OF HATTIESBUG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY



DETAIL SHEET 3 ROOF DETAILS

WORKING NUMBER:
DET-3

DRAWING NUMBER:
24

GENERAL:

1. GENERAL BUILDING CODE: INTERNATIONAL BUILDING CODE, 2015 EDITION.
2. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL OBTAIN ALL CONTRACT DOCUMENTS AND NOTIFY THE STRUCTURAL ENGINEER AND ARCHITECT OF ANY DISCREPANCIES OR OMISSIONS.
3. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER PRIOR TO BIDDING OF ANY DISCREPANCY BETWEEN PLANS, DETAILS, AND/OR SPECIFICATIONS.
4. DESIGN LOADS:

A. DEAD LOADS:
SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR THE CONSTRUCTION MATERIALS USED IN THE PROJECT. ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF THE CAPACITY OF THE STRUCTURE.

B. *LIVE LOADS (psf):
ROOF (REDUCIBLE).....20
FLOOR.....125
STAIRS/EXITWAYS.....100

C. SNOW LOADS:
GROUND SNOW LOAD (Pg).....9 psf
SNOW EXPOSURE FACTOR (Ce).....0.9
SNOW LOAD IMPORTANCE FACTOR (Is).....1.0

D. WIND LOADS:
BASIC WIND SPEED (3 SECOND GUST).....131 MPH
BUILDING CATEGORY.....OPEN
WIND IMPORTANCE FACTOR.....1
EXPOSURE CATEGORY.....B
INTERNAL PRESSURE COEFFICIENT (Gcpi).....0
DESIGN WIND PRESSURE FOR COMPONENTS & CLADDING (psf):
WALLS.....XXXX
ROOF.....XXXX
OVERHANG.....XXXX

E. SEISMIC LOADS:
EARTHQUAKE IMPORTANCE FACTOR (Ie).....1
MAPPED SPECTRAL RESPONSE ACCELERATIONS: (Ss).....0.111
(S1).....0.068

SITE CLASS (ASSUMED).....D
SPECTRAL RESPONSE COEFFICIENTS: (SDS).....0.119
(SD1).....0.109

SEISMIC DESIGN CATEGORY.....B
BASIC SEISMIC-FORCE RESISTING SYSTEM:
STEEL ORDINARY MOMENT FRAMES

5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES ARE NOTED.

6. SPECIAL INSPECTIONS ARE REQUIRED FOR THIS PROJECT IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. VISUAL OBSERVATIONS BY THE STRUCTURAL ENGINEER'S OFFICE DOES NOT REPLACE REQUIRED INSPECTIONS OR TESTING PERFORMED BY THE TESTING AGENCY OR SPECIAL INSPECTOR.

7. THE CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS, AND SEQUENCE OF CONSTRUCTION.

8. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONSTRUCTION MATERIALS ARE SPREAD OUT ON FRAMED FLOORS/ROOF SUCH THAT THE DESIGN LOADS LISTED ABOVE ARE NOT EXCEEDED.

SITE PREPARATION:

1. ALL FOOTINGS AND FOUNDATIONS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 1,400 PSF. FOOTINGS ARE TO BEAR ON UNDISTURBED SOIL OR SATISFACTORY, COMPACTED STRUCTURAL FILL AS APPROVED BY THE GEOTECHNICAL ENGINEER.

2. CONTRACTOR TO INVESTIGATE ACTUAL LOCATIONS OF UNDERGROUND LINES AND UTILITIES BEFORE EXCAVATING, AND ADVISE ENGINEER OF ANY VARIATIONS. ALL EXCAVATIONS NEAR THESE LINES TO BE CARRIED OUT WITH EXTREME CAUTION.

3. RETAINING WALLS SHALL BE BACKFILLED WITH #57 CRUSHED STONE PLACED IN A 45-DEGREE WEDGE EXTENDING FROM THE BACK OF THE FOOTING HEEL. STONE SHALL BE COMPACTED IN 1'-0" MAX. LIFTS.

4. THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER IF AVAILABLE AND FOLLOW ALL REQUIREMENTS.

5. THE OWNER SHALL HIRE A GEOTECHNICAL ENGINEER TO REVIEW THE FOUNDATION BEARING SURFACE AND ENSURE THAT THE ALLOWABLE SOIL BEARING LISTED ABOVE THAT WAS USED IN THE STRUCTURAL DESIGN IS MET.

CONCRETE:

1. CONCRETE DESIGN CODE: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE – ACI 318-14.

2. UNLESS OTHERWISE NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS, CONCRETE SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.

3. UNLESS OTHERWISE NOTED, ALL DETAILING, FABRICATING STEEL SHALL BE GRADE 60, DEFORMED BARS, CONFORMING TO ASTM A615.

4. UNLESS OTHERWISE NOTED, ALL DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI-SP-66-LATEST EDITION).

5. ALL BAR SPLICES SHALL BE CLASS 'B' TENSION SPLICES. AS SPECIFIED IN ACI 318-14, UNLESS OTHERWISE NOTED, REINFORCEMENT SHALL NOT BE WELDED UNLESS APPROVED BY THE ENGINEER.

TENSION LAP SPlice LENGTHS		
BAR SIZE	fc=4000 psi	
	TOP BARS	OTHER BARS
	B	B
#3	25"	19"
#4	33"	25"
#5	41"	31"
#6	49"	37"
#7	71"	54"
#8	81"	62"
#9	91"	70"
#10	102"	79"
#11	114"	87"
NOTES: 1. ABOVE CHART IS APPLICABLE TO GRADE 60 REINFORCEMENT. 2. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CAST BELOW THE BAR. 3. WHEN BAR COVER IS EQUAL TO OR LESS THAN THE BAR DIAMETER OR THE BAR SPACING IS TWICE THE BAR DIAMETER OR LESS, SPlice LENGTHS SHALL BE INCREASED BY 100%.		

6. ALL EMBEDDED STRUCTURAL STEEL SHALL BE ASTM A36, UNLESS NOTED OTHERWISE. ANCHOR BOLTS SHALL BE A307 UNLESS NOTED OTHERWISE. ALL BOLTS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE GALVANIZED OR STAINLESS STEEL.

7. INTERSECTING WALLS SHALL BE KEYED IF POURED SEPARATELY. RUN HORIZONTAL WALL REINFORCING CONTINUOUSLY INTO INTERSECTING WALL.

8. PROVIDE 2 – #4 DIAGONAL RODS IN THE TOP FACE OF SLAB ON GRADE AT ALL RE-ENTRANT CORNERS.

9. EXTEND REINFORCING BARS PAST RE-ENTRANT CORNERS A MINIMUM OF TENSION DEVELOPMENT LENGTH (Ld).

10. CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH 3/4"x45 DEGREE CHAMFER, UNLESS NOTED OTHERWISE.

11. UNLESS OTHERWISE NOTED, REINFORCE ALL CONCRETE SLABS ON GRADE WITH 6 x 6 – W2.9 x W2.9 WELDED WIRE FABRIC AT MID-DEPTH OF SLAB.

12. WELDED WIRE FABRIC REINFORCING SHALL LAP TWO FULL MESHES AND BE SECURELY WIRED AT EACH SIDE AND END.

13. CONTRACTOR TO REFER TO DRAWINGS OF OTHER TRADES AND VENDOR DRAWINGS FOR EMBEDDED ITEMS AND RECESSES NOT SHOWN ON THE STRUCTURAL DRAWINGS.

14. SHEAR KEYS TO BE 2x4 NOMINAL UNLESS OTHERWISE NOTED.

15. SET ALL FLOOR DRAINS 1/2" BELOW FIN. FLOOR ELEVATION AND PROVIDE 4'-0" DIA. SLOPED AREA AROUND DRAIN, UNLESS OTHERWISE NOTED.

16. PROVIDE CONCRETE COVERAGE OF REINFORCEMENT AS FOLLOWS:
(PER ACI 318)
FOOTINGS: 3" BOTTOM & SIDES.....1 1/2" TOP
WALLS:.....1 1/2"
PEDESTALS:.....1 1/2" CLEAR OF TIES

17. PROVIDE CORNER BARS TO SPlice WITH ALL CONTINUOUS REINFORCEMENT.

18. ALL CONCRETE SHALL BE CURED USING WET METHODS OR CURING COMPOUND PER ACI 301. COMPLY WITH ACI 301 FOR MIXING, TRANSPORTING, FORMING, PLACING, AND CURING CONCRETE.

19. FOR PEDESTAL AND VERTICAL WALL REINFORCING, DOWEL TO FOUNDATION WITH HOOKED BARS OF THE SAME SIZE AND SPACING AS VERTICAL BARS.

CONCRETE:

20. MAXIMUM SPACING OF CONTROL JOINTS IN SLABS SHALL BE 12'-0" EACH WAY UNLESS SHOWN OTHERWISE ON THE PLANS.

21. ALL EPOXY SHALL CONFORM TO THE REQUIREMENTS OF HILTI HY 200 OR APPROVED EQUAL.

22. CONCRETE MIX REQUIREMENTS:
-PORTLAND CEMENT: ASTM 150, TYPE 1
-FLY ASH: CLASS F OR C (25% OF CEMENTITIOUS MATERIALS MAXIMUM)
-AGGREGATE: ASTM 33
-MAXIMUM W/C/ RATIO: 0.48
-MINIMUM CEMENTITIOUS MATERIAL: 520LB/CU. YD.
-SLUMP LIMIT: 4" ±1", 8" WITH VERIFIED SLUMP OF 2 TO 4 INCHES
BEFORE ADDING HIGH RANGE WATER REDUCING ADMIXTURE OR PLASTICIZING ADMIXTURE, ±1 INCH.
-AIR CONTENT: NOT TO EXCEED 3%.

MASONRY:

1. MASONRY DESIGN CODE: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-13/ASCE 5-13/ TMS 402-13).

2. ALL REINFORCED CONCRETE MASONRY WALLS AND ALL EXTERIOR CONCRETE MASONRY WALLS SHALL HAVE A SPECIFIED COMPRESSIVE STRENGTH (f'm) OF 1500 PSI AND SHALL BE CONSTRUCTED WITH TYPE 'M' OR 'S' PORTLAND CEMENT-LIME MORTAR. GROUT ALL CELLS OF REINFORCED MASONRY WITH MASONRY GROUT PER ASTM C476.

3. REINFORCEMENT SHALL BE GRADE 60.

4. MINIMUM LAP SPlice LENGTHS SHALL BE 48 BAR DIAMETERS.

5. ALL CMU WALLS SHALL HAVE CONTINUOUS 8" DEEP BOND BEAMS (WITH 2-#5 BARS) AS NEAR TOP OF WALL AS PRACTICAL AND/OR AT BEARING ELEVATIONS AS SHOWN ON DETAILS. BOND BEAMS SHALL BE CONTINUOUS AT CORNERS, USING CORNER BARS TO SPlice WITH CONTINUOUS REINFORCEMENT. BOND BEAMS TO BE CONTINUOUS AT CONTROL JOINTS AND EXPANSION JOINTS UNLESS OTHERWISE DETAILED. PROVIDE DUMMY JOINTS WHERE CONTROL JOINTS INTERSECT BOND BEAMS.

6. UNLESS OTHERWISE NOTED OR DETAILED, HORIZONTAL WALL REINFORCING SHALL BE PROVIDED IN ALL MASONRY WALLS (9 GAUGE MIN), INTERIOR AND EXTERIOR, AT 16" O.C. VERTICALLY. STOP REINFORCING EACH SIDE OF CONTROL JOINTS.

7. REINFORCE CMU WALLS VERTICALLY WITH FULL HEIGHT BARS GROUTED IN VERTICAL CELL AT CORNERS, EACH SIDE OF OPENINGS, EACH SIDE OF CONTROL JOINTS OR EXPANSION JOINTS, AND AT THE FOLLOWING MAXIMUM SPACING UNLESS SHOWN OTHERWISE ON THE DRAWINGS. VERTICAL REINFORCING SHALL EXTEND THROUGH GROUTED BOND BEAM AT TOP OF WALL AND TERMINATE 2" FROM TOP OF MASONRY WALL.

12" CMU #5 AT 4'-0" MAXIMUM SPACING
8" CMU #5 AT 4'-0" MAXIMUM SPACING

8. GROUT FILL ALL REINFORCED CELLS TO FULL HEIGHT. GROUT FILL ALL CELLS OF MASONRY BELOW TOP OF SLAB ON GRADE ELEVATION.

9. FILL FIRST MASONRY CELL EACH SIDE OF WALL OPENINGS FULL HEIGHT OF JAMBS WITH MASONRY GROUT.

10. CMU SHALL BE LAID IN RUNNING BOND.

11. LOCATE CONTROL JOINTS AT THE FOLLOWING LOCATIONS: (UNLESS OTHERWISE SPECIFIED BY ARCHITECT)

AT A SPACING OF NOT MORE THAN 25'-0". AT A DISTANCE OF NOT OVER 12'-0" FROM BONDED INTERSECTIONS AND CORNERS, AT CHANGES IN WALL HEIGHT, AT CHANGES IN WALL THICKNESS, ABOVE JOINTS IN FOUNDATIONS AND FLOORS, AND AT EACH SIDE OF ABUTTED PILASTERS COLUMNS, ETC.

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				DSGN: RPB DATE: 5/2022	
				DRWN: RPB DATE: 5/2022	
				CHKD: DATE:	
				QA/QC: DATE:	

JAYCEE PARK
FIELDS & PARKING IMPROVEMENTS

CITY OF HATTIESBUG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY



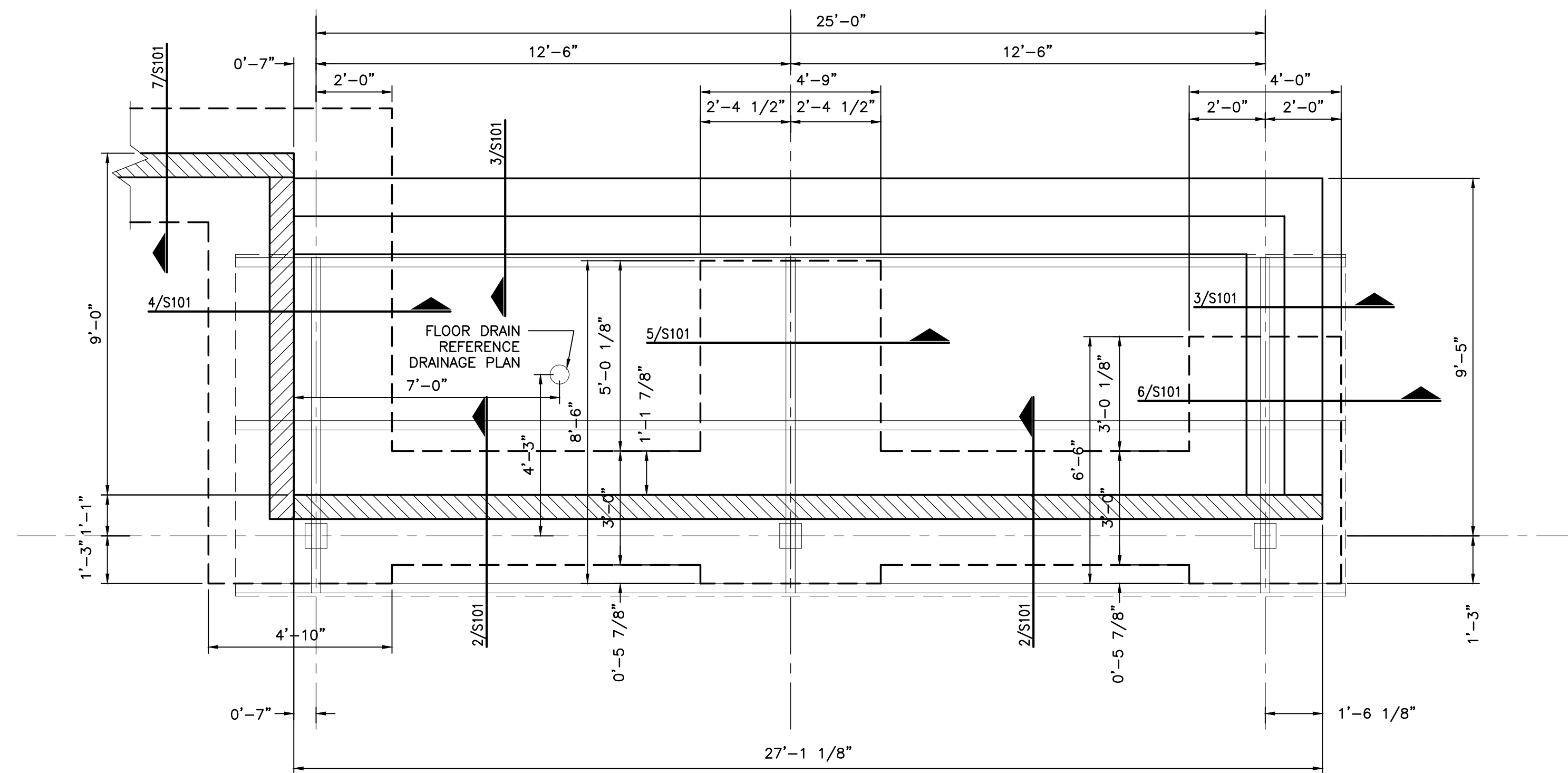
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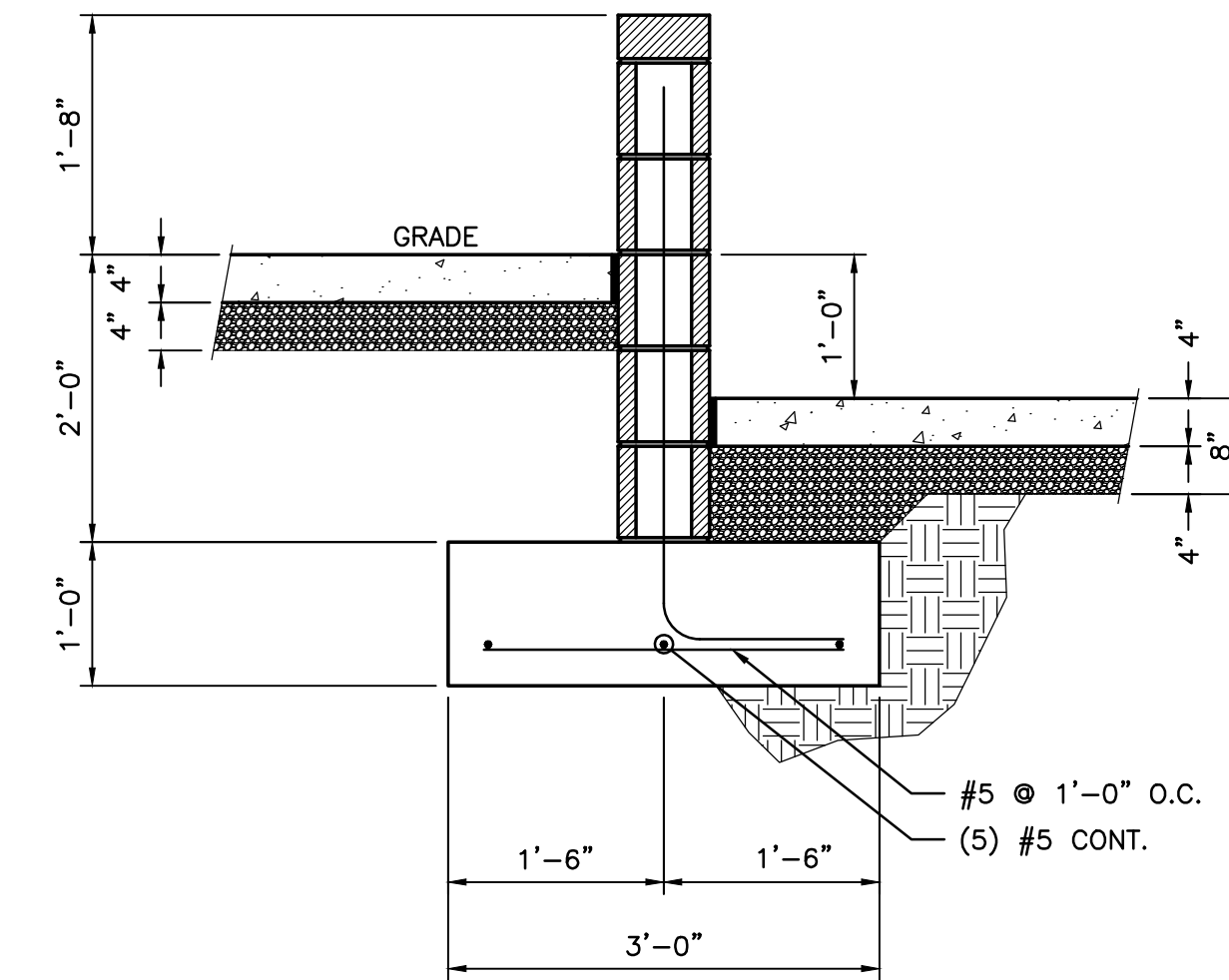
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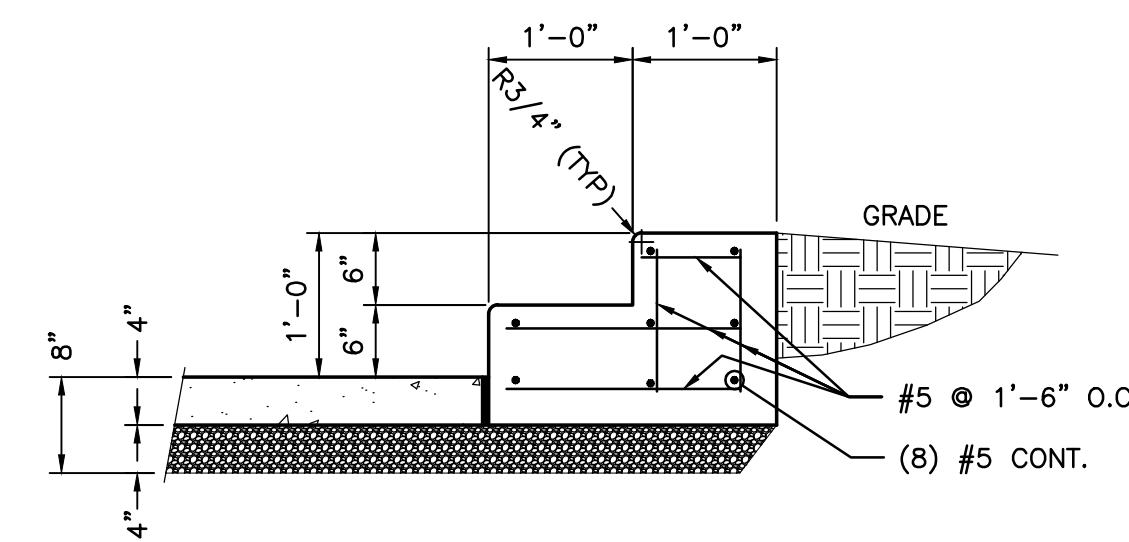
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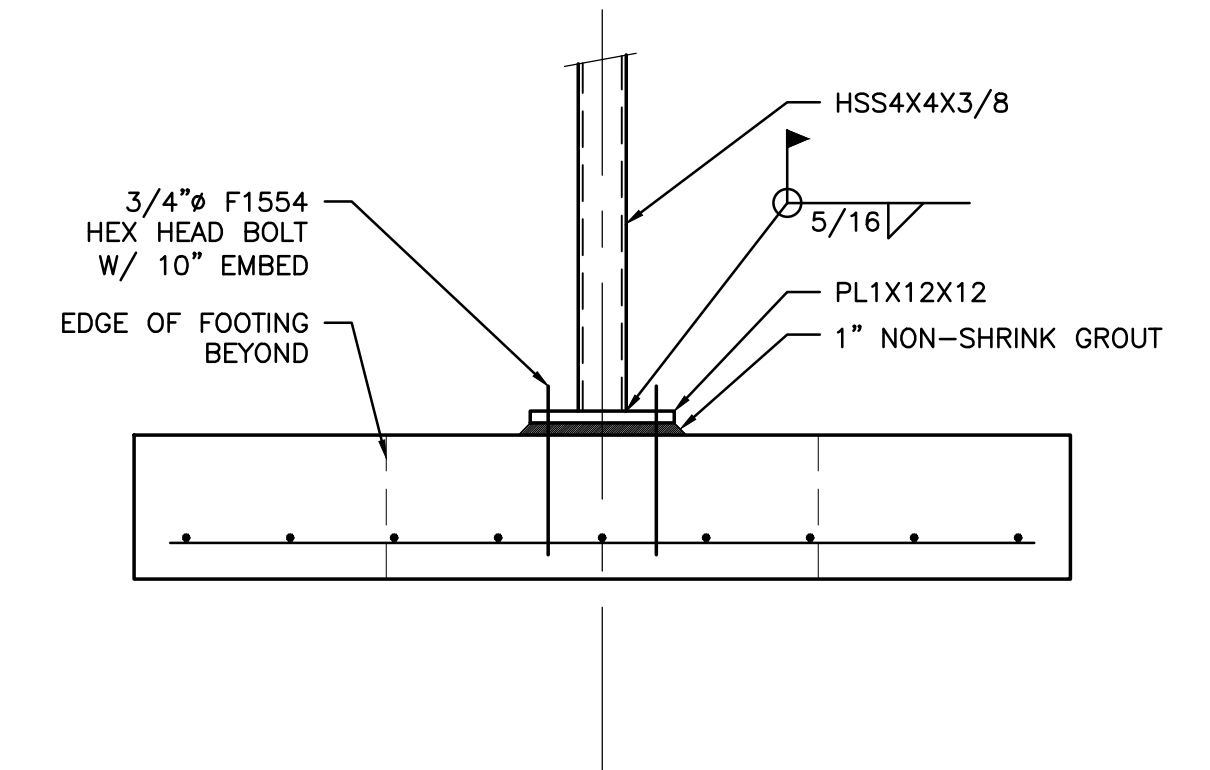
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S101 SCALE: 3/8"=1'-0"



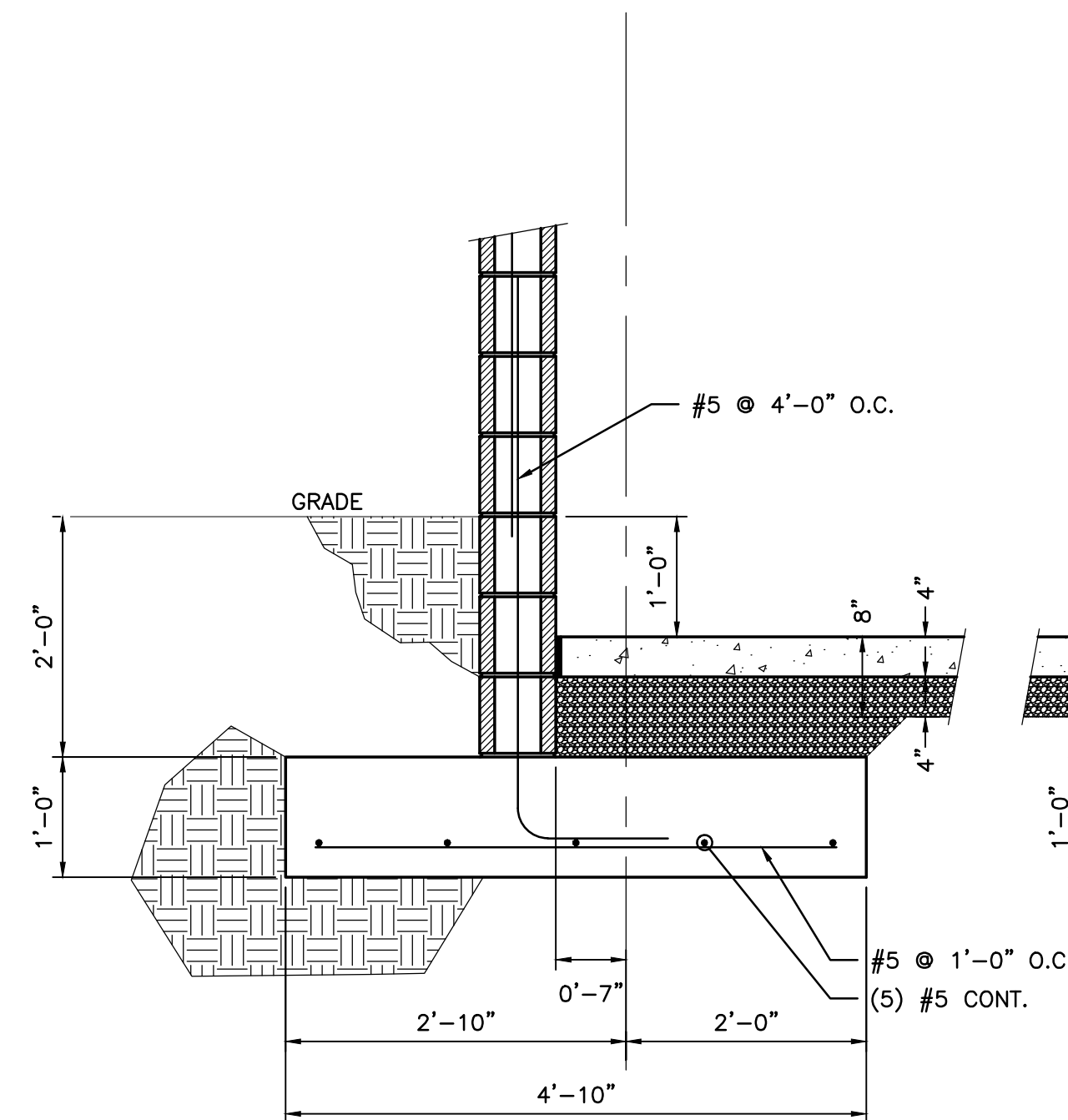
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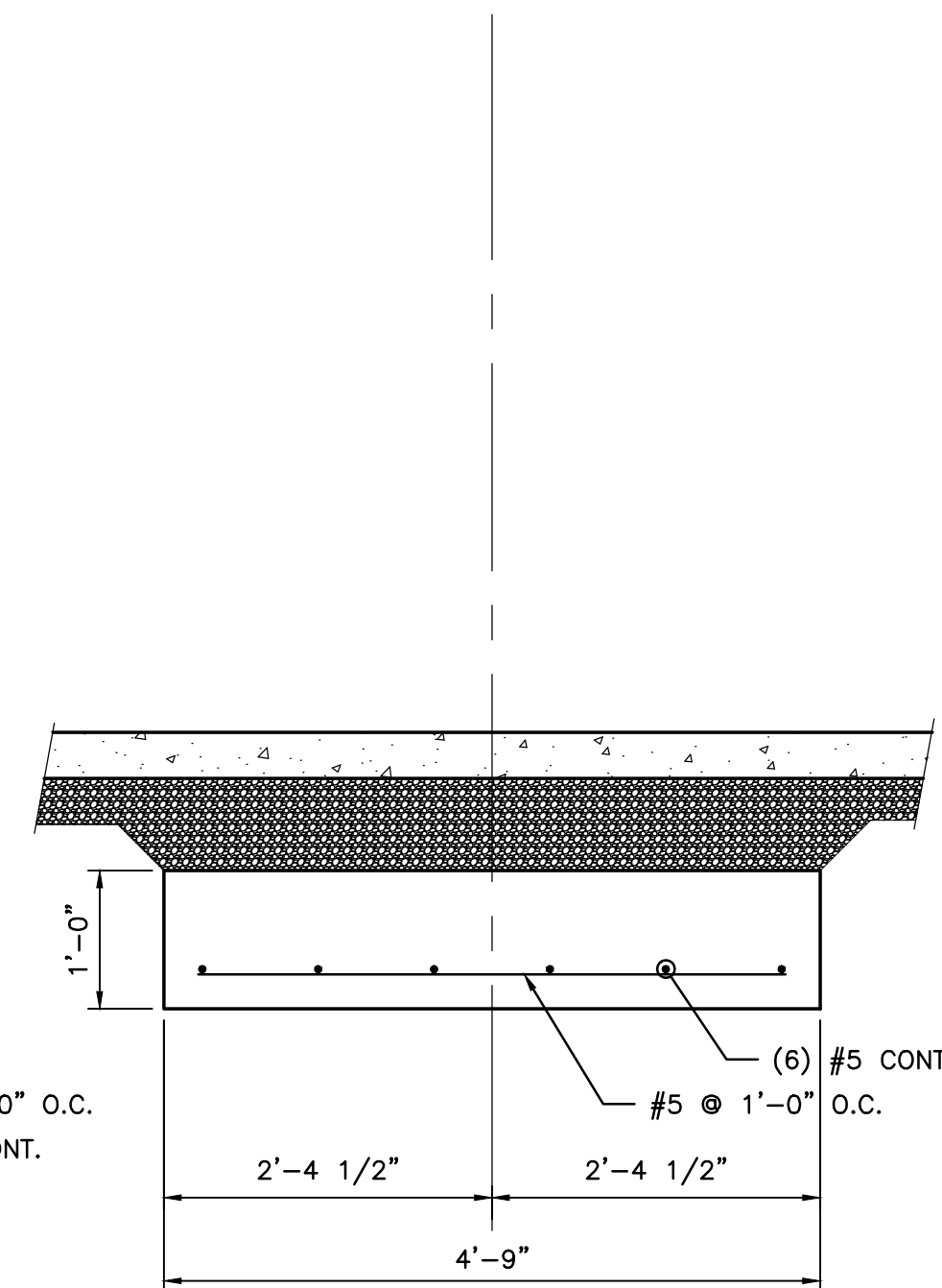
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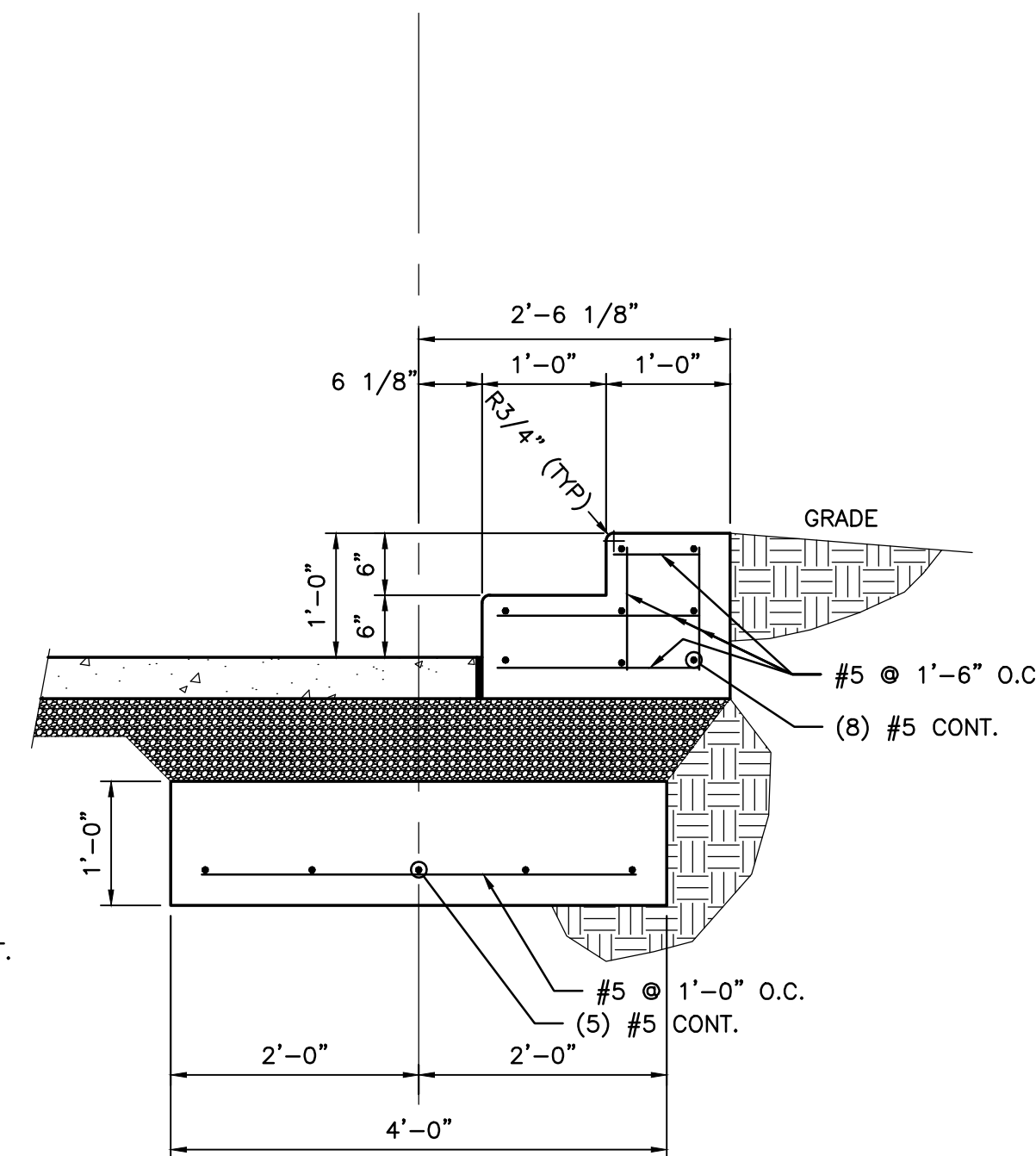
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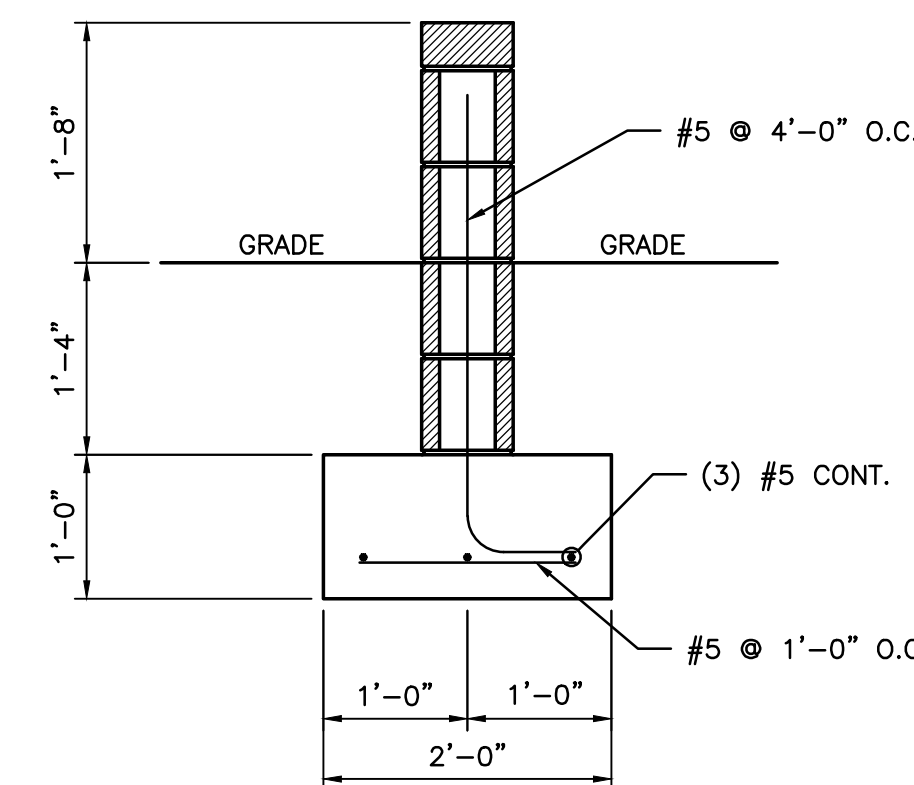
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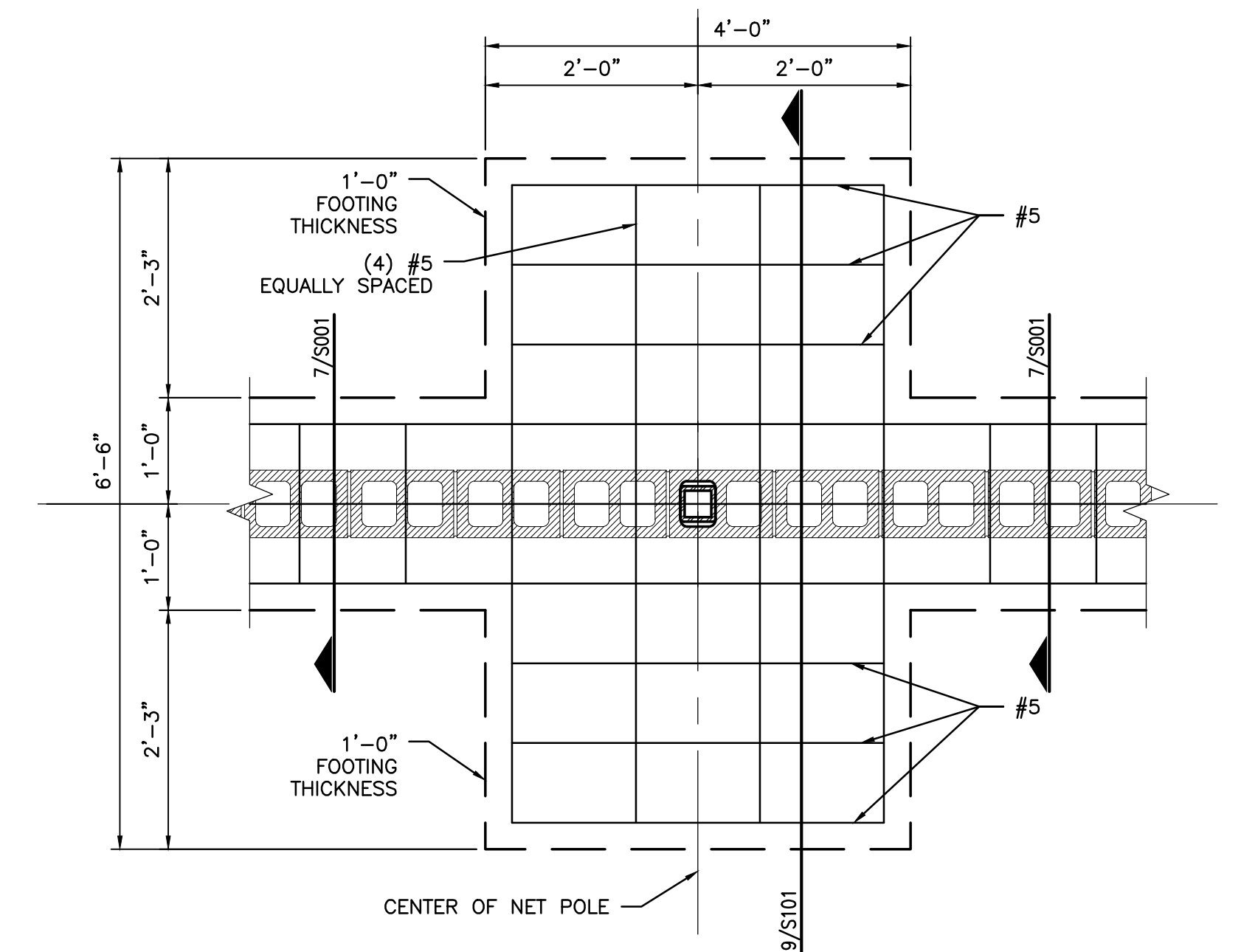
5 SECTION
S101 SCALE: 3/4"=1'-0"



6 SECTION
S101 SCALE: 3/4"=1'-0"



7 SECTION
S101 SCALE: 3/4"=1'-0"



8 PARTIAL PLAN AT NET POST
S101 SCALE: 3/4"=1'-0"

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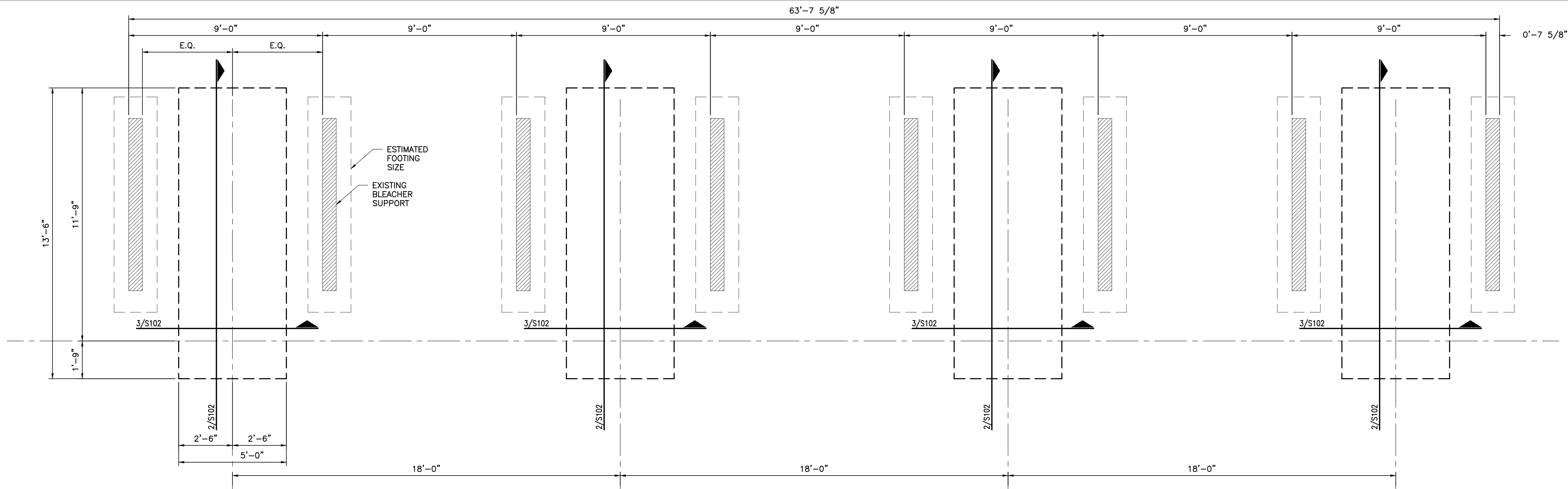
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NEEL-SCHAFFER
Solutions you can build upon

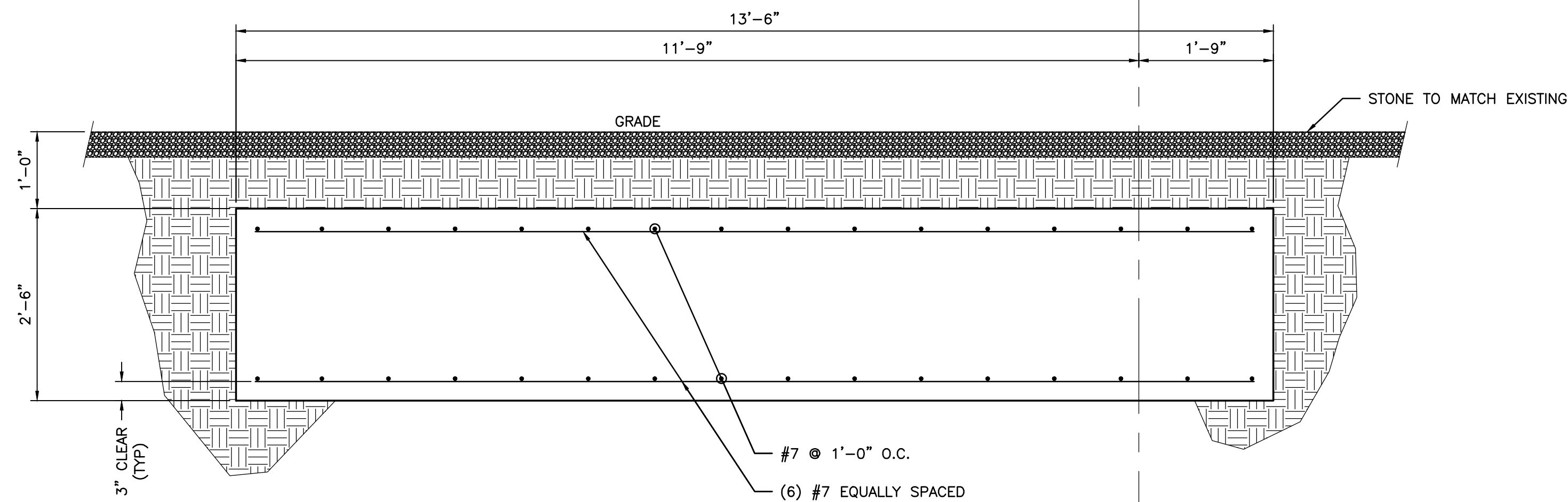
DUG-OUT FOUNDATION

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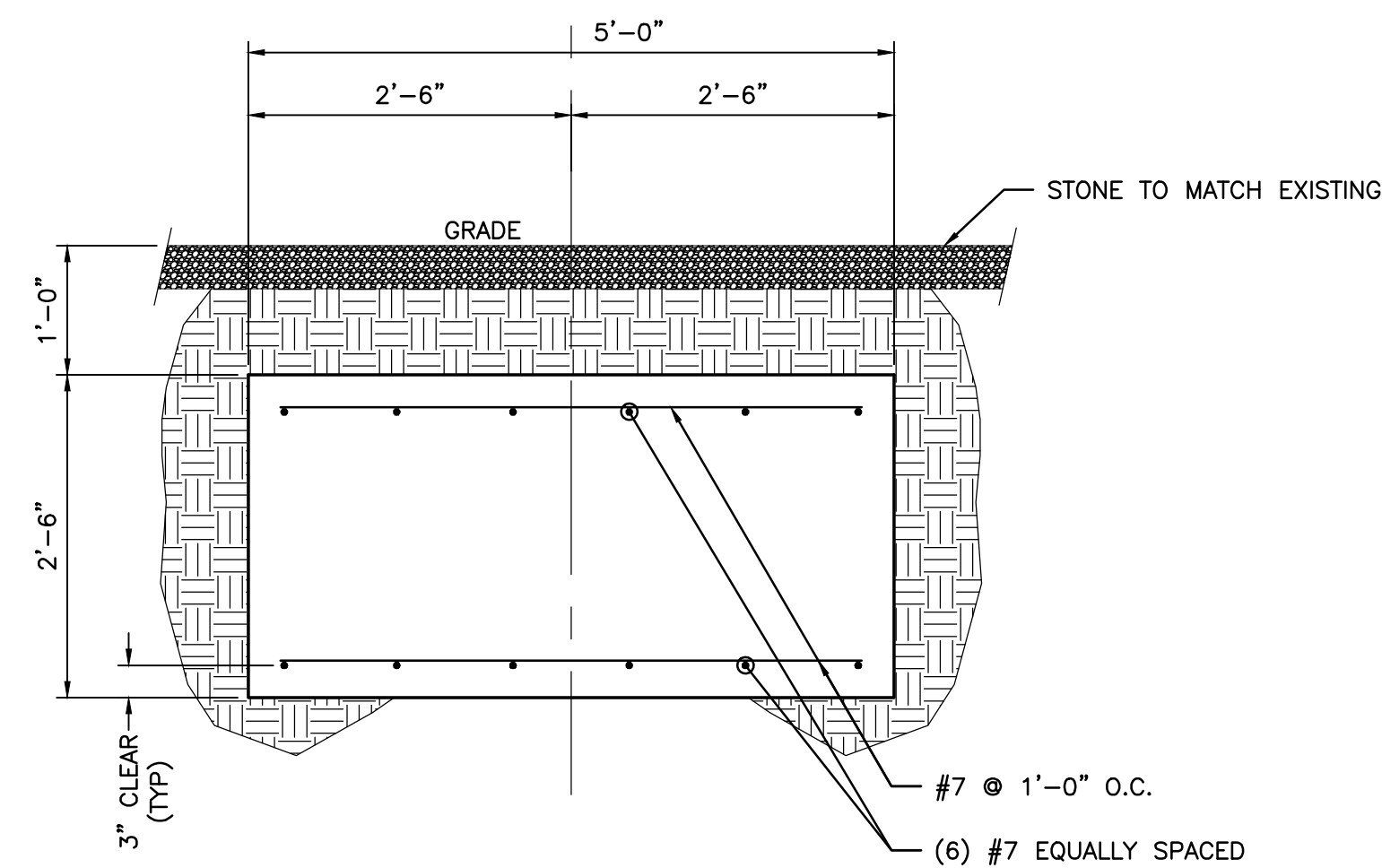
DRAWING NUMBER:
26



1 BLEACHER CANOPY FOUNDATION PLAN
 S102 SCALE: 3/8"=1'-0"



2 SECTION
 S102 SCALE: 3/4"=1'-0"



3 SECTION
 S102 SCALE: 3/4"=1'-0"

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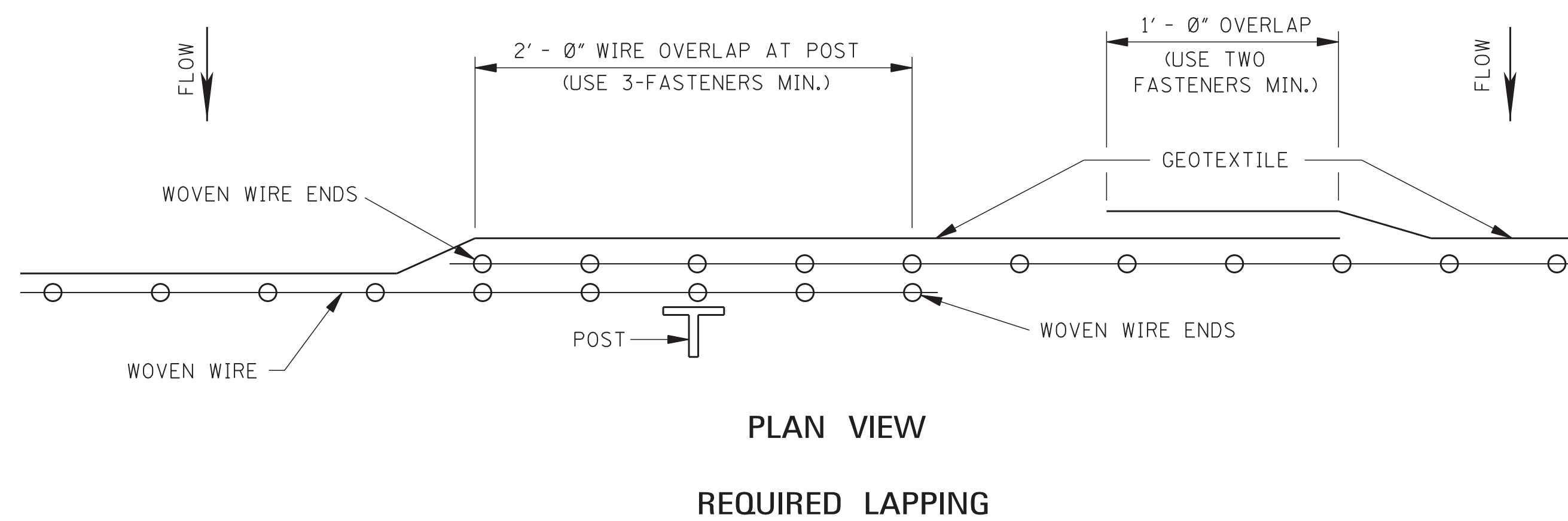
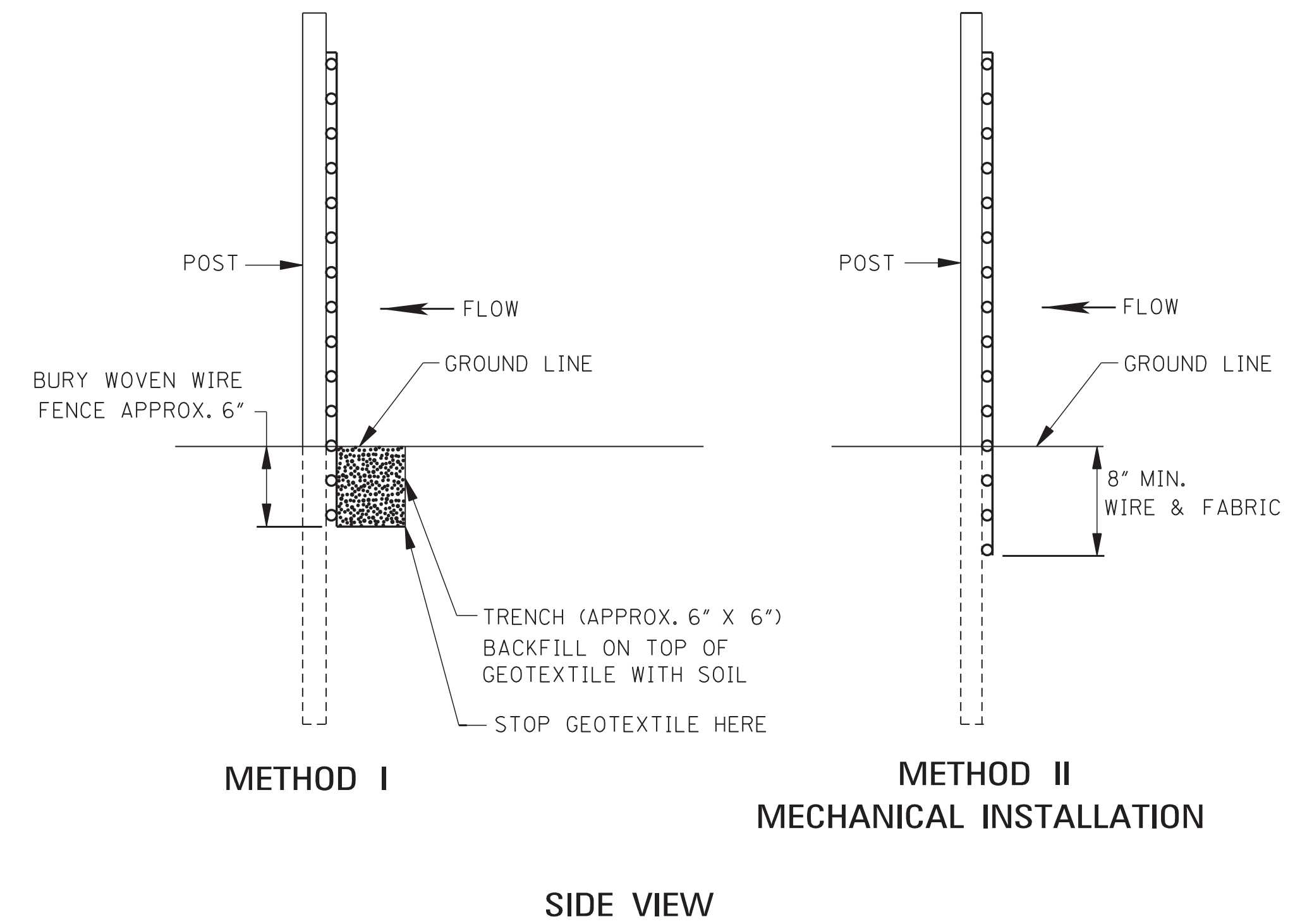
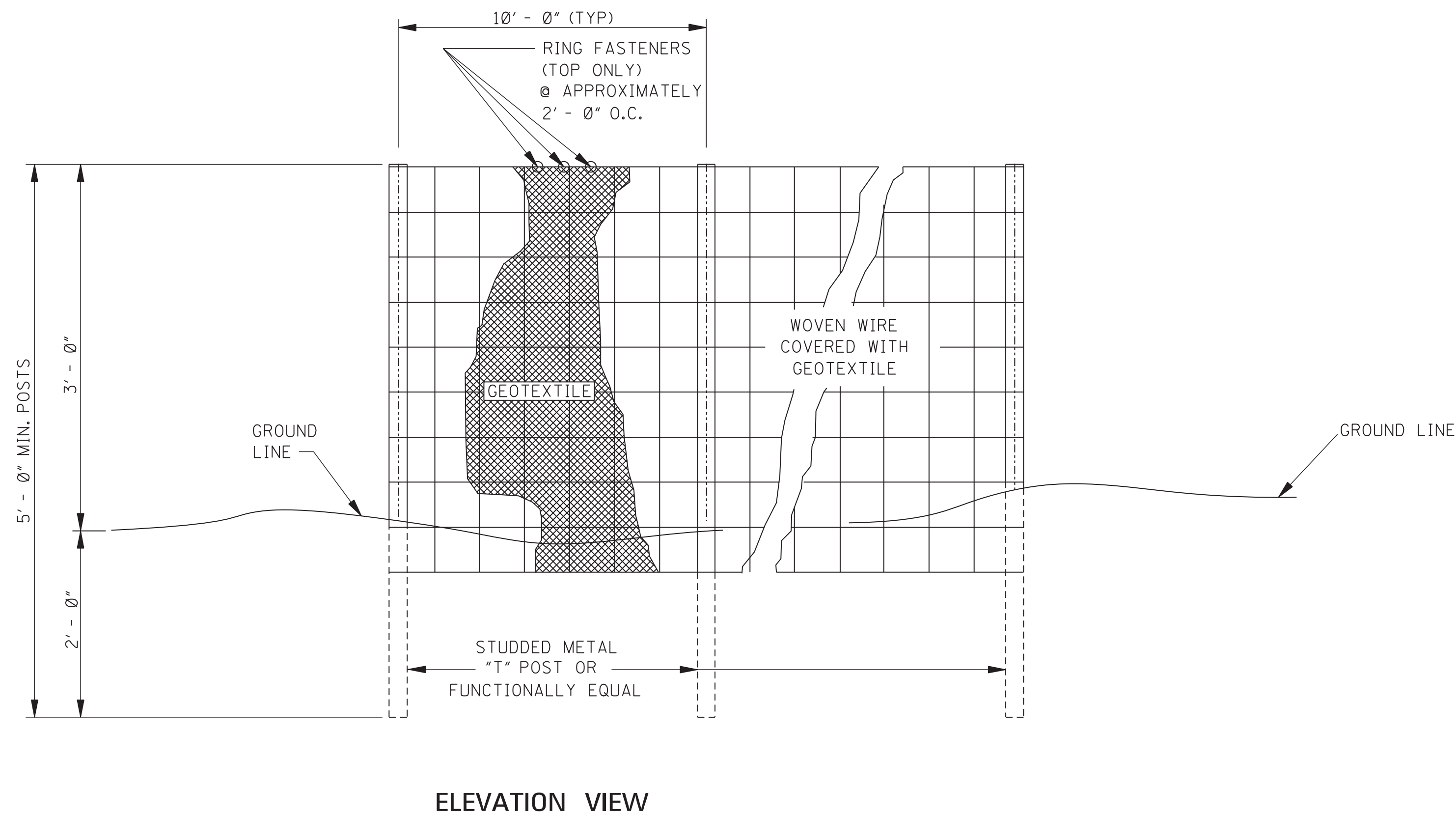
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BLEACHER CANOPY
 FOUNDATION

WORKING NUMBER:
S-102

DRAWING NUMBER:
27



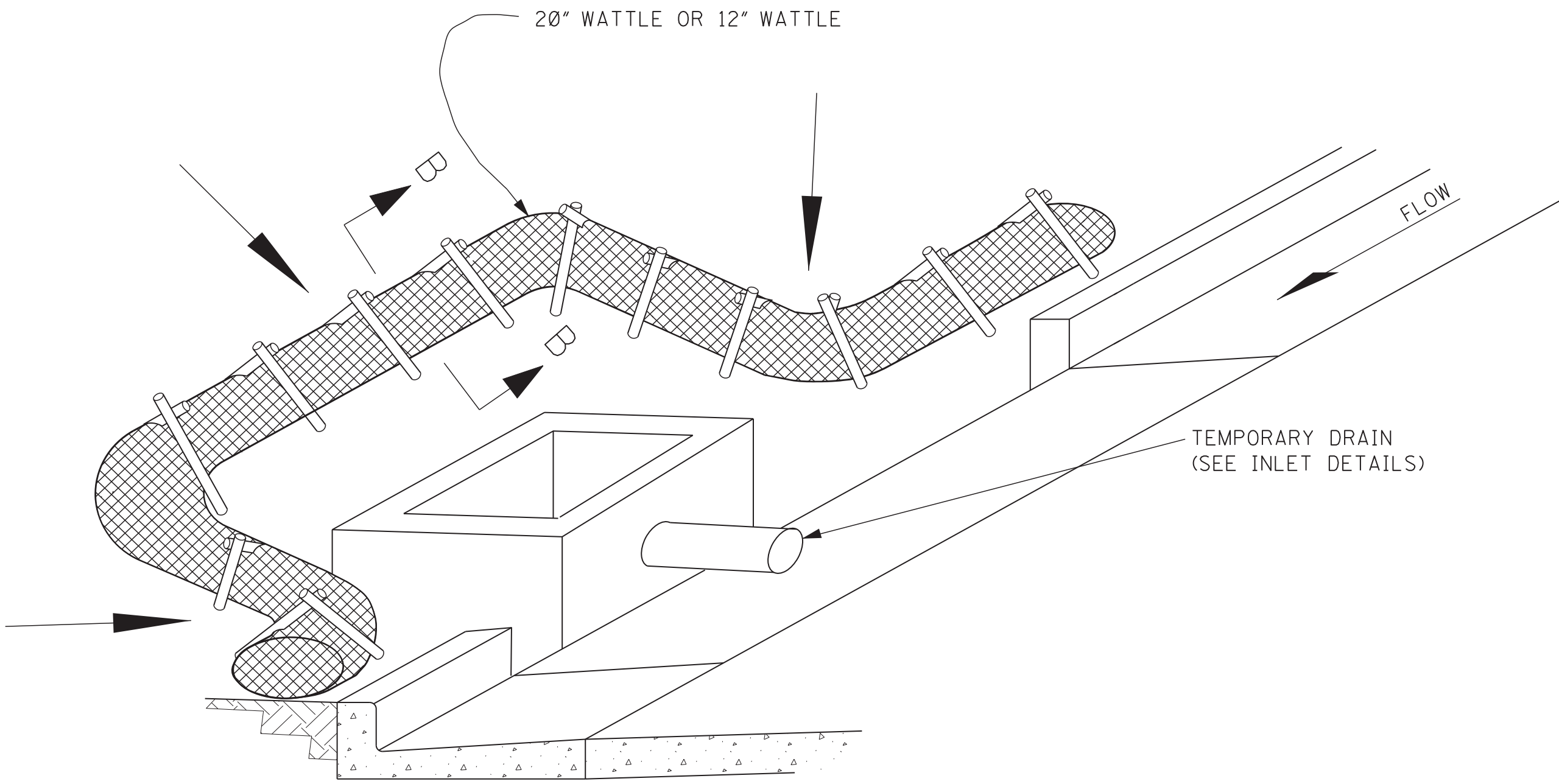
GENERAL NOTES:

1. SILT FENCES SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
2. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHOULD BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STEAMS AND CHANNELS.
3. SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
4. WHENEVER POSSIBLE SILT FENCE SHOULD BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AN FACILITATES SEDIMENTATION.
5. THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
6. METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF DETAIL.
7. WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
8. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.

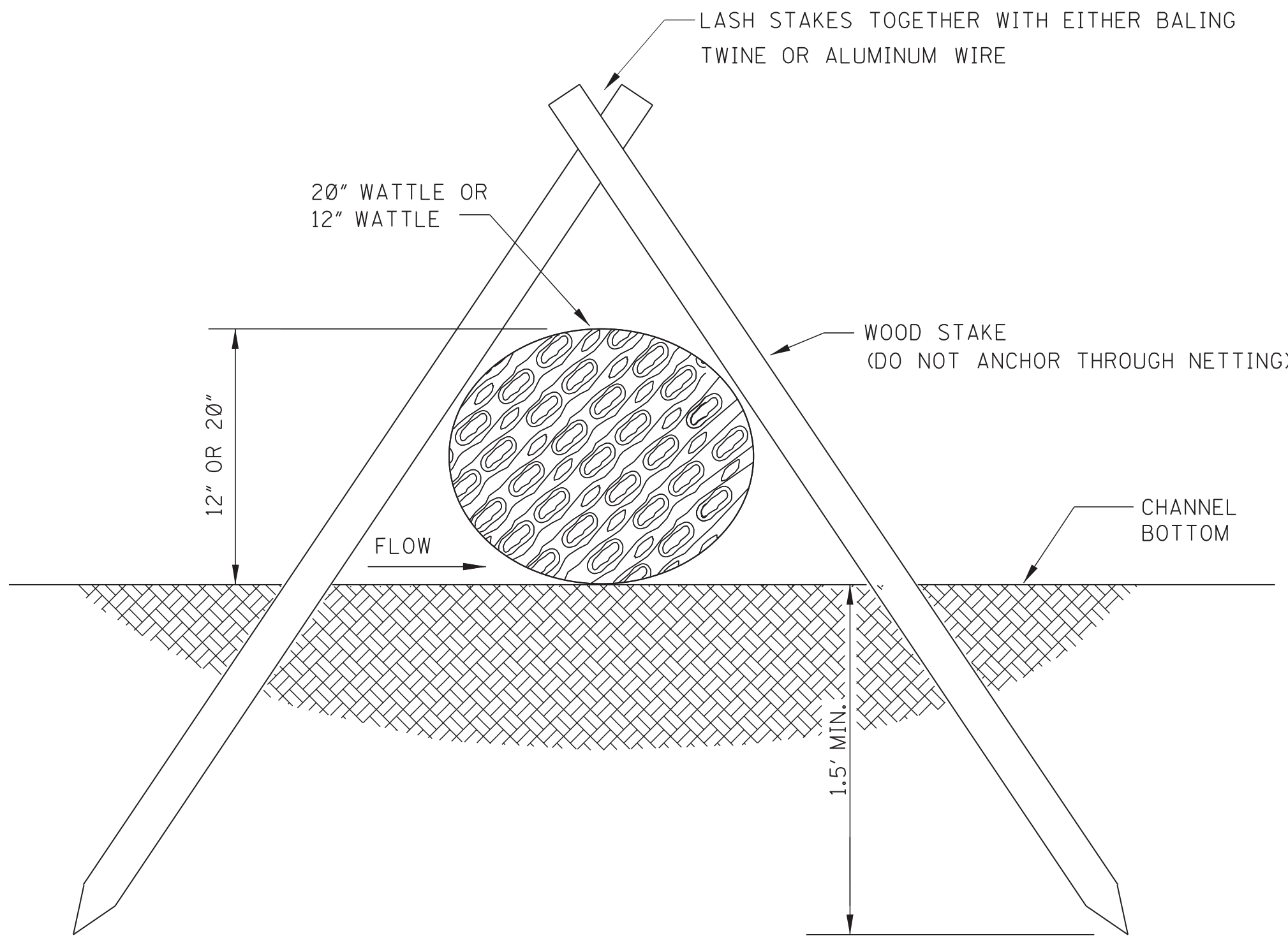
				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
				REVISION		
				DATE	ISSUE DATE: AUGUST 01, 2017	

DETAILS OF SILT FENCE INSTALLATION		
		WORKING NUMBER ECD-3
		SHEET NUMBER 6103

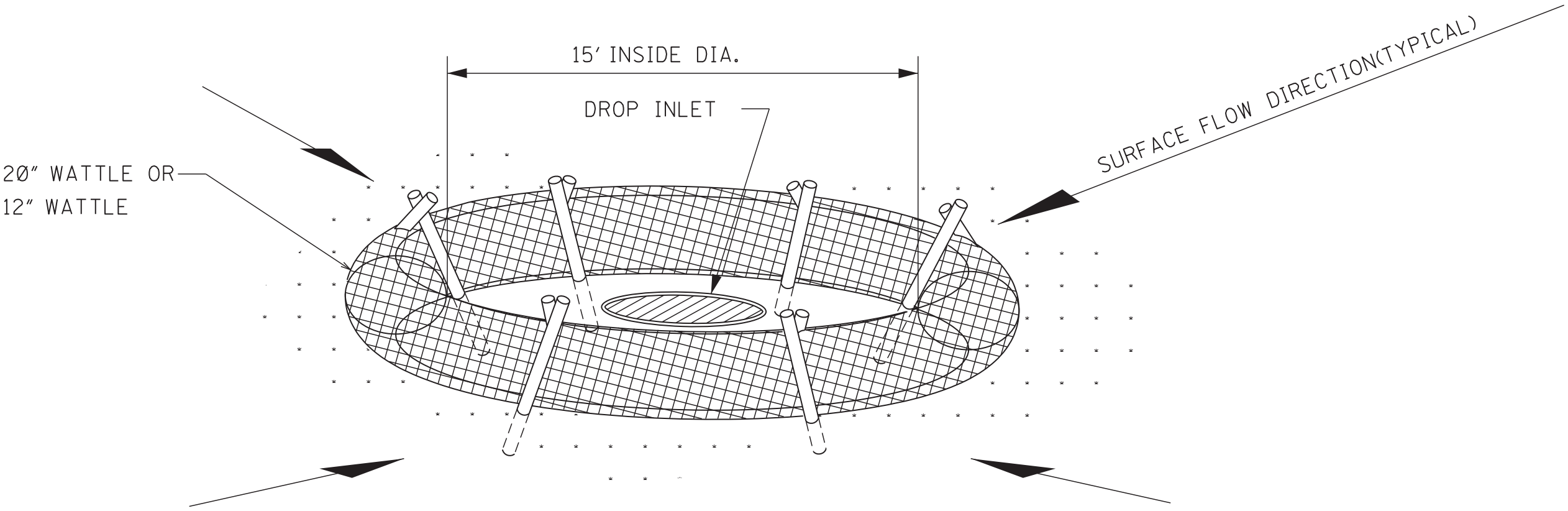
NOTE: SILT FENCE OR SANDBAGS MAY ALSO BE USED FOR THIS APPLICATION.
HAY BALES NOT ACCEPTABLE DURING THIS STAGE.



CURB INLET PROTECTION (STAGE 2)
SINGLE OR DOUBLE WING INLET



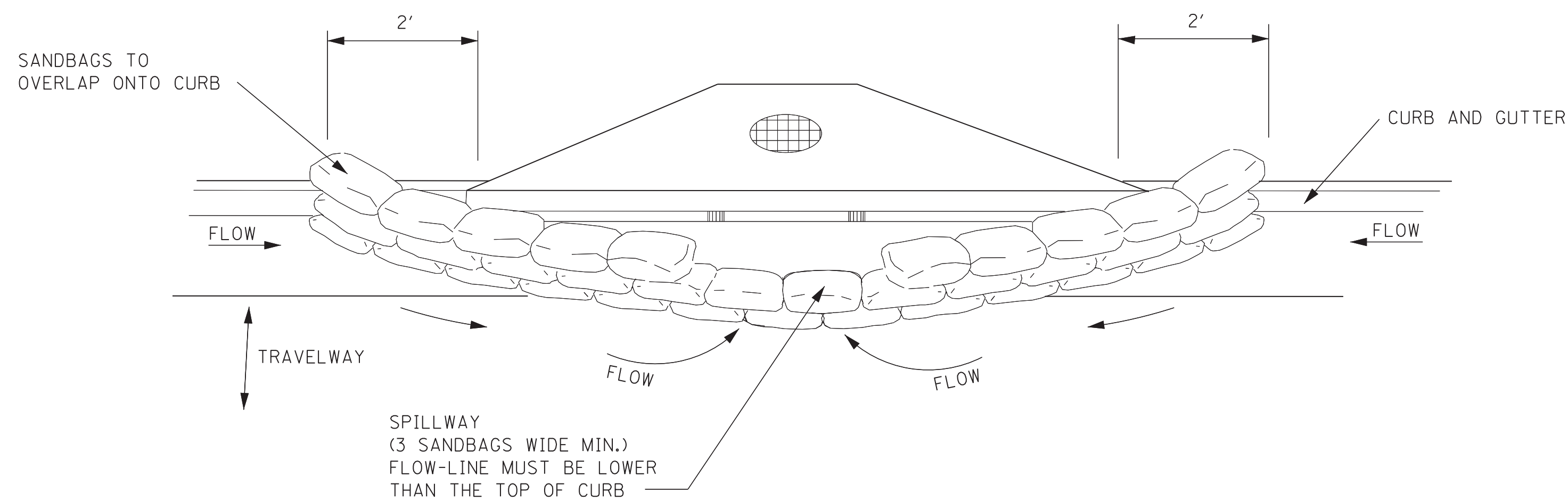
SECTION B-B



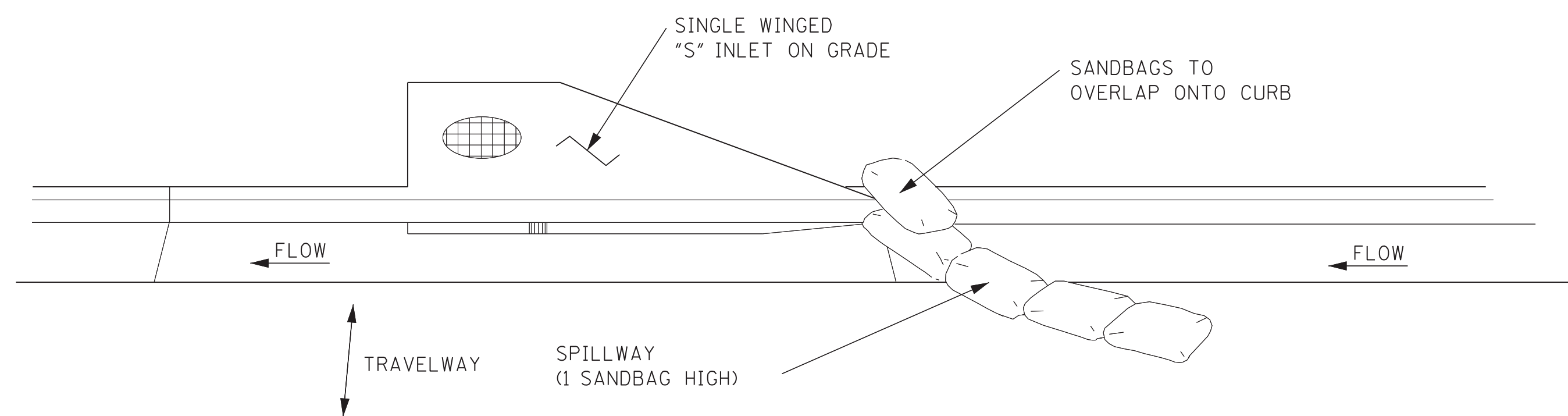
DROP INLET PROTECTION

- NOTES:
- ANCHORING STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE WATTLE. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET.
 - OVERLAP ENDS OF WATTLES PER MANUFACTURER'S RECOMMENDATIONS (1' MIN., 3' MAX.)
 - TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
 - IN THE EVENT WATTLES CANNOT BE SECURED IN PLACE USING WOOD STAKES, SANDBAGS MAY BE USED IN LIEU OF WOOD STAKES IN ORDER TO SECURE WATTLES IN PLACE. COST OF SANDBAGS USED IN THIS APPLICATION SHALL BE INCLUDED IN OTHER ITEMS BID.

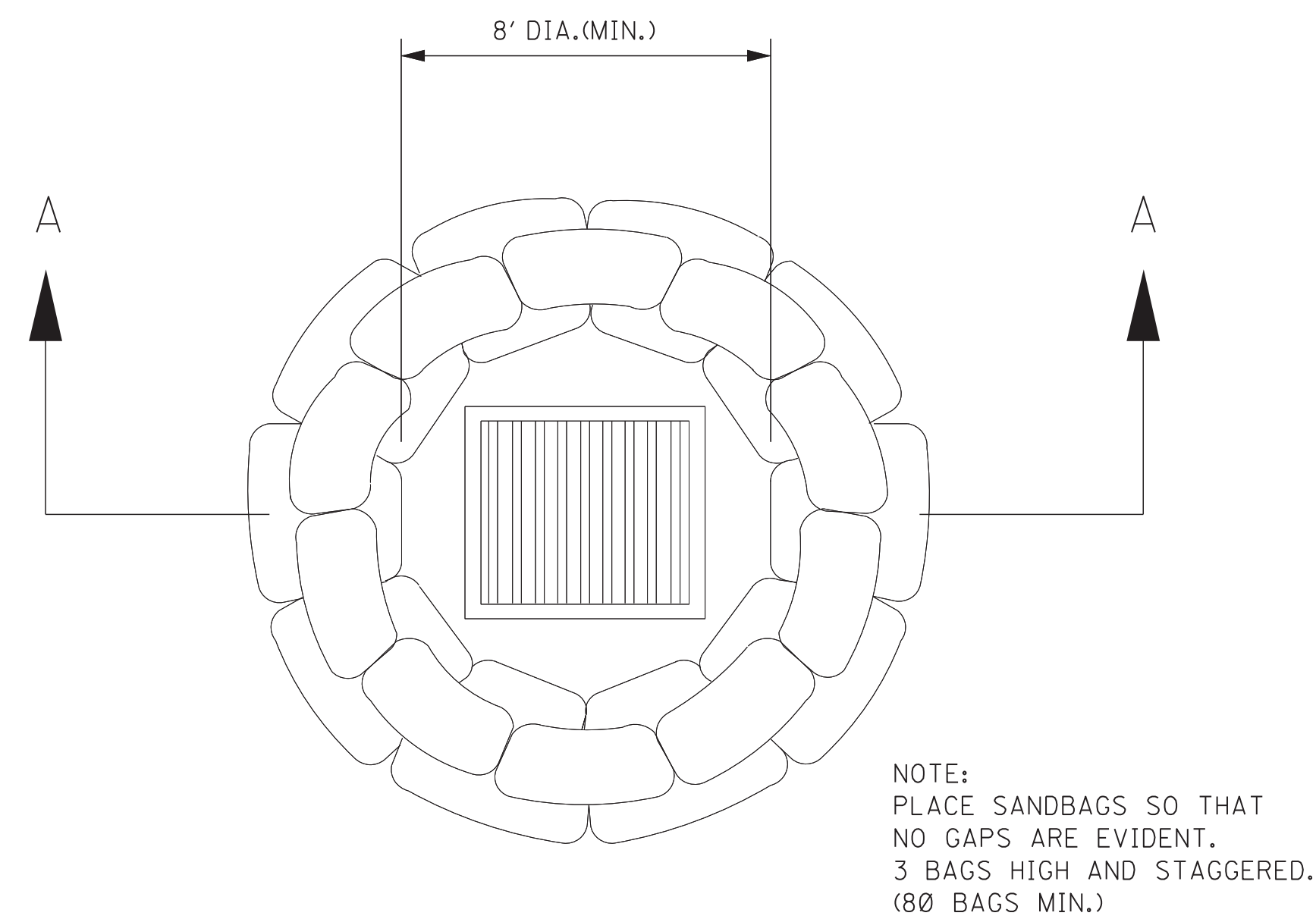
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				DATE	ISSUE DATE: AUGUST 01, 2017	
					INLET PROTECTION DETAILS OF WATTLES	
					 WORKING NUMBER ECD-13 SHEET NUMBER 6113	



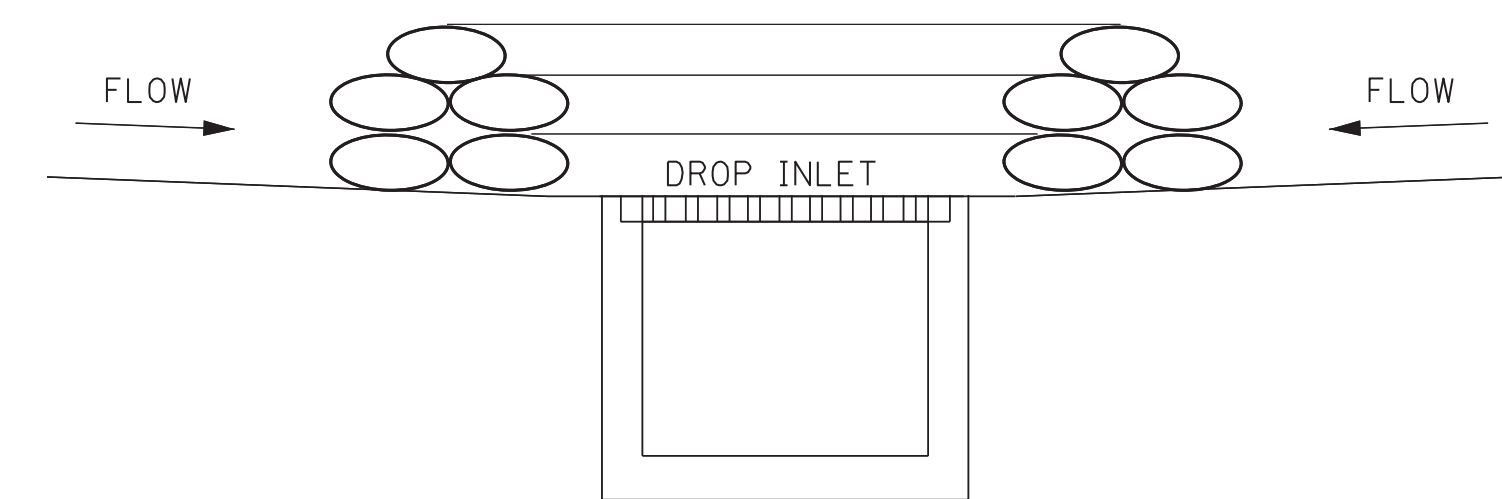
TYPICAL (SANDBAG) PROTECTION FOR INLET IN SAG



TYPICAL (SANDBAG) PROTECTION FOR INLET ON GRADE



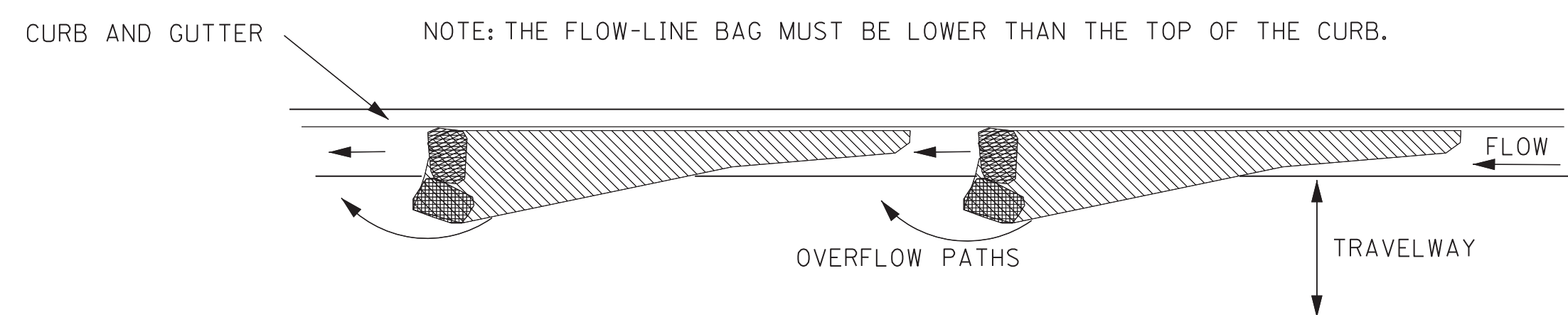
DROP INLET
PLAN VIEW



SECTION A-A
SANDBAG BARRIER

CURB INLET PROTECTION NOTES:

1. THIS CURB INLET PROTECTION METHOD CAN BE USED DURING ANY STAGE OF BASE AND PAVEMENT CONSTRUCTION.
2. BAG HEIGHT AND NUMBER OF BAGS SHOULD BE BASED ON CURB HEIGHT AND USE OF TRAVELWAY.
3. SEDIMENT SHOULD BE CONTROLLED PRIOR TO ENTERING GUTTER. GUTTER CHECKS AND INLET PROTECTION ARE FOR SECONDARY CONTROL.
4. REMOVE ACCUMULATED SEDIMENT AFTER EVERY RAINFALL. SWEEP SEDIMENT FROM HARD SURFACES AND DISPOSE OF APPROPRIATELY AWAY FROM INLETS AND/OR WATER BODIES.
5. IF DENUDED AREAS EXIST BEHIND THE INLET, A SEDIMENT BARRIER SHOULD BE INSTALLED AROUND ITS PERIMETER TO CONTROL SEDIMENT.



CURB AND GUTTER SEDIMENT
CONTAINMENT SYSTEM

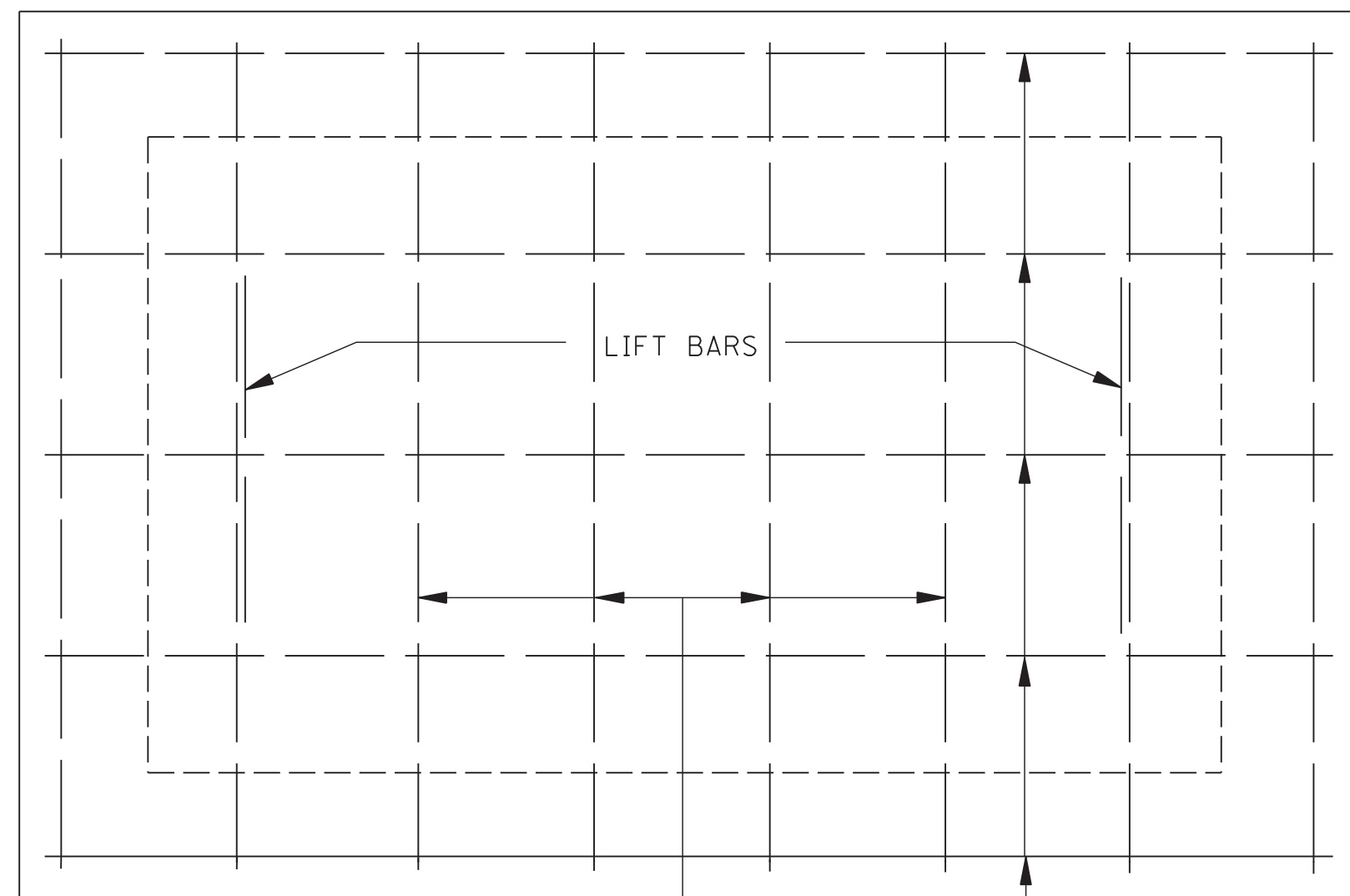
				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
				REVISION		
				DATE	ISSUE DATE: AUGUST 01, 2017	

**INLET PROTECTION
DETAILS OF SANDBAGS**

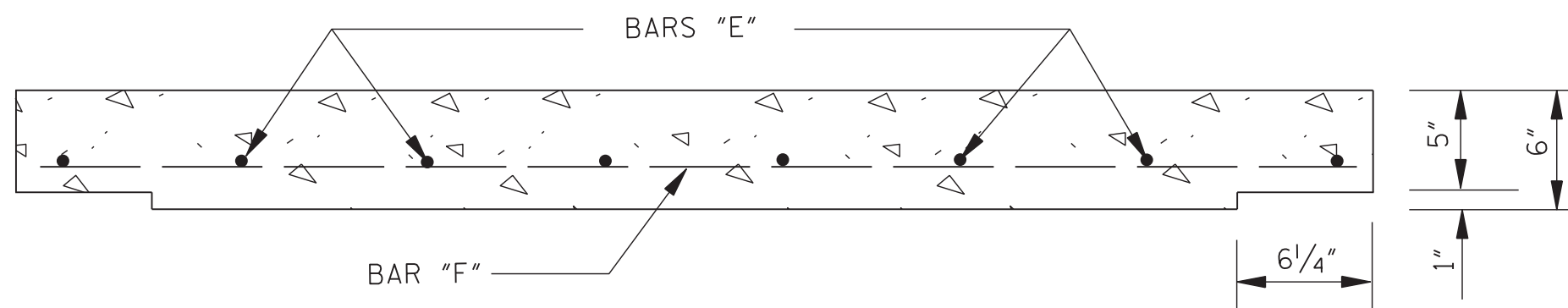
**MDOT**
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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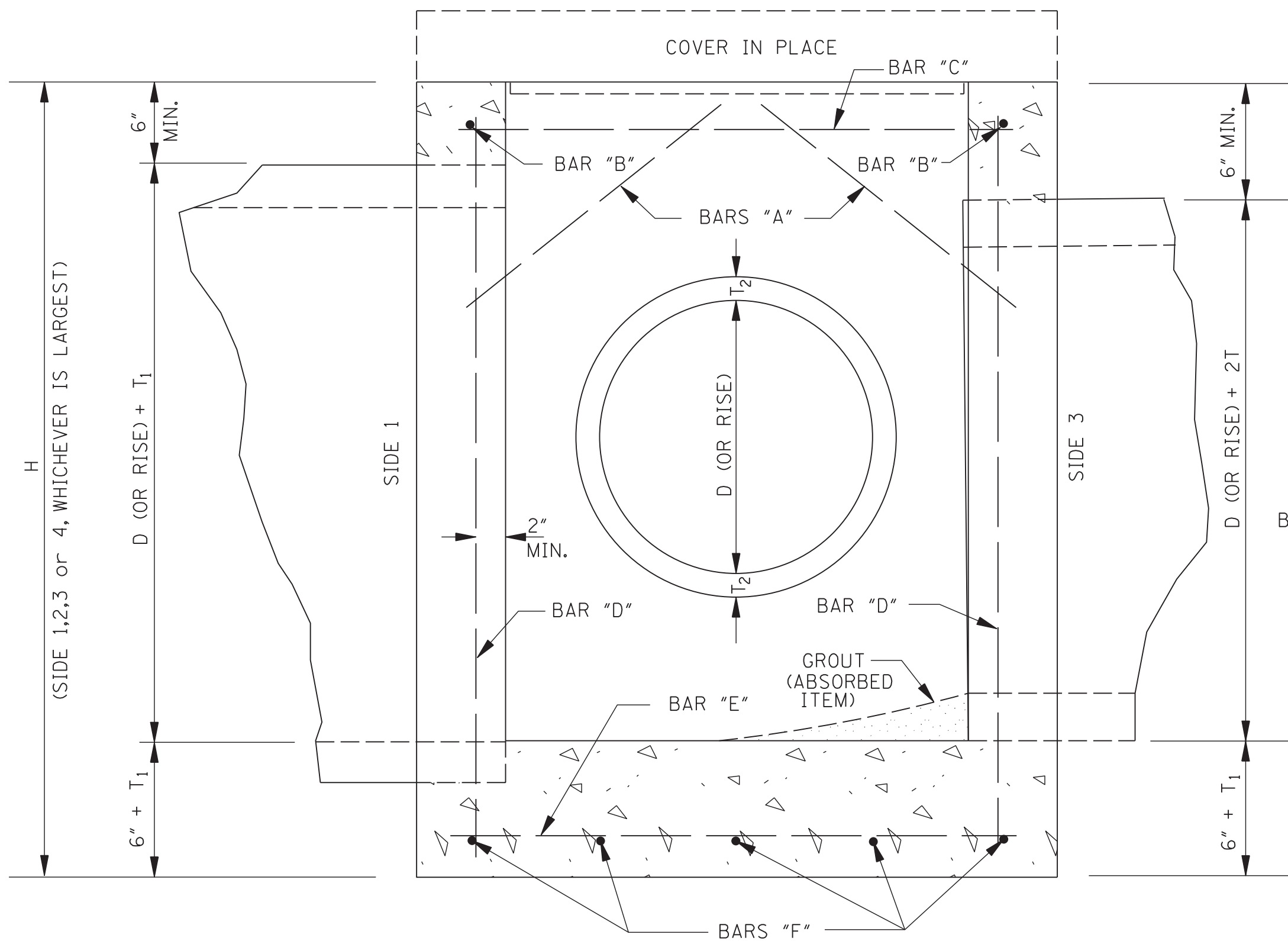
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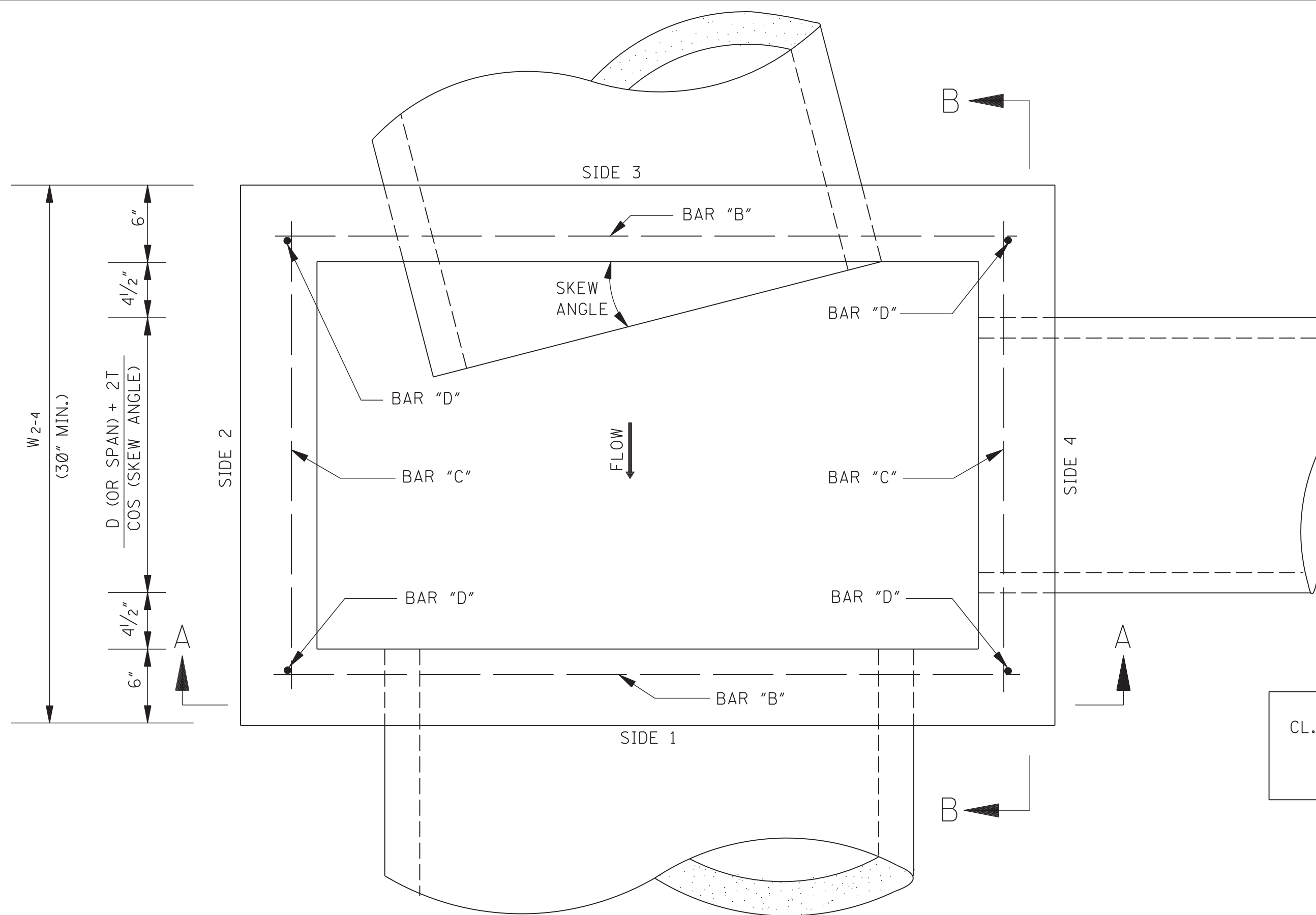
PLAN OF COVER



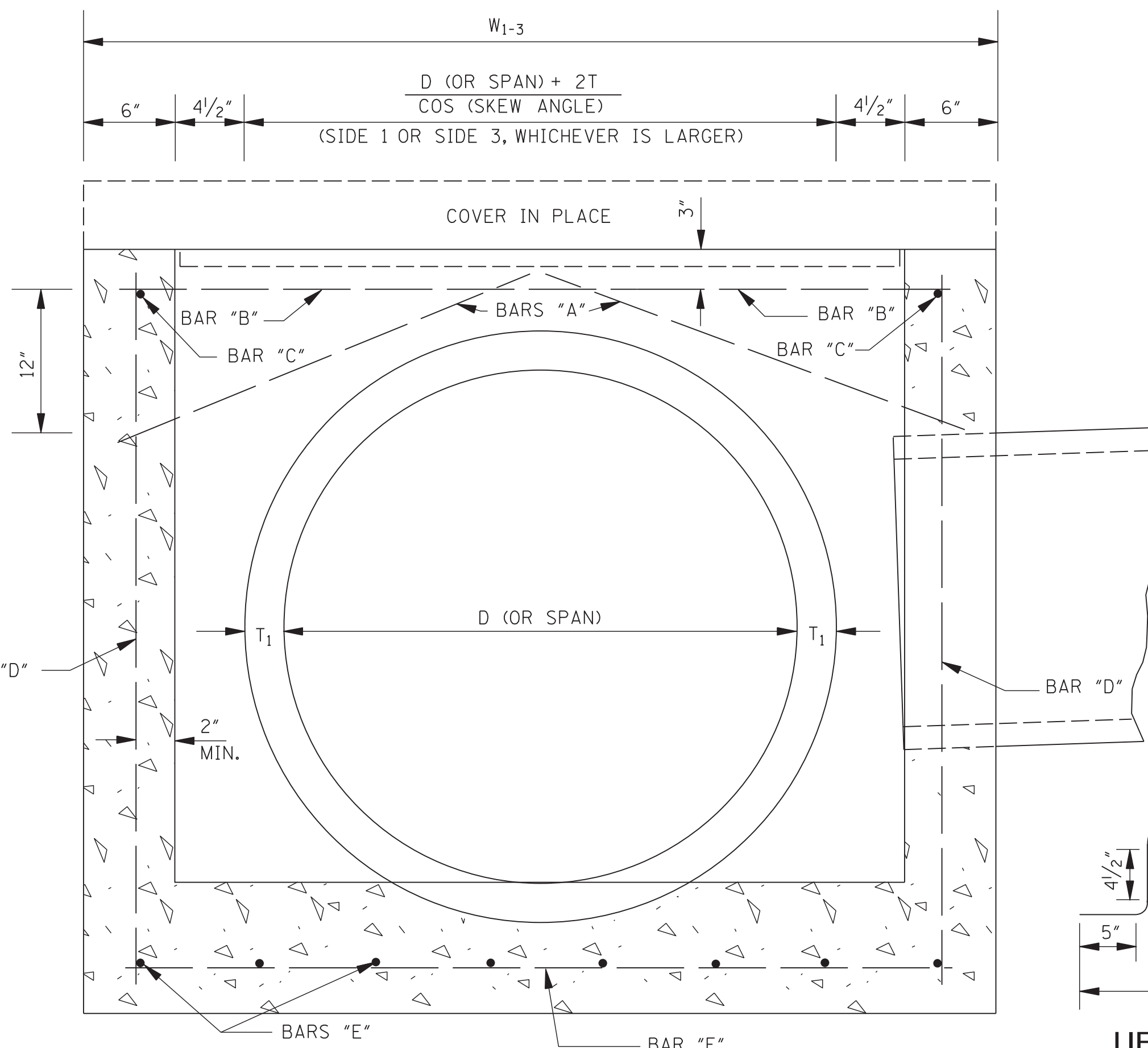
ELEVATION OF COVER



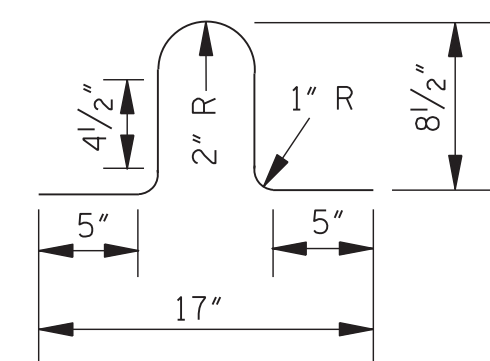
SECTION B-B



PLAN



SECTION A-A



LIFT BAR

NOTE: LIFT BAR TO BE FABRICATED FROM A #4 BAR 30" LONG. TWO LIFT BARS ARE REQUIRED. REINFORCING STEEL FOR 2 LIFT BARS = 3.3 lbs.

REINFORCING BAR LIST			
BAR	SIZE	NUMBER REQUIRED	LENGTH
A	#4	2 PER PIPE OPENING	$\sqrt{196 + \left(\frac{W^*}{2} + 2\right)^2}$
B	#4	2	$W_{1-3} - 6"$
C	#4	2	$W_{2-4} - 6"$
D	#4	4	$H - 6"$
E	#4	$2 \left[\left(\frac{W_{1-3}}{9} \right) ** + 1 \right]$	$W_{2-4} - 4"$
F	#4	$2 \left[\left(\frac{W_{2-4}}{9} \right) ** + 1 \right]$	$W_{1-3} - 4"$

NOTE: VARIABLES AND DESIGNATIONS ARE AS FOLLOWS:
D (OR SPAN) = PIPE DIAMETER (OR SPAN)
W₁₋₃ = WIDTH OF SIDE 1 & SIDE 3
W₂₋₄ = WIDTH OF SIDE 2 & SIDE 4
W* = W₁₋₃ OR W₂₋₄ (SIDE OF ENTERING PIPE)
** = ROUND TO NEAREST WHOLE NUMBER

CL. "B" CONC. (yd³) = [(Q1 + Q2) / 46,656] - Σ PIPE OPENING DEDUCTIONS
WHERE: Q1 = [5"W₁₋₃W₂₋₄] + [1"(W₁₋₃ - 12.5"W₂₋₄ - 12.5") + [(T₁ + 6")W₁₋₃W₂₋₄]
Q2 = 12"(H - (T₁ + 6")) [(W₁₋₃ - 12") + W₂₋₄]

COMMON PIPE SIZE		
CIRCULAR PIPE		
PIPE SIZE	T	PIPE OPENING DEDUCTION (yd ³)
18"	2 1/2"	0.053
24"	3"	0.091
30"	3 1/2"	0.138
36"	4"	0.196
42"	4 1/2"	0.263
48"	5"	0.340
54"	5 1/2"	0.427
60"	6"	0.524
66"	6 1/2"	0.630
72"	7"	0.747
ARCH PIPE		
PIPE SIZE	T	PIPE OPENING DEDUCTION (yd ³)
22" x 13"	2 1/2"	0.053
29" x 18"	3"	0.087
36" x 23"	3 1/2"	0.129
44" x 27"	4"	0.185
51" x 31"	4 1/2"	0.245
58" x 36"	5"	0.318
65" x 40"	5 1/2"	0.394
73" x 45"	6"	0.489

GENERAL NOTES:

- REINFORCING STEEL QUANTITIES TO BE COMPUTED FROM BAR LIST AND SHOWN ELSEWHERE ON THE PLANS.
- QUANTITIES FOR JUNCTION BOXES SHOWN ON THE PLANS WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
- CONCRETE SHALL BE CLASS "B" AND REINFORCING STEEL SHALL BE DEFORMED BARS.
- SIDE 1 OF THE JUNCTION BOX WILL ALWAYS BE THE OUTFLOW SIDE.
- IF PIPES ARE SKEWED MORE THAN 15° OR IF SKEWED PIPES PRODUCE CONFLICTS WITH ANOTHER OPENING, THE PIPE SHALL BE BROKEN BACK TO THE WALL OF THE JUNCTION BOX.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		ROADWAY DESIGN DIVISION	
DATE		STANDARD PLAN	
		JUNCTION BOX FOR PIPE CULVERTS	
		WORKING NUMBER JB-1	
		SHEET NUMBER 6504	
		ISSUE DATE: AUGUST 01, 2017	



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Lamar Rutland
cc:
Date: Tuesday, June 7, 2022
Re: Approve Plans and Specifications for the FTA Sidewalk Hardy Street - Kamper Park project and authorize advertisement for bids.
File Number: 2022-388
Minute Book #

Summary

Approve Plans and Specifications for the FTA Sidewalk Hardy Street - Kamper Park project and authorize advertisement for bids.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

***CONTRACT DOCUMENTS AND TECHNICAL
SPECIFICATIONS***

FOR

**FTA SIDEWALK PROJECT
HARDY STREET - KAMPER PARK**

FOR THE

**CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY**



MAY 2022

PREPARED BY



05/27/2022



NEEL-SCHAFER
Solutions you can build upon

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ADVERTISEMENT FOR BIDS

**FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI**

Sealed bids will be received by the City of Hattiesburg, at the City Clerk's office, Mississippi, hereafter referred to as Owner, located at 200 Forrest Street, Hattiesburg, Mississippi, 39401, until 10:00 A.M., Local Time, Thursday, **July 21**, 2022 for supplying all labor, equipment, and materials (as specified) necessary for the construction of the above referenced project. Work consists of sidewalk, landscaping, and a pedestrian bridge along Hardy Street from Park Avenue to 17th Avenue. When bids are submitted electronically, the same requirements for submitting sealed bids shall apply. Electronic bids shall be submitted online at www.hattiesburgsbids.com and shall include a document representing the cover of the envelope containing the aforementioned criteria.

The above general outline of features of the work does not in any way limit the responsibility of the Contractor to perform all work and furnish all labor, equipment and materials required by the specifications and the drawings referred to therein.

Bidder must be qualified under Mississippi Law and show current Certificate of Responsibility issued by the Mississippi State Board of Public Contractors establishing his classification as to the value and type of construction on which he is authorized to bid.

Each Bidder shall write his Certificate of Responsibility Number on the outside of the sealed envelope containing his proposal.

Proposals shall be submitted in duplicate, sealed and deposited with the Owner prior to the hour and date hereinbefore designated. No bidder may withdraw his bid within 90 days after the actual date of the opening thereof.

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so-called Golden Rule is followed state law requires a non-resident bidder is to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

Each Bidder must deposit with his proposal, a Bid Bond or Certified Check in an amount equal to five percent of his bid, payable to the Owner, as bid security. Bidders shall also submit a current financial statement, if requested, by the Owner. The successful bidder will be required to furnish a Payment Bond and Performance Bond each in the amount of 100 percent of the contract amount.

Bid documents are being made available via paper copy or pdf. All interested bidders are required to log-in or register for an account at www.hattiesburgsbids.com OR www.neel-schafferplans.com to view and order Bid Documents. All plan holders are required to have a valid email address for registration. Bid documents are non-refundable and must be purchased through the website. Questions regarding website registration and online orders please contact Plan House Printing at (601) 336-6378.

"Mississippi Standard Specifications for Road and Bridge Construction, 2017 Edition" as referred to herein, may be purchased from the Mississippi Department of Transportation.

The Owner hereby notifies all Bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged and women's business enterprises will be afforded the full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Engineer is Neel-Schaffer, Inc., 704 Hardy Street, Hattiesburg, Mississippi 39401; Phone No. (601) 545-1565, Fax No. (601)-545-2267. Geoffrey Crosby, P.E. – Senior Project Manager.

The Owner reserves the right to reject any and all bids and to waive any informalities or irregularities therein.

BY: _____
City Clerk
City of Hattiesburg, Mississippi

DATES OF PUBLICATION:

June 15, 2022

June 22, 2022

INSTRUCTIONS TO BIDDERS

FTA SIDEWALK PROJECT HARDY STREET – KAMPER PARK CITY OF HATTIESBURG, MISSISSIPPI

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1. COORDINATION OF SPECIFICATIONS

Work under this Contract shall be performed in accordance with the Contract Documents, which includes General Conditions, Supplementary Conditions and Technical Specifications contained therein. Division 200 through 800 of the *Mississippi Standard Specifications for Road and Bridge Construction* (2017 Edition) is made a part hereof as if it were attached hereto, except where superseded by special provisions contained herein.

2. DATE AND PLACE OF OPENING OF PROPOSALS

The date, time, and place for opening Proposals will be as set out in the published "Advertisement for Bids."

The Owner reserves the right to postpone the date for presentation and opening of Proposals and will give notice of any such postponement to each known prospective Bidder.

3. FORM FOR PROPOSALS

Proposals must be submitted on the forms furnished by the Owner and the envelope (if not submitted electronically) containing the Proposals must be addressed to:

City Clerk
City of Hattiesburg
200 Forrest Street
Hattiesburg, Mississippi 39401

The outside of the envelope (if not submitted electronically) containing the Proposal shall bear the inscription:

**SEALED BID FOR: FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI**

BY _____

Certificate of Responsibility No. _____

State License No. _____

The duplicate Proposals shall be in the form of one original Proposal, marked "ORIGINAL" and one photocopy (Xerox or similarly reproduced copy) marked "PHOTOCOPY" of the original Proposal.

If Proposals are forwarded by the U.S. Postal Service, delivery shall be by Registered or Certified Mail.

4. PREQUALIFICATION

All Bidders must be in good standing with the Owner. Bidders who are not in good standing with the Owner will not be considered for award of the contract. Good standing includes, among other things: (a) whether Bidder has failed to successfully complete the work or punchlist items under another Owner contract; (b) whether Bidder is currently, or has been in the past five years, involved in litigation with the Owner regarding work under another Owner contract, either as a general contractor or subcontractor; (c) whether Bidder has been or is currently in default under another Owner contract the past five years. with the Owner; or (d) whether Bidder has failed to fulfill provisions of another Owner contract within during the past five years.

5. CERTIFICATE OF RESPONSIBILITY

Prior to filing Bids on Owner projects (in excess of \$50,000), the prospective Bidder must obtain a Certificate of Responsibility from the Mississippi State Board of Public Contractors, establishing his classification as to the value and the type of construction on which he is authorized to bid. Application must be submitted to the Board at least 30 days prior to a regular Board meeting scheduled every Quarter on the first Tuesday of January, April, July and October.

6. ANNUAL LICENSE TO BID (Not Used)

7. CHARGES FOR PROPOSALS, PLANS AND SPECIFICATIONS

Prospective Bidders may obtain Proposal forms including one copy of Contract Documents upon payment of the amount of money stipulated in the "Advertisement for Bids."

No refunds will be made for return of Plans or Specifications.

If a contract award is made, the successful Bidder will be furnished (free of charge) two additional sets of the Plans and Specifications.

In the event all Bids are rejected and the Project is re-advertised, the original Bidders shall **NOT** be entitled to free Bidders Proposal forms for the subsequent letting.

8. OMISSIONS AND DISCREPANCIES

Should a Bidder find discrepancies, errors or omissions in the Drawings or Specifications, or should he be in doubt as to the correctness of the Plan details, dimensions and layout, he should immediately notify the Engineer in order to permit checking and any necessary revisions or modifications.

9. ADDENDA

Prior to the date set for opening of Bids, the right is reserved, in the interests of the Owner, as it may require, to revise or amend the Contract Documents. Such revisions, if any, will be announced by an Addendum or Addenda, and copies of such Addenda will be furnished to all prospective Bidders who have purchased Plans and Specifications for acknowledgment by return fax. If the revisions and Addenda are of a nature which require material changes in quantities or prices Bid, or both, the date set for opening Bids may be postponed to enable Bidders to revise their Bids. In such case, the Addendum or Addenda will include an announcement of the new date for opening Bids.

10. INTERPRETATIONS

No oral interpretation made to any Bidder as to the meaning of the Contract Documents shall be considered an effective modification of any of the provisions of the Contract Documents. In order to ensure appropriate and concise responses, and avoid any misinterpretations, no verbal questions will be received. Written requests for interpretation of the Plans and Specifications shall be submitted to the Engineer at least 10 days prior to opening of Proposals so that a formal decision can be given in writing to all known prospective Bidders in the form of an Addendum. The Contract Document contains the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the Contract.

11. BID SECURITY

All Bids shall be accompanied by a Bid Security in the form of a Certified Check upon a national or state bank or a Bid Bond made by a bonding company registered in the State of Mississippi, drawn and made payable to the Owner in an amount equal to five percent of the Bid. The Certified Check or Bid Bond must be enclosed in the same envelope with the Bid. Except as noted below, the Bid Security of all known unsuccessful Bidders will be returned promptly after a Notice of Award has been sent to the successful Bidder or in the event that all Bids are rejected.

The Bid Security of the next two lowest qualified Bidders will be retained until the Contract has been executed with the lowest qualified Bidder. The Bid Security of the successful Bidder will be returned when satisfactory Performance and Payment Bonds have been furnished and approved and the Contract executed.

12. GENERAL INFORMATION

Bidders shall inform themselves and comply with all pertinent Owner regulations and ordinances, State and Federal laws, licenses and tax liabilities which may in any manner affect their Bids and the prosecution of the work. The successful bidder will be responsible for obtaining all building, plumbing, and electrical permits required by the local city government. Special attention is directed to the rules and regulations published by the Mississippi State Tax Commission outlining certain taxes imposed on Contractors by the state of Mississippi.

13. REJECTION OF PROPOSAL

Proposals may be rejected in the case of any omission, alterations of forms, additions or conditions not called for, unauthorized alternate Bids, incomplete Bids, erasures or irregularities of any kind. Bids received conditioning their consideration or rejection upon Bids for the other work submitted by the same Bidder may be classed as irregular, unless the Contract Documents specifically invite or permit conditional or combination Bids. Bids in which the prices obviously are unbalanced may be rejected.

14. CONDITIONS OF WORK

Each Bidder must inform himself fully of the conditions relating to the construction of the Project and the employment of labor thereon. Failure to do so will not relieve a successful Bidder of his obligation to furnish all materials and labor necessary to carry out the provisions of his Contract. Insofar as possible, the Contractor, in carrying out his work, must employ such methods or means as

will not cause any interruption of or interference with the work of any other Contractor.

15. SECURITY FOR FAITHFUL PERFORMANCE

Simultaneously with his delivery of the Executed Contract, the Contractor shall furnish a Performance Bond and a Payment Bond each in the sum of 100% of the Contract amount as security for faithful performance of his Contract and for the payment of all persons performing labor on the Project under his Contract and furnishing materials in connection with his Contract, as specified in the Contract Documents. The surety of such Bonds shall be issued by a duly authorized surety company listed on the Treasury Department's most current list Circular 570 (as amended) and satisfactory to the Owner.

Attorneys in fact who sign Bid Bonds or Payment Bonds and Performance Bonds must file with each bond a certified and effective dated copy of their Power of Attorney. Failure of the successful Bidder to execute the Contract and to supply the required bonds within 10 calendar days from the date that the Notice of Award is delivered, or within such extended period as the Owner may grant based upon reasons determined sufficient by the Owner, shall constitute a default, and the Owner, at his discretion, may either award the Contract to the next lowest qualified Bidder or readvertise for Bids, and may charge against the Bidder the difference between the amount for which a Contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the Bid Bond. If a more favorable bid is received by readvertising, the defaulting Bidder shall have no claim against the Owner for a refund. The Contractor's bond will not be released until all provisions of the Contract have been fulfilled.

16. INSURANCE

The Contractor will be required to carry the types and amounts of insurance named in the Contract Documents for the full life of the Contract.

17. SUBCONTRACTORS

Bidders are specifically advised that any person, firm or other party to whom it is proposed to award a Subcontract must be acceptable to the Owner. Nothing contained in the Contract Documents shall create any contractual relation between subcontractor and the Owner.

18. METHOD OF AWARD – LOWEST RESPONSIVE BIDDER

The Owner will award the Contract to the lowest and best Bid unless all Bids are rejected. The award will be based on the evaluation of the low bid for the total base bid or the total alternate bid as decided upon by the Owner.

The responsiveness of the low Bidder shall be determined by (1) the completeness and regularity of the Bidders Proposal; (2) the Bidders Proposal being without exclusions or special conditions; (3) the Bid Form having no alternative Bids for any item unless requested in the Technical Specifications; and (4) such other factors as may be considered under State law, Federal law or regulation.

The evaluation of the low bidder will be based on whether the Bidder (1) maintains a permanent place of business; (2) has adequate plant equipment to do the work properly and within the time limit that is established; (3) has adequate financial status to meet his obligations contingent to the work; (4) has adequate manpower and present workload is such that he can perform according to a reasonable

schedule; and (5) such other factors as may be considered under State law, Federal law or regulation.

19. OBLIGATION OF BIDDER

At the time of the opening of Bids, each Bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Plans and Contract Documents (including all Addenda).

The failure or omission of any Bidder to examine any form, instrument or document shall in no way relieve any Bidder from any obligation in respect to his Bid. Submission of Bid shall be accepted as prima facie evidence that Bidder has inspected the site and is familiar with the Plans and Contract Documents.

20. SUBSURFACE DATA

Not Used.

21. EXECUTION OF CONTRACT

If the successful Bidder is a corporation, the officer who signs the Contract shall furnish copies of the resolution of the Directors of the corporation authorizing him to sign the contract. Such resolution should bear the seal of the corporation.

Subject to the applicable provisions of law, the Contract shall be in full force and effect only from and after the date when a fully executed and approved counterpart thereof has been rendered or delivered, or both, to the Contractor or his duly authorized agent or representative. Deposit of said counterpart in the United States mail in an envelope or wrapper properly addressed shall constitute compliance with these provisions by the Owner.

22. INTERCHANGEABLE TERMS

The terms "Bid" and "Proposal" wherever they are used in the Contract Documents are interchangeable and have the same meaning. The terms "Contract" and "Agreement", are interchangeable and have the same meaning. The terms "Contract Drawings" and "Plans", are interchangeable and have the same meaning.

23. QUALIFICATIONS OF BIDDER, OWNER'S RIGHTS

The Owner may make such investigation as it deems necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by or investigation of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

24. MATERIALS AND EQUIPMENT

Whenever materials or equipment are specified or described in the Contract Documents by using the name of a manufacturer, fabricator, supplier, or distributor, the naming of the item in this manner is intended to establish the type, function and quality required. Materials or equipment of other manufacturers, fabricators, suppliers, or distributors may be accepted by the Engineer if sufficient

information is submitted by the Contractor to allow the Engineer to determine that the material or equipment proposed is equivalent to that named in the Contract Documents. Bidders are referred to Section 6.3 of the General Conditions regarding procedures for approval of substitute materials and equipment.

25. NON-RESIDENT BIDDERS

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident Bidder's state awards contractors to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so called "Golden Rule" is followed, state law requires a non-resident Bidder to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

26. DESIGNATING OWNER AND ENGINEER

Any reference in the Contract Documents to the State of Mississippi, Mississippi Department of Transportation, Mississippi Transportation Commission, or any official thereof shall be interpreted to mean the City of Hattiesburg, Mississippi, the "Owner".

Any reference in the Standard Specifications to the Project Engineer, District Engineer, Office Engineer, or Engineer shall be interpreted to mean the Engineer for the City of Hattiesburg, Mississippi, Neel-Schaffer, Inc.

27. MATERIALS TESTING

The Contractor shall be responsible for all testing of materials associated with the project. Materials shall be tested in accordance to the requirements and frequencies outlined in the *Mississippi Standard Specifications for Road and Bridge Construction* (2017 Edition), and shall be considered an absorbed item.

28. CONTRACT TIME

The number of calendar days to complete the work will be **150** calendar days for the Base Bid Work.

The calendar date for completion of the work to be performed by the Contractor for this project shall be a specified completion date. The specified completion date for this project will be calculated by adding the above number of calendar days to the date of the notice to proceed.

BIDDER'S PROPOSAL

FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI

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BIDDER'S PROPOSAL
FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI

DATE: _____, 20_____

PROPOSAL OF _____
(Name of Bidder)

(Address of Bidder)

for construction of the FTA Sidewalk Project-Hardy Street-Kamper Park.

The documents on which this Proposal is based include the Instructions to Bidders, Bid Forms, General Conditions, Supplementary Conditions, Supplemental General Conditions, Technical Specifications, Contract Drawings, and all supplements, amendments and addenda for this Project and are made a part hereof by reference.

TO: CITY OF HATTIESBURG
200 FORREST STREET
HATTIESBURG, MISSISSIPPI 39401

Gentlemen:

The following Proposal is submitted on behalf of the undersigned Bidder(s) and no others. Evidence of my (our) authority to submit the Proposal is hereby furnished. The Proposal is submitted without collusion on the part of any person, firm or corporation.

I (We), the undersigned Bidder(s), certify that I (we) have carefully examined the Instructions to Bidders, Bid Forms, General Conditions, Supplemental Conditions, Technical Specifications, Contract Drawings and any and all Addenda thereof.

I (We) further certify that I, (we) have visited and carefully examined the site of the proposed Work and have inspected the location and condition of all public utilities and existing structures or other facilities on the site or adjacent thereto which may be affected by the proposed construction and fully understand all conditions relative to construction difficulties, hazards, labor, transportation and all other factors affecting the prosecution of the work covered by this Proposal.

I (We) understand that the quantities mentioned below are approximate only and are subject to either increase or decrease, and hereby propose to perform any increased or decreased quantities of work at the unit prices bid. No increase in quantities of work shall be performed until a written change order is duly executed in advance and approved in the public minutes of the Owner.

In accordance with the requirements of the Instructions to Bidders, Bid Forms, Federal Supplement to

00300-2

Bidder's Proposal, Technical Specifications, General Conditions, Supplementary Conditions, Contract Drawings, and any Addenda, I (we) propose to furnish all necessary materials, equipment, labor, tools and other means of construction and will do all Work called for by the Contract Documents within the specified Contract Time. The following is my (our) itemized proposal for the project:

Prices Bid and Approximate Quantities - Base Bid

Pay Item	Pay Item Description	<u>Unit</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Price Extension</u>
202-B	Removal of Concrete Sidewalk	SY	470		
202-B	Removal of Curb & Gutter, All Types	LF	130		
202-B	Removal of Concrete Pavement	SY	160		
202-B	Removal of Pipe, 8" and Above	LF	250		
202-B	Removal of Inlets, All Sizes	EA	2		
202-B	Removal of Fence	LF	750		
202-B	Removal of Crape Myrtle	EA	14		
202-B	Removal of Trees, Greater than 10"	EA	5		
202-B	Removal of Traffic Stripe	LF	110		
202-B	Removal of Electrical Service Pole and Wire	EA	1		
202-B	Removal of Batting Cage, Poles and Netting	LS	1	XXXX	
203-A	Unclassified Excavation, FM, AH	CY	300		
203-EX	Borrow Excavation, AH, FME, Class B9	CY	1750		
203-G	Excess Excavation, FM, AH	CY	550		
211-A	Topsoil for Slope Treatment, from Right of Way	SY	2800		
219-A	Watering	KGAL	370		

00300-4

211-A	Topsoil for Slope Treatment, Contractor Furnished	CY	120		
216-A	Solid Sodding, Centipede	SY	2325		
234-A	Temporary Silt Fence	LF	2500		
237-A	Wattles, 20"	LF	1000		
246-A	Sandbags	EA	100		
211-C	Topsoil for Plant Holes, Contractor Furnished	CY	8		
230-A	Shrub Planting, Daylily, (1) GAL	EA	62		
230-A	Shrub Planting, Parsons Juniper, (1) GAL	EA	37		
230-A	Shrub Planting, Dirift Rose "Peach", (3) GAL	EA	28		
230-B	Tree Planting, Live Oak, 30 Gallon	EA	15		
230-D	Bed Preparation	SF	850		
232-A	Fertilizer for Woody Plant Material, Tabler, 21 Gram	EA	202		
233-A	Tree Bark Mulch, Type III	CY	2		
233-A	Tree Bark Mulch, Type V	CY	2		
601-B	Class "B" Structural Concrete, Minor Structures	CY	13		
602-A	Reinforcing Steel	LBS	1200		
603-CA	18" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	LF	24		
603-CA	24" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	LF	24		
603-CA	36" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	LF	144		
603-PC	18" Corrugated Polyethylene Pipe	LF	384		
603-SB	36" Branch Connections, Stub into Concrete Ditch	EA	2		

603-SB	Concrete Ditch Wall Repair	EA	3		
603-SB	Plug Concrete Pipe	EA	3		
604-B	Gratings	LBS	1200		
907-603-PP	Preformed Polyethylene Drainage Catch Basin, 30"	EA	4		
607-B	8' Chain Link Fence	LF	210		
607-PP	8' chain Link Fence Gate, Per Plans	EA	1		
608-A	Concrete Sidewalk, Without Reinforcement	SY	1750		
609-D	Combination Concrete Curb and Gutter	LF	130		
613-D	Adjustment of Manholes	EA	1		
613-D	Adjustment of Water Valves	EA	4		
613-D	Adjustment of Electrical Pull Boxes	EA	2		
618-A	Maintenance of Traffic	LS	1	XXXX	
620-A	Mobilization	LS	1	XXXX	
699-A	Roadway Construction Stakes	LS	1	XXXX	
626-H	Legend, White	LF	385		
907-608-E	Asphalt Pavement Texturing	SF	500		
647-PP	Electrical Pullbox, Per Plans	EA	5		
637-C	Traffic Signal Conduit, Underground, Type 4, 2" (Inc. Pull String)	LF	875		
907-634-A	Traffic Signal Equipment Pole, Type VI, 8' Shaft	EA	1		
907-634-C	Pole Foundations, Class "B" Concrete	CY	1		
635-A	Traffic Signal Head, Type 6	EA	2		

907-636-B	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 5 Conductor	LF	100		
907-636-D	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 5 Conductor	LF	16		
907-637-A	Pull Box Enclosure, Type 2	EA	2		
907-637-C	Traffic Signal Conduit, Underground, Type 4, 2"	LF	20		
907-637-D	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 3"	LF	78		
907-643-A	Video Vehicle Detection Sensor, Type 3	EA	1		
907-643-B	Video Vehicle Detection Cable	LF	180		
907-645-B	Accessible Pedestrian Detection Assembly	EA	4		
647-A	Removal of Existing Traffic Signal Equipment	LS	1	XXXX	
Total Base Bid \$					

Prices Bid and Approximate Quantities – Bridge Items					
Pay Item	Pay Item Description	<u>Unit</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Price Extension</u>
907-242-PP	Pedestrian Bridge, 12' W by 110' L (Inc. Decking)	LS	1	XXXX	
601-B	Class "B" Structural Concrete	CY	55		
602-A	Reinforcing Steel	LBS	5500		
803-A	Test Pile	LS	1	XXXX	
803-B	Conventional Static Pile Load Test	EA	1		
803-D	HP 10X42 Steel Piling	LF	455		
Total Bridge Items \$					

TOTAL BASE BID: \$ _____

TOTAL BRIDGE BID: \$ _____

THE BIDDER'S TOTAL ABOVE IS HIS TOTAL BID BASED ON HIS UNIT PRICES AND LUMP SUM PRICES AND THE ESTIMATED QUANTITIES. THIS FIGURE IS FOR INFORMATION ONLY AT THE TIME OF OPENING BIDS. THE OWNER WILL MAKE THE BID TABULATION FROM THE UNIT PRICES AND LUMP SUM PRICES BID. IF THERE IS AN ERROR IN THE TOTAL BY THE BIDDER, IT SHALL BE CHANGED AS ONLY THE UNIT PRICES AND LUMP SUM PRICES SHALL GOVERN.

NOTE: FAILURE OF BIDDER TO INCLUDE PRICES FOR THE ALTERNATE BID ITEMS MAY RENDER HIS PROPOSAL NON-RESPONSIVE.

NOTE: Bids shall include sales tax and all other applicable taxes and fees.

I (We) further propose to execute the Contract Agreement as bound herein within ten working days after receipt of Contract Forms from the Owner and to complete the work within the contract time. I (We) agree to pay as liquidated damages the actual costs, expenses and other losses reasonably incurred by Owner for each consecutive calendar day beyond the specified Contract Time.

I (We) also propose to execute a Performance Bond and a Payment Bond, as shown in the Specifications, each in an amount of not less than one hundred percent (100%) of the total of my (our) Bid. These Bonds shall not only serve to guarantee the completion of the Work on my (our) part, but also to guarantee the excellence of both workmanship and materials until the Work is finally accepted.

I (We) enclose a Bid Bond or Certified Check for 5 percent of _____
_____, DOLLARS (\$_____))
(Base Bid Amount)

and hereby agree that in case of my (our) failure to execute the Contract and furnish the Bonds within ten calendar days after delivery of the Notice of Award, the amount of this check (Bid Bond) will be forfeited to the Owner as liquidated damages arising out of my (our) failure to execute the Contract as proposed.

It is understood that in case I (we) am (are) not awarded the Work, the Certified Check or Bid Bond submitted as Bid security will be returned as stipulated in the Contract Documents.

Bidder acknowledges receipt of the following Addenda:

No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____

Respectfully Submitted,

Contractor(s)

By: _____
Title

Address

BIDDER'S CORPORATE DECLARATION
(TO BE FILLED IN IF BIDDER IS A CORPORATION)

Date: _____, 20_____.

Our corporation is chartered under the Laws of the state of _____ and the names,
titles and business addresses of the executives are as follows:

President

Secretary

Treasurer

DECLARATION OF PARTNERSHIP

(To be filled in if a Bidder is a Partnership)

Our Partnership is composed of the following individuals:

Address

Address

NON-COLLUSION AFFIDAVIT

**FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI**

(THIS AFFIDAVIT MUST BE EXECUTED FOR THE BID TO BE CONSIDERED)

STATE OF _____)

COUNTY OF _____) ss.

_____ being first duly sworn,
(Person)
deposes and says that he is _____

(Sole owner, a partner, president, secretary, etc.)
of _____ the party making the foregoing Proposal or Bid;
(Name of Firm)

that such Bid is genuine and not collusive; that said Bidder is not financially interested in, or otherwise affiliated in a business way with any other bidder on the same contract; that said Bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder or person, to put in a sham bid, or that such other person shall refrain from bidding, and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the Owner or any person or persons interested in the proposed contract; and that all statements contained in said Proposal or Bid are true; and further, that such Bidder has not, directly or indirectly submitted his Bid, or the contents thereof, or divulged information or data relative thereto to any association or to any member or agent thereof.

Affiant

Sworn to and subscribed before me this _____ day of _____, 20_____.

Notary Public in and for

_____ County,

(SEAL)

My Commission Expires _____, 20_____.

BID BOND

**FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI**

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____ as Principal, and _____ as Surety, are hereby held and firmly bound unto the Owner, in the penal sum of \$ _____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. Signed this ____ day of _____, 20 _____.

The condition of the above obligation is such that whereas the Principal has submitted to the Owner, a certain bid, attached hereto and hereby made a part hereof to enter into a contract in writing for the above referenced project.

NOW THEREFORE,

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to signed by their proper officers, the day and year first set forth above.

Contractor

SEAL

By:_____

Surety

SEAL

By:_____

PROPOSED SUBCONTRACTORS

**FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI**

The names and addresses of all persons and parties who will be utilized for subcontract Work in the foregoing Bidder's Proposal are listed below. (The Contractor must list all Subcontractors to be utilized on the Work. Failure to list Subcontractors may cause the Bidder's Proposal to be rejected by the Owner as non-responsive.) If the Bidder does not propose Subcontractors, so state.

NAME

ADDRESS

CONTRACT FORMS

**FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI**

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CONTRACT

**FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI**

This Contract, made this the _____ day of _____, 20____, by and between the City of Hattiesburg, Mississippi, a municipal corporation, hereinafter called "Owner" and _____ doing business as a _____ located in _____ hereinafter called the "Contractor".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. THE CONTRACTOR will commence and complete the "FTA Sidewalk Project-Hardy Street-Kamper Park" in strict accordance with the Contract Documents and the Contract Drawings.
2. The Contractor will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED and will attain Final Completion within the contract time stipulated in the INSTRUCTION TO BIDDERS unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
The Contractor agrees to pay, as liquidated damages, the actual damages, costs, losses and expenses reasonably incurred by Owner for each consecutive calendar day that he shall be in default in attaining Final Completion within the time stipulated as provided herein.
3. The term "CONTRACT DOCUMENTS" means and includes Advertisement for Bids, Instructions to Bidders, Bidder's Proposal, Bid Bond, Contract, Payment Bond, Performance Bond, General Conditions, Supplementary Conditions, Technical Specifications, Contract Drawings, Notice of Award, Notice to Proceed, Addenda (if any), and all subsequent Change Orders, Supplemental Agreements and/or other modifications as if formally recopied in this Contract.
4. The Contractor agrees to furnish all materials in place and to faithfully complete all of said work contemplated by this Contract in good and workmanlike manner, strictly in accordance with said Contract Documents, Contract Drawings and other requirements of the Owner, and to the complete satisfaction of the Owner or his authorized representatives, and in accordance with the Laws of the state of Mississippi and the Ordinances of the Owner, for which the Owner hereby agrees to pay and the Contractor agrees to accept a sum of money in current funds equal to the contract amount of _____ (\$ _____) plus the amount of any supplemental agreements and force accounts for extra work authorized and duly set forth in a written change order approved and executed by the Owner and set forth in the public minutes of the Owner and in full compensation for furnishing all materials, the doing of all work contemplated under the Contract, as well as all loss or damage, if any, arising out of the nature of the work, or the action of the weather, and any and all other unforeseen obstructions or difficulties that may be encountered in the prosecution of the same, the Contractor assuming all risks of every kind and description in the performance of this Contract.

-
5. The Contractor shall protect, indemnify and save harmless the Owner from and against any and all damage, loss, claims, judgments or expenses, including but not limited to reasonable attorney's fees, which the Owner may suffer or be subjected to by the performance of the work, including but without limitation injury to or death of any person whomever and destruction or damage to any property whatsoever.
 6. Attached hereto and made a part of this Contract is a Performance Bond, executed by a Surety Company doing business in the state of Mississippi, in the sum of

(\$_____).
 7. Attached hereto and made a part of this Contract is a Payment Bond, executed by a Surety Company doing business in the state of Mississippi, in the sum of

(\$_____).
 8. The Contractor agrees to allow the Owner, or any of their duly authorized representatives, access to any books, documents, papers and records of the Contractor which are directly pertinent to the project which is the subject of this Contract, for the purpose of making audits, examinations, excerpts and transcriptions, and Contractor agrees to insert an identical clause in any and all subcontracts.
 9. The Owner will pay to the Contractor in the manner and at such times and amounts as set forth in the Contract Documents.
 10. This Contract shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
 11. If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner his obligations under this Contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, the Owner shall thereupon have the right to terminate this Contract by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least five days before the effective date of such termination. Notwithstanding the above, the Contractor shall not be relieved of liability to the Owner for damages sustained by the Owner by virtue of any breach of the Contract by the Contractor and the Owner may withhold any payments to the Contractor until such time as the exact amount of damages due the Owner from the Contractor is determined.

IN WITNESS THEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Contract in _____ counterparts, each of which shall be deemed an original on the date first above written. (number)

OWNER

CONTRACTOR

BY _____

BY _____

ATTEST _____

ATTEST _____

(Seal)

(Seal)

PARTNERSHIP CERTIFICATE

State of _____

County of _____ Ss.

On this _____ day of _____, 20_____, before me personally appeared _____, known to me and known by me to be the person who executed the above instrument, who being by me first duly sworn, did depose and say that he is a general partner in the firm of _____; that said firm consists of himself and _____; and that he executed the foregoing instrument on behalf of said firm for the uses and purposes stated herein.

Notary Public in the

County of _____

State of _____

Notary Seal

My Commission Expires:

CORPORATE CERTIFICATE

I, _____ certify that I am the Secretary of the Corporation named as Contractor in the foregoing Contract; that _____, who signed said Contract on behalf of the Contractor was then _____ of said Corporation; that said Contract was duly signed for and in behalf of said Corporation by authority of its governing body and is within the scope of its corporate powers.

Secretary

Corporate Seal

GENERAL INSTRUCTIONS FOR BONDS

1. The surety on each Bond must be a responsible surety company, which is qualified to do business in Mississippi and satisfactory to the Owner.
2. The name, including full Christian name and residence of each individual party to the Bond shall be inserted in the body thereof, and each such party shall sign the Bond with his usual signature on the line opposite the seal and if signed in Maine, Massachusetts or New Hampshire an adhesive seal shall be affixed opposite the signature. The bond must be either signed or countersigned by a Mississippi Resident Agent of the Surety Company.
3. If the principals are partners, their individual names will appear in the body of the Bond with the recital that they are partners composing a firm, naming it; and all the members of the firm shall execute the Bond as individuals.
4. The signature of a witness shall appear in the appropriate place, attesting to the signature of each individual party to the Bond.
5. If the principal or surety is a corporation, the name of the State in which incorporated shall be inserted in the appropriate place in the body of the Bond, and said instrument shall be executed and attested under the corporate seal as indicated in the form. If the corporation has no corporate seal the fact shall be stated, in which case, a scroll or adhesive seal shall appear following the corporate name.
6. The official character and authority of the person or persons executing the Bond for the principal, if a corporation, shall be certified by the secretary or assistant secretary, according to the form attached hereto. In lieu of such certificate there may be attached to the Bond copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.
7. The date of this Bond must not be prior to the date of the Contract in connection with which it is given.
8. Surety Companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal, and
(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____ Dollars,
\$(_____) in lawful money of the United States, for the payment of which sum well
and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these
presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain
contract with the OWNER, dated _____ day of _____ 20 _____,
a copy of which is hereto attached and made a part hereof for the construction of :

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings,
covenants, terms, conditions, and agreements of said contract during the original term thereof, and any
extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the
one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and
shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by
reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the
OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full
force and effect.

NOW, THEREFORE, if the Principal shall promptly make payment of all taxes, licenses, assignments,
contributions, damages, penalties, and interest thereon, when and as the same may lawfully be due the state of
Mississippi, or any county, municipality, board, department, commission, or political subdivision thereof, by
reason of and directly connected with the performance of said Contract or any part thereof as provided by
Sections 27-65-1, 27-65-21, 27-67-301 and 31-5-3, supra, or any other applicable statute or other authority,
then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change,

extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this statement is executed in _____ counterparts, each one of which shall
(number)
be deemed an original, this the _____ day of _____, 20 _____.

ATTEST:

(Principal) Secretary
(Seal)

Principal
By _____

(Address)

Witness as to Principal

(Address)

Surety
By _____

ATTEST:

Witness as to Surety

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
 If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS THAT

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal,
(Corporation, Partnership, or Individual)

and _____
(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____
Dollars, \$(_____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____ 20 _____, a copy of which is hereto attached and made a part hereof for the construction of:

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this statement is executed in _____ counterparts, each one of which shall
(number)
be deemed an original, this the _____ day of _____, 20 _____.

ATTEST:

(Seal) (Principal) Secretary

By Principal

(Address)

Witness as to Principal

(Address)

ATTEST:

Surety

By _____

Witness as to Surety

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

NOTICE OF AWARD

Date _____

TO: _____

RE: FTA Sidewalk Project
 Hardy Street – Kamper Park
 City of Hattiesburg, Mississippi

NOTICE OF AWARD

Gentlemen:

The Owner has considered the Proposal submitted by you for the above referenced Work in response to its Advertisement for Bids and Instructions to Bidders.

You are hereby notified that your Proposal has been accepted in the amount of \$_____.

You are required by the Instruction to Bidders to execute the Contract and furnish to the Owner the required Contractor's Performance Bond, Payment Bond and certificates of insurance within 10 calendar days from the date of delivery of this Notice to you. We have enclosed five copies of the necessary contract forms and bond forms. Please return all five copies of these documents to the offices of Neel-Schaffer, 704 Hardy Street, Hattiesburg, MS 39401.

If you fail to execute said Contract and to furnish said Bonds within 10 days from the date of delivery of this Notice, the Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your proposal as abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by Law.

You are required by the General Conditions and Supplementary Conditions to submit to Neel-Schaffer, Inc. an estimated progress schedule, a preliminary schedule of Shop Drawing submissions and a preliminary schedule of values of the Work within 10 days after the effective date of this Contract, all in accordance with Article 2.5 of the General Conditions.

You are required to return an acknowledged copy of this Notice of Award directly to the City of Hattiesburg, Mississippi, Attention: Lamar Rutland, P.E., and to Neel-Schaffer, Inc.

Sincerely,

NEEL-SCHAFFER, INC.

Geoffrey Crosby, P.E.
Senior Project Manager

c: Lamar Rutland, P. E.
City of Hattiesburg
200 Forrest Street
Hattiesburg, MS 39401

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged by _____ this, the
_____ day of _____, 20_____.

By _____

Title _____

NOTICE TO PROCEED

Date _____

To: _____

Attention: _____

REFERENCE: NOTICE TO PROCEED
FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI

Dear _____:

You are hereby notified to commence Work in accordance with the Contract dated _____, on or before _____. You are to complete the Work within _____ consecutive calendar days from the effective date of this Notice to Proceed. The date of Final Completion is therefore _____. Liquidated damages in the amount of the actual damages, costs, losses and expenses reasonably incurred by the OWNER per calendar day for each day the Work has not achieved Final Completion after _____ will be imposed unless the contract time is otherwise adjusted for due cause by change orders to the Contract. Liquidated Damages, as defined herein, will be assessed unless the Contract Time is otherwise adjusted for due cause by change order to the Contract.

The engineering firm of Neel-Schaffer, Inc. will act as the Engineer on behalf of the City of Hattiesburg, Mississippi for the work to be performed under the contract. Geoffrey Crosby, P.E., of Neel-Schaffer, Inc. will be the designated representative of the Engineer.

Please return a copy of this NOTICE TO PROCEED and ACCEPTANCE OF NOTICE to the undersigned and to Neel-Schaffer, Inc., indicating your receipt of this document in the space provided below.

Sincerely,

City of Hattiesburg, Mississippi

Mayor Toby Barker

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED

is hereby acknowledged by _____

this, the _____ day

of _____, 20_____.

By _____

Title _____

CONTRACT CHANGE ORDER

OWNER: _____ PROJECT NAME: _____

CONTRACTOR: _____

DATE: _____

CHANGE ORDER NUMBER: _____ CONTRACT NUMBER: _____

REASON FOR CHANGE: _____

YOU ARE HEREBY REQUESTED TO COMPLY WITH THE FOLLOWING CHANGES FROM THE CONTRACT
PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS: (USE ADDITIONAL SHEETS IF REQUIRED)

ITEM NO.	DESCRIPTION OF CHANGE(S) (QUANTITIES, ETC.)	QTY	UNIT COST	TOTAL CONTRACT
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00

TOTAL CONTRACT CHANGE	\$
	TOTAL CONTRACT
ORIGINAL CONTRACT AMOUNT:	\$
CURRENT CONTRACT AMOUNT:	\$
THIS CONTRACT CHANGE	
REVISED CONTRACT AMOUNT:	\$
CURRENT CONTRACT COMPLETION DATE:	
TIME EXTENSION REQUIRED BY CHANGE:	
REVISED CONTRACT COMPLETION DATE:	
THIS DOCUMENT SHALL BE AN AMENDMENT TO THE CONTRACT AND ALL PROVISIONS OF THE CONTRACT WILL APPLY. RECOMMENDED BY: _____ ENGINEER _____ DATE _____ NEEL-SCHAFFER, INC. ACCEPTED BY: _____ CONTRACTOR _____ DATE _____ ACCEPTED BY: _____ OWNER _____ DATE _____	

Procurement.

A. All items to be purchased under this Agreement must be in accordance with all Federal and State governmental standards, including but not limited to those issued by the Occupational Safety and Health Administration (OSHA), the National Institute of Occupational Safety Hazards (NIOSH), and the National Fire Protection Association (NFPA).

B. Recovered Materials.

1) In the performance of this Agreement and any subcontract, the CONTRACTOR shall, and require its subcontractors to, make maximum use of products containing recovered materials that are EPA designated items unless the product cannot be acquired as follows:

- a) Competitively within a timeframe providing for compliance with the Agreement performance schedule;
- b) Meeting performance requirements of the Agreement; or
- c) At a reasonable price.

2) Information about this requirement, along with the list of EPA designated items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

C. The CONTRACTOR shall comply with 2 C.F.R. Part 200, Subpart D, in the procurement of property or services under this Agreement.

Equal Employment Opportunity. During the performance of this Agreement, the CONTRACTOR agrees as follows:

A. The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

B. The CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

C. The CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the CONTRACTOR's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

D. The CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

E. The CONTRACTOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

F. In the event of the CONTRACTOR's noncompliance with the nondiscrimination clauses of this Agreement or with any of the rules, regulations, or orders, this Agreement may be canceled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

G. The CONTRACTOR shall include the portion of the sentence immediately preceding paragraph (A) and the provisions of paragraphs (A) through (G) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The CONTRACTOR will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

H. The CONTRACTOR shall comply with all applicable Federal implementing regulations and other implementing requirements FTA may issue.

Compliance with the Contract Works Hours and Safety Standards Act.

A. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

B. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

C. Withholding for unpaid wages and liquidated damages. The COUNTY shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of

such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

D. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

Environmental Standards.

A. Clean Air Act.

1) The CONTRACTOR shall comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act, 42 U.S.C. Section 7401 *et seq.*

2) The CONTRACTOR shall report each violation to the COUNTY, which will report each violation as required to assure notification to FTA and the appropriate Environmental Protection Agency (EPA) Regional Office.

3) The CONTRACTOR shall include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FTA under this Agreement.

B. Federal Water Pollution Control Act.

1) The CONTRACTOR shall comply with all applicable standards, orders, and regulations issued pursuant to the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 *et seq.*

2) The CONTRACTOR shall report each violation to the COUNTY, which will report each violation as required to assure notification to FTA and the appropriate Environmental Protection Agency Regional Office.

3) The CONTRACTOR shall include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FTA under this Agreement.

6.23 Debarment and Suspension.

A. This Agreement is a covered transaction for purposes of 2 C.F.R. Part 180 and 2 C.F.R. Part 3000. As such, the CONTRACTOR shall verify that none of the subcontractors, its principals (defined at 2 C.F.R. Section 180.995), or its affiliates (defined at 2 C.F.R. Section 180.905) are excluded (defined at 2 C.F.R. Section 180.940) or disqualified (defined at 2 C.F.R. Section 180.935).

B. The CONTRACTOR must comply with 2 C.F.R. Part 180, Subpart C and 2 C.F.R. Part 3000, Subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

C. This certification is a material representation of fact relied upon by the COUNTY. If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. Part 180, Subpart C and 2 C.F.R. pt. 3000, Subpart C, in addition to remedies available to the COUNTY, the Federal Government may pursue available remedies, including but not limited to suspension and debarment.

Byrd Anti-Lobbying Amendment.

A. The CONTRACTOR has executed the certification regarding lobbying required by the Byrd Anti-Lobbying Amendment, 31 U.S.C. Section 1352, attached as **Attachment C**.

B. Contractors and subcontractors who apply or bid for an award under this Agreement of \$100,000 or more shall file the certification required by the Byrd Anti-Lobbying Amendment, 31 U.S.C. Section 1352 (which can be located at Appendix A, 44 C.F.R. Part 18). Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. Section 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

Civil Rights. The CONTRACTOR shall comply with 49 U.S.C. Section 5332, the Florida Civil Rights Act of 1992, Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, the Architectural Barriers Act of 1968, the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, all implementing regulations of these statutes, Executive Order 11063, and Executive Order 11246 as amended by Executive Orders 11375, 11478, 12107 and 12086.

The CONTRACTOR shall not discriminate against present or prospective employees on the basis of age and shall comply with any implementing requirements that FTA may issue. **6.26 Drug-Free Workplace.** In accordance with the Drug Free Workplace Act of 1988 (codified at 41 U.S.C. Section 8101 *et seq.*, implemented by 2 C.F.R. Part 2429), the CONTRACTOR certifies that it has a policy designed to ensure that the CONTRACTOR's workplace is free from the illegal use, possession, or distribution of drugs or alcohol. The CONTRACTOR will require all of its subcontractors under this Agreement to comply with this requirement.

Business Enterprises. The CONTRACTOR will use its best efforts to afford small businesses, minority business enterprises, and women's business enterprises the maximum practicable opportunity to participate in the performance of this Agreement. As used in this Agreement, the terms "small business" means a business that meets the criteria set forth in Section 3(a) of the Small Business Act, (15 U.S.C. Section 632). The CONTRACTOR may rely on written representations by businesses regarding their status as minority and female business enterprises in lieu of an independent investigation.

To the extent applicable, the CONTRACTOR, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. The CONTRACTOR shall carry out applicable requirements of 49 C.F.R. Part 26 in the award and administration of USDOT-assisted contracts. Failure by the CONTRACTOR to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy as the COUNTY deems appropriate, which may include, but is not limited to:

- A. Withholding monthly progress payments;
- B. Assessing sanctions;
- C. Liquidated damages; and/or
- D. Disqualifying the CONTRACTOR from future bidding as non-responsible. 49 C.F.R. §

26.13(b).

The CONTRACTOR shall pay all subcontractors for satisfactory performance of their subcontracts no later than thirty (30) days from receipt of each payment the COUNTY makes to the CONTRACTOR.

USDOT Seal, Logo, and Flags. The CONTRACTOR shall not use the United States Department of Transportation (USDOT) seals, logos, crests, or reproductions of flags or likenesses of USDOT agency officials without specific FTA pre-approval.

False Claims and Statements. The CONTRACTOR acknowledges that 31 U.S.C. Chapter 38 (Administrative Remedies for False Claims and Statements) applies to the CONTRACTOR's actions pertaining to this Agreement.

No Obligation by Federal Government. The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the COUNTY, CONTRACTOR, or any other party or entity pertaining to any matter resulting from the Agreement. The CONTRACTOR will include this provision in all subcontracts under this Agreement.

Buy America. The CONTRACTOR shall comply with 49 U.S.C. Section 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless all steel, iron, and manufactured products used in FTA funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. Section 661.7. Separate requirements for rolling stock are set out at 49 U.S.C. Section 5323(j)(2)(C) and 49 C.F.R. Section 661.11. The CONTRACTOR has submitted the appropriate Buy America certification with its proposal.

Cargo Preference. To the extent applicable, the CONTRACTOR shall:

A. Use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this Agreement to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels;

B. Furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the COUNTY; and

C. Include these requirements in all subcontracts issued pursuant to this Agreement when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

Energy Conservation. The CONTRACTOR shall comply with mandatory standards and policies relating to energy efficiency, which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

Program Fraud and False or Fraudulent Statements or Related Acts. The CONTRACTOR acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. Section 3801, *et seq.* and USDOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Agreement. Upon execution of this Agreement, the CONTRACTOR certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to this Agreement or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the CONTRACTOR further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the CONTRACTOR to the extent the Federal Government deems appropriate.

The CONTRACTOR also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under this Agreement that may be financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. Chapter 53, the Federal Government reserves the right to impose the penalties of

18 U.S.C. Section 1001 and 49 U.S.C. Section 5323(l) on the CONTRACTOR, to the extent the Federal Government deems appropriate.

The CONTRACTOR shall include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. The clauses must not be modified, except to identify the subcontractor who will be subject to the provisions.

Safe Operation of Motor Vehicles. The CONTRACTOR is encouraged to adopt and promote on-the-job seat belt use policies and programs for its employees and other personnel that operate company-owned vehicles, company-rented vehicles, or personally operated vehicles. The terms “company-owned” and “company-leased” refer to vehicles owned or leased either by the CONTRACTOR or the COUNTY. The CONTRACTOR shall adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers, including policies to ban text messaging while using an electronic device supplied by an employer, and driving a vehicle the driver owns or rents, a vehicle that the CONTRACTOR owns, leases, or rents, or a privately-owned vehicle when on official business in connection with the work performed under this Agreement.

Veterans Employment. As provided by 49 U.S.C. Section 5325(k), to the extent practicable, CONTRACTOR shall, and require its subcontractors to,

A. give a hiring preference to veterans (as defined in 5 U.S.C. § 2108), who have the skills and abilities required to perform work required under a third party contract in connection with a capital project supported with funds made available or appropriated for 49 U.S.C. chapter 53, and

B. not require an employer to give a preference to any veteran over any equally qualified applicant who is a member of any racial or ethnic minority, female, an individual with a disability, or a former employee.

"General Decision Number: MS20220131 02/25/2022

Superseded General Decision Number: MS20210131

State: Mississippi

Construction Type: Highway

County: Forrest County in Mississippi.

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	02/18/2022
2	02/25/2022

ELEC0903-006 01/01/2022

	Rates	Fringes
ELECTRICIAN.....	\$ 29.20	6.68+1.5%+8%

* SUMS2010-054 08/04/2014		

	Rates	Fringes
CARPENTER (Form Work Only).....	\$ 12.00 **	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 11.54 **	1.63
HIGHWAY/PARKING LOT STRIPING: Truck Driver (Line Striping Truck).....	\$ 14.55 **	0.00
INSTALLER - SIGN.....	\$ 12.19 **	0.00
INSTALLER: Guardrail.....	\$ 12.39 **	0.00
IRONWORKER, REINFORCING.....	\$ 16.44	0.00
LABORER: Common or General, Including Asphalt Raking, Shoveling, Spreading.....	\$ 10.34 **	0.00
LABORER: Flagger.....	\$ 11.42 **	0.00
LABORER: Grade Checker.....	\$ 14.82 **	0.00
LABORER: Luteman.....	\$ 12.88 **	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 10.57 **	0.00
LABORER: Pipelayer.....	\$ 14.50 **	0.00
LABORER: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper.....	\$ 12.17 **	0.00
OPERATOR: Asphalt Spreader.....	\$ 14.71 **	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 14.20 **	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 11.86 **	0.00
OPERATOR: Broom/Sweeper.....	\$ 10.94 **	0.00
OPERATOR: Bulldozer.....	\$ 13.99 **	0.00
OPERATOR: Concrete Saw.....	\$ 13.93 **	0.00
OPERATOR: Crane.....	\$ 14.80 **	0.00
OPERATOR: Distributor.....	\$ 11.46 **	0.00
OPERATOR: Grader/Blade.....	\$ 16.09	0.00
OPERATOR: Loader.....	\$ 13.99 **	0.00

OPERATOR: Mechanic.....	\$ 13.00 **	0.00
OPERATOR: Milling Machine.....	\$ 16.96	0.00
OPERATOR: Oiler.....	\$ 12.22 **	0.00
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 11.56 **	0.00
OPERATOR: Roller (All Types)....	\$ 12.17 **	0.00
OPERATOR: Scraper.....	\$ 14.00 **	0.00
OPERATOR: Tractor.....	\$ 12.00 **	0.00
SURVEYOR (Staking, Marking and Brush Clearing).....	\$ 11.56 **	0.00
TRUCK DRIVER: Flatbed Truck.....	\$ 14.72 **	0.00
TRUCK DRIVER: Lowboy Truck.....	\$ 14.18 **	0.00
TRUCK DRIVER: Mechanic.....	\$ 12.31 **	0.00
TRUCK DRIVER: Water Truck.....	\$ 17.08	0.00
TRUCK DRIVER: Dump Truck (All Types).....	\$ 11.58 **	0.00
TRUCK DRIVER: Semi/Trailer Truck.....	\$ 14.36 **	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage

determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By



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a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

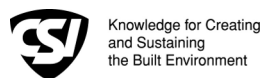
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AMERICAN SOCIETY OF CIVIL ENGINEERS

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The Associated General Contractors of America



Construction Specifications Institute

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National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314

American Council of Engineering Companies
1015 15th Street, N.W., Washington, DC 20005

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain

administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times

but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents, or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
- c. has been damaged prior to Engineer's - recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement

or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or

responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work

(unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or

3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's

sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice*: If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review*: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

- a. reviewing and checking all such information and data,
- b. locating all Underground Facilities shown or indicated in the Contract Documents,
- c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
- d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will

promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to

entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified

in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection

from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any

deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract

Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or

received from the superintendent shall be binding on Contractor.

6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services;

4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract

Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. Contractor's Expense: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual

or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer,, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Draw-

ings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples*: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.

a. Submit number of Samples specified in the Specifications.

b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals , any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents

with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 Continuing the Work

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or

disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 Contractor's General Warranty and Guarantee

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal

shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and

2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and

properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 *Insurance*

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep

Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show

partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall

promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,

2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and

Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have

resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. Costs Excluded: The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.

C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall

be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an

allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted

by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to

be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications .

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress

payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent

inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

- a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling Owner to a set-off against the amount recommended; or
- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, , Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial

Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals

that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;

b. consent of the surety, if any, to final payment;

c. a list of all Claims against Owner that Contractor believes are unsettled; and

d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. *Engineer's Review of Application and Acceptance*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations

under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance

with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be

governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or

2. agrees with the other party to submit the Claim to another dispute resolution process, or

3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS

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SUPPLEMENTARY CONDITIONS

1. Definitions

- A. The definition of "Technical Specifications" shall be the same as the definition for Specifications stated in Paragraph 1.01 under item number 43 of the General Conditions.
- B. Delete Paragraph 1.01.A.12 of the General Conditions in its' entirety.
- C. In Paragraph 1.01A.52 delete the following words, "or responding to differing or unseen subsurface or physical conditions under which the work is to be performed or to emergencies."

2. Commencement of Contract Time: Notice to Proceed

The commencement of Contract Time, as stated in Item 2.03 of the General Conditions is changed to read The Contract Time will commence to run within the sixtieth day after the Effective Date of the Agreement, or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed; but in no event shall the Contract Time commence to run later than the sixtieth day after the Effective Date of the Agreement.

Notice to Proceed may be given at any time within sixty days after the Effective Date of the Agreement. Refer to Item 21 of the Instructions to Bidders regarding execution of the Contract.

3. Before Starting Construction

In addition to the requirements of Paragraph 2.05 of the General Conditions, "**CONTRACTOR** shall deliver to the **OWNER**, with his signed Contract, all bonds and insurance which he is required to purchase and maintain in accordance with Article 5 of the General Conditions. A copy shall also be submitted to the **ENGINEER**. The **OWNER** shall deliver to the **CONTRACTOR** a copy of all policies of insurance which the **OWNER** is required to purchase and maintain in accordance with Article 5 of the General Conditions."

4. Preconstruction Conference

The time period for holding the preconstruction conference as stated in Paragraph 2.06 of the General Conditions shall be within 30 days after the Effective date of the Agreement, but before the **CONTRACTOR** starts the Work at the site.

5. Subsurface and Physical Conditions

Paragraphs 4.02 and 4.03 shall be deleted in its' entirety and replaced with the following:

DIFFERING SITE CONDITIONS PROVISION:

Execution of this Contract (Agreement) by the Contractor is a representation that the Contractor has visited the site, that general and local conditions are suitable for the work to be performed and that the Contractor accepts all conditions at the Project site. The Contractor assumes all risks with respect to the requirements of the Contract Documents, including without limitation the characteristics (natural and manmade) of the site, site accessibility, labor rates and availability, weather conditions, and any other matter that could affect the performance and cost of the work.

6. Insurance Requirements

- A. Paragraphs 5.05 and 5.06 shall be deleted in their entirety.
- B. Paragraphs 5.07.B, 5.07.B.1 and 5.07.B.2 shall be deleted in their entirety.
- C. In addition to the requirements of Article 5 of the General Conditions, insurance coverage specified herein constitutes the minimum requirements and said requirements shall in no way lessen or limit the liability of the **CONTRACTOR** under the terms of the Contract. The **CONTRACTOR** shall procure and maintain at his own expense any additional kinds and amounts of insurance that, in his own judgment, may be necessary for his proper protection in the prosecution of the Work.
 - 1. The **CONTRACTOR** shall carry insurance as prescribed herein and all policies shall be with companies satisfactory to the **OWNER**. If a part of this Contract is sublet, the **CONTRACTOR** shall require each Subcontractor to carry insurance of the same kinds and in like amounts as carried by the **CONTRACTOR**, including all additional insureds and waivers of subrogation.
 - 2. Certificates of insurance shall state that 30 days written notice will be given to the **OWNER** before the policy is canceled or changed. No **CONTRACTOR** or Subcontractor will be allowed to start any construction work on this Contract until certificates of all insurance required herein and all coverage requirements specified in contract documents are filed with and approved by the **OWNER**. The certificates shall show the type, amount, class of operations covered, effective dates and the dates of expiration of policies.
 - 3. The **CONTRACTOR** shall secure and maintain in effect for the period of the **CONTRACT** and pay all premiums for the following kinds and amounts of insurance:
 - a. Worker's Compensation and Employer's Liability Insurance: This insurance shall protect the **CONTRACTOR** against all claims under applicable State Worker's Compensation Laws. The **CONTRACTOR** shall also be protected and shall cause each Subcontractor to be protected against claims for injury, disease, or death of employees, which for any reason, may not fall within the provisions of a Worker's Compensation Law. The liability limits shall not be less than the required statutory limits for Worker's Compensation and Employer's Liability limits in the amount of ONE MILLION DOLLARS (\$1,000,000.00). **CONTRACTOR** and subcontractors shall supply **OWNER** endorsements from their carriers evidencing waiver of subrogation in favor of the **OWNER**.
 - b. **CONTRACTOR'S** and Subcontractor's Comprehensive General Liability Insurance, including bodily injury, property damage, contractual and other

standard coverage contained in Comprehensive General Liability Insurance, in an amount of not less than ONE MILLION DOLLARS (\$1,000,000) per occurrence and aggregate. **OWNER** shall be provided an endorsement naming the **OWNER** as an insured from the insurer for the work contracted. The Comprehensive General Liability policies carried by both the **CONTRACTOR** and the Subcontractors shall contain an endorsement to include the coverage of the following hazards:

- i. Explosion, collapse, and underground property damage to include any damage or destruction of property below the surface of the ground, such as wires, conduits, pipes, mains, sewers, etc., caused by the **CONTRACTOR'S** operations.
 - ii. The collapse of and structural injury to any building, structure or property on or adjacent to the **OWNER'S** premises or right-of-way caused by the **CONTRACTOR'S** operations in the removal of other buildings, structures, or supports, or by excavation below the surface of the ground.
 - iii. Contractual Liability Coverage for the Hold Harmless segments of the Contract Documents.
- c. **CONTRACTOR'S** Contingent or Protective Liability and Property Damage: In case part of this Contract is sublet, the **CONTRACTOR** shall secure contingent or protective liability and property damage insurance to protect the **CONTRACTOR** from any and all claims arising from the operation of Subcontractors in the execution of Work included in the Contract. In no case shall the amount of such protection be less than the limits of \$500,000/\$1,000,000 for Public Liability Insurance and \$500,000/\$1,000,000 for Property Damage Insurance. The coverage in each case shall be acceptable to the **OWNER**.
- d. Auto Liability: The **CONTRACTOR** shall maintain Auto Liability Insurance in the amount of not less than ONE MILLION DOLLARS (\$1,000,000) Combined Single Limit to protect him from any and all claims arising from the use of the following:
- i. **CONTRACTOR'S** own automobiles and trucks.
 - ii. Hired and non-owned automobiles and trucks.
 - iii. Automobiles and trucks owned by Subcontractors.
- The aforementioned is to cover use of automobiles and trucks on and off the site of the Project. The **OWNER** shall be provided an endorsement from the insurer naming the **OWNER** as an insured for the work contracted.
- e. **OWNER'S** Protective Liability Policy: The **CONTRACTOR** shall maintain **OWNER'S** Protective Liability Insurance with the **OWNER** as the named insured, and the **ENGINEER**, and their servants, agents and employees as additional insureds, in an amount not less than ONE MILLION DOLLARS (\$1,000,000).
- f. Umbrella Liability: The **CONTRACTOR** shall provide **OWNER** a certificate of insurance evidencing Umbrella Liability Insurance in the amount of not less than FIVE MILLION DOLLARS (\$5,000,000).
- g. Builder's Risk and Boiler and Machinery Insurance: The **CONTRACTOR** shall purchase and maintain Builder's Risk and Boiler and Machinery Insurance in the amount of the total value of the materials necessary for the

project. A certificate evidencing such coverage shall be on file with the **OWNER**.

h. Property Insurance: No property insurance is required for this project.

7. Contractor's Responsibilities

Delete Paragraph 6.02.B in its entirety.

8. Record Documents

In addition to the requirements of Paragraph 6.12 of the General Conditions, **CONTRACTOR** shall provide accurate 'mark-ups' acceptable to the **ENGINEER** on or before the date of Substantial Completion of the Project for use by the **ENGINEER** in the preparation of 'record' drawings. Final payment will not be made to the **CONTRACTOR** prior to the **ENGINEER** receiving these mark-ups from the **CONTRACTOR**.

9. Limitations on ENGINEER'S Responsibilities

In addition to the requirements of Paragraph 9.09.B, when it comes to his attention, the **ENGINEER** will immediately notify the **OWNER** in the event that the **CONTRACTOR** is not complying with the Contract Documents or is conducting the Work in such a manner that could be considered grounds for termination of the Contract. The **CONTRACTOR** shall retain responsibility for performing all Work in compliance with the Contract Documents.

The following language shall be added to Paragraph 9.09.B:

“Consistent with the express provisions of this Section 00700, Article 6.13, Article 6.17.D.2, Article 9.02.B, Article 9.09, this Article 9.09.B, and Article 14.02.B.4.b, any reference to “safety” elsewhere in this contract, including but not limited to those found in Section 00700, Articles 4.02.B.1, 4.04.A.2.d, 4.04.B.1, 4.06.B.1, 6.02.B, 6.14, 6.15, 6.16, 6.17.C.1.c, and 13.02.A, does not impose upon the Engineer any duty, obligation or other contractual undertaking to administer the “safety” aspects of Contractor’s performance, or any other matter relating to the Contractor’s means, methods, techniques, sequences or procedures. Contractor’s contractual safety obligations and means and methods during construction are the sole responsibility of the Contractor and are not being administered, overseen or reviewed in any way by the Engineer in performing its contractual obligations”

10. Change of the Contract Time

In addition to the requirements of Paragraph 12.03 of the General Conditions, rainstorms which are encountered in the project area on a regular and seasonal basis do not constitute an abnormal weather condition.

11. Payments to **CONTRACTOR**

Paragraph 14.02.A, Application for Payments, is deleted in its' entirety and the following substituted therefore:

-
- A. Monthly Estimates and Partial Payments: The **CONTRACTOR'S** partial payment period shall end on the last day of each month. The **CONTRACTOR** shall submit acceptable Application for Payment to the **ENGINEER** by the date indicated on the payment schedule as supplied to **CONTRACTOR** by **ENGINEER** provided that the amount due on completed work is at least \$500.00. The partial payment request shall be filled out and signed by the **CONTRACTOR** covering the work completed as of the date of the request and accompanied by such supporting documentation as is required by the Contract Documents and also as the **ENGINEER** may reasonably require. At the discretion of the **OWNER**, the **ENGINEER** may be authorized to include in any monthly estimate advances covering approximately 95 percent of the value of unused materials delivered and stored on the site of the work. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site, the Application for Payment shall also be accompanied by such data, satisfactory to **OWNER**, as will establish **OWNER'S** title to the material and equipment and protect **OWNER'S** title to the material and equipment and protect **OWNER'S** interest therein, including applicable insurance. Each subsequent Application for Payment shall include an affidavit of **CONTRACTOR** stating that all previous progress payments received on account of the Work have been applied to discharge in full all of **CONTRACTOR'S** obligations reflected in prior Applications for Payment.
- B. After each monthly estimate has been approved, the **OWNER** shall pay to the **CONTRACTOR** 95 percent of the amount of said estimate. From the total value of each estimate there will be deducted an amount equivalent to 5 percent of the whole as a retainage to be held by the **OWNER**. The monthly estimates will be approximate only and subject to correction in any subsequent estimate rendered following discovery of the error. At the discretion of the **OWNER**, the **ENGINEER** may be authorized to include any monthly advances covering approximately 95 percent of the value of unused materials delivered and stored on the site of the work.
- C. Subsequent to discovery of any defective or questionable work, an amount equal to the estimated value of such work will be deducted from the next current estimate. The sum will not be included in a subsequent estimate until the defects have been remedied to the **ENGINEER'S** satisfaction.
- D. The **OWNER** reserves the right to withhold payment of any monthly estimate that becomes due if, in the opinion of the **OWNER'S** Attorney, such action is warranted because of any breach of the Contract Provisions or malfeasance on the part of the **CONTRACTOR** or because the progress or the quality of the work is unsatisfactory and does not comply with the Plans and Specifications.

Paragraph 14.02.C of the General Conditions is modified to read "60 days after presentation of the Application for Payment to **OWNER** with **ENGINEER'S** recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by **OWNER** to **CONTRACTOR**."

Paragraph 14.07.C of the General Conditions is modified to read, "If the Application and accompanying documentation are appropriate as to form and substance, **OWNER** shall, within 60 days after receipt thereof, pay **CONTRACTOR** the amount recommended by **ENGINEER**."

Delete Paragraph 14.09.A.2 in its entirety.

12. List of Contract Drawings: Not Used.

13. Liquidated and Special Damages

The **CONTRACTOR** will be subject to liquidated damages and actual damages in the amount of the actual costs incurred by the Owner after the time stipulated for Final Completion of the work.

The **CONTRACTOR** will be subject to liquidated damages in the amount of **\$750** for each consecutive calendar day after the time stipulated for Final Completion of the work. The actual costs includes, but is not limited to construction related costs resulting from the Contractor's failure to complete the work on schedule.

When the Contractor fails to complete the work within the time stipulated, a deduction will be made of \$750 a day from the money due the Contractor not as a penalty but as liquidated damages. The Contractor and the Contractor's Sureties shall be liable for all liquidated damages in excess of money due the Contractor

The liquidated damages provided for herein were not calculated in contemplation or anticipation that the **CONTRACTOR** would default or otherwise abandon the project. In the event the **CONTRACTOR** does default or otherwise abandon the project, the **OWNER** reserves the right to collect from the **CONTRACTOR** or its surety, in addition to the liquidated damages, the actual damages including, but not limited to, additional engineering costs, incurred by the **OWNER** as a result of the default or abandonment.

14. Suspension of Work and Termination

In Paragraph 15.04.A delete the following words: "or Engineer fails to act on any Application for Payment within thirty days, after it is submitted" and add the words "if the". In Paragraph 15.04.B delete the following words: "if Engineer has failed to act on an Application for Payment within thirty days after it is submitted" and add the words "if the".

16. Methods and Procedures

Delete sentence 16.01.C.2 in its entirety

*** * END OF SECTION * ***

SECTION 01010
SUMMARY OF WORK

PART 1 GENERAL

1.01 Location of Work

All of the work of this Contract is located in public right-of-way or on easements and property owned or obtained by the Owner.

1.02 Work to be Done

- A. The CONTRACTOR shall furnish all labor, materials, equipment, tools, services and incidentals to complete all work required by these Specifications and as shown on the Drawings.
- B. The CONTRACTOR shall perform the work complete, in place, and ready for continuous service, and shall include repairs, testing, permits, cleanup, replacements and restoration required as a result of damages caused during this construction.
- C. All materials, equipment, skills, tools and labor which are reasonably and properly inferable and necessary for the proper completion of the work in a substantial manner and in compliance with the requirements stated or implied by these Specifications or Drawings shall be furnished and installed by the CONTRACTOR without additional compensation, whether specifically indicated in the Contract Documents or not.
- D. The CONTRACTOR shall comply with all county, state, federal, and other codes which are applicable to the proposed construction work.

1.03 General Description of Work to be Performed

- A. The Work included in the Contract shall be as described in the Contract Documents.
- B. All work shall be done as described in the Specifications and as shown on the Drawings, complete, tested and ready for operation.

1.04 Work Sequence

- A. All work to be done under the Contract shall be done with minimum inconvenience to the OWNER. The CONTRACTOR shall coordinate his work with private property owners such that existing drainage, water service, sewer service and garbage pickup and other public services are maintained at all times.
- B. Construct Work in stages to accommodate the OWNER'S use of the premises during the construction period; coordinate the construction schedule and operations with the ENGINEER.
- C. Construct the Work in stages to provide for public convenience. Do not close off public

access until completion of one stage of construction will provide alternative usage.

1.05 Construction Areas

- A. CONTRACTOR shall limit his use of the construction areas for Work and for storage, to allow for:
 - 1. Work by other contractors.
 - 2. OWNER use.
 - 3. Public use.
- B. Coordinate use of work site under direction of ENGINEER.
- C. Assume full responsibility for the protection, security and safekeeping of products under this Contract stored on the site.
- D. Move any stored products, under CONTRACTOR'S control which interfere with operations of the OWNER or other contractors.
- E. Obtain and pay for the use of additional storage or work areas needed for operations.

1.06 Owner Occupancy

- A. OWNER will have full access to and use of all existing sewer facilities during the entire period of construction for the conduct of his normal operations. Cooperate with ENGINEER in all construction operations to minimize conflict and to facilitate OWNER usage.
- B. CONTRACTOR shall at all times conduct his operations as to insure the least inconvenience to the general public.

1.07 Partial Owner Occupancy

The CONTRACTOR shall schedule his operations for completion of portions of the Work, as designated, for the OWNER'S occupancy prior to Substantial Completion of the entire Work.

1.08 Plans and Specifications

- A. Specifications: The Technical Specifications consist of three parts: General, Products, and Execution. The General section contains general requirements which govern the work. The Products and Execution sections modify and supplement these by detailed requirements of the work and shall always govern whenever there appears to be a conflict.
- B. Intent:
 - 1. All work called for in the Specifications applicable to the Contract but not shown on the Plans in their present form or vice versa shall be of like effect as if shown or mentioned in both. Work not specified in either the Plans or in the Specifications but involved in carrying out their intent or in the complete and proper execution of the work is required and shall be performed by the CONTRACTOR as though it were specifically delineated or described at the CONTRACTOR'S expense.
 - 2. The apparent silence of the Specifications as to any detail, or the apparent omission

from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

- C. Conflict between Drawings and Specifications. Where an obvious conflict exists between the Plans and Specifications, the ENGINEER shall decide which governs and the CONTRACTOR shall comply with the decision. Such decision shall not be grounds for additional payment to the CONTRACTOR, i.e., the CONTRACTOR shall include the price of the most expensive alternative in his bid.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 Description

- A. CONTRACTOR shall furnish all labor, materials, tools, equipment, appurtenances and all services necessary to perform all Work required, at the lump sum or unit prices for the items listed in the Prices Bid Table located in the Bid Proposal.
- B. The pay items listed in the Bid Proposal constitute all of the pay items for the completion of the Contract. No direct or separate payment will be made for providing miscellaneous temporary or accessory works, plant, services, CONTRACTOR'S or ENGINEER'S field offices, layout surveys, job signs, sanitary requirements, testing, safety devices, approval and record drawings, water supplies, power, removal of waste, watchmen, bonds, insurance, and all other requirements of the Contract Documents. Compensation for all such services, things and materials shall be included in the prices stipulated for the lump sum and unit pay items listed herein.

1.02 Engineer's Estimate of Quantities

The ENGINEER's estimated quantities for unit bid prices, as listed in the Bid Form, are approximate only and are included solely for the purpose of comparison of Bids. The OWNER does not expressly or by implication agree that the nature of the materials encountered below the surface of the ground or the actual quantities of material encountered or required will correspond therewith and reserves the right to increase or decrease any quantity or to eliminate any quantity as OWNER may deem necessary.

1.03 Related Provisions Specified Elsewhere

- A. Payments to CONTRACTOR: Refer to General Conditions and Supplemental Conditions.
- B. Changes in Contract Price: General Conditions and Contract Forms.
- C. Schedule of Values: Section 01026.

1.04 Measurement of Quantities

- A. The measurement and determination of quantities for each pay item will be made in general as prescribed hereinafter and specifically as set out under Method of Measurement and Basis of Payment for each respective pay item section. Actual authorized quantities of work, complete and accepted under the contract, will be measured by the Engineer according to United States standard measures, and in accordance with well recognized engineering practices.
- B. A station when used as a definition or term of measurement will be 100 linear feet.

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- C. Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures having an area of nine square feet or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered by the Engineer.
 - D. Where the area unit for measurement and payment is specified for erosion control items, the measurements will be taken on the slope of the ground to compute the actual surface area for payment.
 - E. Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.
 - F. All items which are measured by the linear foot, such as pipe culverts, guardrail, underdrains, etc., will be measured as specified under the Method of Measurement for the item unless otherwise shown on the plans.
 - G. No payment will be made for unauthorized excavation. Excavation or embankment performed beyond the required neat lines or slope stakes will not be measured for payment unless within tolerances specified or otherwise provided.
 - H. In computing volumes of excavation and embankment, the average end area method will be used, unless otherwise specified.
 - I. When size number is used in the measurement of wire, it will mean the size number specified in AASHTO Designation: M 32.
 - J. The term ton will mean the short ton consisting of 2000 pounds avoirdupois. All materials which are specified for measurement by the ton shall be weighed by competent personnel on approved scales set at locations approved by the Engineer or in the case of prepackaged materials, the manufacturer's bag weight may be used. If material is shipped by rail, the car weight may be accepted provided it is the actual weight of material and not minimum car weight used for assessing freight tariff. However, car weights will not be acceptable for material to be used in mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such time as the Engineer directs, and each truck shall bear a plainly legible identification mark.
 - K. When a complete structure or structural unit, in effect "lump sum" work, is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.
 - L. Volumes of materials computed in cubic yards by the average end area method are designated as "Final Measure" (FM), or "Final Measure - Embankment" (FME). Volumes of materials designated for measurement loose in the vehicle are designated as "Loose Vehicle Measure" (LVM).

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- M. Volumetric measurement of excavation, embankment, granular materials or similar materials in cubic yards will be made by the methods designated on the plans or in the proposal. For justifiable reasons, such as impracticability of measurement of volumes (usually small) by the designated method, the Engineer may order measurement by another method as follows:
1. Volumes designated for payment by FM may be measured LVM and converted to contract measurement by multiplying the loose measure by 80 percent.
 2. Volumes designated for payment by LVM may be measured in its original position by the average end area method and multiply the FM measure by 125 percent.
 3. Volumes designated for payment by FME may be measured in its original position by the average end area method and multiply the FM measure by 90 percent.
 4. Small volumes of surplus, excess excavation or other small volumes of excavation which are impractical to measure by the average end area method but are designated to be measured by FME may be measured LVM and multiply the loose measure by 72 percent.

When the Engineer orders the use of a conversion factor for converting a unit of measure, the ordered method of measurement shall be deemed acceptable to all parties and shall be final.

- N. When requested by the Contractor and with written approval of the Engineer, material specified to be measured by the cubic yard or ton may be converted to the other measure as appropriate. Factors for this conversion will be determined by the Engineer and agreed to by the Contractor before such method of measurement is used.
- O. All materials measured by the cubic yard LVM shall be hauled in approved vehicles and verified at the point of delivery. Vehicles may be of any size or type acceptable to the Engineer provided the body is of such shape that the capacity may be readily and accurately determined to the whole cubic yard. Unless all vehicles on the work are of uniform capacity, each vehicle must be plainly labeled to indicate its measured capacity. All vehicles shall be legibly numbered for identification.
- P. The vehicles shall be loaded to ensure a water level load when they arrive at the point of delivery. Loads hauled in unapproved vehicles and loads of a quantity less than the measured quantity for the hauling vehicle, will be subject to rejection.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01026
SCHEDULE OF VALUES

PART 1 GENERAL

1.01 Requirements Included

The Schedule of Values is an itemized list that establishes the value or cost of each part of the work as defined in Section 01025, Part 1.04. All other work shall be paid according to the Prices Bid Table. It shall be used as the basis for preparing progress payments and may be used as a basis for negotiations concerning additional work or credits which may arise during the construction. Quantities and unit prices may be included in the schedule when approved by or required by the ENGINEER.

1.02 Preparation

- A. Schedule shall show breakdown of labor, materials equipment and other costs used in preparation of the Bid.
- B. Costs shall be in sufficient detail to indicate separate amounts for each Section of the Specifications.
- C. CONTRACTOR may include items for bond, insurance, temporary facilities and job mobilization within the mobilization bid item.
- D. Schedule of Values shall be prepared on 8-1/2 inch by 11 inch white paper.
- E. Use Table of Contents of the Specifications as basis for Schedule format and identify each item with number and title in the Table of Contents. List sub-items of major products or systems as appropriate or when requested by ENGINEER.
- F. When requested by ENGINEER, support values with data that will substantiate their correctness.
- G. The sum of the individual values shown on the Schedule of Values must equal the total Contract Price.
- H. The manner in which overhead and profit are shown shall be supported by the ENGINEER.
- I. Schedule shall show the purchase and delivery costs for materials and equipment that the CONTRACTOR anticipates he shall request payment for prior to their installation.

1.03 Submittal

Submit two copies of Schedule to ENGINEER for approval at least 20 days prior to submitting first application for a progress payment. After review by ENGINEER, revise and resubmit Schedule as required until it is approved.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01027

APPLICATIONS FOR PAYMENT

PART 1 GENERAL

1.01 Requirements Included

Submit Applications for Payment to the ENGINEER in accordance with the General Conditions and in the form required by the OWNER.

1.02 Format and Data Required

- A. Submit applications typed with itemized Schedule of Values data typed on 8-1/2 inch x 11 inch white continuation sheets.
- B. Provide detailed substantiating data on additional sheets, including paid invoices where applicable.

1.03 Preparation of Application for Progress Payments

- A. Application Form:
 - 1. Fill in required information, including that for Change Orders executed prior to date of submittal of application.
 - 2. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
 - 3. Execute certification with signature of a responsible officer of the CONTRACTOR.
- B. Continuation Sheets:
 - 1. Fill in total list of all scheduled component items of work, with item number and scheduled dollar value for each item.
 - 2. Fill in dollar value in each column for each scheduled line item when work has been performed or products stored. Round off values to the nearest dollar or as specified for Schedule of Values.
 - 3. List each Change Order executed prior to date of submission by Change Order Number and description.
 - 4. To receive payment for materials stored on site, submit copies of the original paid invoices with the application for payment.

1.04 Substantiating Data for Progress Payments

- A. Provide substantiating data containing suitable information for review of costs requested with the applications for progress reports identifying:
 - 1. The payment item to which the substantiating data applies.
 - 2. Application number and date.
 - 3. Detailed list of enclosures.
 - 4. For stored materials:
 - a. Item number and identification as shown on application.
 - b. Description of specific material and invoice of delivered material.

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- c. Consolidated inventory of stored materials showing:
 - (1) Materials received.
 - (2) Materials used.
 - d. Additional stored materials may not be claimed upon reaching 75% completion of the total project.
 - e. Stored Materials shall be inventoried jointly prior to each pay request.
 - B. Submit one copy of data for each copy of application for payment.
 - C. The CONTRACTOR is to maintain an updated set of record drawings in accordance with Section 01720. As a prerequisite for monthly progress payments, the CONTRACTOR is to exhibit the updated record drawings for review by the OWNER and the ENGINEER.
 - D. Construction photographs as required by Section 01380 will be submitted with each progress payment and shall be considered a part of that payment request.
 - E. Updated construction schedule showing work completed and work projected by month to the completion of the project.

1.05 Preparation of Application for Final Payment

- A. Fill in application form as specified for progress payments.
- B. Use continuation sheet for presenting the final statement of accounting.

1.06 Submittal Procedure

- A. Submit applications for payment to the ENGINEER at the times stipulated in the General Conditions.
- B. Initially a pencil draft application shall be informally submitted to the ENGINEER who shall review the draft with the CONTRACTOR and make adjustments as appropriate. The CONTRACTOR shall then prepare a formal typed application using the informally approved amounts and submit three (3) complete sets to the ENGINEER.
- C. When the ENGINEER finds the application properly completed and correct, as informally approved, he will transmit it to the OWNER for payment with a copy to the CONTRACTOR.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01030

SPECIAL PROJECT PROCEDURES

PART 1 GENERAL

1.01 WORKMANSHIP, MATERIAL AND EQUIPMENT

- A. When a particular product is specified or called for, it is intended and shall be understood that the Contractor include those products in his bid. Should the Contractor desire to substitute products which he purports to be equal to those specified, the Contractor shall furnish information as described in Section 00700, General Conditions, The alternative products(s) submitted by the Contractor shall meet the requirements of the specifications and shall, in all respects, be equal to the products specified by name herein.
- B. All apparatus, mechanism, equipment, machinery, and manufactured articles for incorporation into the Work shall be new and unused and the standard products of recognized reputable manufacturers.

1.02 PROVISIONS FOR CONTROL OF EROSION AND POLLUTANTS

Sufficient precautions shall be taken during construction to minimize the runoff of polluting substances such as silt, clay, fuels, oils, bitumens, calcium chloride, or other materials harmful to humans, fish, or other life, into the ground and surface waters of the state. Contractor will give all notices and comply with all laws, notices, ordinances, rules and regulations applicable to the work, without exception.

1.03 ON-SITE STORAGE

The Contractor's attention is invited to special storage requirements and possible charges for noncompliance of on-site storage requirements for materials and equipment as specified in Section 01600.

1.04 INCLEMENT WEATHER

- A. In the event of inclement weather, or whenever Engineer shall direct, Contractor and Subcontractors will protect carefully the work and materials against damage or injury from the weathers, including sudden rises in flows due to storms outside the immediate construction zone. Damaged Work and materials shall be removed and replaced. If, in the opinion of Engineer, any portion of Work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or Subcontractors to so protect the Work, no additional time for removal and replacement will be given by the Owner.

1.05 WARRANTIES

- A. All work supplied under the Contract shall be warranted for a period of one (1) year or such longer period of time as may be prescribed by any special guarantee required by Change Orders or issued by Subcontractor, suppliers, or manufacturers, from the date of acceptance for operations (beneficial use) by the Owner as specified in Section 01740, Warranties and Bonds.
- B. The work shall be warranted to be free from defects in workmanship, design and materials. If any part of the work should fail during warranty period, it shall be replaced or restored to service at no expense to the Owner.

1.06 CONSTRUCTION CONDITIONS

The Contractor shall strictly adhere to the specific requirements of the governmental units(s) or agency(ices) having jurisdiction over the work. Wherever there is a difference in the requirements of a jurisdictional body and these Specifications, the more stringent shall apply.

1.07 PUBLIC NUISANCE

The Contractor shall not create a public nuisance, including, but not limited to, encroachment on adjacent lands, flooding of adjacent lands, or excessive noise.

1.08 SUSPENSION OF WORK DUE TO WEATHER

During inclement weather, all work which might be damaged or rendered inferior by such weather conditions shall be suspended. The orders and decisions of the Engineer as to suspensions shall be final and binding. The authority of the Engineer to issue such an order shall not be interpreted as a requirement to do so. During suspension of the work from any cause, the work shall be suitably covered and protected so as to preserve it from injury by the weather. Notwithstanding this provision, it is understood and agreed that the General Conditions shall control.

1.09 RELOCATIONS

The Contractor shall be responsible for the relocation of structures, including, but not limited to, light poles, signs, sign poles, fences, mailboxes, piping, conduits and drains that interfere with the positioning of the work as set out on the Drawings. The cost of all such relocations shall be included in the bid.

1.10 SALVAGE

Any existing equipment or materials, including, but not limited to, valves, pipes, fittings, couplings, etc., which are removed or replaced as a result of construction under this project may be designated as salvage by the Engineer and, if so, shall be removed and delivered to the Owner at a location directed by the Engineer.

1.11 PERMITS

Upon notice of award, the Contractor shall immediately apply for all applicable permits not previously obtained by the Owner to do the work from the appropriate governmental agency or agencies. No work shall commence until all applicable permits have been obtained and copies delivered to the Engineer. The costs for obtaining all permits shall be borne by the Contractor.

1.12 HAZARDOUS LOCATION

- A. The existing wet wells, manholes, sewers, force mains, pipes, and other related areas are hazardous locations in that explosive concentrations of sewage gas may be present. The Contractor is cautioned that the above areas, especially the wet well, may be deficient in oxygen. Checks shall be made by the Contractor whenever personnel are working in these areas to insure that adequate ventilation has been provided.
- B. In his operations in hazardous locations, the Contractor shall use spark-proof tools and explosion-proof temporary lighting and shall not use electric power tools, open flame devices, electric welding or any device or methods which might conceivably cause ignition or explosion.
- C. If a working is atmosphere is unsafe, the Contractor shall furnish, install, operate, and later remove such temporary auxiliary ventilating facilities as are necessary to provide a safe atmosphere.
- D. The Contractor shall also instruct and caution his employees and the employees of his subcontractors to avoid smoking while in the hazardous areas. Suitable prominent "No Smoking" signs shall be placed at locations where sewage gas could be present.

1.13 NOTIFICATION OF WORK ON EXISTING FACILITIES

Before commencing work on any of the existing structures or equipment, the Contractor shall notify the Engineer, in writing, at least ten (10) calendar days in advance of the date he proposes to commence such work.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01041

PROJECT COORDINATION

PART 1 GENERAL

1.01 Work Progress

The CONTRACTOR shall furnish personnel and equipment which will be efficient, appropriate, and large enough to secure a satisfactory quality of work and a rate of progress which will insure the completion of the work within the time stipulated in the contract. If at any time such personnel appear to the ENGINEER to be inefficient, inappropriate, or insufficient for performing the quality of work required or for producing the rate of progress aforesaid, he may order the CONTRACTOR to increase the efficiency, change the character or increase the personnel and equipment, and the CONTRACTOR shall conform to such order at his own expense. Failure of the ENGINEER to give such order shall in no way relieve the CONTRACTOR of his obligations to perform the work at the specified quality and rate of progress.

1.02 Private Land

The CONTRACTOR shall not enter or occupy private land outside of the OWNER'S land, right-of-ways, or servitudes except by written permission of both the OWNER and the Owner of the private land. Such permission shall be obtained by and at the expense of the CONTRACTOR and at no additional cost to the OWNER.

1.03 Work Locations

Work shall be located substantially as indicated on the Drawings, but the Engineer reserves the right to make such modifications in locations as may be found desirable to avoid interference with existing structures or for other reasons.

1.04 Open Excavations

All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons and damage to property. The CONTRACTOR shall, at his own expense, provide suitable and safe bridges and other crossings for accommodating travel by the public, OWNER'S and ENGINEER'S personnel, and workmen.

1.05 Test Pits

Test pits for the purpose of locating underground utilities or structures which may interfere with installation of the Work shall be excavated in advance of the Work and backfilled by the CONTRACTOR. Test pits shall be backfilled immediately after their purpose has been satisfied and maintained in a manner satisfactory to the ENGINEER. The costs for such test pits shall be included in the cost of the work for which the test pits benefit.

1.06 Water for Construction Purposes

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- A. In locations where public water supply is available, the CONTRACTOR shall purchase water for all construction purposes.
 - B. The CONTRACTOR shall make his own arrangements and pay all costs for connections to public water systems and for water used. Existing OWNER supplies or connections shall not be used without prior approval by OWNER.

1.07 Maintenance of Flow

The CONTRACTOR shall maintain the flow of sewers, drains, and water courses interrupted during the progress of the Work, including complete pumped bypass systems where necessary. The CONTRACTOR shall immediately remove all offensive matter. The entire procedure of maintaining existing flow shall be fully discussed with the ENGINEER well in advance of the interruption of any flow. All temporary works installed for flow maintenance shall be removed when the permanent work is finished and the areas cleaned and restored to good condition.

1.08 Protection of Construction and Equipment

- A. All newly constructed work shall be carefully protected from injury in any way. No wheeling or walking or placing of heavy loads on it shall be allowed. All portions of the work injured shall be reconstructed by the CONTRACTOR at his own expense.
- B. All structures shall be protected in a suitable manner. Should any parts of the structures become heaved, cracked or otherwise damaged, all such damaged portions of the work shall be completely repaired and made good by the CONTRACTOR at his own expense and to the satisfaction of the ENGINEER. If, in the final inspection of the work, any defects, faults or omissions are found, the CONTRACTOR shall cause the same to be repaired or removed and replaced by proper materials and workmanship without extra compensation for the materials and labor required. Further, the CONTRACTOR shall be fully responsible for the satisfactory maintenance and repair of the construction and other work undertaken herein for at least the guarantee period described in the contract.
- C. The CONTRACTOR shall take all necessary precautions to prevent damage to any structure due to water pressure (groundwater or surface water) during and after construction and until such structure is accepted and taken over by the OWNER.
- D. The CONTRACTOR is responsible for security of the site. Security of all equipment, material, tools, machinery, supplies, structures, buildings, vehicles and offices is the responsibility of the CONTRACTOR. Measures to affect job site security and limit unauthorized access, including temporary fencing, security guards, and other measures are the responsibility of the CONTRACTOR at his expense.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01041.1

UTILITIES COORDINATION

PART 1 GENERAL

1.01 UTILITIES

Utilities for the purpose of these specifications shall be considered as including, but not limited to: pipelines, conduits, cables, transmission lines and appurtenances of Public Utilities and those of Special Utility Districts, Cities or Towns, businesses or individuals solely for their own use or for use of their tenants; and storm drains, sanitary sewers, street lighting, traffic signal and fire alarm systems.

1.02 UNDERGROUND INSTALLATIONS

Existing underground pipelines and utilities are indicated on the Drawings only to the extent such information was made available to or discovered by Engineer in preparing drawings. There is no guarantee as to the accuracy or completeness of such information, and all responsibility for the accuracy and completeness thereof is expressly disclaimed by the Owner and the Engineer.

1.03 UTILITIES LOCATED IN CITY RIGHT-OF-WAY

Unless otherwise provided or excepted herein, the removal, adjusting, relocation, or replacement of utility structures or facilities within City right-of-way which may be necessary for construction of the work in accordance with these Contract Documents, shall be at the expense of the Contractor.

It shall be the Contractor's responsibility to protect and maintain those utilities which, in the opinion of the Engineer, do not need to be disturbed in order to accomplish the work required by the contract.

1.04 RELOCATIONS OF EXISTING GAS LINES, TELEPHONE LINES, ELECTRIC LINES, CABLE TV LINES AND WATER LINES

The Contractor shall notify the proper authority of the utility involved when relocation of these lines is required. The Contractor shall coordinate all work by the utility so that the progress of construction will not be hampered.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

The Contractor, when the Notice to Proceed is received, shall notify the owners of utilities affected by the work, the approximate date upon which he will begin work, and shall submit a progress schedule of the proposed work. This shall be deemed sufficient notice if the project progresses according to the progress schedule submitted with the notification. If changes in the schedule of the

work occur, the Contractor shall appraise both the owner of the utility affected and the Engineer so that adjustments in the work schedule of utility can be made. The Contractor shall be responsible for damages to the utility facility and construction delays resulting from failure to notify the utility and the Engineer of changes in procedure or location.

3.02 PROTECTION OF EXISTING UTILITIES

- A. The attention of the Contractor is drawn to the fact that during excavation, the possibility exists of the Contractor encountering various water, gas, telephone, electrical, or other utility lines not shown on the Drawings. The Contractor shall exercise extreme care before and during excavation to locate and flag these lines so as to avoid damage to the existing lines. Should damage occur to an existing line, the Contractor shall repair the line at no cost to the Owner.
- B. The Contractor shall assume full responsibility for the protection of all utilities, public and private, including poles, services to buildings, gas pipes, water pipes, hydrants, sewers, drains, and electric and telephone cables, whether or not they are shown on the Drawings. The Contractor shall carefully support and protect all such utilities from injury of any kind. Any damage resulting from the Contractor's operation shall be repaired by him at his expense.

The protection and preservation of utility facilities which are located within the right-of-way, but outside the normal limits of construction, as determined by the Engineer, shall be the responsibility of the Contractor. The Contractor shall be responsible for all damage to utilities which are due to his negligence.

- C. The Contractor shall bear full responsibility for obtaining locations of all underground structures and utilities (including existing water services, drain lines, and sewer). Services to buildings shall be maintained, and all costs or charges resulting from damage thereto shall be paid by the Contractor.
- D. If, in the opinion of the Engineer, permanent relocation of a utility owned by the City is required, he may direct the Contractor, in writing, to perform the work. Work so ordered will be paid for at the Contract unit prices, if applicable, or as extra work under Article 10 of the General Conditions. If relocation of a privately owned utility is required, the Contractor will notify the Utility to perform the work as expeditiously as possible. The Contractor shall fully cooperate with the County and Utility and shall have no claim for delay due to such relocation.
- E. The Contractor shall notify public and private utility companies in writing at least two, but not more than five full days (excluding Saturdays, Sundays, and legal holidays) before excavating near their utilities.

3.03 UTILITIES TO BE ADJUSTED

The owners of utility facilities which require relocation, removal, adjustment or replacement shall, if possible and feasible, perform this work prior to the commencement of the Contractor's work. Where utility work must be done in conjunction with the Contractor's work on the project or in conjunction with the work of other utilities, arrangements for when, how and where the operation is to proceed

shall be worked out among the parties concerned. If disputes arise, the Engineer shall decide the course of action to be taken.

3.04 UTILITIES CONFLICTING WITH OPERATIONS

Those utility facilities which do not conflict with the improvement, but which are obstructions to the operations required for installation or which are obstructions to the operations required for installation of which present unusual difficulty due to their close proximity to the area of the operations, shall be located with certainty by the owners of the utility prior to the arrival of the Contractor's operation which would be hindered by the utility facility. The Contractor is required to preserve the utility facility in place without damage and shall be responsible for damages sustained, if the utility owner has located the facility by exposing it to the view of the Contractor or has otherwise made the Contractor aware, with certainty, of the location of the facility. Any other arrangements that the Contractor may make with a utility owner as a substitute for the requirements of this Section shall require the approval of the Engineer, in writing.

3.05 MISLOCATED UTILITIES

The owner of a utility shall be wholly responsible for the proper location of his facilities which are affected by construction work performed according to these specifications. Improperly located or mislocated facilities which are damaged during construction shall be the responsibility of the utility, providing proper notification has been given.

*** * END OF SECTION * ***

SECTION 01045
CUTTING AND PATCHING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Contractor shall be responsible for all cutting, fitting and patching, including attendant excavation and backfill, required to complete the Work to include:

- A. Make its several parts fit together properly.
- B. Uncover portions of the Work to provide for installation of ill-timed work.
- C. Remove and replace defective work.
- D. Remove and replace work not conforming to requirements of the Contract Documents
- E. Remove samples of installed work as specified for testing.

1.02 SUBMITTALS

- A. Submit a written request to the Engineer well in advance of executing any cutting or alteration which affects:
 - 1. Work of the Owner or any separate contractor.
 - 2. Structural value or integrity of any element of the Project or work.
 - 3. Integrity or effectiveness of weather-exposed or moisture-resistant elements or systems.
 - 4. Efficiency, operational life, maintenance or safety of operational elements.
 - 5. Visual qualities of sight-exposed elements.
- B. Request shall include:
 - 1. Identification of the work.
 - 2. Description of affected work.
 - 3. The necessity for cutting, alteration or excavation.
 - 4. Effect on work of Owner or any separate Contractor, or on structural or weatherproof integrity of work.

-
5. Description of proposed work:
 - a. Scope of cutting, patching, alteration, or excavation.
 - b. Trades who will execute the work.
 - c. Products proposed to be used.
 - d. Extent of refinishing to be done.
 6. Alternatives to cutting and patching.
 7. Cost proposal, when applicable.
- C. Submit written notice to the Engineer designating the date and the time the work will be uncovered.

PART 2 PRODUCTS

2.01 MATERIALS

Comply with specifications and standards for each specific product involved.

PART 3 EXECUTION

3.01 INSPECTION

- A. Inspect existing conditions of Project, including elements subject to damage or to movement during cutting and patching.
- B. After uncovering work, inspect conditions affecting installation of products or performance or work.
- C. Report unsatisfactory or questionable conditions to the Engineer in writing; do not proceed with work until the Engineer has provided further instructions.

3.02 PREPARATION

- A. Provide adequate temporary support as necessary to assure structural value or integrity of affected portion of Work.
- B. Provide devices and methods to protect other portions of Project from damage.
- C. Provide protection from elements for the portion of the Project which may be exposed by cutting and patching work, and maintain excavations free from water.

3.03 PERFORMANCE

- A. Execute cutting and demolition by methods which will prevent damage to other work and will provide proper surfaces to receive installation of repairs.
- B. Execute excavating and backfilling by methods which will prevent settlement or damage to other work.
- C. Employ original installer or fabricator to perform cutting and patching for:
 - 1. Weather-exposed or moisture-resistant elements.
 - 2. Sight-exposed finished surfaces.
- D. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes.
- E. Restore work which has been cut or removed; install new products to provide completed work in accord with requirements of Contract Documents.
- F. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:
 - 1. For continuous surfaces, refinish to nearest intersection.
 - 2. For an assembly, refinish entire unit.

*** * END OF SECTION * ***

SECTION 01050
FIELD ENGINEERING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Contractor shall provide and pay for field engineering services for:
 - 1. Survey work required in execution of work.
 - 2. Civil, structural, or other professional engineering services specified or required to execute the Contractor's construction method.
- B. The method of field staking for the construction of the work shall be at the option of the Contractor. The Owner shall provide the engineering surveys to establish reference points which in his judgment are necessary to enable the Contractor to proceed with his work.
- C. The accuracy of any method of staking shall be responsibility of the Contractor. All engineering for vertical and horizontal control shall be the responsibility of the Contractor.
- D. The Contractor shall be held responsible for the preservation of all stakes and marks. If any stakes or marks are carelessly or willfully disturbed by the Contractor, the Contractor shall not proceed with any work until he has reestablished such points, marks, lines and elevations as may be necessary for the prosecution of the work.
- E. The Contractor shall retain the services of a competent surveyor, registered in the State of Mississippi, to layout the work and maintain a survey during construction. The Contractor shall be solely responsible for proper location of the work.

1.02 SURVEY REFERENCE POINTS

Locate and protect control points prior to starting site work, and preserve all permanent reference points during construction.

- 1. Make no changes or relocations without prior written notice to the Engineer.
- 2. Report to the Engineer when any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations.

1.03 PROJECT SURVEY REQUIREMENTS

- A. Establish temporary bench marks as needed, referenced to data established by survey control points. Record locations, with horizontal and vertical data, on Record Drawings.
- B. Establish lines and levels, and locate and lay out, by instrumentation and similar appropriate

means:

1. Site improvements, including utility slopes and invert elevations.
 2. Batter boards for structures.
- C. From time to time, verify layouts by same methods.
- D. Establish all lines and grades prior to construction of site improvements.

1.04 RECORDS

- A. Maintain a complete, accurate log of all control and survey work as it progresses.
- B. At Contract closeout, submit a survey of installation of water mains, fire hydrants, and valves at the same scale as the Engineer's drawings indicating elevations and channel stationing at 100 foot increments.

1.05 SUBMITTALS

- A. On request of the Engineer, submit documentation to verify accuracy of field engineering work.
- B. Submit Drawings showing locations of all pipes and structures constructed. This Drawing shall be included with the Record Drawings.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01060

REGULATORY REQUIREMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Abbreviations and acronyms used in Contract Documents to identify reference standards are as indicated herein.

1.02 QUALITY ASSURANCE

- A. Applications: When a standard is specified by references, comply with requirements and recommendations stated in the standard, except when requirements are modified by the Contract Documents, or applicable codes establish stricter standards.
- B. Publications Date: The publication in effect on the date of issue of Contract Documents, except when a specific publication date is specified.

1.03 ABBREVIATIONS, NAMES, AND ADDRESSES OF ORGANIZATIONS

The following standards may be referenced in the Contract Documents. The contractor shall obtain copies of reference standards directly from the publication source when needed for proper performance of Work or when required for submittal by Contract Documents.

AAN	American Association for Nurserymen 1250 I Street N.W., Suite 500 Washington, DC 20005 (202) 789-2900
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W., Suite 225 Washington, DC 20001 (202) 624-5800
ACI	American Concrete Institute Post Office Box 19150 22400 W. Steven Mile Road Detroit, MI 48219 (313) 532-2600
ACPA	American Concrete Pipe Association 8320 Old Courthouse Road, Suite 201 Vienna, VA 22180 (703) 821-1990
AI	Asphalt Institute

	Asphalt Institute Building College Park, MD 20740-1802
AISC	American Institute of Steel Construction 400 North Michigan Avenue Chicago, IL 60611 (312) 670-2400
AISI	American Iron and Steel Institute 1133 15th Street N.W., Suite 300 Washington, DC 20005 (202) 452-7100
ANSI	American National Standard Institute 1430 Broadway New York, NY 10018 (212) 354-3300
ASCE	American Society of Civil Engineers 345 East 47th Street New York, NY 10017 1-800-548-ASCE 345 East 47th Street New York, NY 10017 (212) 705-7722
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103 (215) 299-5400
AWPA	American Wood Preserver's Association Post Office Box 849 Stevensville, MD 21666 (301) 643-4163
AWS	American Welding Society Post Office Box 351040 550 LeJeune Road, N.W. Miami, FL 33126 1-800-443-9353
AWWA	American Water Works Association 6666 W. Quincy Avenue Denver, CO 80235 (303) 794-7711
CLFMI	Chain Link Fence Manufacturers Institute

	1776 Mass Avenue N.W., Suite 500 Washington, DC 20036 (202) 659-3537
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Road Schaumburg, IL 60173 (312) 517-1200
DIPRA	Ductile Iron Pipe Research Association 245 Rivercase Parkway E., Suite 100 Birmingham, AL 35244 (205) 988-9870
FS	Federal Specification General Services Administration Specifications and Consumer Information & Distribution Section (WFSIS) 7 and D Street S.W., Room 654 Washington, DC 20407 (202) 472-2140
IEEE	Institute of Electrical and Electronic Engineers Service Center 345 E. 47th Street New York, NY 10017 (212) 705-7900
MDOT	Mississippi Department of Transportation P. O. Box 1850 Jackson, Ms 39215-1850 (601) 359-1213
MIL	Department of the Navy Navel Publications and Forms Center 5801 Torbor Avenue Philadelphia, PA 19120-5099 (215) 697-2667
NEC	National Electric Code National Fire Protection Association Batterymarch Park Quincy, MA 02269 (617) 770-3000
NEMA	National Electrical Manufacturer's Association 2101 L Street, NW, Suite 300 Washington, DC 20037 (202) 457-8400
NSPE	National Society of Professional Engineers

	1420 King Street Alexandria, VA 22314 (703) 684-2835
OSCI	Office of Standards Code and Information National Bureau of Standards Gaithersburg, MD 20899 (301) 975-4029
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077 (312) 966-6200
PCI	Prestressed Concrete Institute 175 W. Jackson Blvd., Suite 1859 Chicago, IL 60604 (312) 786-0300
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association Post Office Box 70 Merrifield, VA 22116 (703) 790-9890
SSPC	Steel Structures Painting Council 4400 5th Avenue Pittsburgh, PA 15213 (412) 268-3327
UL	Underwriter's Laboratories, Inc. 333 Pfingsten Road Northbrook, IL 60062 (312) 272-8800

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01200
PROJECT MEETINGS

PART 1 GENERAL

1.01 Requirements Included

- A. The ENGINEER shall schedule and administer a preconstruction meeting, construction progress meetings, and specially called meetings throughout the progress of the work. The ENGINEER will:
 - 1. Prepare agenda for meetings.
 - 2. Make physical arrangements for meetings.
 - 3. Preside at meetings.
 - 4. Record the minutes; include significant proceedings and decisions.
 - 5. Reproduce and distribute copies of minutes.
- B. The CONTRACTOR and representatives of, where appropriate, subcontractors and suppliers shall attend meetings. The representative shall be qualified and authorized to act on behalf of the entity each represents.
- C. The CONTRACTOR shall attend and identify at the meetings the actual status of the Contract Work and, when the Work is not being performed consistently with the Contract Documents and construction schedules, shall identify at the meetings the steps he is taking to resolve the inconsistency.

1.02 Pre-construction Meeting

- A. The CONTRACTOR shall participate in a preconstruction meeting to be held after the effective date of the Agreement and prior to the date of Notice to Proceed.
- B. The following are expected to be in attendance:
 - 1. OWNER'S Representative and other staff as appropriate.
 - 2. ENGINEER and his professional consultants as appropriate.
 - 3. ENGINEER's Resident Project Representative.
 - 4. CONTRACTOR's Representative and Construction Superintendent.
 - 5. Subcontractors as appropriate.
 - 6. Utility representatives as appropriate.
 - 7. Others as appropriate.
- C. The following matters are expected to be addressed:
 - 1. Distribution and discussion of:
 - a. List of major subcontractors.
 - b. Project construction schedules.
 - 2. Critical work sequencing.
 - 3. Project Coordination.
 - 4. Designation of responsible personnel.
 - 5. Procedures and processing of:

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- a. Field decisions.
 - b. Proposal requests.
 - c. Submittals.
 - d. Change Orders.
 - e. Applications for Payment.
 6. Distribution of Contract Documents.
 7. Procedures for maintaining Record Documents.
 8. Use of premises:
 - a. Office, work and storage areas.
 - b. OWNER'S requirements.
 9. Construction facilities, controls and construction aids.
 10. Temporary utilities.
 11. Housekeeping procedures.
 12. Insurance certifications.
 13. Liquidated damages for delay.
 14. Weekly job meetings.
 15. Laboratory testing of material requirements.

1.03 Construction Progress Meetings

- A. Construction progress meetings will be held monthly with the first meeting 30 days or less after the date of Notice to Proceed.
- B. Special construction progress meetings will be held as required by progress of the Work.
- C. The following are expected to be in attendance:
 1. OWNER Representative and other staff as appropriate.
 2. The ENGINEER and his professional consultants as appropriate.
 3. CONTRACTOR's Representative and/or construction Superintendent.
 4. Subcontractors as appropriate.
 5. Suppliers as appropriate.
 6. Others as appropriate.
- D. The following matters are expected to be addressed:
 1. Review and approve minutes of previous meeting.
 2. Review of work progress.
 3. Field observations, problems, conflicts.
 4. Problems which impede Construction Schedule.
 5. Review of off-site fabrication, delivery schedules.
 6. Corrective measures and procedures to regain Construction Schedule.
 7. Revisions to Construction Schedule.
 8. Progress and schedule during succeeding work period.
 9. Payment applications and processing.
 10. Submittals.
 11. Maintenance of quality standards.
 12. Changes, substitutions, and Change Orders.

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- 13. Review proposed changes for:
 - a. Effect on Construction Schedule and completion date.
 - b. Effect on other contracts of the Project.
 - 14. Other matters as appropriate.
 - 15. Record drawings.
- E. The CONTRACTOR shall be prepared to discuss the above topics and to make commitments for resolving deficiencies.
- F. The CONTRACTOR shall provide a current submittal log at each progress meeting in accordance with Section 01340.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01310
CONSTRUCTION SCHEDULES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Contractor shall comply with the General Conditions.
- B. Submit revised progress schedules periodically.

1.02 FORM OF SCHEDULES

- A. Prepare schedules in the form of a horizontal bar chart.
 - 1. Provide separate horizontal bar for each trade or operation.
 - 2. Horizontal time scale; identify the first work day of each week.
 - 3. Scale and spacing: To allow for notations and future revisions.
 - 4. Minimum sheet size: 8-1/2 inches by 11 inches.
- B. Format of listings: The table of contents of the Contract Documents.
- C. Identification of listings: Items of work.

1.03 CONTENT OF SCHEDULE:

- A. Construction Progress Schedule:
 - 1. Show the complete sequence of construction by activity.
 - 2. Show the dates for the beginning, and completion of each major element of construction.
 - 3. Show projected percentage of completion for each item, as of the first day of each month.
 - 4. Show an anticipated monthly payment schedule.
- B. Submittal Schedule for Shop Drawings, Product Data and Samples. Show:
 - 1. The dates for Contractor's submittal.
 - 2. The dates approved submittal will be required from the Engineer.

1.04 PROGRESS REVISIONS

- A. Indicate progress of each activity to date of submission.
- B. Show changes occurring since previous submission of schedule:
 - 1. Major changes in scope.
 - 2. Activities modified since previous submission.
 - 3. Revised projections of progress and completion.
 - 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
 - 1. Problem areas, anticipated delays, and the impact on the schedule.
 - 2. Corrective action recommended, and its effect.

1.05 SUBMISSIONS

- A. Submit initial schedules in accordance with the General Conditions.
 - 1. Engineer will review schedules and return review copy within ten (10) days after receipt.
 - 2. If required, Contractor shall resubmit within seven (7) days after return of review copy.
- B. Submit revised progress schedules with each Application for Payment.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01340

SHOP DRAWINGS, PROJECT DATA, AND SAMPLES

PART 1 GENERAL

1.01 Requirements Included:

- A. The Contractor shall submit to the Engineer for review and exception, if any, such working drawings, shop drawings, test reports and data on materials and equipment (hereinafter in this article called data), and material samples (hereinafter in this article called samples) as are required for the proper control of work, including but not limited to those working drawings, shop drawings, data and samples for materials and equipment specified elsewhere in the Specifications and in the Contract Drawings.
- B. Within fifteen (15) calendar days after the Effective Date of the Agreement, the Contractor shall submit to the Engineer a complete list of preliminary data on items for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way relieve the Contractor from submitting complete shop drawings, data, and samples in accordance with the Specifications. This procedure is required in order to expedite final review of Shop Drawings.
- C. The Contractor is to maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting. This log should include the following items:
 - 1. Submittal Description and Number assigned.
 - 2. Date to Engineer.
 - 3. Date returned to Contractor (from Engineer).
 - 4. Status of Submittal (No exceptions taken, returned for confirmation or resubmittal, rejected).
 - 5. Date of Resubmittal and Return (as applicable).
 - 6. Date material released (for fabrication).
 - 7. Projected date of fabrication.
 - 8. Projected date of delivery to site.
 - 9. Status of O&M manuals submittal.

1.02 Contractor's Responsibility

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- A. It is the duty of the Contractor to check all drawings, data and samples prepared by or for him before submitting them to the Engineer for review. Each and every copy of the Drawings and data shall bear Contractor's stamp showing that they have been so checked. Shop drawings submitted to the Engineer without the Contractor's stamp or evidence that the Contractor has not performed the required review will be returned to the Contractor for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the Contract Documents.
 - B. Determine and verify:
 - 1. Field measurements.
 - 2. Field construction criteria.
 - 3. Catalog numbers and similar data.
 - 4. Conformance with Specifications and indicate all variances from the Specifications.
 - C. The Contractor shall furnish the Engineer a schedule of Shop Drawing submittals fixing the respective dates for the submission of shop and working drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.
 - D. The Contractor shall not begin any of the work covered by a drawing, data, or a sample returned for correction until a revision or correction thereof has been reviewed and returned to him by the Engineer with no exceptions taken.
 - E. The Contractor shall submit to the Engineer all drawings and schedules sufficiently in advance of construction requirements to provide no less than twenty-one (21) calendar days for checking and appropriate action from the time the Engineer receives them.
 - F. The Contractor shall submit five (5) copies of shop drawings and descriptive or product data submittal to complement shop drawings to the Engineer which will be retained for his use.
 - G. The Contractor shall be responsible for and bear all cost of damages which may result from the ordering of any material or from proceeding with any part of work prior to the completion of the review by Engineer of the necessary shop drawings.
 - H. The Contractor shall utilize a Sequential Numbering System for submittals (1-999). Resubmittals or confirming material shall be assigned a letter next to the submittal number, i.e. A= second submittal, B= third submittal, etc.
 - I. Submittals shall include a certified statement of compliance to the requirements detailed in the specifications in addition to other submittal requirements. This certification shall be prepared by the manufacturer and not the local supplier. Validity of the authority and position of the person signing the certification shall be verified by a Notary Public. The statement of compliance shall address each point of conformance contained in the governing specifications with definite comments of either compliance or non-compliance. Statements of non-compliance with points of conformance shall be accompanied by a statement of

justification as to the reason for non-conformance and why the non-complying feature is considered to be either equal to or better than the specified feature. The Engineer will use the certified statement of compliance in his evaluation of the submittal rendering a judgment as to equality to the specified product and issuing a statement as to whether the product is acceptable for or rejected from incorporation into the work.

- J. When a manufacturer named in the controlling specification is chosen to supply a product and the details of manufacture, size, and installation are shown on this standard catalog cut sheets, the manufacturer may submit the certified statement of compliance as detailed above along with installation details specific to the work such as laying schedules, etc. as required, deleting the standardized catalog data.

1.03 Engineer's Review of Shop Drawings

- A. The Engineer's review of drawings, data and samples submitted by the Contractor will cover only general conformity to the Specifications, external connections, and dimensions which affect the installation.
- B. The review of drawings and schedules will be general, and shall not be construed:
1. as permitting any departure from the Contract requirements;
 2. as relieving the Contractor of responsibility for any errors, including details, dimensions, omissions and materials;
- C. If the drawings or schedules as submitted describe variations per subparagraph (1.04.D), and show a departure from the Contract requirements which Engineer finds to be in the best interest of the Owner and to be so minor as not to involve a change in Contract Price or Time, The Engineer may return the reviewed Drawings without noting any exception.
- D. After the ENGINEER completes his review, the Shop Drawings will be marked with one of the following notations:
1. No Exceptions Taken.
 2. Make Corrections Noted.
 3. Revise and Resubmit.
 4. Rejected.
 5. Submit Specified Item.
- E. If a submittal is acceptable, it will be marked "No Exception Taken" or "Make Corrections Noted". Three copies of the submittal will be returned to the CONTRACTOR.
- F. Upon return of a submittal marked "No Exception Taken" or "Make Corrections Noted", the CONTRACTOR may order, ship or fabricate the materials included on the submittal, provided it is in accordance with the corrections indicated.
- G. If a Shop Drawing action is "Make Corrections Noted" but has extensive corrections or corrections affecting other drawings or Work, the ENGINEER may require that the CONTRACTOR make the corrections indicated thereon and resubmit the Shop Drawings for

record purposes. In this case, the submittal will be marked "Make Corrections Noted-Resubmit".

- H. If a submittal is unacceptable, two copies will be returned to the CONTRACTOR with one of the following notations:
 - 1. "Revise and Resubmit"
 - 2. "Rejected"
- I. Upon return of a submittal marked "Revise and Resubmit", the CONTRACTOR shall make the corrections indicated and repeat the initial approval procedure. The "Rejected" notation is used to indicate material or equipment that is not acceptable. Upon return of a submittal so marked, the CONTRACTOR shall repeat the initial approval procedure utilizing acceptable material or equipment.
- J. Submittals lacking adequate details or information to allow the ENGINEER to determine whether or not the submittal meets the intent of the Contract specifications shall be marked "Submit Specified Item" and returned without further comment.
- K. Shop Drawings or other submittals not bearing the ENGINEER'S "No Exception Taken" or "Make Corrections Noted" notations shall not be issued to Subcontractors nor utilized for construction purposes. No Work shall be performed or equipment installed without a drawing or submittal bearing one of these notations.
- L. In the event the CONTRACTOR obtains the ENGINEER'S approval for the use of equipment other than that which is shown or specified, the CONTRACTOR shall, at his own expense and using methods approved by the ENGINEER, make all changes to the Work, including structures, piping, electrical, equipment and controls, that may be necessary to accommodate this equipment.
- M. Resubmittals will be handled in the same manner as first submittals. The Contractor shall direct specific attention to revisions other than the corrections requested by the Engineer on previous submissions by written details or markings on the resubmitted Shop Drawings. The Contractor shall make any corrections required by the Engineer.
- N. If the Contractor considers any correction indicated on the Drawings to constitute a change to the Contract Drawings or Specifications, the Contractor shall give written notice thereof to the Engineer.
- O. The Engineer will review a submittal/resubmittal a maximum of three times after which cost of review will be borne by the Contractor. The cost of engineering shall be equal to the Engineer's charges to the Owner under the terms of the Engineer's agreement with the Owner.
- P. When the Shop Drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions or approval from the Engineer.

Q. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor, and will be considered "NOT APPROVED" until resubmitted.

1.13 SHOP DRAWINGS

- A. Shop drawings shall be complete and detailed.
- B. Drawings and schedules shall be checked and coordinated with the work of all trades involved, before they are submitted for review by the Engineer and shall bear the Contractor's stamp of approval as evidence of such checking and coordination. Drawings or schedules submitted without this stamp of approval shall be returned to the Contractor for resubmission.
- C. Each shop drawing shall have a blank area 3-1/2 inches by 3-1/2 inches, located adjacent to the title block. The title block shall display the following:
 - 1. Number and title of the drawing.
 - 2. Date of drawing or revision.
 - 3. Name of project building or facility.
 - 4. Name of contractor and subcontractor submitting drawing.
 - 5. Clear identification of contents and location of the work.
 - 6. Specification number and title.
- D. If Drawings show variations from Contract requirements because of standard Shop practice or other reasons, the Contractor shall describe such variations in his letter of transmittal. If acceptable, proper adjustment in the Contract shall be implemented where appropriate. If the Contractor fails to describe such variations, he shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such Drawings have been reviewed.
- E. Data on materials and equipment include, without limitation, materials and equipment lists, catalog data sheets, cuts, performance curves, diagrams, materials of construction and similar descriptive material as required. Materials and equipment lists shall give for each item thereon the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish, and all other pertinent data.
- F. The Contractor shall provide a list including the equipment name, address, and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained for all mechanical and electrical equipment furnished.
- G. All manufacturers or equipment suppliers who proposed to furnish equipment or products shall submit an installation list to the Engineer along with the required Shop Drawings. The

installation list shall include at least five installations where identical equipment has been installed and has been in operation for a period of at least one (1) year.

- H. Only the Engineer will utilize the color red in marking Shop Drawing submittals.
- I. Before final payment is made, the Contractor shall furnish to Engineer five (5) sets of record shop drawings all clearly revised, complete and up to date showing the permanent construction as actually made for all reinforcing and structural steel, miscellaneous metals, process and mechanical equipment, yard piping, electrical system and instrumentation system.

1.13 Working Drawings

- A. Working drawings shall be considered to mean the Contractor's plans for temporary structures.
- B. Copies of working drawings as noted in subparagraph 1.02, shall be submitted to the Engineer where required by the Contract Documents or requested by the Engineer, and shall be submitted at least thirty (30) calendar days (unless otherwise specified by the Engineer) in advance of their being required for work.
- C. The Engineer will not review working drawings but shall use them as information to monitor the work performed by the Contractor.

1.14 Samples

- A. The Contractor shall furnish for the review of the Engineer samples required by the Contract Documents or requested by the Engineer. Samples shall be delivered to the Engineer as specified or directed and the Contractor shall prepay all shipping charges. Materials or equipment for which samples are required shall not be used in work until reviewed by the Engineer.
- B. Samples shall be of sufficient size and quantity to clearly illustrate:
 - 1. Functional characteristics of the product, with integrally related parts and attachment devices.
 - 2. Name of Contractor and Subcontractor
 - 3. Material or Equipment represented
 - 4. Place of Origin
 - 5. Name of Producer and Brand (if any).
 - 6. Location in Project

(Samples of finished materials shall have additional marking that will identify them under the finished schedules.)

- C. The Contractor shall prepare a transmittal letter in triplicate for each shipment of samples containing the information required in subparagraph 1.06B above. He shall enclose a copy of this letter with the shipment and send a copy of this letter to the Engineer under separate cover and the remaining copy shall be for the Contractor's records. Review of a sample shall be only for the characteristics or use named and shall not be construed to change or modify any Contract requirements.
- D. Reviewed samples not destroyed in testing shall be sent to the Engineer or stored at the site of the work. Reviewed samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the reviewed samples. Samples which failed testing or were rejected will be returned to the Contractor at his expense, if so requested at time of submission.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01410

TESTING LABORATORY SERVICES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Contractor will employ and pay for the services of an Independent Testing Laboratory to perform testing specifically indicated on the Contract Documents or specified in the Specifications and may at any other time elect to have materials and equipment tested for conformity with the Contract Documents.

- A. Employment of the laboratory shall in no way relieve Contractor's obligations to perform the Work of the Contract.

1.02 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

Laboratory is not authorized to:

- A. Release, revoke, alter or enlarge on requirements of Contract Documents.
- B. Approve or accept any portion of the Work.
- C. Perform any duties of the Contractor.

1.03 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with laboratory personnel; provide access to Work, to Manufacturer's operations.
- B. Secure and deliver to the laboratory adequate quantities of representational samples of materials proposed to be used and which require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other materials mixes which require control by the testing laboratory.
- D. Materials and equipment used in the performance of work under this Contract are subject to inspection and testing at the point of manufacture or fabrication. Standard specifications for quality and workmanship are indicated in the Contract Documents. The Owner may require the Contractor to provide statements or certificates from the manufacturers and fabricators that the materials and equipment provided by them are manufactured or fabricated in full accordance with the standard specifications for quality and workmanship indicated in the Contract Documents. All costs of this testing and providing statements and certificates shall be a subsidiary obligation of the Contractor, and no extra charge to the Owner shall be allowed on account of such testing and certification.
- E. Furnish incidental labor and facilities:
 - 1. To provide access to Work to be tested.

-
2. To obtain and handle samples at the Project site or at the source of the product to be tested.
 3. To facilitate inspections and tests.
 4. For storage and curing of test samples.
- F. Notify laboratory at least 24 hours in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.
- G. Employ and pay for the services of the same or a separate, equally qualified independent testing laboratory to perform additional inspections, sampling and testing required for the Contractor's convenience and as approved by the Owner.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01600

MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Material and equipment incorporated into the Work shall:

- A. Conform to applicable specifications and standards.
- B. Comply with size, make, type, and quality specified to the greatest extent possible, detailing all aspects and providing explicit reasons for parameters not in compliance and specifically approved in writing by the Engineer.
- C. Manufactured and Fabricated Products:
 - 1. Design, fabricate, and assemble in accord with the best engineering and standard shop practices.
 - 2. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - 3. Two or more items of the same kind shall be produced, by the same manufacturer.
 - 4. Products shall be suitable for service conditions.
 - 5. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
- D. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

1.02 APPROVAL OF MATERIALS

- A. Only new materials and equipment shall be incorporated in the Work. All materials and equipment furnished by the Contractor shall be subject to the inspection and approval of the Engineer. No material shall be delivered to the Work without prior approval of the Engineer.
- B. The Contractor shall submit to the Engineer, data relating to materials and equipment he proposes to furnish for the work. Such data shall be in sufficient detail to enable the Engineer to identify the particular product along with references to the applicable section(s) of the specifications to form an opinion as to its conformity to the specifications. The data shall comply with Paragraph 1.06 of this Section.
- C. Facilities and labor for handling and inspection of all materials and equipment shall be furnished by the Contractor. If the Engineer requires, the Contractor shall submit samples of materials for such special tests as may be necessary to demonstrate that they conform to the

specifications. Such samples shall be furnished, stored, packed, and shipped as directed at the Contractor's expense. Except as otherwise noted, the Contractor will make arrangements for and pay for the tests. Where such tests confirm compliance with the specifications, the Owner will reimburse the actual charges of the testing firm paid by the Contractor.

- D. Contractor shall submit data and samples sufficiently early to permit consideration, approval, manufacture, and delivery of materials before they are necessary for incorporation in the work. Any delay of approval resulting from the Contractor's failure to submit samples or data promptly shall not be used as a basis of claim against the Owner or the Engineer.
- E. The materials and equipment used in the Work shall correspond to the approved samples or other data.

1.03 MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION

- A. When Contract Documents require that installation of the Work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including five copies to the Engineer. One complete set of the installation instructions shall be available for use on the job site during and through completion of the Work.
- B. Handle, install, connect, clean, condition and adjust products as required by the manufacturer's instructions and in conformity with specified requirements.
 - 1. Should the specified requirements conflict with the manufacturer's instructions, the manufacturer's instructions shall have priority unless changes are authorized in writing by the manufacturer.
 - 2. Should job conditions conflict with the manufacturer's instructions, consult with the manufacturer for clarification.
 - 3. Clarifications of installation instructions shall be issued only by the manufacturer, shall be in writing, and shall be distributed to all parties involved in the installation as stated above and prior to alteration of the installation procedures.
 - 4. Do not proceed with the Work without clear instructions concerning the specific installation procedures.
- C. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by the manufacturer.

1.04 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of Products as required by the currently approved construction schedule coordinating each delivery to avoid conflict with other work and conditions at the site.
 - 1. Deliver Products in a undamaged condition, in the manufacturer's original containers or packaging and with identifying labels intact and legible.
 - 2. Prior to accepting delivery, inspect shipments to assure compliance with approved submittal, and that the Products have been properly protected and are undamaged.
- B. Provide equipment and personnel to handle Products preventing soiling or damage to the Products or their protective packaging.

1.05 STORAGE AND PROTECTION

- A. Store Products in accord with manufacturer's instruction, with seals and labels intact and legible.
 - 1. Store products subject to damage by the elements in weathertight enclosures.
 - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
 - 3. Store fabricated products above the ground, on blocking or skids, prevent spoiling, staining or corrosion. Cover products which are subject to deterioration with impervious sheet coverings and provide adequate ventilation to avoid condensation.
 - 4. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
- B. All materials and equipment to be incorporated in the Work shall be handled and stored in a manner to prevent warping, twisting, bending, breaking, chipping, rusting, and other injury, theft or damage.
- C. Cement and lime shall be stored under a roof and off the ground and shall be kept completely dry at all times. All miscellaneous steel, structural steel and reinforcing steel shall be stored off the ground, kept free of accumulations of dirt and grease, and in areas free of standing water to minimize rusting. Precast concrete sections shall be handled and stored in a manner to prevent staining, chipping or cracking. Brick, block and similar masonry products shall be handled and stored in a manner to reduce staining, breaking, chipping, cracking, and spalling.
- D. All materials which, in the opinion of the Engineer, have become so damaged as to be unfit for the use intended, including aesthetics, shall be promptly removed from the site of the work.
- E. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections and exercise or rotate moving parts of stored products as required by the

manufacturer to assure that products are maintained under specified conditions and free from damage or deterioration.

- F. Provide substantial coverings as necessary to protect installed products from damage caused by traffic and subsequent construction operations. Remove the protective covering when no longer needed.
- G. The Contractor shall be responsible for all material, equipment, and supplies sold and delivered to the Owner under this Contract until final inspection of the Work and acceptance thereof by the Owner. In the event any such material, equipment, and supplies are lost, stolen, damaged, or destroyed prior to final inspection and acceptance they shall be replaced by the Contractor.
- H. Should the Contractor fail to take proper action to properly store and handle equipment supplied under this Contract, the Owner retains the right to notify the Contractor in writing of the deficiencies, to correct all deficiencies and deduct the cost associated with these corrections from the contractor's Contract. These costs may be comprised of expenditures for labor, equipment usage, administration, clerical, engineering and any other costs associated with making the necessary corrections.

1.06 SUBSTITUTIONS AND PRODUCT OPTIONS

A. Products List:

Within fifteen (15) days after the Notice to Proceed, submit to the Engineer complete list of major products proposed to be used, with the name of the manufacturer and the installing subcontractor.

B. Contractor's Options:

- 1. For Products specified only by reference standard, select any product meeting that standard.
- 2. For Products specified by naming one or more Products or manufacturers and "or equal", Contractor must submit a request as for substitutions for any Product or manufacturer not specifically named.

C. Substitutions:

- 1. For a period of thirty (30) days after the Effective Date of the Agreement, the Engineer will consider written requests from Contractor for substitution of Products.

-
2. Submit a separate request for each Product, supported with complete data, with drawings and samples as appropriate, including:
 - a. Comparison of the qualities of the proposed substitution with that specified.
 - b. Changes required in other elements of the work because of the substitution.
 - c. Effect on the construction schedule.
 - d. Cost data comparing the proposed substitution with the Product specified.
 - e. Any required license fees or royalties.
 - f. Availability of maintenance service, and source of replacement materials.
 3. The Engineer shall be the judge of the acceptability of the proposed substitution.
- D. Contractor's Representation:
- A request for a substitution constitutes a representation that Contractor:
1. Has investigated the proposed Product and determined that it is equal to or superior in all respects to that specified.
 2. Will provide the same warranties or bonds for the substitution as for the Product specified.
 3. Will coordinate the installation of an accepted substitution into the Work, and make such other changes as may be required to make the Work complete in all respects.
 4. Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.

1.07 SPECIAL TOOLS

Manufacturers of equipment and machinery shall furnish any special tools required for normal adjustment, operations and maintenance, together with instructions for their use. The Contractor shall preserve and deliver to the Owner these tools and instructions in good order no later than upon completion of the Contract.

1.08 WARRANTY

For all major pieces of equipment, submit a warranty from the equipment manufacturer. The manufacturer's warranty period shall be concurrent with the Contractor's as stipulated in the specifications for each piece of equipment.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01630

SUBSTITUTIONS

PART 1 GENERAL

1.01 General

Requests for review of a substitution shall conform to the requirements of Article 6.05 of the General Conditions and shall contain complete data substantiating compliance of proposed substitution with Contract Documents.

1.02 Substitutions

- A. During a period of 60 days after execution of Contract, ENGINEER will consider written requests from CONTRACTOR for substitution of products or construction methods (if specified).
 - 1. After end of specified period, requests will be considered only in case of unavailability of products or other conditions beyond control of CONTRACTOR.
 - 2. If the CONTRACTOR proposes to use products other than named manufacturers in the technical Specification, the ENGINEER reserves the right to require the CONTRACTOR to submit information within the first 30 days after the NOTICE TO PROCEED verifying that the proposed equipment will comply with the Specifications.
- B. Requests for review of a substitution shall conform to the requirements of Article 6.05 of the General Conditions, and shall contain complete data substantiating compliance of proposed substitution with the Contract Documents.
- C. In making request for substitution, CONTRACTOR represents:
 - 1. CONTRACTOR has investigated proposed product or method, and determined that it is equal or superior in all respects to that specified.
 - 2. CONTRACTOR will provide the same or better warranties or bonds for proposed substitution as for product or method specified.
 - 3. CONTRACTOR waives all claims for additional costs or extension of time related to proposed substitution that subsequently may become apparent.
- D. Proposed substitutions will not be accepted if:
 - 1. They are only shown or implied on the Shop Drawings.
 - 2. Acceptance will require substantial revision of Contract Documents.
 - 3. They will change design concepts or Specifications.
 - 4. They will delay completion of the Work, or the work of other contractors.
- E. The ENGINEER will determine whether substitute brands or products are equal to those specified in the Contract Documents. No substitute will be ordered or installed without the ENGINEER'S prior written acceptance.
- F. The OWNER may require CONTRACTOR to furnish at CONTRACTOR'S expense a

special performance guarantee or other surety with respect to any substitute.

- G. If the ENGINEER determines that a proposed substitute is not equal to that specified or described in the Drawings or Specifications, CONTRACTOR shall furnish one of the brands or products specified or described, at no additional cost to the OWNER.
- H. Engineering Costs:
1. The ENGINEER will record all time required in evaluating substitutions proposed by CONTRACTOR and in making any change in the Drawings or Specifications occasioned thereby. Whether or not the ENGINEER accepts a proposed substitute CONTRACTOR will reimburse the OWNER for the actual cost of the ENGINEER for evaluating any proposed substitute which either does not meet the requirements of the Drawings and Specifications, or the acceptance of which would require changes to other portions of the Work.
 2. CONTRACTOR shall reimburse OWNER for all associated engineering costs, including redesign, additional shop drawing reviews, investigations, consultant fees and revision of the Contract Documents required because of the substitution.
- I. The time required by the ENGINEER to evaluate and either accept or reject proposed substitutes is included in the Contract Time and no extension of the Contract Time shall be allowed therefore.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01710

CLEANING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Cleaning shall include daily "policing" of the work and surrounding areas to clear general debris waste paper, wood scraps, broken concrete, loose riprap, and other objectionable material along with the final cleanup of site(s) required for project acceptance. **DAILY CLEANUP IS REQUIRED.**

1.02 DISPOSAL REQUIREMENTS

Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 DURING CONSTRUCTION

- A. Execute daily cleaning to keep the Work, the site and adjacent properties, free from accumulations of waste materials, rubbish and windblown debris, resulting from construction operations.
- B. Provide onsite containers for the collection of waste materials, debris and rubbish. All waste materials including containers, food debris and other miscellaneous materials must be disposed of daily in onsite containers.
- C. Remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal areas away from the site.

3.02 FINAL CLEANING

- A. Employ skilled workmen for final cleaning.
- B. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
- C. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.
- D. Prior to final completion or Owner occupancy, Contractor shall conduct an inspection of sight-exposed interior and exterior surfaces and all work areas to verify that the entire Work is clean.

*** * END OF SECTION * ***

SECTION 01720
PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Maintain at the site for the Owner one record copy of:

- A. Conformed Drawings.
- B. Conformed Specifications.
- C. Change Orders and other Modifications to the Contract.
- D. Engineer's Field Orders or written instructions.
- E. Approved Shop Drawings, Working Drawings and Samples.
- F. Field Test records.
- G. Construction photographs.
- H. Latest, Approved Progress Schedule.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store documents and samples in a manner and location to prevent damage.
 - 1. Provide files and racks for storage of documents.
 - 2. Provide secure storage space for storage of samples.
- B. File documents and samples in accordance with CSI section numbers.
- C. Maintain documents in a clean, dry, legible, condition and in good order. Do not use record documents for construction purposes.
- D. Make documents and samples available at all times for inspection by the Owner.
- E. As a prerequisite for monthly progress payments, the Contractor is to exhibit the currently updated "record documents" for review by the Owner.

1.03 MARKING DEVICES

Provide felt tip marking pens for recording information in the color code designated by the Owner.

1.04 RECORDING

- A. Label each document "PROJECT RECORD" with rubber stamp.
- B. Record information concurrently with construction progress and do not conceal any work until required information is recorded.
- C. Legibly mark drawings to record actual construction:
 - 1. The Contractor shall use the following color code in marking Contract Drawings:
 - a. Yellow for no change.
 - b. Red to indicate additions, deletions and changes.
 - 2. Elevations of various structure elements in relation to elevation datum.
 - a. Elevations referenced to control points established by the Owner's agent.
 - b. Specifically, elevations of drainage culvert inverts, ditch grades, top of roadway and driveway curbs, bridges, etc.
 - 3. Location of internal utilities and appurtenances concealed in the construction by referencing to visible and accessible features of the structure.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Field Order or by Change Order.
 - 6. Details not on original contract drawings.
- D. Specifications and Addenda; Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and Supplier of each Product and item of equipment actually installed.
 - 2. Changes made by Field Order or by Change Order.
- E. Shop Drawings (after final review):

-
- F. Certified site survey and line elevations and stationing at 100 foot increments and all points of change of direction of channel improvements (Section 01050) by a registered land surveyor.

1.05 SUBMITTAL

- A. At Contract close-out, deliver Record Documents to the Owner.
- B. Accompany submittal with transmittal letter in duplicate, containing:
1. Date.
 2. Project title and number.
 3. Contractor's name and address.
 4. Title and number of each Record Document.
 5. Signature of Contractor or his authorized representative.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01740

WARRANTIES AND BONDS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Compile specified warranties and bonds, as in Articles 5 and 13 of the General Conditions.
- B. Co-execute submittals when so specified.
- C. Review submittals to verify compliance with Contract Documents.
- D. Submit to the Owner for review.

1.02 SUBMITTAL REQUIREMENTS

- A. Assemble and include warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, couplers, and subcontractors including effective dates.
- B. Number of original signed copies required. Two (2) each.
- C. Table of Contents. Neatly typed in orderly sequence. Provide complete information for each item.
 - 1. Product or work item.
 - 2. Firm, with name of principal, address and telephone number.
 - 3. Scope.
 - 4. Date of beginning warranty, and bond.
 - 5. Duration of warranty.
 - 6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure.
 - b. Instances which might affect the validity of warranty or bond.
 - 7. Contractor, name of responsible principal, address and telephone number.

1.04 FORM OF SUBMITTALS

- A. Prepare in duplicate packets.
- B. Format:
 - 1. Size 8-1/2-inches x 11-inches, punch sheets for standard 3-post binder.
 - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS." List:
 - a. Title of Project.
 - b. Name of Contractor.
- C. Binders: Commercial quality, three-post binder, with durable and cleanable plastic covers and maximum post width of 2-inches, "D" ring.

1.05 WARRANTY SUBMITTAL REQUIREMENTS

- A. For all components of the work, unless stated otherwise in the specifications for each individual item of equipment, submit a written warranty from the manufacturer to replace promptly any component thereof which, in the sole opinion of the Engineer, has defects in design, workmanship, materials, or performance within a one (1) year period following the date of acceptance for operation (Substantial Completion) by the Owner. The manufacturer's warranty period shall be concurrent with the Contractor's for one (1) year, unless otherwise specified, commencing at the time of acceptance for operation (beneficial use) by the Owner and shall be read in conjunction with the Contractor's warranty which shall operate together to provide for replacement of defective components and restoration of proper operation. The Contractor shall be solely responsible for both warranties.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 02270

SLOPE PROTECTION AND EROSION CONTROL

PART 1 - GENERAL

1.01 Section Includes

- A. Temporary and permanent erosion control systems.
- B. Slope Protection Systems.

1.02 Related Sections

- A. Section 234, Silt Fence
- B. Section 907-237, Wattles
- C. Section 907-246, Sandbags and Rockbags
- D. Erosion Control Details
- E. Construction Requirements

1.03 Permits

- A. Securing a permit (s) for storm water discharge associated with the Contractor's activity on any other regulated area the Contractor occupies, shall be the responsibility of the Contractor.

1.04 Environmental Requirements

The contractor shall meet the requirements of The USDA/Mississippi "Planning and Design Manual for the Control of Erosion, Sediment, and Stormwater" (first edition – April 1994) in addition to the Field Manual for Erosion and Sediment Control on Construction Site in Mississippi (second edition – 2005) in the implementation of erosion and sediment controls to protect adjacent properties and water resources from erosion and sediment damage throughout the life of the contract.

The maximum total acreage that can be disturbed, at one time, on the project is NINETEEN (19) acres. The Contractor shall be required to "stabilize" disturbed areas prior to opening up additional sections of the project. "Stabilized" shall be when the disturbed area has been grassed either temporary or permanent, and mulched according to the specifications. Disturbed areas include, but not limited to, roadbeds, slopes, and other remaining areas within the project limits.

PART 2 - PRODUCTS

2.01 Materials

- A. Quick growing grasses such as wheat, rye or oats (See Section 02900).
- B. Hay or straw bales.
- C. Fencing for siltation control as specified on the plans.
- D. Curlex blankets by American Excelsior Company or approved equal.
- E. Temporary mulches such as loose hay, straw, netting, wood cellulose or agricultural silage.
- F. Wattles
- G. Triangular Silt Dikes
- H. Sandbags
- I. Inlet Siltation Guards.
- J. Silt Basins
- K. Turbidity Barriers.
- L. Erosion and Siltation Control Plan

PART 3 - EXECUTION

3.01 Preparation

- A. Review site Erosion Control Plan. The Contractor shall submit to the Project Engineer for approval, a comprehensive Erosion and Siltation Control Plan utilizing temporary measures and permanent erosion control features to provide acceptable controls during all stages of construction.
- B. Erosion Control Plan (ECP) shall include (at a minimum) the following:
 - Plan sheets, 11"x17" or larger, of all areas within project site, showing locations of all temporary/permanent erosion control devices.
 - Detailed description of the proposed sequence of operations, but not limited to, clearing and grubbing, excavation, drainage, and structure installation.
 - Detailed description of best management practices (BMP) to be used to prevent siltation and erosion during sequence of operations.
 - A copy of the Certification for the Contractor's Certified Erosion Control Person whose primary duty shall be monitoring and maintaining the effectiveness of the ECP and compliance with the NPDES permit requirements. (THE CONTRACTOR'S SUPERINTENDENT CANNOT BE THE CERTIFIED EROSION CONTROL PERSON.)
 - Plan for disposal of waste materials within the project site which shall include but

not be limited to:

- Containment and disposal of materials from the cleaning (washing out) of concrete trucks that are delivering concrete to the project site.
 - Containment and disposal of fuel/petroleum materials at staging areas on the project.
 - The ECP shall be maintained for review on the project site at all times, updated as work progresses to show changes due to revisions in the sequences of construction operations, replacement of inadequate BMPs, and the maintenance of BMPs. Work shall not be started until and ECP has been approved by the Engineer. The Engineer will have the authority to suspend all work and/or withhold payments for failure of the Contractor to carry out provisions of MDEQ's Storm Water Construction General Permit, the ECP, updates to the ECP, and/or proper maintenance of the BMPs.
- C. Deficiencies or changes in the Erosion Control Plan as it is applied to current conditions will be brought to the attention of the Engineer for remedial action.

3.02 Erosion Control and Slope Protection Implementation

- A. Prior to beginning any clearing and grubbing operations on the project, controls shall be in place to address areas such as drainage structures, wetlands, streams, steep slopes and any other sensitive areas as directed by the Engineer.
- B. Contractor shall make inspections and shall furnish the Engineer with the results of each weekly inspection as soon as possible following the date of the inspection. The weekly inspections must be documented monthly on the Inspection and Certification Form. The contractor's representative and the Engineer shall jointly review and discuss the results of the inspections so that corrective action can be taken. Securing a permit for storm water discharge associated with the Contractor's activity shall be the responsibility of the Contractor. Contractor shall provide, set up, and read an on-site rain gauge.
- C. The engineer has the authority to limit the surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and to direct the contractor to provide immediate permanent or temporary pollution control measures. The contractor will be required to incorporate all permanent erosion control features into the project at the earliest practical time to minimize the need for temporary controls. Cut slopes shall be permanently seeded and mulched as the excavation proceeds to the extent considered desirable and practical.
- D. The temporary erosion control systems installed by the contractor shall be maintained as directed by the engineer to control siltation at all times during the life of the contract. The contractor must respond to any maintenance or additional work ordered by the engineer within a 48-hour period.
- E. Disturbed areas that remain inactive for a period of more than thirty (30) days shall be temporary grassed and mulched. Temporary grassing and mulching shall be included in other items of work.

****END OF SECTION****

CITY OF HATTIESBURG

SPECIAL PROVISION NO. 907-608-1

CODE: (XX)

DATE: 8/07/2009

SUBJECT: ASPHALT PAVEMENT TEXTURING

608.01-Description. This work consist of elevating the temperature of an asphalt pavement surface and then pressing a metal template into the surface to replicate, in relief, the grout depressions common to hand-laid brick or cobblestone, or any other design as shown on the drawings or described in the specifications. The imprinted asphalt pavement surface is then coated with a coating or system of coatings specifically formulated for asphalt pavement. It shall include the furnishing and application of coating or system of coatings.

608.02-References

608.02.1. ASTM D-4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Tester.

608.02.2. ASTM D-4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser.

608.02.3. ASTM D522-93A Standard Test Method for Mandrel Bend Test of Attached Organic Coatings.

608.02.4. ASTM G-155 QUV Accelerated Weathering Environment. Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials.

608.02.5. ASTM D-2486 MEK rub test for chemical resistance.

608.02.6. ASTM E-303 British Pendulum test for friction.

608.02.7. EPA 24 ASTM D3960-05 Volatile Organic Compounds.

608.03-Definitions

608.03.1. "Qualified Applicator" is a contractor or applicator who has completed asphalt pavement texturing work and can provide certification and references upon request.

608.03.2. "Textured asphalt Pavement" is asphalt pavement that has been subjected to imprinting or stamping in a specific pattern.

608.04-Submittals. The documents required shall be submitted within 10 days after Notice of Award is issued. The documents are as follows:

608.04.1 Proof of applicator's ability. A copy of the current year license as provided to the proposed applicator issued by a recognized authority in the execution of asphalt pavement texturing work. Failing that, at least 3 reference sites and written references from 3 previous customers for work performed by this applicator.

608.04.2 A list of the major equipment to be used in the execution of the Work. This list will include the asphalt pavement reheat machinery, spray equipment, compactor(s) and templates.

608.04.3 The name of the coating(s) and the coating supplier's name.

608.04.4 Certified performance test results of the coating materials as outlined in Table 1.

608.04.5 Confirmation of coating color(s).

608.05-Construction Requirements

608.05.1 Coatings. Properly designed asphalt pavement coatings have been scientifically formulated to provide the optimal balance of performance properties for a durable, long lasting color and texture to asphalt pavement surfaces. The asphalt pavement coating shall be environmentally safe and meet EPA requirements for Volatile Organic Compounds (VOC). Only asphalt pavement coatings from qualified pavement coating suppliers shall be used. The coating supplier shall provide proof of these required performance properties in Table 1.

608.05.2 Minimum Performance Properties of Asphalt Coatings. The following table outlines the minimum required performance properties of the asphalt pavement coating. These performance properties must be ascertained by a Certificate of Analysis issued by an approved testing facility.

TABLE 1: Required Performance Properties of Asphalt Pavement Coating

Characteristic	Test Specification	Minimum Required result
Durability Taber Abrasion (cycles to wear-through)	ASTM D-4060 Abrasion Resistance of Organic Coatings (wet wear) 7 day cure, 24 hour soak;H-10 wheel	Wear Index (WI) < 5.0
Color stability	ASTM G-155 QUV 2,000 hours (CIE units)	Brick color $\Delta E < 1.5$
Flexibility: Mandrel Bend	ASTM D522-93A Flexibility as measured by Mandrel bend 0.5mm thick sample passes 10 mm at 21°C 0.5mm thick sample passes 125mm at -18°C	
Chemical resistance	ASTM D-2486 Modified MEK scrubs 16 dry mils, number of scrubs until 50% substrate exposed	>5000
Adhesion to Asphalt	ASTM D-4541	Substrate Failure
Friction Wet	ASTM E-303 British Pendulum Tester	>55
Environmental Sensitivity	EPA 24 ASTM D3960-05 Volatile Organic Compounds	VOC < 150

608.05.3 Equipment. The following specialized equipment shall be used in the execution of the Work.

608.05.3.1 Metal wire rope templates are used to create the desired imprint pattern. Metal wire rope shall be $\frac{3}{8}$ " in diameter. Only use templates that have been supplied by a manufacturer who has the proven expertise in manufacturing these templates for this type of application.

608.05.3.2 Only asphalt pavement reheat equipment specifically designed for asphalt pavement texturing shall be used in the execution of this work. The primary asphalt pavement re-heat equipment must cycle the heat application and must allow the equipment operator to check the pavement surface temperature during the heating process. These controls are necessary to enable the pavement temperature to be elevated gradually, giving the operator the ability to ensure that the pavement is not overheated or adversely affected. Heaters without these controls are strictly prohibited as the primary re-heat equipment.

608.05.3.3 Hand-held portable heating devices may be used only for areas where it is difficult to operate the re-heat machine. These may not be used as the primary pavement re-heating device.

608.05.3.4 Finishing tools that are designed to enable the applicator to complete the imprinting of the asphalt pavement in areas which may be inaccessible to the template such as curbs and manhole covers are permitted.

608.05.3.5 Vibratory Plate Compactors shall be used for pressing the templates into the heated asphalt pavement to create the specified pattern.

608.05.3.6 Specialized coating spray equipment must be used in the application of the coating and must be capable of applying the coating to the asphalt pavement surface in a thin, controlled film which will optimize the drying and curing time of the coating. More specifically, the spray equipment pump must be capable of providing a continuous recirculation of the coating in order to keep the solids within the coating in suspension.

608.05.4 Execution

608.05.4.1 General. The pavement texturing system shall be supplied and installed by a Qualified Applicator in accordance with the plans and specifications or as directed by the Owner. Do not begin the Work until confirmation of the Applicator's qualifications is provided in accordance with 608.04.

608.05.4.2 Pre-Conditions – Asphalt Pavement. A highly stable asphalt pavement free of defects is a pre-requisite for the installation of a pavement texturing system. Do not install the pavement texturing system over poor quality asphalt pavement.

608.05.4.2.1 Pre-requisites for new asphalt pavement. A durable and stable asphalt pavement mix design installed according to best practices over a properly prepared and stable substrate is a pre-requisite for all long-lasting asphalt pavement surfaces. The application of a pavement texturing system does not change this requirement.

608.05.4.2.2 Pre-requisites for existing asphalt pavement. Depending upon the condition and age, existing asphalt pavement may or may not be suitable for the successful application of a pavement texturing system. Minimally, the asphalt pavement must be in excellent condition and not have any defects including cracks, ruts or potholes nor demonstrate any flushing, raveling or like deficiencies.

608.05.4.2.3 Pavement Marking Removal: recommended guidelines. Pavement markings may be removed by sandblasting, water-blasting, grinding, or other approved mechanical methods. The removal methods shall, cause no damage to the pavement surface. The Owner shall determine if the removal of the markings is satisfactory for the application of the pavement texturing system. Work shall not proceed until this approval is granted.

608.05.4.2.4 Surface Preparation. The asphalt pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.

608.05.4.3 Layout. Layout of the pattern for imprinting into the surface of the asphalt pavement shall be as per the drawings and specifications.

608.05.4.4 Heating the Asphalt Pavement. The Applicator shall use asphalt pavement reheat equipment as described in Section 608.05.3.

The optimal pavement temperature for imprinting the template is dependent upon mix design, modifiers used in the mix, the age of the pavement and weather. The surface temperature of the pavement should not exceed 325°F as determined by an infra-red thermometer reading taken after the heat is applied to the asphalt pavement.

In order to achieve the proper depth of imprint it is important to elevate the asphalt pavement temperature to a minimum depth of 1/2 inch (12.5mm) without burning the pavement surface. This shall be accomplished using asphalt pavement reheat equipment that is specifically designed for this Work.

608.05.4.5 Surface Imprinting. The pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.

Once the asphalt pavement has reached imprinting temperature, the templates shall be placed in position and pressed into the surface using vibratory plate compactors. The top of the template is to be flush with the surrounding asphalt pavement and can then be removed. Areas that have an imprint depth less than 3/8 inch shall be re-heated and re-stamped prior to applying the coatings. Hand tooling is a permitted method to achieve proper imprint depth in areas difficult to get at with the template.

608.05.4.6 Application of Asphalt Pavement Coating.

608.05.4.6.1 Application Guidelines. The qualified applicator shall refer to the asphalt pavement coating supplier's recommendations for methods of application. Special care and attention must be paid to ensure asphalt pavement coatings are applied in environmental conditions that permit proper cure.

The coating application shall proceed as soon as possible upon completion of the imprinting of the asphalt pavement.

The pavement surface shall be completely dry and thoroughly cleaned prior to application of the asphalt pavement coating(s).

The qualified applicator shall use spray equipment specifically designed for the application of the coating(s) as outlined in 608.05.3.

Refer to the asphalt pavement coating supplier's recommendations for coating coverage rate, number of recommended passes and recommended film thickness.

608.05.4.7 Opening to Traffic. The surface coating shall be 100% dry before traffic is permitted.

608.06 Method of Measurement. The measured area is the actual area that has received the asphalt pavement texturing. No deduction will be made for the area(s) occupied by manholes, inlets, drainage structures, bollards or by any public utility appurtenances within the area.

608.07 Payment. Asphalt Pavement Texturing will be paid for at the contract unit price per unit specified in the bid schedule of the contract, which shall be full compensation for completing the work.

Payment will be made under:

907-608-E: Asphalt Pavement Texturing

- per square foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-634-4

CODE: (IS)

DATE: 05/25/2021

SUBJECT: Traffic Signal and ITS Equipment Poles

Section 634, Traffic Signal and ITS Equipment Poles, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-634.02--Materials.

907-634.02.1--Poles. Delete the bullet for Type X poles in Subsection 634.02.1 on page 542 and substitute the following.

- Type X -- Aluminum Pole for Detectors

After Type XI poles in Subsection 634.02.1 on page 542, add the following.

- Type XII -- ITS Extension Poles

907-634.02.1.1--Traffic Signal Poles. Delete the first, third, fourth, and fifth bullets in Subsection 634.02.1.1 on pages 542 and 543, and substitute the following.

- Self-supporting straight or upswept mast arm(s), in accordance with Plan details. Where possible, the mast arms shall match the adjacent signal poles in the area unless otherwise stated;
- Tag installed on shaft side opposite the mainline highway and located approximately 48 inches above the top of the Baseplate;
- Minimum nominal size of four (4) inches wide by 26 inches tall reinforced hand-hole with included terminal block(s);
- A ½-inch coarse thread grounding stud shall be located on the interior side of the pole hand-hole opening;

907-634.02.1.2--Galvanized Steel Poles for Cameras. Delete the second paragraph of Subsection 634.02.1.2 on page 543, and substitute the following.

Unless specified otherwise in the plans, poles shall be designed in accordance with the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans, including all interims and updates. Design life shall be 50 years for all poles. The design wind speed for all parts of the structure shall meet the wind requirements set forth in the latest edition of the AASHTO Wind Map, as stated in Subsection 722.02.3. The pole shall meet the design wind loading with all equipment installed.

In the fifth sentence of the fifth paragraph of Subsection 634.02.1.2 on page 544, change “butt welded” to butt-welded” and change “radio graphically” to radio-graphically.”

Delete the second bullet in Subsection 634.02.1.2 on page 544, and substitute the following.

- Consideration shall be given for all possible loading combinations including ice and wind loads.

After the fourth bullet in Subsection 634.02.1.2 on page 544, add the following.

- Top of pole deflection shall not exceed one (1) inch deflection from center due to 30 mph (non-gust) winds or the maximum deflection allowed by Subsection 722.02.3, whichever is more restrictive, for 80-foot poles.

In the first bullet in Subsection 634.02.1.2 at the bottom of page 544, change “cross sectional” to “cross-sectional.”

In the second paragraph of Subsection 634.02.1.2.4 on page 545, change “butt weld” to “butt-weld.”

907-634.02.1.3--Galvanized Steel Poles for Detectors. In the first paragraph of Subsection 634.02.1.3 on page 546, change “ground mounted” to “ground-mounted.”

Delete the second paragraph of Subsection 634.02.1.3 on page 546, and substitute the following.

Unless specified otherwise in the plans, poles shall be designed in accordance with the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans, including all interims and updates. Design life shall be 50 years for all poles. The design wind speed for all parts of the structure shall meet the wind requirements set forth in the latest edition of the AASHTO Wind Map, as stated in Subsection 722.02.3.

Delete the last two sentences of the fifth paragraph of Subsection 634.02.1.3 on page 546, and substitute the following.

Design wind loading shall be as indicated in Subsection 722.02.3 unless otherwise noted in the plans. The pole shall meet design wind loading with all equipment installed.

907-634.02.1.4--Aluminum Poles for Detectors. Delete the second paragraph of Subsection 634.02.1.4 on page 547, and substitute the following.

Unless specified otherwise in the plans, poles shall be designed in accordance with the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans, including all interims and updates. Design life shall be 50 years for all poles. The design wind speed for all parts of the structure shall meet the wind requirements set forth in the latest edition of the AASHTO Wind Map, as stated in Subsection 722.02.3. The pole shall meet design wind loading with detector(s) installed.

907-634.02.1.5--Structure-Mounted ITS Equipment Poles. Delete the second paragraph of Subsection 634.02.1.5 on page 548, and substitute the following.

Unless specified otherwise in the plans, poles shall be designed in accordance with the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans, including all interims and updates. Design life shall be 50 years for all poles. The design wind speed for all parts of the structure shall meet the wind requirements set forth in the latest edition of the AASHTO Wind Map, as stated in Subsection 722.02.3. For projects that are in areas with higher wind standards, the higher standard is required. The pole shall meet design wind loading with all equipment installed.

In the fifth sentence of the fifth paragraph of Subsection 634.02.1.5 on page 548, change “butt welded” to butt-welded” and change “radio graphically” to radio-graphically.”

Delete the second bullet in Subsection 634.02.1.5 on page 548, and substitute the following.

- Consideration shall be given for all possible loading combinations including ice and wind loads, as stated in Subsection 722.02.

In the first bullet in Subsection 634.02.1.5 at the top of page 549, change “cross sectional” to “cross-sectional.”

After Subsection 634.02.1.8 on page 549, add the following.

907-634.02.1.9--ITS Extension Poles. ITS extension poles are used to provide ITS devices a mounting location with a vertical or horizontal clearance away from an existing pole or structure to which they are to be attached. As such, extension poles and the mounting and attachment hardware shall be of a material that will not cause galvanic corrosion with existing or proposed equipment. If possible, the extension poles shall be similar in color to the base pole or structure, unless otherwise directed. They shall meet the requirements of the base pole, the plans, and Subsection 722.02. Design considerations shall be given to the additional loading being subjected to the base pole or structure.

907-634.02.2--Camera Lowering Device. The lowering device system shall be designed to support, raise, and lower a standard CCTV camera, lens, housing, PTZ mechanism, cabling, connectors, and other supporting field components. The camera connector box shall be cast ZA-12 (12% Al and 88% Zn) and have a minimum weight that ensures stability of the camera during raising and lowering operation. The camera connector box shall have fully gasketed doors to prevent water intrusion. The bottom of the camera connector box shall be equipped with a condensation/moisture exit system. The camera connector block shall be molded in thermoset, weather-resistant, synthetic rubber designed to handle harsh environments.

Electrical contacts must also be designed to handle harsh environments. There shall be a locking mechanism between the fixed and movable components. For the movable components, a latching mechanism shall be provided to hold the device in place (when latched all weight shall be removed

from the lowering cable) and to raise or lower the assembly using the lowering tool and lowering cable. The suspension contact unit housing shall be weatherproof with a gasket to isolate the interior from dust and moisture.

All pulleys shall have sealed, self-lubricated bearings, oil tight bronze bearings, or sintered bronze bushings. The lowering cable shall be a minimum 1/8-inch diameter stainless steel aircraft cable. Internal wireways shall prevent the stainless steel lifting cable from contacting power or video cabling. The only cable permitted to move is the lifting cable, all other cables must remain stable and secure during lowering and raising operations.

The lowering tool shall consist of a lightweight metal frame and winch assembly, a quick release cable connector, an adjustable safety clutch, and a variable speed industrial duty electric drill motor. This tool shall be able to access the lifting cable through a pole hand hole, shall support itself and the load during lowering, and shall provide a means to prevent freewheeling when loaded. This tool shall have a reduction gear to reduce the manual effort required during lifting operations. In addition, this tool shall be provided with an adapter for operating the lowering device with a portable drill using a clutch mechanism. The portable lowering tool shall be included as part of the installed system. The lowering device shall include customized adapter brackets to install cylindrical type PTZ CCTV cameras that have a mounting base below the camera assembly and is require to be installed in an upright position.

907-634.03--Construction Requirements.

907-634.03.1--Foundations. Delete the last sentence of the fourth paragraph of Subsection 632.03.1 on page 550, and substitute the following.

Where foundations are constructed in areas where the pavement edge elevation and shoulder edge elevation differ more than twelve (12) inches, taller foundations may be used but must be approved by the Engineer.

After Subsection 634.03.3 on page 552, add the following.

907-634.03.4--Submittals. The submittal requirements defined in the Notice to Bidders entitled “ITS General Requirements”, along with the requirements in this specification, shall be met for all ITS components. All costs associated with submittals shall be included in the overall contract price; no separate payment will be made for any documenting and submitting.

907-634.03.5--Quality Assurance. The quality assurance requirements defined in the Notice to Bidders entitled “ITS General Requirements” shall be met for all ITS components. All costs associated with the quality assurance requirements shall be included in the overall contract price.

907-634.04--Method of Measurement. After the last sentence of the fourth paragraph of Subsection 634.04 on page 552, add the following.

Field conditions may require taller foundations than specified in the plans. In which case, the addition concrete will be paid for at the contract bid price per cubic yard for pole foundations.

After the sixth paragraph of Subsection 634.04 on page 553, add the following.

ITS extension poles of the type specified will be measured as a unit quantity per each.

Delete the last paragraph in Subsection 634.04 on page 553 and substitute the following.

Wooden poles will be measured as a unit quantity per each.

Camera lowering device will be measured as a unit quantity per each.

907-634.05--Basis of Payment. Delete the fourth paragraph of Subsection 634.05 on page 553, and substitute the following.

Camera pole with foundation and detector pole with foundation, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials, all documentation and submittals, for excavating, backfilling, replacing sod, and for all constructing, placing, curing, erecting, installing, connecting and testing; for foundations, poles, pole bases, conduit inside foundation as indicated on the plans, connections to support structures, caps, covers, ground wire, ground rods, hardware and for all equipment, tools, labor and incidentals necessary to complete the work and quality assurance, including remote and local control of the camera site complete in place and ready for use.

Camera lowering device and camera lowering tool, as described above, shall be paid for at the contract unit price per each. This price shall be full compensation for all materials, design, installation, equipment, tools, labor and incidentals associated with providing and installing the camera lowering device and the camera lowering tool.

Delete the sixth paragraph of Subsection 634.05 on page 553, and substitute the following.

Structure-mounted equipment pole, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials, all documentation and submittals, for all constructing, placing, erecting, installing, connecting and testing, for poles, conduit between structure attachment location as indicated in the plans; wiring between pole-mounted devices and field cabinet; all structure-mounting hardware indicated in the plans, caps, covers, ground wire, ground rods, hardware and for all equipment, tools, labor and incidentals necessary to complete the work and quality assurance, including remote and local control of the camera site complete in place and ready for use.

ITS extension poles, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials, all documentation and submittals, for installing the extension pole, mounting attachments as necessary, adjusting the pole to meet specific project needs, and for all equipment, tools, labor, and incidentals necessary to complete the work and quality assurance.

After the last paragraph of Subsection 634.05 on page 554, add the following.

Sizing poles and their appurtenances to field conditions is the Contractor's responsibility. No separate payment will be made for designing to meet project specifications and field conditions.

Delete the pay items listed on page 554, and substitute the following.

907-634-A: Traffic Signal Equipment Pole, Type __, __' Shaft, __' Arm *	- per each
907-634-B: Traffic Signal Equipment Pole Shaft Extension, ____' **	- per each
907-634-C: Pole Foundations, Class ____ Concrete	- per cubic yard
907-634-D: Slip Casing, ____" Diameter	- per linear foot
907-634-E: Camera Pole with Foundation, ____' Pole	- per each
907-634-F: Detector Pole with Foundation, ____' Pole	- per each
907-634-G: Traffic Signal Equipment Pole Mast Arm Extension, ____' **	- per each
907-634-H: ITS Equipment Pole, Structure Mounted, ____' Pole	- per each
907-634-I: Wood Pole, Class ____ Height ____'	- per each
907-634-J ITS Extension Pole, ____' **	- per each
907-634-K: Camera Lowering Device	- per each

- * Multiple Arms may be indicated
- ** Additional information may be indicated

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-636-2

CODE: (IS)

DATE: 11/15/2017

SUBJECT: Electrical Cable

Section 636, Electrical Cable, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-636.01--Description. Delete the last sentence of the last paragraph in Subsection 636.01 on page 555 and substitute the following.

It shall include excavating, laying, placing tracer cable or tape, backfilling, replacing sod, aerial supports and/or pull-through conduits, as applicable; and transformer enclosures and/or terminal boxes when not placed under other items of the contract.

907-636.02--Materials. After the paragraph of Subsection 636.02 on page 555, add the following.

907-636.02.1--ITS Ground Mounted Meter Enclosure.

907-636.02.1.1--Meter Base. Meter bases shall be NEMA Type 3R with a minimum rating of 100 amps and shall meet the requirements of the local utility. The meter base shall be provided with ampere rating of meter sockets based on sockets being wired with insulated wire rated at least 167°F. The meter base shall be designed for underground service.

Meter bases shall be 4-terminal, 600 volt, single phase, 3-wire furnished with the following:

- (a) Line, load and neutral terminals accepting #8 to 2/0 AWG copper/aluminum wire,
- (b) Ringed or ringless type, with or without bypass,
- (c) Made of galvanized steel,
- (d) Listed as meeting UL Standard UL-414, and
- (e) Underground service entrance as specified.

The meter bases shall have electrostatically applied dry powder paint finish, light gray in color, with a minimum thickness of 2.4 mils.

A 1-inch watertight hub for threaded rigid conduit shall be furnished with meter base.

907-636.02.1.2--Disconnect. External electrical service disconnects shall be furnished with a single pole 50-amp inverse time circuit breaker with at least 10,000 RMS symmetrical amperes short circuit current rating in a lockable in open or closed position in accordance with National Electric Code (NEC) and be a NEMA 3R Type enclosure. The disconnect shall be listed as meeting UL Standard UL-489 and marked as being suitable for use as service equipment.

The disconnect enclosure shall be fabricated from galvanized steel and electrostatically apply dry powder paint finish, light gray in color, to yield a minimum thickness of 2.4 mils. Ground bus and neutral bus shall be provided with at least four terminals with minimum wire capacity range of number 14 through number 4.

For 480V service, a local utility approved, lockable, non-fused disconnect switch on the supply side of the meter base shall be furnished, installed, and labeled as "Utility Disconnect". A separate load side disconnect with overcurrent protection shall be provided within two feet (2') of the meter.

907-636.02.1.3--Ground Mounted – Pedestal – Service Panel. The pedestal shall be of NEMA Type 3R rainproof construction and shall be UL Listed as "Enclosed Industrial Control Equipment" (UL 508A). External construction shall comply with UL50 requirements and shall be of G90 galvanized steel with light green #14672 Federal Specification 595 polyurethane industrial grade powder paint.

Hinges shall be stainless steel and of the continuous piano hinge type.

The pedestal mounting bolts shall not be externally accessible. The pedestal shall be able to be embedded in concrete or use anchor bolts for mounting on concrete base. Either pedestal mounting base or anchor bolt kit shall be used for installation.

The service pedestal should have three separate isolated sections for metering equipment, utility termination and customer equipment.

The metering section shall be pad-lockable and sealable and have a hinged swing hood with an integral hinged polycarbonate sealable window for access to demand meters. Meter socket type shall meet the requirements of the serving utility.

The utility termination section shall be pad-lockable and sealable and shall have a stainless steel handle provided on a lift-off cover. Sufficient clearance shall be provided for a 4-inch diameter conduit for utility cables entrance. Utility landing lugs shall be UL listed and shall accommodate conductor sizes between AWG #6 – 350 kcmil.

The customer compartment door shall be hinged on the left hand side. A stainless pad-lockable hasp shall be provided to secure customer compartment. A door keeper shall be provided to keep the door in an open position. A print pocket shall be provided on the inside of the door in a weatherproof sleeve. Required UL labeling shall be located on the inside of the customer door. Distribution and control equipment shall be behind an internal dead-front door with a quarter-turn securing latch and be hinged to open more than 90 degrees. The dead-front door shall be hinged on the same side as the customer section door. All distribution and control equipment shall be factory wired using 600-volt wire sized to NEC and UL requirements.

The service pedestal shall be rated for operation at 10K minimum amps interrupting capacity (AIC). The provided documentation shall list circuit breaker combinations and those to be used for de-rated operation for series ratings. Circuit breakers shall be permanently labeled with engraved name plates.

The serving utility shall be contacted for necessary requirements before ordering or installing equipment.

907-636.02.2--ITS Ground Mounted Transformer Enclosure.

907-636.02.2.1--Disconnect. The disconnect shall meet the requirements of Subsection 907-636.01.2.

907-636.02.2.2--Ground Mounted - Pedestal – Service Panel. The ground mounted - pedestal – service panel shall meet the requirements of Subsection 907-636.01.3. In addition, the transformer shall be rated to match the requirement of the primary service and the types of load served as specified in the plans. The transformer unit shall be installed inside the enclosure and meet all applicable codes. Each transformer shall be furnished as one complete unit and wiring of multiple transformers to meet the required ratings at each enclosure location is not allowed. Step-up and Step-down transformers shall be designed specifically for each application. Reverse feeding of step-up and step-down transformers is not allowed. All transformers shall be designed for outdoor installation and rated 600 VAC and below.

907-636.04--Method of Measurement. Delete the first paragraph of Subsection 636.04 on page 557, and substitute the following.

Electric cable of the type specified, constructed as specified on the plans, will be measured by the linear foot. Measurement will be computed horizontally along the conduit, messenger cable or mast arm and vertically along the pole. Measurement in underground conduit is only in the horizontal plane and no additional quantity shall be added for conduit depth or change in elevation of the conduit. No extra length will be allowed for cable inside signal heads, drip loops, or sag in aerial supported cable. Tracer tape, when required in the plans, used with tracer cable will not be measured for separate payment but shall be included in the contract price for Tracer Cable. The terminals for the measurements of lengths will be considered specifically as the center of the pull boxes, poles, signal heads or controller cabinets.

After the first paragraph of Subsection 636.04 on page 557, add the following.

ITS Ground Mounted Enclosures, complete in place and accepted, will be measured as a unit quantity per each for a complete and operable unit in accordance with the contract provisions.

907-636.05--Basis of Payment. After the first paragraph of Subsection 636.05 on page 557, add the following.

ITS Ground mounted enclosures, measured as prescribed above, will be required wherever ground mounted meter enclosures or step-up or step-down transformers are noted as required in the plans. The enclosures shall be paid for at the contract unit price bid per each; which price shall be full compensation for any transformers (as described in the plans), foundation construction, cabinets, pedestals, meter bases, disconnects, relays, terminals, circuit breakers, sockets, hubs, buses, connectors, mounting material, all other materials for constructing, installing, connecting, testing

and final cleanup; and for all equipment, labor, tools and incidentals necessary to complete the work in accordance with the contract documents.

In the first sentence of the second paragraph of Subsection 636.05 on page 557, change “relaid” to “re-laid”.

Delete the list of pay items on pages 557 and 558, and substitute the following.

907-636-A: Electric Cable, Direct Burial, <u>Type</u> , AWG ___, ___ Conductor	- per linear foot
907-636-B: Electric Cable, Underground in Conduit, <u>Type</u> , AWG ___, ___ Conductor	- per linear foot
907-636-C: Electric Cable, Aerial Supported, <u>Type</u> , AWG ___, ___ Conductor	- per linear foot
907-636-D: Electric Cable, Aerial Supported in Conduit, <u>Type</u> , AWG ___, ___ Conductor	- per linear foot
907-636-E: Electric Cable, Underground in Conduit, Tracer Cable	- per linear foot
907-636-F: Electric Cable, Repair	- per linear foot
907-636-G: Underground Cable and Conduit, Removed	- per linear foot
907-636-H: Underground Cable and Conduit, Removed and Re-laid	- per linear foot
907-636-I: ITS Ground Mounted * Enclosure	- per each

* Indicates Meter or Transformer Enclosure Type

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-637-3

CODE: (IS)

DATE: 05/25/2021

SUBJECT: Traffic Signal Conduit and Pull Boxes

Section 637, Traffic Signal Conduit and Pull Boxes, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-637.02--Materials.

907-637.02.1--Pull Box / Enclosures. Delete the first sentence of the second paragraph of Subsection 637.02.1 on page 558, and substitute the following.

For grade level pull boxes and enclosures only, Tier 22 (22,500-pound design load, 33,750-pound test load) enclosures with minimum size dimensions as shown in the detail drawings on the plans shall be installed for use in traffic signal construction. Enclosure boxes shall be open bottom.

Delete the fourth sentence of the second paragraph of Subsection 637.02.1 on page 558.

907-637.03--Construction Requirements.

907-637.03.1--Pull box/Enclosures. Delete the sixth sentence of the first paragraph of Subsection 637.03.1 on page 559, and substitute the following.

Enclosures located in soil or sodded areas shall be installed with a supporting poured concrete collar or approved composite collar assembly, as shown by details on the plans.

907-637.03.2.1--Conduit Duct Bank. Delete the first sentence of subparagraph a) under Bored or drilled conduit in Subsection 637.03.2.1 on page 560, and substitute the following.

All conduits under railroad tracks shall be horizontal directional bored or drilled at a minimum of ten (10) feet below the railroad bed, or as required by the Railroad Company.

Delete Subsections 637.03.2.4 and 637.03.2.5 on pages 561 & 562, and substitute the following.

907-637.03.2.4--Blank.

907-637.03.2.5--Blank.

After Subsection 637.03.2.7 on page 563, add the following.

907-637.03.3--Submittals. The submittal requirements defined in the Notice to Bidders entitled “ITS General Requirements” shall be met if the NTB is included as part of the Project Proposal

and Contract Documents. In all cases, submittals shall be thorough and timely. All costs associated with submittals shall be included in the overall contract price; no separate payment will be made for any documenting and submitting.

907-637.03.4--Quality Assurance. The quality assurance requirements defined in the Notice to Bidders entitled "ITS General Requirements" shall be met if the NTB is included as part of the Project Proposal and Contract Documents. In all cases, the Contractor shall conduct, maintain, and leave the worksite in a professional and organized manner. All costs associated with the quality assurance requirements shall be included in the overall contract price.

907-637.04--Method of Measurement. Delete subparagraphs a) and b) in Subsection 637.04 on page 563, and substitute the following.

- a) From center to center of pull box and/or foundation.
- b) Any above ground vertical conduit runs, as indicated in the plans. Measurement in underground conduit is only in the horizontal plane and no additional quantity shall be added for conduit depth or change in elevation of the conduit.

907-637.05--Basis of Payment. Delete the first, second, third, fourth and fifth paragraphs of Subsection 637.05 on page 564, and substitute the following.

Pull Box Enclosures, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials including the cover, installing, crushed gravel underlayment, poured concrete collars, replacement of sod or existing grassing, final clean-up and for all equipment, all documentation and submittals, tools, labor and incidentals necessary to complete the work and quality assurance.

Conduit / Duct Bank, measured as prescribed above, will be paid for per linear feet, which price shall be full compensation for all materials, equipment, labor, trenching, installing, backfilling trench, plowing, directional boring, restoration, marking tape, pull tape, duct plugs, fittings, testing, bore logs, all documentation and submittals, and all other incidentals necessary for the installation and quality assurance of the conduit system.

Rigid Galvanized Steel, measured as prescribed above, will be paid for per linear feet, which price shall be full compensation for all materials, equipment, labor, all documentation and submittals, all related materials including but not limited to couplings, mounting straps, bonding to ground, etc., that is installed on sign structures, poles or between the pull boxes, and all other incidentals necessary for the installation and quality assurance of the conduit system.

Duct Plugs and Sealant will be included in the cost of the conduit and will not be measured separately.

Delete the pay items listed on page 564 and substitute the following.

907-637-A: Pull Box Enclosure, Type

- per each

907-637-B:	Pull Box Enclosure, Structure Mounted, <u>Type</u>	- per each
907-637-C:	Traffic Signal Conduit, Underground, <u>Type, Size</u>	- per linear foot
907-637-D:	Traffic Signal Conduit, Underground Drilled or Jacked, <u>Type, Size</u>	- per linear foot
907-637-E:	Traffic Signal Conduit, Structural Conduit, <u>Type, Size</u>	- per linear foot
907-637-F:	Traffic Signal Conduit, Aerial Supported, <u>Type, No, Size</u>	- per linear foot
907-637-G:	Traffic Signal Conduit, Underground Encased in Concrete, <u>Type, Size</u>	- per linear foot
907-637-H:	Traffic Signal Conduit Bank, Underground, <u>Type, No., Size</u>	- per linear foot
907-637-I:	Traffic Signal Conduit Bank, Underground Drilled or Jacked, <u>Type, No., Size</u>	- per linear foot
907-637-J:	Traffic Signal Conduit Bank, Structural Conduit, <u>Type, No., Size</u>	- per linear foot
907-637-K:	Traffic Signal Conduit Bank, Aerial Supported, <u>Type, Size and Number</u>	- per linear foot

CITY OF HATTIESBURG, MISSISSIPPI

SPECIAL PROVISION NO. 907-643-3

CODE: (IS)

DATE: 09/20/2021

SUBJECT: Video Vehicle Detection

Section 643, Video Vehicle Detection System, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 643 on pages 601 thru 628 and substitute the following.

SECTION 907-643 - VIDEO VEHICLE DETECTION

907-643.01--Description. This section specifies the minimum requirements for Video Vehicle Detection (VVD) and Multi-Sensor Vehicle Detection (MSVD) furnished and installed in accordance with the design(s) for the location(s) designated on the project plans, in any related notice to bidders, or as directed. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, test, and operate VVD and/or MSVD. The video vehicle detection system shall at a minimum use one or more cameras recommended by the manufacturer or an integrated thermal sensor and video analytics hardware and software to detect vehicle presence, provide a detection output, and generate volume, occupancy, and speed data.

Type 1 Video Vehicle Detection will provide presence or pulse detection of vehicles, bicycles, and pedestrians for Traffic Signal Controller inputs. There are two variations of Type 1 Video Vehicle Detection: Type 1A – camera with independent video detection processor, Type 1B – a single integrated camera with video detection processor. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Video Vehicle Detection equipment, complete and ready for service.

Type 2 Video Vehicle Detection will provide presence or pulse detection of vehicles, bicycles, and pedestrians for Traffic Signal Controller inputs. Type 2 Video Vehicle Detection shall be designed to be span wire mounted. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Video Vehicle Detection equipment, complete and ready for service.

Type 3 Video Vehicle Detection will provide presence or pulse detection and tracking of vehicles, bicycles, and pedestrians for Traffic Signal Controller inputs. Type 3 Video Vehicle Detection shall be a single fish-eye lens camera, designed to be mounted on signal pole or mast arm. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Video Vehicle Detection equipment, complete and ready for service.

The Multi-Sensor Vehicle Detection (MSVD) will provide detection of vehicles on a roadway using a Multi-Sensor Detection for Traffic Signal Controller inputs. The Multi-Sensor shall utilize two (2) different sensors of different technologies, video imaging and radar, to detect and track vehicles. The module shall process information from both video imaging and radar sensors simultaneously in real-time. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Multi-Sensor Vehicle Detection equipment, complete and ready for service.

907-643.02--Materials.

907-643.02.1--Materials Type 1 Video Vehicle Detection. The Type 1 Video Vehicle Detection shall consist of power supply, video camera, mounting brackets, and lightning protection as recommended by the manufacturer, video detection processors/extension modules capable of processing the number of camera and phase combination video sources shown on the project plans or in the purchase order. In addition, Type 1B Video Vehicle Detector shall consist of a single integrated camera with video detection processor, a cabinet interface which mounts in a standard detector rack or as a standalone shelf mount unit.

907-643.02.1.1--Functional Requirements for Type 1 Video Vehicle Detection. The Type 1 Video Vehicle Detection configuration shall utilize video processors with one or more video inputs and one (1) video output, responding to specific site applications, camera locations and detection zones shown on the project plans. Video processors or interface modules shall be provided which plug directly into NEMA TS 1 and TS 2 detector racks without adapters. Extension modules which allow detection zones from one camera to be routed to other card slots shall also be provided if required. The system shall be Ethernet compatible with an RJ45 port. The Type 1 Video Vehicle Detection shall be able to detect vehicles and bicycles in multiple lanes using only the video image.

907-643.02.1.2--Interface Type 1 Video Vehicle Detection. The following interfaces shall be provided:

- 1) Video inputs that accept RS 170 (NTSC) signals from an external video source. A BNC type interface connector shall be provided and located on the front of the video processing unit.
- 2) A LED indicator to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.
- 3) One (1) video output per processor module. The video output shall be RS 170 compliant and shall pass through the input video signal. The video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Control of the overlays and video switching shall also be provided through the serial communications port. The video output interface connector shall be BNC or RCA type. If RCA connector is used, an RCA to BNC adapter shall be provided.
- 4) A serial communications port on the front panel. The serial port shall be compliant with RS-232 or RS-422 electrical interfaces and shall use a DB9 or RJ45 type connector. The serial communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information.
- 5) Interface software. The interface protocol shall support multi-drop or point-to-multipoint communications. Each video detection sensor shall have the capability to be individually IP addressable either built in or with third party video server units.
- 6) Open collector contact closure outputs meeting NEMA TS-2 requirements. The open collector output will be used for vehicle detection indicators as well as discrete outputs for alarm conditions.
- 7) LED status indicators on the front panel. The LED's shall illuminate when a contact closure

- output occurs. Provide one output LED for each contact closure output.
- 8) A mouse compatible port (PS-2 or USB) on the front panel of the video processing unit. The mouse port shall be used as part of the system setup and configuration.
 - 9) A Cabinet Interface shall be provided that is specifically designed to mount in a standard NEMA TS 1 and TS 2 detector rack without adapters or rewiring, or as a stand-alone shelf mount unit. The Interface shall operate in a temperature range from -31°F to +165°F and a humidity range from 0% to 95% relative humidity. The Cabinet Interface shall be powered by 100v to 240v AC, 50 or 60Hz. The front of the Interface shall include LED detection indications for each channel of detection. One BNC video output and detector test switches that allow the user to place calls on each channel

907-643.02.1.3--Functionality Type 1 Video Vehicle Detection. Detection zones shall be programmed via an on-board menu displayed on a video monitor and a pointing device connected to the video detection processor. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. The video detection processor shall detect vehicles, bicycles, and pedestrians in real time as they travel across each detection zone. The video detection processor shall have an RS-232 (DB9 or RJ45) port for communications with an external computer. The video detection processor port shall be multi-drop capable.

It shall be possible to upload and save all configuration data including loop placement and save the file on a computer. It shall be possible to download a configuration file from a computer to the detection device.

The video detection processor shall accept new detection patterns from an external computer through the RS-232 port when the external computer uses the correct communications protocol for downloading detection patterns.

A WindowsTM based software designed for local and remote connection shall be provided for video capture, real-time detection indication and detection zone modification capability. The video detection processor shall send its detection patterns to an external computer through the RS-232 port.

The video detection processor shall default to a safe condition, such as minimum recall, fixed recall or a constant call on each active detection channel, in the event of unacceptable interference with the video signal, low visibility conditions, or power failure.

The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined detection zones in a constant call mode. The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

907-643.02.1.4--Detection. Type 1A shall have a minimum of 24 detection zones per camera input and each detection zone shall be capable of being sized to suit the site and the desired vehicle detection area. Type 1B shall have a minimum of 8 detection zones per camera input and each detection zone shall be capable of being sized to suit the site and the desired vehicle detection area.

A single detection zone shall be able to replace multiple inductive loops and the detection zones

shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

Placement of detection zones shall be done by using only a pointing device, and a Graphical Interface built into the video detection processor and displayed on a video monitor, to draw the detection zones on the video image from each video camera. Detection zones created in this manner shall be compatible with the PC-based software provided with the system.

The video detection processor shall support bicycle type zones where the zone can differentiate between motorized vehicles and bicycles, producing a call for one but not the other. Bicycle zones shall only output when a bicycle is detected. The video detection processor shall provide the ability to assign a separate output channel for bicycle zones to allow traffic controllers to implement special bicycle timing for applications where the traffic controller has separate bicycledetection inputs. Bicycle zones shall have the ability to have extensions assigned to individual bicycle zones for applications where the traffic controller does not have bicycle specific detectioninputs.

For Type 1A, six (6) additional count zones for bicycles shall be provided to accumulate bicycle counts at user specified intervals.

The video detection processor's memory shall be non-volatile to prevent data loss during power outages.

When a vehicle is detected crossing a detection zone, the corners or entire zone of the detection zone shall flash/change color on the video overlay display to confirm the detection of the vehicle. It shall be possible to record the operation of the unit in real time with the detection zones operating.

Detection shall be at least 98% accurate in all weather conditions, with slight degradation acceptable under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility.

The video detection processor shall maintain normal operation of existing detection zones when one (1) zone is being added or modified.

The video detection processor shall output a constant call on any detector channel corresponding to a zone being modified and shall resume normal operation upon completion.

Detection zones shall be directional to reduce false detections from objects traveling in directions other than the desired direction of travel in the detection area.

The video detection processor shall process the video input from each camera using a microprocessor at 30 frames per second at one volt, peak to peak, 75 ohms, or EIA 170 NTSC video standard.

The video detection processor shall output minimum recall, fixed recall or constant call for each enabled detector output channel if a loss of video signal occurs. The recall behavior shall be user selectable for each output. The video detection processor shall output a constant call during the

background "learning" period.

Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds in increments of 0.1 seconds.

Type 1A shall have up to six (6) detection zones per camera view that have the capability to count the number of vehicles detected, measure classification, **occupancy**, and speed. The data values shall be internally stored within the processor module for later retrieval through the RS-232 port. The data collection interval shall be user definable in periods of 5, 15, 30, or 60 minutes or by intersection cycle. Real-time data shall be retrieved from the PC-based software provided with the system.

~~907-643.02.1.5~~---Camera. Type 1A cameras shall be completely compatible with the video detection processor and shall be certified by the manufacturer to ensure proper system operation.

Type 1B shall be a single integrated camera with built in video detection processor.

The Video Vehicle Detection shall produce accurate detector outputs under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.009 to 930 foot-candles.

The camera shall use a color CCD sensing element with resolution of not less than 470 lines horizontal and 400 lines vertical.

The camera shall include mechanisms to compensate for changing of lighting by using an electronic shutter and/or auto-iris lens.

The camera shall include a variable focal length lens with factory preset focus that requires no field adjustment. Zooming of the camera lens to suit the site geometry by means of a portable interface device designed for that purpose. The horizontal field of view shall be adjustable. Camera configuration shall be customized for each approach based on field site conditions and the project plans.

The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate

of the enclosure. The heater shall directly heat the glass lens and require less than five (5) watts over the temperature range.

Power consumption of the camera shall be 15 watts or less under all conditions.

The camera enclosure shall be equipped with separate, weather-tight connections for power and setup video cables at the rear of the enclosure. These connections shall allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module furnished under this bid item.

The video signal output by the camera shall in accordance with NTSC standards.

All necessary mounting brackets shall be mounted to pole shafts, mast arms, or other structures to mount cameras as indicated on the project plans. Mounting brackets shall result in a fixed- position mounting. Mounting Brackets shall be included at no additional cost.

907-643.02.1.6--Video Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance. The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.1.7--Power Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance.

Camera power cable shall be suitable for installation in conduit and in exposed sunlight environment, and UL listed.

The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.1.8--Surge Protection. Surge protection devices shall be provided for all new or added video detection devices as recommended by the manufacturer. A surge protection device (SPD) shall be installed at the point the video detection devices receive 120 volt power and connected in series with the circuits. SPDs shall be selected and installed according to recommendation from the device manufacturer. The units shall be configured with receptacles. The units shall have an internal fuse protection and shall provide common mode (L+N-G) protection.

Video and/or Power cable shall be protected with an inline surge suppressor as recommended by the manufacturer or a panel mounted surge suppressor as recommended by the manufacturer or approved equal, installed and grounded per manufacturer's recommendations.

907-643.02.1.9--Physical and Environmental Specifications. Physical and Environmental Specifications shall be as follows.

Video Vehicle Detection Processor: The video vehicle detection processor shall operate reliably in a typical roadside traffic cabinet environment. Internal cabinet equipment and a videovehicle detection processor shall be provided that meets the environmental requirements of NEMATS-2-2003 Section 2. If the processor is located in the sensor, it shall meet the same requirements.

Video Camera Sensor: The operating ambient temperature range shall be -30°F to 140°F. Additionally, a heater shall be included to prevent the formation of ice and condensation in cold weather. The heater shall not interfere with the operation of the video camera sensor electronics, or cause interference with the video signal.

Vibration: Vibrations shall meet the requirements of NEMA TS 2-2003 Section 2.1.9. Shock: Shock shall meet the requirements of NEMA TS 2-2003 Section 2.1.10.

Acoustic Noise: A video camera sensor and enclosure shall be provided that can withstand 150 dB for 30 minutes continuously, with no reduction in function or accuracy.

907-643.02.2--Materials Type 2 Video Vehicle Detection. The Type 2 Video Vehicle Detection shall be span wire mounted and consist of power supply, video camera, mounting brackets, and lightning protection as recommended by the manufacturer, video detection processors/extension modules capable of processing the number of camera and phase combination video sources shown on the project plans or in the purchase order

907-643.02.2.1--Functional Requirements for Type 2 Video Vehicle Detection. The Type 2 Video Vehicle Detection configuration shall utilize video processors with one or more video inputs and one (1) video output, responding to specific site applications, camera locations and detection zones shown on the project plans. Video processors or interface modules shall be provided which plug directly into NEMA TS 1 and TS 2 detector racks without adapters. Extension modules which allow detection zones from one camera to be routed to other card slots shall also be provided if required. The system shall be Ethernet compatible with an RJ45 port. The Type 2 Video Vehicle Detection shall be able to detect vehicles and bicycles in multiple lanes using only the video image.

907-643.02.2.2--Interface Type 2 Video Vehicle Detection. The following interfaces shall be provided:

- 1) Video inputs that accept RS 170 (NTSC) signals from an external video source. A BNC type interface connector shall be provided and located on the front of the video processing unit.
- 2) A LED indicator to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.
- 3) One (1) video output per processor module. The video output shall be RS 170 compliant and shall pass through the input video signal. The video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Control of the overlays and video switching shall also be provided through the serial communications port. The video output interface connector shall be BNC or RCA type. If RCA connector is used,

- an RCA to BNC adapter shall be provided.
- 4) A serial communications port on the front panel. The serial port shall be compliant with RS-232 or RS-422 electrical interfaces and shall use a DB9 or RJ45 type connector. The serial communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information.
 - 5) Interface software. The interface protocol shall support multi-drop or point-to-multipoint communications. Each video detection sensor shall have the capability to be individually IP addressable either built in or with third party video server units.
 - 6) Open collector contact closure outputs meeting NEMA TS 2 requirements. The open collector output will be used for vehicle detection indicators as well as discrete outputs for alarm conditions.
 - 7) LED status indicators on the front panel. The LED's shall illuminate when a contact closure output occurs. Provide one output LED for each contact closure output.
 - 8) A mouse compatible port (PS-2 or USB) on the front panel of the video processing unit. The mouse port shall be used as part of the system setup and configuration.
 - 9) A Cabinet Interface shall be provided that is specifically designed to mount in a standard NEMA TS 1 and TS 2 detector rack without adapters or rewiring, or as a stand-alone shelf mount unit. The Interface shall operate in a temperature range from -31°F to +165°F and a humidity range from 0% to 95% relative humidity. The Cabinet Interface shall be powered by 100v to 240v AC, 50 or 60Hz. The front of the Interface shall include LED detection indications for each channel of detection. One BNC video output and detector test switches that allow the user to place calls on each channel

907-643.02.2.3--Functionality Type 2 Video Vehicle Detection. Detection zones shall be programmed via an on-board menu displayed on a video monitor and a pointing device connected to the video detection processor. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. The video detection processor shall detect vehicles, bicycles, and pedestrians in real time as they travel across each detection zone. The video detection processor shall have an RS-232 (DB9 or RJ45) port for communications with an external computer. The video detection processor port shall be multi-drop capable.

It shall be possible to upload and save all configuration data including loop placement and save the file on a computer. It shall be possible to download a configuration file from a computer to the detection device.

The video detection processor shall accept new detection patterns from an external computer through the RS-232 port when the external computer uses the correct communications protocol for downloading detection patterns.

A WindowsTM based software designed for local and remote connection shall be provided for video capture, real-time detection indication and detection zone modification capability. The video detection processor shall send its detection patterns to an external computer through the RS-232 port.

The video detection processor shall default to a safe condition, such as minimum recall, fixed recall or a constant call on each active detection channel, in the event of unacceptable interference with

the video signal, low visibility conditions, or power failure.

The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined detection zones in a constant call mode. The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

907-643.02.2.3.1--Functionality for Type 2 Video Vehicle Detection. The Video Detection Processor (VDP) for the Type 2 Video Vehicle Detection shall employ Dynamic Zone Stabilization to provide motion tracking and compensation for swaying camera sensors mounted on dual or single span wires. The VDP shall include software that discriminately detects the presence of vehicles and bicycles in single or multiple lanes using only the video image. The VDP shall compensate for swaying motions by tracking the position of the stop bar for the approaching vehicle or bicycle movement. The VDP shall compensate for low frequency (cable sag) motion due to temperature changes during the day. The VDP shall compensate for moderate frequency motion induced by winds. The VDP shall compensate for up to ± 5 degrees of tilt from vertical without any adverse detection false calls or dropped calls.

907-643.02.2.4--Detection. Type 2 shall have a minimum of 24 detection zones per camera input shall be possible, and each detection zone shall be capable of being sized to suit the site and the desired vehicle detection area. .

A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

Placement of detection zones shall be done by using only a pointing device, and a Graphical Interface built into the video detection processor and displayed on a video monitor, to draw the detection zones on the video image from each video camera. Detection zones created in this manner shall be compatible with the PC-based software provided with the system.

The video detection processor shall support bicycle type zones where the zone can differentiate between motorized vehicles and bicycles, producing a call for one but not the other. Bicycle zones shall only output when a bicycle is detected. The video detection processor shall provide the ability to assign a separate output channel for bicycle zones to allow traffic controllers to implement special bicycle timing for applications where the traffic controller has separate bicycledetection inputs. Bicycle zones shall have the ability to have extensions assigned to individual bicycle ones for applications where the traffic controller does not have bicycle specific detection inputs.

Six (6) additional count zones for bicycles shall be provided to accumulate bicycle counts at user specified intervals.

The video detection processor's memory shall be non-volatile to prevent data loss during power outages.

When a vehicle is detected crossing a detection zone, the corners or entire zone of the detection

zone shall flash/change color on the video overlay display to confirm the detection of the vehicle. It shall be possible to record the operation of the unit in real time with the detection zones operating.

Detection shall be at least 98% accurate in all weather conditions, with slight degradation acceptable under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility.

The video detection processor shall maintain normal operation of existing detection zones when one (1) zone is being added or modified.

The video detection processor shall output a constant call on any detector channel corresponding to a zone being modified and shall resume normal operation upon completion.

Detection zones shall be directional to reduce false detections from objects traveling in directions other than the desired direction of travel in the detection area.

The video detection processor shall process the video input from each camera using a microprocessor at 30 frames per second at one volt, peak to peak, 75 ohms, or EIA 170 NTSC video standard.

The video detection processor shall output minimum recall, fixed recall or constant call for each enabled detector output channel if a loss of video signal occurs. The recall behavior shall be user selectable for each output. The video detection processor shall output a constant call during the background "learning" period.

Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds in increments of 0.1 seconds.

The processor shall have up to six (6) detection zones per camera view shall have the capability to count the number of vehicles detected, measure classification and speed. The data values shall be internally stored within the processor module for later retrieval through the RS-232 port. The data collection interval shall be user definable in periods of 5, 15, 30, or 60 minutes or by intersection cycle. Real-time data shall be retrieved from the PC-based software provided with the system.

907-643.02.2.5--Camera. Type 2 cameras shall be completely compatible with the video detection processor and shall be certified by the manufacturer to ensure proper system operation.

The Video Vehicle Detection shall produce accurate detector outputs under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.009 to 930 foot-candles.

The camera shall use a color CCD sensing element with resolution of not less than 470 lines horizontal and 400 lines vertical.

The camera shall include mechanisms to compensate for changing of lighting by using an

electronic shutter and/or auto-iris lens.

The camera shall include a variable focal length lens with factory preset focus that requires no field adjustment. Zooming of the camera lens to suit the site geometry by means of a portable interface device designed for that purpose. The horizontal field of view shall be adjustable. Camera configuration shall be customized for each approach based on field site conditions and the project plans.

The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure. The heater shall directly heat the glass lens and require less than five (5) watts over the temperature range.

Power consumption of the camera shall be 15 watts or less under all conditions.

The camera enclosure shall be equipped with separate, weather-tight connections for power and setup video cables at the rear of the enclosure. These connections shall allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module furnished under this bid item.

The video signal output by the camera shall in accordance with NTSC standards.

All necessary mounting brackets shall be mounted to pole shafts, mast arms, or other structures to mount cameras as indicated on the project plans. Mounting brackets shall result in a fixed- position mounting. Mounting Brackets shall be included at no additional cost.

907-643.02.2.6--Video Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance. The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.2.7--Power Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance.

Camera power cable shall be suitable for installation in conduit and in exposed sunlight environment, and UL listed.

The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.2.8--Surge Protection. Surge protection devices shall be provided for all new or added video detection devices as recommended by the manufacturer.

Video and/or Power cable shall be protected with an inline surge suppressor as recommended by the manufacturer or a panel mounted surge suppressor as recommended by the manufacturer or approved equal, installed and grounded per manufacturer's recommendations.

907-643.02.2.9--Physical and Environmental Specifications. Physical and Environmental Specifications shall be as follows.

Video Vehicle Detection Processor: The video vehicle detection processor shall operate reliably in a typical roadside traffic cabinet environment. Internal cabinet equipment and a video vehicle detection processor shall be provided that meets the environmental requirements of NEMA TS 2-2003 Section 2. If the processor is located in the sensor, it shall meet the same requirements.

Video Camera Sensor: The operating ambient temperature range shall be -30°F to 140°F. Additionally, a heater shall be included to prevent the formation of ice and condensation in cold weather. Do not allow the heater to interfere with the operation of the video camera sensor electronics, or cause interference with the video signal.

Vibration: Vibrations shall meet the requirements of NEMA TS 2-2003 section 2.1.9. Shock: Shock shall meet the requirements of NEMA TS 2-2003 section 2.1 .10.

Acoustic Noise: A video camera sensor and enclosure shall be provided that can withstand 150 dB for 30 minutes continuously, with no reduction in function or accuracy.

907-643.02.3--Materials Type 3 Video Vehicle Detection and Tracking System. The Type 3 Video Vehicle Detection and Tracking System (VIVTDS) shall consist of the following:

- One VIVTDS processor capable of connecting with 1 to 8 sensors
- One or more VIVTDS sensors, with at least one sensor having a fisheye lens for omnidirectional viewing of the roadway or intersection.
- One surge protector junction unit, per each advanced/stopline sensor
- One mounting pole and bracket (90° pole per each fisheye sensor; or straight, vertical pole per each advanced/stopline sensor). Pole should be assembled in two (2) pieces (3' x 3' plus 7' straight, vertical base)
- One ball-swivel, bracket, and surge protector junction unit, per each fisheye sensor
- One Ethernet Protection Module (surge protector located in the traffic cabinet), per each VIVTDS sensor
- VIVTDS interface cables to the traffic signal controller based on model/type.
- Optional portable field computer to configure and monitor system operations
- Optional computer to configure and monitor system operations at the TOC or other remote location
- Optional Ethernet Repeater to extend VIVTDS sensors beyond 300 feet

- Optional Fiber interconnect to extend VIVTDS sensors up to 2000 feet
- Optional POE Powered Switch for use with more than two sensors

907-643.02.3.1--Functional Requirements for Type 3 Video Vehicle Detection. The Type 3 Video Vehicle Detection configuration shall be for a system that views, captures, and derives data based on the objects that pass within the sensor field of view along a highway, road, ramp, or other commonly used transit pathway via processing video images. The detection of objects by a VIVTDS can be accessed and used by and for many applications, including:

- Vehicle detection and actuation at intersections
- Pedestrian Actuation
- Pedestrian Counting
- In the Box bicycle discrimination and clearance extension
- Bicycle Counting
- Highway flow monitoring
- Ramp metering
- Advanced detection
- Pedestrian crossing extensions
- Temporary construction zone detection
- Situational awareness of location area, including an intersection center
- Automated alerts and reports of potentially unsafe conditions, incidents, malfunctions, or signal timing inefficiencies
- Collecting and archiving traffic data on the Cloud for future analysis to improve performance by optimizing timing plans at intersections
- Non-recurring charges for Cloud Data access
- Occupancy-based vehicle actuation
- Signal Performance Metrics
- User-defined zone output pulses
- Onboard video recording and playback
- Open API for data access

The system shall have a modular electrical design and use Ethernet to connect and network with the different system components. Streaming video images, alerts, and data shall be transmitted from the field back to a Traffic Operations Center (TOC) via the systems client software and to the VIVTDS's cloud by using any or combination of the following:

- Fiber optic
- Wireless Radios
- WAN
- TCP/IP
- Optional Internal modem
- Any other means of commonly used communication practices and standards for digital content and information.

The VIVTDS client software shall provide graphical user interfaces between the administrator(s) and permissioned users of the system and the VIVTDS sensor(s) itself. The software shall allow the user to configure sites, conduct maintenance, monitor information relayed from the sensor(s), and provide access to real-time data, system and user defined alerts, and access to historical data collected by the sensor(s). The client software should be installed on a single personal computer or across a network of computers. One or more users will be able to access VIVTDS simultaneously.

907-643.02.3.2—Processor Hardware.

The VIVTDS processor shall support 1 or 2 fisheye sensors, or if equipped with 1 fisheye sensor the VIVTDS processor should, at a minimum, be capable of simultaneously supporting up to four (4) additional VIVTDS sensors for special requirements such as advance detection or underpass detection.

The VIVTDS processor shall comply with NEMA standards, TS1, TS2 Type 1 and Type 2; 170/2070; and ITS. The VIVTDS processor shall provide the following inputs and outputs:

Type	Inputs	Outputs
TS1	24	24
TS2	16	64
170/2070	8	24
ITS	16	64

The VIVTDS processor will have at a minimum four (4) USB 3.0 ports for expansion flexibility and have an optional, built-in modem.

The VIVTDS processor shall be no more than 1U high with dimensions, excluding connectors, not to exceed 8.5" x 11.5" x 1.75" and weigh no more than 5.2 lbs. The unit shall have flexible mounting options including the ability to lie flat on a cabinet shelf, be mounted in a standard traffic cabinet rack with optional mounting ears or be installed vertically with optional base. The outer enclosure shall be a powdered coated aluminum.

907-643.02.3.3-- Type 3 Video Vehicle Detection System Software.

Each VIVTDS system shall include software for up to six (6) sensors for detecting and counting the vehicle's entrance and exit of the intersection. The VIVTDS system will also include software for communicating with the traffic controllers and other electronic devices.

Client software shall be included free of charge with each VIVTDS system and should be downloaded and run on any personal computer with a Windows 7 or newer operating system. The client software at minimum should include management tools to perform the following:

- View, diagnose, configure, and reset individual sensor outputs
- View the status of inputs to enable setup and troubleshooting in the field
- Configure and view calls and phases
- The ability to create and define, as well as edit, vehicle zones, road masks, object masks, and pedestrian zones by drawing arbitrary shaped polygons using a computer
- The ability to detect and track vehicles, motorcycles, bicycles, and pedestrians through the entire 360-degree field of view
- Distinguish between bicycles and vehicles in the center of the intersection (The Box) and provide distinct detector calls to the traffic controller for each object type
- Provide system calls based on zone occupancy
- View the site's configuration history
- Publish and revert back to previous configuration
- View real-time image streaming from the sensor(s) within the software's Client interface
- Optionally access and use an API that is documented online and uses HTTP
- Enterprise security with user-based roles

- Ability to utilize LDAP for user access
- Provide System Alerts for diagnostic and administrative events

The VIVTDS system shall support optional performance data packages for purchase that provide count data, access to real time data, and system and user defined alerts. The performance data shall be accessible directly from the processor or from a remote computer with a network connection, or via a Cloud storage platform. The performance data shall include the following types of reports and alerts:

- Turning movement counts, including U-turns
- Length based vehicle classifications
- Incident reporting
- Volume
- 7 Day Volume
- Occupancy on Green
- Occupancy on Red
- Percentage of Arrivals on Green
- Percentage of Arrivals on Red
- Speed
- Pedestrian Counts
- Bicycle Turning Movements
- Bicycle Counts
- RTSP (H.264) streaming capability
- Wrong way vehicle detection
- Loss of visibility event
- Volume Exceeded

Reports should be exportable and downloadable in the following formats:

- PDF
- Excel
- Synchro Export – Turning Movement Counts

907-643.02.3.4--Detection. VIVTDS system shall provide real time vehicle detection (within 500 milliseconds (ms) of vehicle arrival). The system should detect the presence of vehicles for up to 64 detection zones per VIVTDS sensor. The detection zones shall be sensitive to the direction a vehicle travels and the direction to be detected by each detection zone shall be programmable by a client software user.

The VIVTDS system should provide a flexible detection zone placement anywhere within one hundred (150) feet of the VIVTDS sensors. Preferred presence detector configurations shall be arbitrarily shaped polygons, including simple boxes, drawn across lanes of traffic or placed in line with lanes of traffic. A single VIVTDS sensor should replace one or more conventional detectors. Advanced detection zones may be placed up to three hundred (300) feet from a Fisheye sensor when mounted at least forty (40) feet high.

Placement of detection zones will be done by means of a graphical interface using the MJPEG image of the roadway. The client software displays images of the detection zones overlaid on the video image of traffic while the VIVTDS processor is running. The detection zones, when

operating, shall display outlined or filled, with a visible change indicating activation.

A laptop should be used to draw detection zones. Alternatively, a mouse, keyboard, and monitor may be connected directly to the processor to configure a site. The detection zones should be capable of being sized and shaped to provide optimal road coverage and detection. It should be possible to upload detector configurations to the VIVTDS processor and to retrieve the sensor configuration that is currently running in the VIVTDS processor through the client software. The configuration should also be retrievable from the VIVTDS system's cloud if properly backed up.

The user will be able to edit previously defined detector configurations in order to fine tune the detection zone placement size and shape. Once a detection configuration has been created, the system will provide a graphic display of the new configuration on its monitor. While this fine-tuning is being done, the sensor will be required to continue to operate from the sensor configuration, currently in place. A user should be able to use a system command to revert to previous configurations stored in the client software or on the VIVTDS system's cloud if properly backed up.

When a vehicle occupies a detection zone, the detection zone on the live video will indicate the presence of a vehicle, thereby verifying proper operation of the system.

The presence of the vehicle as well as the signal states will be indicated via colored LED lights on the front panel of VIVTDS processor. With the absence of images, the VIVTDS processor's display shall indicate proper operation of the detection zones.

Detection zones shall be sensitive to the direction of vehicle travel. The direction will be capable of being detected by each detection zone and will be programmable by the user. The vehicle detection zones will not activate if a vehicle is traveling in any direction other than the one specified for detection in the zone. Cross-street and wrong way traffic shall not cause a false detection.

Detection zones will be capable of an optional user defined call to detect a side entrance (90° or less angled entrance).

The VIVTDS system will be able to reliably detect vehicle presence in the design field of view. The design field of view shall be defined as the sensor view when the image sensor is mounted thirty-five (35) feet (10.5 meters) or higher above the roadway, when the sensor is in front of all stop lines, no more than seventy-five (75) feet from the intersection center, and the beginning of the detection area is not greater than one hundred and fifty (150) feet from the image sensor. Within this design field of view, the VIVTDS processor should be capable of setting up detection zones for point detection (equivalent to the operation of a 6' x 6' inductive loop). A VIVTDS sensor, placed at the proper mounting height, is able to monitor up to and including five (5) traffic lanes per approach simultaneously. A single fisheye sensor, placed at the proper mounting height, should be able to monitor detection zones in an intersection of five (5) approaches, at a minimum. Fisheye sensors mounted no less than forty (40) feet should be capable of advanced vehicle detection of up to three hundred (300) feet.

Detection accuracy of the VIVTDS system shall be comparable to properly operating inductive loops. Detection accuracy should include the presence of any vehicle in the defined detection zone regardless of the lane the vehicle is occupying. Occlusion produced by vehicles in the same or adjacent lanes shall not be considered a failure of the VIVTDS processor, but a limitation of the VIVTDS sensor placement.

Detection shall be 98% accurate with slight degradation possible under adverse weather or road conditions (i.e. rain, snow, fog). Detection will be expected for the entire design field of view on a lane by lane or by approach basis.

Equipment failure, either sensor or VIVTDS processor, shall result in constant vehicle detection on affected detection zones. The VIVTDS system will be required to have the ability to place a constant call to a specific zone, if said zone loses visibility, while simultaneously making calls in the traditional manner in the remaining zones.

907-643.02.3.5--Camera. The VIVTDS should have at least one downward-facing fisheye sensor capable of seeing the center of the intersection and have an omnidirectional line of site to track vehicles entering and exiting the intersection. Other required features shall include the following:

- Color images outputted into digital format as MJPEG images
- Camera lens shall not require adjustment and is always in focus
- A thermostatically controlled heater residing inside the enclosure to reduce the effects of ice and condensation
- Any plastics used in the enclosure shall have ultraviolet inhibitors
- A waterproof and dust tight aluminum enclosure

The sensor dimensions excluding connectors shall not exceed 9.9" x 7.9" (height x diameter). The weight of the sensor including the enclosure shall not exceed eight pounds. The VIVTDS sensor manufacturer shall provide a lifetime "always in focus" guarantee on the iconic bell-shaped fisheye camera. The sensor's mounting bracket shall utilize a two (2) piece, ten (10) foot 90° mounting pole. The sensor junction box should mount at the base of the vertical pole and allow for the installer to adjust the sensor's horizontal position with one hand and tighten the bracket without having to support the sensor simultaneously.

907-643.02.3.5.1—Optional VIVTDS sensors.

Certain projects will have special requirements or needs, such as advanced detection beyond three hundred (300) feet and/or stopline detection. In these instances, an additional VIVTDS sensor with a field of view of either 30° - 50° for stopline detection or a field of view of 9° - 18° for advanced detection should be used. The sensor dimensions excluding connectors and mounting bracket shall not exceed 8" x 15" x 3.5" and the weight should not exceed eight pounds. Other required features are the following:

- Color images outputted into digital format as MJPEG images
- A 5 – 50 mm varifocal lens set for the specific application
- A thermostatically controlled heater residing inside the enclosure to reduce the effects of ice and condensation
- A sun shield to minimize lens exposure to the sun
- A waterproof and dust tight powdered coated aluminum housing

The VIVTDS should support thermal imaging sensors for use in specific situations.

907-643.02.3.6—Power.

The VIVTDS sensor(s) will use five (5) watts nominally and a maximum of fifty (50) watts with active heaters. The sensor(s) will be Power Over Ethernet (POE) and will only require a single shielded, burial grade, gel-filled CAT5e cable for both power and data or composite fiber cable.

Each VIVTDS sensor shall have its own surge protector junction unit and EPM surge protection unit in the traffic cabinet.

The VIVTDS processor shall operate within a range of 89 to 240 VAC, 60Hz single phase. Power to the VIVTDS processor is from the transient protected side of the AC power distribution system in the traffic control cabinet where the VIVTDS processor is installed.

907-643.02.3.6—CAT5E Cable. CAT5E cabling shall be a high performance shielded direct burial data cable capable of 350MHz bandwidth for data applications. The cabling shall consist of a 24 AWG solid core copper wire with 8 solid conductors in a gel-filled jacket. The jacket shall consist of linear low-density polyethylene (LLDPE) that is UV resistant and have a cable diameter of no more than 6.5 mm. The cable shall have easily identifiable striped pairs as follows:

- Orange-White, Orange
- Green-White, Green
- Blue-White, Blue
- Brown-White, Brown

The cable shall be rated at a minimum for 60 V.

The surge protector junction unit for the VIVTDS sensor shall provide protection against a transient pulse with a pulse shape of 8/20 μ s and a max current of 75A. The unit shall weigh no more than two (2) lbs.

The EPM, surge protection unit for the VIVTDS sensor, shall have at most a max impulse discharge current of 40 KA and an impedance of at least 100 ohms. The unit should have at least Line-Line and Line-Ground protection options, and the POE current should not exceed 1.8A.

907-643.02.3.7—Composite Fiber. Composite Fiber cable shall meet the following requirements:

- Multimode, OM3, Indoor-Outdoor rated
- Meet ICEA-S-83-597 Standard
- Four Fiber Strands and Two 16 AWG Copper Power Conductors

Fiber cable shall be terminated with FASTconnect LC connectors and maintain a signal strength between -20 dBm and -24 dBm.

The Fiber cable shall connect the Fisheye Sensor and/or other Optional Sensors using PoE Media Converters.

PoE Media Converters shall meet the following requirements:

- Material: UV Stabilized, Polycarbonate/ASA Blend
- Environmental: -29° F - 165° F (-34° C - 74° C)
- IP66

907-643.02.3.8—Physical and Environmental Specifications. The VIVTDS processor will meet or exceed the NEMA TS-2 standard of -29° F - 165° F (-34° C - 74° C) and meet or exceed a 5-30Hz vibration test as well as a 10G shock test.

The VIVTDS processor shall operate properly in an environment with 0% to 95% relative humidity, non-condensing. The VIVTDS sensor(s) shall operate properly in an environment with 0% to 100% relative humidity.

907-643.02.3.9—System Software Operation. The VIVTDS must transmit and receive all information needed for sensor setup, to monitor vehicle detection, to view vehicle traffic flow, and to interpret stored data. The remote communications link between the VIVTDS processor shall not interfere with the on-street detection of the VIVTDS processor.

The user should be able to view the detection area in a horizon to horizon fisheye view or in a configurable four (4) pane flattened view on the same screen. Each view should be able to be customized by the user, with the ability to digitally pan-tilt-zoom.

907-643.02.3.10—Installation and Training. The supplier of the VIVTDS system shall supervise the installation and testing of the sensors, processor, and other sensor components.

System installers will be required to be certified by the system manufacturer. A manufacturer's instructional guide will not be considered an adequate substitute for practical, classroom training and formal certification by an approved agency.

However, the manufacturer shall provide an online user guide and an electronic copy of the user guide within the client software and on board the VIVTDS processor for reference.

Formal levels of factory authorized training are required for installers, contractors and system operators. All training must be certified by the VIVTDS system manufacturer.

907-643.02.3.10—Warranty, Maintenance and Support. The video detection system must be warranted to be free of defects in material and workmanship for a period of 3 years from date of shipment from the manufacturer's facility. During the warranty period, the system manufacturer will be required to repair with new or refurbished materials, or replace at no charge, any product containing a warranty defect provided the product is returned FOB to the supplier's factory or authorized repair site. Return product, product for repair, or product to be replaced under warranty by the supplier shall have prepaid transportation. This warranty does not apply to any products damaged by accident, improperly operated, abused, serviced by unauthorized personnel or unauthorized modification.

Ongoing software support by the manufacturer includes updates of the VIVTDS processor's engine and updates to the client software shall be provided free of charge for the life of the system.

907-643.02.4--Materials Multi-Sensor Vehicle Detection.

907-643.02.4.1--General. The Multi-Sensor Vehicle Detector shall utilize two (2) different sensors of different technologies, video imaging and radar, to detect and track licensed and unlicensed vehicles at distances up to 600 feet. The detector shall fuse vehicle information from the two sensors to provide highly accurate and precise detection for special or advanced applications.

The Multi-Sensor Vehicle Detector shall use a primary detector rack mounted processor to interface with the traffic control cabinet. The module shall process information from both video imaging and radar sensors simultaneously in real-time.

907-643.02.4.2--Detector Configuration. The proposed MSVD shall be available in various configurations to allow maximum deployment flexibility. Each configuration shall have an identical user interface for system setup and configuration. The communications protocol to each

configuration shall be identical and shall be hardware platform independent.

The detector shall include software that detects vehicles in multiple lanes. Video imaging detection zones shall be defined using only an on-board video menu and a pointing device to place the zones on a video image. Up to 24 video detection zones per camera view shall be available. Two (2) additional trigger zones for the radar sensor shall be available and be configurable by using the same system setup menu on the DP. A separate computer shall not be required to program the detection zones. A pre-programmed setup tool is required to align and input radar information and set the camera field of view (zoom and focus).

907-643.02.4.3--Multi-Sensor Vehicle Detection Hardware. The MSVD hardware shall consist of the following four (4) elements:

- 1) Video Imaging Camera Sensor
- 2) Radar Sensor
- 3) Sensor Data Combiner
- 4) Detection Processor

907-643.02.4.3.1--Video Imaging Camera Sensor. The video imaging camera sensor shall meet the following minimum requirements:

- To accommodate deployment flexibility, the MSVD camera sensor shall be compatible with the Data Processor platforms. The MSVD camera sensor shall be supplied by the MSVD manufacturer.
- The advanced camera enclosure shall utilize technology for the heating element of the front glass. The transparent coating shall not impact the visual acuity and shall be close to optically clear.
- Cable terminations at the data combiner for video and power shall not require crimping or special tools.
- The camera sensor shall allow the user to set the focus and field of view via Wi-Fi connectivity.
- The camera shall produce a useable video image of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 1.0 lux to 10,000 lux.
- The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.
- The imager luminance signal to noise ratio (S/N) shall be more than 50 dB with the automatic gain control (AGC) disabled.
- The imager shall employ three (3) dimensional dynamic noise reduction (3D-DNR) to remove unwanted image noise.
- The camera image shall employ wide dynamic range (WDR) technology to compensate for wide dynamic outdoor lighting conditions. The dynamic range shall be greater than 100 dB.
- The camera shall be digital signal processor (DSP) based and shall use a CCD sensing element and shall output color video with resolution of not less than 550 TV lines.
- The camera sensor shall include an electronic shutter control based upon average scene

luminance and shall be equipped with an auto-iris lens that operates in tandem with the electronic shutter. The electronic shutter shall operate between the range of 1/1 to 1/10,000th second.

- The camera sensor shall utilize automatic white balance.
- The camera sensor shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry by means of a portable interface device designed for that purpose and manufactured by the detection system supplier.
- The horizontal field of view shall be adjustable. This camera configuration may be used for the majority of detection approaches in order to minimize the setup time and spares required by the user. The lens shall be a minimum 10X zoom lens with a variable focal length.
- The lens shall also have an auto-focus feature with a manual override to facilitate ease of setup.
- The camera shall incorporate the use of preset positioning that store zoom and focus positioning information. The camera shall have the capability to recall the previously stored preset upon application of power.
- The camera shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications. The housing shall allow the camera to be rotated to allow proper alignment between the camera and the traveled road surface.
- The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.
- The camera enclosure shall be designed so that the pan, tilt and rotation of the camera assembly can be accomplished independently without affecting the other settings.
- The camera enclosure shall include a proportionally controlled heater design that maximizes heat transfer to the lens. The output power of the heater shall vary with temperature, to assure proper operation of the lens functions at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.
- The glass face on the front of the enclosure shall have an anti-reflective coating to minimize light and image reflections.
- When mounted outdoors in the enclosure, the camera shall operate in a temperature range from -29°F to +165°F and a humidity range from 0% RH to 100% RH.
- Measurement of satisfactory video shall be based upon DP system operation.
- The camera sensor shall acquire its power from the sensor data combiner.
- Recommended camera placement height shall be 18 to 33 feet above the roadway, and over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. The camera shall view approaching vehicles at a distance not to exceed 350 feet for reliable detection (height to distance ratio of 10:100). Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.
- The video signal shall be fully isolated from the camera enclosure and power cabling.
- A weather-proof protective cover shall be provided to protect all terminations at the camera.

907-643.02.4.3.2--Radar Sensor. The radar sensor shall meet the following minimum requirements:

- The radar sensor shall operate in the 24 GHz frequency band.
- The radar detection range shall be 600 feet minimum, $\pm 5\%$.
- The radar sensor shall be able to track up to 20 independent objects simultaneously.
- Object speed detection shall be within a range of zero (0) to 150 mph ± 1.0 mph.
- The radar sensor shall be able to detect vehicles in one (1) to four (4) traffic lanes.
- The radar sensor shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications. The housing shall allow the radar to be adjusted to allow proper alignment between the sensor and the traveled road surface.
- When mounted outdoors in the enclosure, the radar shall operate in a temperature range from -29°F to $+165^{\circ}\text{F}$ and a humidity range from 0% RH to 100% RH.
- The radar sensor shall communicate with the sensor data combiner.
- The radar sensor shall acquire its power from the sensor data combiner.
- Data and power cables between the radar sensor and sensor data combiner shall be fully isolated from the sensor enclosure.

907-643.02.4.3.3--Multi-Sensor Vehicle Detection Assembly. Multi-Sensor Vehicle Detection Assembly shall meet the following requirements:

- Both camera and radar sensors shall be housed in an overall, single enclosure assembly.
- The maximum power consumption for the Multi-Sensor Vehicle Detection Assembly shall be less than ten (10) watts typical, 20 watts peak.

907-643.02.4.3.4--Sensor Data Combiner. The sensor data combiner (if required) shall meet the following minimum requirements:

- A sensor data combiner that combines sensor information from both video and radar sensors shall be employed.
- Sensor data combiner shall supply primary power to each sensor unit.
- Sensor data combiner shall facilitate digital communications between the sensor data combiner and each of the sensor units.
- Sensor data combiner shall get its primary power from an AC power source using industry standard 3-conductor cabling.
- Sensor data combiner shall communicate with the detection processor using a single coax cable. Both video imaging and radar data shall use the single coax cable.
- The sensor data combiner shall also employ industry standard Wi-Fi connectivity for remote sensor system setup using a mobile programming device such as a netbook or tablet computer. Video camera and radar sensor shall be able to be configured independently.
- Sensor data signal shall be fully isolated from the mechanical enclosure and power cabling.
- Cable terminations at the sensor data combiner shall not require crimping tools.
- The Sensor Data Combiner shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications.

907-643.02.4.3.5--Detection Processor. The detection processor shall meet the following minimum requirements:

- Each sensor input shall accept RS170 (NTSC) or CCIR (PAL) signals from an external video source. The interface connector shall be BNC type and shall be located on the front of the processing unit. The sensor input shall have the capability to be terminated into 75- ohms or high impedance (Hi-Z) using dip switches or software control from the user menu. The sensor input shall also facilitate the data from the radar sensor.
- A LED indicator shall be provided to indicate the presence of the sensor signal. The LED shall illuminate upon valid sensor synchronization and turn off when the presence of a valid sensor signal is removed.
- One (1) video output shall be provided. The video output shall be RS170 or CCIR compliant and shall pass through the input video signal. For multi-channel video input configurations, a momentary push-button shall be provided on the front panel to cycle through each input video channel. In the absence of a valid sensor signal, the channel shall be skipped and the next valid sensor signal shall be switched. The real time video output shall have the capability to show text and graphical overlays to aid in system setup. The video output interface connector shall be positive locking BNC type. Friction type (e.g. RCA type) connectors shall not be allowed.
- A communications port shall be provided on the front panel. The communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information. The interface protocol shall be documented or interface software shall be provided. Each MSVD shall have the capability to be addressable. The DP shall support data rates of 1200 bps to 230,400 bps, inclusive.
- Open collector (contact closure) outputs shall be provided. Four (4) open collector outputs shall be provided for the single or dual channel rack-mount configuration. Additionally, the DP shall allow the use of extension modules to provide up to 24 open collector contact closures per camera input. Each open collector output shall be capable of sinking 30 mA at 24 VDC. Open collector outputs will be used for vehicle detection indicators as well as discrete outputs for alarm conditions. The DP outputs shall be compatible with industry standard detector racks assignments.
- Logic inputs such as delay/extend or delay inhibit shall be supported through the appropriate detector rack connector pin or front panel connector in the case of the I/O module. For DPs and extension modules, four (4) inputs shall be supported via detector rack interface. The I/O module shall accommodate eight (8) inputs through a 15-pin "D" connector.
- Detection status LEDs shall be provided on the front panel. The LEDs shall illuminate when a contact closure output occurs. The front panel of the DP shall have detector test switches to allow the user to manually place calls on each DP output channel. The test switch shall be able to place either a constant call or a momentary call depending on the position of the switch.
- A USB mouse port shall be provided on the front panel of the rack mount detection processing unit. The mouse port shall not require special mouse software drivers. The mouse port shall be used as part of system setup and configuration.
- Extension modules (if required) shall be connected to the DP by an 8-wire twisted- pair cable with modular RJ45 connectors. DP and EM communications shall be accommodated by methods using differential signals to reject electrically coupled noise.
- Extension modules (EM) shall be available to eliminate the need of rewiring the detector

rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack to provide additional open collector outputs. The extension module shall be available in both two (2) and four (4)-channel configurations. The DP and EM shall be specifically designed to mount in a standard detector rack, using the edge connector to obtain power, provide contact closure outputs and accept logic inputs (e.g. delay/extend). No adapters shall be required to mount the DP or EM in a standard detector rack. Detector rack rewiring shall not be required.

- The DP shall utilize non-volatile memory technology to store on-board firmware and operational data.
- The DP shall enable the loading of modified or enhanced software through the EIA232 or USB port (using a USB thumb drive) and without modifying the DP hardware.
- The DP and EM shall be powered by 12 or 24 volts DC. DP and EM modules shall automatically compensate for either 12 or 24 VDC operation. DP power consumption shall not exceed 7.5 watts. The EM power consumption shall not exceed three (3) watts.
- The DP shall operate satisfactorily in a temperature range from -40°F to +165°F and a humidity range from zero (0) %RH to 95 %RH, non-condensing as set forth in NEMA specifications.
- A video surge suppresser shall be provided for each sensor input. The surge suppresser shall be appropriately grounded to the cabinet ground rod using AWG 14 minimum.

907-643.02.4.4--Detection Software. The detection software shall meet the following general system functions:

- Detection zones shall be programmed via an on board menu displayed on a video monitor and a pointing device connected to the DP. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. A separate computer shall not be required for programming detection zones or to view system operation.
- The DP shall store up to three (3) different detection zone patterns in non-volatile memory. The DP can switch to any one of the three (3) different detection patterns within one (1) second of user request via menu selection with the pointing device. Each configuration shall be uniquely labeled and able to be edited by the user for identification. The currently active configuration indicator shall be displayed on the monitor.
- The DP shall detect vehicles in real time as they travel across each detection zone.
- The DP shall accept new detection patterns from an external computer through a communications port when the external computer uses the correct communications protocol for downloading detection patterns. A Windows™ based software designed for local or remote connection and providing video capture, real-time detection indication and detection zone modification capability shall be provided with the system.
- The DP system shall have the capability to automatically switch to any one of the stored configurations based on the time of day which shall be programmable by the user.
- The DP shall send its detection patterns to an external computer through the communications port when requested when the external computer uses the appropriate communications protocol for uploading detection patterns.
- The DP shall default to a safe condition, such as a constant call on each active detection channel, in the event of unacceptable interference or loss of the sensor signal.
- The system shall be capable of automatically detecting a low-visibility condition such as

fog and respond by placing all effected detection zones in a constant call mode. A user-selected alarm output shall be active during the low-visibility condition that can be used to modify the controller operation if connected to the appropriate controller input modifier(s). The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

- Up to 24 detection zones per camera input shall be supported and each detection zone can be sized to suit the site and the desired vehicle detection region.
- The DP shall support two (2) independent trigger points for radar outputs for dilemma zone applications.
- The DP shall provide up to 24 open collector output channels per sensor input using one or more extension modules.
- A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single approach of traffic movement.
- Placement of detection zones shall be done by using only a pointing device, and a graphical interface built into the DP and displayed on a video monitor or laptop computer to draw the detection zones on the video image from each video camera.
- When a vehicle is detected within a detection zone, a visual indication of the detection shall activate on the video overlay display to confirm the detection of the vehicle for the zone.
- Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon site geometry, camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality.
- The DP shall provide dynamic zone reconfiguration (DZR). DZR enables normal operation of existing detection zones when one zone is being added or modified during the setup process. The new zone configuration shall not go into effect until the configuration is saved by the operator.
- Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.
- The DP shall process the video input from each camera at 30 frames per second. Multiple camera processors shall process all video inputs simultaneously.
- The DP shall output a constant call during the background learning period of no more than three (3) minutes.
- Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse, extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds.
- Up to six (6) video detection zones per sensor input shall have the capability to count the number of vehicles detected. The count value shall be internally stored for later retrieval through the communications port.
- In addition to the count type zone, the DP shall be able to calculate and/or acquire average speed and lane occupancy using both video and radar sensors. These values shall be stored in non-volatile memory for later retrieval.
- The DP shall have an "advance" zone type where detection outputs to the traffic controller

are compensated for angular occlusion and distance.

- The user shall have the ability to enable or disable the display of the phase information on the video output.
- The DP shall have the capability to change the characteristics of a detection zone based on external inputs such as signal phase. Each detection zone shall be able to switch from one zone type (i.e. presence, extension, pulse, etc.) to another zone type based on the signal state. For example, a zone may be a “count” zone when the phase is green but change to a “presence” zone type when the phase is not green. Another application would be zone type of “extension” when the signal phase is green and then “delay” when red.
- The DP shall aid the user in drawing additional detection zones by automatically drawing and placing zones at appropriate locations with only a single click of the mouse. When the user wishes to modify the location of a zone, the DP shall allow the user move a single zone, multiple zones or all zones simultaneously.
- On-screen zone identifiers shall be modifiable by the user. The user shall be allowed to select channel output assignments, zone type, input status, zone labels or zone numbers to be the identifier.
- For multiple camera input DPs, the user shall have the ability to enable automatic video output switching. The dwell time for each sensor input shall be user programmable.
- For the radar sensor zones the output can be triggered by presence of a vehicle only or by presence of a vehicle above a speed defined by the user.

907-643.02.4.5--Multi-Sensor Cable. The cable to be used between the Multi-Sensor Vehicle Detection Assembly and the DP in the traffic cabinet shall be per manufacturer’s specifications. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. BNC plug connectors shall be used where applicable. The cable, BNC connector, and crimping tool shall be approved by the supplier of the MSVD, and the manufacturer's instructions must be followed to ensure proper connection.

907-643.02.4.6--Power Cable. The power cabling shall be per manufacturer’s specifications. The cabling shall comply with the National Electric Code, as well as local electrical codes.

907-643.05--Construction Requirements. The Construction and testing requirements for Type 1, Type 2, and Multi-Sensor Vehicle Detection are the same.

907-643.05.1--General Requirements. The Contractor shall perform the following:

- 1) Install all sensors, system processors and associated enclosures and equipment at the locations specified in the plans, in any related notice to bidders, per manufacturer’s recommendations, or as directed.
- 2) Install all cabinet-mounted equipment in the intersection equipment cabinet or as specified in the plans.
- 3) Cabling from all sensors shall be installed in accordance with the manufacturer's recommendations.
- 4) Make all necessary adjustments and modifications to the total VVD/MSVD prior to requesting inspection for system/device acceptance.
- 5) Mount the sensors as per manufacturer’s recommendations or as shown in the plans.

- 6) Mount the sensors so as to view approaching traffic unless otherwise directed.
- 7) Optimize the sensors location and zone of detection as directed by the Engineer, or authorized designee.
- 8) Adjust the sensor zoom lens to match the width of the road/detection area, and minimize lane vehicle occlusion.
- 9) Fasten all other cabinet components, with hex-head or Phillips-head machine screws insulated with nuts (with locking washer or insert) or into tapped and threaded holes. Do not use self-tapping or self-threading fasteners.
- 10) Provide electrical cables for video, communications signaling and power supply between the cabinet and the VVD/MSVD image sensor cameras as recommended by the manufacturer, and as required for a fully functional System.

907-643.05.2--Contractor Training. Installation of the Video Vehicle Detection shall be as recommended by the manufacturer and performed by a Contractor trained and certified by the supplier. Where time does not reasonably permit training of the installing Contractor, a supplier factory representative shall supervise and assist a Contractor during installation of the Video Vehicle Detection.

Installation of the Multi-Sensor Vehicle Detection shall be as recommended by the supplier and performed by a Contractor with factory-certified installers and documented in installation materials provided by the supplier. Proof of factory certification shall be provided.

907-643.05.3--Testing. All equipment associated with the Video Vehicle Detection System site shall undergo testing to verify conformance to requirements of the plans and these special provisions. All costs associated with testing shall be included in the overall contract price; no separate payment will be made for any testing.

907-643.05.3.1--Standalone Acceptance Test (SAT). The SAT shall include videos of the approach with detection zones overlaid showing detector activations.

- 1) One (1) hour videos shall be made of each approach and compared to actual detection calls.
- 2) 30-minute videos shall be made starting 15 minutes prior to sunrise and sunset for each approach and compared to actual detection calls.
- 3) All videos shall be date and time stamped.
- 4) Provide all videos to the Engineer with a summary of the results included total calls, missed calls and false calls.
- 5) All test results must meet a 98% accuracy requirement.

The Contractor must demonstrate the accuracy requirements specified in Subsection 907-643.02.1.7 at selected intersections after a sixty (60) day burn in period for Type 1 and a thirty (30) day burn in period for Type 2 and MSDS. The intersections to be tested will be randomly selected by the Project Engineer.

907-643.05.4--Warranty. The Video Vehicle Detection shall be warranted to be free of manufacturer defects in materials and workmanship for a period of three (3) years from the date of final acceptance. Equipment covered by the manufacturer's warranties shall have the

registration of that component placed in the Department's name prior to final inspection. The Contractor is responsible for ensuring that the vendors and/or manufacturers supplying the components and providing the equipment warranties recognize the Department as the original purchaser and owner/end user of the components from new. During the warranty period, the supplier shall repair or replace with new or refurbished material, at no additional cost to the State, any product containing a warranty defect, provided the product is returned postage-paid by the Department to the supplier's factory or authorized warranty site. Products repaired or replaced under warranty by the supplier shall be returned prepaid by the supplier.

The Multi-Sensor Vehicle Detector shall be warranted to be free of manufacturer defects in materials and workmanship for a period of three years (3) from the date of final acceptance.

During the warranty period, technical support shall be available from the supplier via telephone within four (4) hours of the time a call is made by the Department, and this support shall be available from factory certified personnel. During the warranty period, updates and corrections to Control Unit Software shall be made available to the Department by the supplier at no additional cost.

907-643.05.5--Training. When called for in the Plans, the Contractor shall submit to the Project Engineer for approval a detailed Training Plan including course agendas, detailed description of functions to be demonstrated and a schedule. The Contractor must also submit the Trainer's qualifications to the Project Engineer for approval prior to scheduling any training. The training must include both classroom style training and hands-on training in the field of the maintenance and troubleshooting procedures required for each component. The training should also consist of a hands-on demonstration of all software configuration and functionality where applicable.

The supplier of the detection system shall, at a minimum, provide a 16-hour operations and maintenance training class with suitable documentation for up to eight (8) persons selected by the Department. The operations and maintenance class shall be scheduled at a mutually acceptable time and location.

907-643.05.6--Maintenance and Technical Support. The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the detection system. Spare parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale of said spare parts.

The suppliers shall maintain an ongoing program of technical support for the detection system. This technical support shall be available via telephone or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale of said technical support services.

The installation or training support shall be provided by a factory-authorized representative and shall be a minimum IMSA-Level II Certified Traffic Signal Technician.

All product documentation shall be written in the English language.

907-643.06--Method of Measurement. Video Vehicle Detection Sensor of the type specified will be measured as a unit per each.

Video Vehicle Detection Cable and/or Power Cable will be measured by the linear foot, measured horizontally along the conduit, messenger cable or mast arm and vertically along the pole.

Video Vehicle Detection Training will be measured as a lump sum after the completion of all training.

Multi-Sensor Vehicle Detection of the type specified will be measured as a unit per each.

Multi-Sensor Detection Cable and/or Power Cable will be measured by the linear foot, measured horizontally along the conduit, messenger cable or mast arm and vertically along the pole.

907-643.07--Basis of Payment. Video Vehicle Detection Sensor, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for installation, system integration, documentation, system software, and testing of a complete video detection sensor site including video camera sensor/processor, the sensor environmental enclosure, attachment hardware and brackets, completion of all testing requirements, [warranties](#) and all work, equipment and appurtenances as required to provide and install a complete video detection system. The price bid shall also include all system documentation including: shop drawings, operations and maintenance manuals, wiring diagrams, block diagrams and other materials necessary to document the operation of the Video Vehicle Detection Sensor. This price shall be full compensation for all labor, tools, materials, equipment and incidentals necessary to complete the work [and quality assurance](#).

Video Vehicle Detection Cable and/or Power Cable will be paid at the contract unit price per linear foot, which price shall be full compensation for all labor, materials, equipment tools, furnishing, installing, system integration, connections, testing, and all incidentals necessary to complete the work.

Video Vehicle Detection Training, measured as prescribed above, will be paid for at the contract unit lump sum price, which price shall be full compensation for all training costs [including all coordination, materials, labor, training location costs, and all incidentals required to complete the training](#).

Multi-Sensor Vehicle Detection Sensor, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for installation, system integration, documentation, and testing of a complete Multi-Sensor Vehicle Detection Sensor site including video imaging camera sensor, radar sensor, sensor data combiner, detection processor, system software, the sensor environment enclosure, attachment hardware and brackets, completion of all testing requirements and all work, equipment and appurtenances as required to provide and install a complete Multi-Sensor Vehicle Detection Sensor. The price bid shall also include all system documentation including: shop drawings, operations and maintenance manuals, wiring diagrams, block diagrams and other materials necessary to document the operation of the multi-sensor detection system. This price shall be full compensation for all labor, tools, materials,

equipment and incidentals necessary to complete the work.

Multi-Sensor Detection Cable and/or Power Cable will be paid at the contract unit price per linear foot, which price shall be full compensation for all labor, materials, equipment tools, furnishing, installing, system integration, connections, testing, and all incidentals necessary to complete the work.

Payment will be made under:

907-643-A: Video Vehicle Detection Sensor, Type ____	- per each
907-643-B: Video Vehicle Detection Cable	- linear foot
907-643-C: Video Vehicle Detection Power Cable	- linear foot
907-643-D: Video Vehicle Detection Training	- lump sum
907-643-E: Multi-Sensor Vehicle Detection Sensor	- per each
907-643-F: Multi-Sensor Vehicle Detection Cable	- linear foot
907-643-G: Multi-Sensor Vehicle Detection Power Cable	- linear foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-645-1

CODE: (IS)

DATE: 11/15/2017

SUBJECT: Pedestrian Detection Assemblies

Section 645, Pedestrian Detection Assemblies, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-645.02--Materials.

907-645.02.1--Standard Pedestrian Pushbutton Detector. Before the first sentence of the paragraph in Subsection 645.02.1 on page 629, add the following.

The Standard Pedestrian Pushbutton Detector shall meet the latest ADA Compliant Specifications.

907-645.02.1.2--Pushbutton. Delete the second sentence of the paragraph in Subsection 645.02.1.2 on page 629, and substitute the following.

The switch, when activated, shall give an audible (i.e., click) and visual indication of actuation. The visual indication shall remain illuminated until the pedestrian's WALK indication is displayed.

907-645.02.5--Environmental. Delete the paragraph in Subsection 645.02.5 on page 631, and substitute the following.

Ensure equipment performs all required functions during and after being subjected to the environmental testing procedures described in NEMA TS 2, Sections 2.2.7, 2.2.8, and 2.2.9.

907-645.05--Basis of Payment. Add the "907" prefix to the list of pay items on page 631.

FTA SIDEWALK PROJECT
HARDY STREET - KAMPER PARK
CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY

MAYOR

TOBY BARKER

CHIEF ADMINISTRATIVE OFFICER

ANN JONES

ENGINEERING DIRECTOR

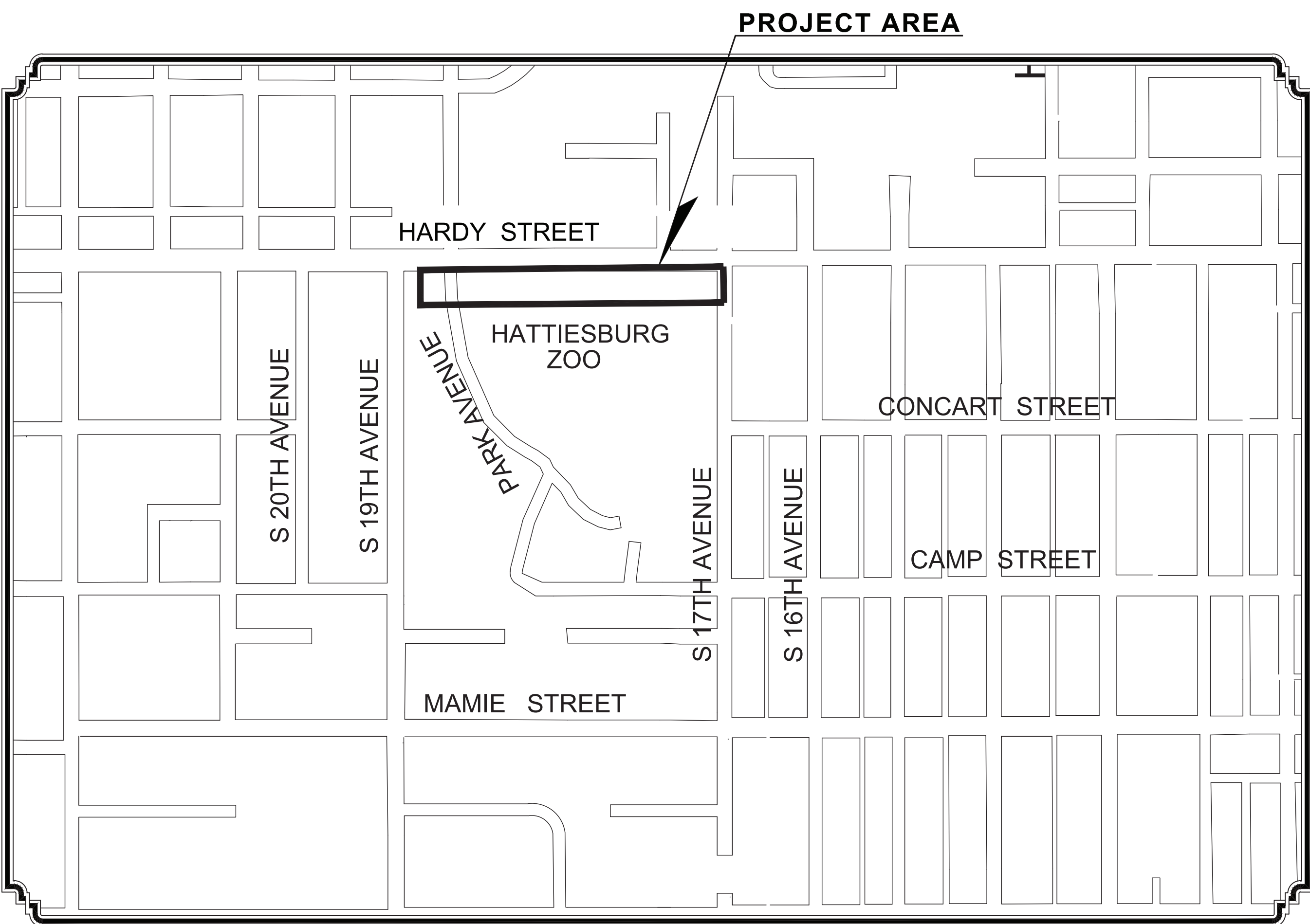
LAMAR RUTLAND, P.E.

COUNCIL MEMBERS

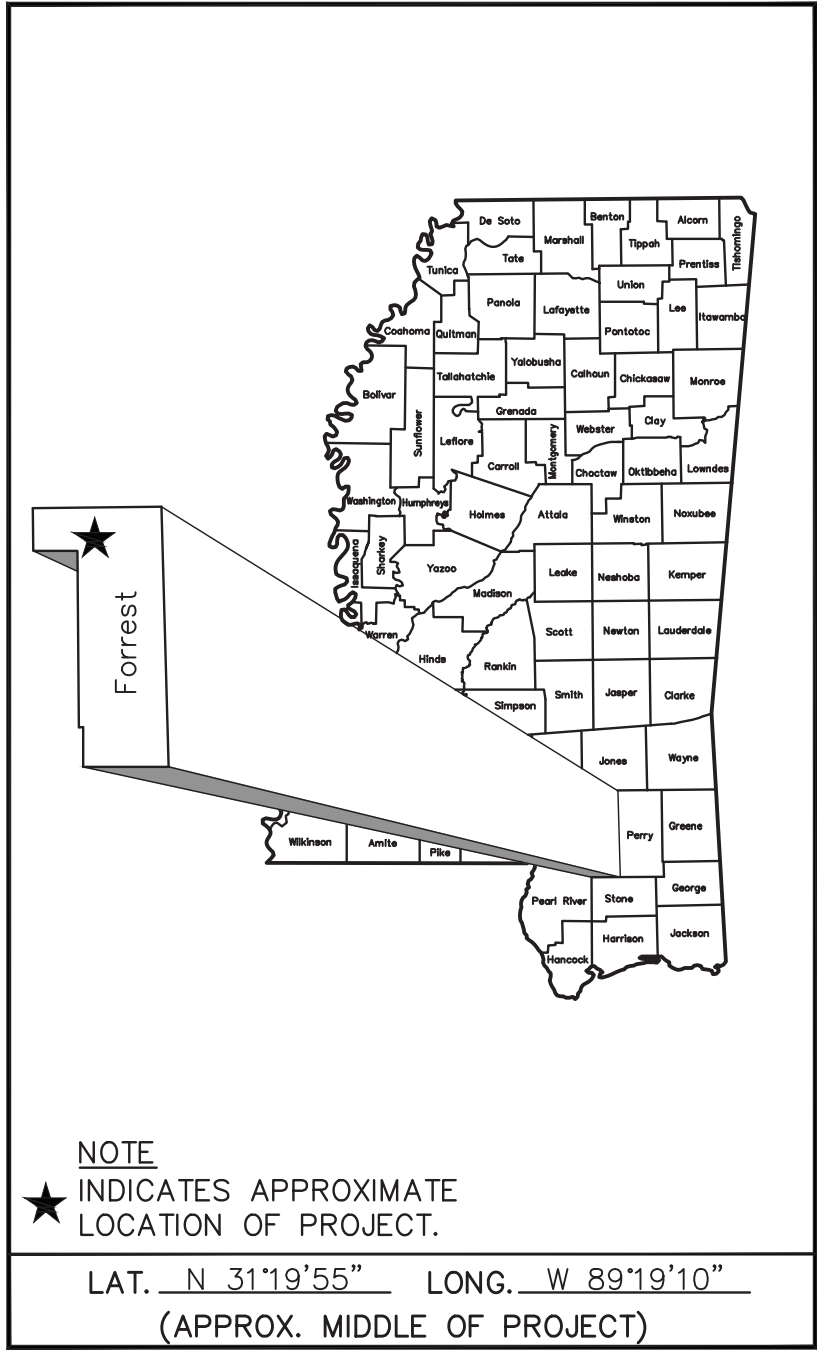
JEFFREY GEORGE	WARD 1
DEBORAH D. DELGADO	WARD 2
CARTER CARROLL	WARD 3
DAVE WARE	WARD 4
NICHOLAS BROWN	WARD 5

UTILITIES

CITY OF HATTIESBURG
MISSISSIPPI POWER
AT&T
SPIRE
COMCAST CABLE



VICINITY MAP
PROJECT LOCATION



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DESCRIPTION OF SHEET	WKG. NO.	SHT. NO.	DESCRIPTION OF SHEET	WKG. NO.	SHT. NO.
<u>TITLE SHEET (1)</u>		1	<u>STRUCTURAL PLAN AND DETAIL SHEET</u>		
<u>DETAILED INDEX & GENERAL NOTES (2)</u>			BRIDGE DETAILS	BD-1	S1
DETAILED INDEX	GN-1	2	BRIDGE DETAILS	BD-2	S2
GENERAL NOTES	GN-2	3	ABUTMENT PLAN AND SECTIONS	S-1	S3
			ABUTMENT FOUNDATION PLAN AND ELEVATION	S-2	S4
<u>TYPICAL SECTION SHEETS (1)</u>					
TYPICAL SECTIONS	TS-1	4			
<u>QUANTITY SHEETS</u>					
SUMMARY OF QUANTITIES	SQ-1	5			
<u>DEMOLITION SHEETS (3)</u>			<u>MDOT STANDARD DETAILS (10)</u>		
DEMOLITION PLAN - B.O.P TO STA. 3+25	DEMO-1	6	TYPICAL TEMPORARY EROSION / SEDIMENT CONTROL APPLICATIONS	ECD-1	6101
DEMOLITION PLAN - STA. 3+25 TO STA. 6+50	DEMO-2	7	DETAILS OF SEDIMENT BARRIER APPLICATIONS	ECD-2	6102
DEMOLITION PLAN - STA. 3+25 TO E.O.P.	DEMO-3	8	DETAILS OF SILT FENCE INSTALLATION	ECD-3	6103
			DETAILS OF EROSION CONTROL WATTLE DITCH CHECK	ECD-6	6106
<u>SITE PLAN SHEETS (4)</u>			TYPICAL APPLICATIONS AND DETAILS FOR INLET CONSTRUCTION	ECD-11	6111
DRAWING KEY	KEY	9	INLET PROTECTION DETAILS OF WATTLES	ECD-13	6113
PLAN AND PROFILE- B.O.P. TO STA. 3+00	PP-1	10	INLET PROTECTION DETAILS OF SANDBAGS	ECD-15	6115
PLAN AND PROFILE- STA. 3+00 TO STA. 6+00	PP-2	11	TRAFFIC CONTROL PLAN FOR POSTED LESS THAN 65 MPH	TCP-2	6352
PLAN AND PROFILE- STA. 6+00 TO STA. 9+00	PP-3	12	CURB RAMPS - RAMP DESIGN ELEMENTS	CR-1	6421
PLAN AND PROFILE- STA. 9+00 TO E.O.P.	PP-4	13	CURB RAMPS - PLACEMENT DETAILS	CR-2	6422
			CURB RAMPS - PLACEMENT DETAILS	CR-3	6423
<u>TRAFFIC CONTROL SHEETS (2)</u>			CURB RAMPS - DETECTABLE WARNING DETAILS	CR-4	6424
TRAFFIC CONTROL PLAN	TCP-1	14	JUNCTION BOX FOR PIPE CULVERTS	JB-1	6504
TRAFFIC CONTROL DETAILS - ONE LANE CLOSURE (2 LANE ROAD)	TCP-2	15	BRANCH CONNECTIONS	BC-1	6507
			STORM SEWER INLET TYPE SS-2	SS-2	6524
<u>DETAILS (3)</u>			DROP INLET AND GRATE DETAILS FOR PIPE AND BOX CULVERTS	B-9	6527
DETAILS	DET-1	16			
DETAILS	DET-2	17			
TYPICAL SANITARY SEWER DETAILS	DET-3	18			
<u>TRAFFIC SIGNAL DESIGN SHEETS AND DETAILS (9)</u>			<u>TOTAL NUMBER OF SHEETS (50)</u>		
TRAFFIC SIGNAL INSTALLATION- HARDY ST. / PARK AVE.	TSI-1	19			
TRAFFIC SIGNAL GENERAL NOTES	TSD-1	20			
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LANDSCAPE PLAN - B.O.P. TO STA. 6+00	LS-1	28			
LANDSCAPE PLAN - STA. 6+00 TO E.O.P.	LS-2	29			
LANDSCAPE DETAILS & VEGETATION SCHEDULE	LS-3	30			

NOTICE TO DRAWING HOLDER

NEEL-SCHAFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS				DRAWING INFORMATION	
NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 16258	
				FILENAME: 16258_index - Park&17th.dwg	
				SCALE:	
				SURVEYED BY: CLEARPOINT ENGINEERS	
				DSGN: GPC	DATE: 05/2022
				DRWN: PAN	DATE: 05/2022
				CHKD:	DATE:
				QA/QC:	DATE:

FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY





DETAILED INDEX

WORKING NUMBER: DI-1	DRAWING NUMBER: 2
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GENERAL NOTES

1. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CANNOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION. ALL DAMAGES TO EXISTING UTILITIES WILL BE REPAIRED AT THE CONTRACTOR’S EXPENSE.

2. THE CONTRACTOR SHALL AVOID DAMAGING TREES AND SHRUBBERY UNLESS NOTED IN THE PLANS TO BE REMOVED. ALL DAMAGED PLANT MATERIAL NOT NOTED TO BE REMOVED SHALL BE REPLACED AT THE CONTRACTOR’S EXPENSE.

3. IMPROVEMENTS SHOWN ON THESE PLANS ARE IN APPROXIMATE LOCATIONS. ALL IMPROVEMENTS SHALL BE FIELD LOCATED BY THE CONTRACTOR WITH FIELD STAKED LOCATIONS APPROVED BY THE ENGINEER TO VERIFY PROPER PLACEMENT, ETC. THE CONTRACTOR SHALL FIELD STAKE PROPOSED IMPROVEMENT LOCATIONS A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO REVIEW BY THE ENGINEER.

4. ALL SIGNS AND TRAFFIC CONTROL DEVICES USED ON THIS PROJECT SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

5. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES. THEREFORE, THE RISK OF A FAILURE OCCURRING DURING EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO PLACE WHAT BRACING, SHORING, OR GROUND SUPPORT SYSTEMS THAT IS DEEMED NECESSARY TO PREVENT A FAILURE AND PROTECT PERSONS WORKING NEAR THE EXCAVATION.

6. UNDERGROUND, DRILLED OR JACKED CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF THREE FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER. TRENCHED CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF THREE FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

7. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING GRADES AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.

8. THE CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR LOCATION OF EXISTING POWER, TELEPHONE, AND CABLE TV UTILITIES. DEPTH OF UNDERGROUND UTILITIES IS NOT KNOWN. THE CONTRACTOR IS REQUIRED TO DO TEST EXCAVATIONS IN AREAS WITH POTENTIAL CONFLICTS TO DETERMINE DEPTH OF UNDERGROUND UTILITIES.

9. ALL TREE ROOTS LARGER THAN ONE–INCH IN DIAMETER ARE TO BE CUT CLEANLY. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE WORK DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP. NO EQUIPMENT, VEHICLES OR MATERIALS SHALL BE OPERATED OR STORED WITHIN THE DRIP LINE OF EXISTING TREES. NO CLEAN–OUT AREAS WILL BE ALLOWED WITHIN THE DRIPLINE SO THAT THE MATERIAL WILL NOT BE IN OR MIGRATE TO THE ROOT ZONE. NO GRADE CHANGE MORE THAN 3" IS ALLOWED WITHIN THE ROOT PROTECTION ZONE. ANY PRUNING OF EXISTING VEGETATION SHALL RECEIVE APPROVAL FROM THE PROJECT ENGINEER AND USM PRIOR TO ANY PRUNING ACTIVITIES. ROOTS OR BRANCHES IN CONFLICT WITH CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. NO WIRES, NAILS OR OTHER MATERIALS MAY BE ATTACHED TO PROTECTED TREES. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTORS NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED ACCORDING TO THE UNIVERSITY’S WISHES AT THE CONTRACTOR’S EXPENSE.

10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, SIDEWALK, IRRIGATION, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.

11. ANY AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR (TO INCLUDE GRASSING AND SITE GRADING) AS DIRECTED BY THE ENGINEER. THIS INCLUDES AREAS DAMAGED OR DISTURBED BY THE CONTRACTOR’S VEHICLES OR EQUIPMENT OUTSIDE OF THE PROJECT AREA. CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROL FOR DISTURBED AREAS UNTIL THEY HAVE BEEN GRASSED AND GROWTH ESTABLISHED (COST ABSORBED).

12. EXISTING LIGHTING (TO REMAIN AND TO BE REMOVED) SHALL REMAIN IN PLACE AND OPERABLE UNTIL PROPOSED LIGHTING IS IN PLACE AND OPERABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO THE EXISTING LIGHTS, CIRCUITS AND ASSOCIATED COMPONENTS TO ENSURE NIGHT LIGHTING IS AVAILABLE EACH NIGHT DURING CONSTRUCTION (COST ABSORBED).

13. APPROXIMATE LOCATIONS OF LIGHTING ASSEMBLIES, IRRIGATION CONTROLLERS, SPRINKLER HEADS, VALVES, HOSEBIBS, RECEPTACLES, ELECTRICAL & CONTROL PANELS, BRICK, LANDSCAPING, ETC. ARE SHOWN ON THE DRAWINGS. EXACT INSTALLATION LOCATION OF IMPROVEMENTS SHALL BE STAKED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE PRIOR TO THE CONSTRUCTION OF THE IMPROVEMENTS.

14. ALL RAISED ROADSIDE APPURTENANCES TO BE PLACED A MINIMUM OF 2’ BEHIND FACE OF CURB UNLESS OTHERWISE SPECIFIED ON PLANS.

15. CONTRACTOR IS RESPONSIBLE FOR HAVING UTILITIES LOCATED PRIOR TO ANY DIGGING OR EXCAVATION ACTIVITIES. CONTRACTORS SHALL MAKE EVERY EFFORT TO PROTECT EACH PRIVATE UTILITY ENCOUNTERED AND COORDINATE ADJUSTMENTS AND/OR UTILITY RELOCATIONS WITH UTILITY OWNERS. ANY DAMAGES TO UTILITIES SHALL BE REPLACED/REPAIRED AT THE CONTRACTORS EXPENSE.

16. ALL IMPROVEMENTS DESIGNATED WITHIN THE PROJECT SITE INCLUDING, BUT NOT LIMITED TO: DRAINAGE PIPE, CONCRETE, UNDERGROUND/ABOVE GROUND UTILITIES, PAVEMENT, & DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE AND PROPERLY DISPOSED, UNLESS DIRECTED OTHERWISE BY THE OWNER OR INDICATED TO BE SALVAGED.

17. ALL PIPE SHALL BE GRADED TO LINES AND ELEVATIONS AS SHOWN. IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO STAKEOUT THE CONSTRUCTION AND ESTABLISH LINES FOR WORK AND VERIFY ALL DIMENSIONS.

18. ALL CONNECTIONS TO EXISTING UTILITIES AND ALL UTILITY INSTALLATIONS SHALL BE IN COMPLIANCE WITH REQUIREMENTS OF APPROPRIATE JURISDICTIONAL AGENCIES.

19. IF IT IS NECESSARY TO HOLD ANY UTILITY POLES, THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY. ANY FEE OR CHARGE FOR THIS SERVICE SHALL BE COST ABSORBED BY THE CONTRACTOR.

20. THE CONTRACTOR SHALL VERIFY MATERIAL OF ALL EXISTING UTILITIES DESIGNATED FOR REMOVAL, REPLACEMENT, OR CONNECTION TO.

21. FILL, BACKFILL, AND EXISTING GRANULAR MATERIAL UNDER OR DIRECTLY ADJACENT TO IMPROVEMENTS (OTHER THAN LANDSCAPING AND GRASSING) SHALL BE COMPACTED TO 95% PROCTER PER ASTM D1557.

22. ALL DRAINAGE STRUCTURES SHALL BE CAST–IN–PLACE.

23. SIDEWALK, CROSS WALKS, CURB RAMPS, AND ALL OTHER ELEMENTS OF CONSTRUCTION SHALL BE ADA COMPLIANT IN ALL INSTANCES. IF SLOPES OF SIDEWALKS OR SHARED USE PATHS EXCEED 2%, THEY SHALL BE REPLACED BY THE CONTRACTOR AT THEIR OWN EXPENSE.

24. EXCEPT AS NOTED BELOW, CONTRACTOR SHALL REMOVE FROM THE SITE AND SATISFACTORILY DISPOSE OF ALL TREES, SHRUBS, STUMPS, ROOTS, BRUSH, MASONRY, RUBBISH, SCRAP, DEBRIS, AND OTHER MISCELLANEOUS STRUCTURES NOT COVERED UNDER OTHER SECTIONS AS SHOWN, SPECIFIED OR OTHERWISE REQUIRED TO PERMIT CONSTRUCTION OF THE NEW WORK.

25. TREES, STUMPS AND OTHER CLEARED AND GRUBBED MATERIAL MAY NOT BE DISPOSED OF ON SITE.

26. BURNING WILL NOT BE ALLOWED ON SITE.

27. ALL BURNING OFF THE SITE SHALL BE IN COMPLETE ACCORDANCE WITH RULES AND REGULATIONS OF LOCAL AUTHORITIES HAVING JURISDICTION.

28. CONTRACTOR SHALL CONTROL AIR POLLUTION CAUSED BY DUST AND DIRT, AND COMPLY WITH GOVERNING REGULATIONS.

29. IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO MAINTAIN ANY AND ALL MARKINGS AS NEEDED TO PROTECT EXISTING UTILITIES. ANY DAMAGE OR INTERRUPTION OF SERVICE CAUSED BY THE CONTRACTOR’S NEGLIGENCE SHALL BE REPORTED IMMEDIATELY TO THE APPROPRIATE UTILITY COMPANY AND SHALL BE REPAIRED AND SERVICE RESTORED IN FULL COOPERATION WITH THE UTILITY COMPANY AT THE CONTRACTOR’S EXPENSE.

30. ALL TREES ARE TO REMAIN UNLESS OTHERWISE NOTED.

31. CONTRACTOR MAY CONSTRUCT SECTIONS OF THE SIDEWALK SIMULTANEOUSLY BUT WILL NEED TO COORDINATE DEMOLITION ACTIVITIES WITH CONSTRUCTION.

32. TREE MAINTENANCE IS NOTED IN THE PLANS AND SHALL BE INCLUDED AS 618–A001 MAINTENANCE OF TRAFFIC. THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN THE TREE PROTECTION ZONE (AREA BETWEEN THE TRUNK AND TEMPORARY ORANGE CONSTRUCTION FENCE) INCLUDE:

a. PARKING VEHICLES OR EQUIPMENT, STORAGE OF BUILDING MATERIALS, REFUSE, OR EXCAVATED SOILS, OR DUMPING POISONOUS MATERIAL ON OR AROUND TREES AND ROOTS. POISONOUS MATERIALS INCLUDE, BUT ARE NOT LIMITED TO PAINT, PETROLEUM PRODUCTS, CONCRETE, STUCCO MIX, DIRTY WATER OR ANY MATERIAL THAT MAY BE HARMFUL TO TREE HEALTH

b. THE USE OF TREE TRUNKS AS A BACKSTOP, WINCH SUPPORT, ANCHORAGE, AS A TEMPORARY POWER POLE, SIGNPOST OR OTHER SIMILAR FUNCTION

c. CUTTING OF TREE ROOTS BY UTILITY TRENCHING, FOUNDATION DIGGING, PLACEMENT OF CURBS AND TRENCHES, OR OTHER MISCELLANEOUS EXCAVATIONS WITHOUT PRIOR APPROVAL OF THE UNIVERSITY’S PROJECT REPRESENTATIVE AND SUPERINTENDENT OF GROUNDS.

d. SOIL DISTURBANCE OR GRADE CHANGE

e. DRAINAGE CHANGES

33. CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS PRIOR TO EXCAVATION OCCURRING UNDER ANY MATURE TREE CANOPY. CONTRACTOR MAY BE REQUIRED TO HAND EXCAVATE OR AIR EXCAVATE THESE AREAS AS DIRECTED BY THE ENGINEER.

34. PRIOR TO CONSTRUCTION, VARIOUS TREES MAY NEED TO BE PRUNED AWAY FROM STRUCTURES OR PROPOSED CONSTRUCTION ACTIVITY. CONSTRUCTION OR CONTRACTOR PERSONNEL ARE NOT ALLOWED TO REMOVE TREES (EXCEPT THOSE NOTED TO BE REMOVED) AND SHALL NOT ATTEMPT PRUNING. ONLY PERSONNEL APPROVED BY THE UNIVERSITY’S PROJECT REPRESENTATIVE AND SUPERINTENDENT OF GROUNDS CAN PERFORM PRUNING OR REMOVAL OPERATIONS. THE UNIVERSITY WILL PROVIDE QUALIFIED TREE PRUNING SERVICES AND COORDINATE WITH THE CONTRACTOR.

35. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION, PROTECTION, AND RELOCATION OF BENCHMARKS DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE RELOCATION OF BENCHMARKS.

36. THE MINIMUM DESIGN CRITERIA CAN BE FOUND IN THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION (AS AMENDED), AND THE PROWAG (DRAFT 2011).

37. THE CONTRACTOR SHALL DISPOSE OF DEMOLITION ITEMS IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS, EXCEPT THOSE ITEMS SPECIFICALLY NOTED IN THE PLANS TO BE SALVAGED TO THE OWNER.

38. THE CONTRACTOR SHALL COORDINATE WITH THE UNIVERSITY ON PLACEMENT OF TRAFFIC AND PEDESTRIAN SIGNAGE. CONTRACTOR SHALL PROVIDE ACCESS TO PEDESTRIANS IN ALL INSTANCES THROUGHOUT THE PROJECT SITE. THIS SHALL INCLUDE, BUT NOT LIMITED TO, HANDICAP ACCESS THRU THE SITE AND THE USE OF PREMISES CONNECTED TO THE SITE (COST ABSORBED).

39. FENCING FOR TREE PROTECTION SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

40. PRIOR TO EXCAVATION AND EMBANKMENT CONSTRUCTION, ALL TOPSOIL SHALL BE STRIPPED AND STOCKPILED. AFTER COMPLETION OF EXCAVATION AND EMBANKMENT CONSTRUCTION, ALL SLOPES SHALL BE UNIFORMLY PLATED WITH THE STOCKPILED TOPSOIL. THE COST OF STRIPPING, STOCKPILING, PLACING AND SPREADING OF TOPSOIL IS TO BE INCLUDED IN PAY ITEM 211–A001 TOPSOIL FOR SLOPE TREATMENT, FROM RIGHT OF WAY.

41. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL STAKE THE PROPOSED ALIGNMENT OF THE SIDEWALK FOR THE ENGINEER AND OWNER TO REVIEW.

42. THE US DEPARTMENT OF TRANSPORTATION REGULATES ACCESSIBILITY FOR CONSTRUCTION SITES. THESE ARE LOCATED IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE US ACCESS BOARD (DEPARTMENT OF JUSTICE) REQUIRES THAT ALL PUBLIC RIGHT–OF–WAY BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES. REMINDER: THESE ARE FEDERAL

43. REGULATIONS (A VIOLATION OF FEDERAL LAW). NO CHANGE ORDERS WILL BE GIVEN TO KEEP THESE REQUIREMENTS IN PLACE.

THE US DOT AND THE DOJ WILL BE CONTACTED IF THE CONTRACTOR FAILS TO KEEP THESE IN PLACE.

NOTICE TO DRAWING HOLDER

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				DSGN: GPC	DATE: 05/2022
				DRWN: PAN	DATE: 05/2022
				CHKD:	DATE:
				QA/QC:	DATE:

FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



GENERAL NOTES

WORKING NUMBER:
DI-2

DRAWING NUMBER:
3

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SUMMARY OF QUANTITIES				
PAY ITEM NO.	PAY ITEM	UNIT	Prelim	Final
202-B	Removal of Concrete Sidewalk	SY	470	
202-B	Removal of Curb & Gutter, All Types	LF	130	
202-B	Removal of Concrete Pavement	SY	160	
202-B	Removal of Pipe, 8" and Above	LF	250	
202-B	Removal of Inlets, All Sizes	EA	2	
202-B	Removal of Fence	LF	750	
202-B	Removal of Crape Myrtle	EA	14	
202-B	Removal of Trees, Greater than 10"	EA	5	
202-B	Removal of Traffic Stripe	LF	110	
202-B	Removal of Electrical Service Pole and Wire	EA	1	
202-B	Removal of Batting Cage, Poles and Netting	LS	1	
	EARTHWORK ITEMS			
203-A	Unclassified Excavation, FM, AH	CY	300	
203-EX	Borrow Excavation, AH, FME, Class B9	CY	1750	
203-G	Excess Excavation, FM, AH	CY	550	
	ROADSIDE DEVELOPMENT ITEMS			
211-A	Topsoil for Slope Treatment, from ROW	SY	2800	
219-A	Watering	KGAL	370	
211-A	Topsoil for Slope Treatment, Contractor Furnished	CY	120	
216-A	Solid Sodding, Centipede	SY	2325	
	EROSION CONTROL ITEMS			
234-A	Temporary Silt Fence	LF	2500	
237-A	Wattles, 20"	LF	1000	
246-A	Sandbags	EA	100	
	LANDSCAPING ITEMS			
211-C	Topsoil for Plant Holes, Contractor Furnished	CY	8	
230-A	Shrub Planting, Daylily, (1) GAL	EA	62	
230-A	Shrub Planting, Parsons Juniper, (1) GAL	EA	37	
230-A	Shrub Planting, Dirift Rose "Peach", (3) GAL	EA	28	
230-B	Tree Planting, Live Oak, 30 Gallon	EA	15	
230-D	Bed Preparation	SF	850	
232-A	Fertilizer for Woody Plant Material, Tabler, 21 Gram	EA	202	
233-A	Tree Bark Mulch, Type III	CY	2	
233-A	Tree Bark Mulch, Type V	CY	2	
	DRAINAGE ITEMS			
601-B	Class "B" Structural Concrete, Minor Structures	CY	13	
602-A	Reinforcing Steel	LBS	1200	
603-CA	18" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	LF	24	
603-CA	24" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	LF	24	
603-CA	36" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	LF	144	
603-PC	18" Corrugated Polyethylene Pipe	LF	384	
603-SB	36" Branch Connections, Stub into Concrete Ditch	EA	2	
603-SB	Concrete Ditch Wall Repair	EA	3	
603-SB	Plug Concrete Pipe	EA	3	
604-B	Gratings	LBS	1200	
907-603-PP	Preformed Polyethylene Drainage Catch Basin, 30"	EA	4	

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SUMMARY OF QUANTITIES				
PAY ITEM NO.	PAY ITEM	UNIT	Prelim	Final
	INCIDENTAL CONSTRUCTION ITEMS			
607-B	8' Black Chain Link Fence	LF	210	
607-PP	8' Double Black Chain Link Fence Gate, Per Plans	EA	1	
608-A	Concrete Sidewalk, Without Reinforcement	SY	1750	
609-D	Combination Concrete Curb and Gutter	LF	130	
613-D	Adjustment of Manholes	EA	1	
613-D	Adjustment of Water Valves	EA	4	
613-D	Adjustment of Electrical Pull Boxes	EA	2	
618-A	Maintenance of Traffic	LS	1	
620-A	Mobilization	LS	1	
699-A	Roadway Construction Stakes	LS	1	
	PAVEMENT MARKING ITEMS			
626-G	Thermoplastic Detail Stripe, White	LF	385	
907-608-E	Asphalt Pavement Texturing	SF	500	
	LIGHTING ITEMS			
647-PP	Electrical Pullboc, Per Plans	EA	5	
637-C	Traffic Signal Conduit, Underground, Type 4, 2" (Inc. Pull String)	LF	875	
	TRAFFIC SIGNAL ITEMS			
907-634-A	Traffic Signal Equipment Pole, Type VI, 8' Shaft	EA	1	
907-634-C	Pole Foundations, Class "B" Concrete	CY	0.58	
635-A	Traffic Signal Head, Type 6	EA	2	
907-636-B	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 5 Conductor	LF	100	
907-636-D	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 5 Conductor	LF	16	
907-637-A	Pull Box Enclosure, Type 2	EA	2	
907-637-C	Traffic Signal Conduit, Underground, Type 4, 2"	LF	20	
907-637-D	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 3"	LF	78	
907-643-A	Video Vehicle Detection Sensor, Type 3	EA	1	
907-643-B	Video Vehicle Detection Cable	LF	180	
907-645-B	Accessible Pedestrian Detection Assembly	EA	4	
647-A	Removal of Existing Traffic Signal Equipment	LS	1	
	Bridge Items			
907-242-PP	Pedestrian Bridge, 12' W by 110' L (Inc. Decking)	EA	1	
601-B	Class "B" Structural Concrete	CY	55	
602-A	Reinforcing Steel	LBS	5500	
803-A	Test Pile	LS	1	
803-B	Conventional Static Pile Load Test	EA	1	
803-D	HP 10X42 Steel Piling	LF	455	

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FOOTNOTES

- ① INCLUDES FULL DEPTH SAW CUTTING
- ② INCLUDES STRUCTURAL EXCAVATION
- ③ NEW FENCE SHALL BE BUILT IN PLACE PRIOR TO REMOVAL OF EXISTING FENCE
- ④ REMOVAL OF SERVICE POLE SHALL INCLUDE: POLE, WIRE, AND ELECTRICAL BOX, THE CONTRACTOR SHALL ALSO COORDINATE WITH MS POWER
- ⑤ ESTIMATED QUANTITY, TO BE USED AFTER TOPSOIL MATERIAL FROM ROW IS EXHAUSTED
- ⑥ ESTIMATED QUANTITY
- ⑦ INCLUDES PERFORATIONS AND SOCK
- ⑧ INCLUDES CLASS "B" CONCRETE, MINOR STRUCTURES AND REINFORCING STEEL
- ⑨ NEW FENCE SHALL MATCH EXISTING FENCE.
- ⑩ INCLUDES CURB-CUT RAMPS AND CONCRETE SIDEWALK UNDER DETECTABLE WARNINGS.
- ⑪ INCLUDES TREX DECKING

NOTICE TO DRAWING HOLDER

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FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

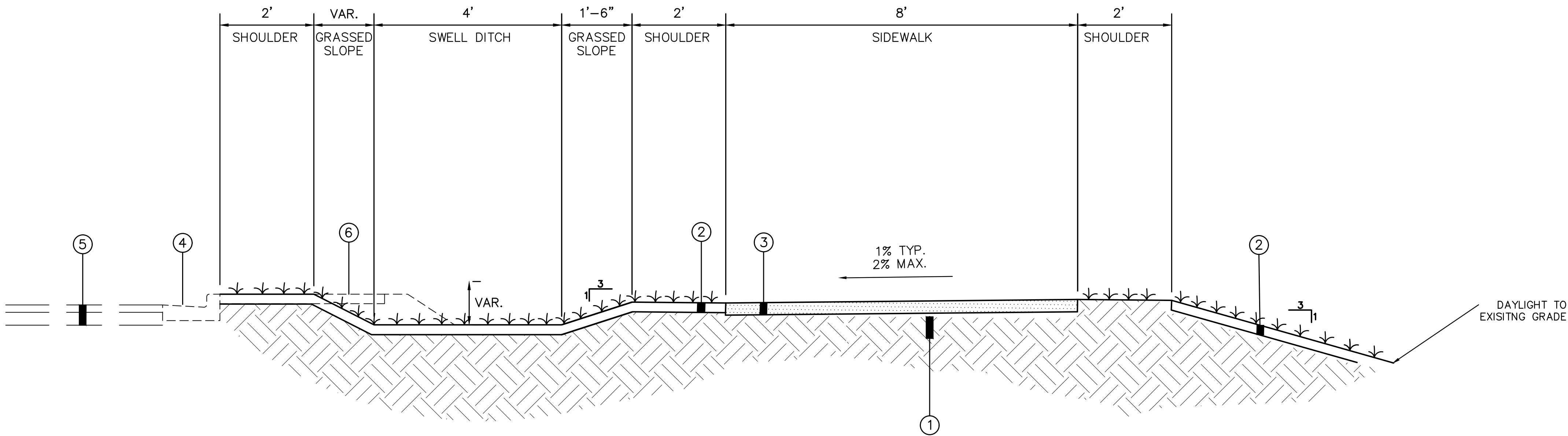


SUMMARY OF QUANTITIES

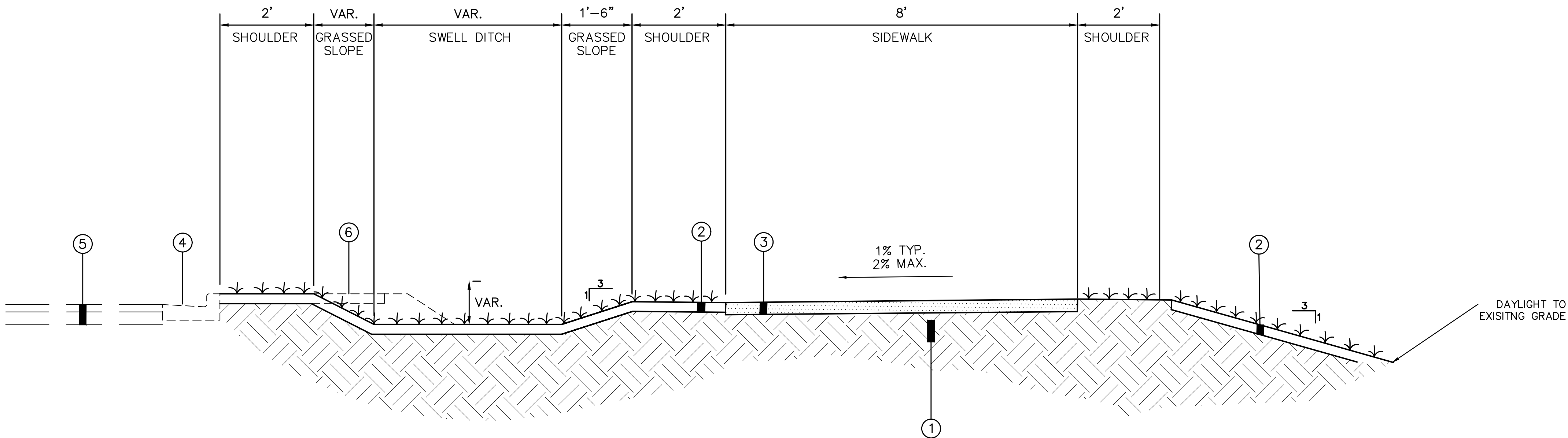
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SQ-1	5

LEGEND

- ① COMPACTED SUBGRADE – SEE DET-1
- ② 4" TOPSOIL BLANKET & SODDING
- ③ 5" CONCRETE PAVING – SEE DET-1
- ④ EXISTING CURB & GUTTER TO REMAIN
- ⑤ EXISTING PAVEMENT TO REMAIN
- ⑥ EXISTING SIDEWALK TO BE REMOVED



TYPICAL SECTION
EAST OF GORDON'S CREEK
NOT TO SCALE



TYPICAL SECTION
WEST OF GORDON'S CREEK
NOT TO SCALE

NOTICE TO DRAWING HOLDER

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FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

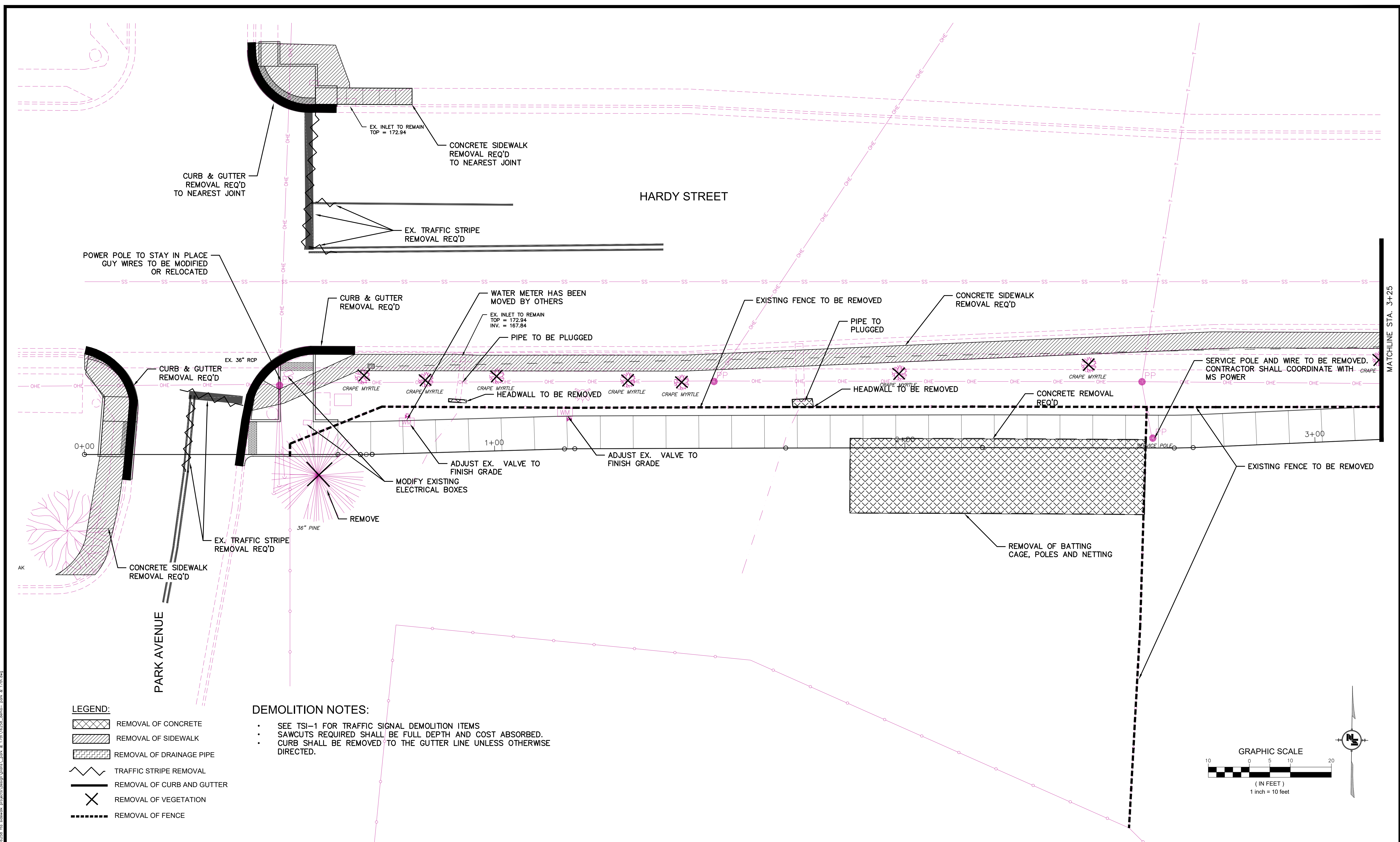
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



TYPICAL SECTION

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TS-1

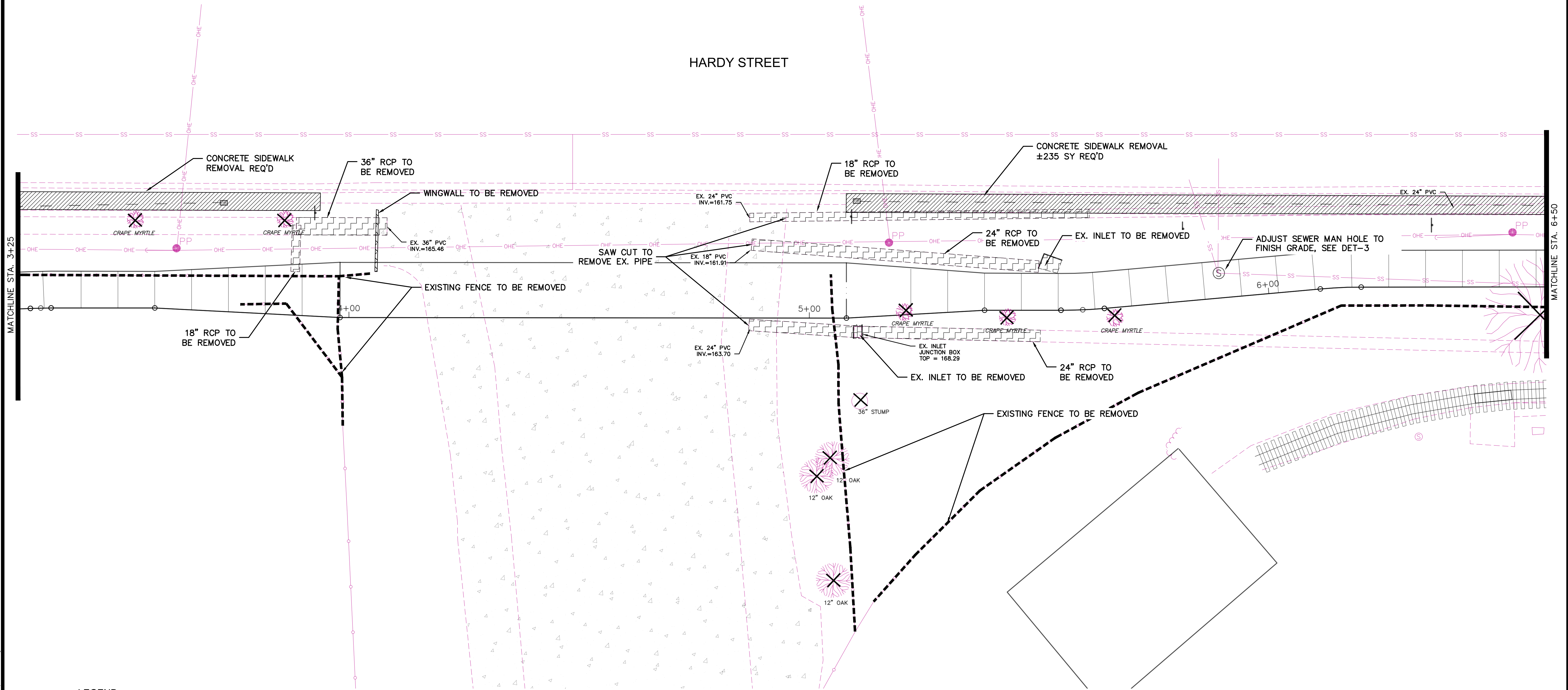
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	B.O.P. TO STA. 3+25										
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LEGEND:

- REMOVAL OF CONCRETE
- REMOVAL OF SIDEWALK
- REMOVAL OF DRAINAGE PIPE
- TRAFFIC STRIPE REMOVAL
- REMOVAL OF CURB AND GUTTER
- REMOVAL OF VEGETATION
- REMOVAL OF FENCE

DEMOLITION NOTES:

- EX. FENCE EAST OF GORDON'S CREEK SHALL NOT BE REMOVED UNTIL PROPOSED FENCE HAS BEEN INSTALLED
- SAWCUTS REQUIRED SHALL BE FULL DEPTH AND COST ABSORBED.
- CURB SHALL BE REMOVED TO THE GUTTER LINE UNLESS OTHERWISE DIRECTED.
- REMOVAL OF WINGWALL, PAID AS REMOVAL OF CONCRETE

NOTICE TO DRAWING HOLDER

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FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

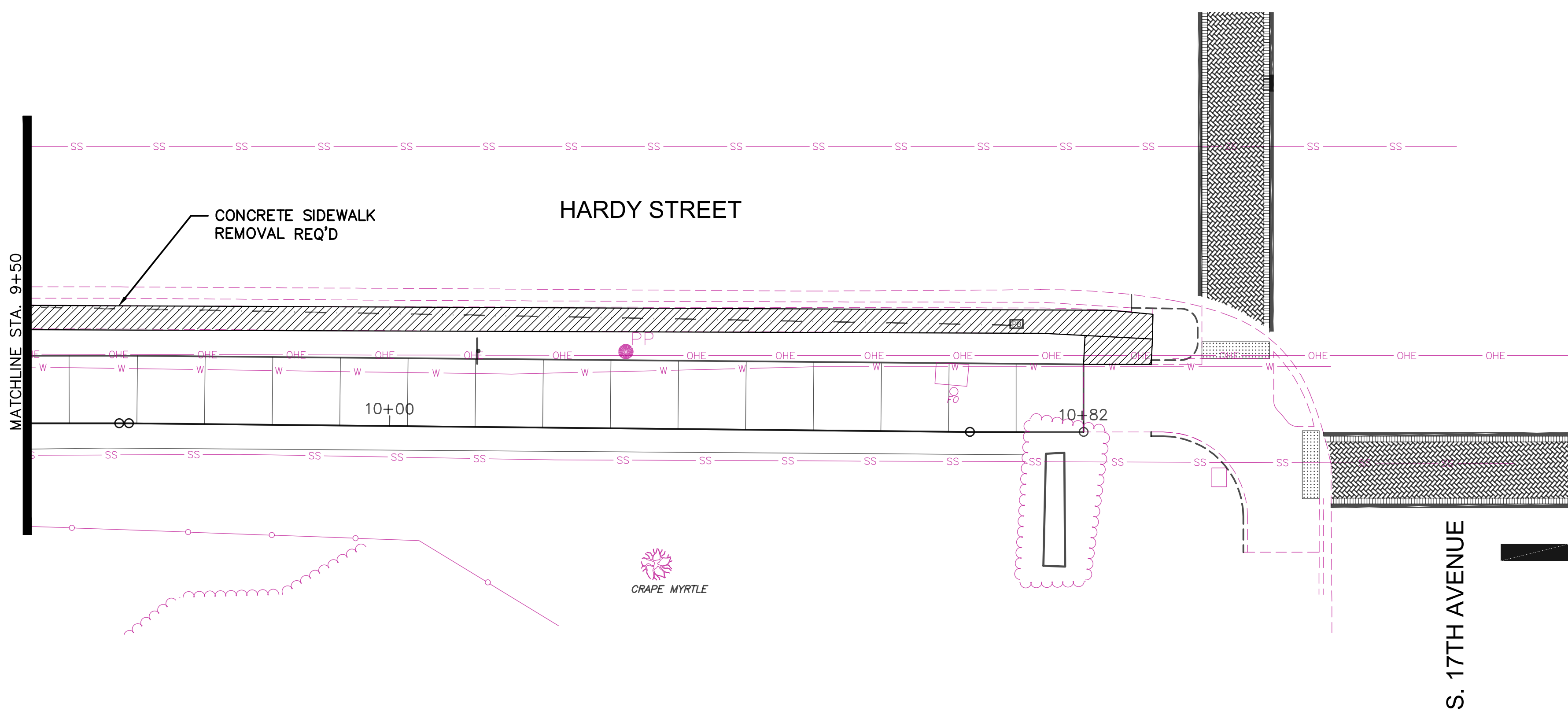
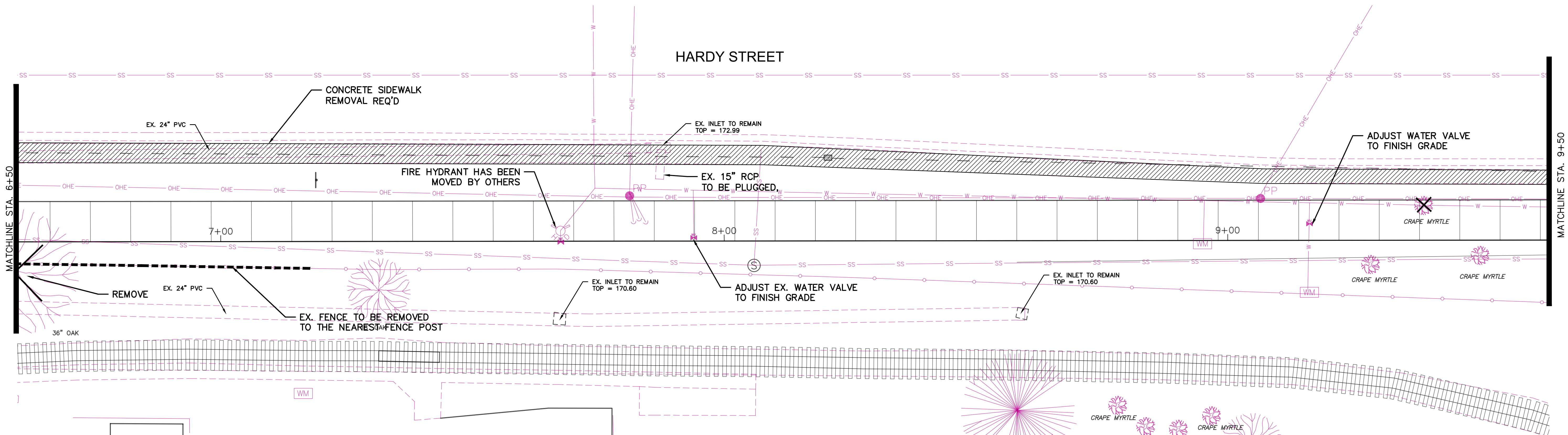
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HATTIESBURG, MS
FORREST COUNTY



DEMOLITION PLAN
STA 3+25 TO STA. 6+50

WORKING NUMBER:
DEMO-2

DRAWING NUMBER:
7



DEMOLITION NOTES:

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- SAWCUTS REQUIRED SHALL BE FULL DEPTH AND COST ABSORBED.
- CURB SHALL BE REMOVED TO THE GUTTER LINE UNLESS OTHERWISE DIRECTED.

LEGEND:

- REMOVAL OF CONCRETE
- REMOVAL OF SIDEWALK
- REMOVAL OF DRAINAGE PIPE
- TRAFFIC STRIPE REMOVAL
- REMOVAL OF CURB AND GUTTER
- REMOVAL OF VEGETATION
- REMOVAL OF FENCE

GRAPHIC SCALE

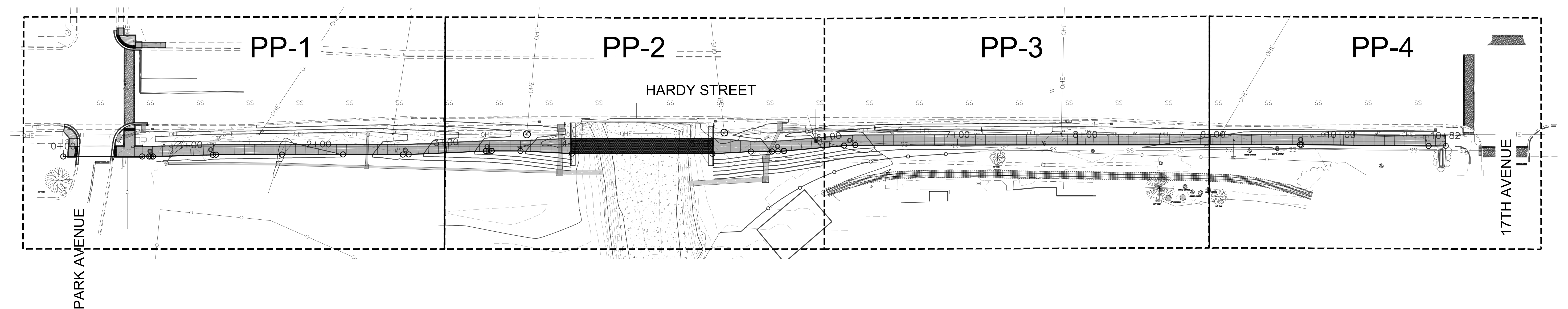
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1 inch = 10 feet

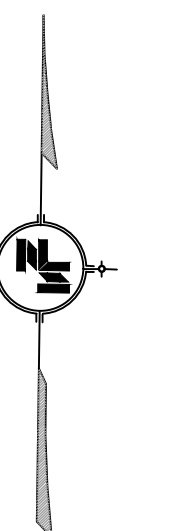
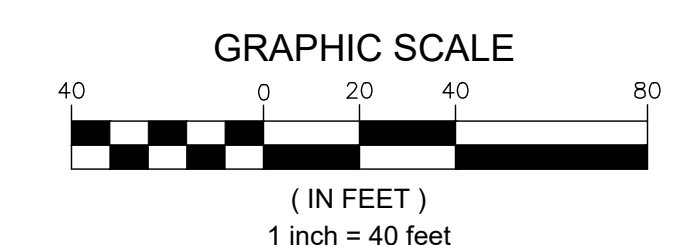
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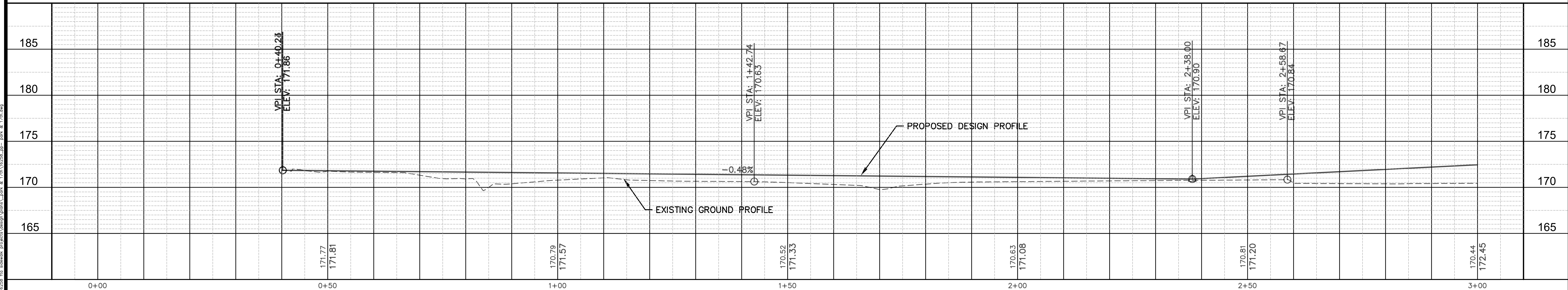
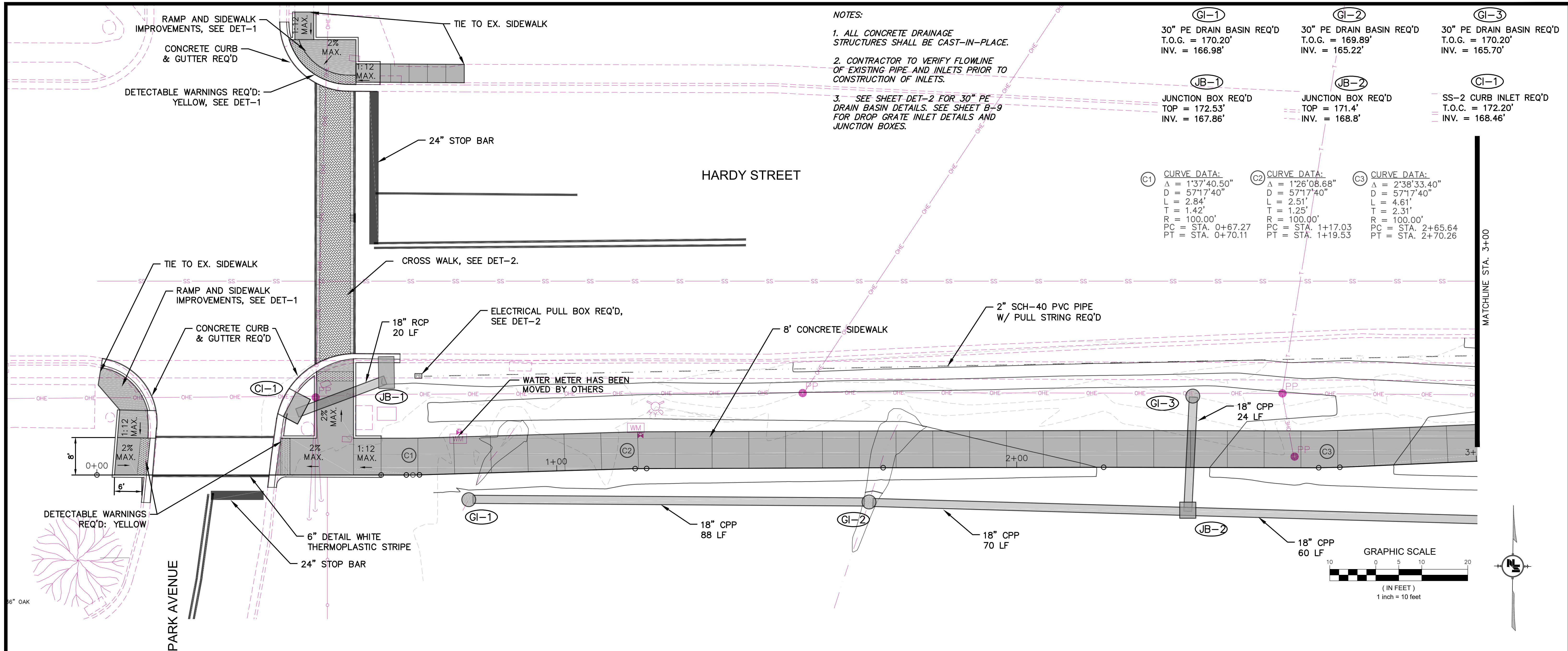


BENCHMARKS / CONTROL POINTS				
NAME	DESC.	ELEV.	NORTHING	EASTING
CP-1	SPIKE	172.893'	664014.5630	833055.3570
CP-2	SPIKE	174.370'	664002.5210	833314.5650
BM-1	USGS BENCH	175.220'	663943.0827	833347.6110

PUBLIC UTILITIES
CITY OF HATTIESBURG
(WATER & SEWER) - (601)545-4530
AT&T - (601)310-0704
MS POWER COMPANY - (601)426-4800
XFINITY (COMCAST) - (601)874-1213
SPIRE GAS - (601)549-9071
CSPIRE - (601)624-4026



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					SCALE: 1" = 40'				
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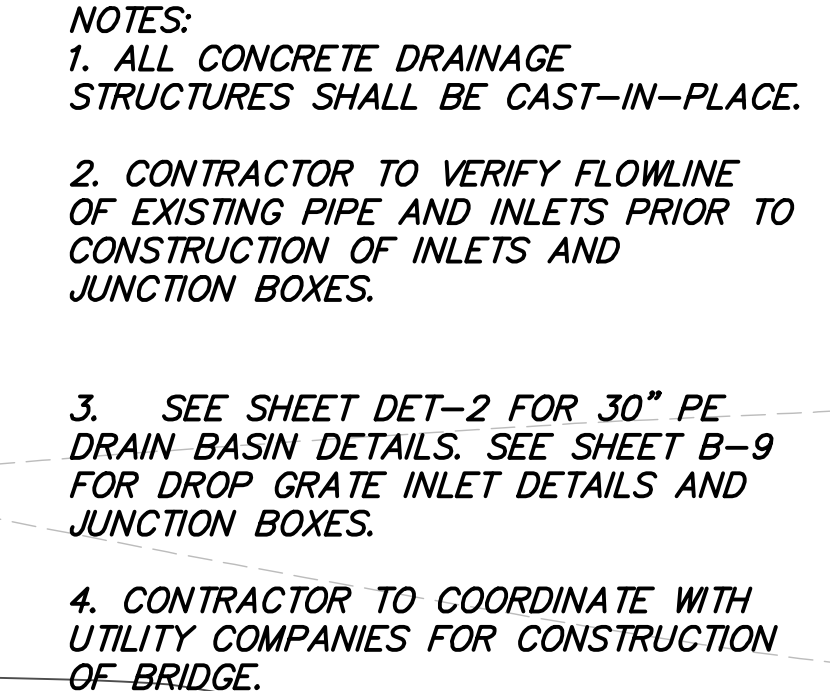


NOTICE TO DRAWING HOLDER NEEL—SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS				DRAWING INFORMATION		FTA SIDEWALKS PROJECT HARDY STREET - KAMPER PARK CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY		NEEL-SCHAFFER Solutions you can build upon	PLAN AND PROFILE B.O.P. TO STA. 3+00	
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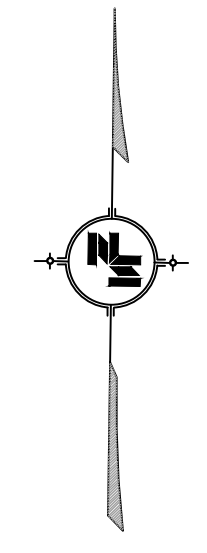
FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

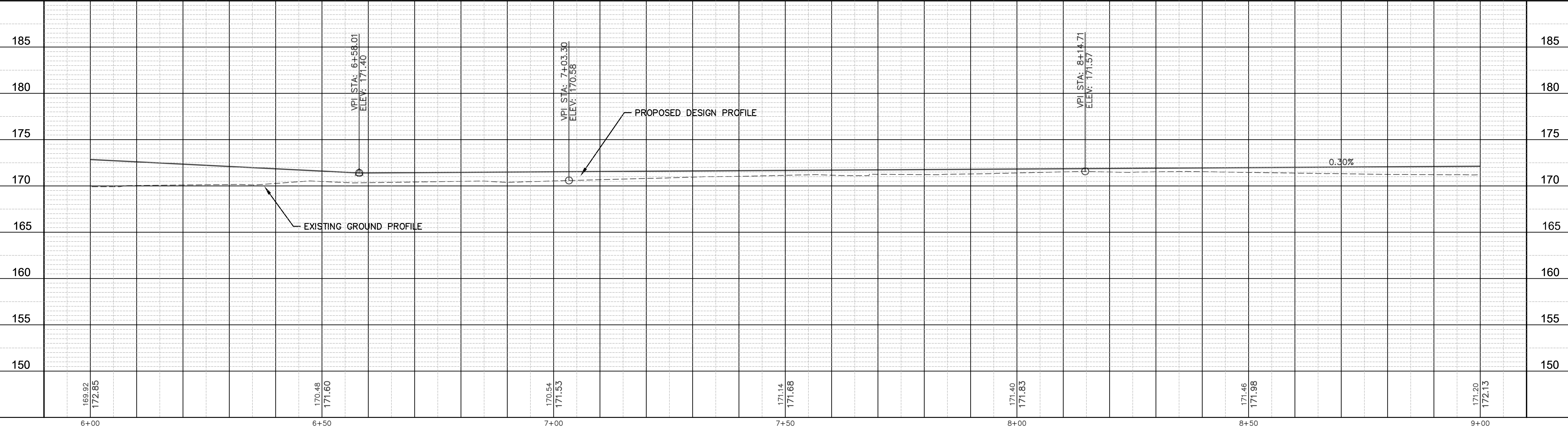
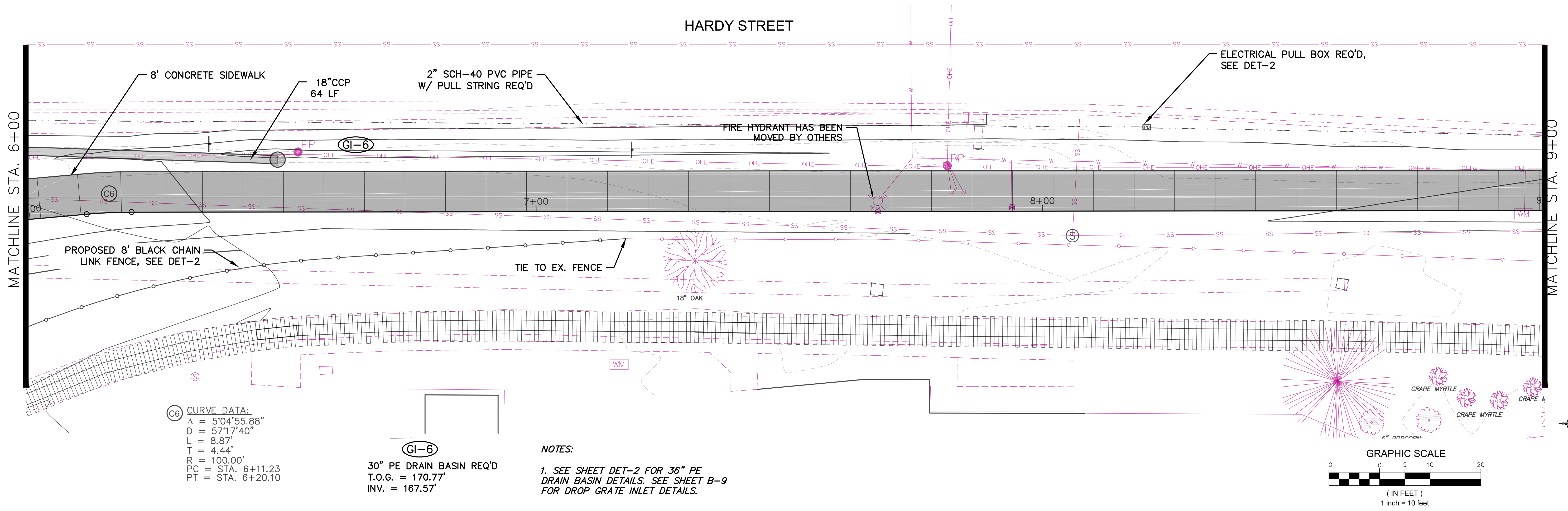




(G|-5)
B-9 INLET REQ'D
T.O.G. = 168.38
INV. = 163.86'



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								WORKING NUMBER: PP-2	DRAWING NUMBER: 11	



NOTICE TO DRAWING HOLDER

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DRAWING INFORMATION			
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DRWN: PAN	DATE: 05/2022		
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QA/QC:	DATE:		

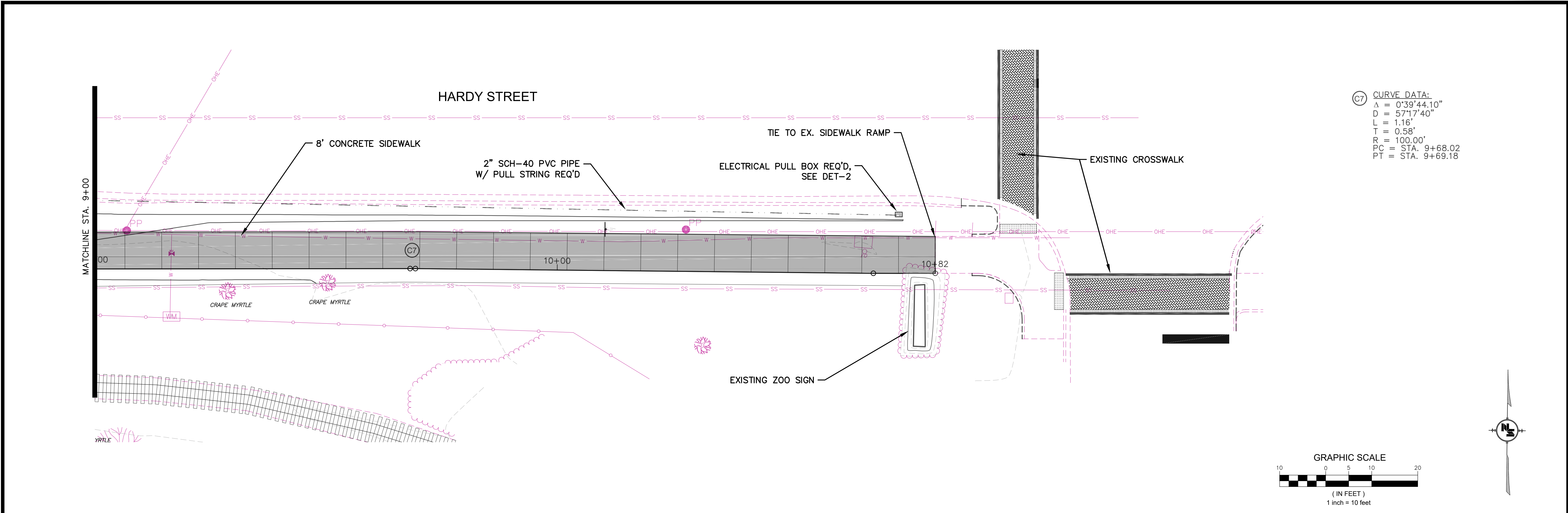
FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

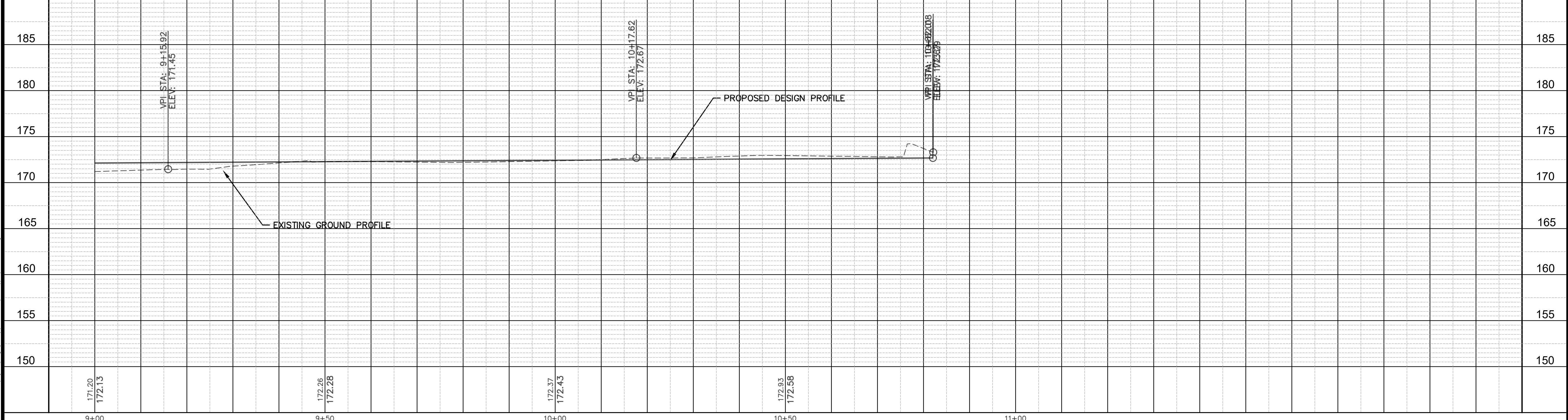
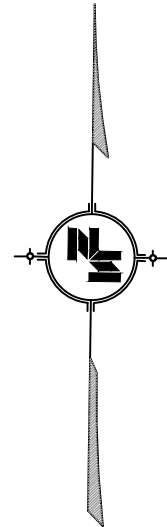
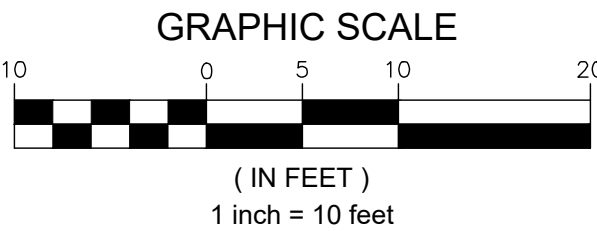
**NEEL-SCHAFFER**
Solutions you can build upon

PLAN AND PROFILE
HARDY STREET / KAMPER
PARK STA. 6+00 TO STA. 9+00

WORKING NUMBER: PP-3	DRAWING NUMBER: 12
--------------------------------	------------------------------



C7 CURVE DATA:
Δ = 0°39'44.10"
D = 57°17'40"
L = 1.16'
T = 0.58'
R = 100.00'
PC = STA. 9+68.02
PT = STA. 9+69.18



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NO.	DATE	BY	DESCRIPTION	

N-S PROJECT NO.: 16258

FILENAME: 16258_PP - Park & 17th.dwg

SCALE: 1" = 10'

SURVEYED BY: CLEARPOINT ENGINEERS

DSGN: GPC	DATE: 05/2022
DRWN: PAN	DATE: 05/2022
CHKD:	DATE:
QA/QC:	DATE:

FTA SIDEWALKS PROJECT

HARDY STREET - KAMPER PARK

CITY OF HATTIESBURG

HATTIESBURG, MS

FORREST COUNTY

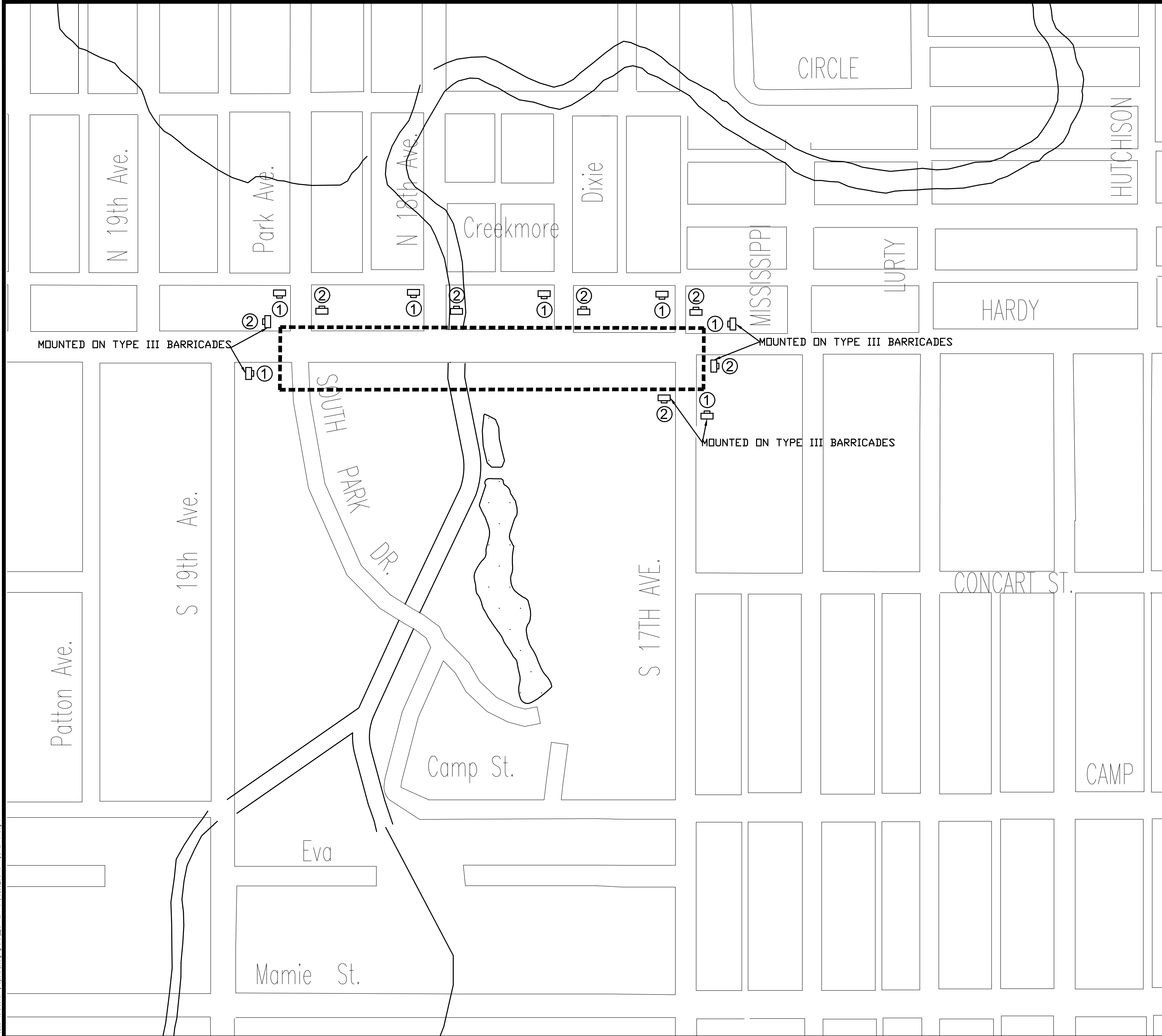
PLAN AND PROFILE

HARDY STREET / KAMPER PARK

STA. 9+00 TO E.O.P.

WORKING NUMBER: PP-4	DRAWING NUMBER: 13
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5/27/2022 1:35 PM c:\16200\hattiesburg\16258 (fta sidewalk project)\design\neel\park & 17th\16258_pp - park & 17th.dwg



LEGEND

①

ROAD
WORK
AHEAD

W20-1
36x36

MOUNTED ON U-SECTION POST

②

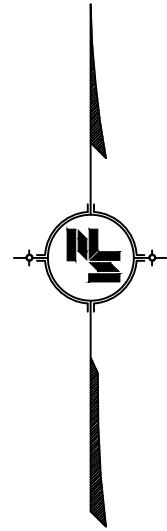
END
ROAD WORK

G20-2a
36x18

MOUNTED ON U-SECTION POST

Ⓜ

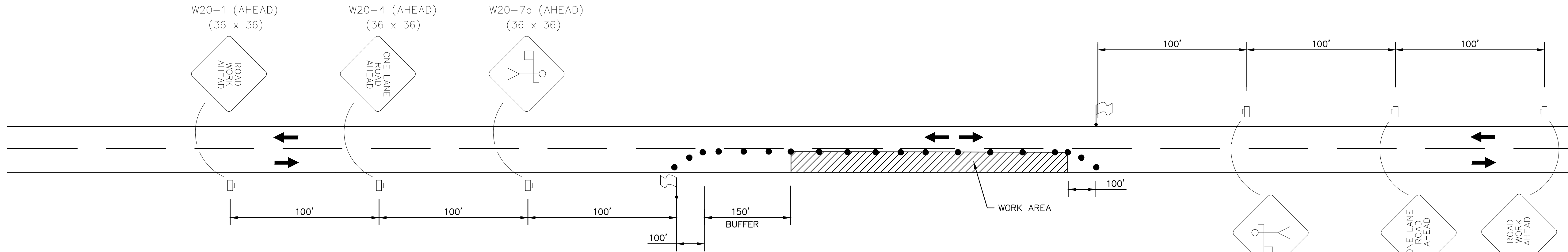
WORK ZONE SIGN



- NOTES:
- ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
 - CONTRACTOR TO MAINTAIN ACCESS TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION.
 - THE LOCATION AND SPACING OF SIGNS ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.
 - FLUORESCENT ORANGE SHEETING SHALL BE BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
 - ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).
 - SEE SHEET TCP-2 FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.

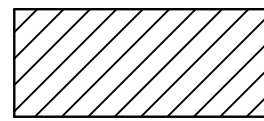
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FTA SIDEWALKS PROJECT HARDY STREET - KAMPER PARK CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY							 NEEL-SCHAFFER Solutions you can build upon		TRAFFIC CONTROL PLAN	
					WORKING NUMBER:		DRAWING NUMBER:			
					TCP-1		14			

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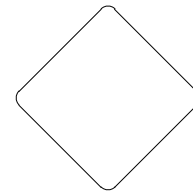


ONE-LANE CLOSURE OF TWO-WAY TRAFFIC
(WITH FLAGGER)
NOT TO SCALE

SYMBOLS



WORK AREA



TRAFFIC CONTROL SIGN



WORK ZONE SIGN



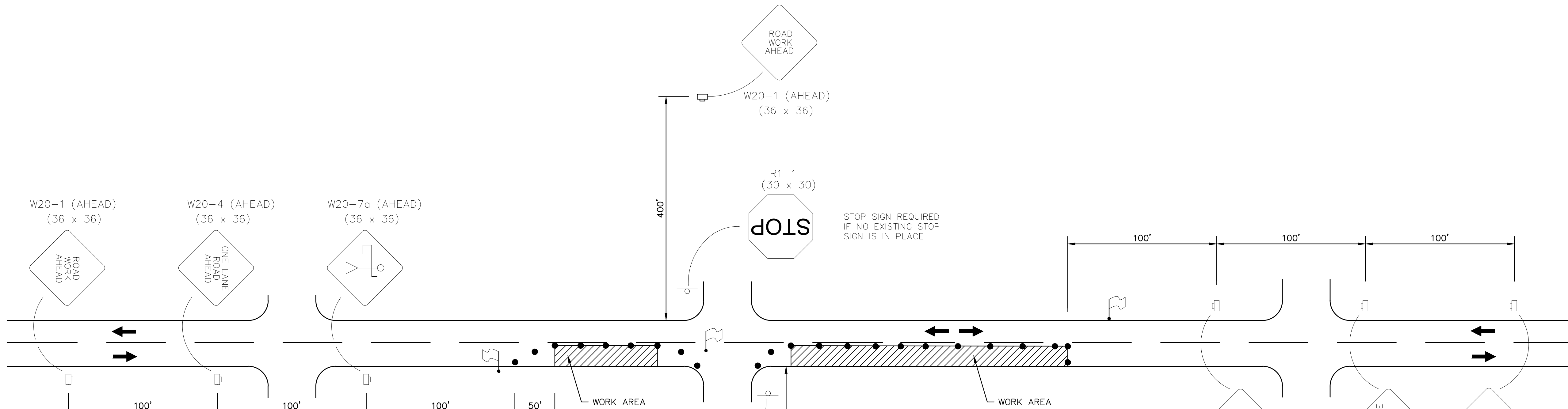
STOP SIGN



TRAFFIC CONE OR REFLECTIVE
PLASTIC DRUM



LOCATION OF FLAGGER



ONE-LANE CLOSURE OF TWO-WAY
TRAFFIC AT INTERSECTION
(WITH FLAGGER)
NOT TO SCALE

GENERAL NOTES:

1. CONTRACTOR SHALL SET UP ALL TRAFFIC CONTROL DEVICES AND SIGNS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORK.
2. WORK OPERATIONS SHALL BE CONFINED TO ONE TRAVEL LANE, LEAVING THE OPPOSING TRAVEL LANE OPEN TO TRAFFIC.
3. ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE ROADWAY.
4. FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
5. THE CONTRACTOR SHALL PROVIDE ACCESS (INGRESS AND EGRESS) TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO NOTIFY BUSINESSES AND HOMEOWNERS 48 HOURS IN ADVANCE OF ACCESS RESTRICTIONS.
6. CHANNELIZING DEVICES SHALL BE A MINIMUM HEIGHT OF 24".
7. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" X 36".
8. SPACING OF CHANNELIZING DEVICES ALONG LANE LINE AND WORK ZONE TO BE EQUAL TO THE POSTED SPEED (M.P.H.) X 1 IN FEET. (EXAMPLE 35 M.P.H. X 1 = 35')
9. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
10. WHEN THE WORK ZONE IS STATIONARY, THE W20-7a SIGN SHOULD BE PLACED 200 FEET IN ADVANCE OF THE FLAGGER AND SHOULD INDICATE 200' AS THE DISTANCE.
11. ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS.
12. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT.
13. DISTANCES BETWEEN SIGNS ARE APPROXIMATE. SIGN SPACING SHOULD BE ADJUSTED FOR CURVES, HILLS, INTERSECTIONS, DRIVEWAYS, ETC., TO IMPROVE VISIBILITY.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THROUGH AND LOCAL TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

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				DSGN: GPC	DATE: 05/2022
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				CHKD:	DATE:
				QA/QC:	DATE:

FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

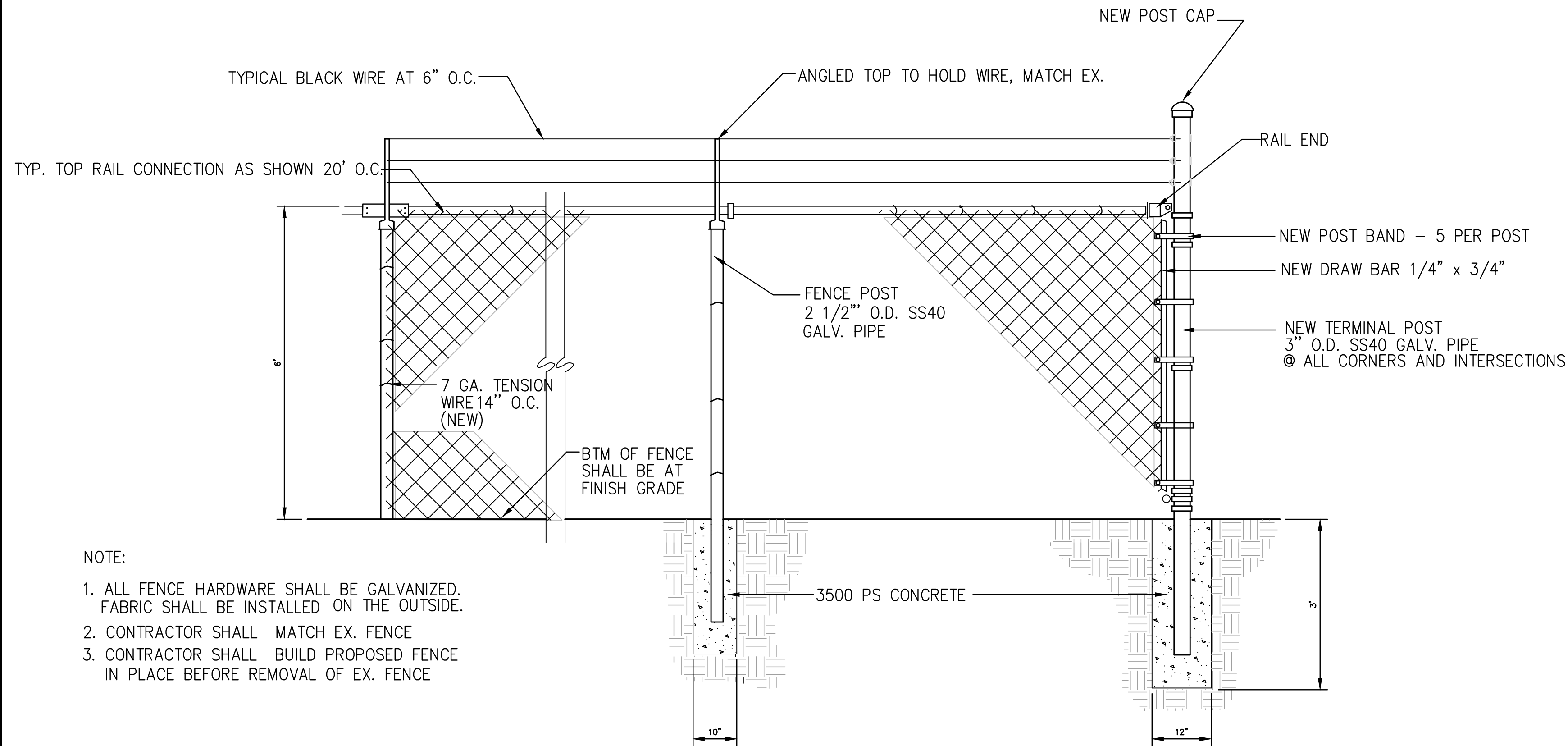
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



TRAFFIC CONTROL DETAILS - ONE
LANE CLOSURE (2 LANE ROAD)

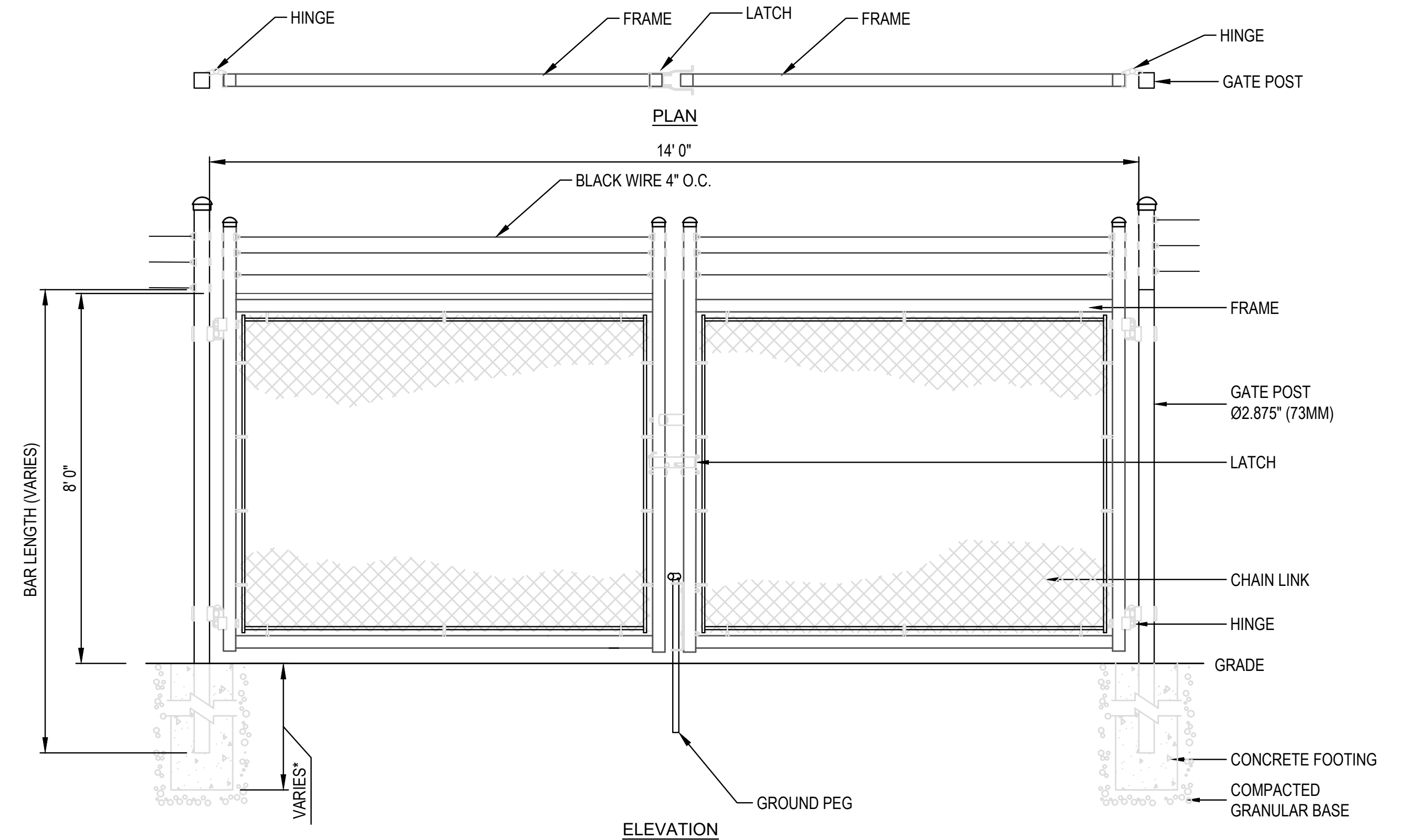
WORKING NUMBER:
TCP-2

DRAWING NUMBER:
16



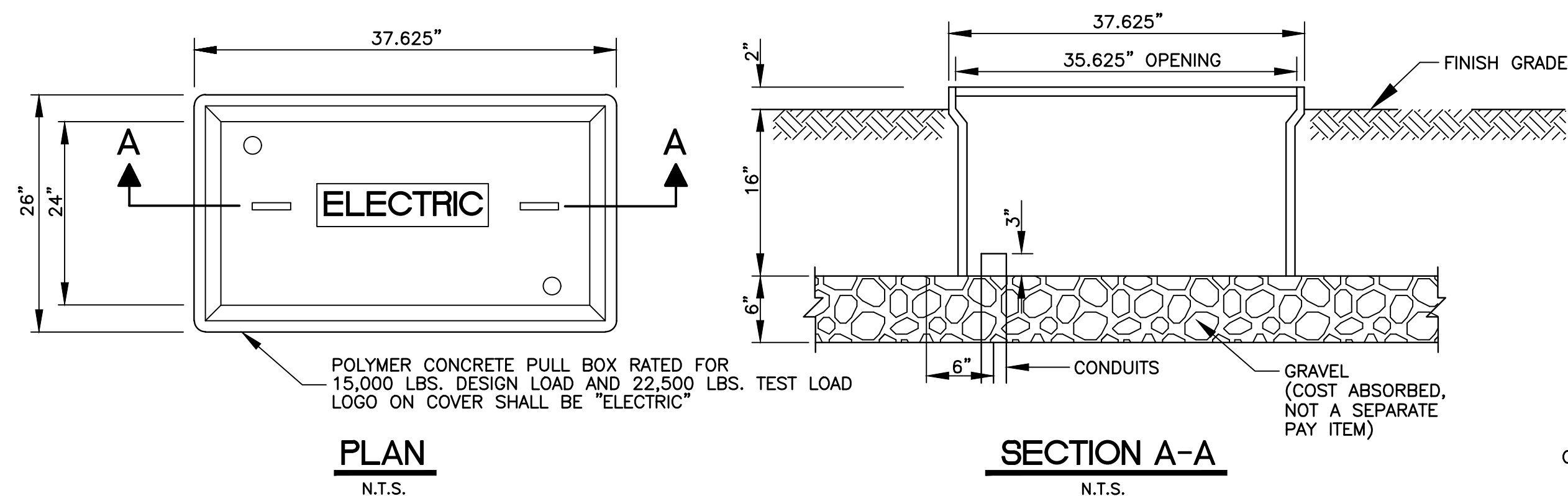
- NOTE:
1. ALL FENCE HARDWARE SHALL BE GALVANIZED. FABRIC SHALL BE INSTALLED ON THE OUTSIDE.
 2. CONTRACTOR SHALL MATCH EX. FENCE
 3. CONTRACTOR SHALL BUILD PROPOSED FENCE IN PLACE BEFORE REMOVAL OF EX. FENCE

CHAIN LINK FENCE DETAIL
NOT TO SCALE

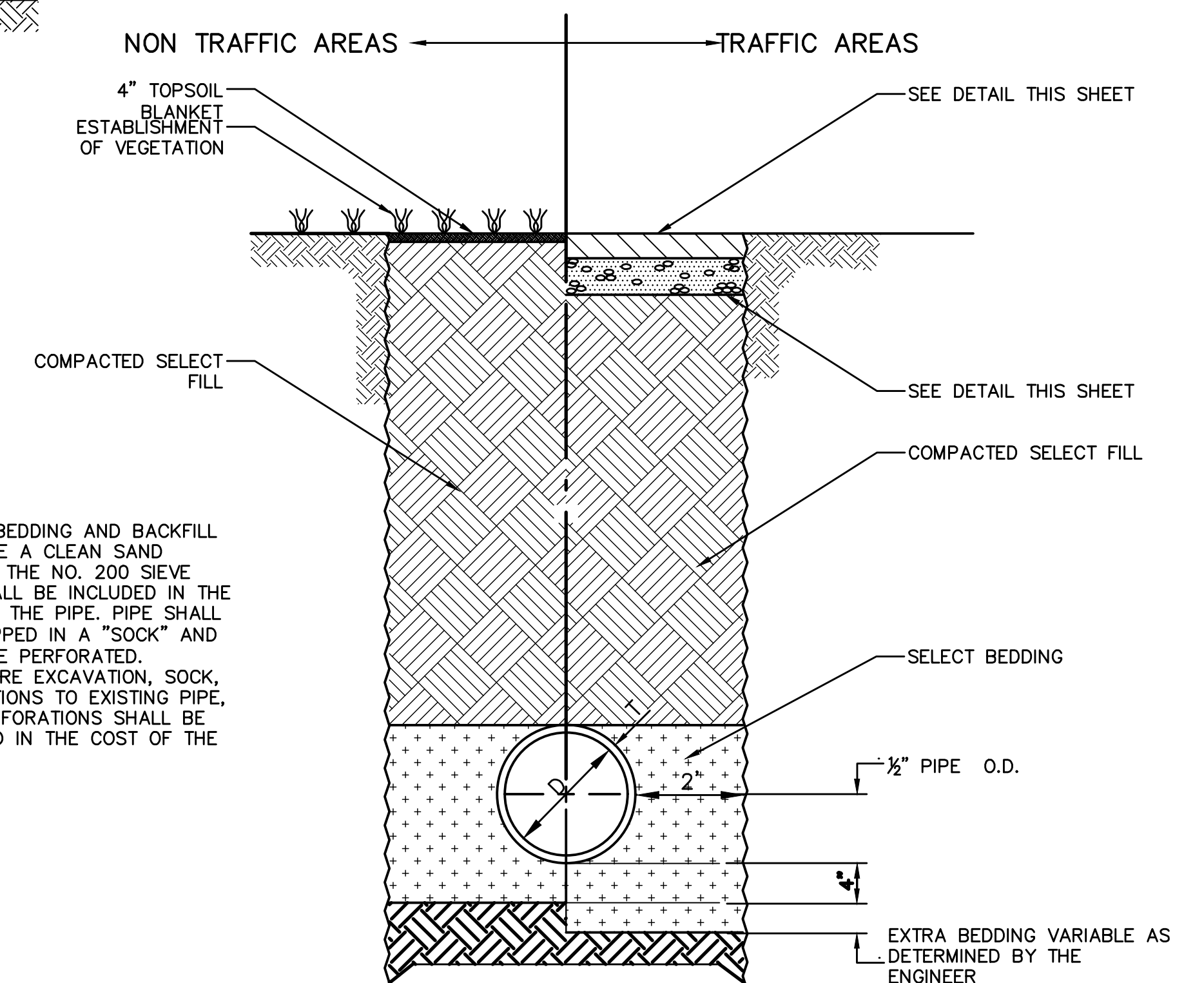


CHAIN LINK FENCE DOUBLE GATE DETAIL
NOT TO SCALE

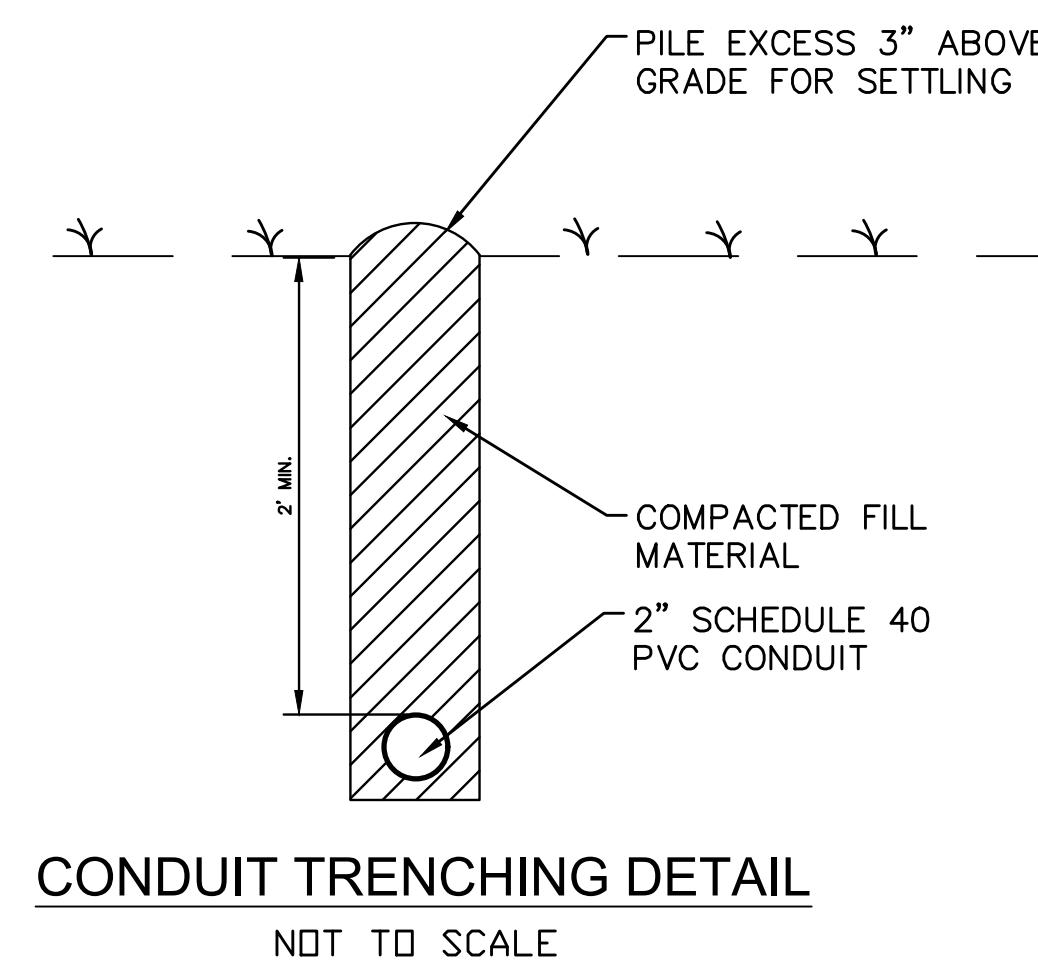
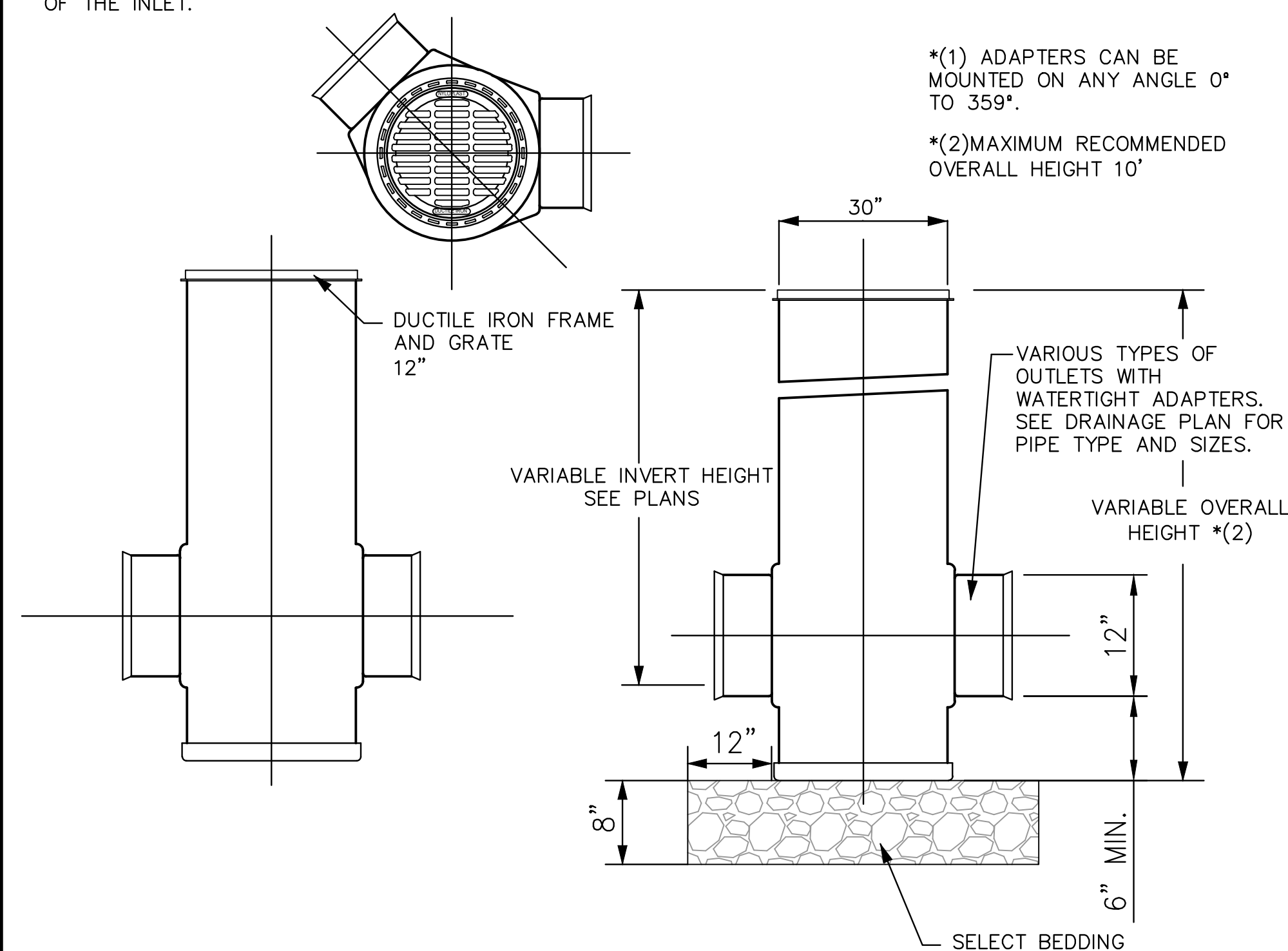
- NOTES:
1. SELECT BEDDING SHALL BE #610 CRUSHED STONE.
 2. STRUCTURE EXCAVATION, SELECT BACKFILL, AND SELECT BEDDING SHALL BE INCLUDED IN THE COST OF THE INLET.



UNDERGROUND ELECTRICAL PULL BOX
NOT TO SCALE



TYPICAL TRENCH DETAILS FOR DRAINAGE PIPE
NOT TO SCALE



CONDUIT TRENCHING DETAIL
NOT TO SCALE

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FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

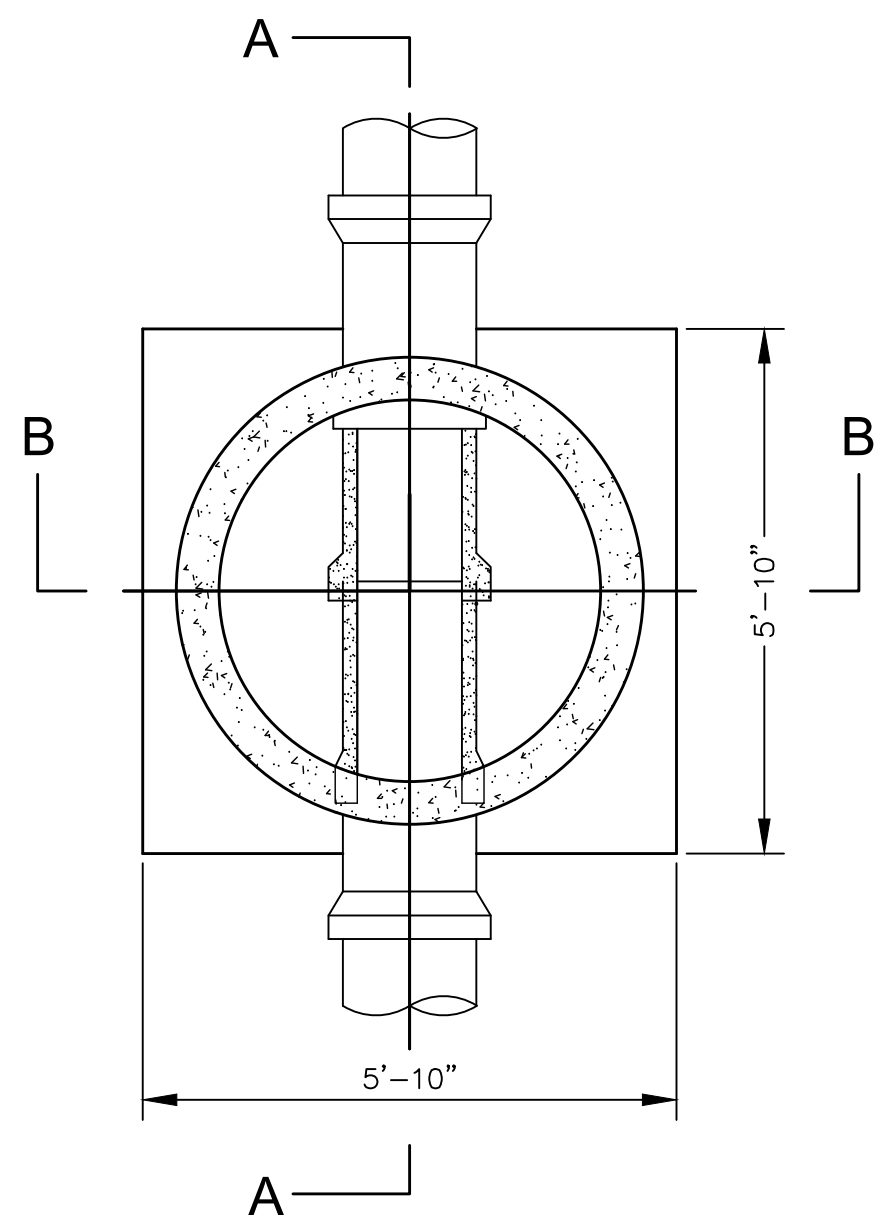
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



DETAILS

WORKING NUMBER:
DET-2

DRAWING NUMBER:
17

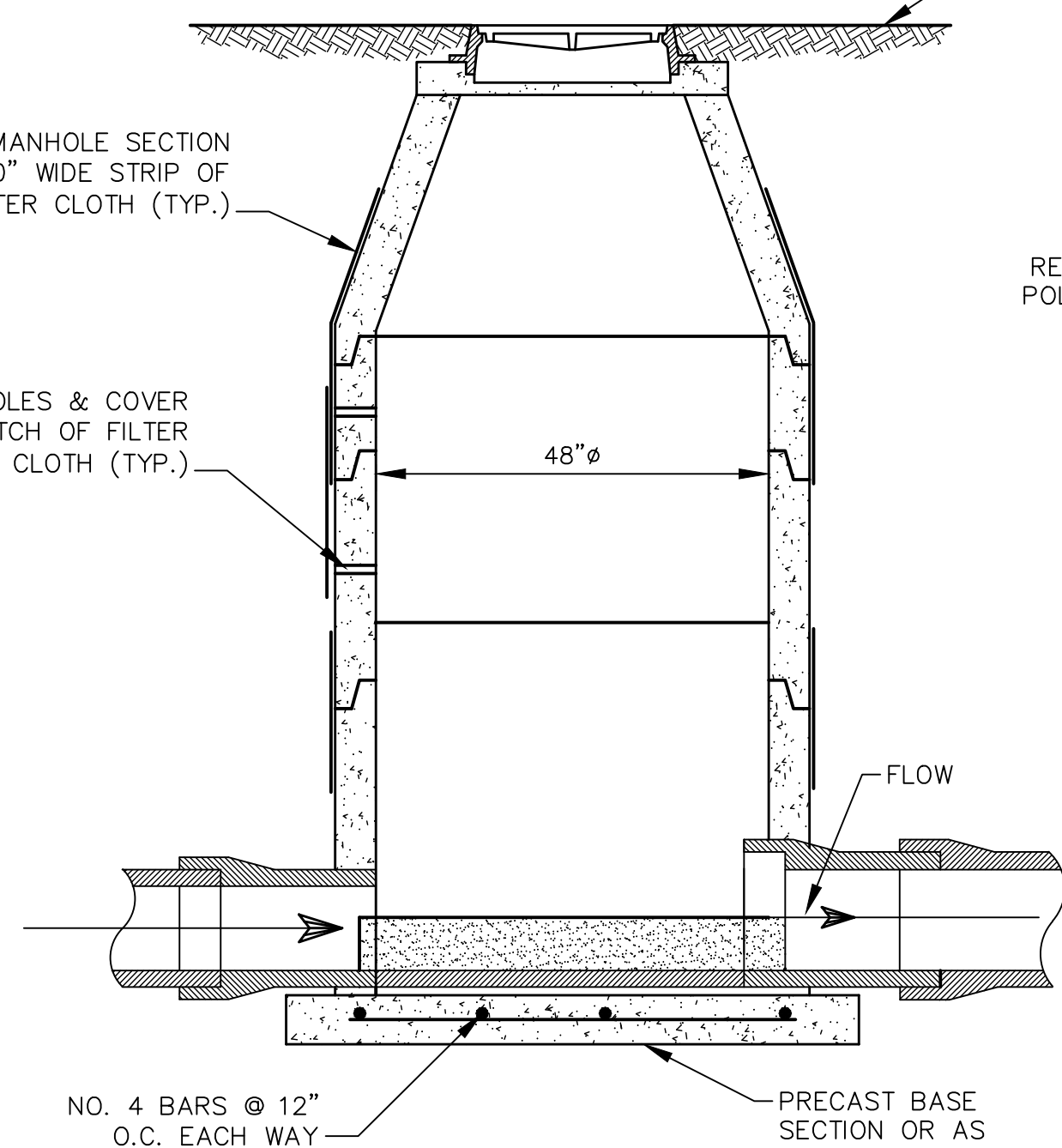


PARTIAL PLAN

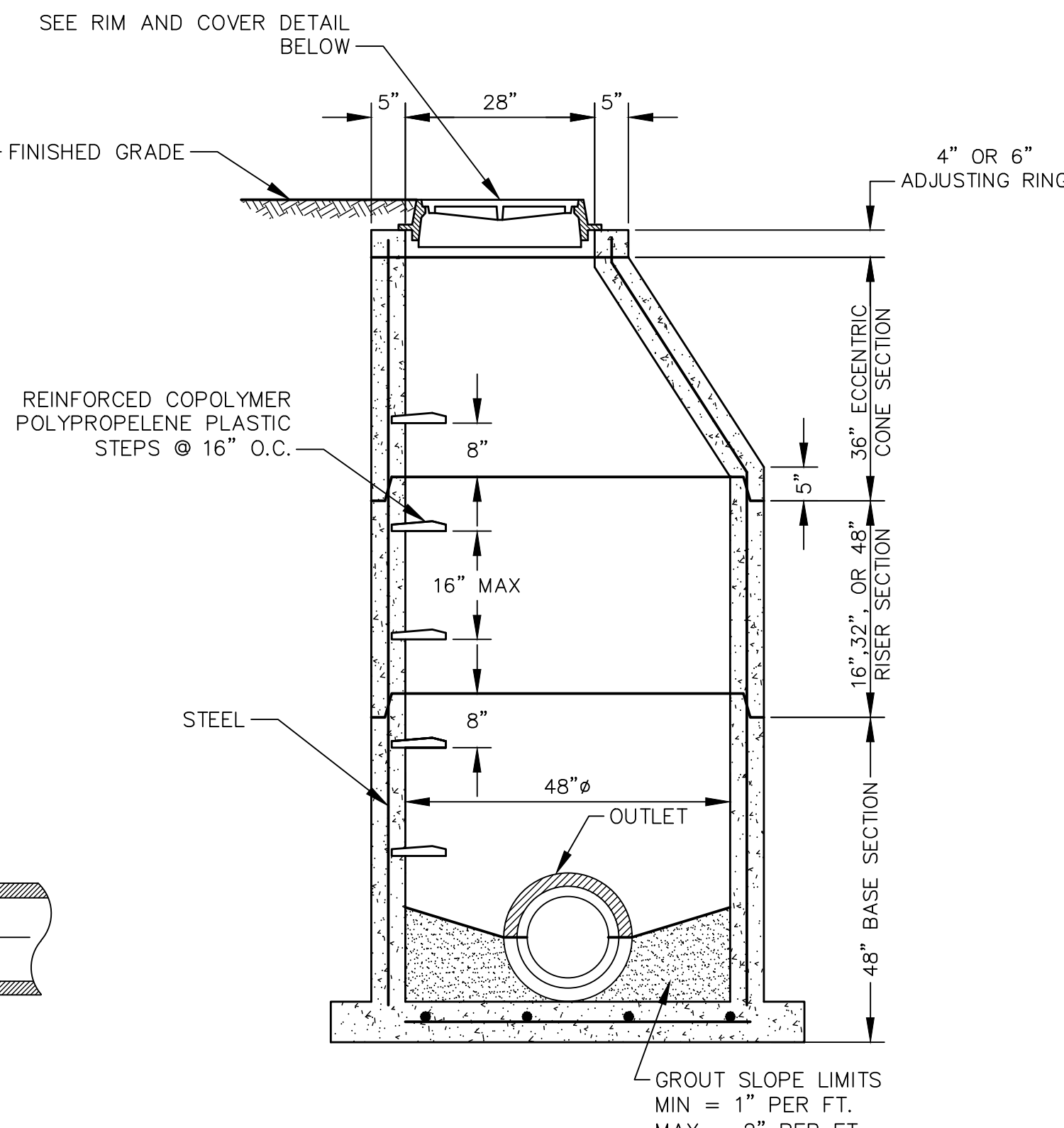
NOTE: PRECAST CONE, RISER AND BASE UNIT MUST COMPLY WITH ASTM SPEC. "C"

WRAP ALL MANHOLE SECTION JOINTS WITH 30" WIDE STRIP OF FILTER CLOTH (TYP.)

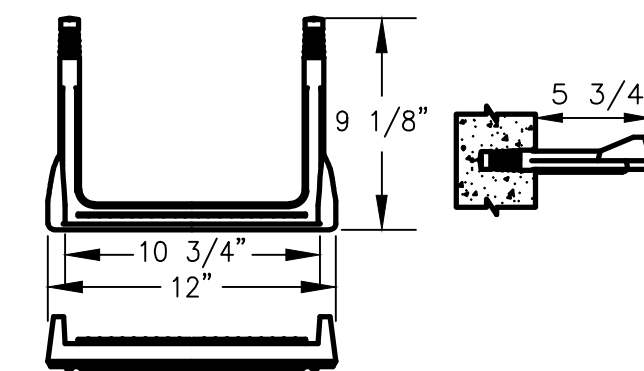
PLUG ALL LIFT HOLES & COVER WITH A 24"x24" PATCH OF FILTER CLOTH (TYP.)



SECTION A-A

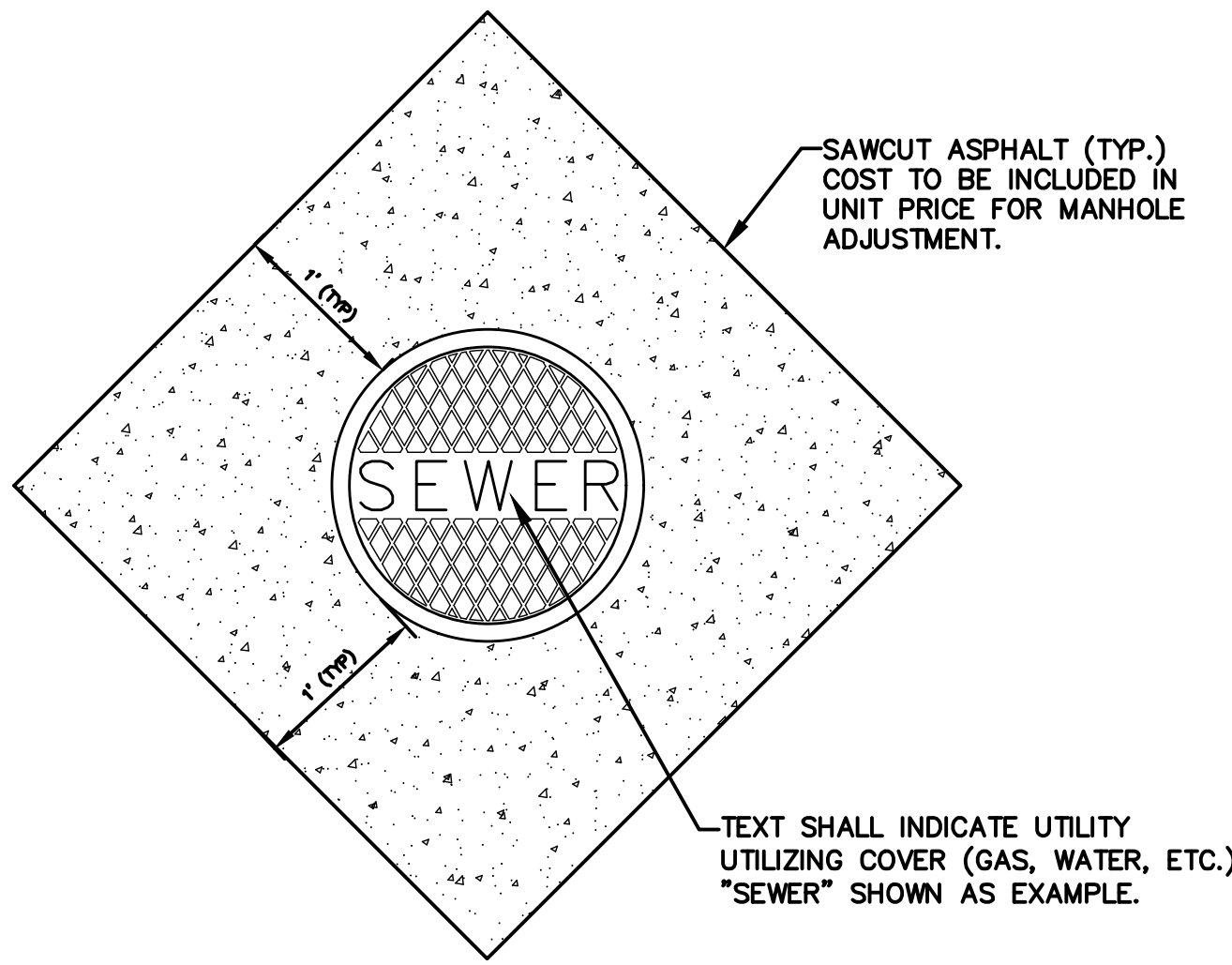


SECTION B-B



MANHOLE STEP DETAIL

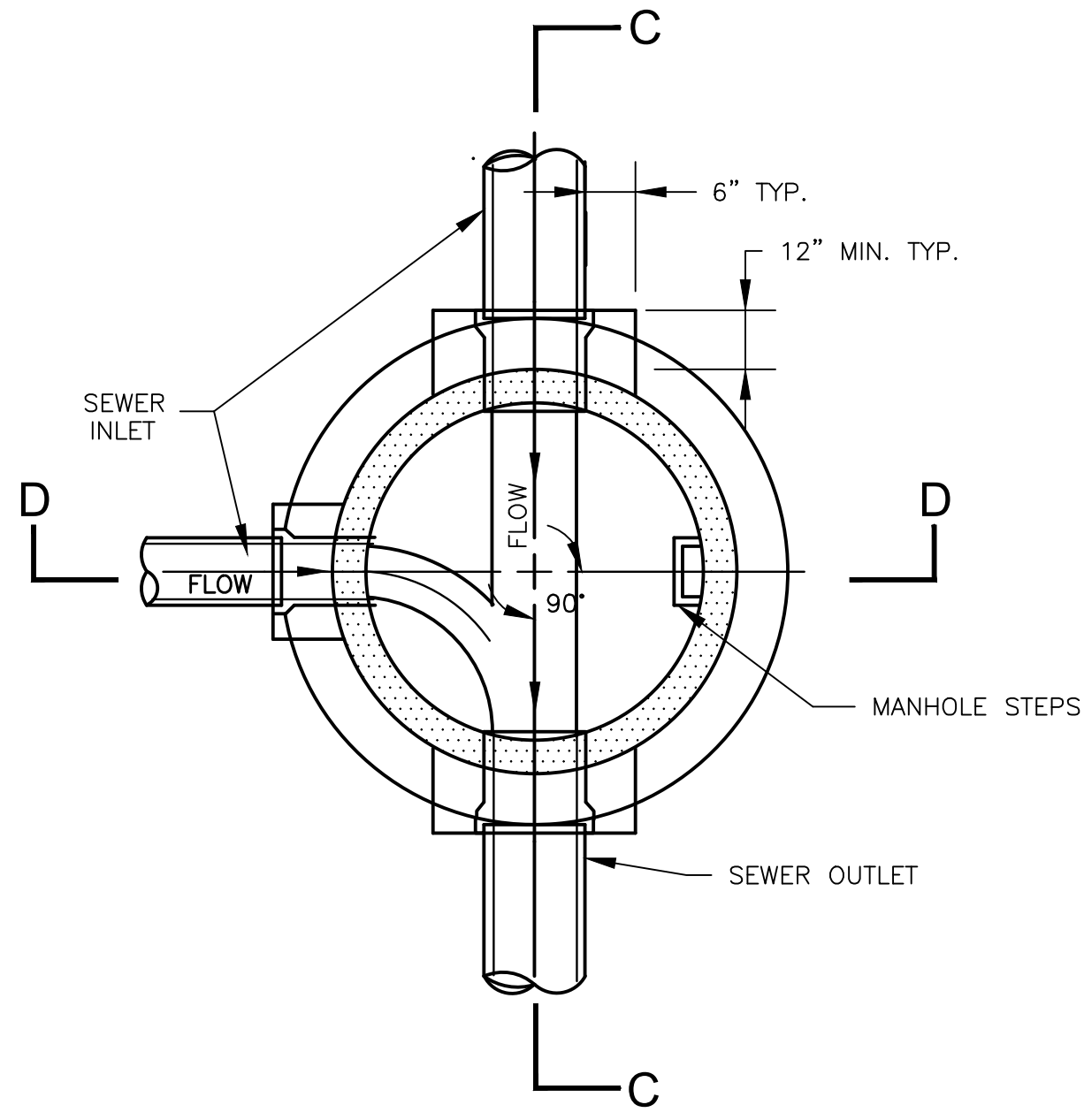
N.T.S.



CONCRETE PAD FOR MANHOLES

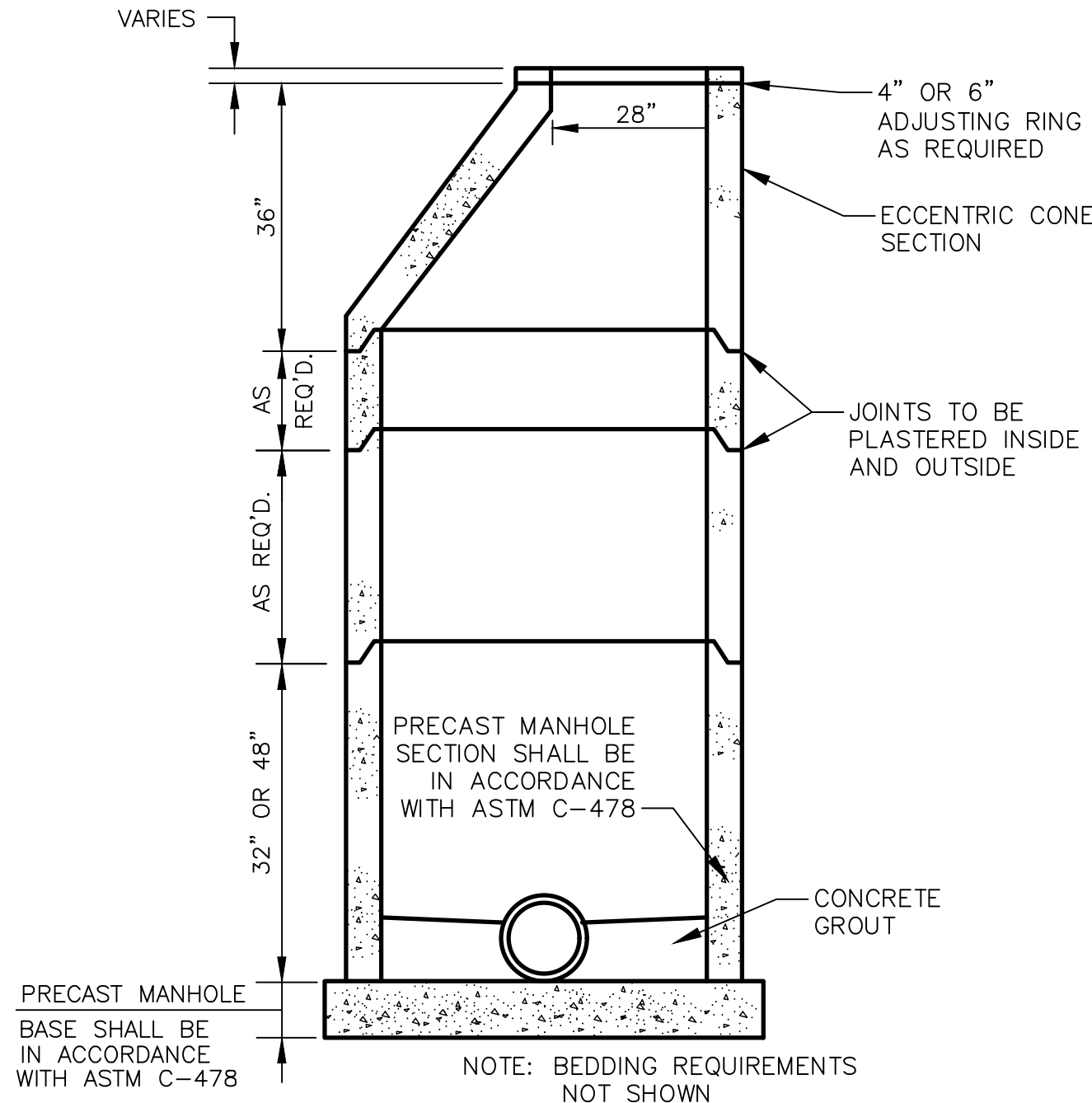
- NOTES:
1. CONCRETE PAD TO BE 12" THICK.
 2. #5 REBAR TO BE PLACED 3" FROM TOP OF CONCRETE PAD.
 3. CONCRETE TO BE PLACED IN A DIAMOND SHAPE ALONG TRAVEL LANE. (SEE ABOVE)

N.T.S.



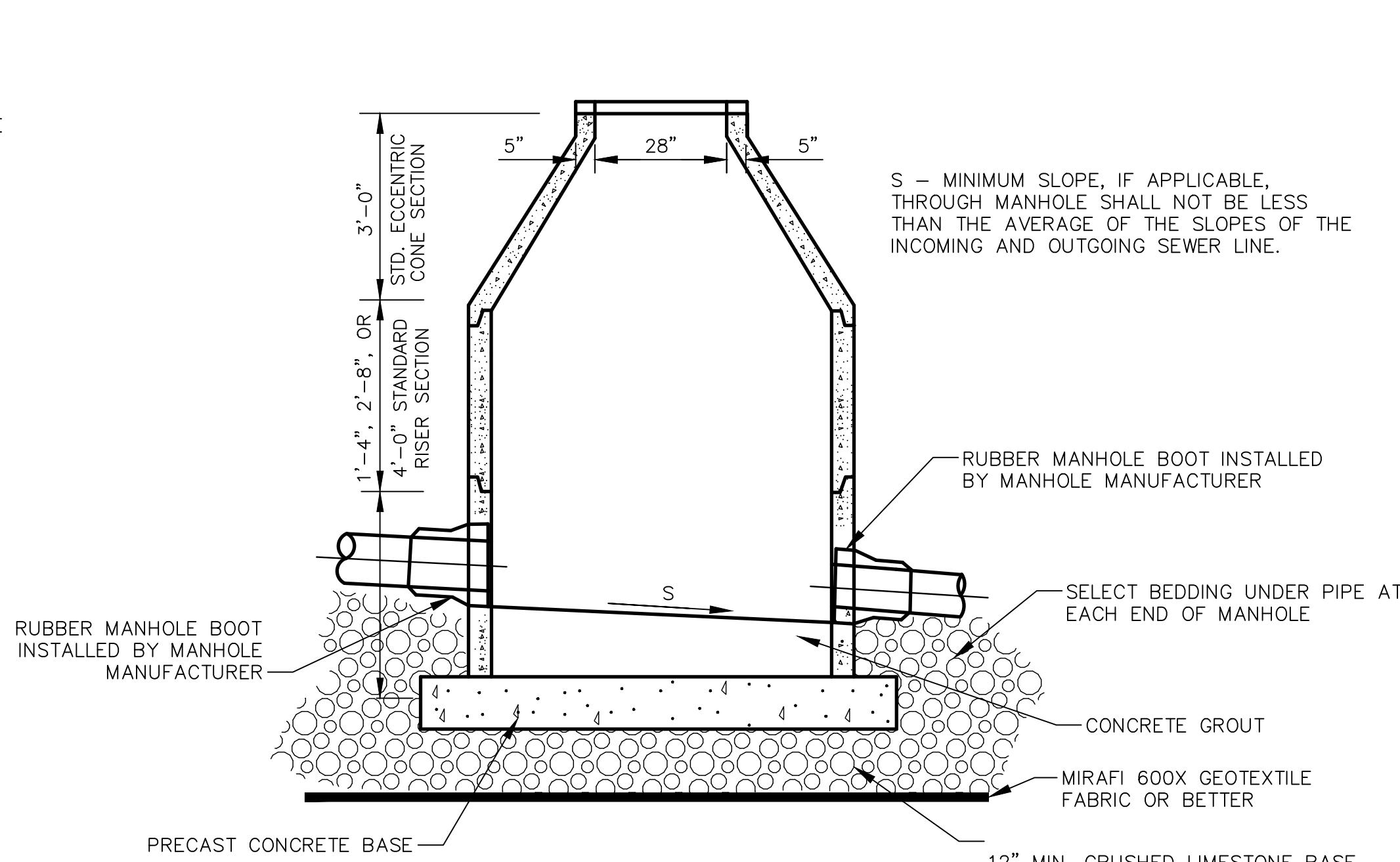
PARTIAL PLAN

NOTE: PRECAST CONE, RISER AND BASE UNIT MUST COMPLY WITH ASTM SPEC. "C"



SECTION D-D

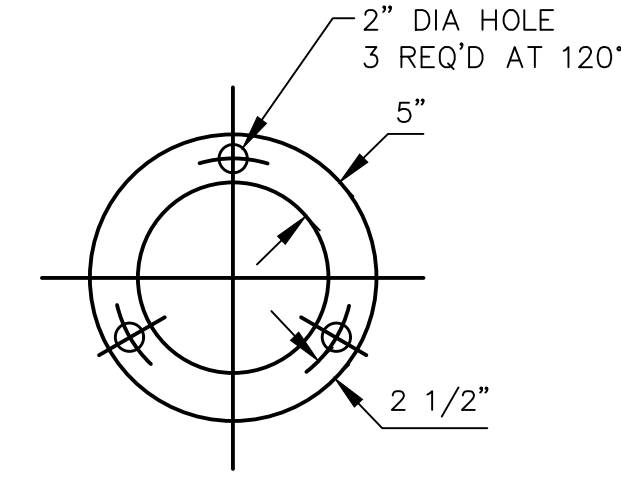
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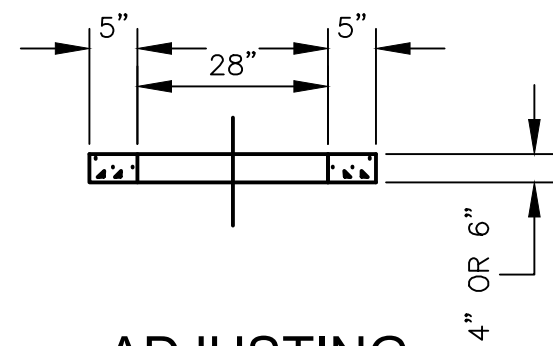
SECTION C-C

N.T.S.

TYPICAL MANHOLE DETAIL



MANHOLE CASTING



ADJUSTING RING

NOTE: VULCAN V-1115 OR EQUAL RIM AND COVER WITH LETTERING "SEWER" TO BE CAST ON LID

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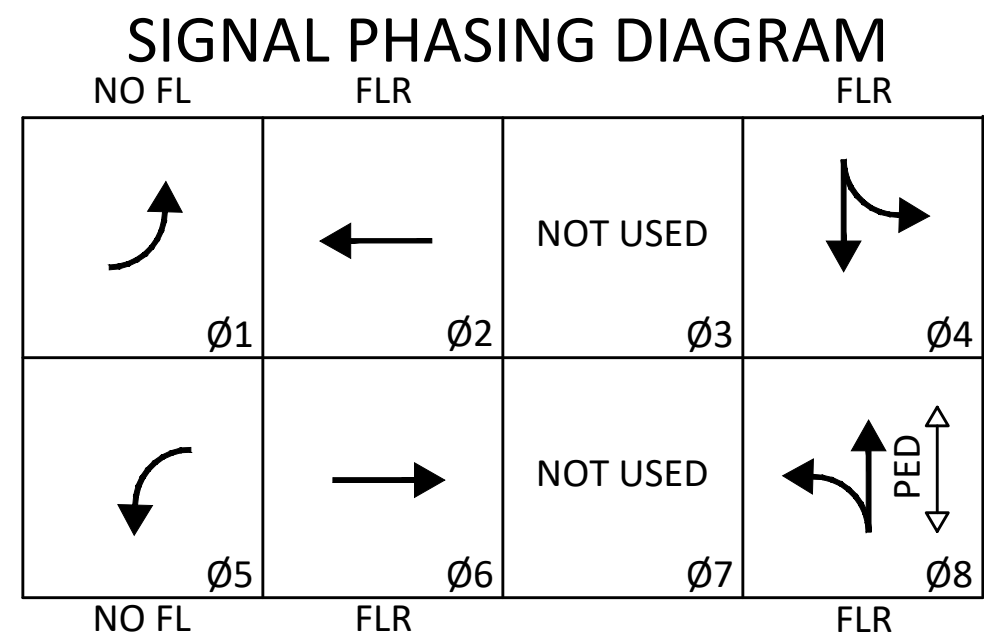
FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

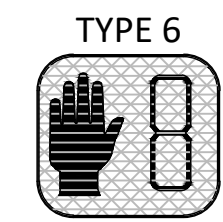


TYPICAL
SANITARY SEWER DETAILS

WORKING NUMBER:	DRAWING NUMBER:
DET-3	18

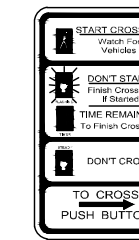


SIGNAL HEADS

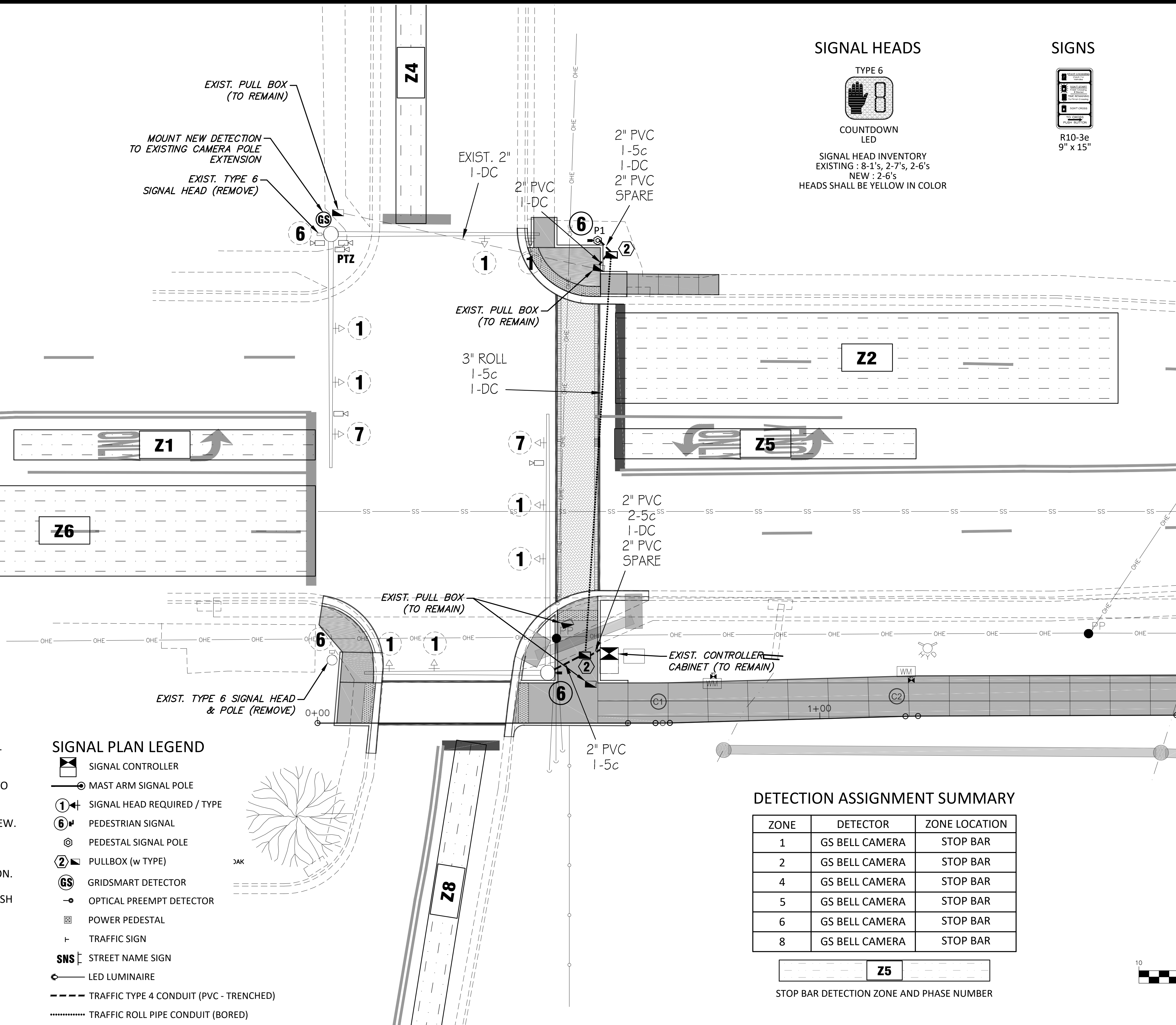


COUNTDOWN LED
SIGNAL HEAD INVENTORY
EXISTING : 8-1's, 2-7's, 2-6's
NEW : 2-6's
HEADS SHALL BE YELLOW IN COLOR

SIGNS



R10-3e
9" x 15"



INTERSECTION NOTES:

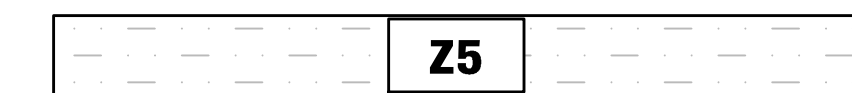
- EXISTING CONTROLLER CABINET, POLES AND ROADWAY SIGNAL HEADS (1's & 7's) SHALL REMAIN. EXISTING PEDESTRIAN SIGNAL HEADS (6's) SHALL BE REMOVED. EXISTING TYPE 6 POLE SHALL BE REMOVED. FOUNDATION FOR TYPE 6 POLE SHALL BE REMOVED TO 12" BELOW EXISTING GROUND.
- ALL EQUIPMENT SHOWN TO BE INSTALLED ON THIS SHEET IS NEW. REMOVAL REQUIRED AS NOTED.
- DETECTION SHALL BE GRIDSART SINGLE BELL CAMERA WITH STOPBAR VIDEO DETECTION. MOUNT TO CAMERA POLE EXTENSION.
- NEW PEDESTRIAN SIGNALS AND PUSH BUTTONS REQUIRED. PUSH BUTTONS SHALL BE THE LATEST APS BLUETOOTH MODELS. APS VOICE MESSAGE TO SAY: "HARDY STREET. WALK SIGN IS ON TO CROSS HARDY STREET".
- ALL CABINET MODIFICATIONS SHALL BE COST ABSORBED.

SIGNAL PLAN LEGEND

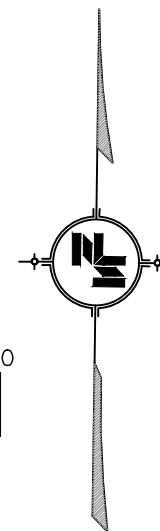
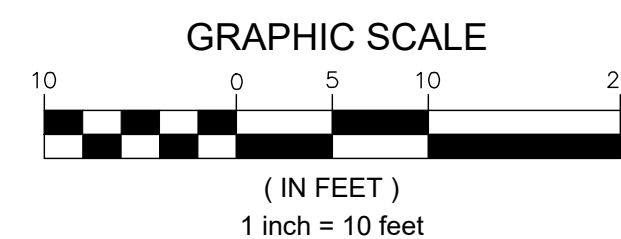
- SIGNAL CONTROLLER
- MAST ARM SIGNAL POLE
- SIGNAL HEAD REQUIRED / TYPE
- PEDESTRIAN SIGNAL
- PEDESTAL SIGNAL POLE
- PULLBOX (w TYPE)
- GRIDSART DETECTOR
- OPTICAL PREEMPT DETECTOR
- POWER PEDESTAL
- TRAFFIC SIGN
- STREET NAME SIGN
- LED LUMINAIRE
- TRAFFIC TYPE 4 CONDUIT (PVC - TRENCHED)
- TRAFFIC ROLL PIPE CONDUIT (BORED)

DETECTION ASSIGNMENT SUMMARY

ZONE	DETECTOR	ZONE LOCATION
1	GS BELL CAMERA	STOP BAR
2	GS BELL CAMERA	STOP BAR
4	GS BELL CAMERA	STOP BAR
5	GS BELL CAMERA	STOP BAR
6	GS BELL CAMERA	STOP BAR
8	GS BELL CAMERA	STOP BAR



STOP BAR DETECTION ZONE AND PHASE NUMBER



NOTICE TO DRAWING HOLDER

NEEL-SCHAFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS				DRAWING INFORMATION	
NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 16258	
				FILENAME: 16258_TSI_Park&17th.dwg	
				SCALE: 1" = 10'	
				SURVEYED BY: CLEARPOINT ENGINEERS	
				DSGN: MWE	DATE: 03/2022
				DRWN: PAN	DATE: 03/2022
				CHKD:	DATE:
				QA/QC:	DATE:

FTA SIDEWALKS PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



TRAFFIC SIGNAL INSTALLATION
HARDY ST. / PARK AVE.

WORKING NUMBER: TSI-1	DRAWING NUMBER: 19
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TRAFFIC SIGNAL GENERAL NOTES

1. POLES, SIGNAL HEADS, EQUIPMENT BOXES, PULLBOXES AND CONDUIT LOCATIONS MAY BE VARIED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE PROJECT ENGINEER. HOWEVER, SIGNAL HEAD OR POLE LOCATIONS SHALL BE WITHIN REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY.
2. THE CONTRACTOR SHALL PROVIDE MAST ARM POLE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS. DESIGN STANDARD FOR MAST ARMS POLES SHALL BE 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. USE FATIGUE CATEGORY II, USE 50 YEAR DESIGN SERVICE LIFE AND DO NOT CONSIDER GALLOPING OR TRUCK-INDUCED GUSTS. WIND AND ICE LOADS VARIABLE BASED UPON MAPS IN THE 2013 AASHTO SPECIFICATION. USE UPSWEPT MAST ARMS UNLESS OTHERWISE NOTED ON PLANS. SEE TSD 3.
3. DETERMINATION OF REQUIRED SIZES, LENGTHS AND GAUGES OF TYPE I - XI STEEL POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND SECTION 722.02 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN PLANS OR SPECIFICATIONS.
4. TRAFFIC SIGNAL MAST ARM POLES SHALL BE HOT DIPPED GALVANIZED WITH FINISH APPROVED BY THE PROJECT ENGINEER.
5. TRAFFIC SIGNAL MAST ARM POLES REQUIRING LUMINAIRES ARE DESIGNATED BY (L). ALL LUMINAIRES SHALL BE LED UNLESS OTHERWISE NOTED ON PLANS.
6. STAINLESS STEEL TAG ATTACHED TO THE POLE SHAFT USING 3/16 INCH STAINLESS STEEL POP RIVETS WITH PROPERTIES AND INFORMATION AS FOLLOWS:
- MINIMUM 1/16 INCH THICKNESS
- MINIMUM 1/4 INCH STAMPED LEGEND WITH FOLLOWING INFORMATION:
-- MANUFACTURER NAME
-- MONTH / YEAR OF MANUFACTURE
-- UNIQUE IDENTIFYING NUMBER FOR FUTURE MANUFACTURER REFERENCE
-- EXTERNAL PROJECT NUMBER FROM THE PLANS COVER SHEET (EXAMPLE: STP-XXXX-XX...)
TAG TO BE INSTALLED ON SHAFT SIDE OPPOSITE THE MAINLINE HIGHWAY AND LOCATED APPROXIMATELY 48 INCHES ABOVE THE TOP OF BASE PLATE.
7. THE TOP OF THE STRAIN POLE FOUNDATION SHALL BE 6" ABOVE THE GROUND. THE CONTRACTOR SHALL PROVIDE POLES OF SUFFICIENT LENGTH PLUS 2 FEET TO PROVIDE REQUIRED VERTICAL CLEARANCE OF THE TRAFFIC SIGNAL HEADS WITHOUT EXTENDING THE FOUNDATION ABOVE THE GROUND LINE OF THE POINT WHERE THE POLE IS LOCATED, EVEN THOUGH THIS MAY BE BELOW THE FINISHED GRADE OF THE ROADWAY.
8. ALL STRAIN POLES AT AN INTERSECTION SHALL BE THE SAME DIAMETER AND UTILIZE THE SAME BOLT CIRCLE SPACING.
9. POLE FOUNDATIONS AND BASE MOUNTED CABINET FOUNDATIONS, GRADE SHALL BE ESTABLISHED TO ±3" OF EDGE OF PAVEMENT ELEVATION UNLESS APPROVED BY SIGNAL PROJECT ENGINEER.
10. TRAFFIC SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS WITH BLACK BACK PLATES
11. PEDESTRIAN HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS.
12. PEDESTRIAN PUSHBUTTONS SHALL BE EITHER STANDARD PUSHBUTTONS OR APS (ACCESSIBLE PEDESTRIAN SYSTEM) STYLE AS NOTED ON PLANS. SIGNS TO BE INCLUDED IN PAY ITEM FOR PEDESTRIAN PUSHBUTTONS AT NO ADDITIONAL COST. SIDE OF POLE LOCATIONS OF PUSHBUTTONS MAY BE FIELD ADJUSTED. PUSHBUTTON HARDWARE SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS.
13. FIELD DRILL AND TAP EXISTING POLES WHERE PEDESTRIAN SIGNALS AND PUSHBUTTONS ARE REQUIRED ON PLANS. (ABSORBED ITEM).

14. TRAFFIC SIGNAL CABINETS AND CONTROLLERS SHALL BE WIRED TO PROVIDE FOR ALL PHASES INCLUDING FUTURE PHASES IN ACCORDANCE WITH THE PHASE SEQUENCE DIAGRAM.
15. ALL TRAFFIC SIGNAL CONTROLLERS SHALL BE ETHERNET READY, AND COMPATIBLE WITH MDOT'S EXISTING TRAFFIC SIGNAL MANAGEMENT SOFTWARE. ALL TRAFFIC SIGNAL CONTROLLER FIRMWARE SHALL BE CAPABLE OF DELAYING THE ONSET OF THE FLASHING YELLOW ARROW. ALL MMU'S SHALL BE ETHERNET READY, 16 CHANNEL, AND CAPABLE OF RUNNING 12 DIFFERENT MODES OF FLASHING YELLOW ARROW OPERATION. THE CONTRACTOR SHALL COORDINATE WITH MDOT FOR IP ADDRESSES ON ALL NETWORKABLE DEVICES. DEVICES INCLUDE BUT NOT LIMITED TO: CONTROLLER, MMU WITH SDLC CABLE (CONFLICT MONITOR), AND DETECTION UNITS. TRAFFIC SIGNAL CONTROLLER CABINET SHALL HAVE A 16 LOAD BAY FACILITY, REAR ACCESS DOOR, LAPTOP TRAY, AND DUAL POSITION INTERNAL LED LIGHTING. ALL TRAFFIC SIGNAL CONTROLLER CABINETS SHALL HAVE A 5 POSITION CARD RACK AND ONE 175 WATT MINIMUM POWER SUPPLY AND 4 AVAILABLE SLOTS UNLESS OTHERWISE NOTED ON PLANS. SEE 907-632.02.6.1.
16. FOR PROTECTED/PERMITTED LEFT TURN PHASING USING TYPE 2 FYA TRAFFIC SIGNAL HEADS, OPERATION SHALL BE AS FOLLOWS: THE PROTECTED PHASE OF THIS OPERATION SHALL DISPLAY A SOLID GREEN ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THE PERMITTED PORTION OF THIS OPERATION SHALL START WITH A FLASHING YELLOW ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THERE SHALL BE A DELAY (AS DIRECTED BY THE PROJECT ENGINEER) BETWEEN THE END OF THE PROTECTED PORTION OF THIS OPERATION AND THE BEGINNING OF THE PERMITTED PORTION OF THIS OPERATION. DURING THIS DELAY, THE OPPOSING PHASE THRU HEADS ARE CAPABLE OF DISPLAYING A GREEN BALL. SIGNAL CONTROLLER WITH FIRMWARE NECESSARY TO ACCOMPLISH THIS DELAY SHALL BE PROVIDED.
17. POLES AND FOUNDATIONS OF EXISTING SIGNAL INSTALLATION REMOVALS SHALL BE CUT OFF 6" BELOW GROUND, REMOVED AND AREA RESTORED TO MATCH ADJACENT SURFACE AS DIRECTED BY THE PROJECT ENGINEER.
18. ALL REMOVED EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS SPECIFIC ITEMS ARE NOTED IN THE PLANS TO BE SALVAGED AS DIRECTED BY THE PROJECT ENGINEER.
19. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ELECTRICAL SERVICE FROM THE POWER COMPANY SERVICE POINT TO THE POWER SERVICE PEDESTAL. FOR SPAN WIRE INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT AERIAL TO THE SIGNAL POLE NEAREST THE CONTROLLER, THE SERVICE SHALL THEN RUN TO THE CONTROLLER AS SHOWN ON THE PLANS. FOR MAST ARM INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT UNDERGROUND DIRECTLY TO THE POWER SERVICE PEDESTAL, THEN TO THE CONTROLLER CABINET, AS SHOWN ON THE PLANS. A DISCONNECT SHALL BE INSTALLED AT THE POWER COMPANY SERVICE POLE FOR MAST ARM INSTALLATIONS.
20. POWER SERVICE METER SHALL NOT BE MOUNTED ON THE CONTROLLER CABINET OR MAST ARM POLE SHAFTS. A SEPARATE POWER SERVICE PEDESTAL FOR MOUNTING THESE ITEMS IS REQUIRED. (SEE TSD-6 & TSD-7). BLACK CONDUCTORS SHALL BE USED FOR ALL LINE (HOT) WIRES AND WHITE CONDUCTORS SHALL BE USED FOR ALL NEUTRAL WIRES.
21. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE THE NECESSARY ARRANGEMENTS WITH THE LOCAL POWER COMPANY TO PROVIDE THE POWER SUPPLY ASSEMBLY FOR ANY NEW INSTALLATION. THE CONTRACTOR SHALL PAY FOR, AT NO COST TO THE DEPARTMENT, ALL DEPOSITS, HOOK-UP CHARGES, OR OTHER SERVICE FEES REQUIRED BY THE POWER COMPANY FOR THE ESTABLISHMENT OF NEW SERVICE. THE COST OF ALL SUCH FEES SHALL BE CONSIDERED INCIDENTAL AND ABSORBED WITHIN EXISTING PAY ITEMS. THE DEPARTMENT OR THE LOCAL AGENCY WILL BE RESPONSIBLE FOR PAYMENT OF THE MONTHLY SERVICE BILL FOR THE NEW POWER SERVICE INSTALLATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SWAP THE ELECTRICAL SERVICE ACCOUNT OVER TO THE DEPARTMENT OR LOCAL AGENCY. WHEN ELECTRIC POWER SERVICE EXISTS AND IS USED FOR THE OPERATION OF AN EXISTING SYSTEM, THE MONTHLY SERVICE FEES SHALL CONTINUE TO BE PAID BY THE DEPARTMENT OR THE LOCAL AGENCY. IF THE EXISTING POWER SERVICE IS INTENDED FOR USE WITH A NEW SIGNAL SYSTEM, THEN ANY SERVICE CHARGE FEES

SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SIMILARLY, IF AN EXISTING POWER SERVICE IS TO BE DISCONNECTED, ANY SERVICE CHARGE FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF ALL SUCH FEES SHALL BE CONSIDERED INCIDENTAL AND ABSORBED WITHIN EXISTING PAY ITEMS.

22. WHEN CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SIGNALS TO ACCOMMODATE ROADWAY CONSTRUCTION, IT SHALL BE PAID FOR UNDER PAY ITEM 619-H1, TRAFFIC SIGNAL, LUMP SUM, UNLESS OTHERWISE NOTED ON PLANS.
23. VEHICLE LOOP ASSEMBLIES SHALL BE INSTALLED IN THE TOP LAYER OF BINDER OR EXISTING SURFACE BEFORE THE FINAL SURFACE COURSE IS APPLIED (BASED ON 2" FINAL LIFT MAXIMUM).
24. WHEN RADAR, VIDEO , OR MULTI-SENSOR DETECTION IS USED, THE SYSTEM MAY REQUIRE BOTH STOP BAR AND ADVANCE DETECTION. TSI PLANS SHOW A GENERIC LAYOUT FOR DETECTION; DETECTOR MAY BE RELOCATED PER MANUFACTURER'S RECOMMENDATIONS. THERE SHALL BE NO EXTRA PAY FOR MOVING OF DETECTORS OTHER THAN CABLE LENGTHS. MANUFACTURER TO HAVE FACTORY REP ON SITE DURING INSTALLATIONS UNLESS CERTIFIED BY THE MANUFACTURER. DETECTION CABLE WILL BE MEASURED BY THE LINEAR FOOT, MEASURED HORIZONTALLY ALONG THE CONDUIT, MESSENGER CABLE OR MAST ARM AND VERTICALLY ALONG THE POLE. DETECTION CABLE FOR CAMERAS, THE POWER AND VIDEO CABLE MAY BE IN THE SAME JACKET. ALL DETECTION UNITS SHALL BE NETWORKABLE DEVICES AND BE ON THE MDOT NETWORK IF NOTED ON PLANS.
25. ALL GROUNDING EQUIPMENT SHALL BE COST ABSORBED.
26. MESSENGER CABLE AND OTHER SUPPORTING DEVICES WHERE REQUIRED SHALL BE ABSORBED IN THE PAY ITEMS FOR SIGNAL CABLE.
27. THE CONTRACTOR SHALL STAKE THE LOCATION OF EACH POLE FOUNDATION AND NOTIFY THE PROJECT ENGINEER FOR CONCURRENCE IN THE LOCATION BEFORE PROCEEDING WITH THE PURCHASE OF THE POLE.
28. THE CONTRACTOR SHALL BE REQUIRED TO ADEQUATELY AND COMPLETELY COVER TRAFFIC SIGNAL HEADS DURING TIMES THAT THEY ARE NOT IN OPERATION WITH A DURABLE, OUTDOOR- HARDENED MATERIAL THAT CONTRASTS WITH THE COLOR OF THE HEAD THAT CLEARLY DESIGNATES THAT THE SIGNAL IS NOT IN "STOP AND GO" MODE. HEAD COVERS ARE TO BE APPROVED BY THE PROJECT ENGINEER.
29. A NEW TRAFFIC SIGNAL INSTALLATION SHALL BE PUT IN FLASH OPERATION FOR A PERIOD OF THREE (3) TO SEVEN (7) DAYS PRIOR TO THE ACTIVATION OF THE SIGNAL'S "STOP AND GO" OPERATION. ACTIVATION OF NEW TRAFFIC SIGNALS SHALL BE DURING A MID-WEEK WEEKDAY (TUESDAY – THURSDAY) DURING A NON-PEAK TIME AND SHALL BE COORDINATED WITH THE PROJECT ENGINEER. UPON INITIAL INSPECTION AND ACCEPTANCE TESTING OF THE NEW TRAFFIC SIGNAL INSTALLATION, THE CONTRACTOR SHALL REQUEST THE START OF THE 30 DAY BURN-IN PERIOD TO COMMENCE, AS OUTLINED IN SUBSECTION 631.03.4 OF THIS SPECIFICATION. ANY NOTED DEFICIENCIES FOUND WITHIN THAT 30 DAY PERIOD SHALL BE CORRECTED TO THE SATISFACTION OF THE PROJECT ENGINEER. THE 30 DAY BURN-IN PERIOD MUST COMMENCE WITHIN THE CONTRACT TIME, AND BEFORE SUBSTANTIAL COMPLETION OF THE PROJECT IS GRANTED.
30. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING FINAL INSPECTION MEETING WITH DISTRICT OFFICE, PROJECT OFFICE AND TRAFFIC ENGINEERING FOR SIGNAL PORTION OF THE PROJECT.



TRAFFIC SIGNAL GENERAL NOTES

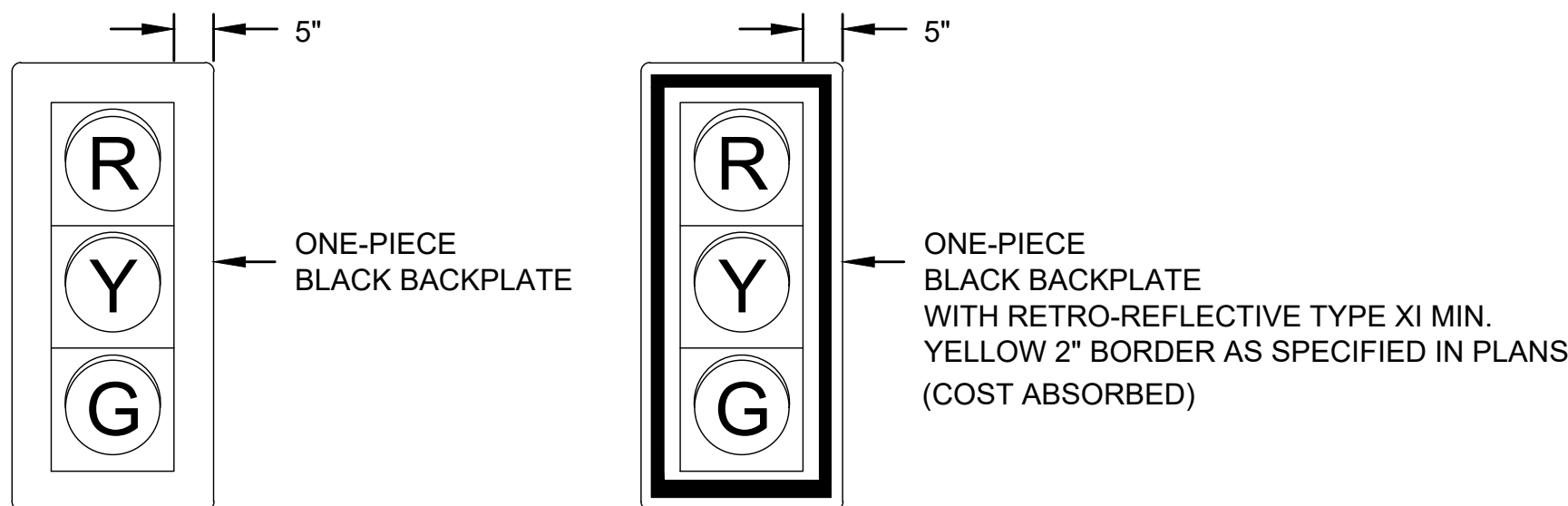
DETAIL OF TYPICAL TRAFFIC SIGNAL HEADS

TYPE 1	TYPE 2	TYPE 2 FYA	TYPE 2B FYA	TYPE 2P FYA	TYPE 3	TYPE 4	TYPE 6	TYPE 7	TYPE H

NOTES:

- ALL SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL SIGNAL HEADS SHALL BE L.E.D. LENSES UNLESS OTHERWISE NOTED ON THE PLANS. TYPE "A" SIGNAL HEAD IS TO BE GEOMETRICALLY PROGRAMMED VIA LOUVERS.
- LETTER "R" ON HEAD TYPES MEANS RIGHT TURN ARROW(S).
- TYPE 6 SIGNAL HEAD SYMBOLS/NUMBERS SHALL BE FULLY ILLUMINATED (NO OUTLINE SYMBOLS ALLOWED). THERE IS A SEPARATE PAY ITEM FOR PEDESTRIAN PUSHBUTTON. PEDESTRIAN PUSHBUTTON SHALL BE FURNISHED WITH R10-3e SIGN. (COST ABSORBED).
- ALL FYA SIGNAL HEAD SHALL BE FURNISHED WITH R10-12M SIGN. WHEN NOTED ON PLANS, TYPE 4 & 5 SIGNAL HEADS SHALL BE FURNISHED WITH R10-10L , R10-10R, OR R10-17M SIGN. TYPE 7 SIGNAL HEAD SHALL BE FURNISHED WITH R10-12 SIGN. TYPE 7 R REQUIRES NO SIGN. TYPE H SIGNAL HEAD SHALL BE FURNISHED WITH R10-23 SIGN WHEN INDICATED ON PLANS. COST OF SIGNAL SIGNS, MOUNTING BRACKETS, HARDWARE, AND LABOR SHALL BE COST ABSORBED.
- FOR SPAN WIRE INSTALLATION, THE HOUSING FOR THE RED INDICATION OF A TYPE 7 HEAD, SHALL BE ALUMINUM.

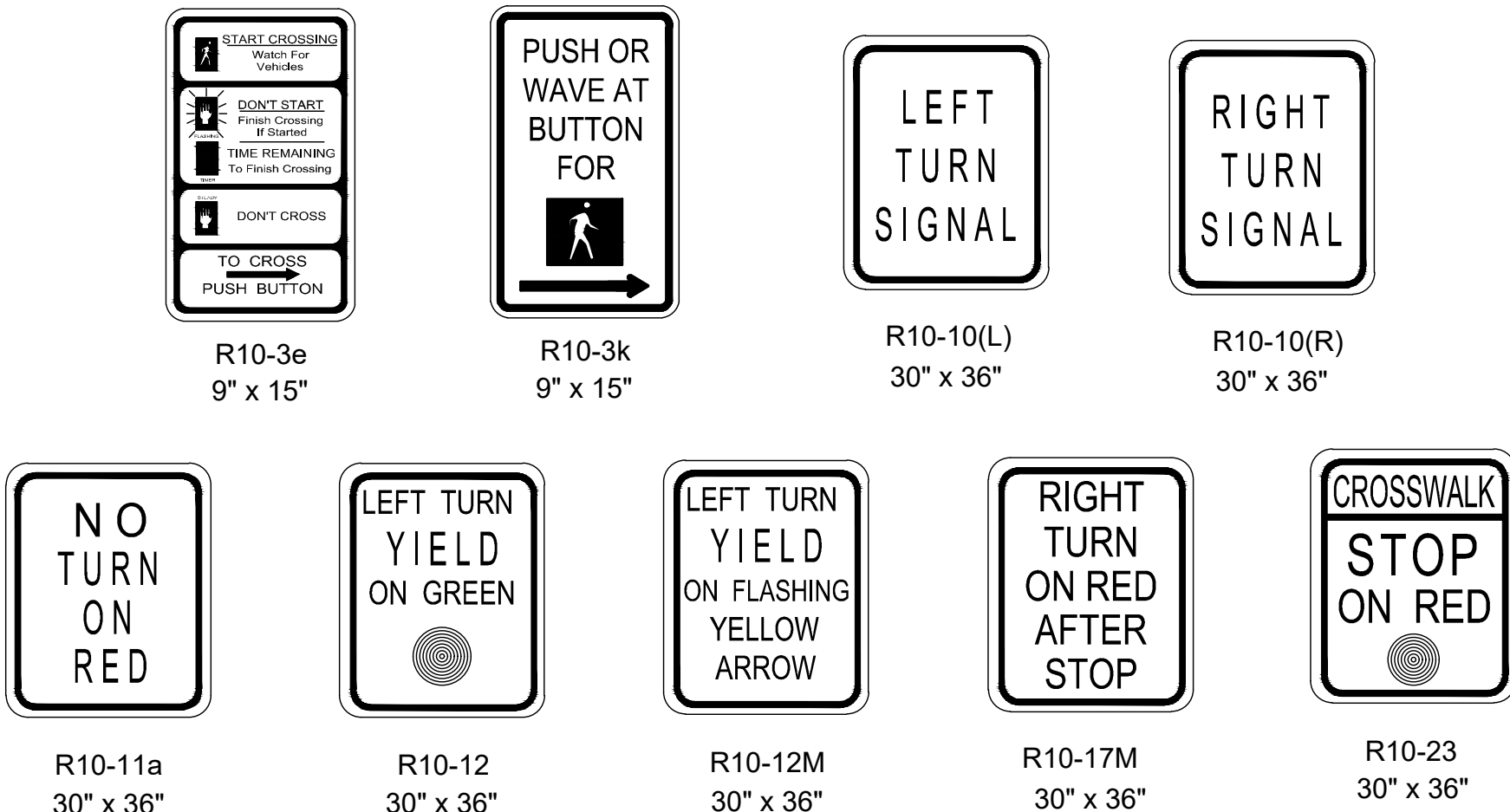
DETAIL OF TRAFFIC SIGNAL WITH BACKPLATE



NOTE:

ALL SIGNAL HEADS SHALL INCLUDE BACKPLATES AND VISORS UNLESS OTHERWISE NOTED ON TRAFFIC SIGNAL INSTALLATION SHEETS.

DETAIL OF TYPICAL TRAFFIC SIGNAL SIGNS



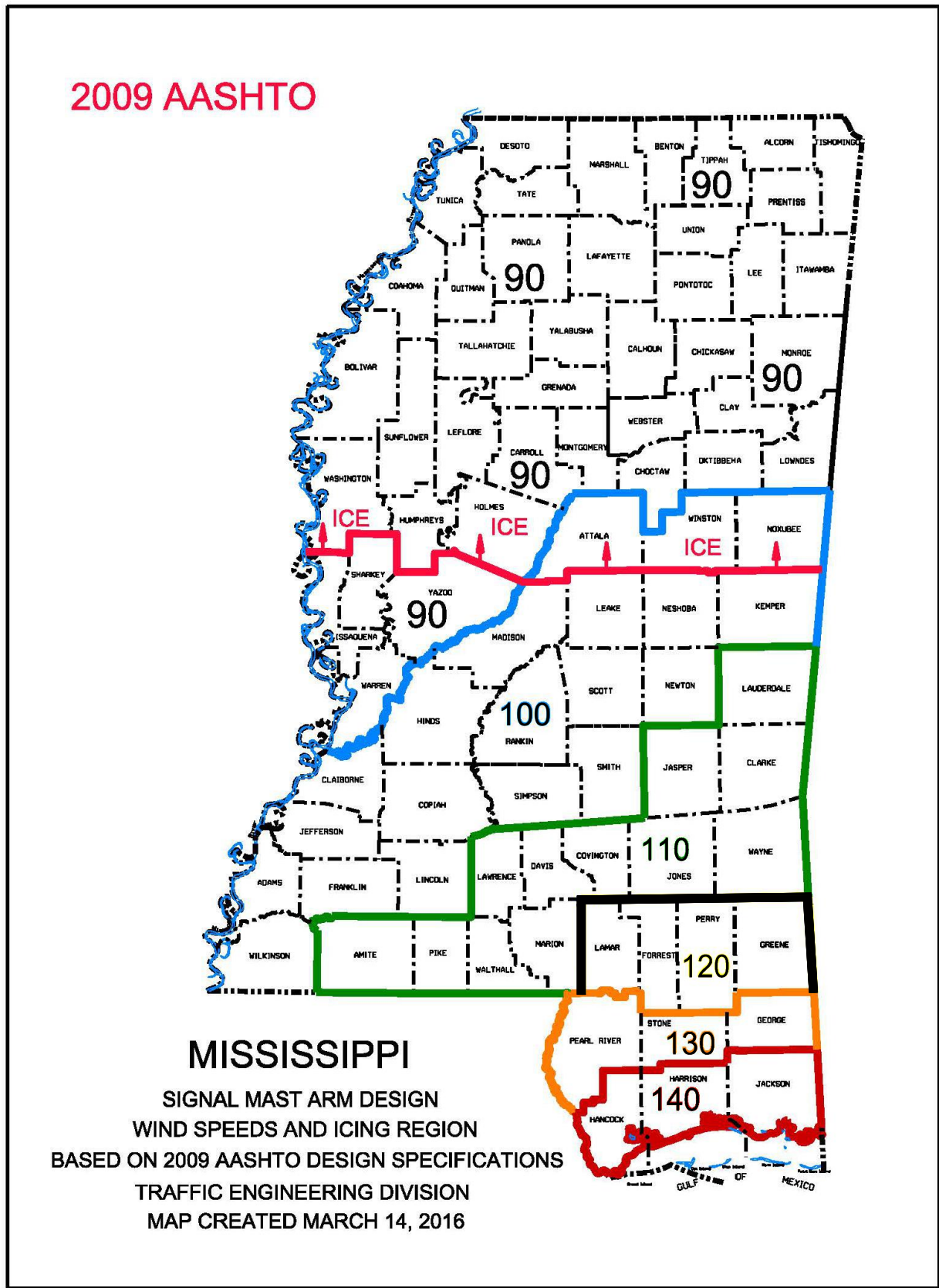
NOTES:

- ALUMINUM SIGN BLANKS ARE TO BE ALUMINUM ALLOY 5052-H38 AND 0.10\"/>
- THE SIGNS SHALL BE SUPPLIED WITH MOUNTING BRACKETS AND HARDWARE AS REQUIRED.
- NUMBER 12 PLATED JACK CHAINS SHALL BE ATTACHED TO THE BOTTOM OF ALL SPAN WIRE MOUNTED SIGNS.
- CHAINS SHALL BE ATTACHED TO SIGN AND TETHER USING "S" HOOKS.
- THE SIZE OF THE SIGN BLANK, LEGEND, BORDER AND THE COLOR OF THE BACKGROUND AND LEGEND IS TO CONFORM TO THE M.U.T.C.D. (LATEST EDITION).
- REFLECTIVE SHEETING FOR TRAFFIC SIGNS SHALL BE TYPE XI PRISMATIC RETROREFLECTIVE SHEETING.

SIGNAL PLAN LEGEND

	SIGNAL HEAD REQUIRED / TYPE
	PEDESTRIAN HEAD REQUIRED
	EXISTING SIGNAL HEAD
	SIGN
	VEHICLE LOOP DETECTOR
	QUADRAPOLE VEHICLE LOOP DETECTOR
	VEHICLE LOOP DETECTOR NUMBER
	WIRELESS MAGNETOMETER SENSOR
	BASE MOUNTED CABINET FOR SIGNAL CONTROLLER
	POLE MOUNTED CABINET FOR SIGNAL CONTROLLER
	EXISTING POLE
	POLE REQUIRED
	NEW PEDESTAL POLE
	MAST ARM POLE REQUIRED
	EXISTING PULLBOX
	PULLBOX REQUIRED (TYPE SPECIFIED ON PLAN SHEETS)
	RADAR DETECTOR (RD)
	VIDEO DETECTOR (VD)
	MULTI SENSOR DETECTOR (MS)
	OPTICAL DETECTOR UNIT
	CONDUIT
	ROLL PIPE
	LUMINAIRE
	DECORATIVE LUMINAIRE
	GROUND MOUNTED PEDESTAL SERVICE PANEL
	RADIO INTERCONNECT ANTENNA
	TWO-WAY WIRELESS ANTENNA
	WIRELESS REPEATER
	PTZ / FIXED CAMERA
	P.B. PUSH BUTTON
	S.C. SHIELDED CABLE
	POW POWER CABLE
	LUM LUMINAIRE POWER CABLE
	ODC OPTICAL DETECTOR CABLE
	8c NUMBER OF CONDUCTORS
	I.C. INTERCONNECT CABLE
	RAD RADIO COMMUNICATIONS CABLE
	FO FIBER OPTIC CABLE (72 SM)
	FO DROP FIBER DROP CABLE (12 SM)
	DC DETECTION CABLE
	STOP BAR DETECTION ZONE
	ADVANCED DETECTION ZONE

WIND SPEEDS AND ICING REGION MAP



2009/2013 AASHTO WIND LOAD LIST BY COUNTY

COUNTY	BASIC WIND SPEED MPH	ICE LOADING REQD
Adams	100	NO
Alcorn	90	YES
Amite	110	NO
Attala	100	YES
Benton	90	YES
Bolivar	90	YES
Calhoun	90	YES
Carroll	90	YES
Chickasaw	90	YES
Choctaw	90	YES
Claiborne	100	NO
Clarke	110	NO
Clay	90	YES
Coahoma	90	YES
Copiah	90	NO
Covington	110	NO
DeSoto	90	YES
Forrest	120	NO
Franklin	100	NO
George	130	NO
Greene	120	NO
Grenada	90	YES
Hancock	140	NO
Harrison	140	NO
Hinds	100	NO
Holmes	90	YES
Humphreys	90	YES
Issaquena	90	NO
Itawamba	90	YES
Jackson	140	NO
Jasper	110	NO
Jefferson	100	NO

COUNTY	BASIC WIND SPEED MPH	ICE LOADING REQD
Jefferson Davis	110	NO
Jones	110	NO
Kemper	100	NO
Lafayette	90	YES
Lamar	120	NO
Lauderdale	110	NO
Lawrence	110	NO
Leake	100	NO
Lee	90	YES
Leflore	90	YES
Lincoln	100	NO
Lowndes	90	YES
Madison	100	NO
Marion	110	NO
Marshall	90	YES
Monroe	90	YES
Montgomery	90	YES
Neshoba	100	NO
Newton	100	NO
Noxubee	100	YES
Oktibbeha	90	YES
Panola	90	YES
Pearl River	130	NO
Perry	120	NO
Pike	110	NO
Pontotoc	90	YES
Prentiss	90	YES
Quitman	90	YES
Rankin	100	NO
Scott	100	NO
Sharkey	90	NO
Simpson	100	NO
Smith	100	NO
Stone	130	NO
Sunflower	90	YES
Tallahatchie	90	YES
Tate	90	YES
Tippah	90	YES
Tishomingo	90	YES
Tunica	90	YES
Union	90	YES
Walthall	110	NO
Warren	90	NO
Washington	90	YES
Wayne	110	NO
Webster	90	YES
Wilkinson	100	NO
Winston	100	YES
Yalobusha	90	YES
Yazoo	90	NO

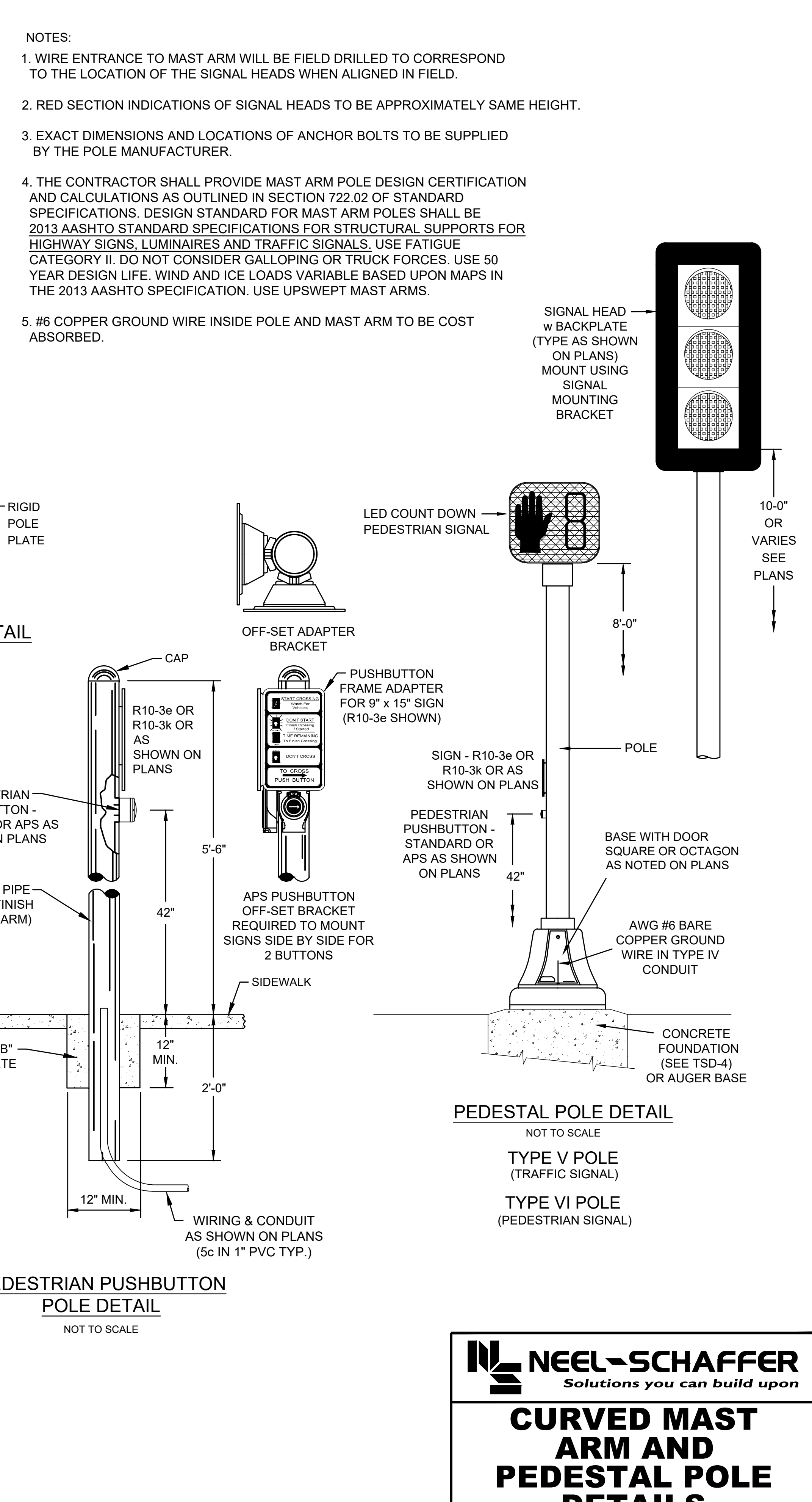
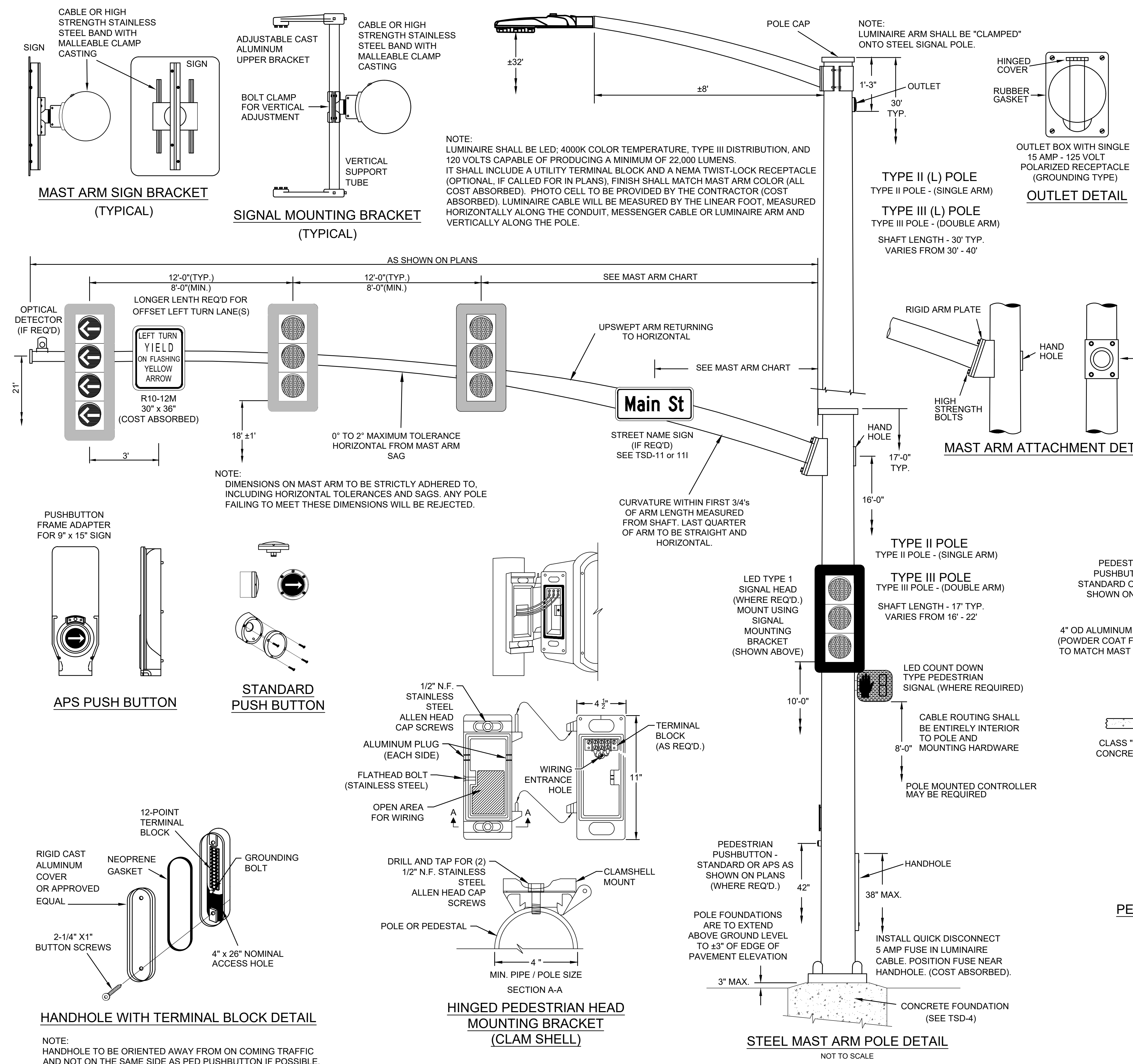


TRAFFIC SIGNAL HEADS, TRAFFIC SIGNAL SIGNS AND WIND SPEEDS

WORKING NUMBER:
TSD-2

DRAWING NUMBER:
21

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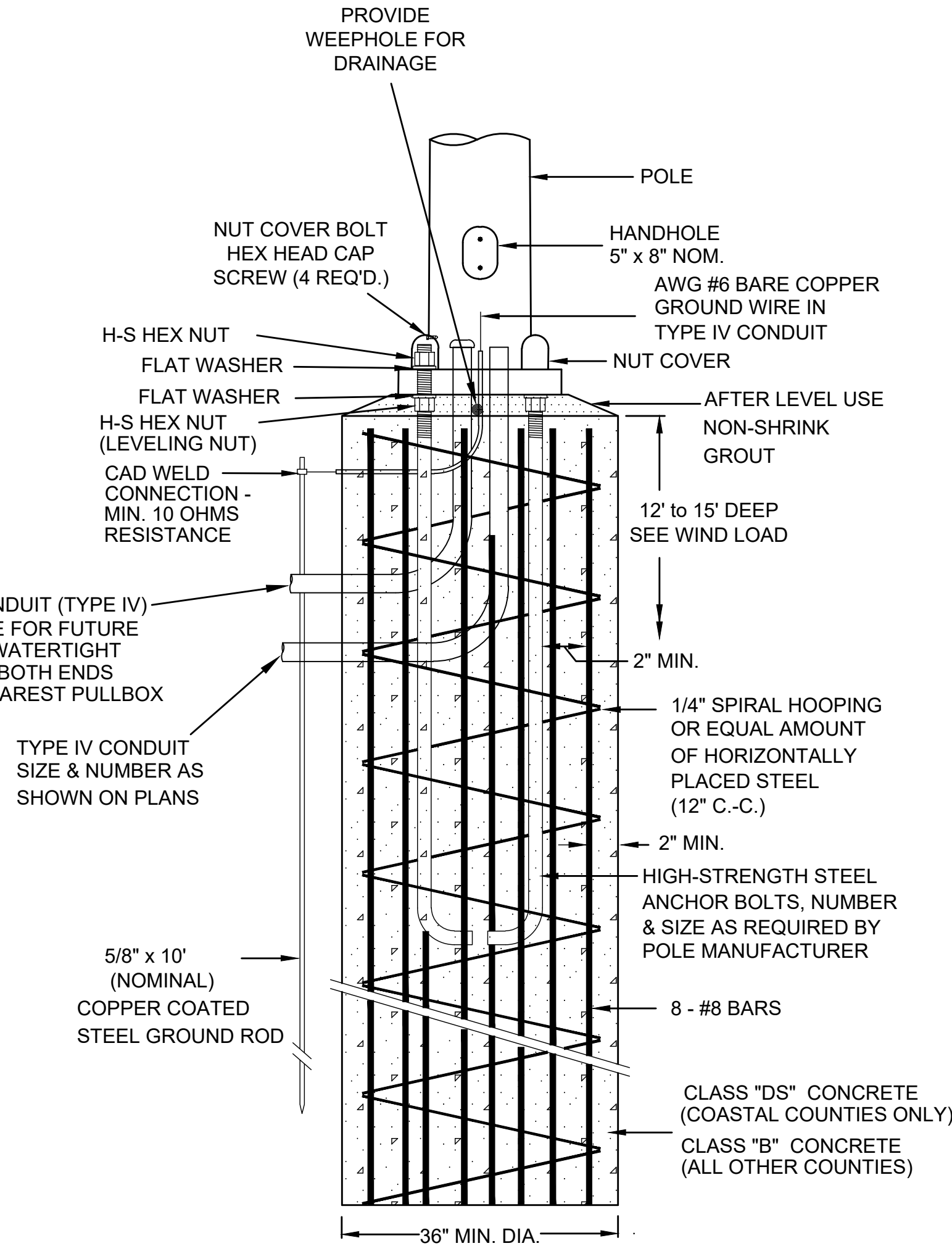


NEEL-SCHAFER
Solutions you can build upon

CURVED MAST ARM AND PEDESTAL POLE DETAILS

WORKING NUMBER: TSD-3C	DRAWING NUMBER: 22
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TYPE I POLE FOUNDATION DETAIL

NOT TO SCALE

WIND SPEED DETERMINES SHAFT DIAMETER AND DEPTH:

FOUNDATION CHART

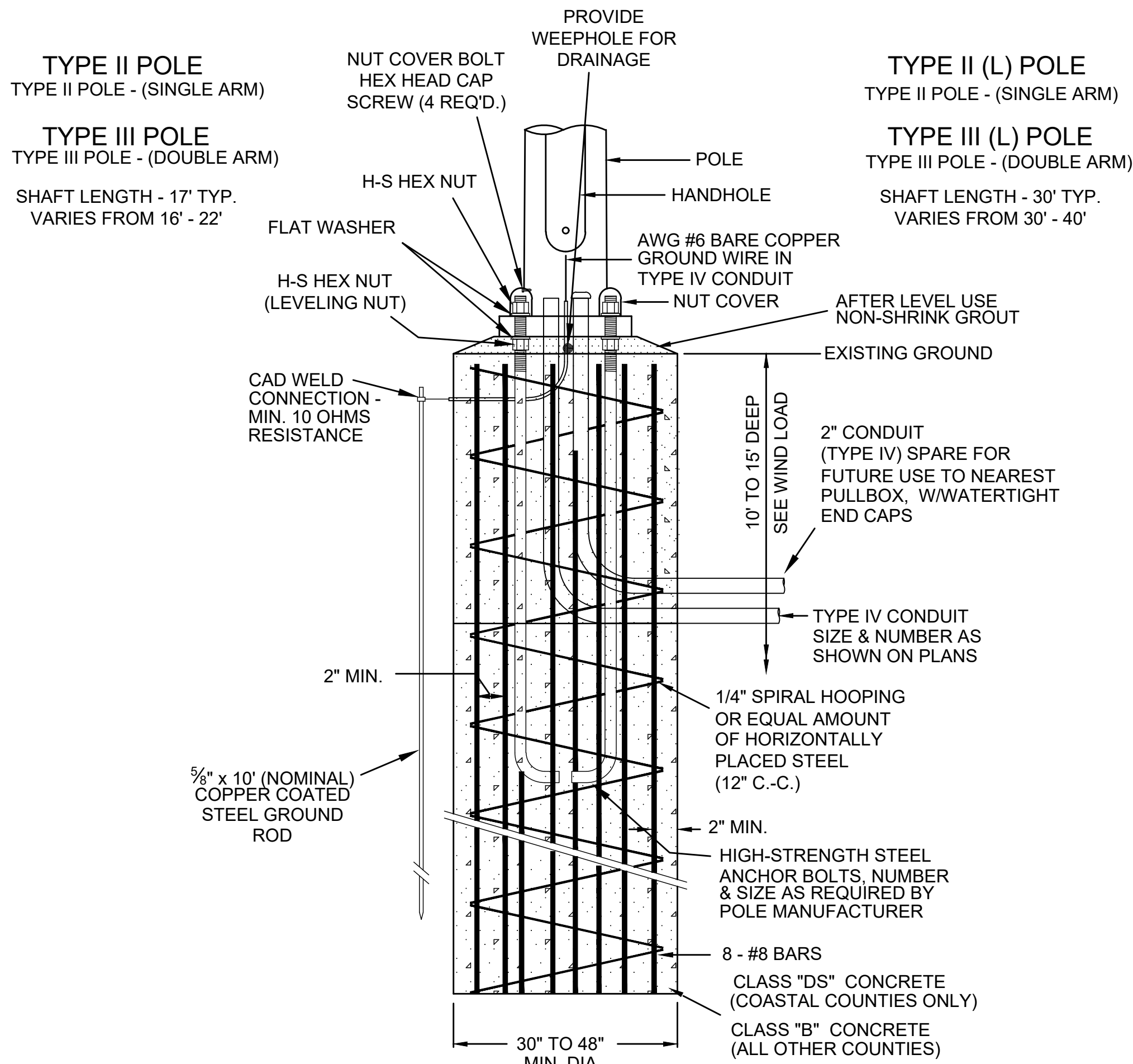
WIND SPEED	POLE TYPE	DIA. (IN.)	DEPTH (FT.)	CONCRETE	SLIP CASING
90 MPH	I	36"	12'	B	NO
100 - 130 MPH	I	36"	15'	B	NO
140 MPH	I	36"	15'	DS	YES

*SEE WIND SPEED MAP IN 2013 AASHTO GUIDELINES ON TSD-2.

FOUNDATION GENERAL NOTES

1. THE CONTRACTOR SHALL STAKE THE LOCATION OF EACH POLE FOUNDATION AND NOTIFY THE PROJECT ENGINEER FOR CONCURRENCE IN THE LOCATION BEFORE PROCEEDING WITH THE PURCHASE OF THE POLE.
2. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE MANUFACTURER. ANY FOUNDATIONS FAILING TO MEET MINIMUM DIMENSIONS WILL BE REJECTED.
3. DRY SHAFT EXCAVATION MUST MEET REQUIREMENTS OF SECTION 803.03.2.3.2. IF GROUNDWATER OR HOLE INSTABILITY IS ENCOUNTERED, SLIP CASING AND 10' TREMIE SHALL BE REQUIRED.
4. GROUND RODS TO BE DRIVEN UNTIL AT LEAST 12" BELOW FINISHED GROUND. SEE TRAFFIC SIGNAL GROUNDING DETAILS (TSD-8) FOR ADDITIONAL INFORMATION.
5. POLE FOUNDATIONS OF THE SIZE SPECIFIED WILL BE MEASURED BY THE CUBIC YARD, WHICH MEASUREMENT SHALL BE THE AREA BOUNDED BY THE VERTICAL PLANES OF THE NEAT LINES OF THE FOUNDATION. FIELD CONDITIONS MAY REQUIRE TALLER FOUNDATIONS THAN SPECIFIED IN THE PLANS IN WHICH THE CONTRACTOR SHALL BE PAID FOR ADDITIONAL CONCRETE PER CUBIC YARD AS BID IN THE POLE FOUNDATIONS PAY ITEM.

6. THE FINISHED TOP SURFACE OF EACH FOUNDATION SHALL BE ±3 INCHES FROM THE PAVEMENT EDGE ELEVATION AT THE FOUNDATION LOCATION. WHERE FOUNDATIONS ARE CONSTRUCTED IN AREAS WHERE THE PAVEMENT EDGE ELEVATION AND SHOULDER EDGE ELEVATION DIFFER MORE THAN TWELVE (12) INCHES, TALLER FOUNDATIONS MAY BE USED BUT MUST BE APPROVED BY THE ENGINEER. TALLER POLES SHOULD BE EVALUATED TO MINIMIZE EXPOSED FOUNDATION.
7. WHEN POLES ARE SET WITHIN OR ON EDGE OF SIDEWALK, POLES SHALL BE AS FLUSH AS POSSIBLE WITH SIDEWALK GRADE. THE FOOTPRINT OF THE NON-SHRINK GROUT PAD MAY BE REDUCED IN SIZE TO PROVIDE ADEQUATE CLEARANCE FOR SIDEWALK AND/OR ACCESSIBILITY CONSIDERATIONS.
8. SLIP CASINGS OF THE SIZE SPECIFIED WILL BE MEASURED BY THE LINEAR FOOT FROM THE GROUND ELEVATION TO THE BOTTOM OF THE STRATA NEEDING TO BE CASED.



STEEL MAST ARM POLE FOUNDATION DETAIL

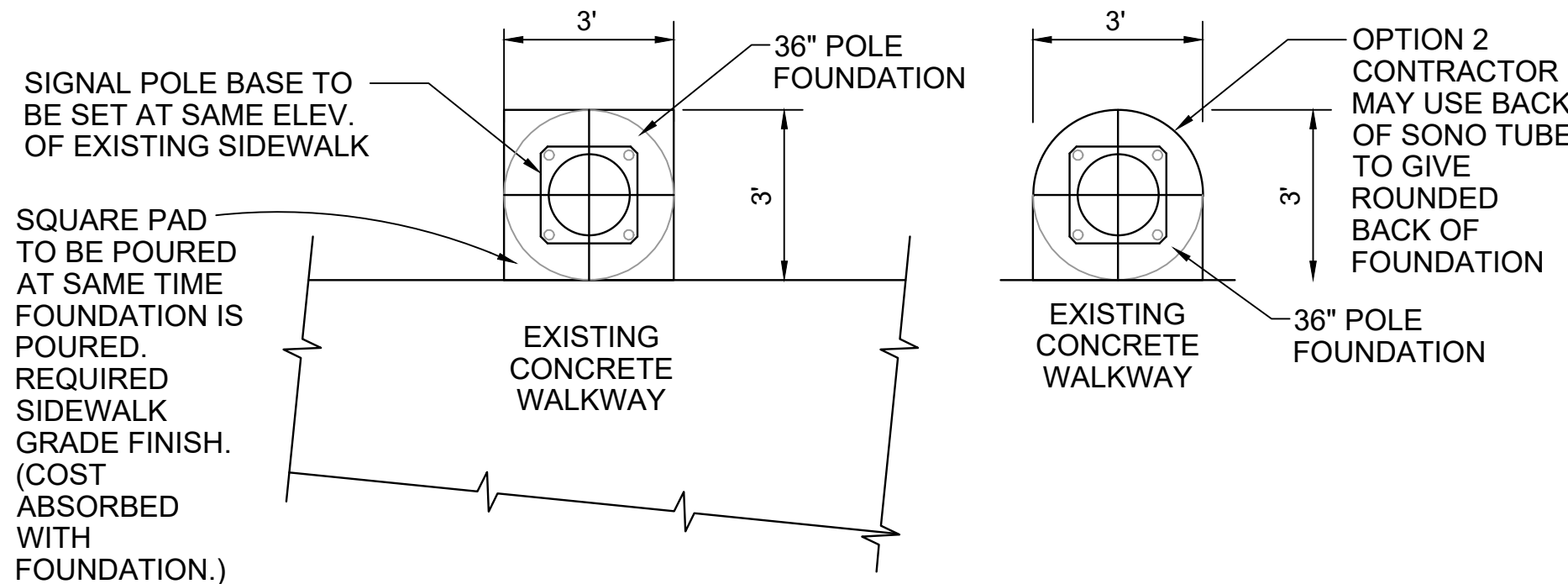
NOT TO SCALE

WIND SPEED DETERMINES SHAFT DIAMETER AND DEPTH:

FOUNDATION CHART

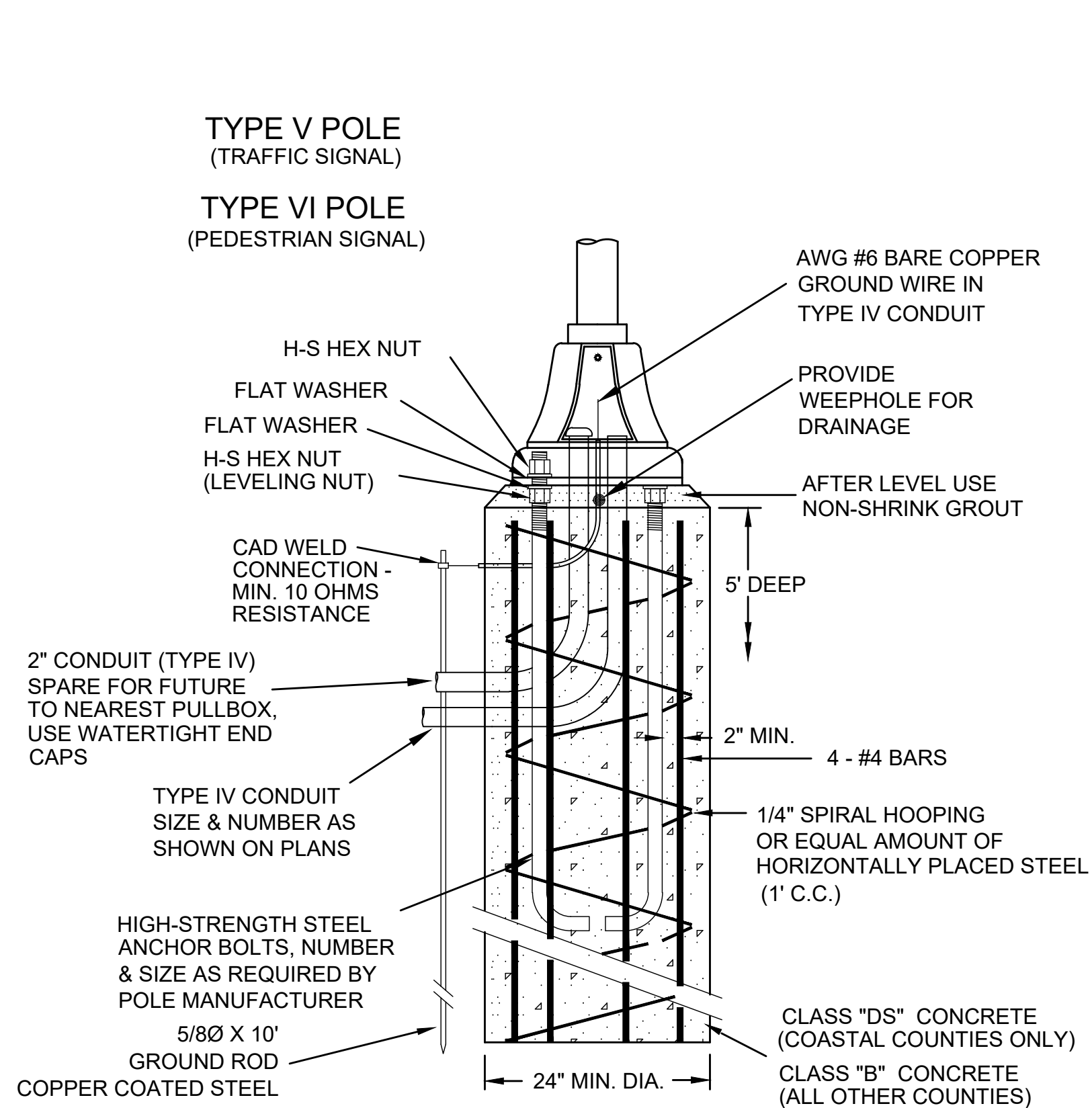
WIND SPEED	POLE TYPE	ARM LENGTH	DIA. (IN.)	DEPTH (FT.)	CONCRETE	SLIP CASING
90 MPH	II, II (L)	5' - 45'	30"	10'	B	NO
90 MPH	II, II (L)	50' - 80'	36"	12'	B	NO
90 MPH	III, III (L)	5' - 80'	36"	15'	B	NO
90 MPH	II, II (L), III, III (L)	85' & OVER	48"	15'	B	NO
100 - 130 MPH	II, II (L), III, III (L)	5' - 80'	36"	15'	B	NO
100 - 130 MPH	II, II (L), III, III (L)	85' & OVER	48"	15'	B	NO
140 MPH	II, II (L), III, III (L)	5' - 80'	36"	15'	DS	YES
140 MPH	II, II (L), III, III (L)	85' & OVER	48"	15'	DS	YES

*SEE WIND SPEED MAP IN 2013 AASHTO GUIDELINES ON TSD-2.



SIGNAL POLE ADJACENT TO EXISTING SIDEWALK DETAIL

NOT TO SCALE



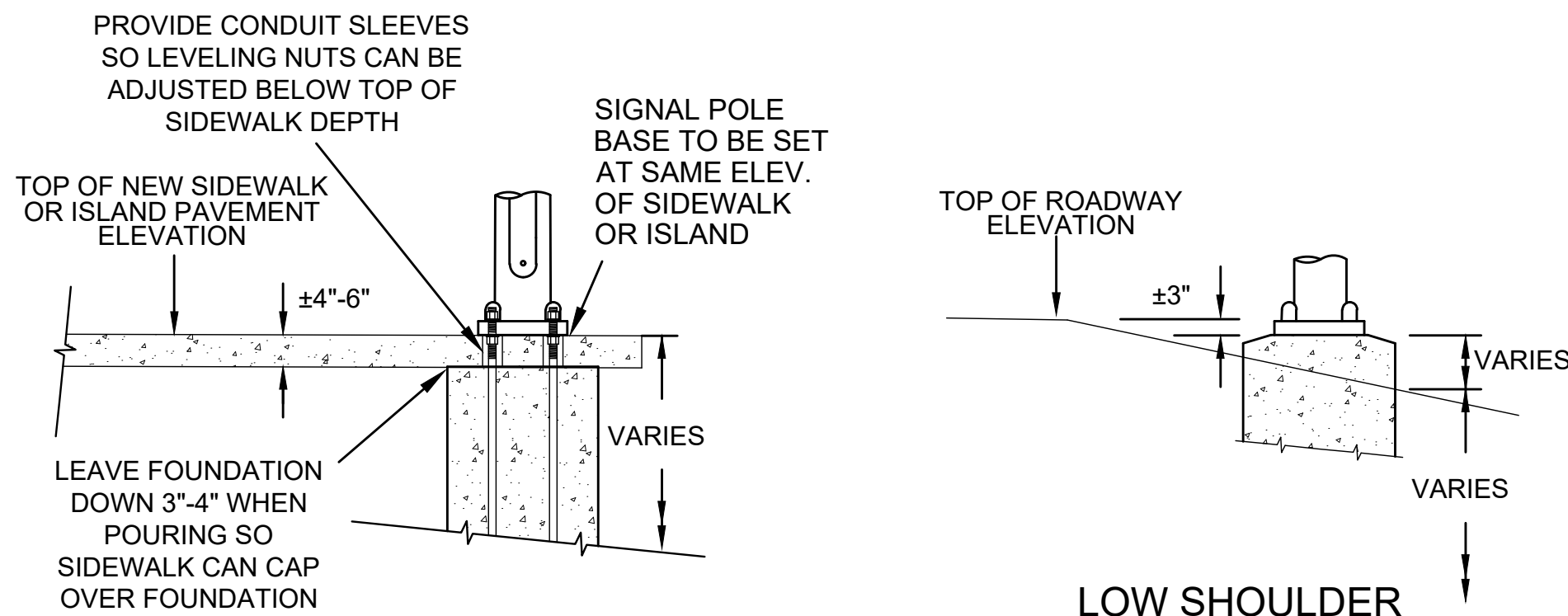
PEDESTAL POLE FOUNDATION DETAIL

NOT TO SCALE

FOUNDATION CHART

WIND SPEED	POLE TYPE	DIA. (IN.)	DEPTH (FT.)	CONCRETE	SLIP CASING
90 -130 MPH	V, VI	24"	5'	B	NO
140 MPH	V, VI	24"	5'	DS	NO

*SEE WIND SPEED MAP IN 2013 AASHTO GUIDELINES ON TSD-2.



FOUNDATION WITHIN SIDEWALK DETAIL

NOT TO SCALE

LOW SHOULDER FOUNDATION DETAIL

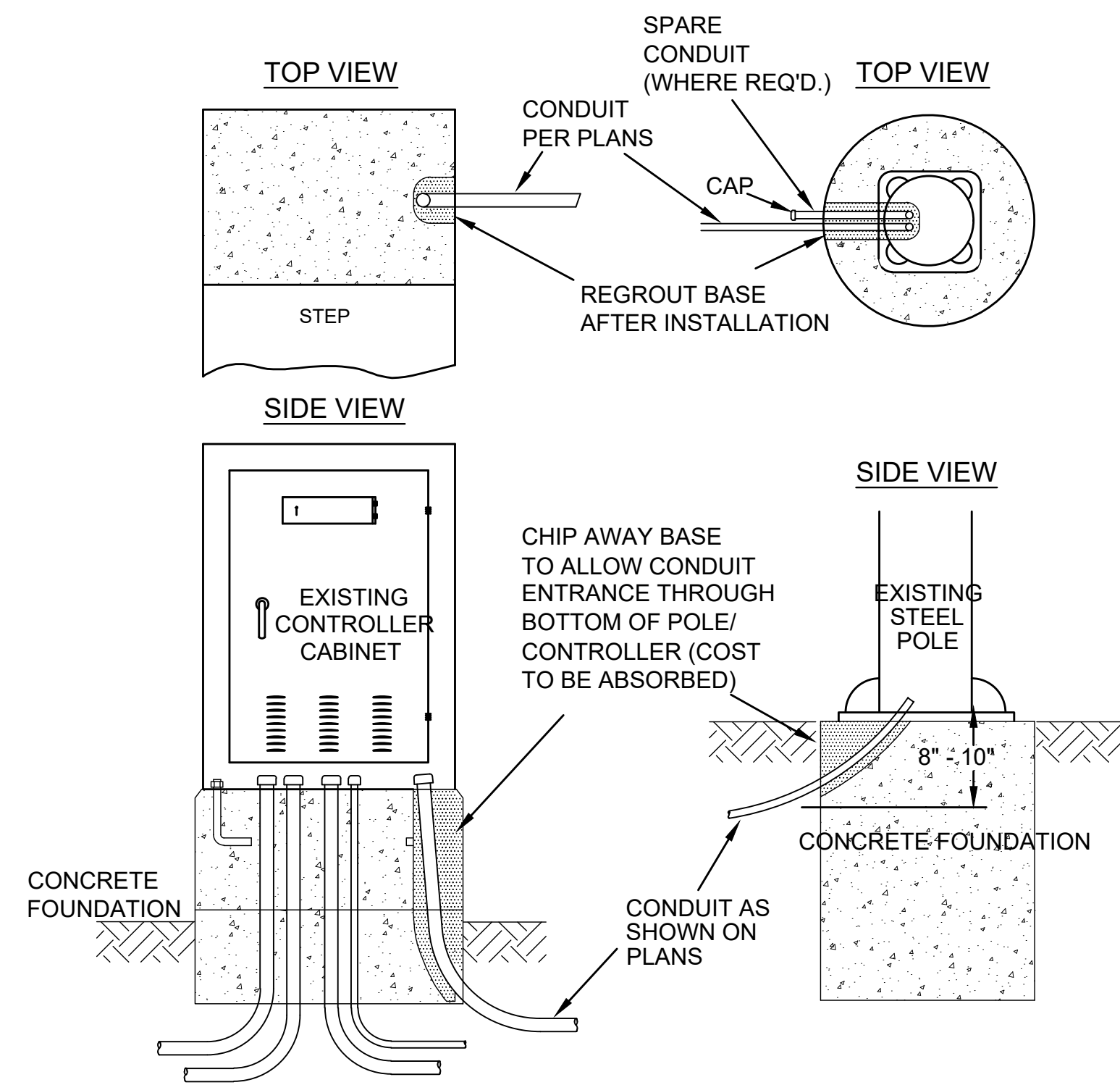
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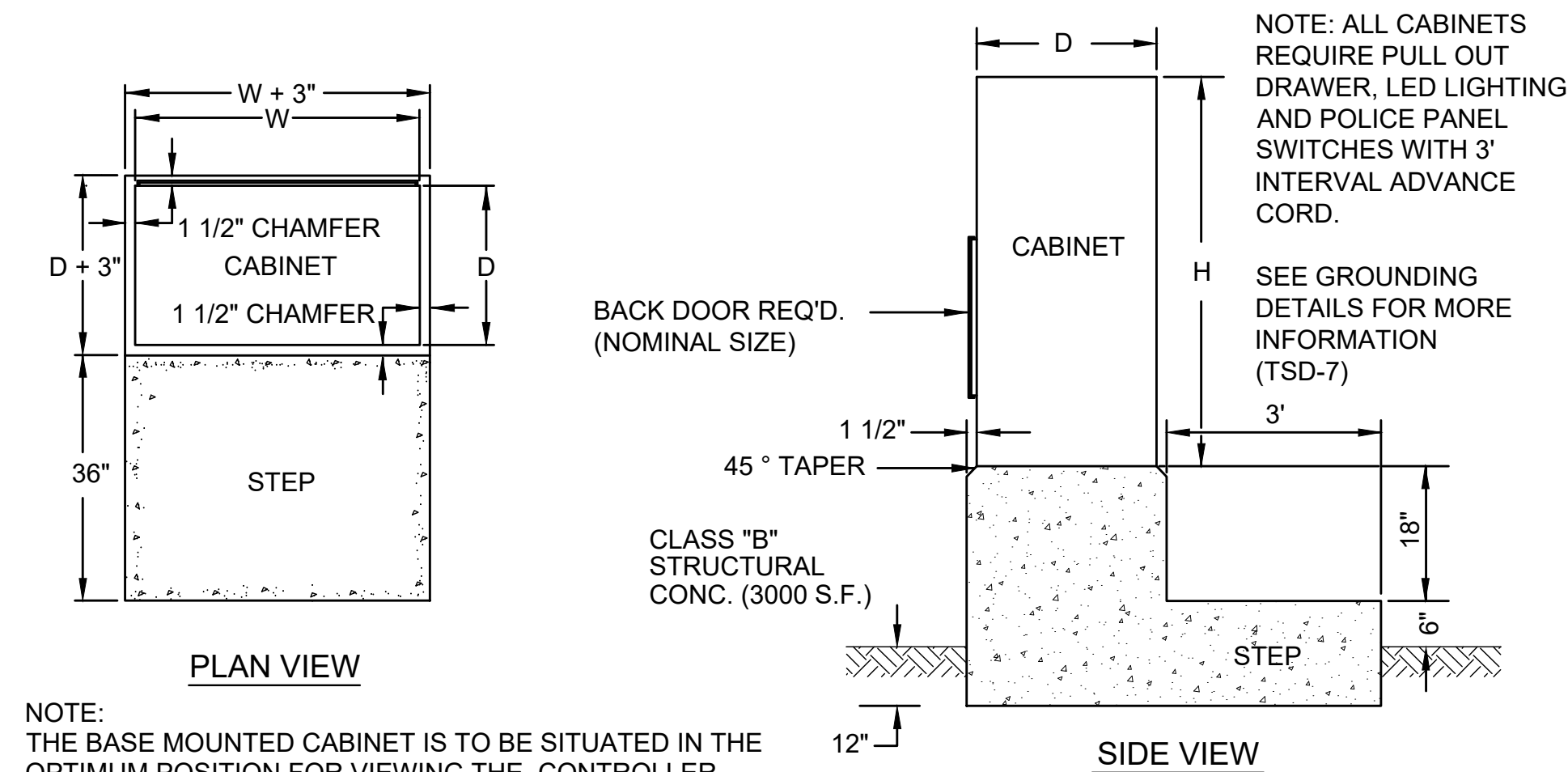
SIGNAL POLE AND PEDESTAL POLE FOUNDATION DETAILS

WORKING NUMBER:
TSD-4

DRAWING NUMBER:
23



**CONDUIT ENTRANCE DETAIL
(EXISTING CABINET OR POLE)**

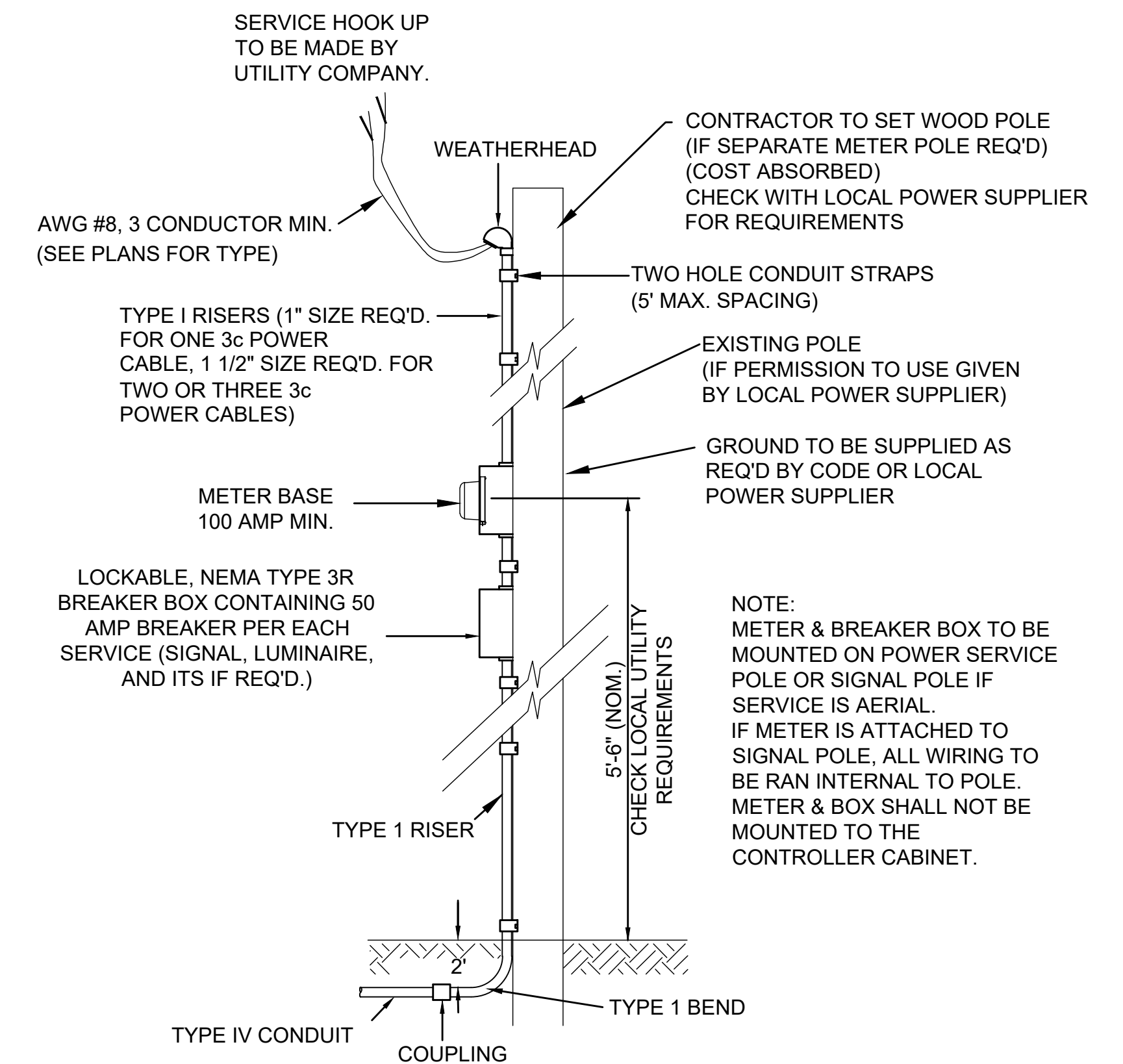


NOTE: THE BASE MOUNTED CABINET IS TO BE SITUATED IN THE OPTIMUM POSITION FOR VIEWING THE CONTROLLER OPERATION AND THE ON STREET SIGNAL DISPLAYS SIMULTANEOUSLY. THIS POSITION IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

CABINET INFORMATION

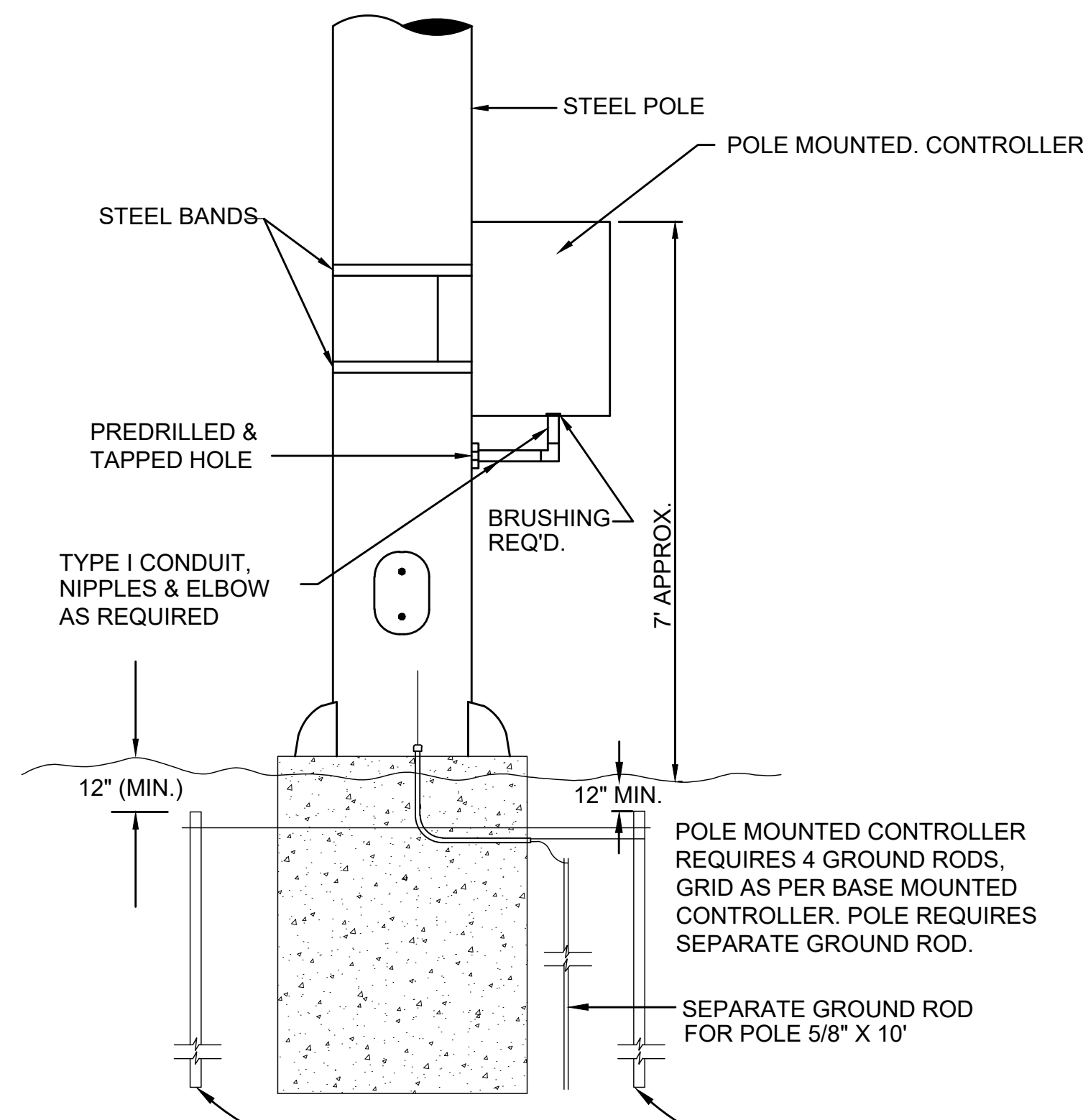
TYPE	SIZE (MIN.)	LOAD BAY
TYPE I CABINET	51"H x 30"W x 18"D	8 POSITION
TYPE II CABINET	51"H x 36"W x 18"D	12 POSITION
TYPE III CABINET	56"H x 44"W x 27"D	16 POSITION
TYPE IV CABINET	56"H x 57"W x 29"D	16 POSITION
TYPE V CABINET	77"H x 44"W x 27"D	16 POSITION

TYPE I AND II MAY BE POLE OR BASE MOUNTED, ALL OTHERS ARE BASE MOUNT. CONTRACTOR TO VERIFY CABINET SIZE BEFORE POURING FOUNDATION.



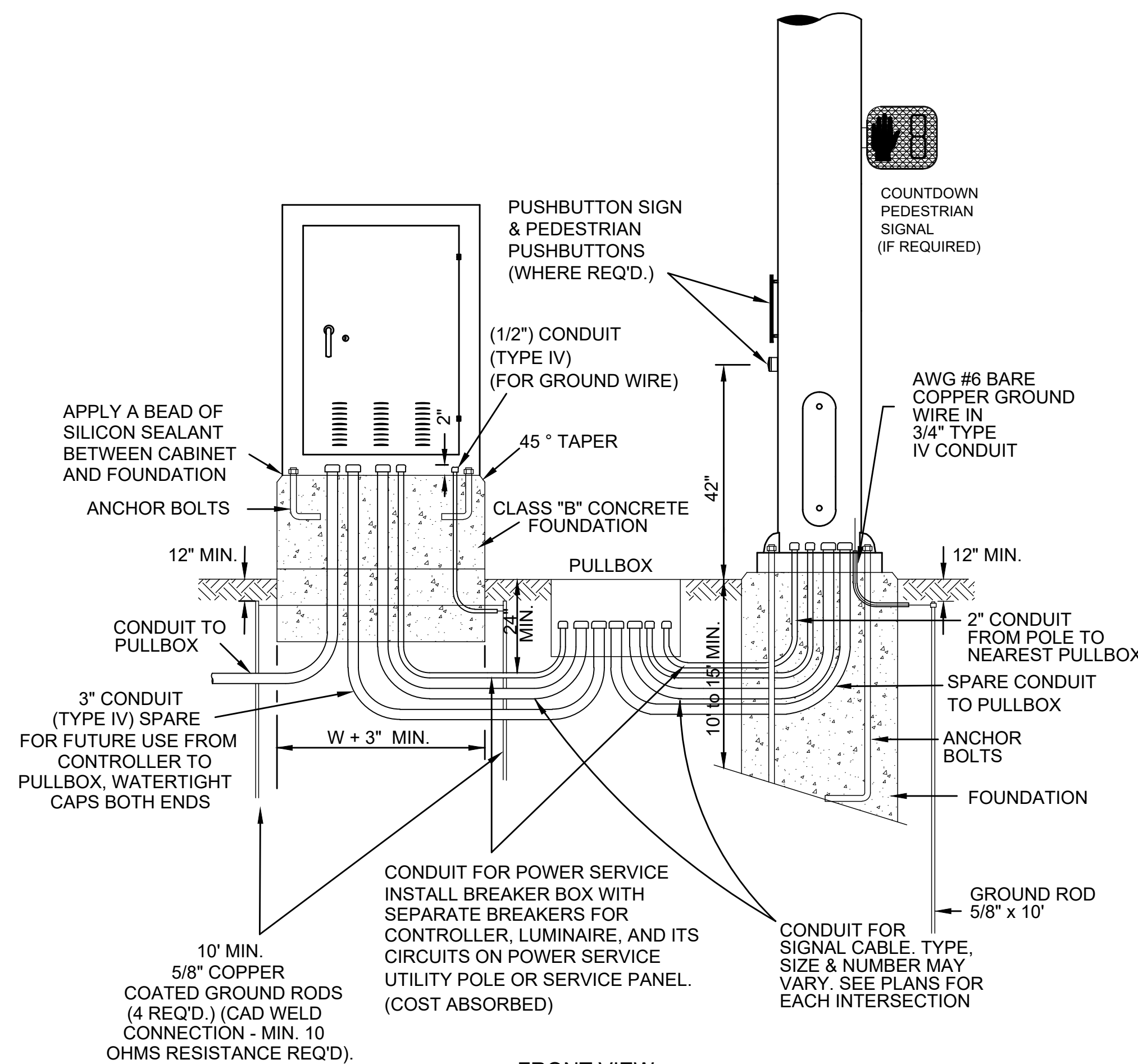
POWER SERVICE DETAIL

TO BE USED FOR SERVICE DOWN POLE OR WHEN METER IS SET ON POLE. SEE TSD-7 FOR POWER SERVICE PEDESTAL DETAILS.



**TYPICAL DETAIL FOR
POLE MOUNTED CONTROLLER**

NOT TO SCALE



FRONT VIEW

TYPICAL DETAIL OF BASE FOR CONTROLLER EQUIPMENT CABINET

NOT TO SCALE

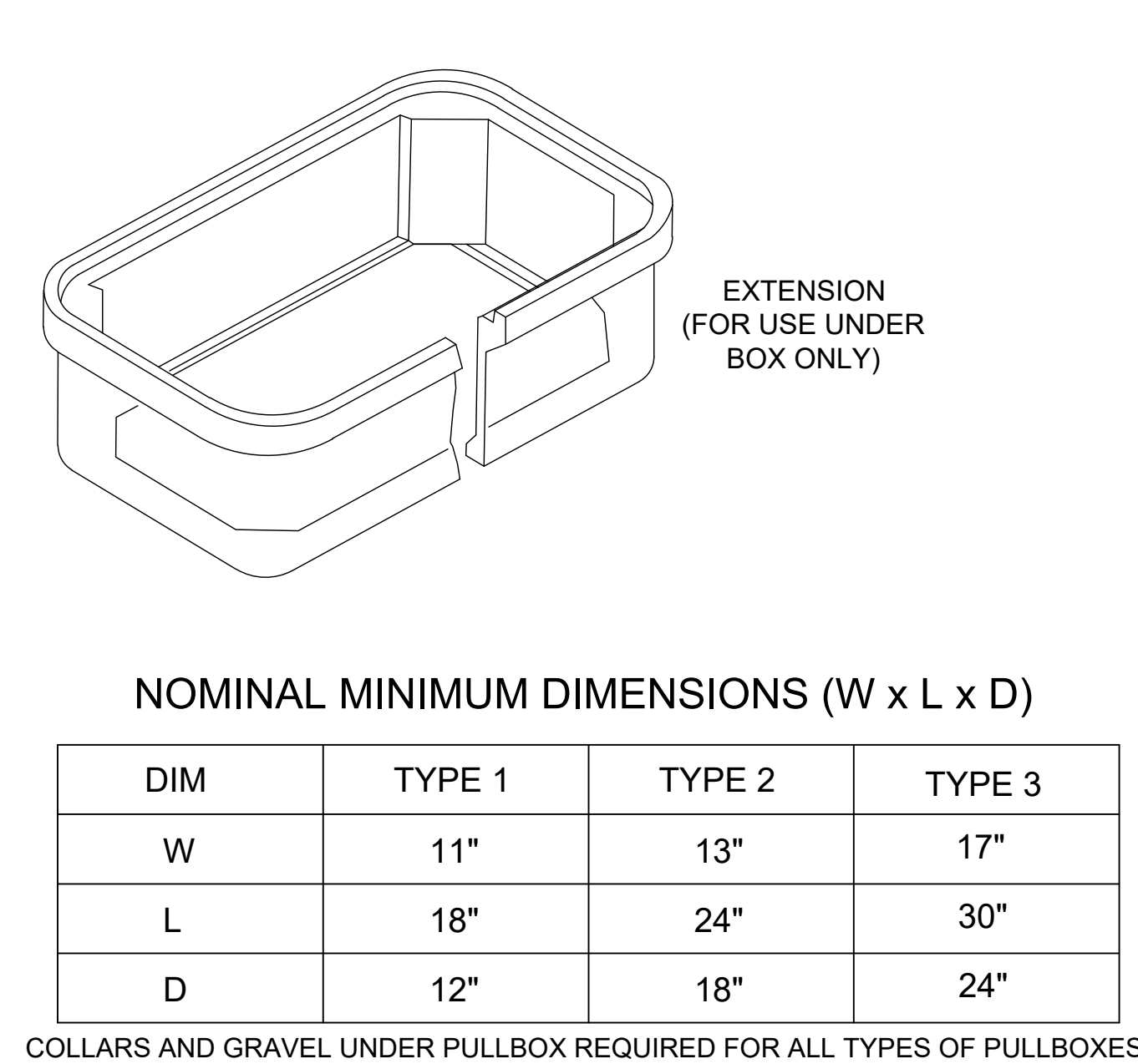
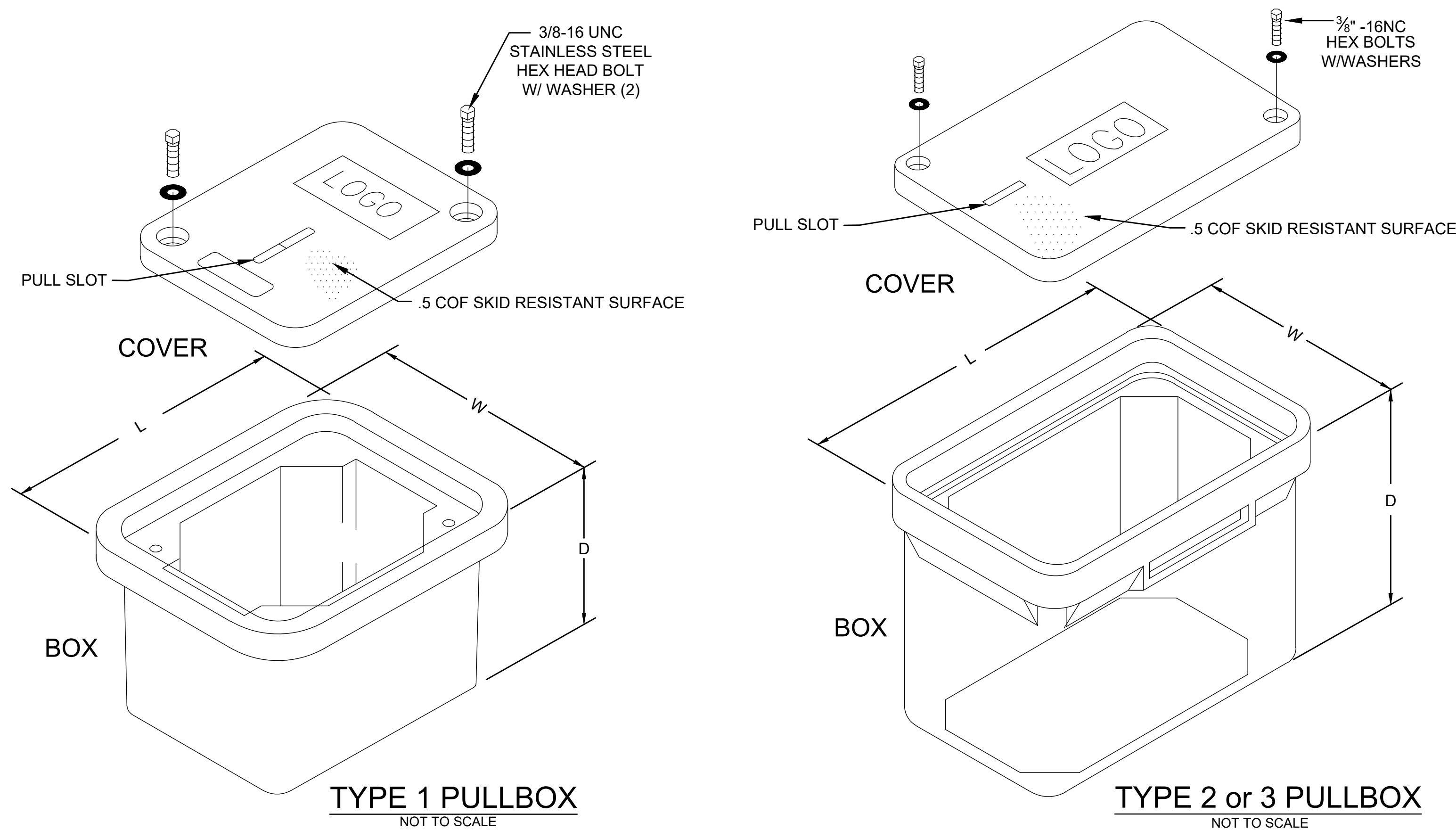
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CONTROLLER CABINET AND POWER SERVICE DETAILS

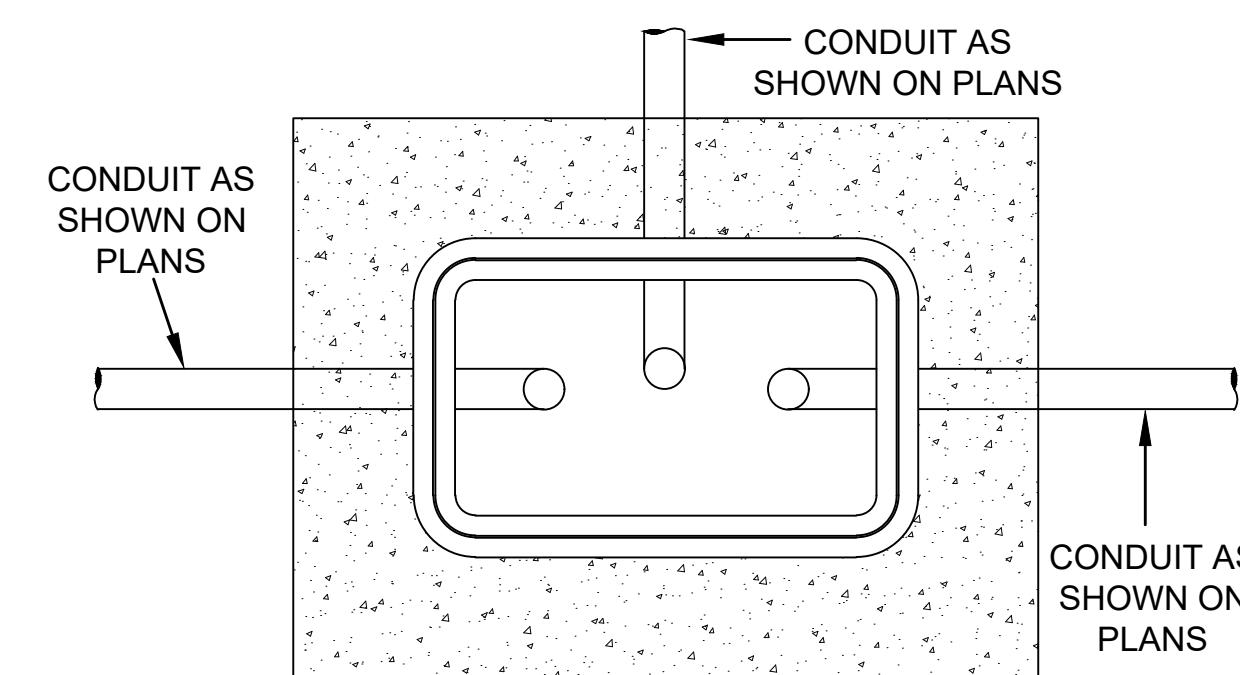
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DRAWING NUMBER: 24

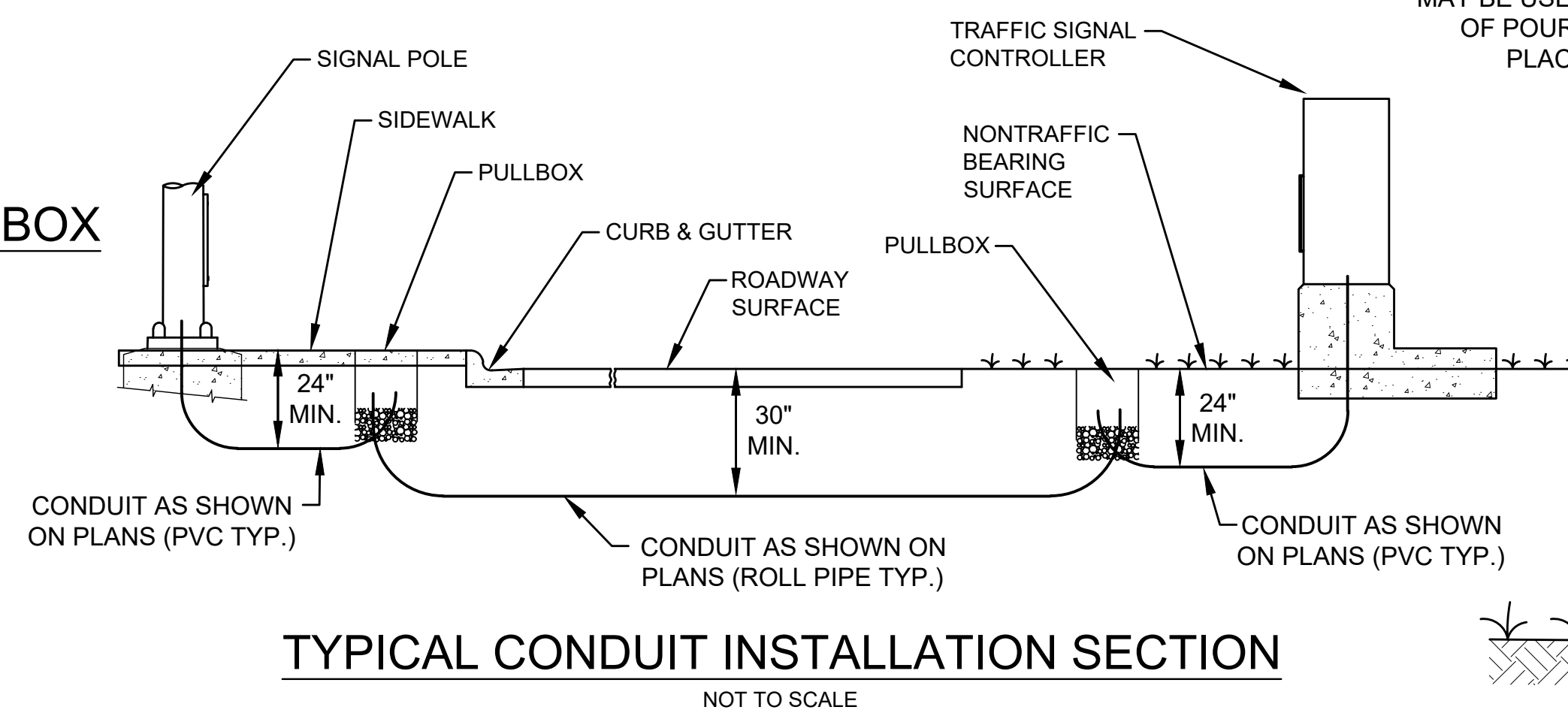
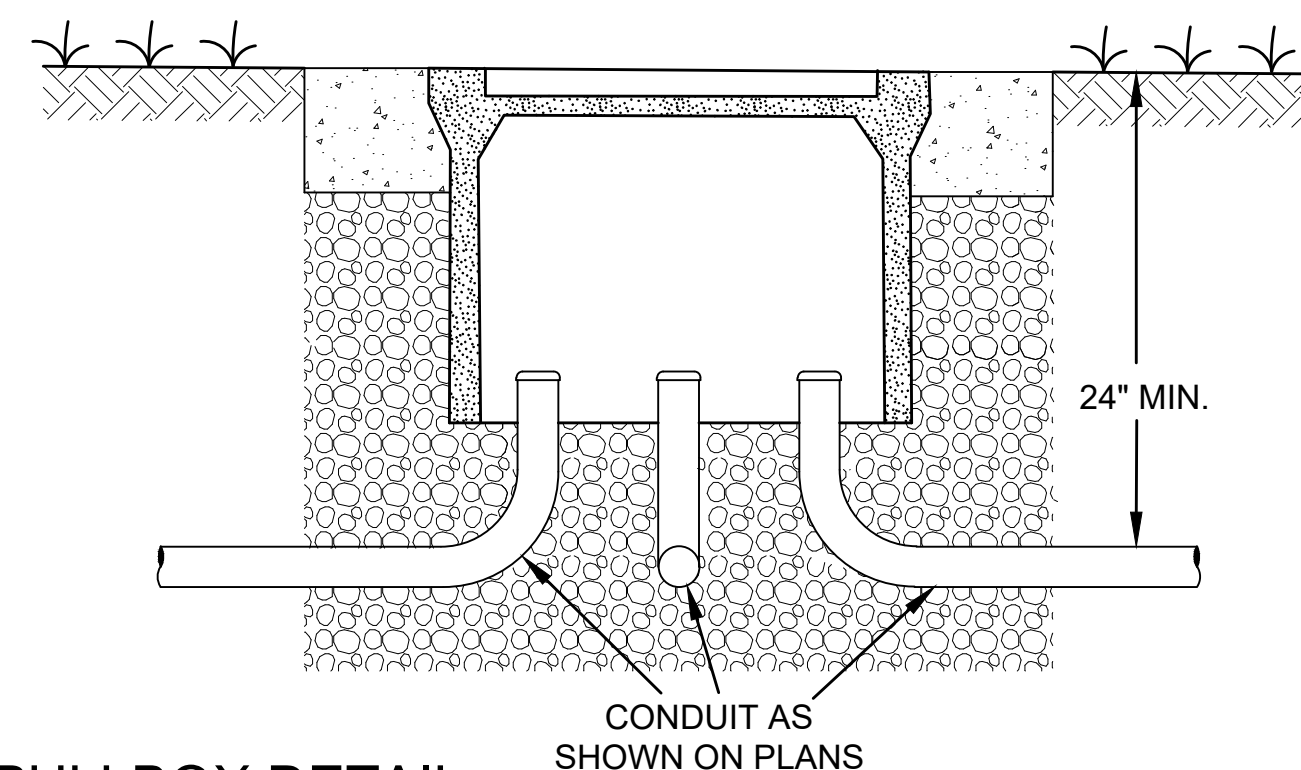
5/27/2022 1:48 PM c:\16000\Nottelburg\16258 fig sidewalks_projects\Neel-Schaffer\Draw & 17th.dwg ns 4-1-22.dwg



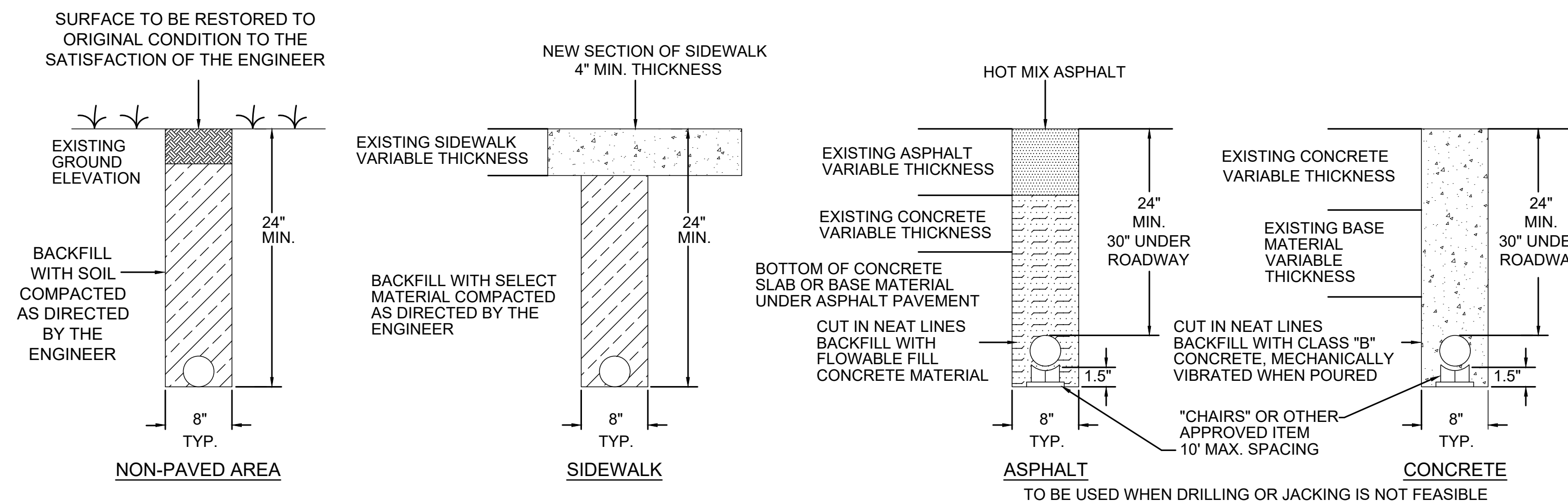
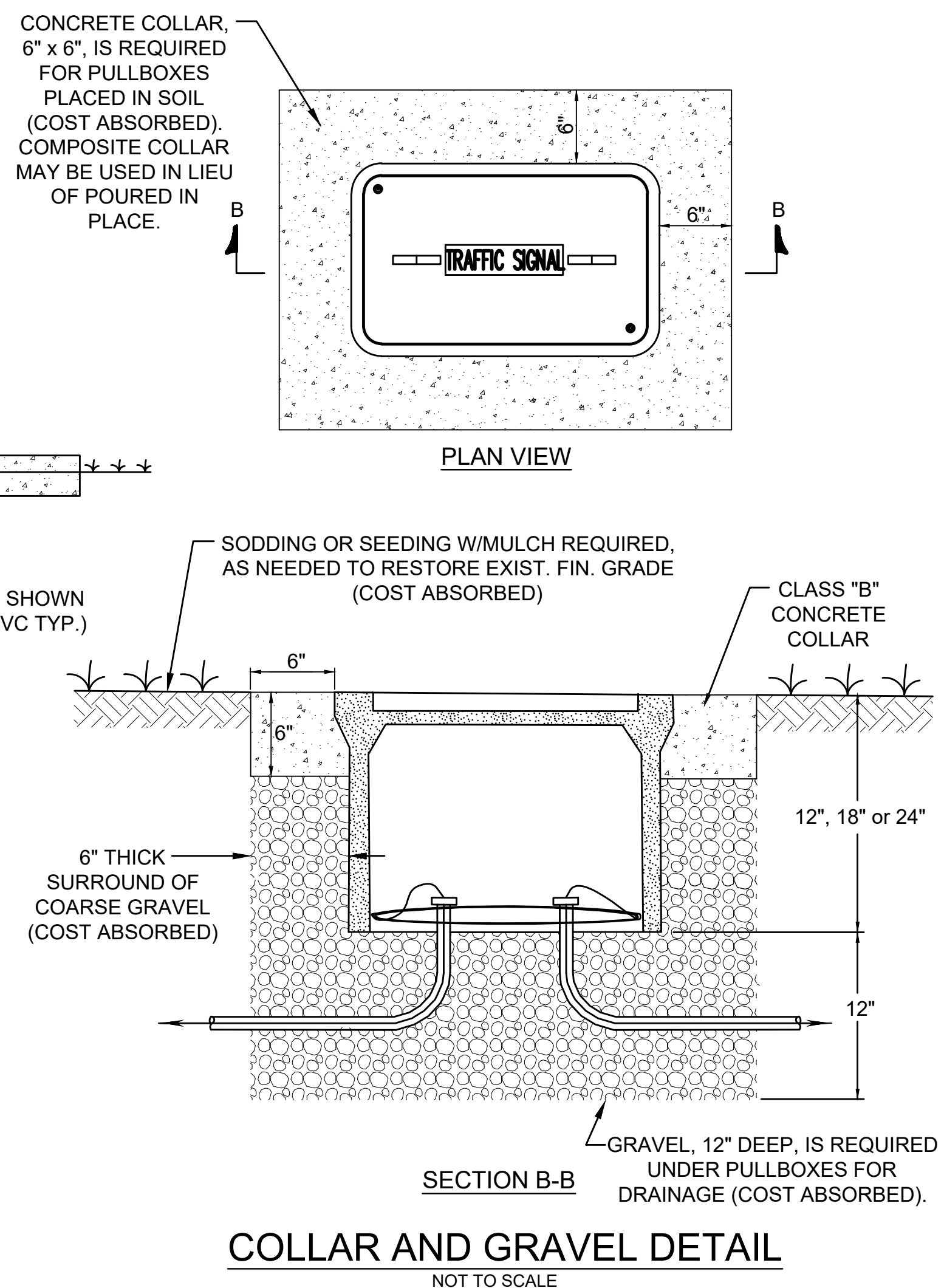
- PULLBOX NOTES:
1. GRADE LEVEL PULL BOX, ENCLOSURES, STRUCTURAL JUNCTION BOXES AND COVERS SHALL MEET THE REQUIREMENTS OF SUBSECTION 722.06 OF SPECS. ALL PULLBOXES SHALL BE TIER 22 = 22,500-POUND DESIGN LOAD, 33,750-POUND TEST LOAD.
 2. IN GENERAL, TYPE 2 BOXES ARE USED FOR CORNERS WHERE SIGNAL CONDUIT UNDER ROADWAY AND TO SIGNAL POLE MEET, TYPE 3 BOXES ARE USED AT CONTROLLER CORNER WHERE ADDITIONAL ROOM FOR EXTRA CONDUIT IS REQUIRED.
 3. LOGOS SHALL READ TRAFFIC, SIGNAL, OR TRAFFIC SIGNAL.
 4. PULLBOXES SHALL NOT BE LOCATED IN THE ROADWAY, SIDEWALK, DRIVEWAY OR OTHER PATHWAY SURFACES UNLESS SPECIFICALLY REQUIRED ON THE PLANS. THEY SHALL NOT BE LOCATED IN DRAINAGE COLLECTION AREAS AND LOCATIONS WHERE DRAINAGE RUNOFF OCCURS SHOULD BE AVOIDED WHENEVER POSSIBLE.
 5. THE FINAL GRADE OF PULLBOX TOP SHALL BE FLUSH WITH ADJACENT MATERIAL WHEN THEY MUST BE INSTALLED WITHIN SIDEWALKS, ISLANDS OR BARRIER WALLS. THE FINAL GRADE OF TOP LOCATED IN SOIL OR SODDED AREAS SHALL BE APPROXIMATELY ONE (1) INCH HIGHER THAN ADJACENT EARTH OR SODDED AREAS.



CONDUIT AT PULLBOX DETAIL
NOT TO SCALE



- CONDUIT NOTES:
1. TOP OF CONDUIT DEPTH SHALL BE A MINIMUM OF 24" UNLESS WHEN INSTALLED UNDER PAVED ROADWAY WHERE IT SHALL BE 30" MINIMUM DEPTH.
 2. CONDUIT BORED OR DRILLED UNDER RAILROAD SHALL BE 10' MIN. BELOW RR BED, CONDUIT BORED OR DRILLED UNDER STREAMS SHALL BE 5' MIN. BELOW STEAM BED. BORE LOGS WILL BE REQUIRED FOR EACH LOCATION.
 3. PULL TAPE SHALL BE INSTALLED INTO EACH EMPTY CONDUIT (COST ABSORBED).
 4. CONDUIT TO BE SEALED WITH DUCT SEALER ONCE CABLE IS INSTALLED. BLANK DUCT PLUGS SHALL BE INSTALLED IN EACH EMPTY CONDUIT.
 5. SAWCUT SIDEWALK AT EXISTING JOINTS AND REPLACE ENTIRE SECTION TO MATCH EXISTING MATERIAL. WHEN NEW SIDEWALK IS BEING CONSTRUCTED, CONDUIT, PULLBOX, AND POLE ARE TO BE INSTALLED BEFORE SIDEWALK IS POURED.
 6. TYPE I CONDUIT IS RIGID GALV. STEEL; TYPE IV CONDUIT IS PVC; FLEXIBLE CONDUIT AND ROLL PIPE ARE HDPE.
 7. ELECTRICAL SUBCONTRACTOR SHALL COORDINATE CONDUIT INSTALLATION WORK UNDER ROADWAY WITH ROADWAY CONSTRUCTION PHASING IN ORDER TO MINIMIZE JACKING.
 8. MATERIAL REMOVED THAT IS NOT SUITABLE FOR BACKFILL OR IS EXCESS SHALL BE DISPOSED OF BY THE CONTRACTOR (COST ABSORBED).
 9. CONDUIT WILL BE MEASURED PER LINEAR FEET TO THE NEAREST FOOT FROM CENTER TO CENTER OF PULL BOX AND/OR FOUNDATION. MEASUREMENT IN UNDERGROUND CONDUIT IS ONLY IN THE HORIZONTAL PLANE AND NO ADDITIONAL QUANTITY SHALL BE ADDED FOR CONDUIT DEPTH OR CHANGE IN ELEVATION OF THE CONDUIT. ANY ABOVE GROUND VERTICAL CONDUIT RUNS, AS INDICATED IN THE PLANS, SHALL BE MEASURED PER LINEAR FEET TO THE NEAREST FOOT.



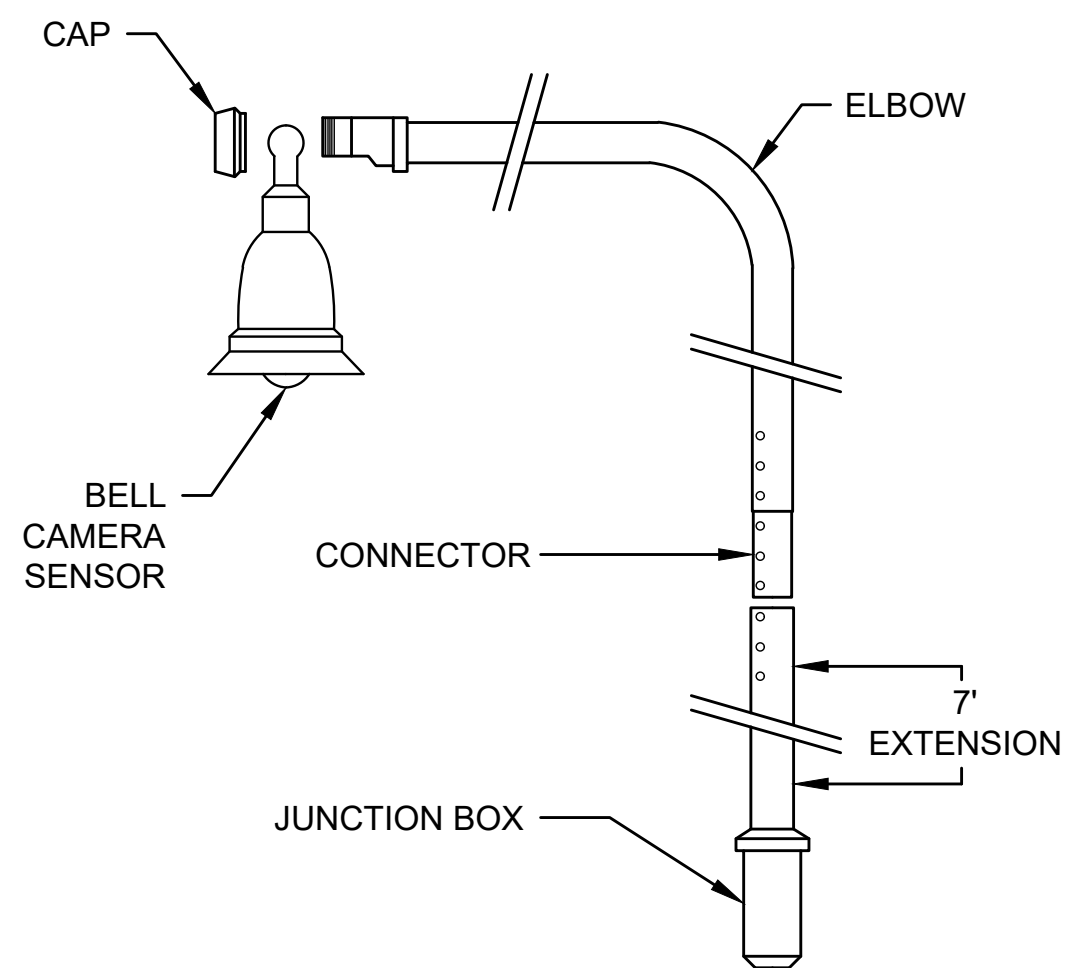
CONDUIT TRENCHING DETAIL
NOT TO SCALE

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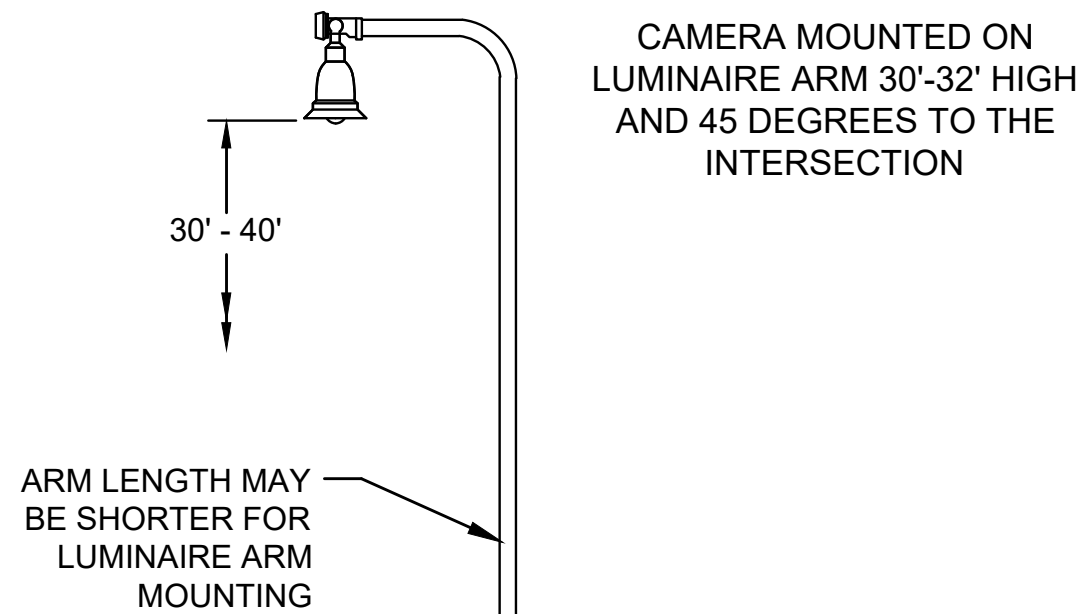
PULL BOX AND CONDUIT TRENCHING DETAILS

WORKING NUMBER:
TSD-8

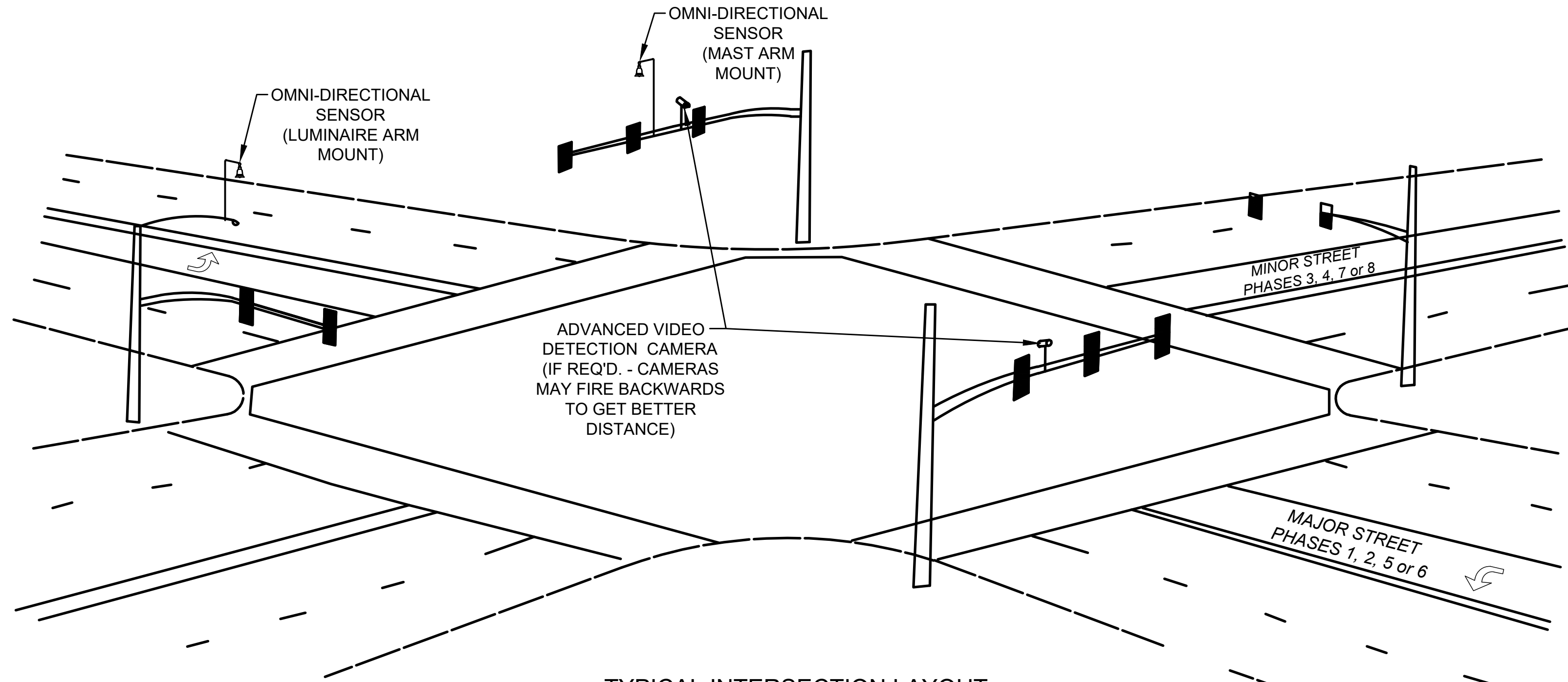
DRAWING NUMBER:
25



TYPICAL 2-SECTION POLE ASSEMBLY FOR VIVTDS SENOR MOUNTING
NOT TO SCALE



- NOTES:
1. CAMERA SHOULD BE MOUNTED AT LEAST 30' HIGH WHEN USING LUMINAIRE ARM AND NO LESS THAN 27' WHEN USING MAST ARM.
 2. MAST ARM MOUNTS ARE ONLY ACCEPTABLE IF THE CAMERA CAN BE LOCATED NEAR THE CENTER WITH NO OCCLUSION.
 3. CAMERA MUST BE LESS THAN 75' FROM THE INTERSECTION CENTER WHEN MOUNTED ON LUMINAIRE ARM WITH NO MORE THAN 150' FROM FURTHEST STOPBAR AND 50' ON MAST ARM WITH NO MORE THAN 100' FROM FURTHEST STOPBAR.
 4. CAMERA SHOULD BE LOCATED IN FRONT OF ALL STOPLINES WITH LEAST AMOUNT OF OCCLUSION.
 5. INSTALLER SHALL AIM FOR BEST "HEAD-ON" VIEW OF ALL APPROACHES.
 6. CAMERA RESISTANCE TO GROUND EQUAL TO OR LESS THAN 25 ohms.
 7. BELL CAMERA HAS APPROXIMATELY 150' TRACKING RADIUS MOUNTED ON MAST ARM, 200' ON LUMINAIRE ARM.

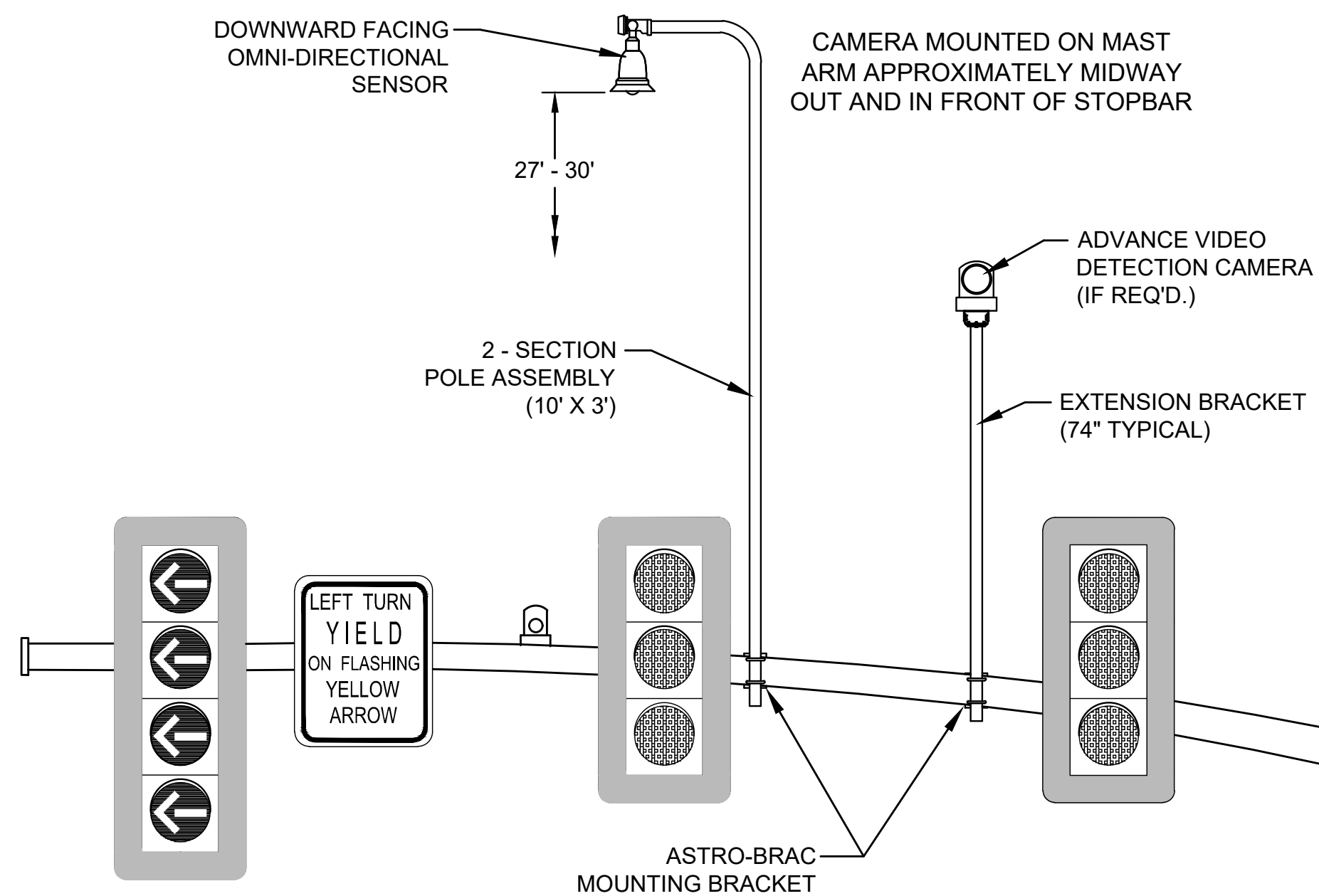


TYPICAL INTERSECTION LAYOUT
NOT TO SCALE

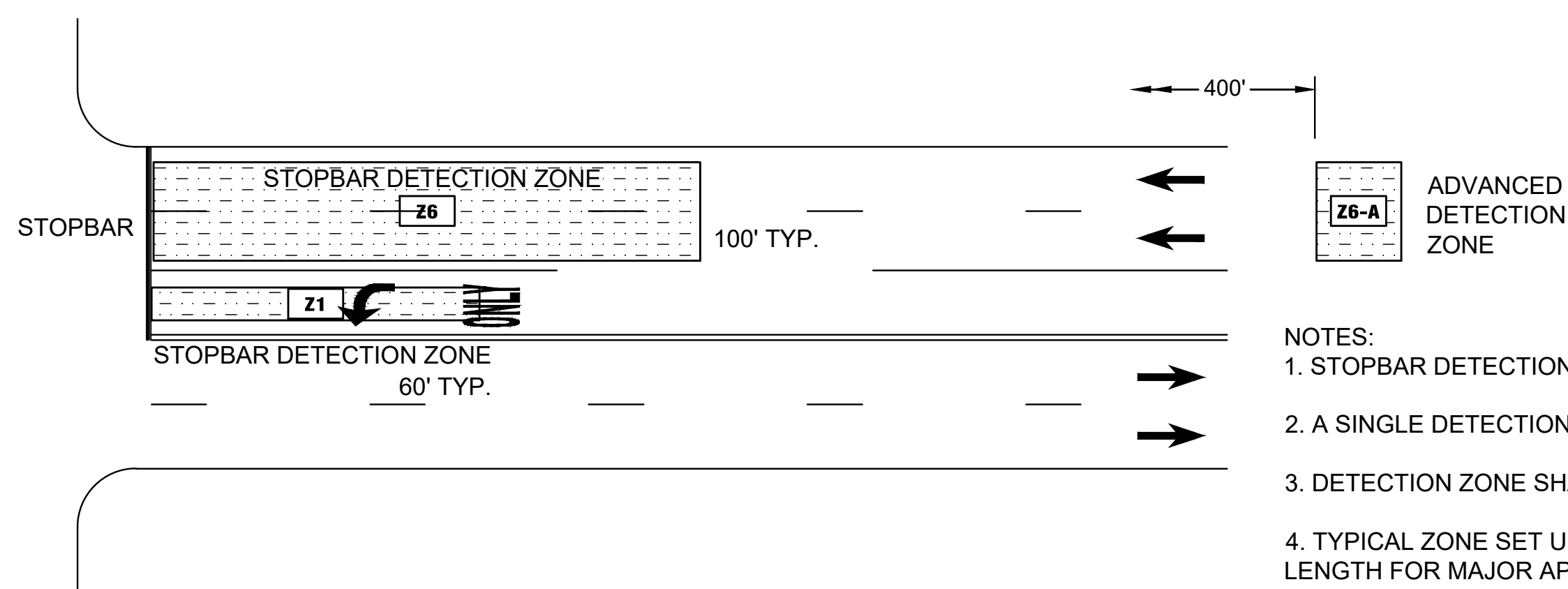
GENERAL NOTES:

1. TYPE 3 VIDEO VEHICLE DETECTION (VIVTDS) WILL PROVIDE PRESENCE OR PULSE DETECTION OF VEHICLES, BICYCLES, AND PEDESTRIANS FOR TRAFFIC SIGNAL CONTROLLER INPUTS. TYPE 3 VIVTDS DETECTOR SHALL BE A SINGLE SENSOR HAVING A FISHEYE LENS FOR OMNIDIRECTIONAL VIEWING OF ROADWAY OR INTERSECTION. THE WORK SHALL CONSIST OF PROVIDING ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO FURNISH, INSTALL, AND TEST THE VIDEO VEHICLE DETECTION EQUIPMENT, COMPLETE AND READY FOR SERVICE. LARGER INTERSECTIONS MAY REQUIRE TWO CAMERAS. ADDITIONAL SENSORS MAY BE REQUIRED FOR ADVANCED DETECTION. THESE SENSORS MAY BE TRADITIONAL FIXED SENSORS INCORPORATED INTO THE VIVTDS SYSTEM.

2. INSTALL VIDEO DETECTION PROCESSOR UNIT(S) INSIDE CONTROLLER CABINET UNLESS OTHERWISE NOTED ON PLANS.
3. AIM THE CAMERA SO THE HORIZON IS NOT VISIBLE IN THE FIELD OF VIEW.
4. INSURE WATER -TIGHT CABLE ENTRY AND EXIT POINTS FOR CONNECTIONS.
5. CONTRACTOR TO USE MANUFACTURE'S SUPPLIED OR APPROVED CABLE, CONNECTIONS AND MOUNTING HARDWARE.
6. DETECTION SUPPLIER TO ASSIST CONTRACTOR WITH INFORMATION ON BEST MOUNTING POSITION (LOCATION ON ARM, MOUNTING HEIGHT, ETC.).
7. POWER AND VIDEO CABLE PROVIDED SHALL BE AS RECOMMENDED BY THE MANUFACTURER FOR OPTIMAL VIDEO DETECTION PERFORMANCE. THE POWER AND VIDEO CABLE MAY BE INSTALLED UNDER THE SAME OUTER JACKET. THE CABLES WILL BE MEASURED BY THE LINEAR FOOT, MEASURED HORIZONTALLY ALONG THE CONDUIT, MESSENGER CABLE OR MAST ARM AND VERTICALLY ALONG THE POLE.
8. SURGE PROTECTION DEVICES SHALL BE PROVIDED FOR ALL NEW OR ADDED VIDEO DETECTION DEVICES AS RECOMMENDED BY THE MANUFACTURER.
9. ALL DETECTION UNITS SHALL BE NETWORKABLE DEVICES AND BE ON THE MDOT / CITY NETWORK IF NOTED ON PLANS.

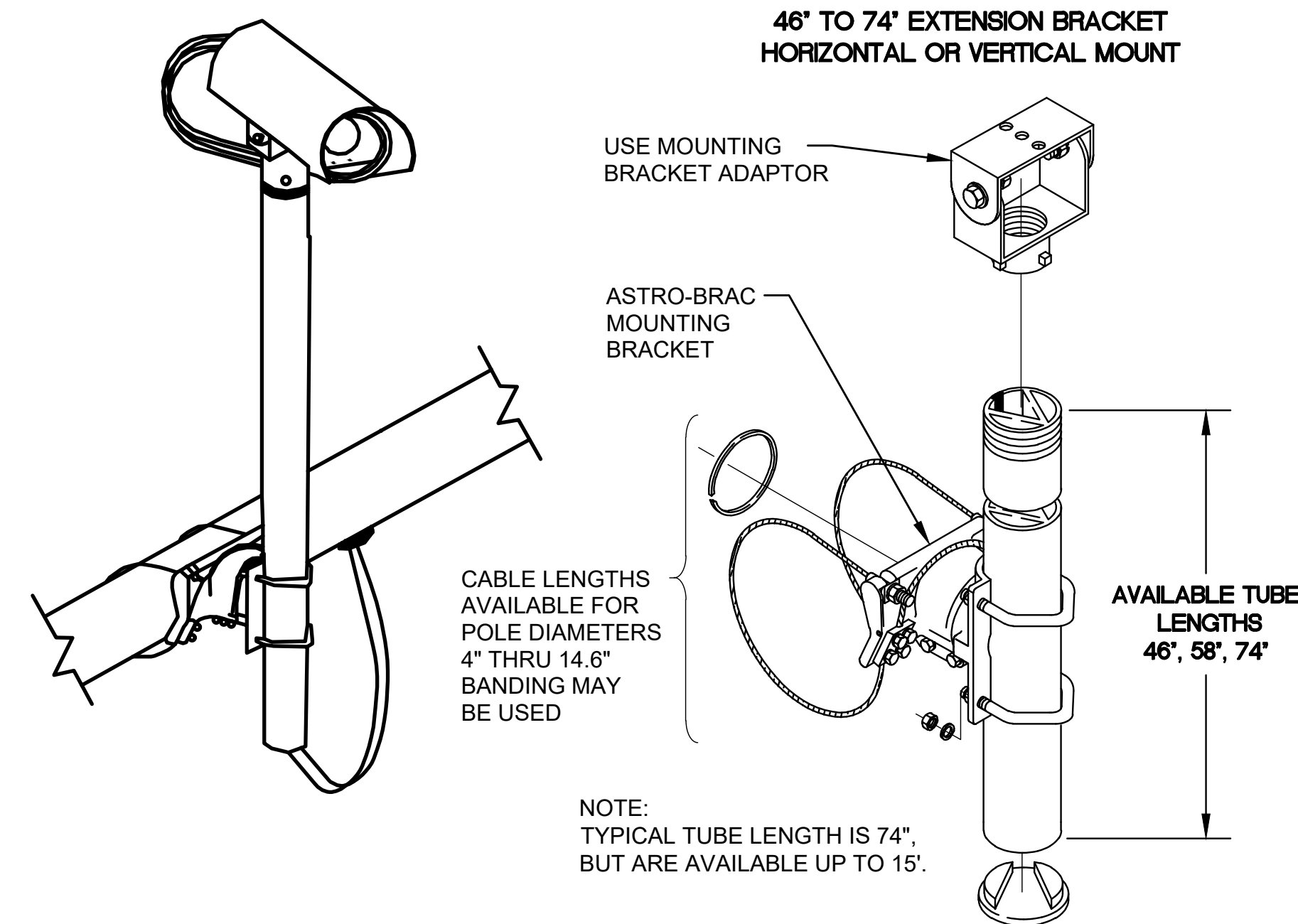


VIVTDS SENSOR CAMERA PLACEMENT
NOT TO SCALE



DETECTION ZONES
NOT TO SCALE

- NOTES:
1. STOPBAR DETECTION ZONES SHOULD BE APPROXIMATELY 3-4 CAR LENGTHS.
 2. A SINGLE DETECTION ZONE SHOULD COVER ALL LANES FOR EACH PHASE.
 3. DETECTION ZONE SHALL NOT OVERLAP.
 4. TYPICAL ZONE SET UP IS 60' IN LENGTH FOR SIDE STREETS AND TURN LANES, 100' IN LENGTH FOR MAJOR APPROACHES.
 5. ASSIGN PHASE INPUTS TO WIRED PHASES ONLY, i.e. STOP-LINE PRESENCE ZONES.
 6. THE FRONT OF THE STOPBAR ZONE (i.e. THE STOP LINE), SHALL BE NO MORE THAN 150' FROM THE CAMERA.
 7. THE FRONT OF THE ADVANCE ZONE SHALL BE NO MORE THAN 400' FROM THE CAMERA.



ADVANCED VIDEO DETECTION EXTENSION BRACKET
NOT TO SCALE

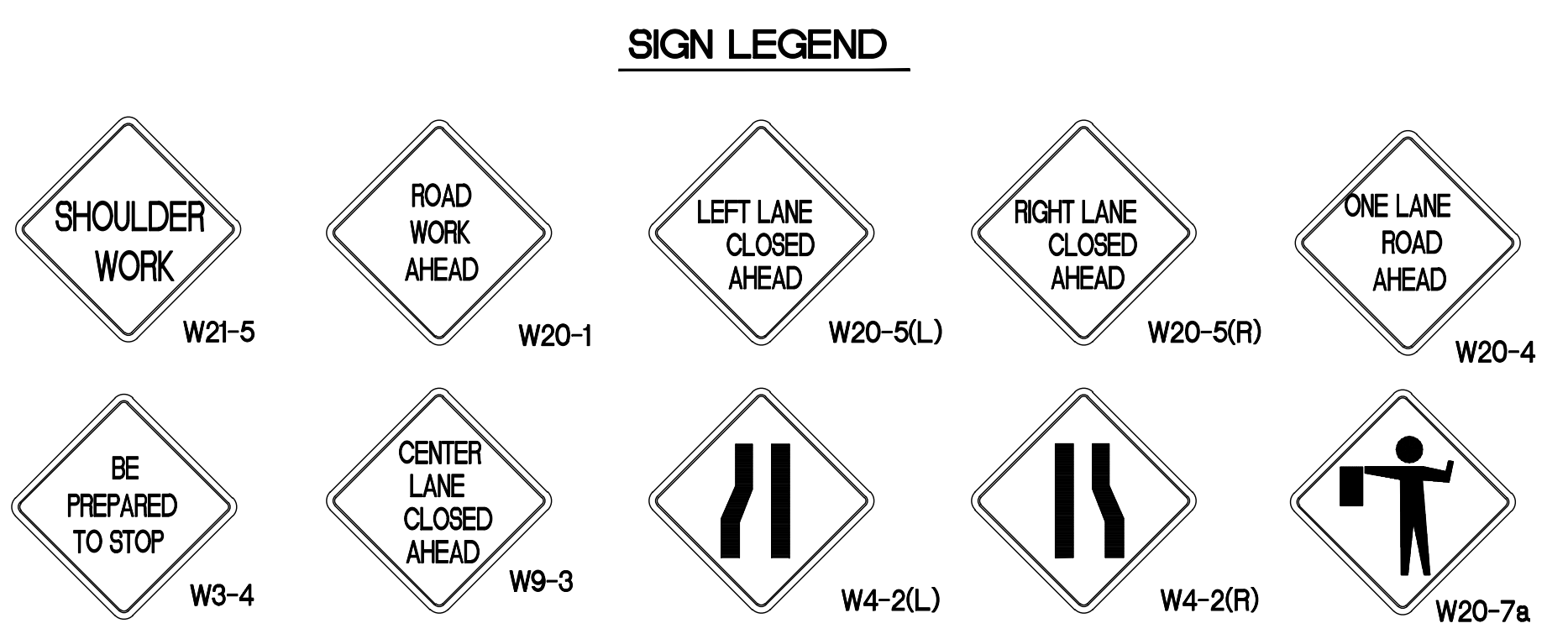
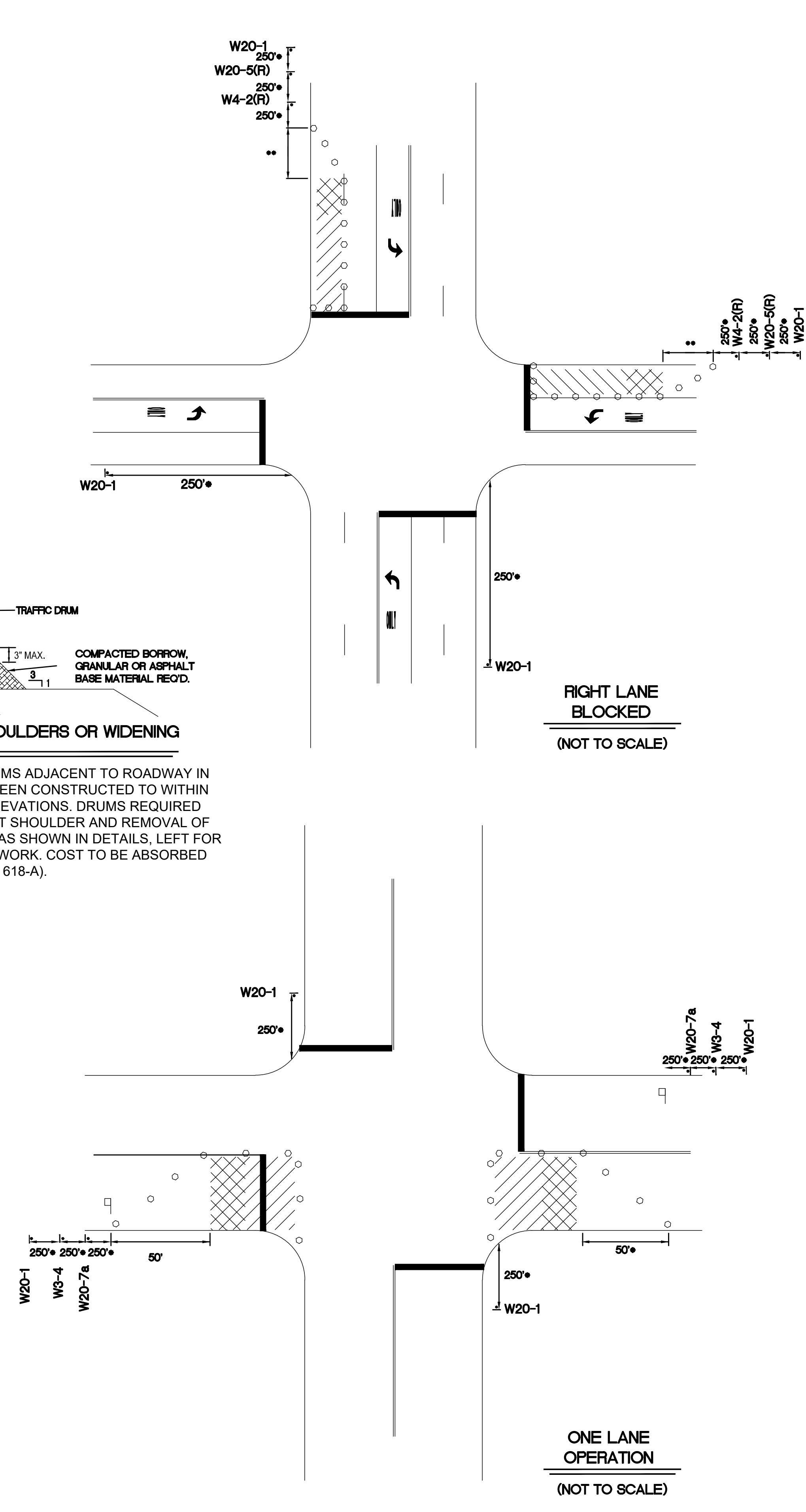
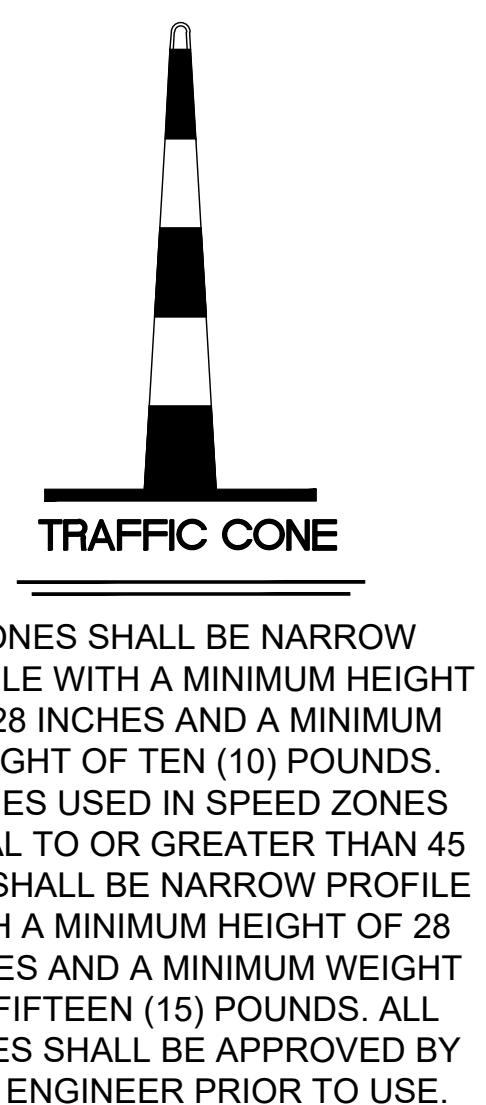
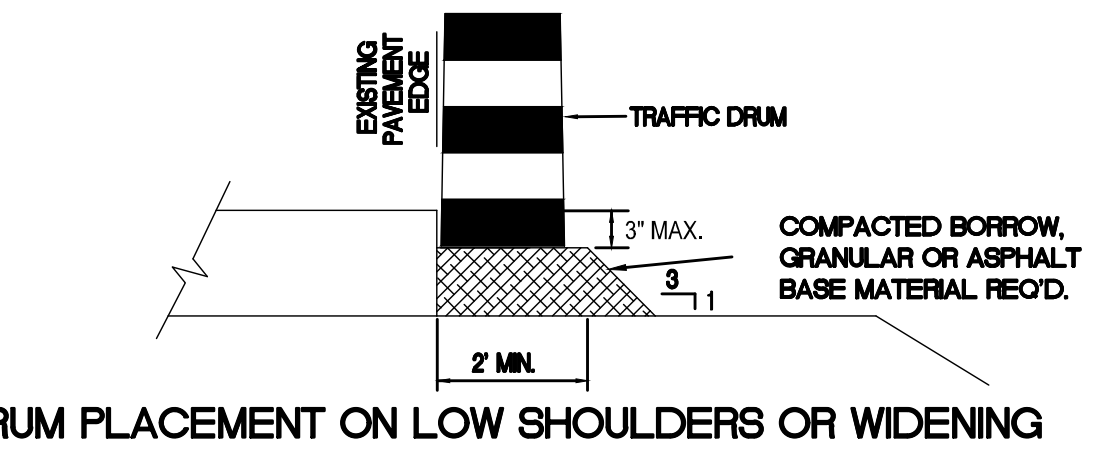
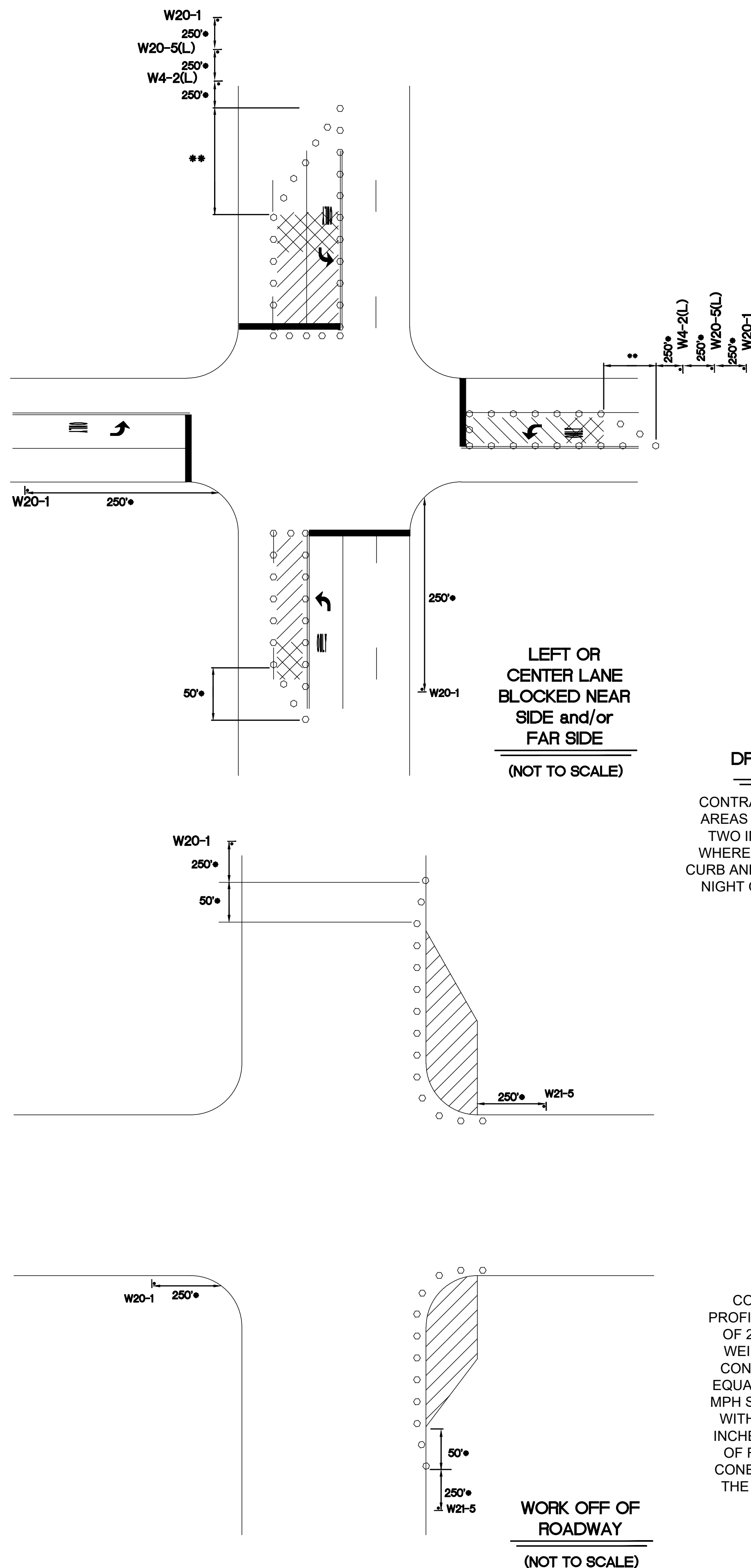


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**VIDEO/MULTISENSOR
DETECTION
INSTALLATION FOR
TRAFFIC SIGNALS**

WORKING NUMBER: TSD-9GS	DRAWING NUMBER: 26
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- GENERAL NOTES:
1. ADDITIONAL ADVANCE WARNING SIGNS MAY BE NECESSARY. ANY ADDITIONAL SIGNS SHOULD BE INCLUDED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
 2. POST MOUNTED SIGNS SHALL HAVE A 7' MINIMUM MOUNTING HEIGHT.
 3. PAYMENT FOR ALL SIGNS, CONES, DRUMS, CONCRETE BARRIERS, STEEL PLATES AND OTHER MATERIALS, BARRICADES, LABOR AND INCIDENTALS REQUIRED TO IMPLEMENT THE TRAFFIC CONTROL PLAN SHALL BE INCLUDED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
 4. APPROACH SIDE TRAFFIC CONTROL TO BE USED WHEN WORK OCCURS ON EITHER THE APPROACH SIDE OR THE FAR SIDE OF THE INTERSECTION. FAR SIDE TRAFFIC CONTROL IS NOT NEEDED WHEN WORK IS CONFINED TO THE APPROACH SIDE ONLY.
 5. FOR A DIVIDED HIGHWAY SITUATION, A SECOND SET OF ADVANCE WARNING SIGNS SHALL BE ERECTED IN MEDIAN AREA (8' MIN. MEDIAN WIDTH REQUIRED).

- LEGEND
- DRUMS (30' MAXIMUM SPACING) - CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.
 - W20-1 + FLAGGER WITH PADDLE - 18" STOP/SLOW PADDLES ACCEPTED AS PROPER TRAFFIC CONTROL DEVICES SHALL BE USED. HAND HELD FLAGS SHALL NOT BE FOR FLAGGING OPERATION.

	WORK AREA		BUFFER AREA
*	CONSIDERED MINIMUM DISTANCE - ENGINEER TO DETERMINE APPROPRIATE SPACING IN THE FIELD		
**	SPEED LIMIT	BUFFER	TAPER LENGTH (Feet)
	M.P.H.	FEET	(Per 12' Lane Shift)
	20	115	80
	25	155	125
	30	200	180
	35	250	245
	40	305	320
	45	360	540
	50	425	600
	55	495	660
	60	570	720
	65	645	780
	70	730	840

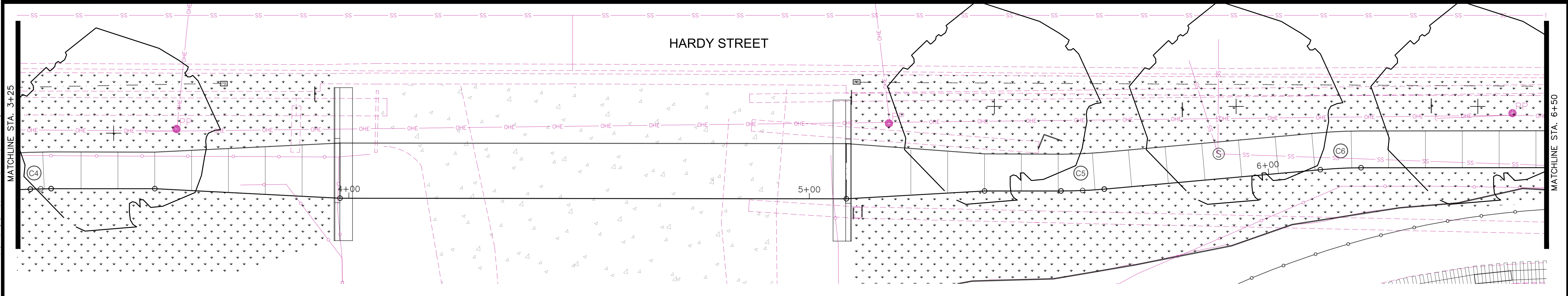
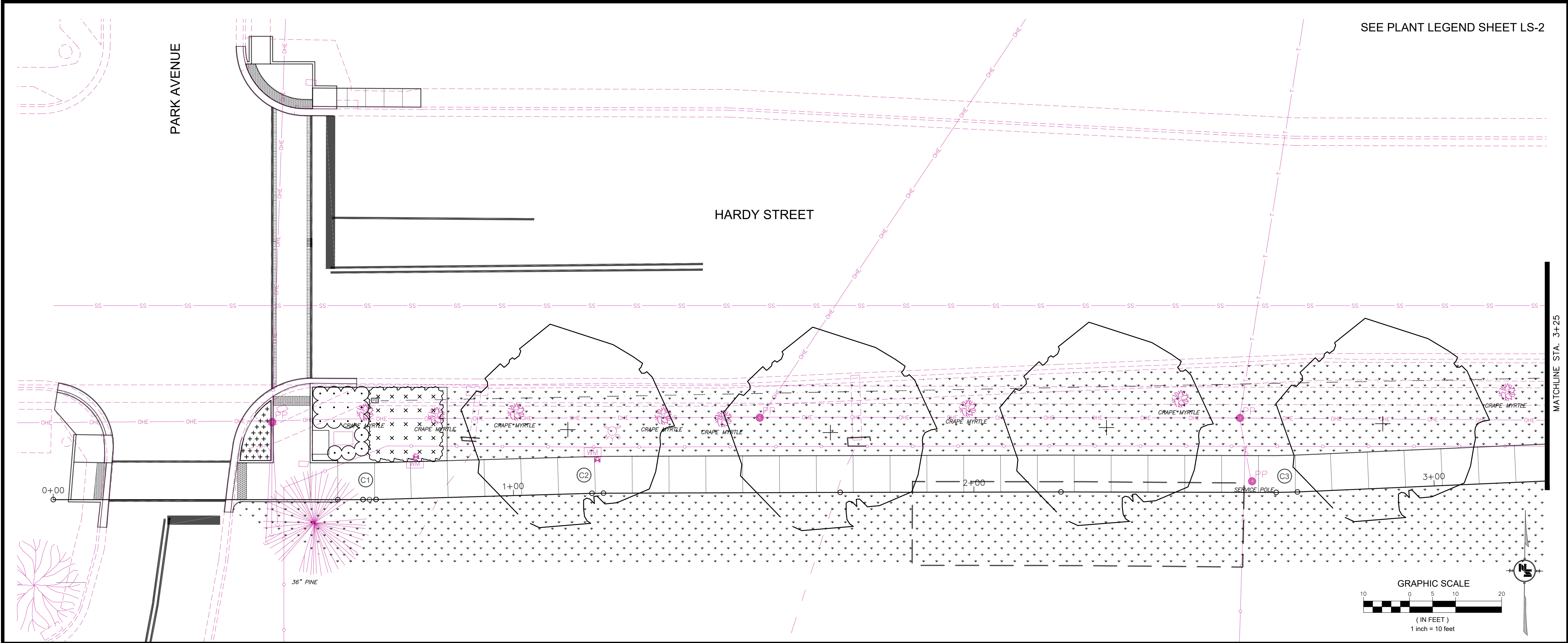


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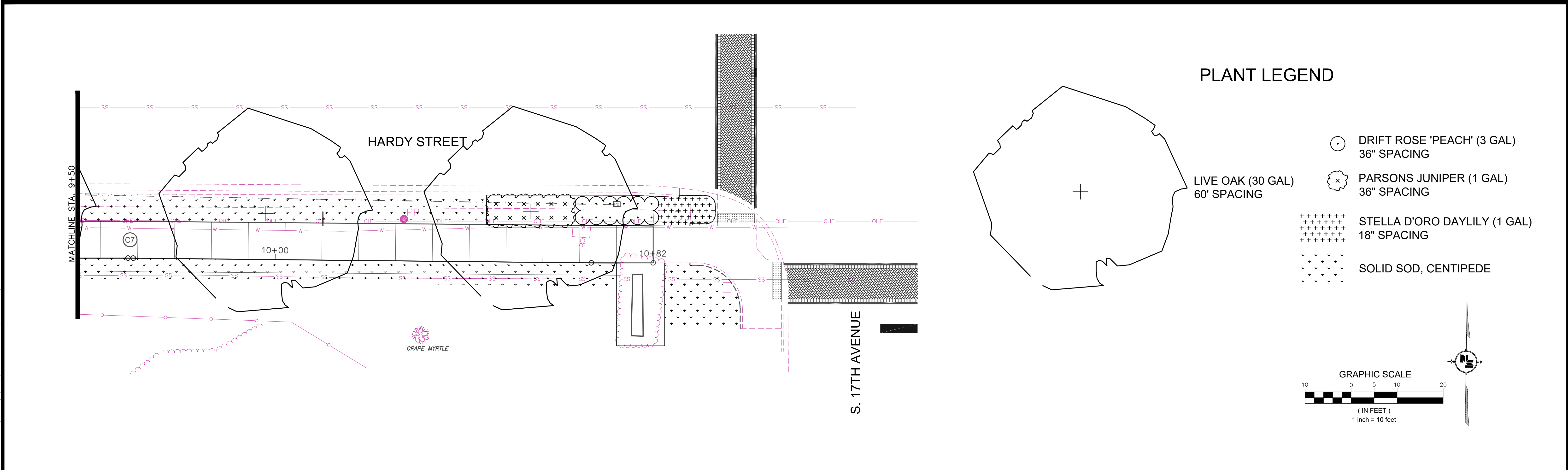
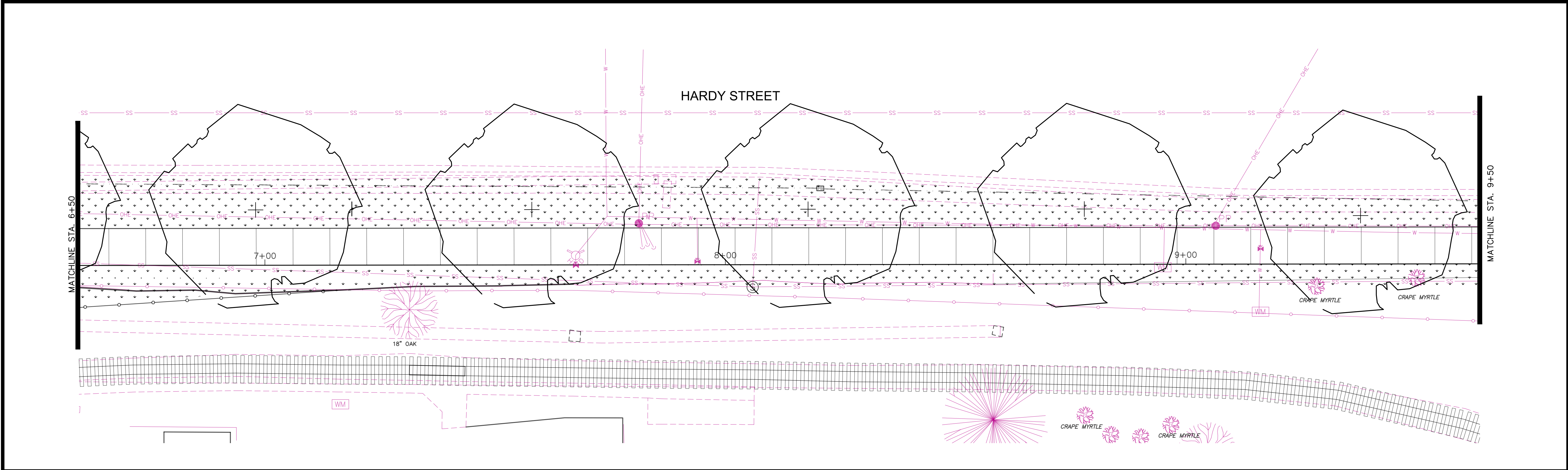
TRAFFIC CONTROL PLAN
(TYPICAL SIGNAL INSTALLATION)

WORKING NUMBER:
TSD-10

DRAWING NUMBER:
27

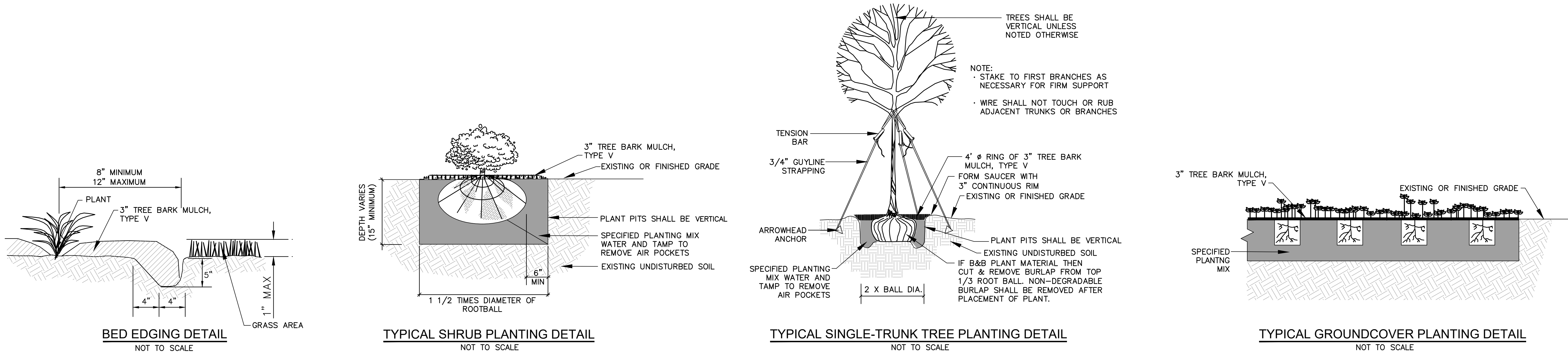


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		NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 16258			
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						SCALE: 1" = 10'			
						SURVEYED BY: CLEARPOINT ENGINEERS			
						DSGN: GPC	DATE: 05/2022	WORKING NUMBER: LS-1	
						DRWN: PAN	DATE: 05/2022	DRAWING NUMBER: 28	
						CHKD:	DATE:		
						QA/QC:	DATE:		



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	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 16258			WORKING NUMBER:	DRAWING NUMBER:
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					SURVEYED BY: CLEARPOINT ENGINEERS				
					DSGN: GPC DATE: 05/2022				
					DRWN: PAN DATE: 05/2022				
					CHKD: DATE:				
					QA/QC: DATE:				

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LANDSCAPE QUANTITIES & VEGETATION SCHEDULE – HARDY STREET								
LANDSCAPE ITEMS		QTY	SIZE/UNIT	SEASONAL APPLICATIONS–DATES & RATES				REQUIREMENTS
				SPRING & SUMMER		FALL & WINTER		
PAY ITEM	ITEMS			RATES	DATES	RATES	DATES	
211–C	TOPSOIL FOR PLANT HOLES, CONTRACTOR FURNISHED	8	CU. YD.	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	3" IN BED PREP AREAS; ANY SOIL BROUGHT TO SITE MUST BE CONSIDERED STERILE AND WEED SEED FREE
216–B	SOLID SOD, CENTIPEDE	2325	SQ. YD	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	GROWER CERTIFICATION REQ'D
219–A	WATERING		KGAL	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	AS DETERMINED BY CONTRACTOR
230–A	SHRUB PLANTING, DAYLILY, (1) GAL	62	1 GALLON	EACH	BY REQUEST ONLY	EACH	OCTOBER 1 – APRIL 30	FULL & HEALTHY PLANT; 18" OC SPACING
230–A	SHRUB PLANTING, PARSONS JUNIPER, (1) GAL	37	1 GALLON	EACH	BY REQUEST ONLY	EACH	OCTOBER 1 – APRIL 30	FULL & HEALTHY PLANT; 36" OC SPACING; 'PARSONS' VARIETY REQD.
230–A	SHRUB PLANTING, DRIFT ROSE "PEACH", (3) GAL	28	3 GALLON	EACH	BY REQUEST ONLY	EACH	OCTOBER 1 – APRIL 30	FULL & HEALTHY PLANT; 36" OC SPACING; 'PEACH' VARIETY REQD.
230–B	TREE PLANTING, LIVE OAK, (30) GAL	15	30 GALLON	EACH	BY REQUEST ONLY	EACH	OCTOBER 1 – APRIL 30	FULL & HEALTHY PLANT; ~60' SPACING; FULL CANOPY; 10' HEIGHT (MIN.) / 4' WIDTH (MIN.); 5' CLEAR TRUNK REQUIRED
230–D	BED PREPARATION	850	SQ. FT.	PER SQ. FT.	NOT APPLICABLE	PER SQ. FT.	NOT APPLICABLE	APPLIED TO AREAS SHOWN IN PLANS TO RECEIVE SHRUB, GROUNDCOVER AND TREE PLANTING; ADD 2" TREE BARK MULCH TYPE III AND ROTO–TILL INTO EXISTING SOIL TO A MINIMUM DEPTH OF 6"; APPLY 3" TREE BARK MULCH TYPE V; MULCH TYPES III & V ABSORBED
232–A	FERTILIZER FOR WOODY PLANT MATERIAL, TABLET, 21 GRAM	202	EACH	SEE REQUIREMENTS	BY REQUEST ONLY	SEE REQUIREMENTS	OCTOBER 1 – APRIL 30	5 PER 30 GALLON (75); 1 PER 3/1 GALLON (127)
233–A	TREE BARK MULCH, TYPE III	2	CU. YD.	PER CU.YD.	NOT APPLICABLE	PER CU.YD.	NOT APPLICABLE	0.1 CY PER TREE PLANTING OUTSIDE OF BED AREA
233–A	TREE BARK MULCH, TYPE V	2	CU. YD.	PER CU.YD.	NOT APPLICABLE	PER CU.YD.	NOT APPLICABLE	3" DEPTH IN 4' D RING PER TREE PLANTING OUTSIDE BED AREA
907–258–PP	HERBICIDE TREATMENT, PER PLANS	1030	SF	SEE REQUIREMENTS	BY REQUEST ONLY	SEE REQUIREMENTS	OCTOBER 1 – APRIL 30	BED PREP AREA & TREE RINGS AS DIRECTED; SEE WEED CONTROL NOTES BELOW
ABSORBED	SOIL TEST	1						REQUIRED TO BE SUBMITTED IN ADVANCE OF ALL LANDSCAPE CONSTRUCTION ITEMS; COST ABSORBED IN BED PREP PAY ITEM
ABSORBED	MOISTURE ABSORBANT CRYSTALS	217	OZ	SEE REQUIREMENTS	BY REQUEST ONLY	SEE REQUIREMENTS	OCTOBER 1 – APRIL 30	6 OZ PER 30 GALLON (90); 1 OZ PER 3/1 GALLON (127); COST ABSORBED IN INDIVIDUAL TREE AND SHRUB PAY ITEMS
ABSORBED	SELECTIVE, PRE–EMERGENCE HERBICIDE	4	LB	SEE REQUIREMENTS	BY REQUEST ONLY	SEE REQUIREMENTS	OCTOBER 1 – APRIL 30	2 GRAM PER SQUARE FEET OF BED PREPARATION AREA (1,700); COST ABSORBED IN BED PREP PAY ITEM

ALL PLANT MATERIAL SHALL MEET THE MINIMUM STANDARDS FOR SPECIFIED CONTAINER SIZE AS DETERMINED BY THE AMERICAN STANDARD FOR NURSERY STOCK.

WEED CONTROL NOTES:

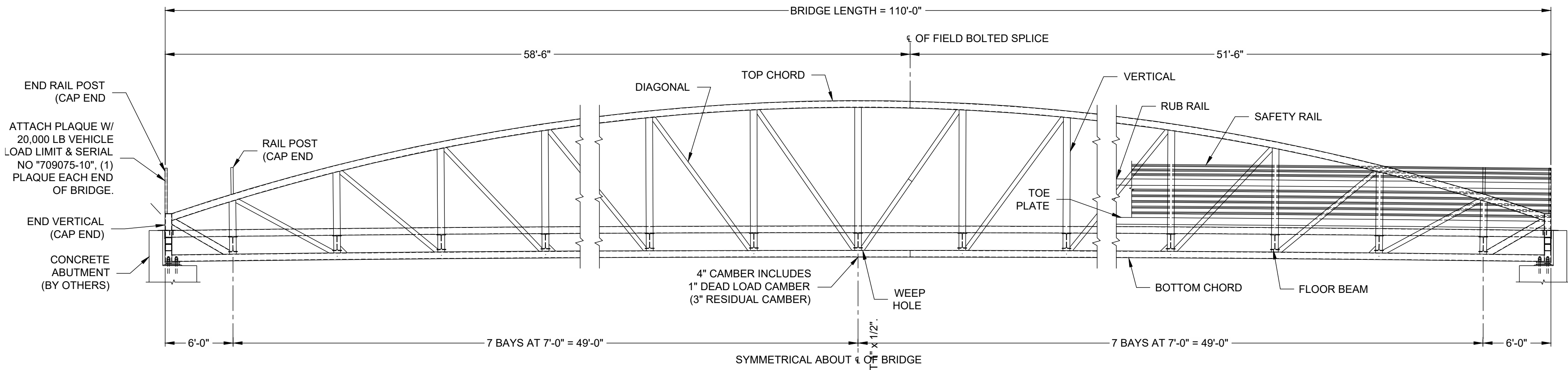
- CONTRACTOR TO PERFORM ON SITE WEED CONTROL ASSESSMENTS EVERY TWO WEEKS (AT A MINUMUM) DURING THE DURATION OF THE GROWTH AND COVERAGE PERIOD.
- CONTRACTOR TO SUBMIT FINDINGS OF WEED CONTROL ASSESSMENTS BACK TO LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL.
- IF ASSESSMENT FINDS THE PRESENCE OF UNWANTED WEEDS, CONTRACTOR TO FORMULATE AND SUBMIT SPRAY SCHEDULE TO LANDSCAPE ARCHITECT IN ACCORDANCE WITH SUGGESTED SPRAY SCHEDULE (SEE THIS SHEET)..
- CONTRACTOR IS RESPONSIBLE FOR RESEARCHING AND BEING FAMILIAR WITH HERBICIDE PRODUCTS AND POTENTIAL RISKS.
- LIQUIDATED DAMAGES WILL BE CHARGED UNLESS CONTRACT REQUIREMENTS ARE MET – REFERENCE SECTION 210 – ROADSIDE DEVELOPMENT
- FOR ADDITIONAL REQUIREMENTS SEE SECTION 230.03.14 WITH REGARDS TO PLANT ESTABLISHMENT

WEED CONTROL SCHEDULE (SUGGESTED SPRAY SCHEDULE):

INITIAL APPLICATION – PRE EMERGENT HERBICIDE REQ'D AT TIME OF PLANTING. (SURFLAND, BARRACADE, SNAPSHOT, OR APPROVED EQUAL) USE AS DIRECTED PER MANUFACTOERS RECOMMENDATIONS
DURATION OF CONTRACTOR GROWTH AND COVERAGE PERIOD – AS NEEDED SPRAYINGS (EVERY TWO WEEKS MIN.) OF POST EMERGENT HERBICIDE ARE REQUIRED DURING MAINTENANCE PERIOD IF DEEMED NECESSARY BY LANDSCAPE ARCHITECT, AFTER WEED CONTROL ASSESSMENT REVIEW
AS NEEDED SPRAY APPLICATIONS – (IMAGE, CERTAINTY, GOAL, OR APPROVED EQUAL) USE AS DIRECTED PER MANUFACTURERS RECOMMENDATIONS.

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NOTICE TO DRAWING HOLDER NEEL–SCHAFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION		FTA SIDEWALKS PROJECT HARDY STREET - KAMPER PARK CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY		LANDSCAPE DETAILS & VEGETATION SCHEDULE	
	NO.	DATE	BY	DESCRIPTION	N–S PROJECT NO.: 16258			WORKING NUMBER:	DRAWING NUMBER:
					FILENAME: 16258_LS–Park & 17th.dwg			LS-3	30
					SCALE: N/A				

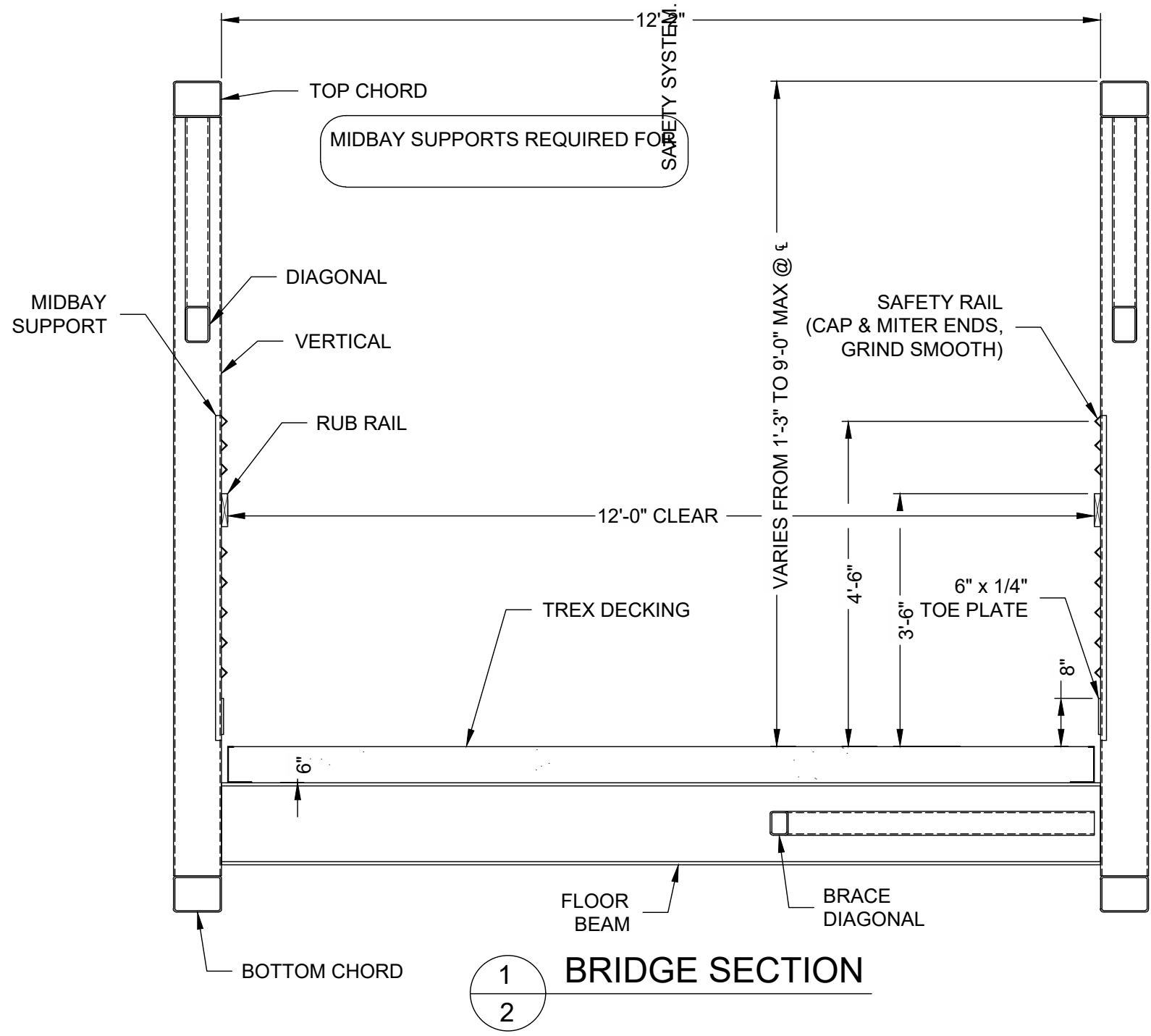


GENERAL NOTES

- DESIGN PROCEDURE IS IN ACCORDANCE WITH "STANDARD SPECIFICATION FOR HIGHWAY BRIDGES", 2014 (7TH EDITION) & "GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES", 2009 (INCLUDING 2015 INTERIM REVISIONS) BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO).
- BRIDGE MEMBERS ARE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ENHANCED ATMOSPHERIC CORROSION RESISTANT ASTM A847 COLD-FORMED WELDED SQUARE AND RECTANGULAR TUBING, AND ASTM A588, ASTM A606, OR ASTM A709-50W PLATE AND STRUCTURAL SHAPES (Fy=50,000 PSI).
- CONCRETE DECK: GALVANIZED FORM DECK SUPPLIED BY CONTECH. CONCRETE, SHEET.
- THE GAS METAL ARC WELDING PROCESS OR FLUX CORED ARC WELDING PROCESS WILL
- ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE
- UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE
 - BOTH ENDS OF VERTICALS, DIAGONALS, AND FLOOR BEAMS SHALL BE WELDED ALL AROUND.
 - BRACE DIAGONALS WILL BE WELDED ALL AROUND.
 - MISCELLANEOUS NON-STRUCTURAL MEMBERS (DEFINED AS MEMBERS WITH CONNECTION WELDS NOT SPECIFICALLY DETAILED) WILL BE STITCH WELDED TO THEIR SUPPORTING MEMBERS, BUTT WELDED AT SHOP SPLICE LOCATIONS, AND ARE TO BE EXEMPT FROM THE REQUIREMENTS OF AWS D1.1.
- BRIDGE DESIGN WAS ONLY BASED ON COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.
 - 90 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR ONE 20,000 LB VEHICLE

THE VEHICLE SHALL BE POSITIONED SO AS TO PRODUCE THE MAXIMUM STRESSES IN EACH MEMBER, INCLUDING DECKING.
 - (160 MPH) WIND LOADING APPLIED TO THE VERTICAL PROJECTION OF STRUCTURE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS SECTION 3.8, 5TH EDITION.
 - 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANSVERSE BRIDGE WIDTH (AASHTO 3.8.2).
- CLEANING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPARATION SPECIFICATIONS
- MINIMUM MATERIAL THICKNESS OF 1/4" ON ALL STRUCTURAL MEMBERS.
- WELD TESTING REQUIRED. SEE QUALITY ASSURANCE NOTES FOR DETAILS.

BRIDGE ELEVATION



BRIDGE SECTION

SPACING OF SAFETY SYSTEM PRODUCES OPENINGS OF LESS THAN 4" UP TO A HEIGHT OF 54" FROM TOP OF DECK.

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NOTICE TO DRAWING HOLDER

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				DSGN: GPC	DATE: 05/2022
				DRWN: PAN	DATE: 05/2022
				CHKD:	DATE:
				QA/QC:	DATE:

FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

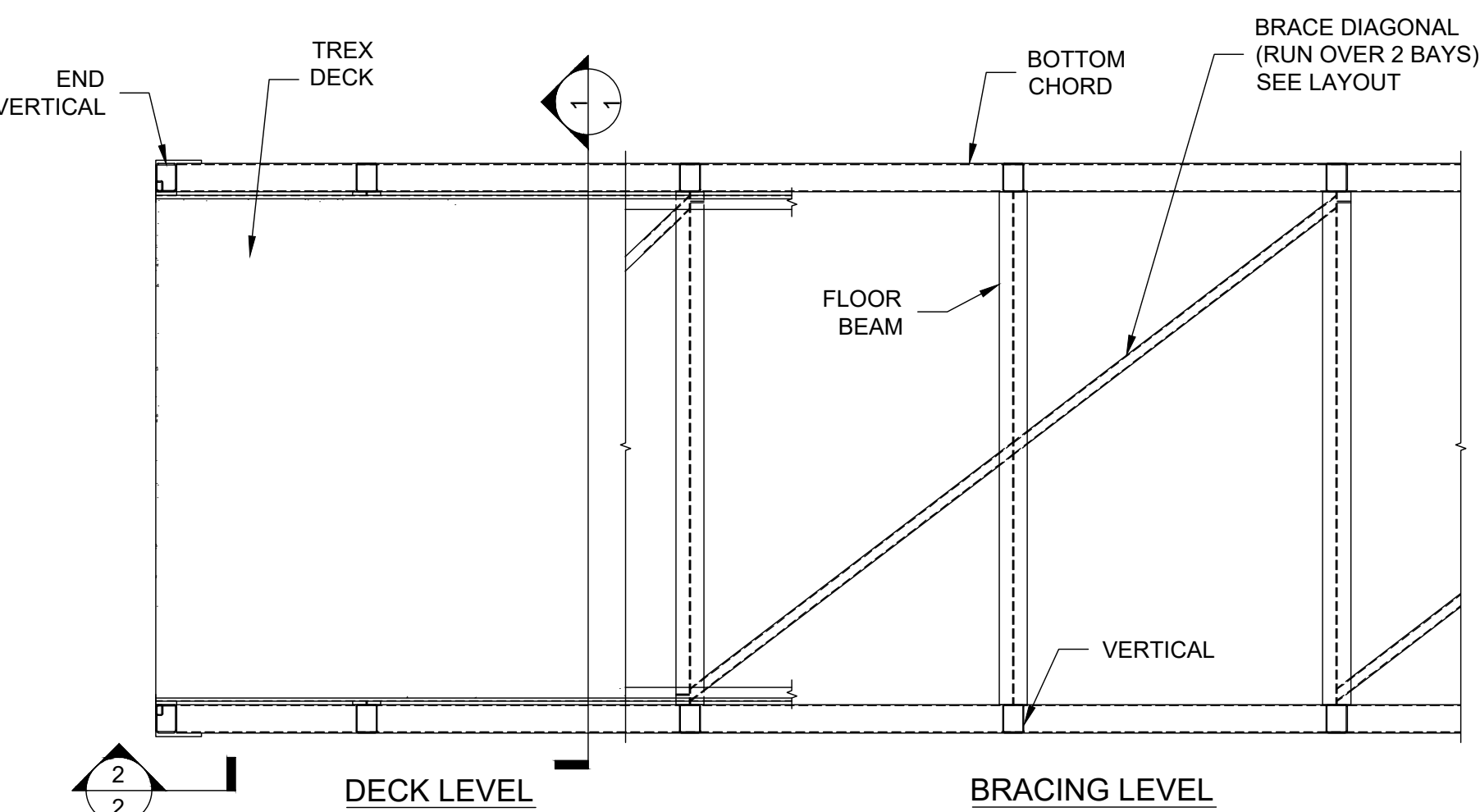
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



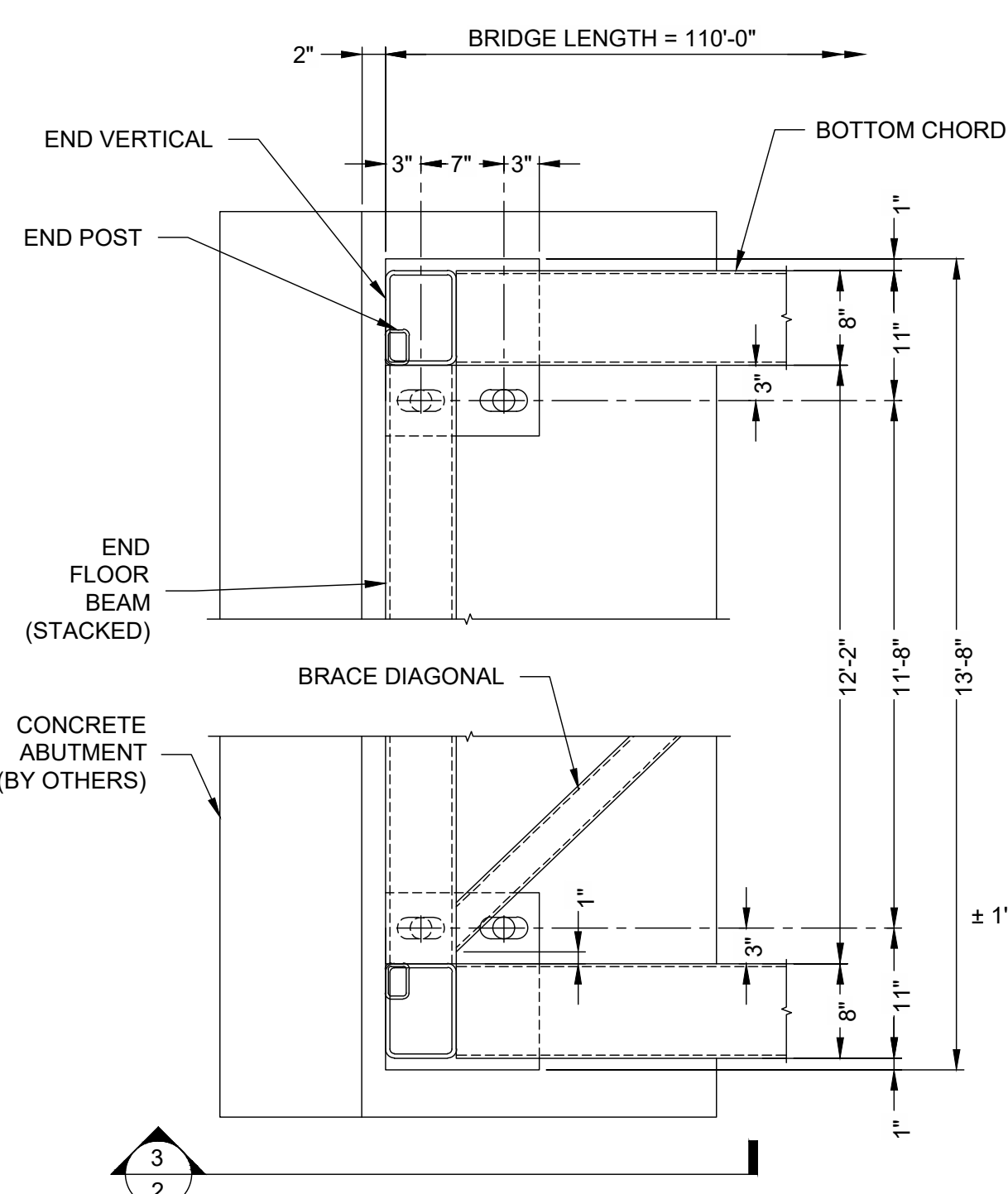
BRIDGE DETAILS

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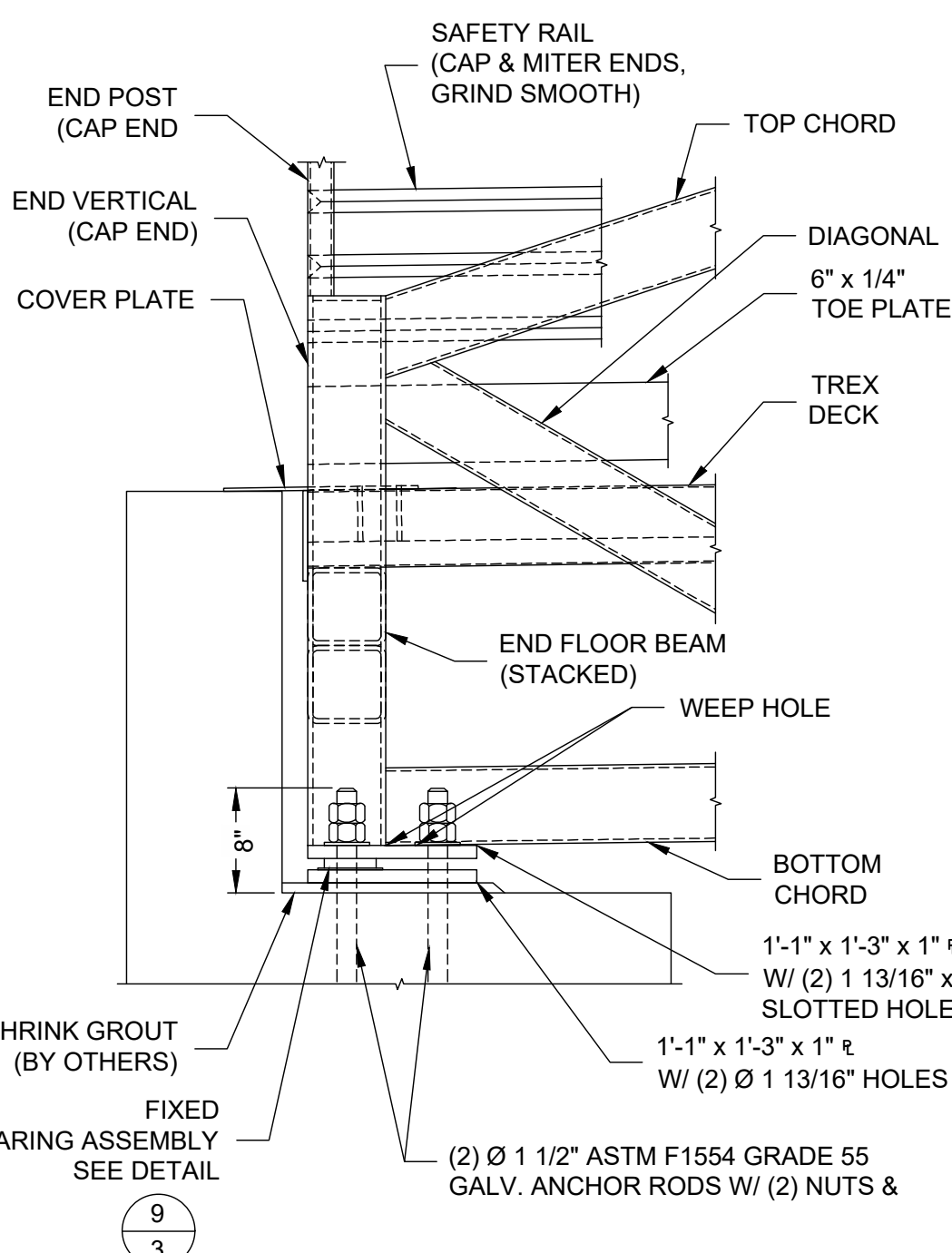
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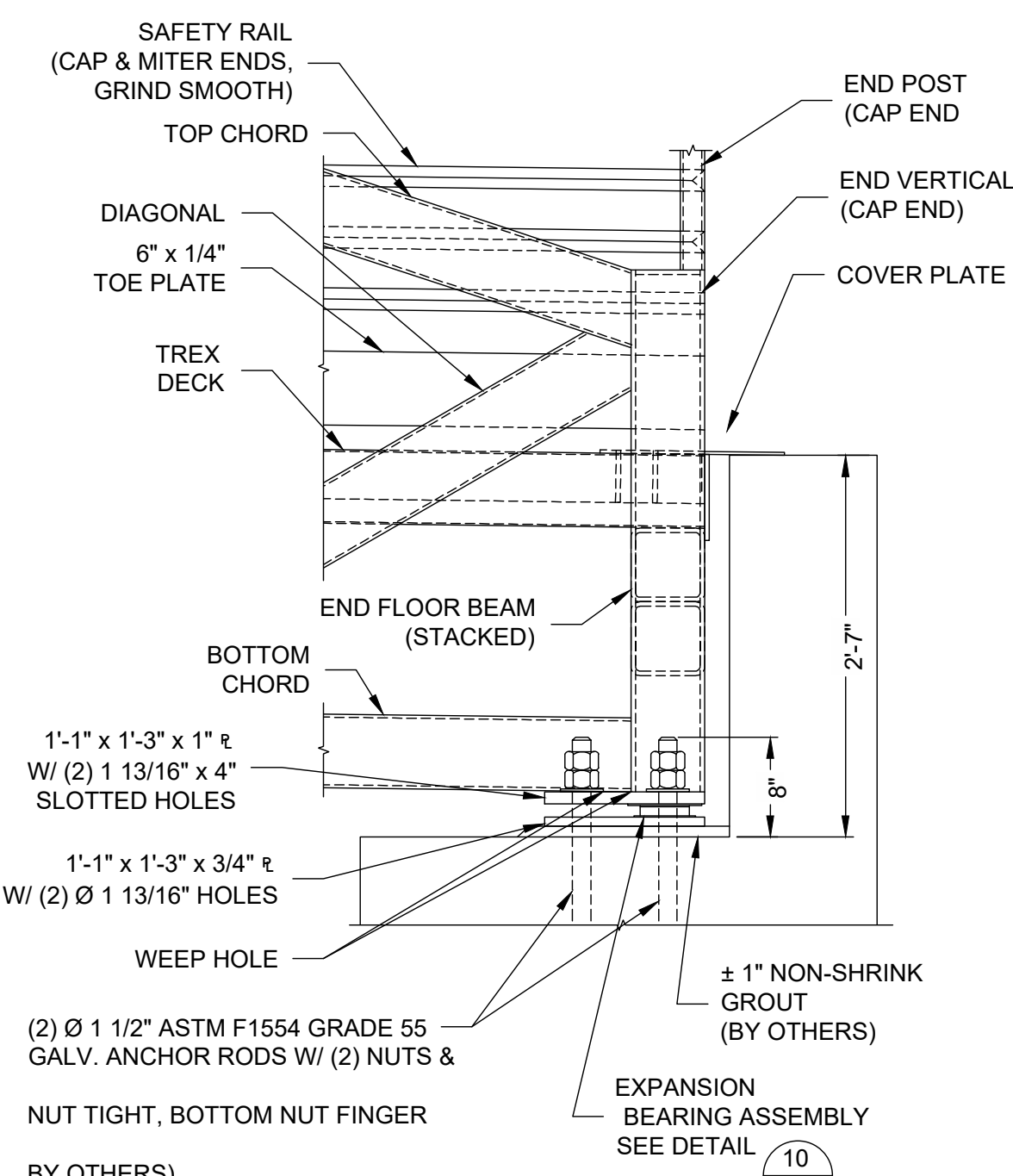
BRIDGE PLAN



BEARING ASSEMBLY - PLAN VIEW



FIXED



EXPANSION

BEARING ASSEMBLY - SIDE VIEW

NOTICE TO DRAWING HOLDER

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				SURVEYED BY: CLEARPOINT ENGINEERS	
				DSGN: GPC	DATE: 05/2022
				DRWN: PAN	DATE: 05/2022
				CHKD:	DATE:
				QA/QC:	DATE:

FTA SIDEWALKS PROJECT
HARDY STREET - KAMPER PARK

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



BRIDGE DETAILS

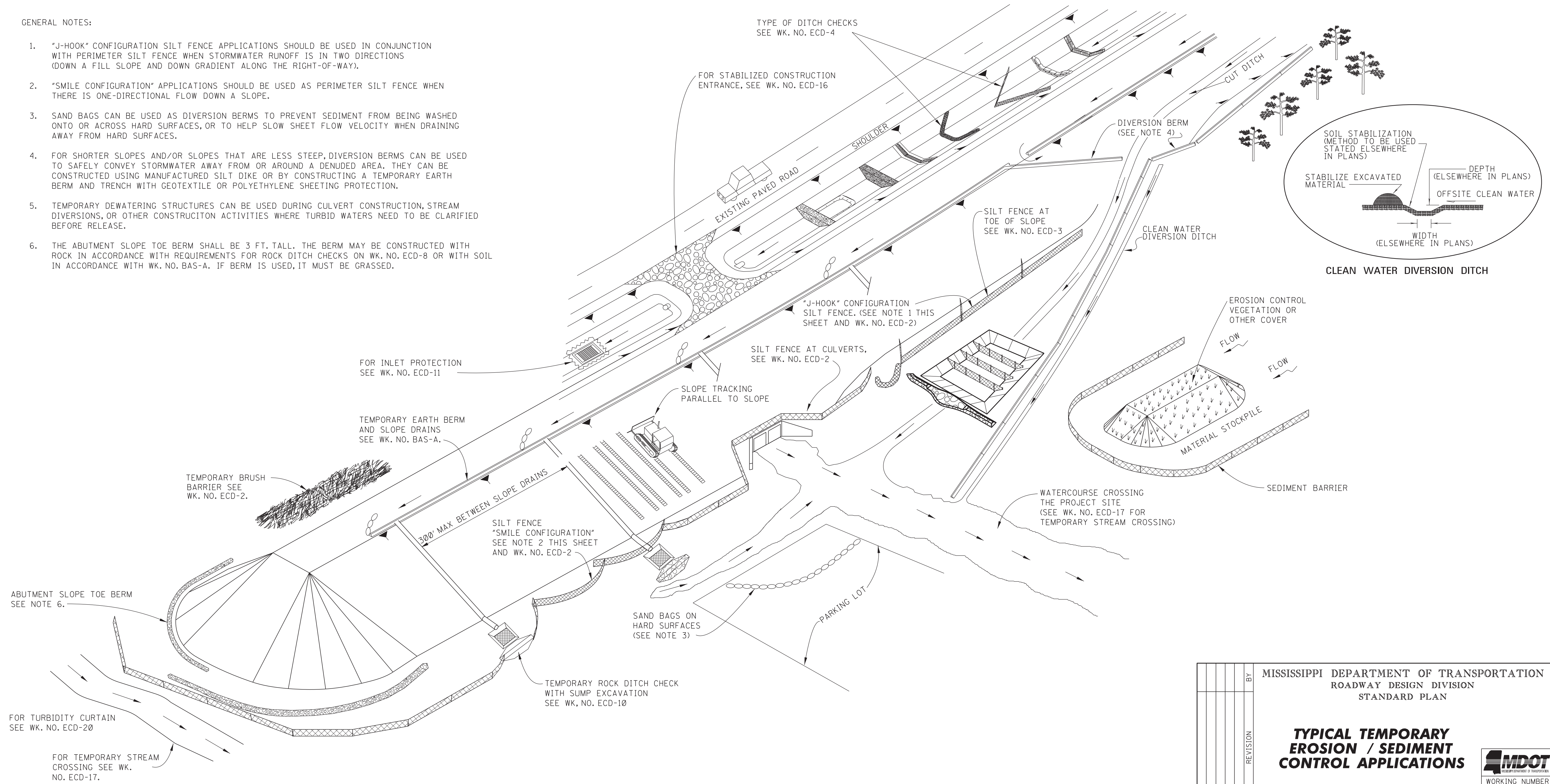
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S2

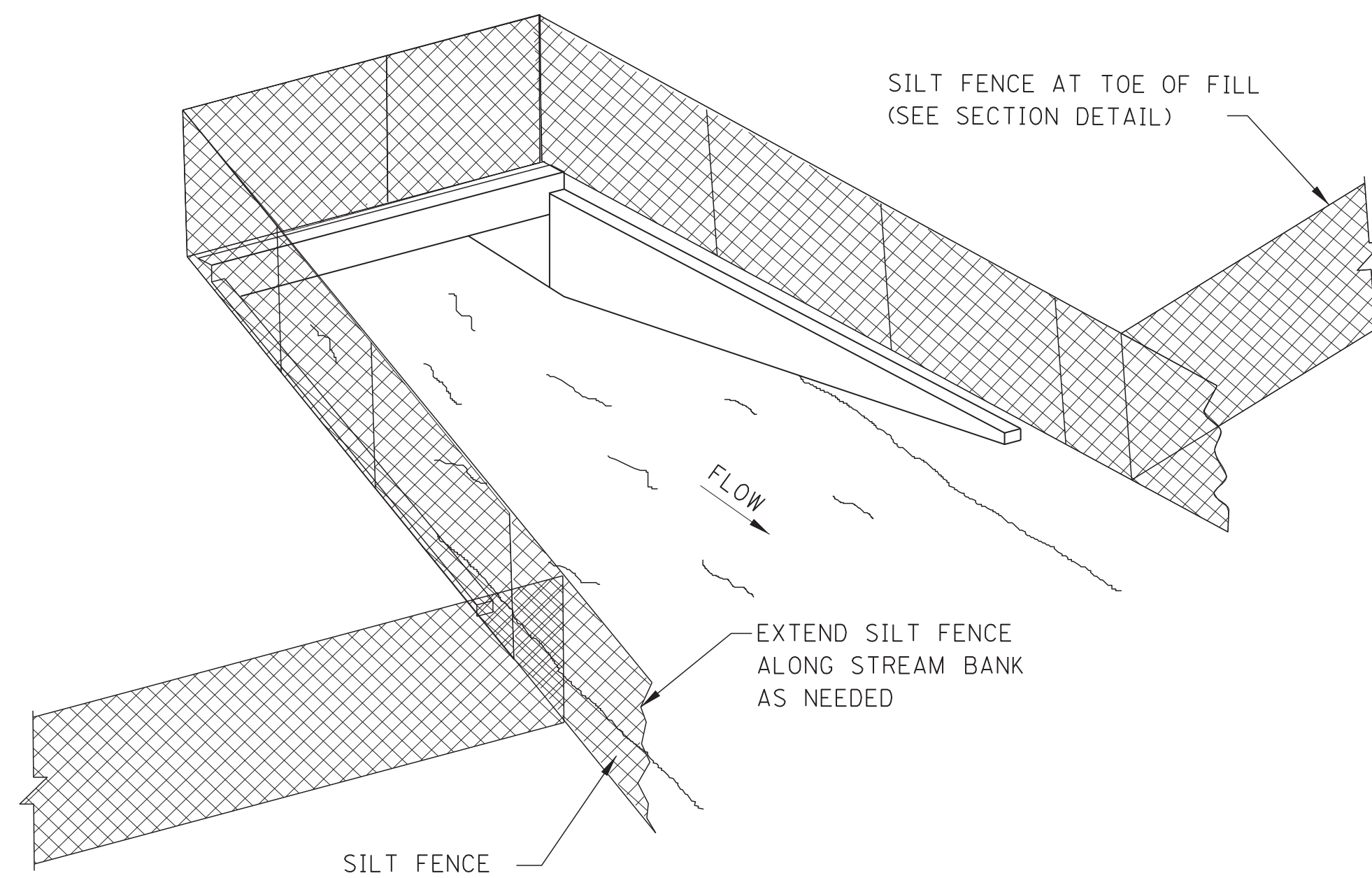
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GENERAL NOTES:

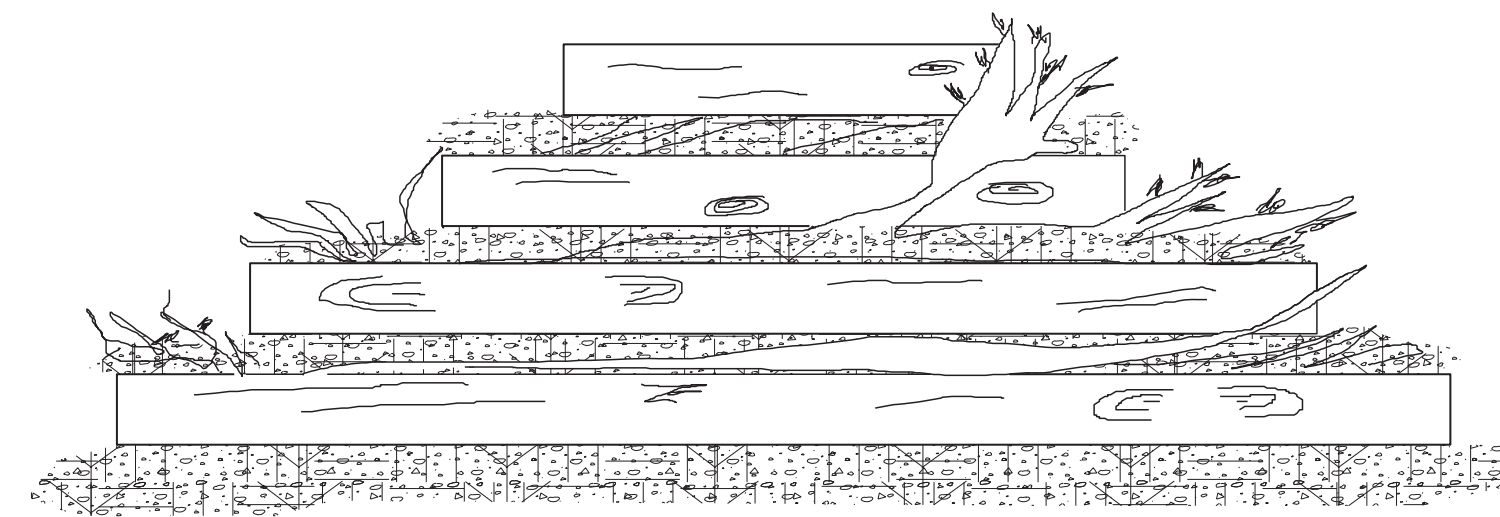
1. "J-HOOK" CONFIGURATION SILT FENCE APPLICATIONS SHOULD BE USED IN CONJUNCTION WITH PERIMETER SILT FENCE WHEN STORMWATER RUNOFF IS IN TWO DIRECTIONS (DOWN A FILL SLOPE AND DOWN GRADIENT ALONG THE RIGHT-OF-WAY).
2. "SMILE CONFIGURATION" APPLICATIONS SHOULD BE USED AS PERIMETER SILT FENCE WHEN THERE IS ONE-DIRECTIONAL FLOW DOWN A SLOPE.
3. SAND BAGS CAN BE USED AS DIVERSION BERMS TO PREVENT SEDIMENT FROM BEING WASHED ONTO OR ACROSS HARD SURFACES, OR TO HELP SLOW SHEET FLOW VELOCITY WHEN DRAINING AWAY FROM HARD SURFACES.
4. FOR SHORTER SLOPES AND/OR SLOPES THAT ARE LESS STEEP, DIVERSION BERMS CAN BE USED TO SAFELY CONVEY STORMWATER AWAY FROM OR AROUND A DENUDED AREA. THEY CAN BE CONSTRUCTED USING MANUFACTURED SILT DIKE OR BY CONSTRUCTING A TEMPORARY EARTH BERM AND TRENCH WITH GEOTEXTILE OR POLYETHYLENE SHEETING PROTECTION.
5. TEMPORARY DEWATERING STRUCTURES CAN BE USED DURING CULVERT CONSTRUCTION, STREAM DIVERSIONS, OR OTHER CONSTRUCTION ACTIVITIES WHERE TURBID WATERS NEED TO BE CLARIFIED BEFORE RELEASE.
6. THE ABUTMENT SLOPE TOE BERM SHALL BE 3 FT. TALL. THE BERM MAY BE CONSTRUCTED WITH ROCK IN ACCORDANCE WITH REQUIREMENTS FOR ROCK DITCH CHECKS ON WK. NO. ECD-8 OR WITH SOIL IN ACCORDANCE WITH WK. NO. BAS-A. IF BERM IS USED, IT MUST BE GRASSED.



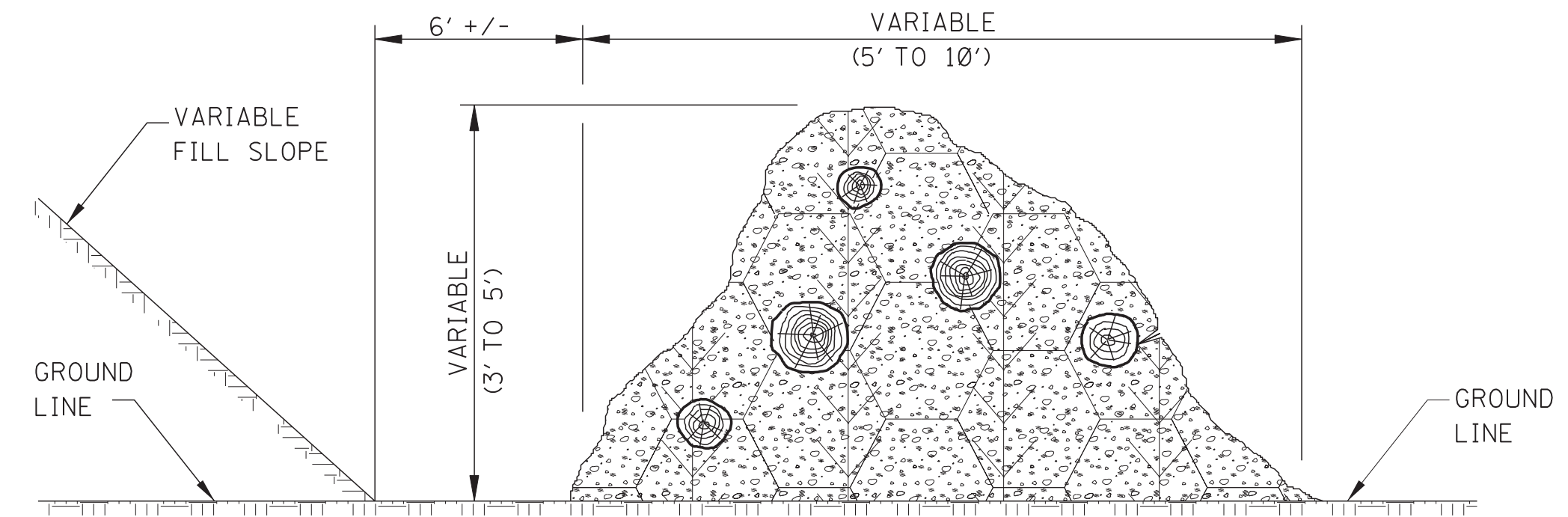
					BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
					REVISION	TYPICAL TEMPORARY EROSION / SEDIMENT CONTROL APPLICATIONS	
					DATE	ISSUE DATE: AUGUST 01, 2017	
						 MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
						WORKING NUMBER ECD-1	
						SHEET NUMBER 6101	



SEDIMENT BARRIER AT CROSS DRAIN



FRONT ELEVATION



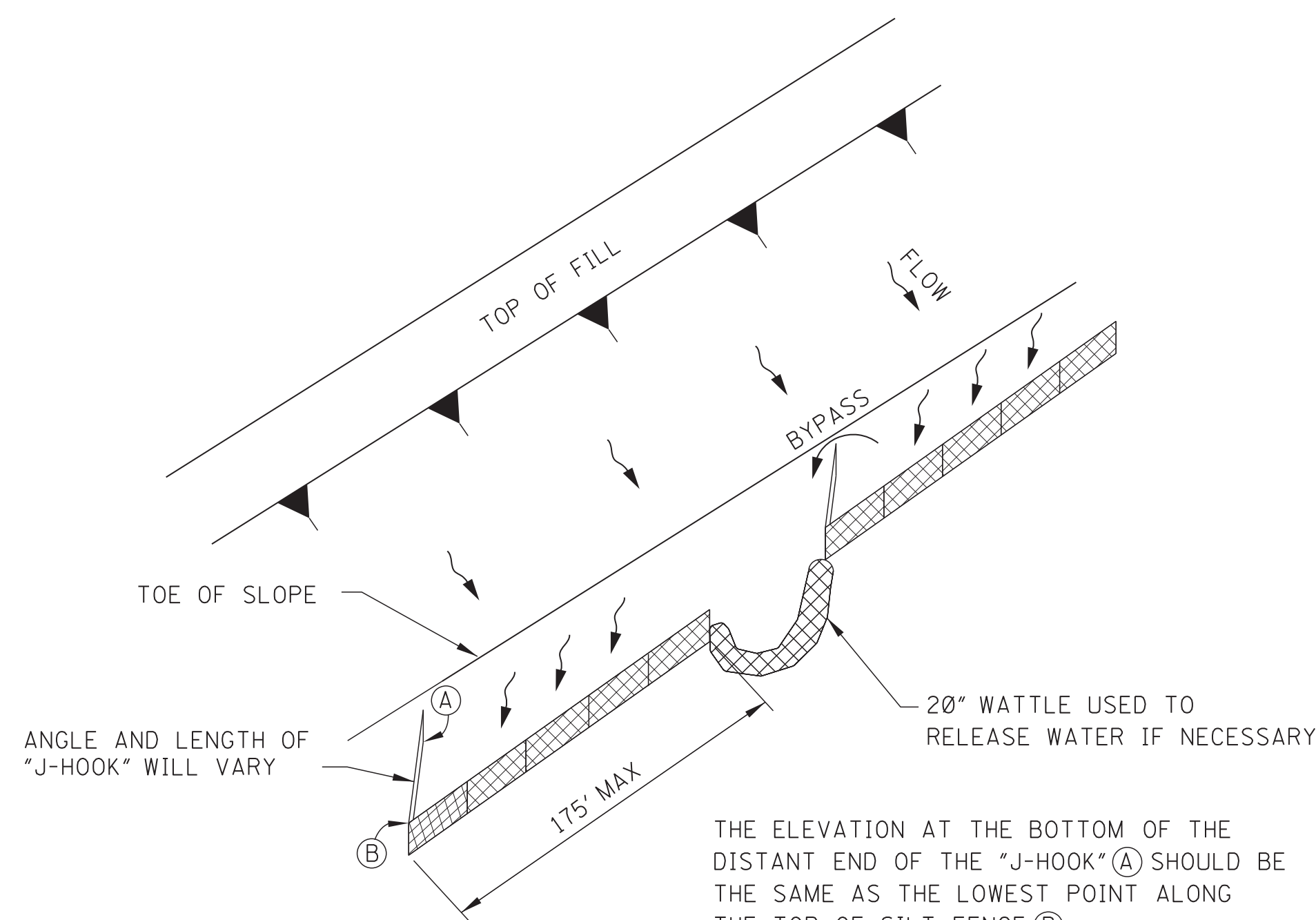
SIDE ELEVATION

TEMPORARY BRUSH BARRIER

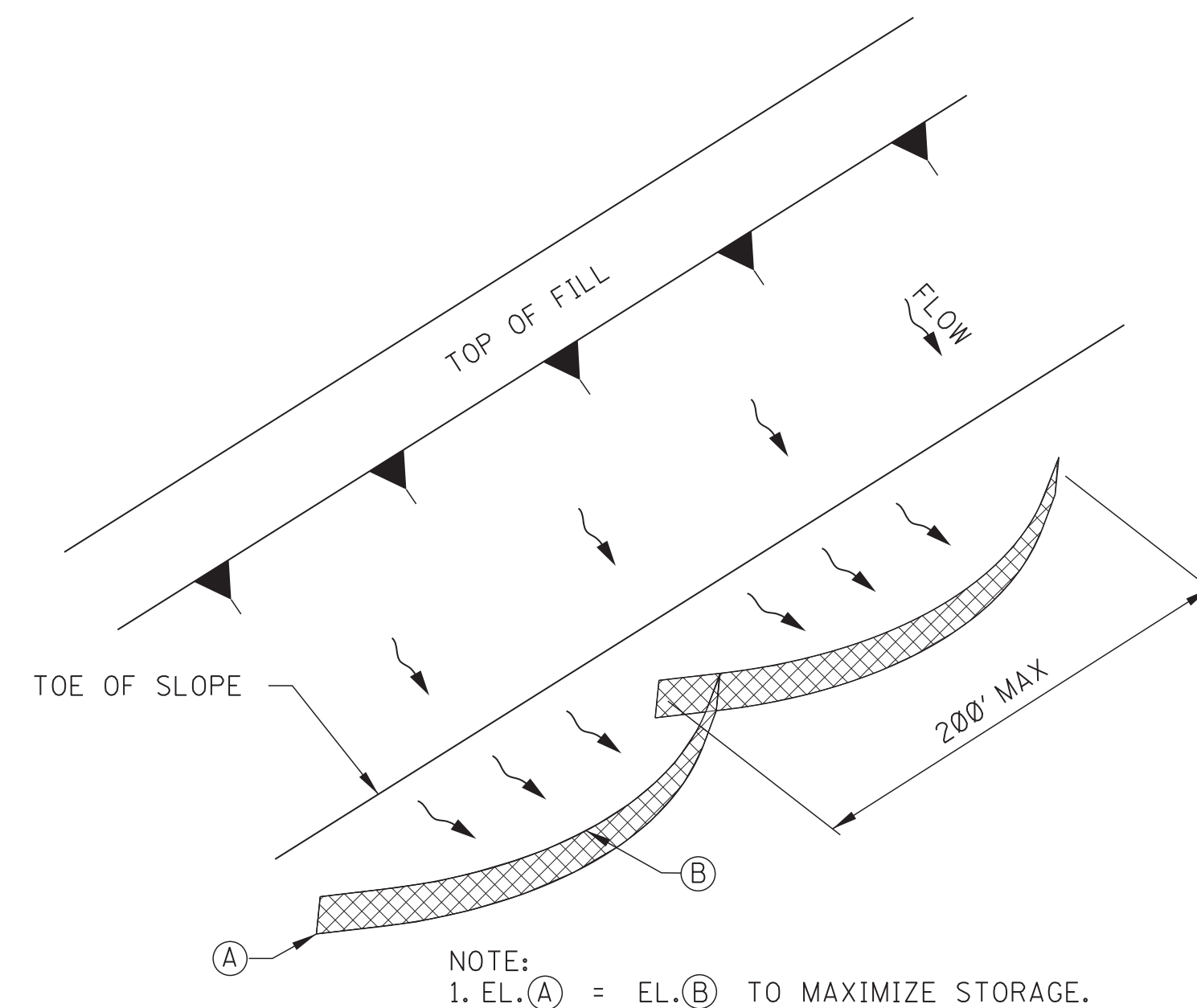
NOTES:

1. BRUSH BARRIER MAY BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TO TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED OR PERMITTED BY THE ENGINEER.
3. TO ALLOW WATER TO SEEP THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.
4. THE BRUSH BARRIER MAY BE CHOKED WITH FILTER FABRIC. THE COST OF FABRIC TO BE INCLUDED IN OTHER ITEMS BID.
5. TEMPORARY BRUSH BARRIER WILL NOT BE MEASURED FOR SEPARATE PAYMENT.

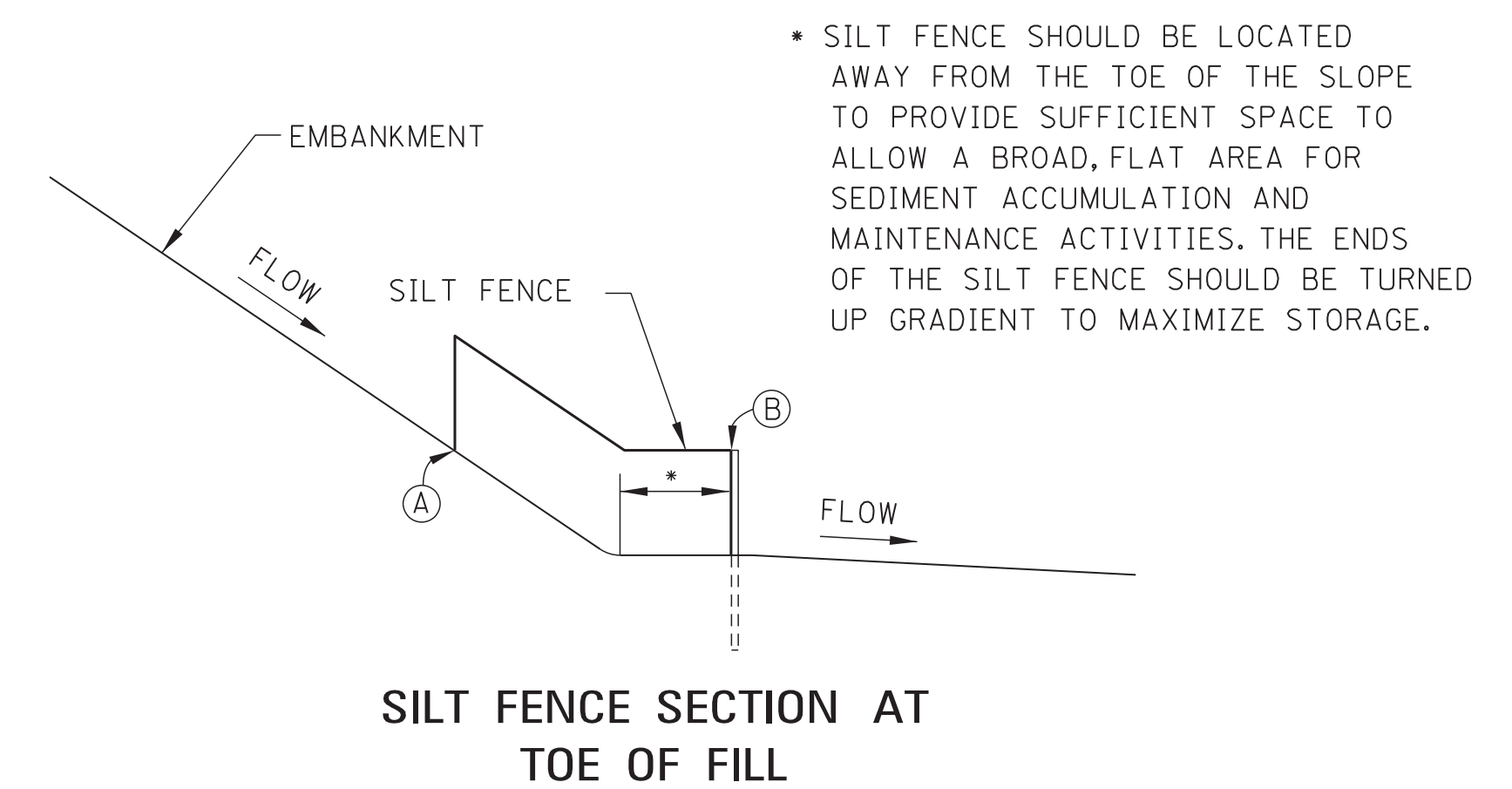
NOTE: ANCHOR AND INSTALL SILT FENCE PER DETAILS SHOWN ON WK. NO. ECD-3



"J-HOOK" SILT FENCE APPLICATION



"SMILE-CONFIGURATION" SILT FENCE APPLICATION



SILT FENCE SECTION AT TOE OF FILL

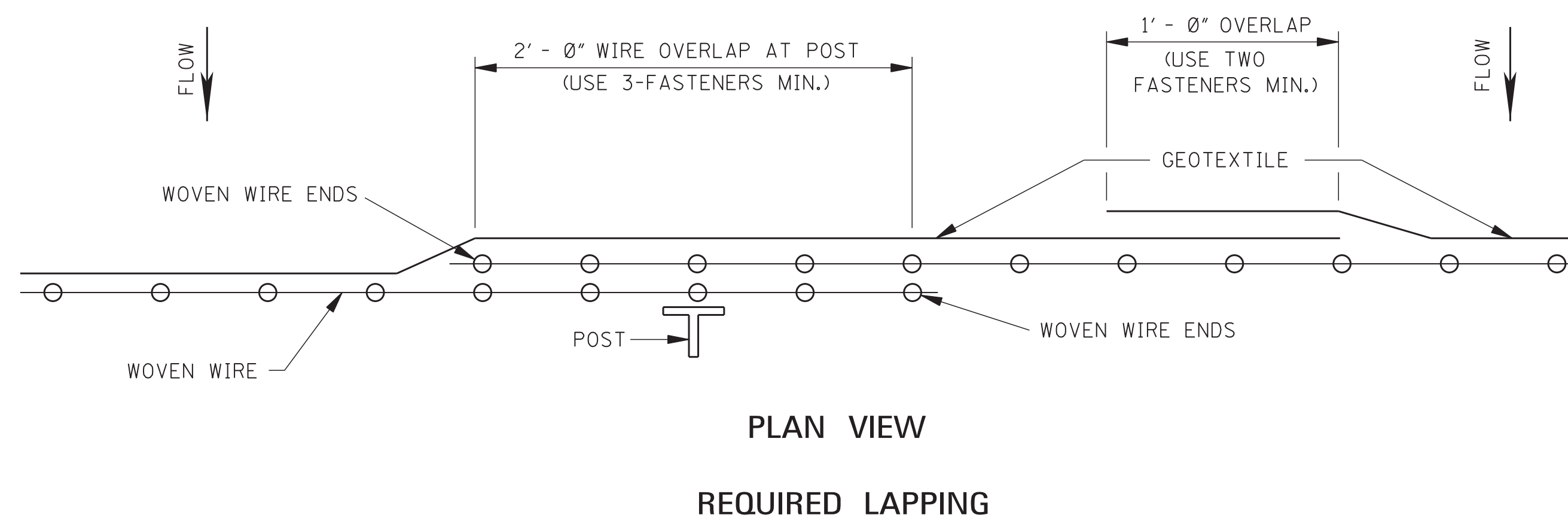
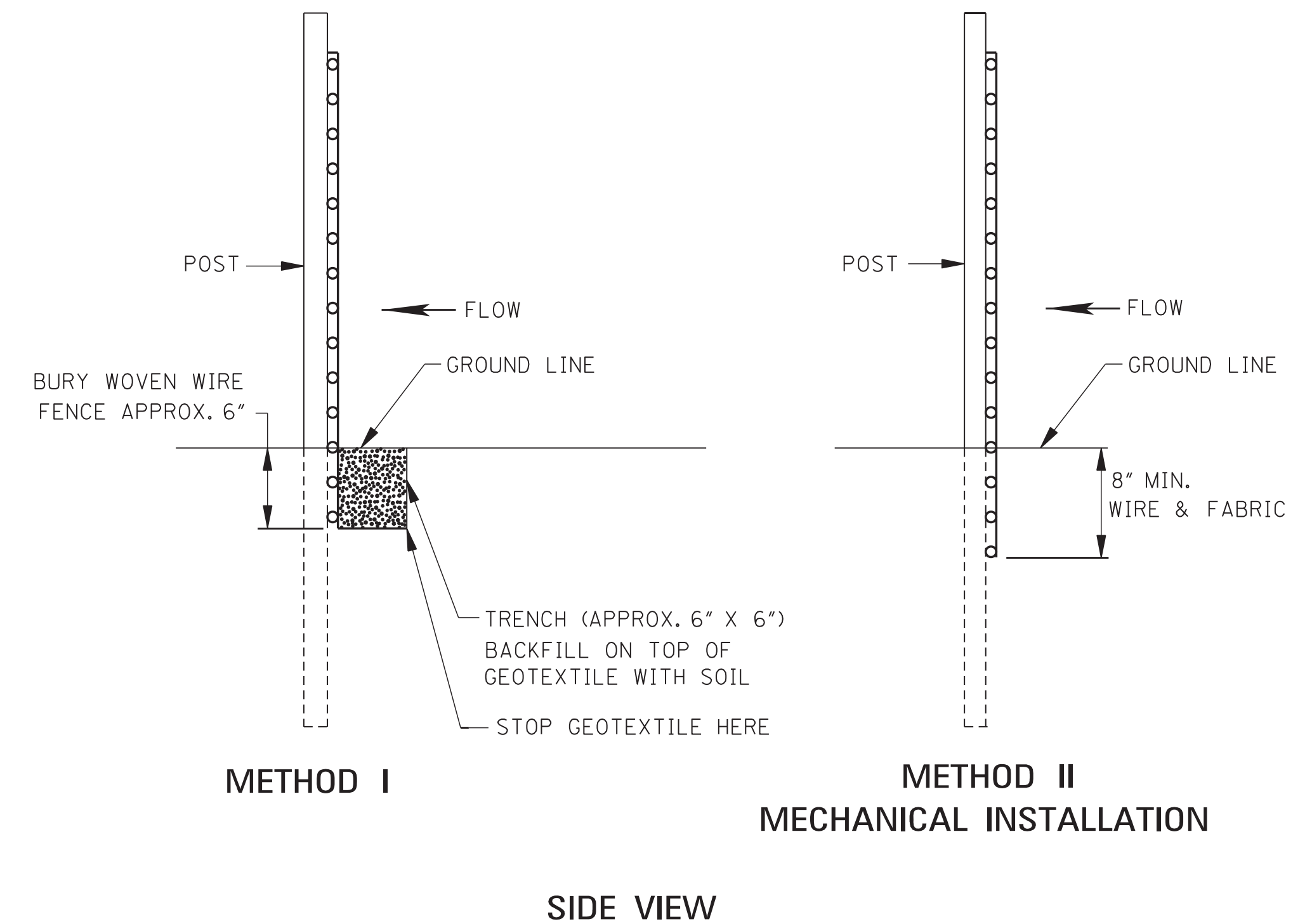
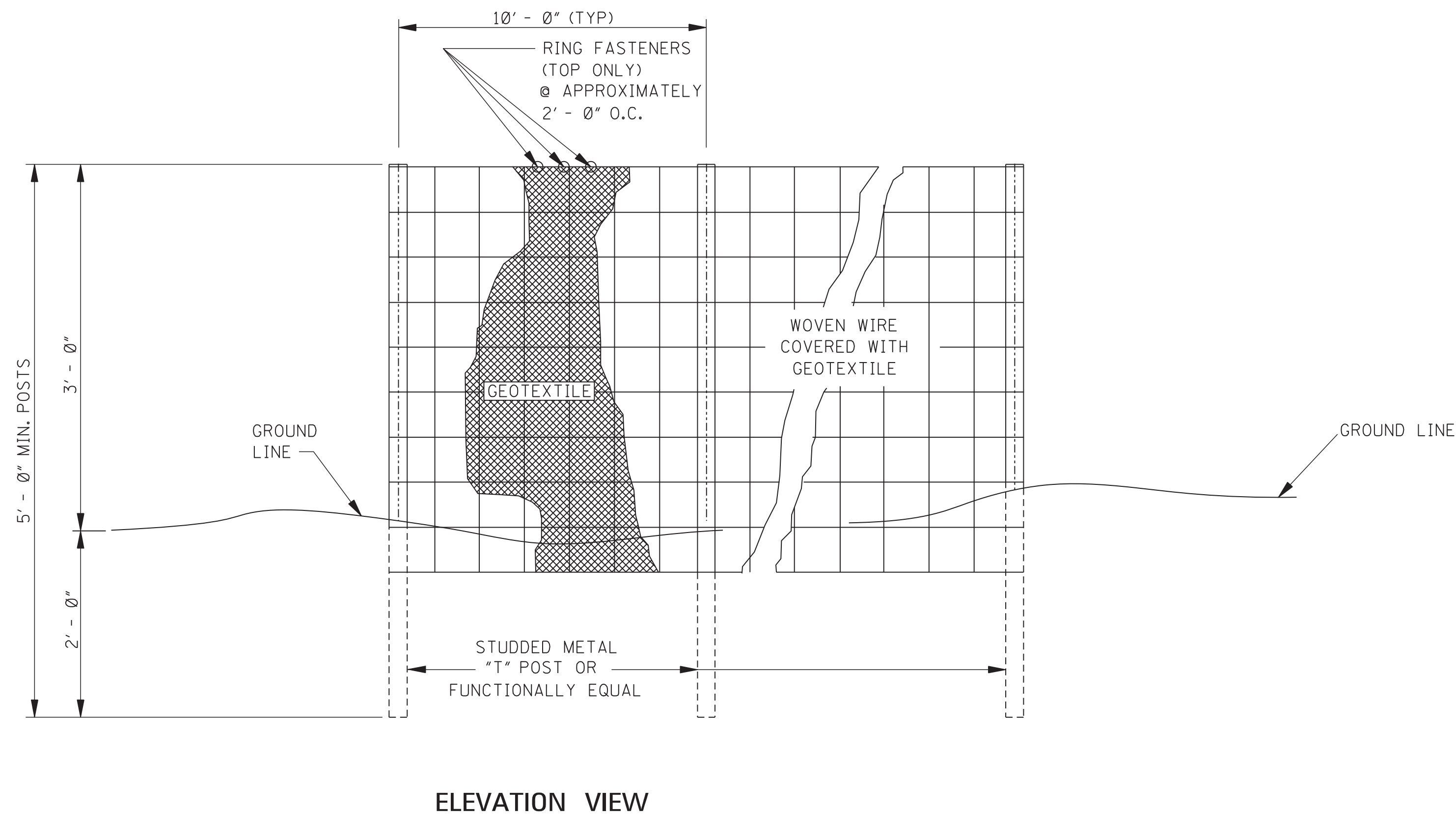
				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
				REVISION	
				DATE	ISSUE DATE: AUGUST 01, 2017

DETAILS OF SEDIMENT BARRIER APPLICATIONS

MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
ECD-2

SHEET NUMBER
6102

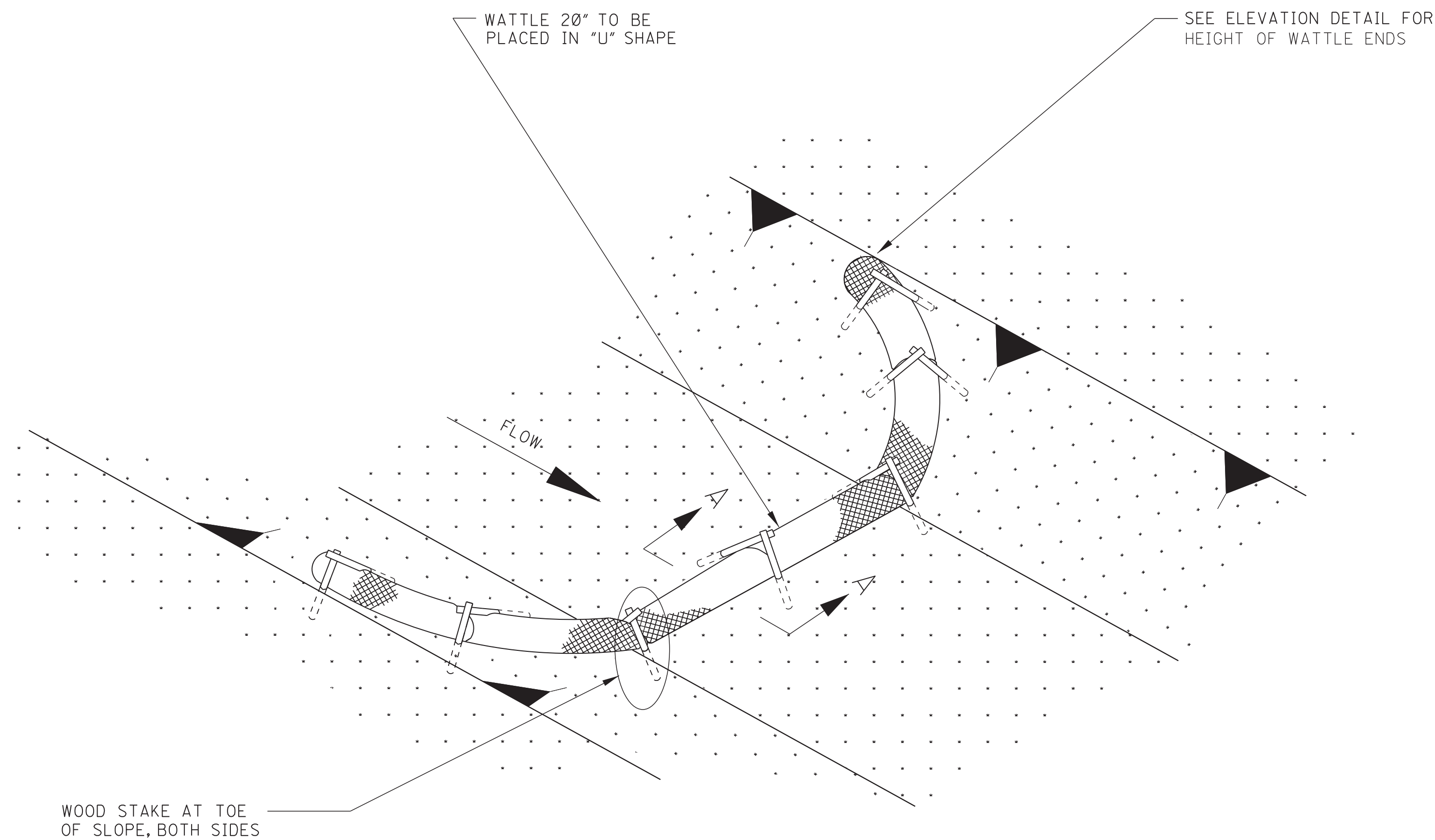


GENERAL NOTES:

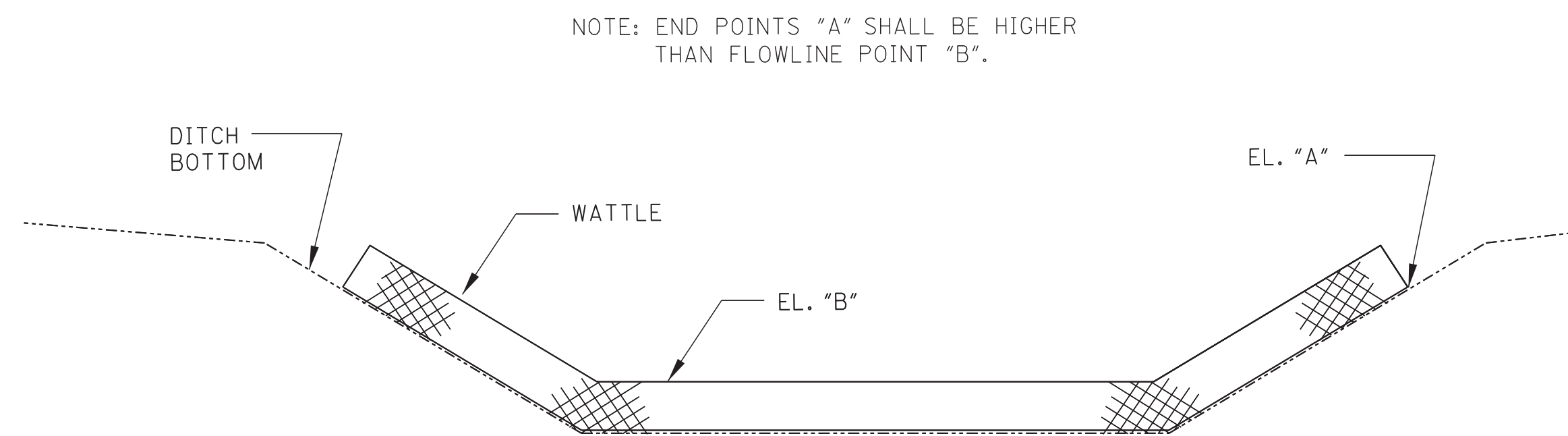
1. SILT FENCES SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
2. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHOULD BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STEAMS AND CHANNELS.
3. SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
4. WHENEVER POSSIBLE SILT FENCE SHOULD BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AN FACILITATES SEDIMENTATION.
5. THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
6. METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF DETAIL.
7. WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
8. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.

				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
				REVISION	<i>DETAILS OF SILT FENCE INSTALLATION</i>	
				DATE	ISSUE DATE: <u> AUGUST 01, 2017 </u>	
					 MISSISSIPPI DEPARTMENT OF TRANSPORTATION WORKING NUMBER ECD-3	
					SHEET NUMBER 6103	

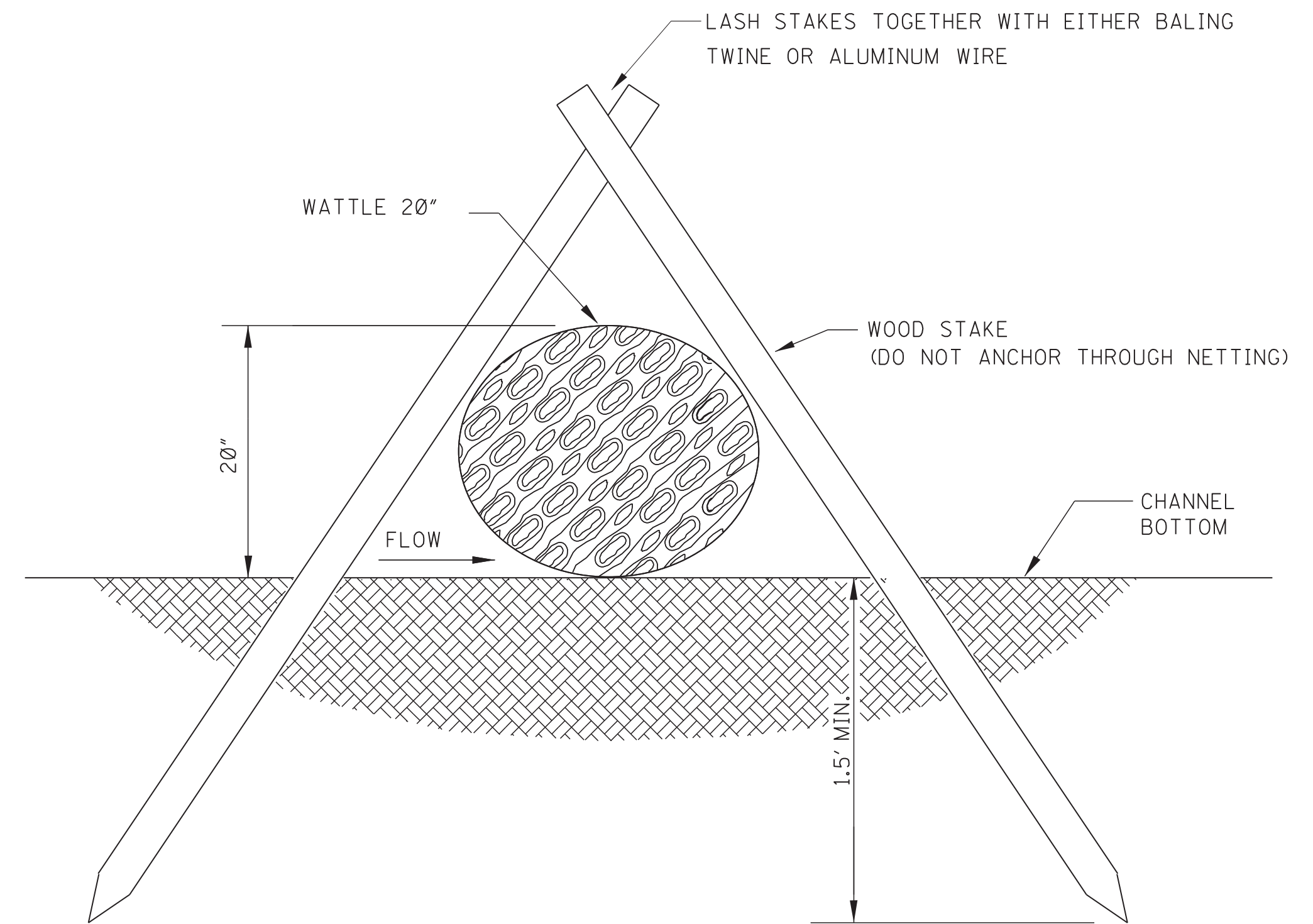




DETAIL (DITCH CHECK)



ELEVATION DETAIL

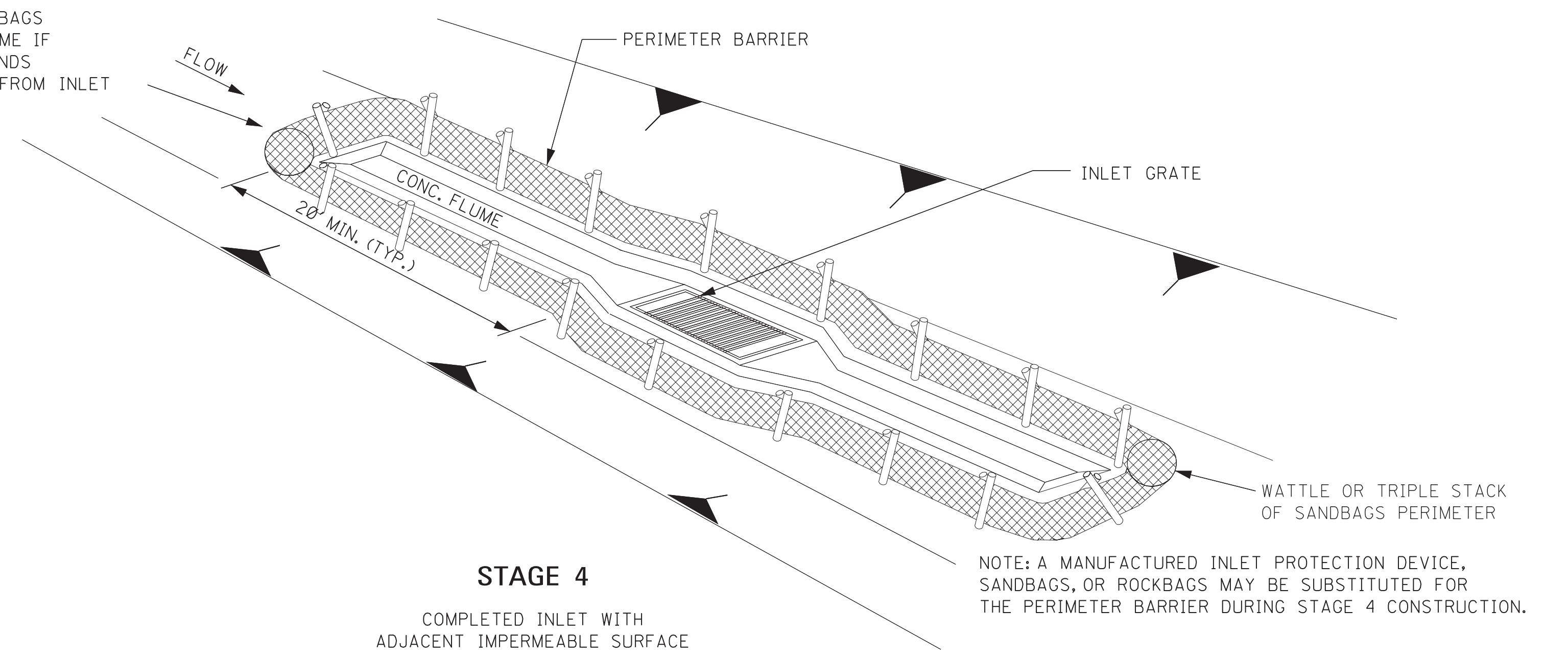
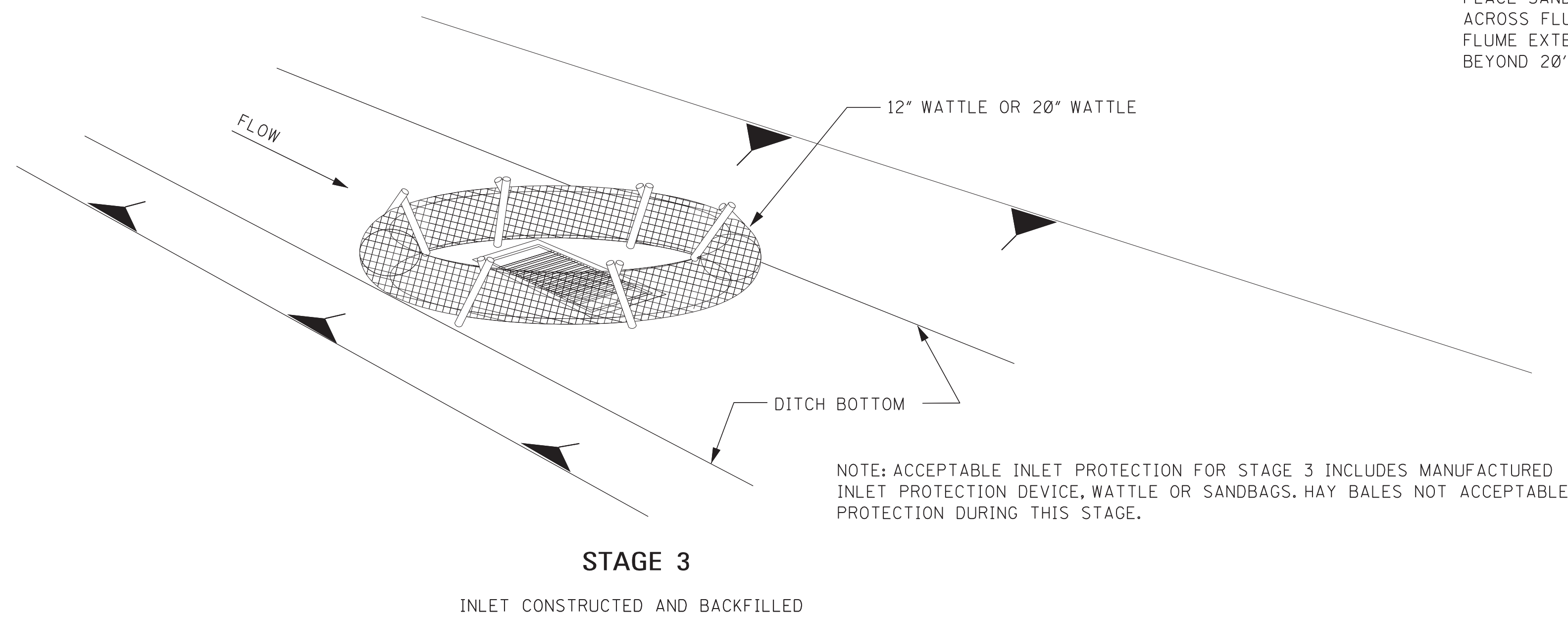
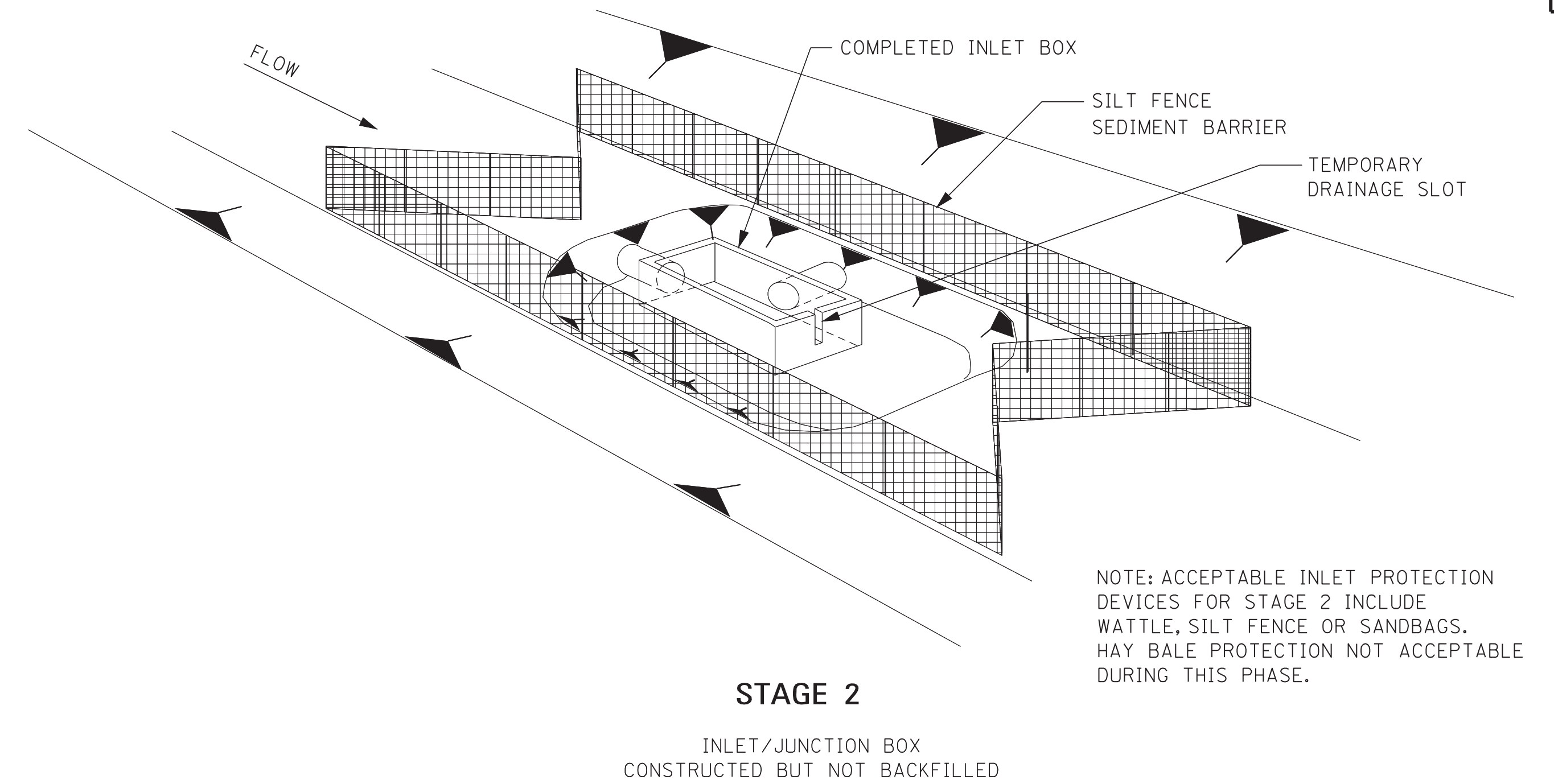
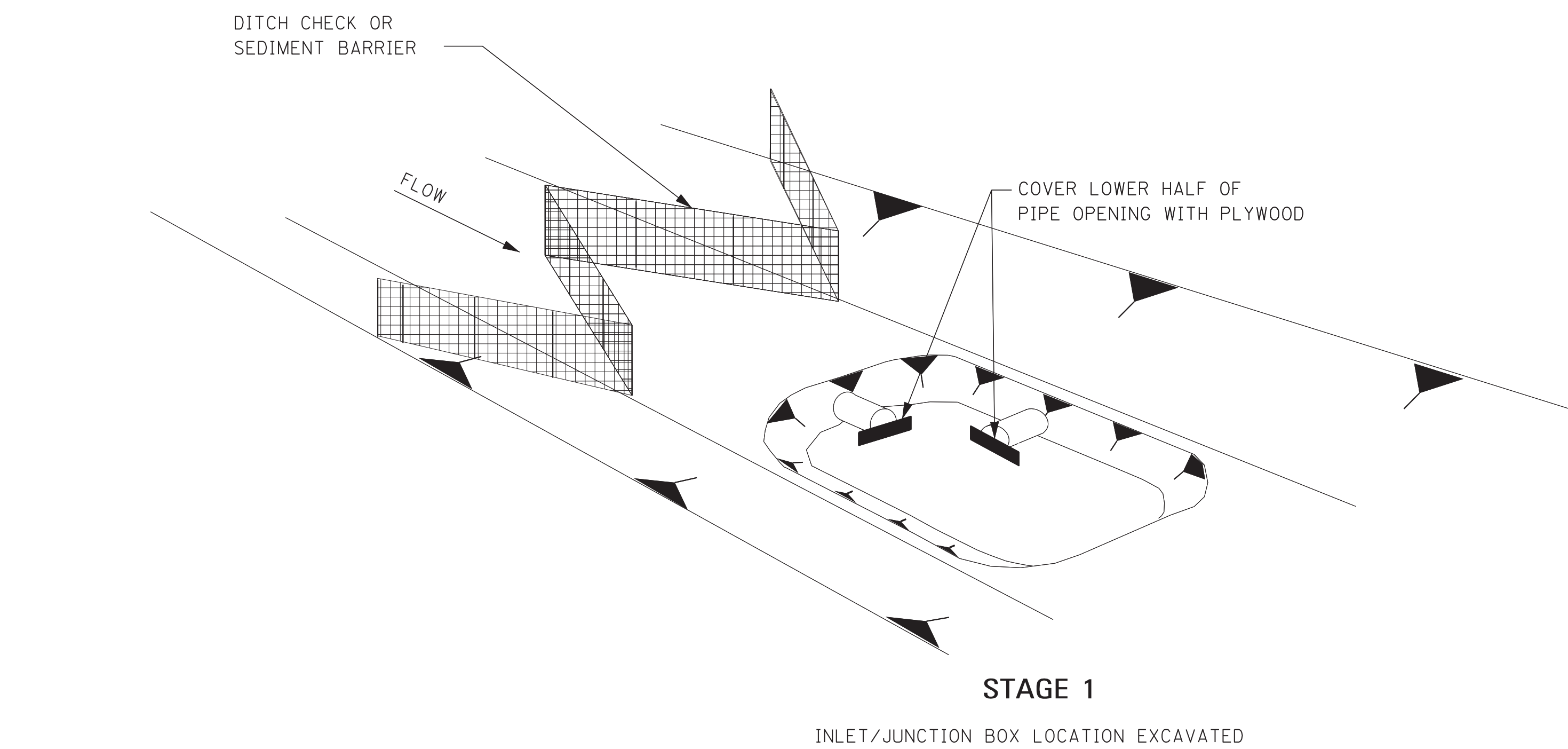


SECTION A-A

NOTES:

1. WATTLE DITCH CHECKS CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
2. THE PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECK SHALL BE 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
3. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
4. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
5. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.
6. IN THE EVENT WATTLES CANNOT BE SECURED IN PLACE USING WOOD STAKES, SAND BAGS MAY BE USED IN LIEU OF WOOD STAKES IN ORDER TO SECURE THE WATTLES IN PLACE. IF SANDS BAGS ARE USED IN THIS APPLICATION THEY WILL NOT BE A SEPARATE PAY ITEM.

				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
				REVISION	DETAILS OF EROSION CONTROL WATTLE DITCH CHECK	
				DATE	ISSUE DATE: <u> AUGUST 01, 2017 </u>	
					 MISSISSIPPI DEPARTMENT OF TRANSPORTATION WORKING NUMBER ECD-6	
					SHEET NUMBER 6106	



DITCH INLET CONSTRUCTION STAGES

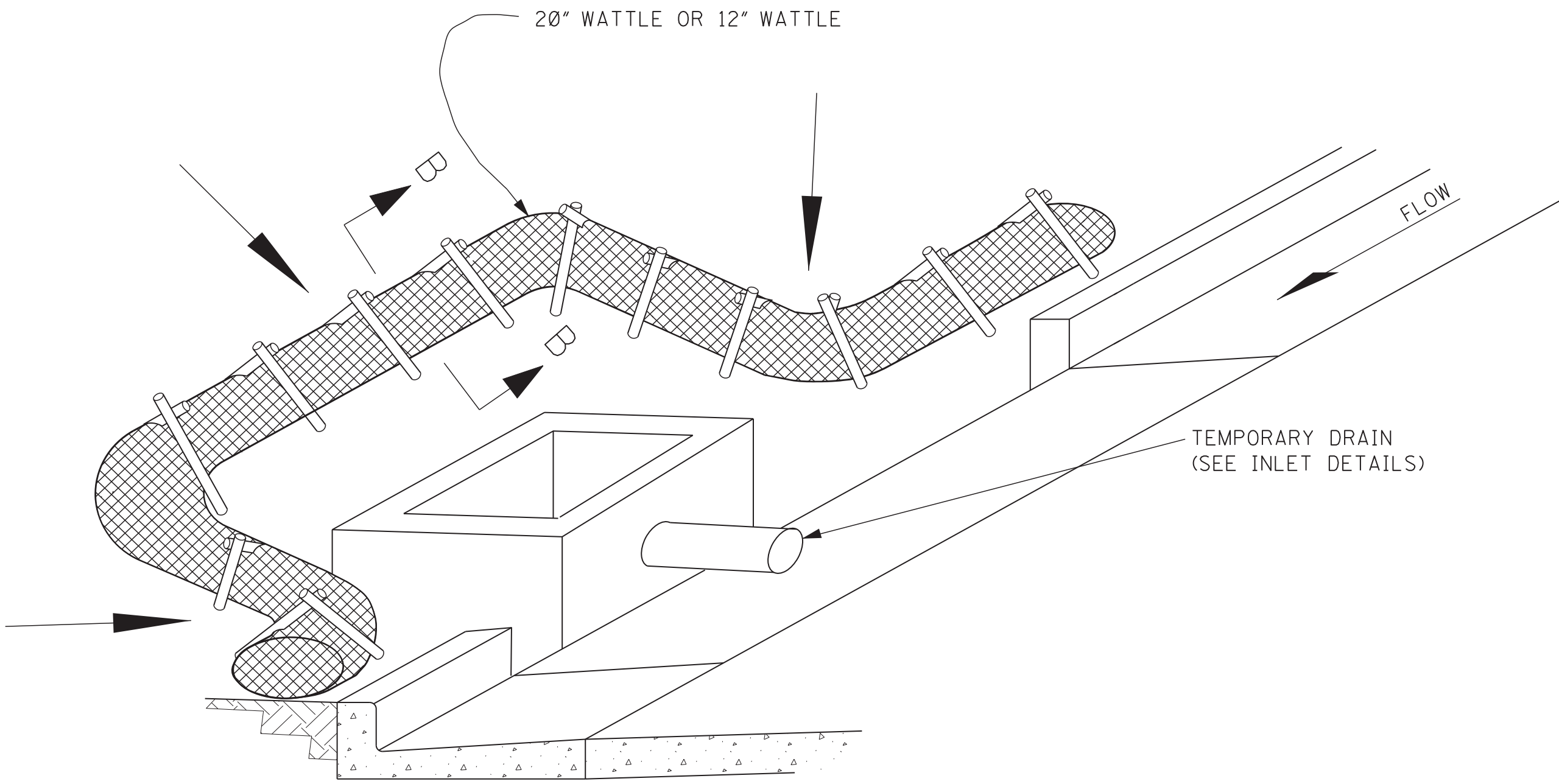
NOTES:

1. DRAINAGE STRUCTURE BACKFILL SHOULD BE PLACED IN STAGE 1 IMMEDIATELY AFTER PIPE INSTALLATION. INLET CONSTRUCTION SHOULD COMMENCE AS SOON AS POSSIBLE AND BE CONTINUOUS THROUGH COMPLETION.
2. CONFIGURATIONS MAY BE ADJUSTED WITH APPROVAL OF THE ENGINEER FOR TRAVELWAY SAFETY, WATER FLOW, OR SOIL AND INSTALLATION CHALLENGES.
3. DURING STAGE 1 AND STAGE 2, SILT FENCE MAY BE REQUIRED UPSLOPE OF THE INLET EXCAVATION AS DIRECTED BY THE ENGINEER.
4. IF SILT FENCE IS INSTALLED AROUND THE INLET INSTALLATION IT SHOULD BE IN A CONFIGURATION THAT WILL ALLOW INLET CONSTRUCTION.
5. FOR INLET PROTECTION TO BE USED IN STAGES 1 AND 2 OF CONSTRUCTION, SEE WK. NO. ECD-12.

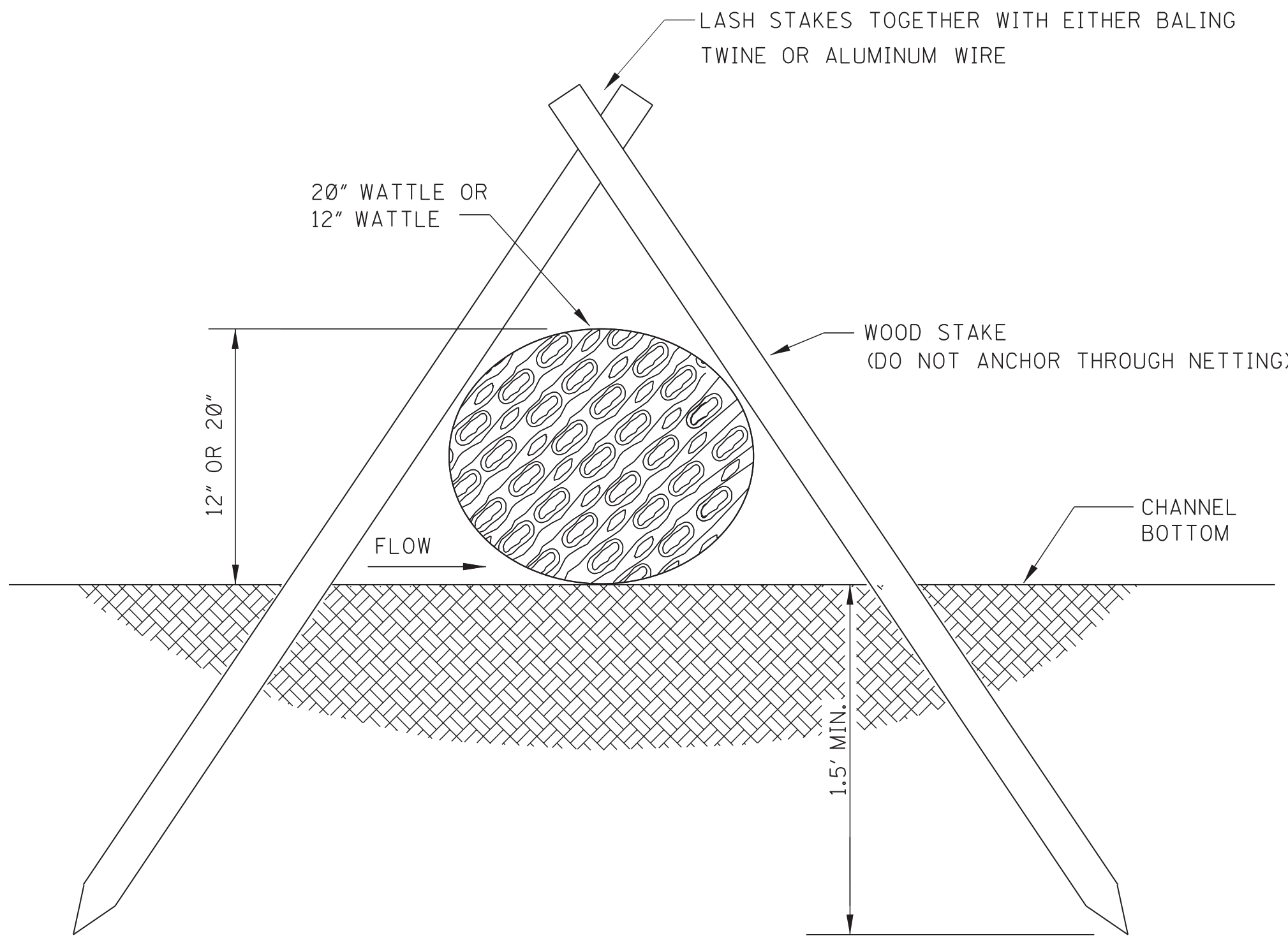
				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN			
				REVISION	TYPICAL APPLICATIONS AND DETAILS FOR INLET CONSTRUCTION			
				DATE				
				ISSUE DATE:	AUGUST 01, 2017			
					WORKING NUMBER ECD-11			
					SHEET NUMBER 6111			



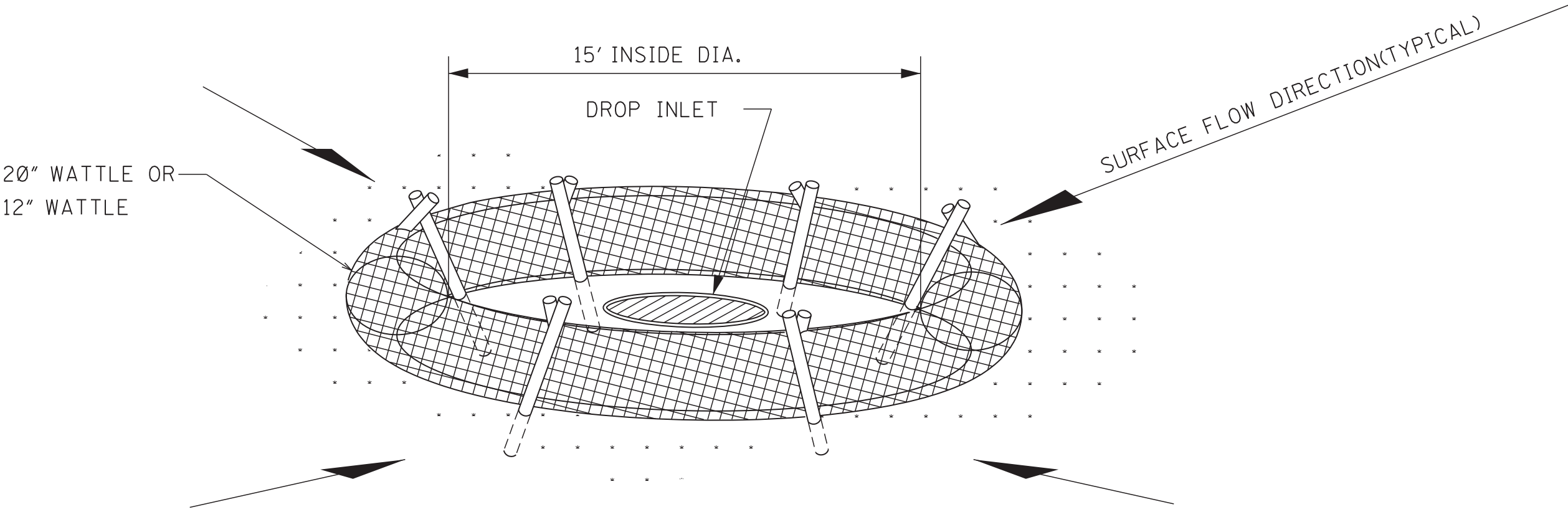
NOTE: SILT FENCE OR SANDBAGS MAY ALSO BE USED FOR THIS APPLICATION.
HAY BALES NOT ACCEPTABLE DURING THIS STAGE.



CURB INLET PROTECTION (STAGE 2)
SINGLE OR DOUBLE WING INLET



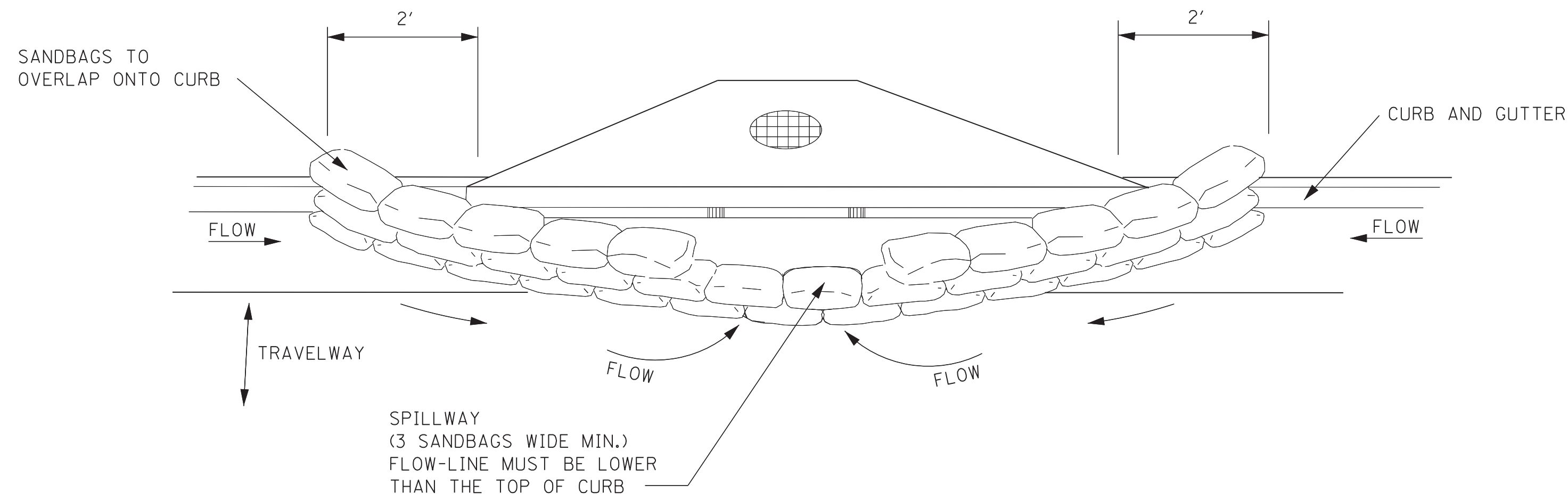
SECTION B-B



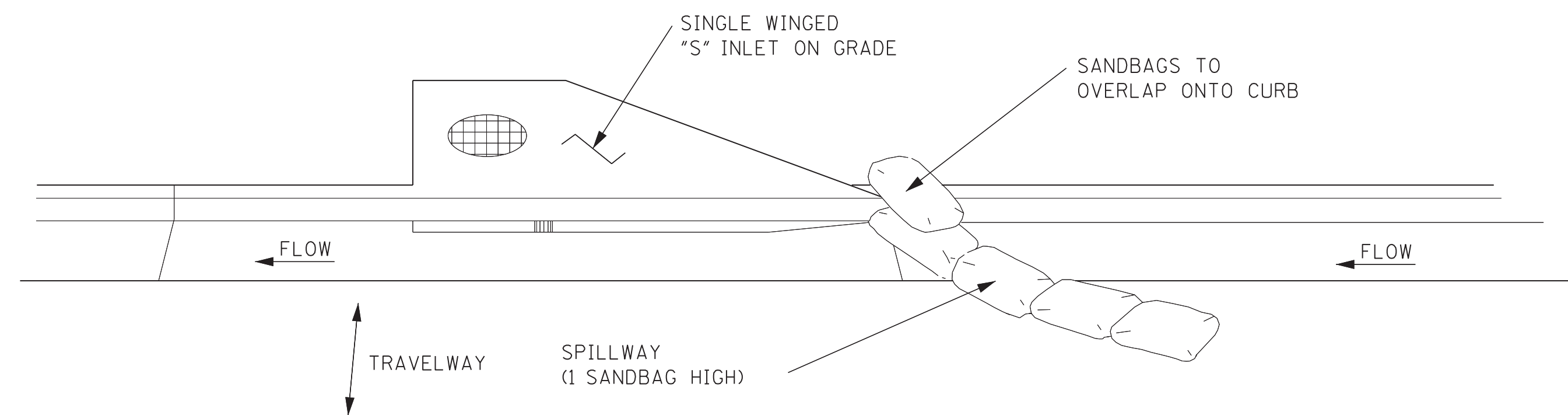
DROP INLET PROTECTION

- NOTES:
- ANCHORING STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE WATTLE. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET.
 - OVERLAP ENDS OF WATTLES PER MANUFACTURER'S RECOMMENDATIONS (1' MIN., 3' MAX.)
 - TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
 - IN THE EVENT WATTLES CANNOT BE SECURED IN PLACE USING WOOD STAKES, SANDBAGS MAY BE USED IN LIEU OF WOOD STAKES IN ORDER TO SECURE WATTLES IN PLACE. COST OF SANDBAGS USED IN THIS APPLICATION SHALL BE INCLUDED IN OTHER ITEMS BID.

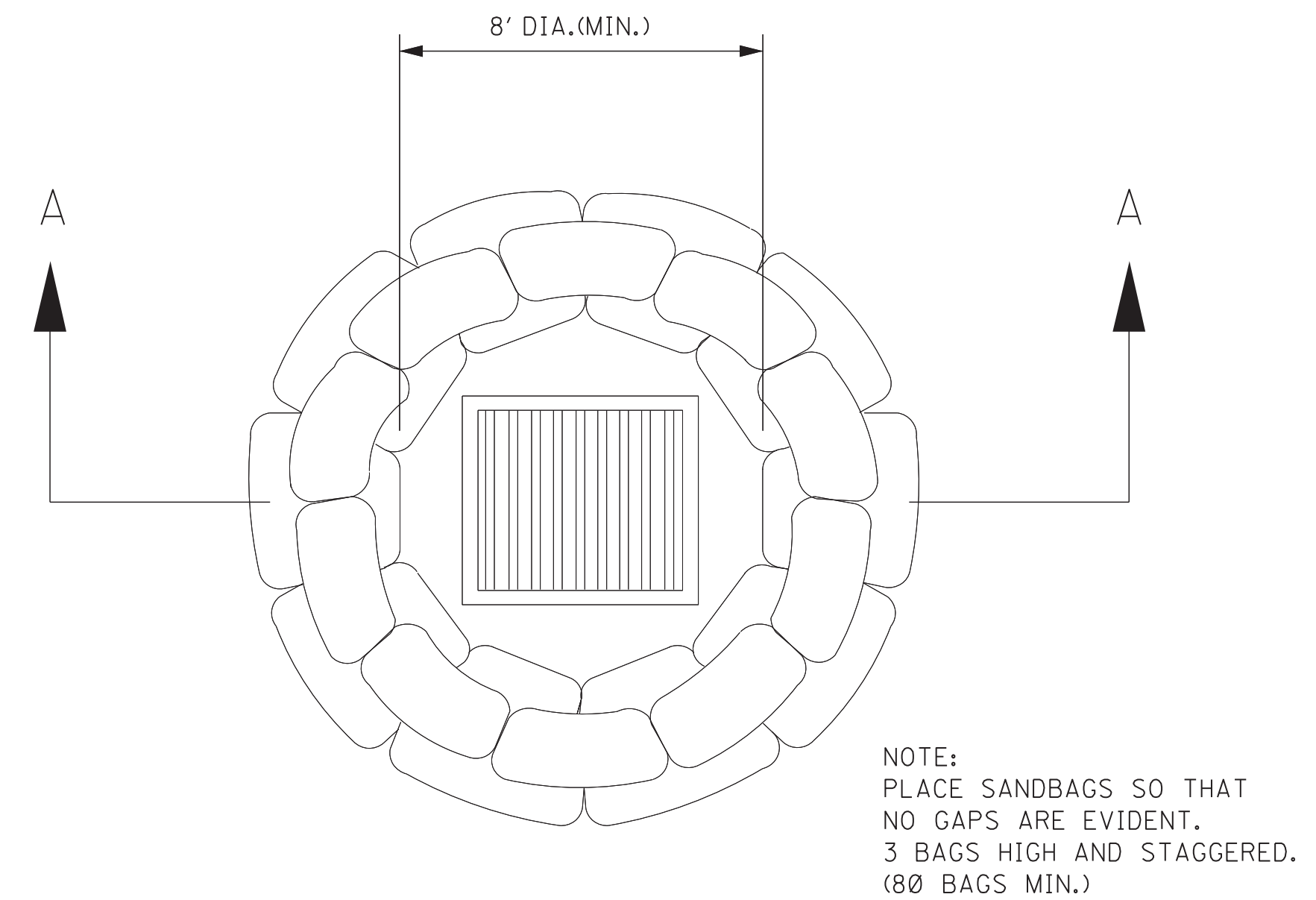
				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
				REVISION		
				DATE	ISSUE DATE: AUGUST 01, 2017	
					INLET PROTECTION DETAILS OF WATTLES	
					 WORKING NUMBER ECD-13 SHEET NUMBER 6113	



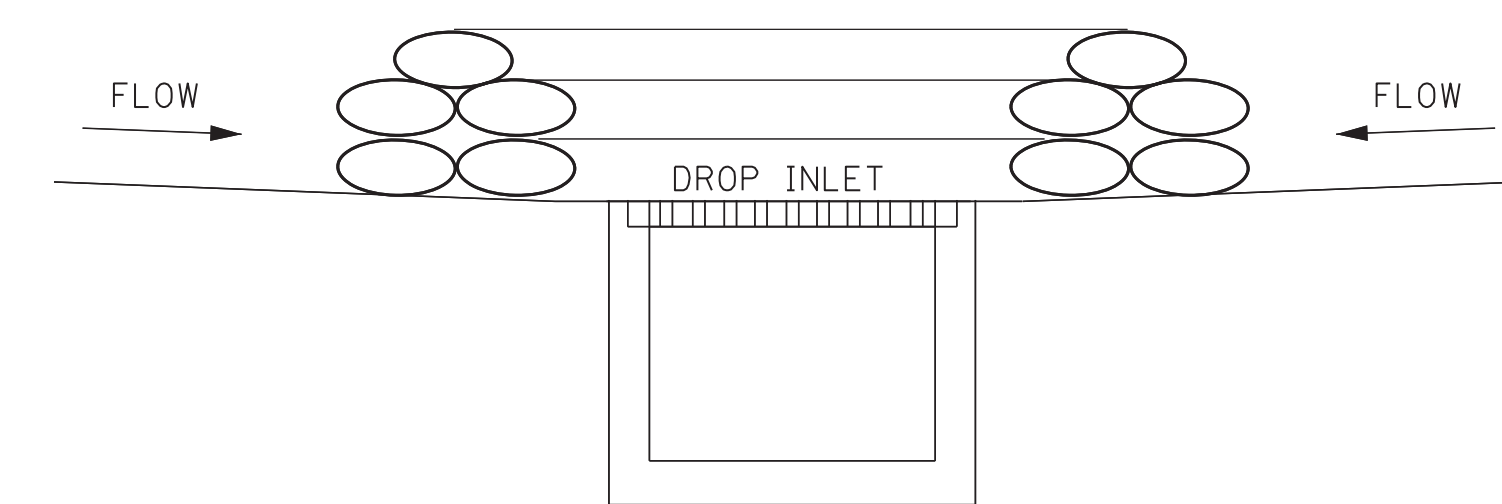
TYPICAL (SANDBAG) PROTECTION FOR INLET IN SAG



TYPICAL (SANDBAG) PROTECTION FOR INLET ON GRADE



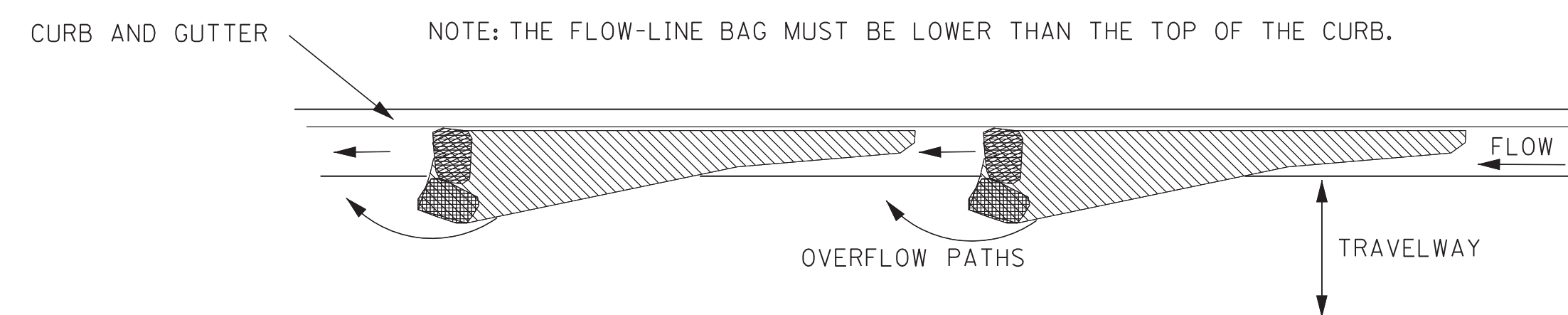
DROP INLET
PLAN VIEW



SECTION A-A
SANDBAG BARRIER

CURB INLET PROTECTION NOTES:

1. THIS CURB INLET PROTECTION METHOD CAN BE USED DURING ANY STAGE OF BASE AND PAVEMENT CONSTRUCTION.
2. BAG HEIGHT AND NUMBER OF BAGS SHOULD BE BASED ON CURB HEIGHT AND USE OF TRAVELWAY.
3. SEDIMENT SHOULD BE CONTROLLED PRIOR TO ENTERING GUTTER. GUTTER CHECKS AND INLET PROTECTION ARE FOR SECONDARY CONTROL.
4. REMOVE ACCUMULATED SEDIMENT AFTER EVERY RAINFALL. SWEEP SEDIMENT FROM HARD SURFACES AND DISPOSE OF APPROPRIATELY AWAY FROM INLETS AND/OR WATER BODIES.
5. IF DENUDED AREAS EXIST BEHIND THE INLET, A SEDIMENT BARRIER SHOULD BE INSTALLED AROUND ITS PERIMETER TO CONTROL SEDIMENT.



CURB AND GUTTER SEDIMENT
CONTAINMENT SYSTEM

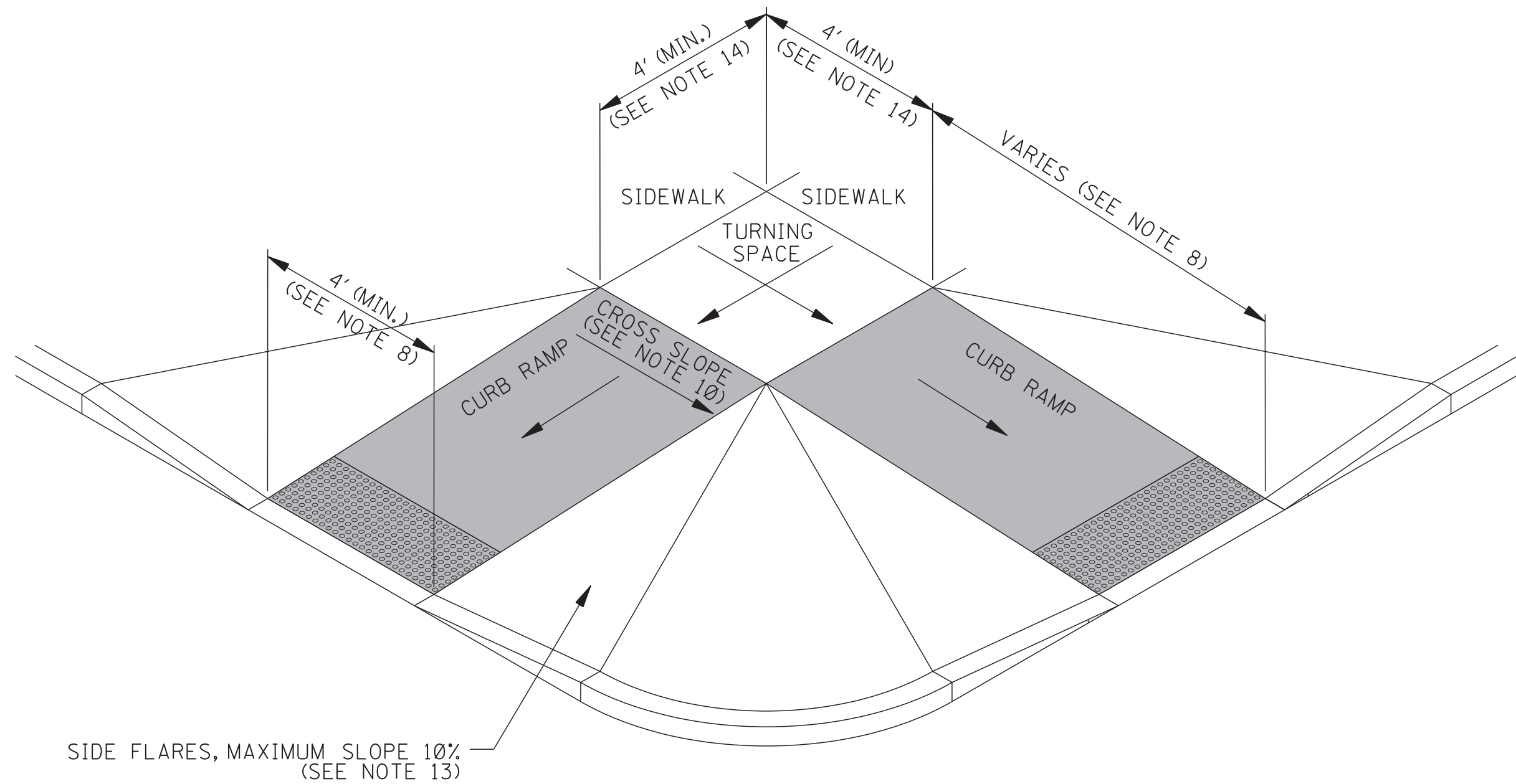
				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
				REVISION		
				DATE	ISSUE DATE: AUGUST 01, 2017	

**INLET PROTECTION
DETAILS OF SANDBAGS**

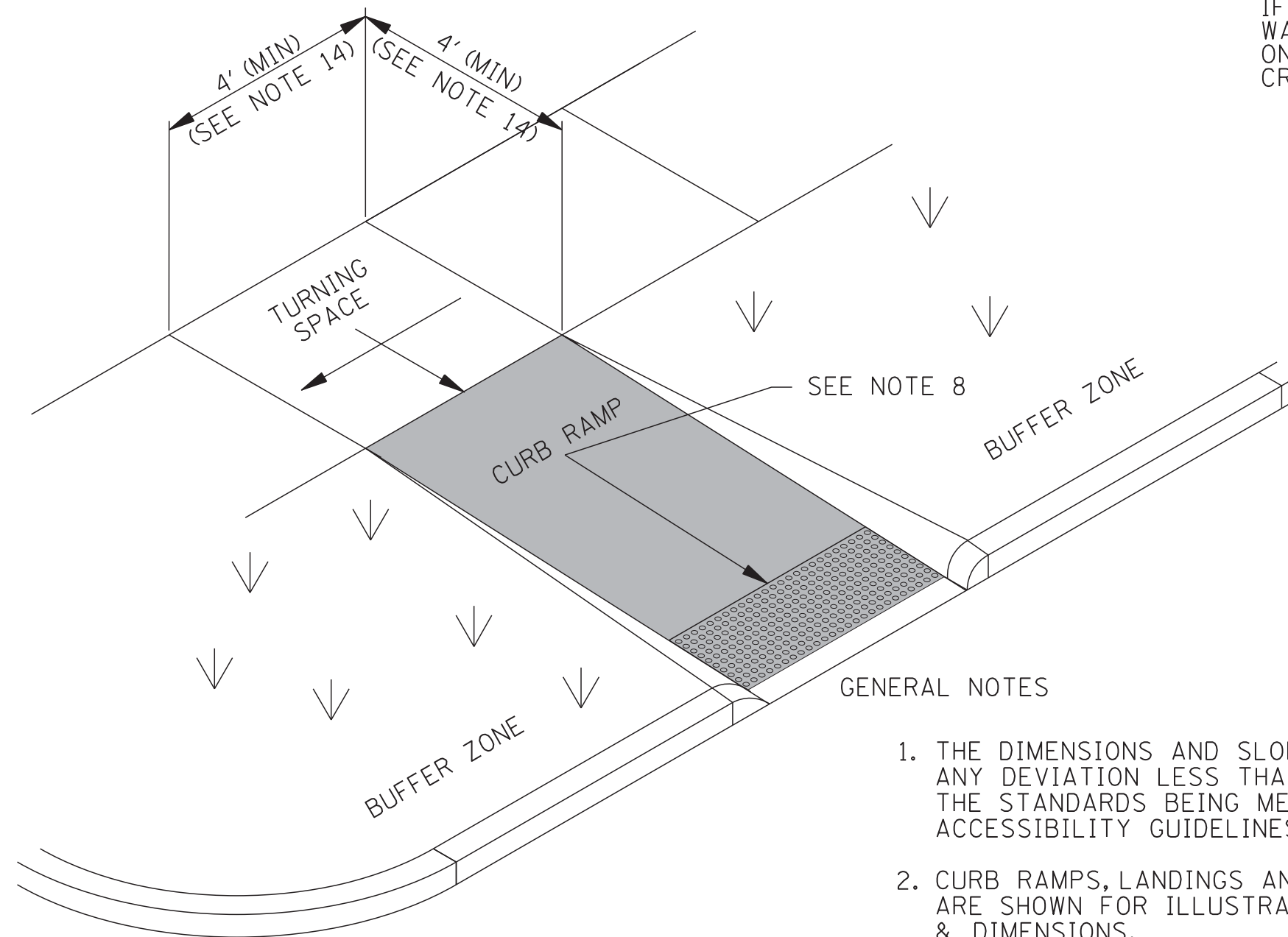
**MDOT**
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
ECD-15

SHEET NUMBER
6115

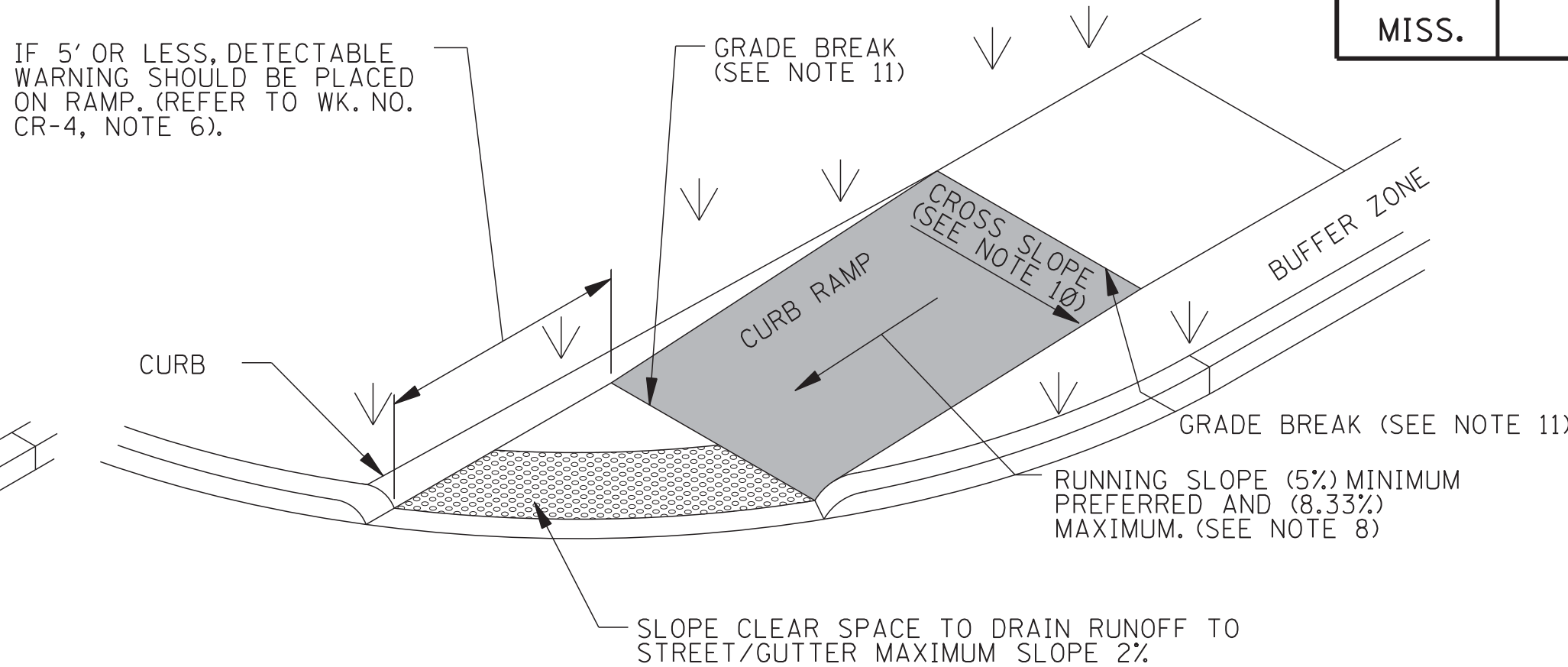


TYPE 1 – PERPENDICULAR CURB RAMP



TYPE 2 – PERPENDICULAR RETURNED CURB RAMP

SIDES OF CURB RAMPS MAY BE RETURNED, PROVIDING USEFUL DIRECTIONAL CUES, IF PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, POLES, OR EQUIPMENT.



TYPE 3 – ALTERNATE PERPENDICULAR RETURNED CURB RAMP

GENERAL NOTES

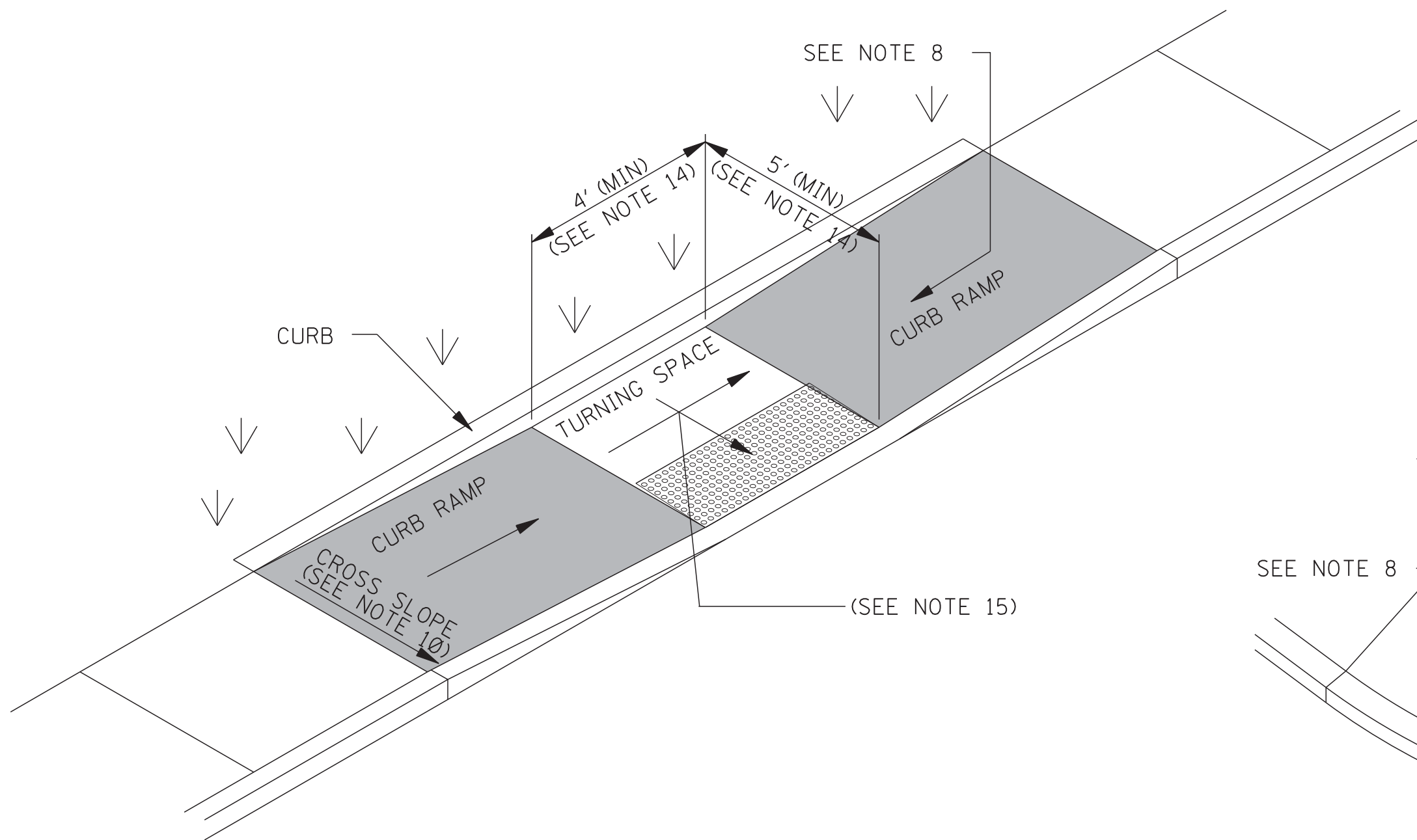
1. THE DIMENSIONS AND SLOPES PRESENTED IN THE DETAILS ARE THE MINIMUM NECESSARY TO COMPLY WITH THE ADA AND MDOT STANDARDS. ANY DEVIATION LESS THAN THE MINIMUM WIDTH OR GREATER THAN THE MAXIMUM SLOPE FROM THESE STANDARDS MUST BE DOCUMENTED WITH THE STANDARDS BEING MET TO THE GREATEST EXTENT PRACTICABLE AND CONSISTENT WITH THE MOST CURRENT PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG).
2. CURB RAMPS, LANDINGS AND BLENDED TRANSITIONS MAY REQUIRE THE USE OF DETECTABLE WARNINGS. DETECTABLE WARNINGS ON THIS SHEET ARE SHOWN FOR ILLUSTRATION ONLY. REFER TO THE DETECTABLE WARNING DETAILS ON WK. NO. CR-4 FOR DETAILS ON PLACEMENT, ORIENTATION & DIMENSIONS.
3. THE LOCATION, ORIENTATION, AND TYPE OF CURB RAMPS SHOULD BE AS SHOWN IN THE PLANS.
4. ANY COMBINATION OF PERPENDICULAR, PERPENDICULAR RETURNED, AND PARALLEL CURB RAMPS MAY BE USED TO ACHIEVE AN ACCESSIBLE DESIGN AS LONG AS THE BASIC REQUIREMENTS FOR CURB RAMPS ARE MET.
5. CURB RAMPS SHALL BE PAID FOR AS SIDEWALK.
6. THE THICKNESS OF THE CURB RAMP SHALL BE A MINIMUM OF 4".
7. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

CURB RAMP NOTES:

8. THE CLEAR WIDTH OF CURB RAMP RUNS (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE THE WIDTH OF THE SIDEWALK, OR 4' MINIMUM. THE RUNNING SLOPE OF A CURB RAMP SHALL BE 5% MINIMUM, AND 8.33% MAXIMUM (7.1% PREFERRED). THE RUNNING SLOPE OF BLENDED TRANSITIONS SHALL BE 5% MAXIMUM.
9. WHERE THE SLOPE OF THE ROADWAY EXCEEDS 8.33%, THE CURB RAMP LENGTH IS THE LENGTH NECESSARY TO MEET THE EXISTING SIDEWALK. IT IS NOT NECESSARY THAT THE RAMP EXCEED 15'.
10. THE CROSS SLOPE OF CURB RAMPS, BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE 2% MAXIMUM (1.5% PREFERRED). AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE IS PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
11. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
12. RAMP TRANSITIONS BETWEEN WALKS, TURNING SPACES, LANDINGS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES.
13. WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP, FLARED SIDES SHALL BE SLOPED 10% MAXIMUM, MEASURED PARALLEL TO THE CURB LINE.

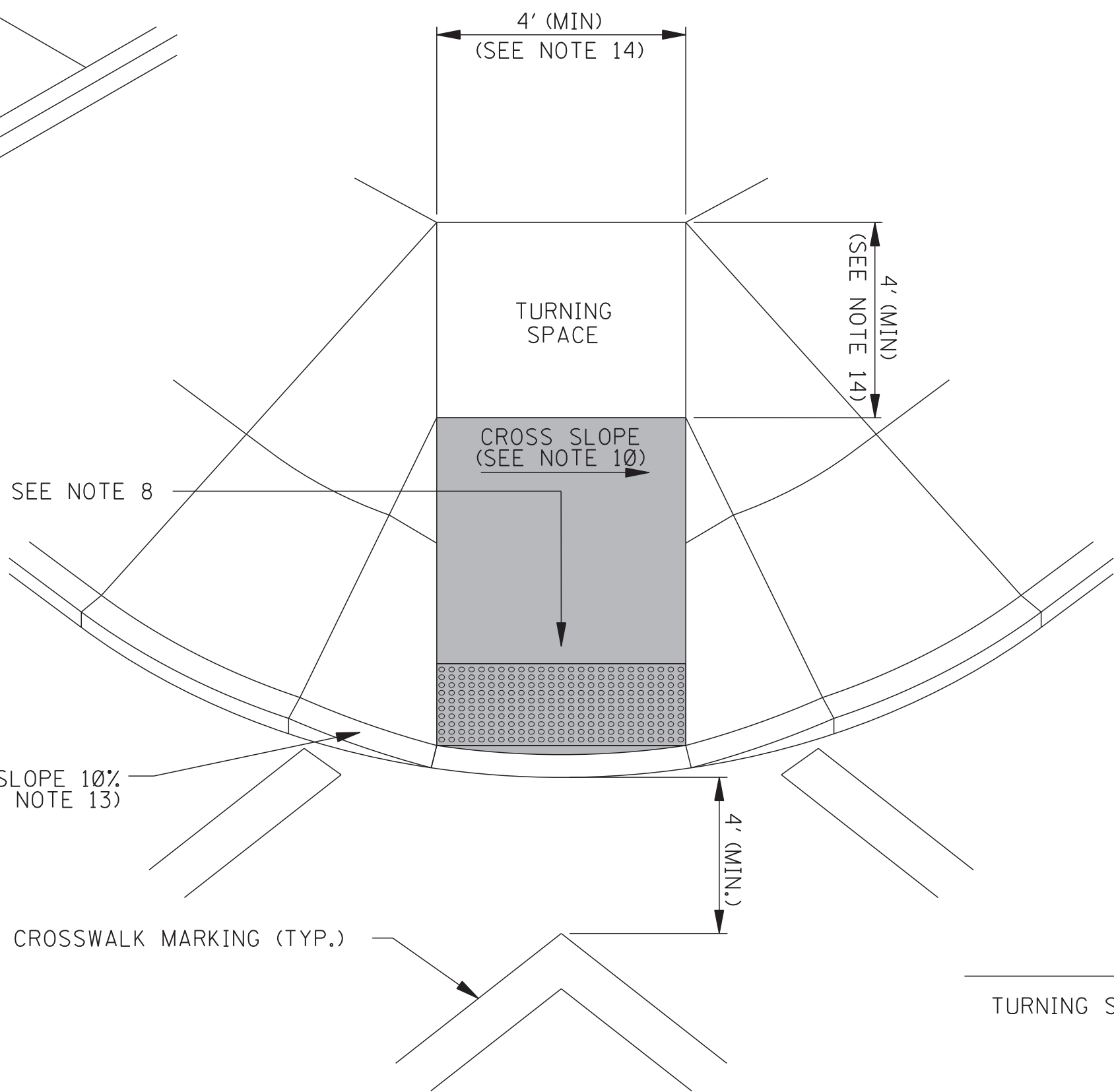
TURNING SPACE NOTES:

14. A TURNING SPACE 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED AT THE TOP OF PERPENDICULAR RAMPS AND AT THE BOTTOM OF PARALLEL RAMPS. TURNING SPACES ARE ALLOWED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED BY A CURB, WALL, OR OTHER OBSTRUCTION, THE TURNING SPACE SHALL BE 4' MINIMUM BY 5' MINIMUM, WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF TRAVEL TOWARD THE CONSTRAINT.
15. THE RUNNING SLOPE OF TURNING SPACES SHALL BE 2% MAXIMUM (1.5% PREFERRED). THE CROSS SLOPE OF TURNING SPACES SHALL BE 2% MAXIMUM (1.5% PREFERRED). AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
16. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
17. THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF CURB RAMP RUNS, BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE 5% MAXIMUM. IT IS BEST PRACTICE TO PROVIDE A 2' LEVEL STRIP AT THE GUTTER IF THE GRADE BREAK EXCEEDS 11%.



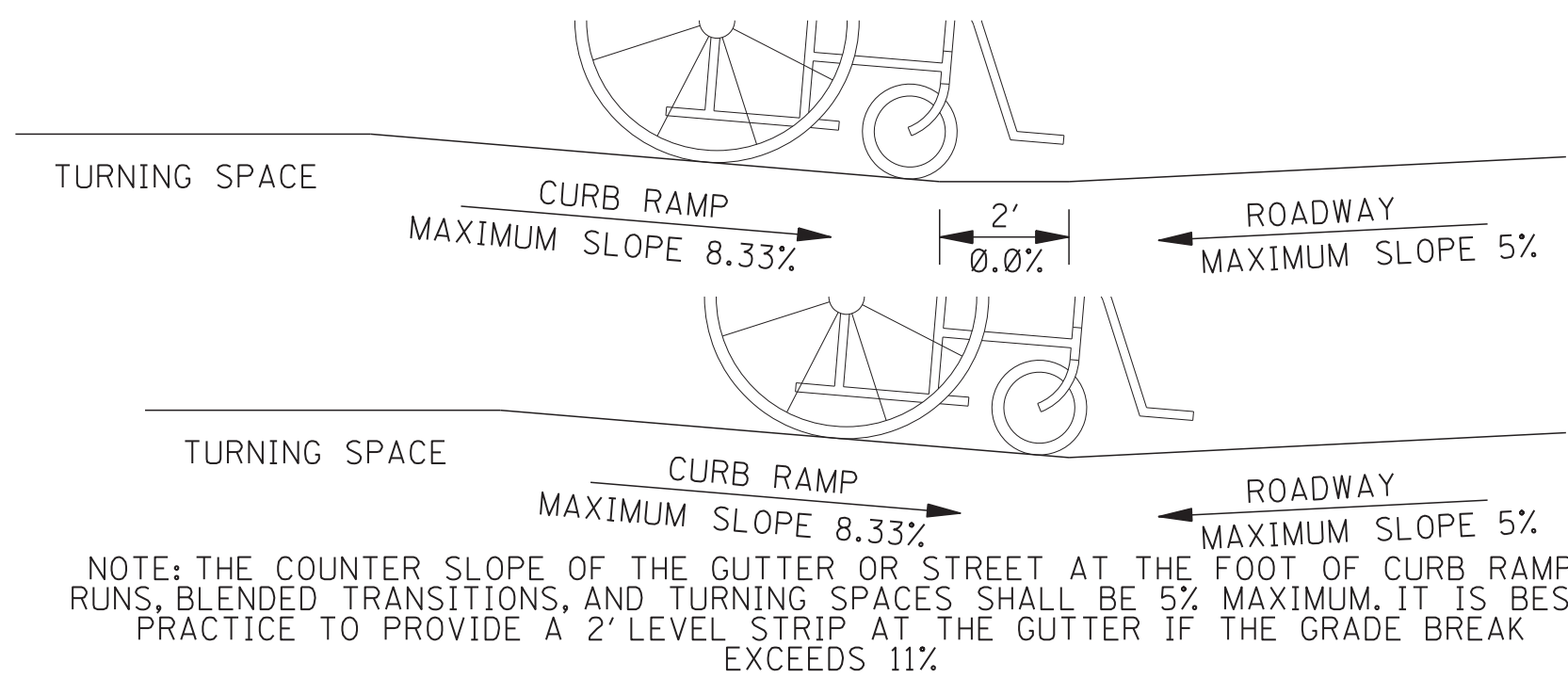
TYPE 4 – PARALLEL CURB RAMP

THE CURB BEHIND THE TURNING SPACE AND RAMPS IS NOT REQUIRED, BUT IS SUGGESTED FOR RETAINING SOIL AND PROVIDING AN EDGE FOR PEDESTRIANS WITH VISUAL IMPAIRMENTS.



TYPE 5 – DIAGONAL CURB RAMP

DIAGONAL CURB RAMPS ARE UNACCEPTABLE IN NEW CONSTRUCTION. THEY MAY BE USED FOR ALTERATIONS ONLY IF IT IS THE ONLY OPTION THAT WILL WORK.



COUNTER SLOPE CONDITIONS

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
	ROADWAY DESIGN DIVISION	
REVISION	STANDARD PLAN	
DATE	ISSUE DATE: AUGUST 01, 2017	

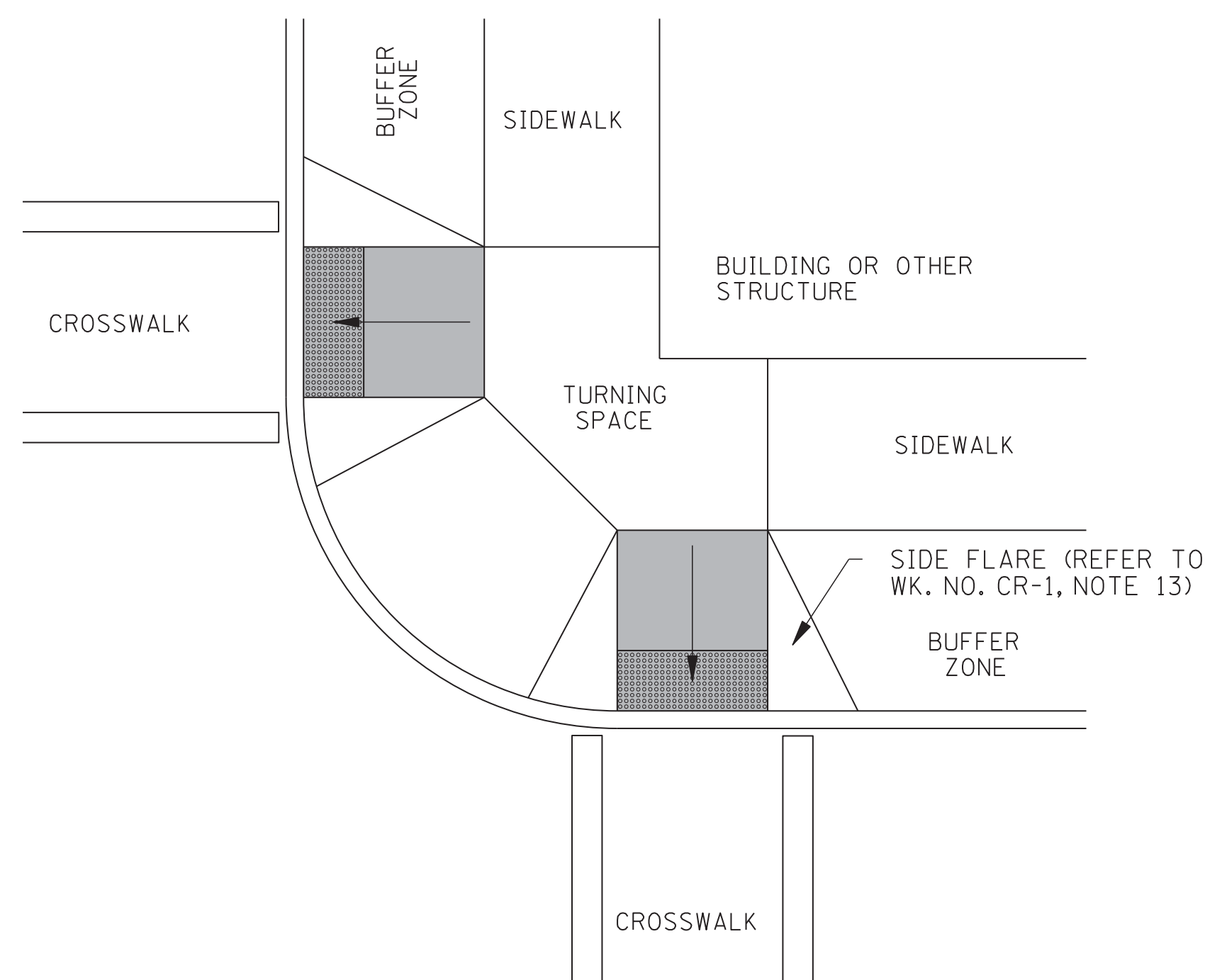
MDOT

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

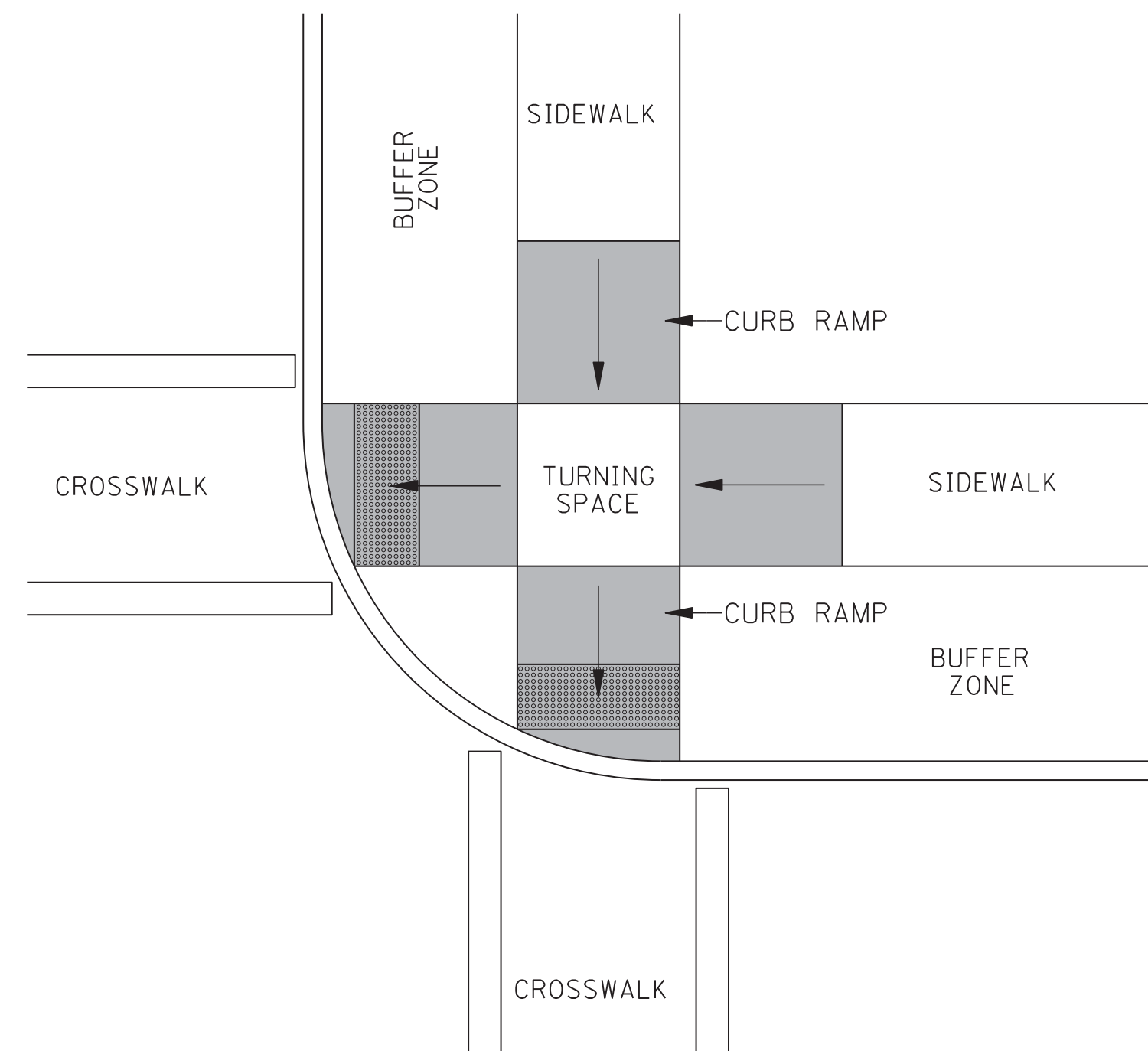
WORKING NUMBER
CR-1

SHEET NUMBER
6421

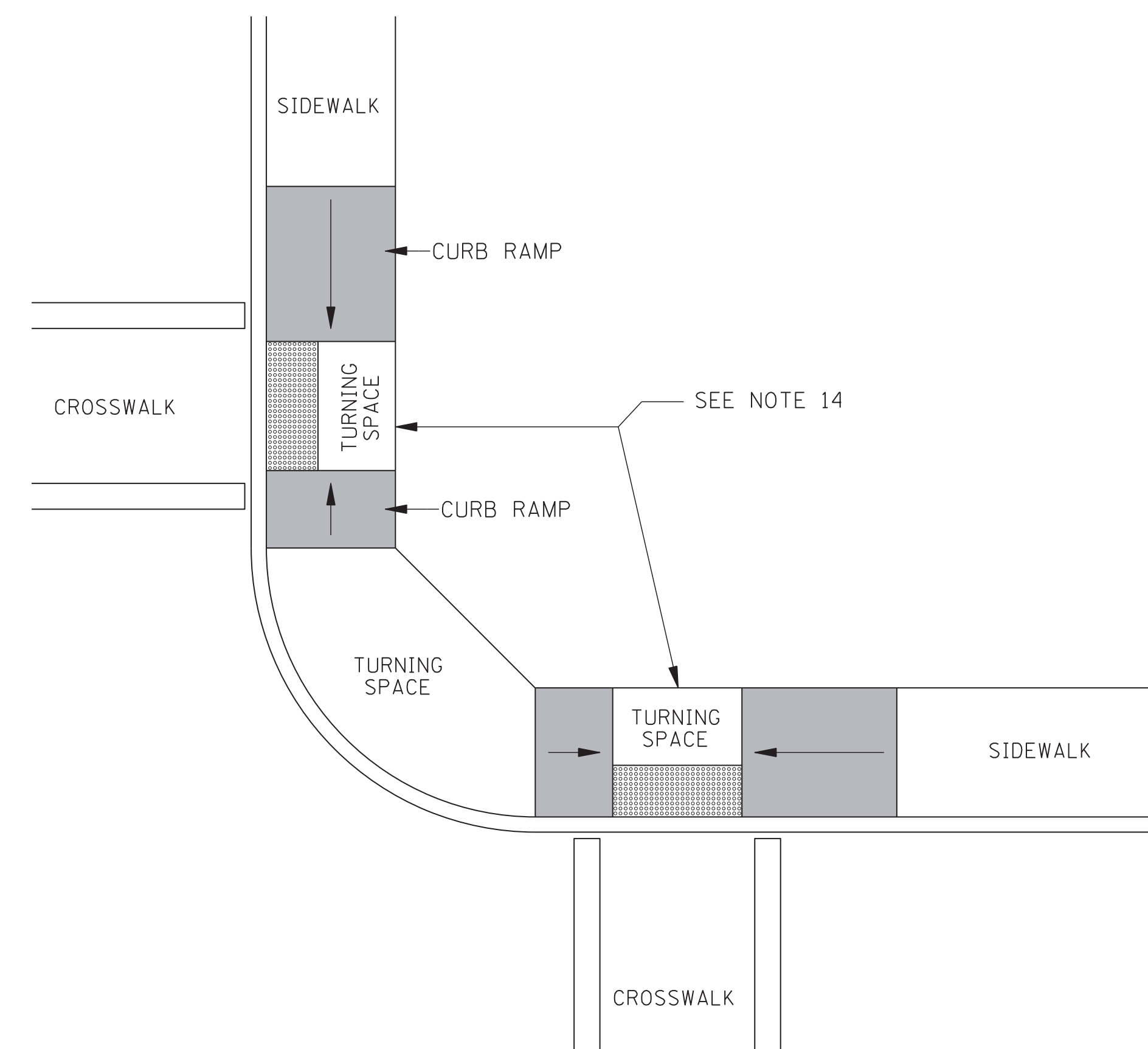
STATE	PROJECT NO.
MISS.	



CURB RAMP CONFIGURATION: TYPE A



CURB RAMP CONFIGURATION: TYPE B

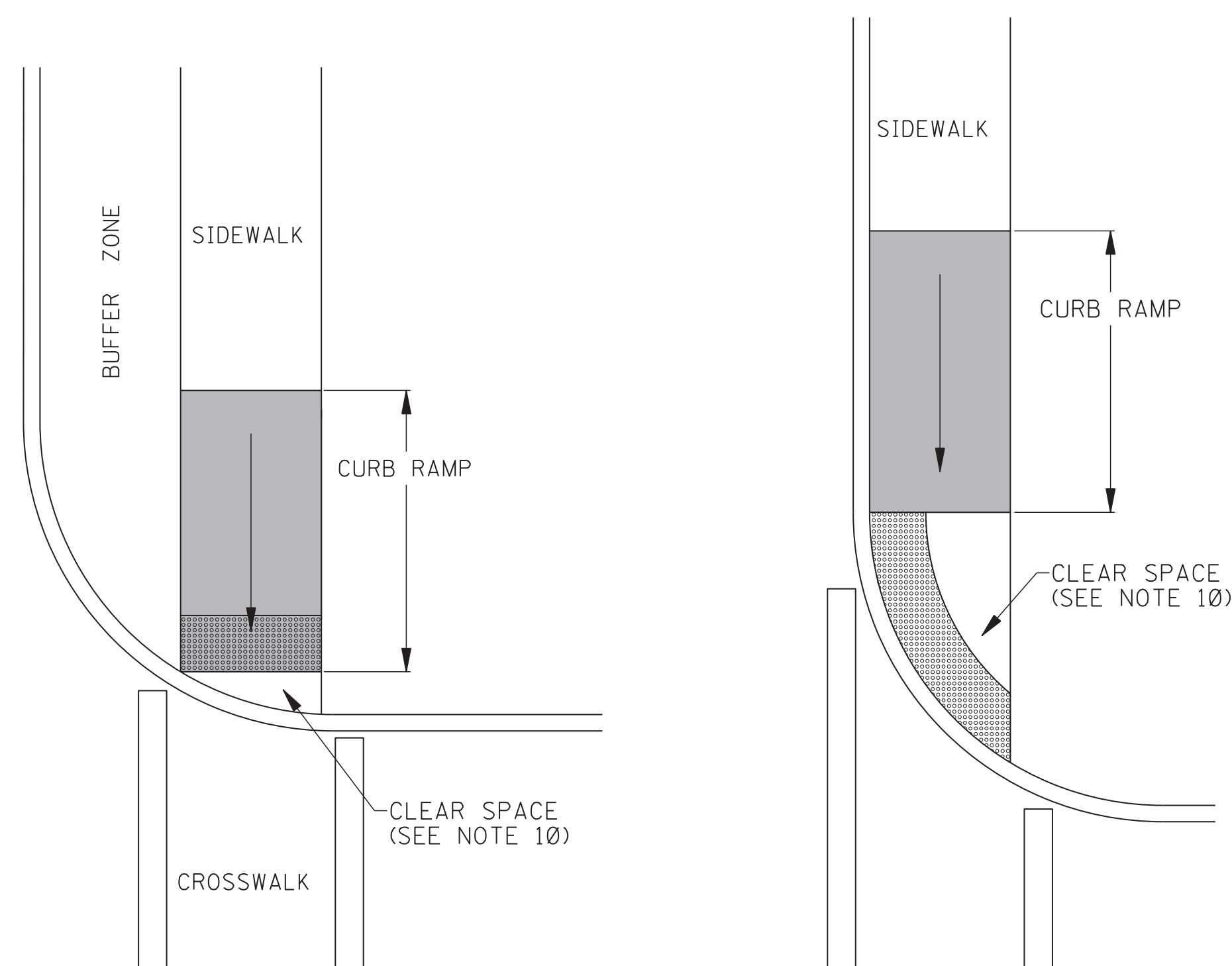


CURB RAMP CONFIGURATION: TYPE C

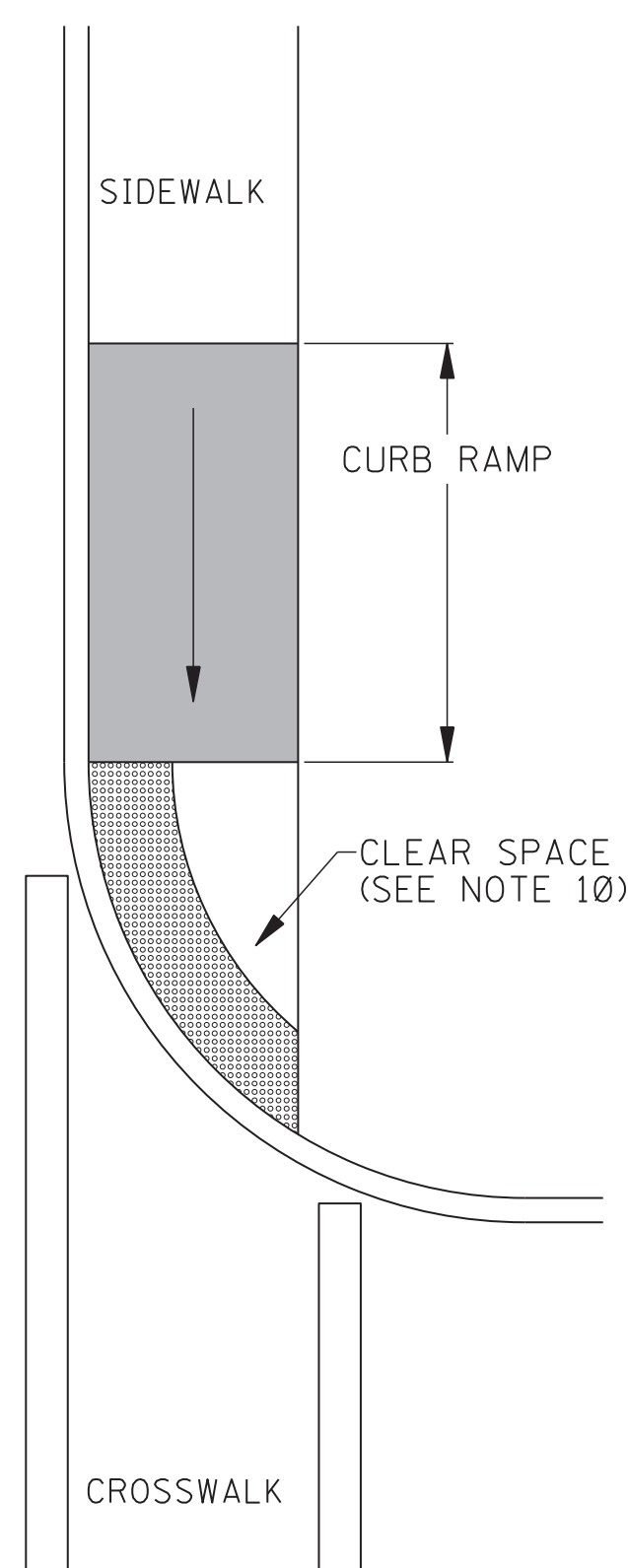
- GENERAL NOTES:

1. FOR DIMENSIONS & GEOMETRIC VALUES REFER TO WK. NO. CR-1.
2. THE CONFIGURATIONS SHOWN GENERICALLY REPRESENT THE MOST COMMON SITUATIONS ENCOUNTERED. THEY ARE INTENDED TO PRESENT CURB RAMP DESIGN CONCEPTS. SITE CONDITIONS AT INDIVIDUAL LOCATIONS REQUIRE SPECIFIC DESIGNS. CURB RAMP DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF WK. NOS. CR-1, CR-2, CR-3 AND CR-4.
3. COORDINATE TRAFFIC CONTROL DEVICES, UTILITY LOCATIONS, SIGNS, STREET FURNITURE AND DRAINAGE TO ENSURE A CONTINUOUS PEDESTRIAN ACCESS ROUTE AT ALL CURB RAMP LOCATIONS. GUIDANCE FOR CROSSWALK MARKINGS AND TRAFFIC CONTROL DEVICES IS PROVIDED IN THE MUTCD.
4. DETECTABLE WARNINGS SHOWN ON THIS SHEET ARE FOR ILLUSTRATION ONLY. FOR SPECIFIC PLACEMENT ORIENTATIONS AND DIMENSIONS REFER TO WK. NO. CR-4.
5. THE CROSS SLOPE OF CURB RAMPS, BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE 2% MAXIMUM (1.5% PREFERRED). AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
6. DIAGONAL CURB RAMPS ARE UNACCEPTABLE IN NEW CONSTRUCTION. THEY MAY BE USED FOR ALTERATIONS ONLY IF IT IS THE ONLY OPTION THAT WILL WORK.
7. GRATES SHALL NOT BE LOCATED ON CURB RAMPS, BLENDED TRANSITIONS, TURNING SPACES, OR LANDINGS. ACCESS COVERS OF SIMILAR SURFACES SHALL COMPLY WITH APPLICABLE SURFACE REQUIREMENTS.
8. UTILITIES, SIGNS, AND OTHER FIXED OBJECTS SHALL NOT BE PLACED ON A CURB RAMP, PEDESTRIAN ACCESS ROUTE, OR IN A MANNER THAT INTERFERES WITH THE USE OF THE CURB RAMP.
9. THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM, AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.
10. THERE SHALL BE A CLEAR SPACE AT THE BOTTOM OF THE ALTERNATE PERPENDICULAR RETURNED CURB RAMP. IT SHALL SLOPE TO DRAIN RUNOFF TO STREET/GUTTER AND HAVE A MAXIMUM SLOPE OF 2% (1.5% PREFERRED).
11. TURNING SPACES MAY OVERLAP WITH ADJACENT TURNING SPACES OR A SINGLE TURNING SPACE MAY SERVE MULTIPLE CURB RAMPS.
12. TURNING SPACES MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.
13. THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES WITHIN MEDIANS AND PEDESTRIAN REFUGE ISLANDS SHALL BE 5' MINIMUM.
14. BEYOND THE BOTTOM GRADE BREAK, A TURNING SPACE OF 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

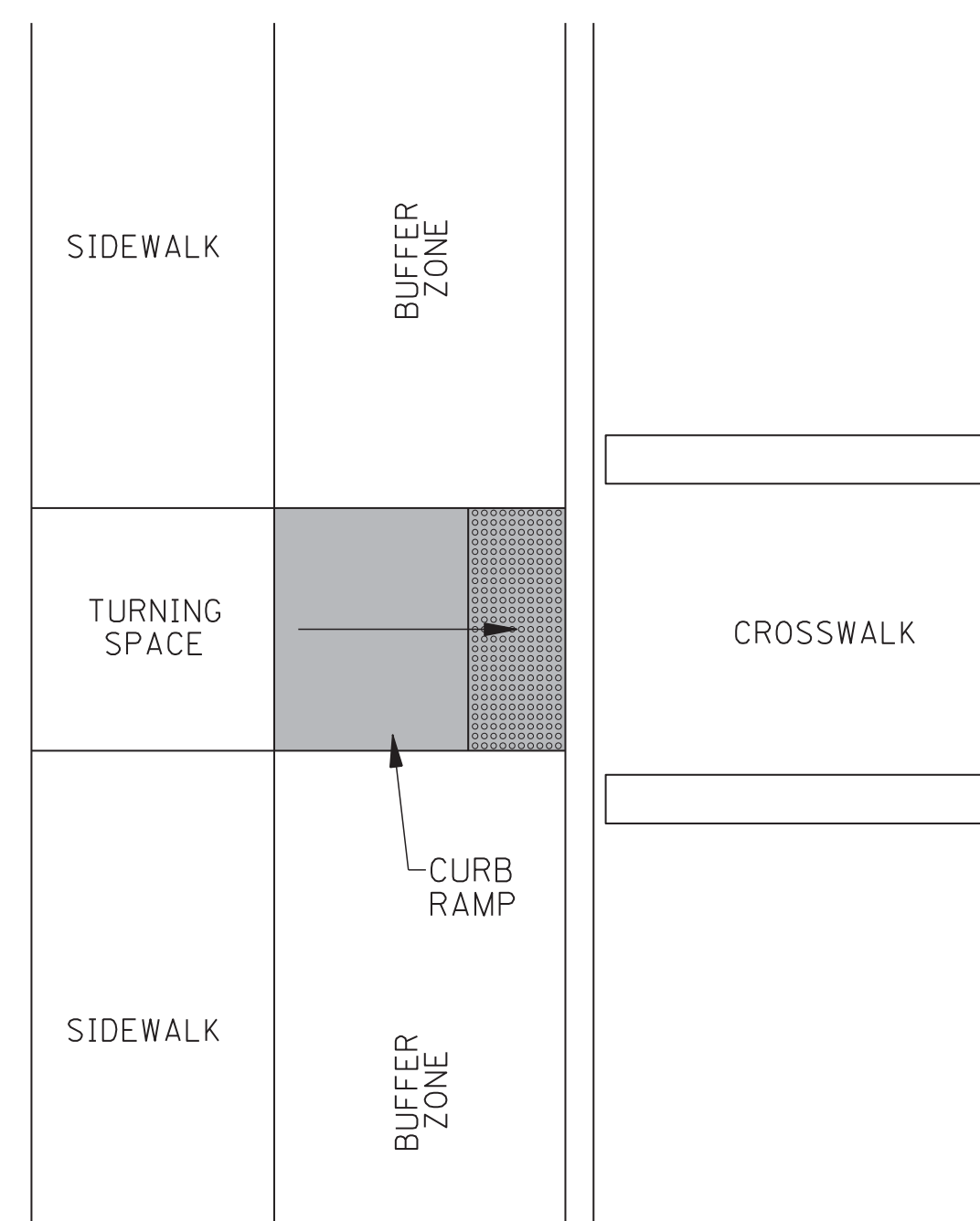
NOTE: SEE WK. NO. CR-4 FOR
DETECTABLE WARNING DIMENSIONS
AND PLACEMENT ORIENTATION.



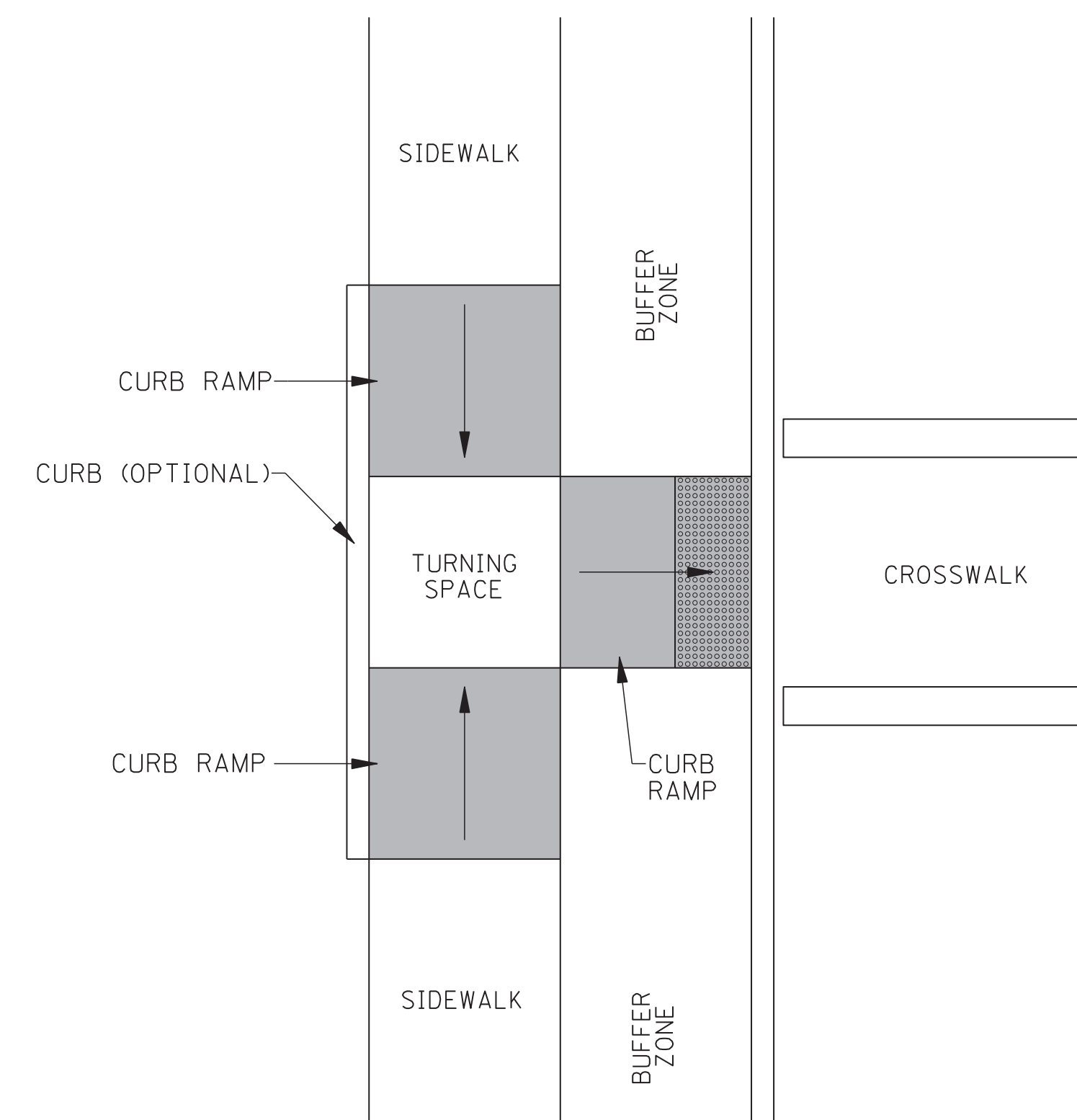
CURB RAMP CONFIGURATION: TYPE D



CURB RAMP CONFIGURATION: TYPE E



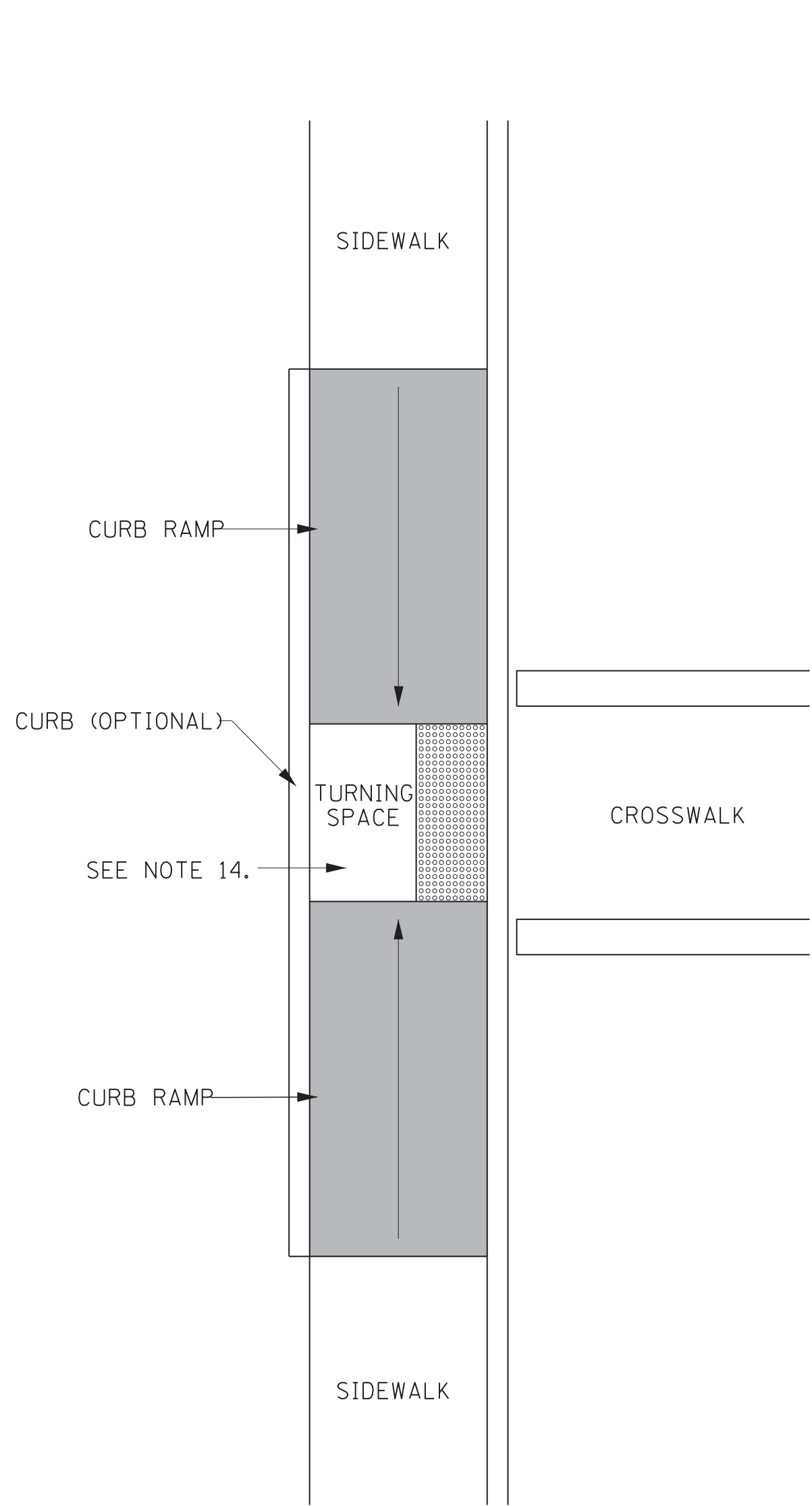
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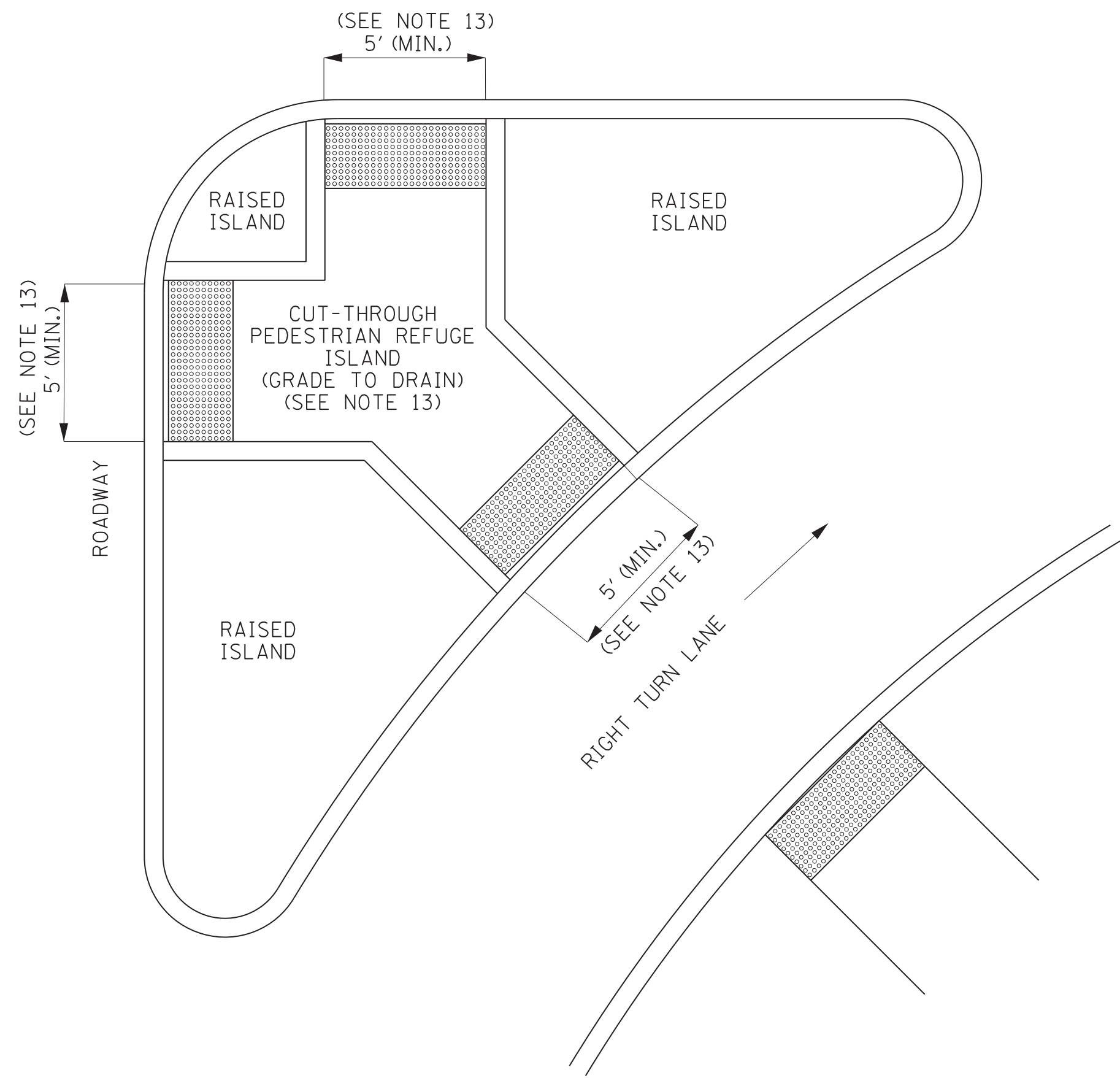
CURB RAMP CONFIGURATION: TYPE G
MID BLOCK CROSSING

THE CURB BEHIND THE TURNING SPACE AND RAMPS IS NOT REQUIRED, BUT IS SUGGESTED FOR RETAINING SOIL AND PROVIDING AN EDGE FOR PEDESTRIANS WITH VISUAL IMPAIRMENTS.

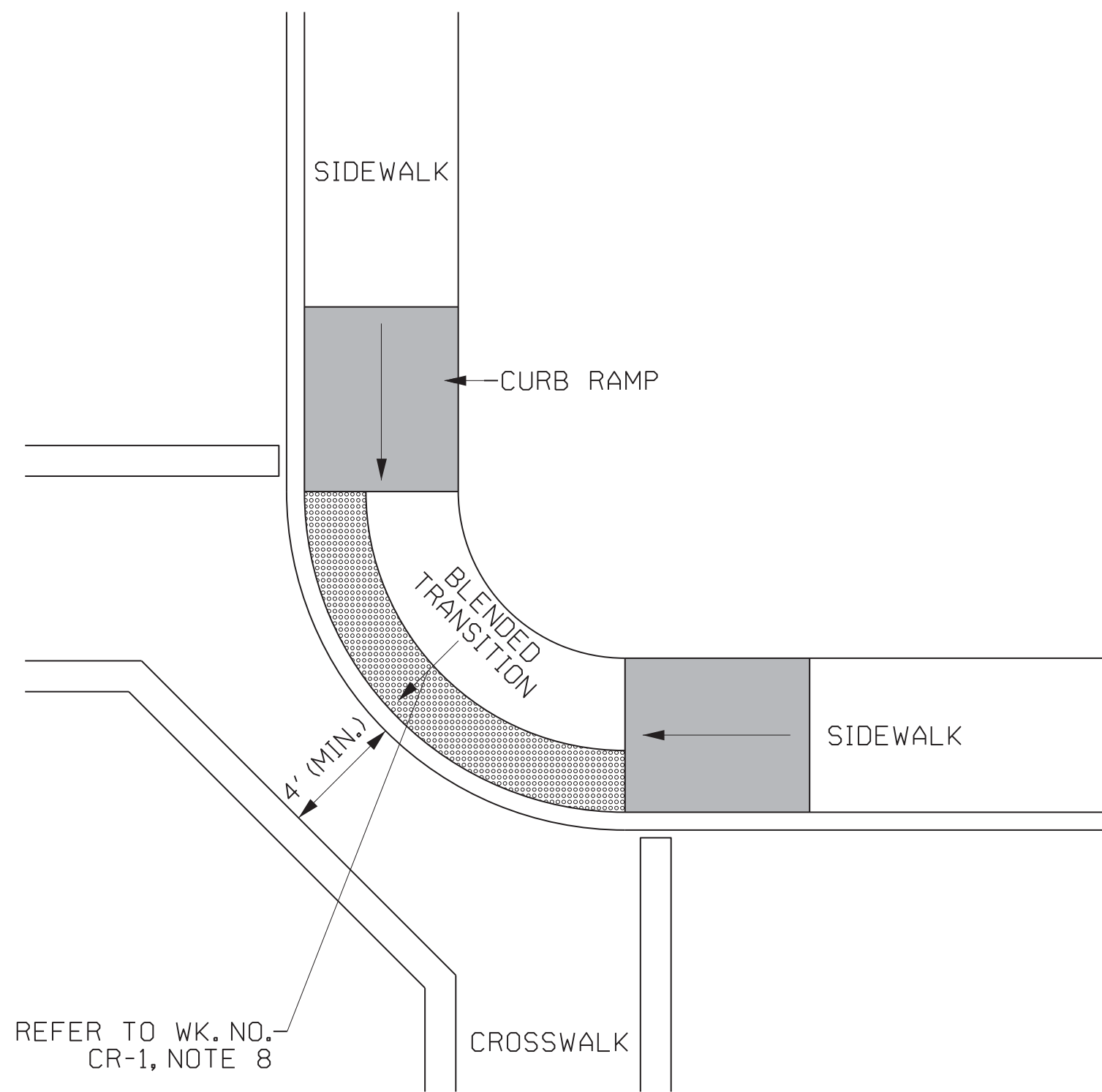
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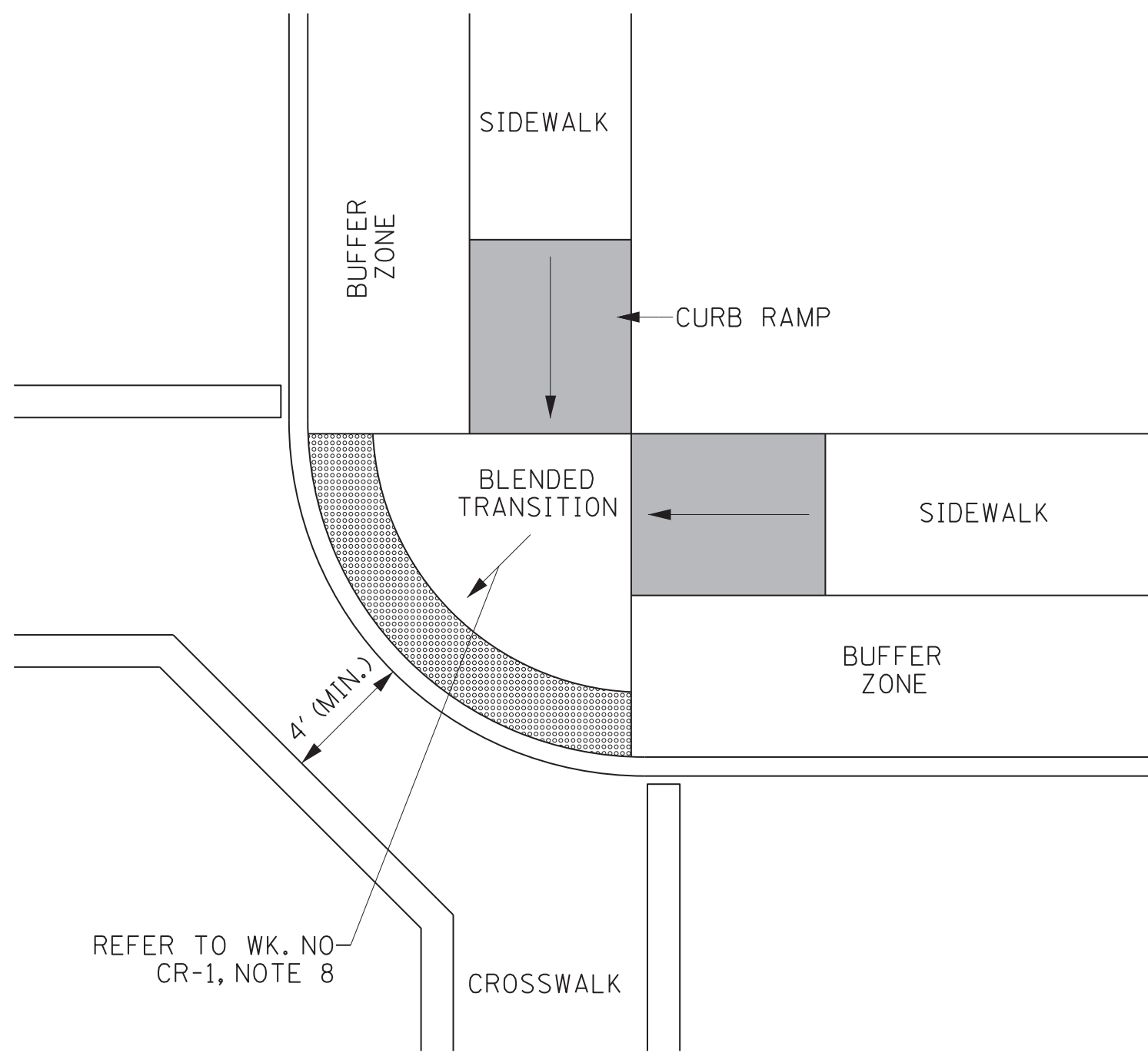
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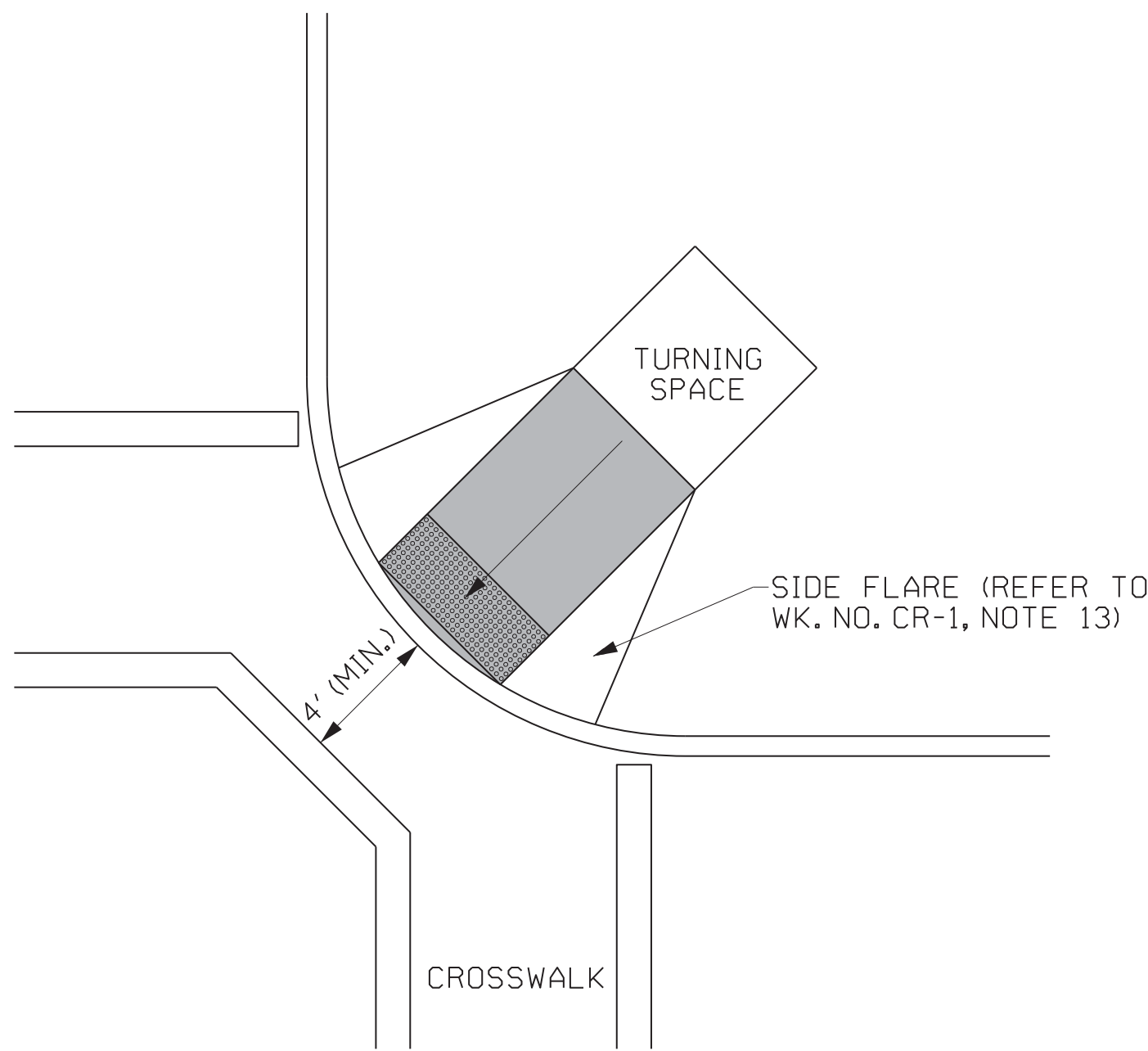
CURB RAMP CONFIGURATION: TYPE I
RIGHT TURN ISLAND CUT THROUGH



CURB RAMP CONFIGURATION: TYPE K
NOT RECOMMENDED



CURB RAMP CONFIGURATION: TYPE J
NOT RECOMMENDED



CURB RAMP CONFIGURATION: TYPE L
NOT RECOMMENDED
REFER TO NOTE 6

- GENERAL NOTES:
- FOR DIMENSIONS & GEOMETRIC VALUES REFER TO WK. NO. CR-1.
 - THE CONFIGURATIONS SHOWN GENERICALLY REPRESENT THE MOST COMMON SITUATIONS ENCOUNTERED. THEY ARE INTENDED TO PRESENT CURB RAMP DESIGN CONCEPTS. SITE CONDITIONS AT INDIVIDUAL LOCATIONS REQUIRE SPECIFIC DESIGNS. CURB RAMP DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF WK. NOS. CR-1, CR-2, CR-3 AND CR-4.
 - COORDINATE TRAFFIC CONTROL DEVICES, UTILITY LOCATIONS, SIGNS, STREET FURNITURE AND DRAINAGE TO ENSURE A CONTINUOUS PEDESTRIAN ACCESS ROUTE AT ALL CURB RAMP LOCATIONS. GUIDANCE FOR CROSSWALK MARKINGS AND TRAFFIC CONTROL DEVICES IS PROVIDED IN THE MUTCD.
 - DETECTABLE WARNINGS SHOWN ON THIS SHEET ARE FOR ILLUSTRATION ONLY. FOR SPECIFIC PLACEMENT ORIENTATIONS AND DIMENSIONS REFER TO WK. NO. CR-4.
 - THE CROSS SLOPE OF CURB RAMPS, BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE 2% MAXIMUM (1.5% PREFERRED). AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
 - DIAGONAL CURB RAMPS ARE UNACCEPTABLE IN NEW CONSTRUCTION. THEY MAY BE USED FOR ALTERATIONS ONLY IF IT IS THE ONLY OPTION THAT WILL WORK.
 - GRATES SHALL NOT BE LOCATED ON CURB RAMPS, BLENDED TRANSITIONS, TURNING SPACES, OR LANDINGS. ACCESS COVERS OF SIMILAR SURFACES SHALL COMPLY WITH APPLICABLE SURFACE REQUIREMENTS.
 - UTILITIES, SIGNS, AND OTHER FIXED OBJECTS SHALL NOT BE PLACED ON A CURB RAMP, PEDESTRIAN ACCESS ROUTE, OR IN A MANNER THAT INTERFERES WITH THE USE OF THE CURB RAMP.
 - THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM, AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.
 - THERE SHALL BE A CLEAR SPACE AT THE BOTTOM OF THE ALTERNATE PERPENDICULAR RETURNED CURB RAMP. IT SHALL SLOPE TO DRAIN RUNOFF TO STREET/GUTTER AND HAVE A MAXIMUM SLOPE OF 2% (1.5% PREFERRED).
 - TURNING SPACES MAY OVERLAP WITH ADJACENT TURNING SPACES OR A SINGLE TURNING SPACE MAY SERVE MULTIPLE CURB RAMPS.
 - TURNING SPACES MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.
 - THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES WITHIN MEDIANS AND PEDESTRIAN REFUGE ISLANDS SHALL BE 5' MINIMUM.
 - BEYOND THE BOTTOM GRADE BREAK, A TURNING SPACE OF 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

NOTE: SEE WK. NO. CR-4 FOR
DETECTABLE WARNING DIMENSIONS
AND PLACEMENT ORIENTATION.

				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
				REVISION		
				DATE	ISSUE DATE: AUGUST 01, 2017	
					CURB RAMPS PLACEMENT DETAILS	
					 WORKING NUMBER CR-3	
					SHEET NUMBER 6423	

GENERAL NOTES:

- THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING UNIT (THE DOMES AND THE ENTIRE 2' LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.
- ALL DETECTABLE WARNINGS SHOWN ON THIS SHEET SHALL BE PAID FOR - PER SQUARE FEET, UNLESS OTHERWISE NOTED IN THE PLANS.

DETECTABLE WARNING UNIT DIMENSIONS:

- DETECTABLE WARNING SURFACES SHALL EXTEND 2' MINIMUM IN THE DIRECTION OF PEDESTRIAN TRAVEL. AT CURB RAMP AND BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP RUN (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITION, OR TURNING SPACE. AT PEDESTRIAN AT-GRADE RAIL CROSSINGS NOT LOCATED WITHIN A STREET OR HIGHWAY, DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE CROSSING. AT BOARDING PLATFORMS FOR BUSES AND RAIL VEHICLES, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL LENGTH OF THE PUBLIC USE AREAS OF THE PLATFORM. AT BOARDING AND ALIGHTING AREAS AT SIDEWALK OR STREET LEVEL TRANSIT STOPS FOR RAIL VEHICLES, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL LENGTH OF THE TRANSIT STOP.

DOME ALIGNMENT:

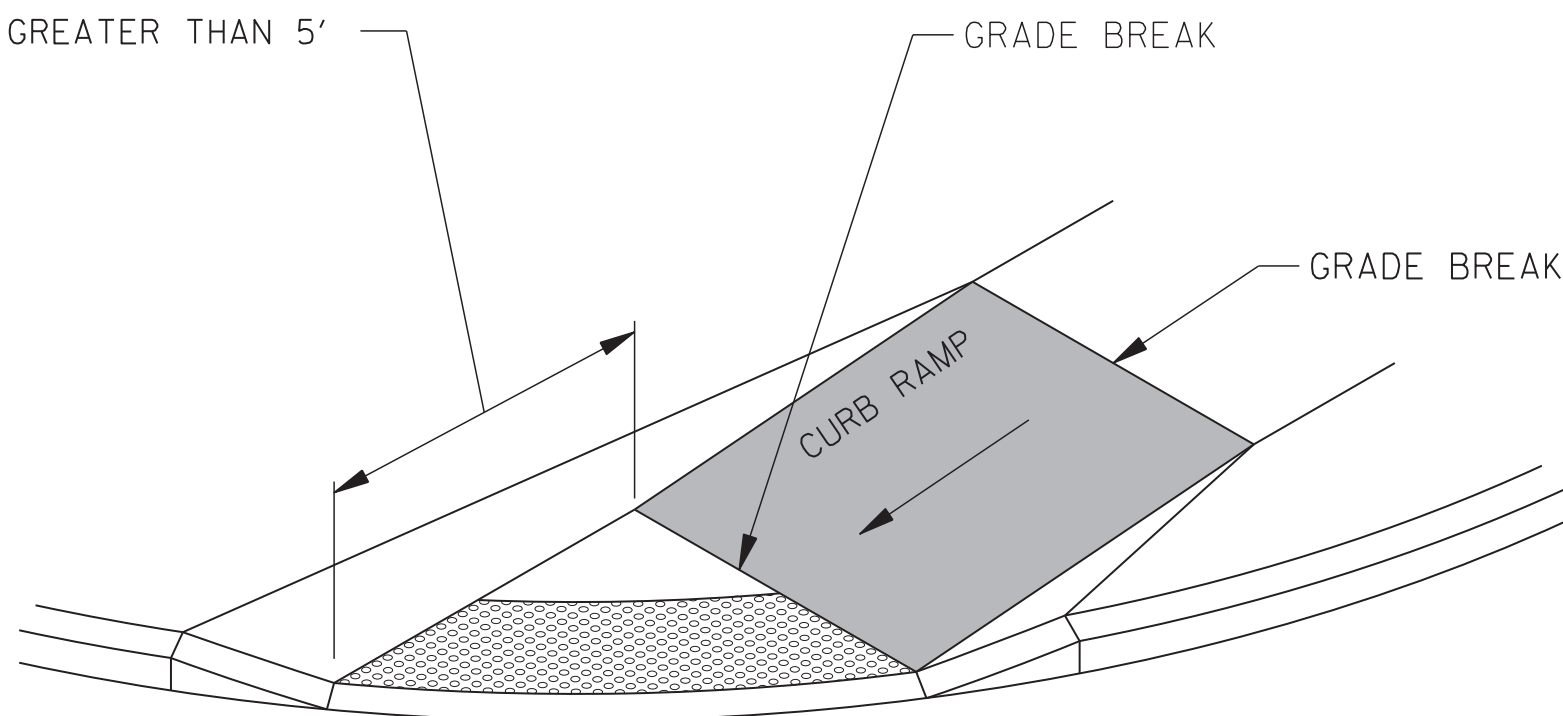
- THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE GRADE BREAK AT THE RAMP LANDING OR BETWEEN THE CURB RAMP AND THE STREET.
- WHERE DOMES ARE ARRAYED RADially THEY MAY DIFFER IN DOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET.

COLOR REQUIREMENTS:

- DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, STREET OR HIGHWAY, OR PEDESTRIAN ACCESS ROUTE SURFACE, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.

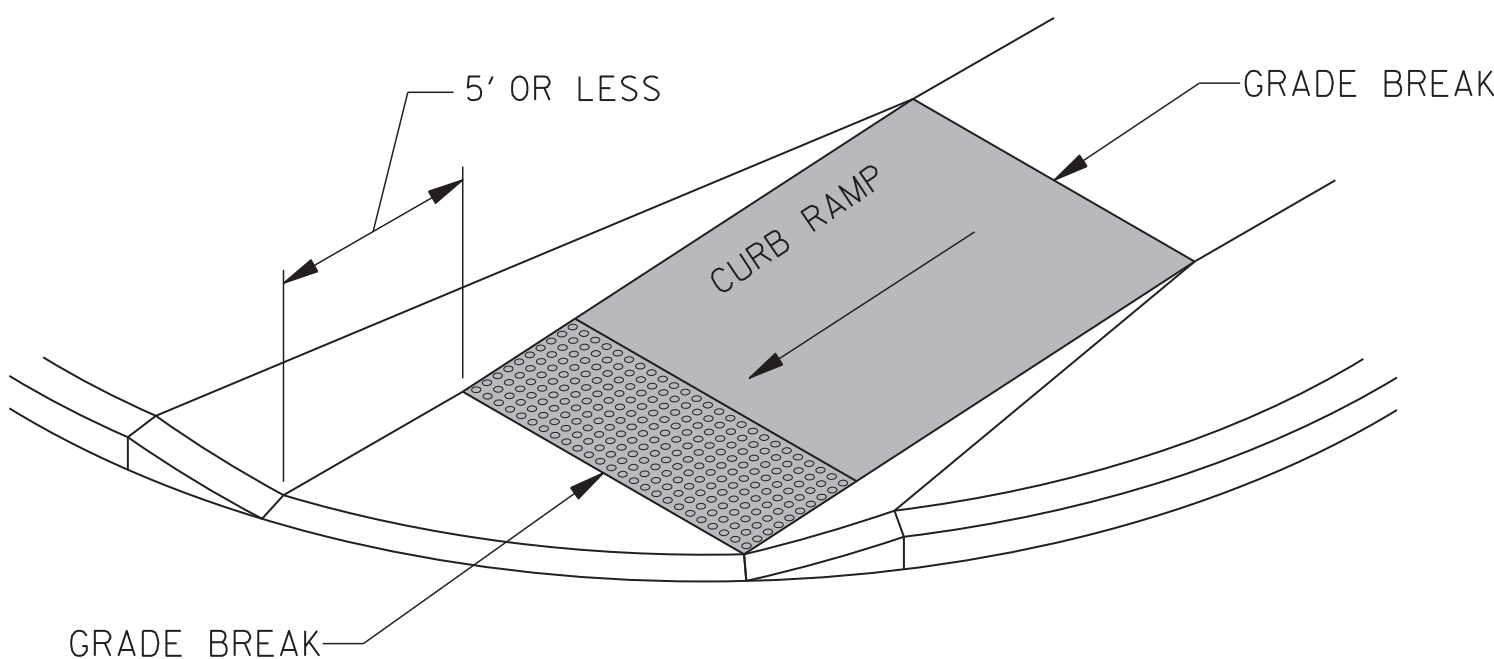
DETECTABLE WARNINGS LOCATIONS:

- ON PERPENDICULAR CURB RAMP, WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE IN FRONT OF THE BACK OF CURB, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE BACK OF CURB. WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS 5' OR LESS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK. WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS MORE THAN 5', DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE LOWER LANDING AT THE BACK OF CURB.
- ON PARALLEL CURB RAMP, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE TURNING SPACE AT THE FLUSH TRANSITION BETWEEN THE STREET AND SIDEWALK.
- ON BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE BACK OF CURB. WHERE RAISED PEDESTRIAN STREET CROSSINGS, DEPRESSED CORNERS, OR OTHER LEVEL PEDESTRIAN STREET CROSSINGS ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE FLUSH TRANSITION BETWEEN THE STREET AND THE SIDEWALK.
- AT CUT-THROUGH PEDESTRIAN REFUGE ISLANDS, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE EDGES OF THE PEDESTRIAN ISLAND AND SHALL BE SEPARATED BY A 2' MINIMUM LENGTH OF SURFACE WITHOUT DETECTABLE WARNINGS.
- AT PEDESTRIAN AT-GRADE RAIL CROSSINGS NOT LOCATED WITHIN A STREET OR HIGHWAY, DETECTABLE WARNING SURFACES SHALL BE PLACED ON EACH SIDE OF THE RAIL CROSSING. THE EDGE OF THE DETECTABLE WARNING SURFACE NEAREST THE RAIL CROSSING SHALL BE 6' MINIMUM AND 15' MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. WHERE PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL.
- AT BOARDING PLATFORMS FOR BUSES AND RAIL VEHICLES, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE BOARDING EDGE OF THE PLATFORM.
- AT BOARDING AND ALIGHTING AREAS AT SIDEWALK OR STREET LEVEL TRANSIT STOPS FOR RAIL VEHICLES, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE SIDE OF THE BOARDING AND ALIGHTING AREA FACING THE RAIL VEHICLES.



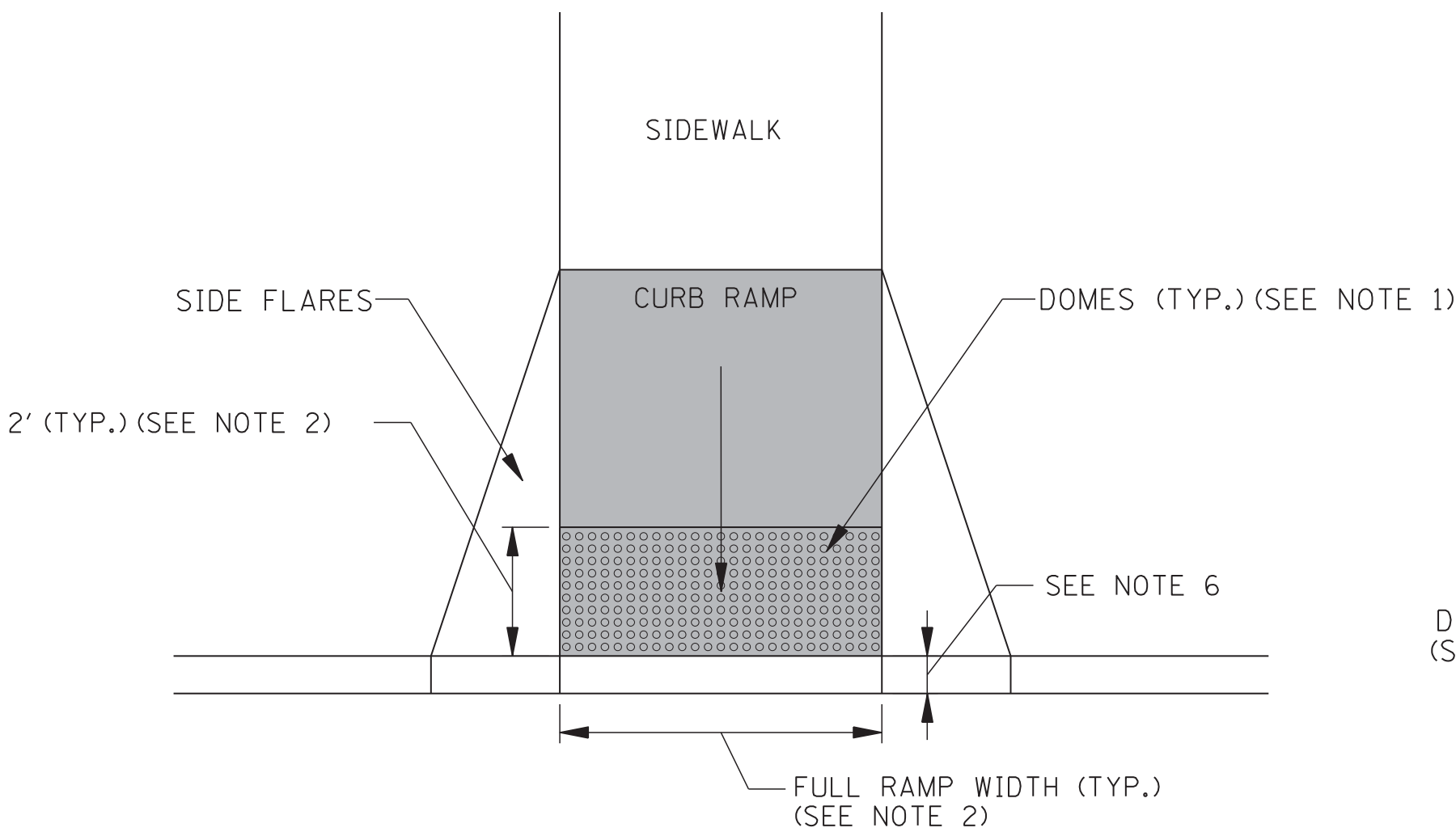
DETECTABLE WARNING PLACEMENT DETAIL 1

NOTE: IF THE DISTANCE FROM THE GRADE BREAK IS GREATER THAN OF EQUAL TO 5', DETECTABLE WARNINGS SHALL BE PLACED ALONG THE RADIUS OF THE CURVE AS SHOWN IN THE ABOVE DETAIL.

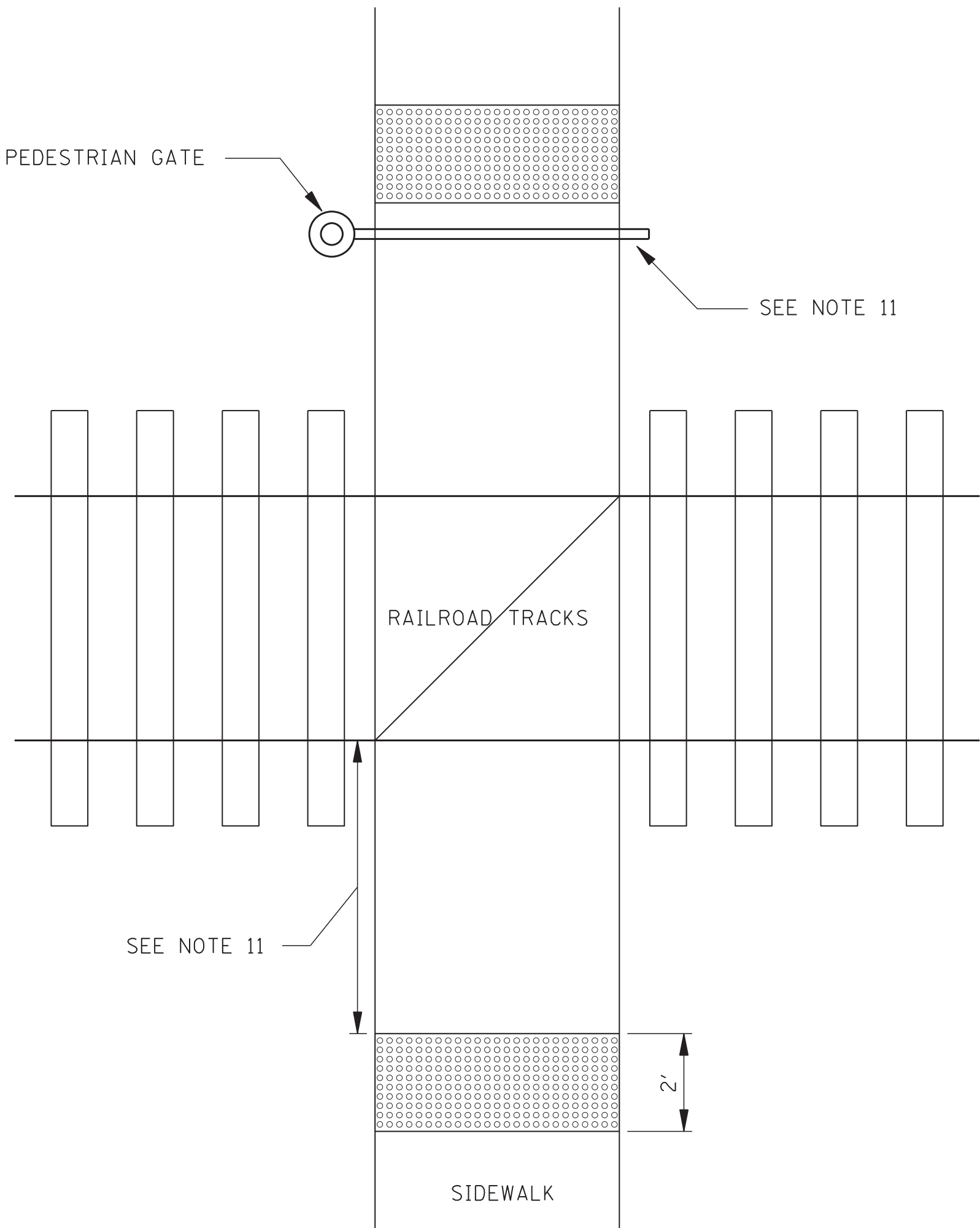


DETECTABLE WARNING PLACEMENT DETAIL 2

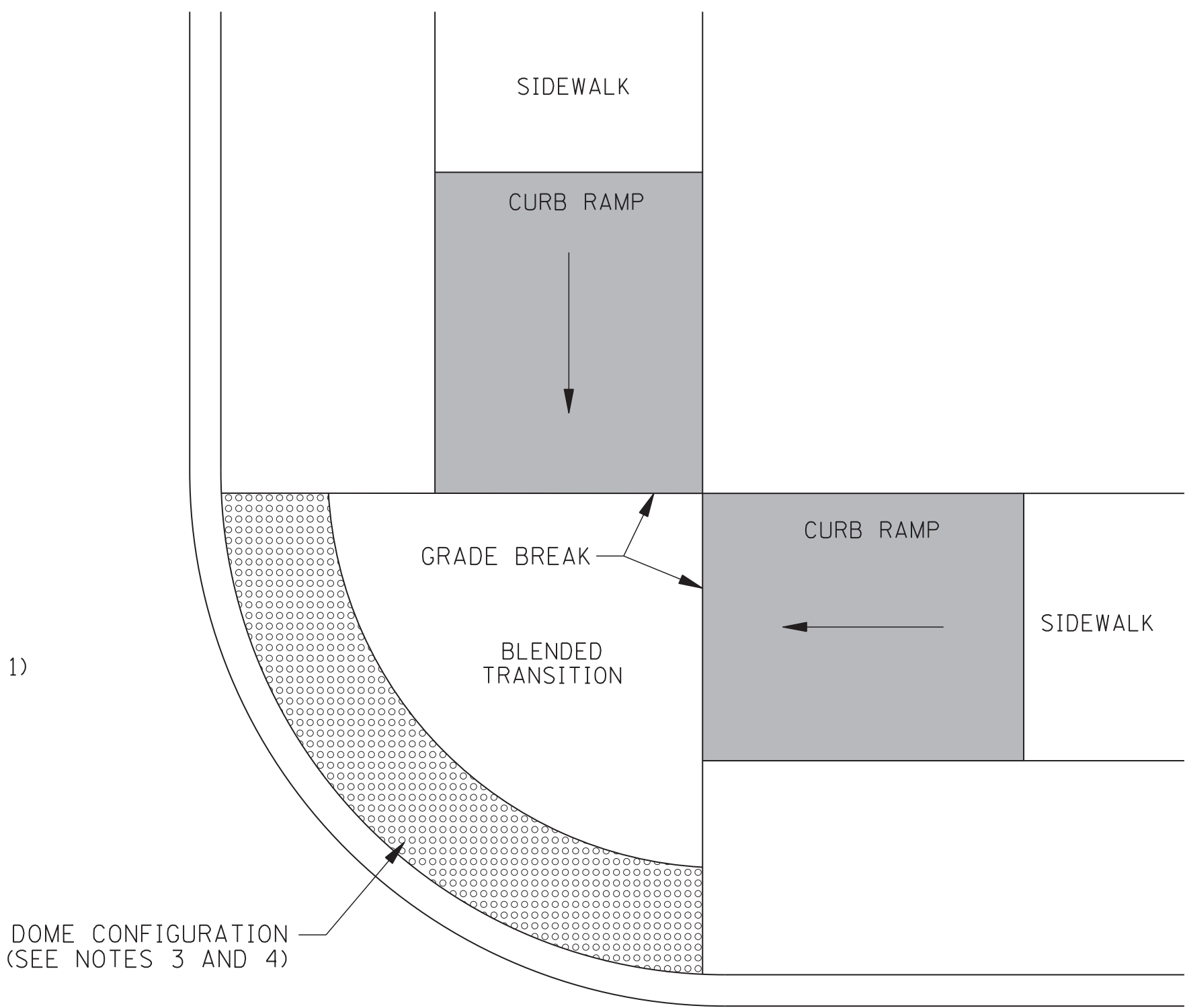
NOTE: IF THE DISTANCE FROM THE GRADE BREAK IS LESS THAN OR EQUAL TO 5', DETECTABLE WARNINGS SHALL BE PLACED ON THE CURB RAMP ALONG THE BOTTOM GRADE BREAK WITH ONE CORNER 5" TO 9" FROM THE FRONT OF THE CURB OR EDGE OF THE ROADWAY.



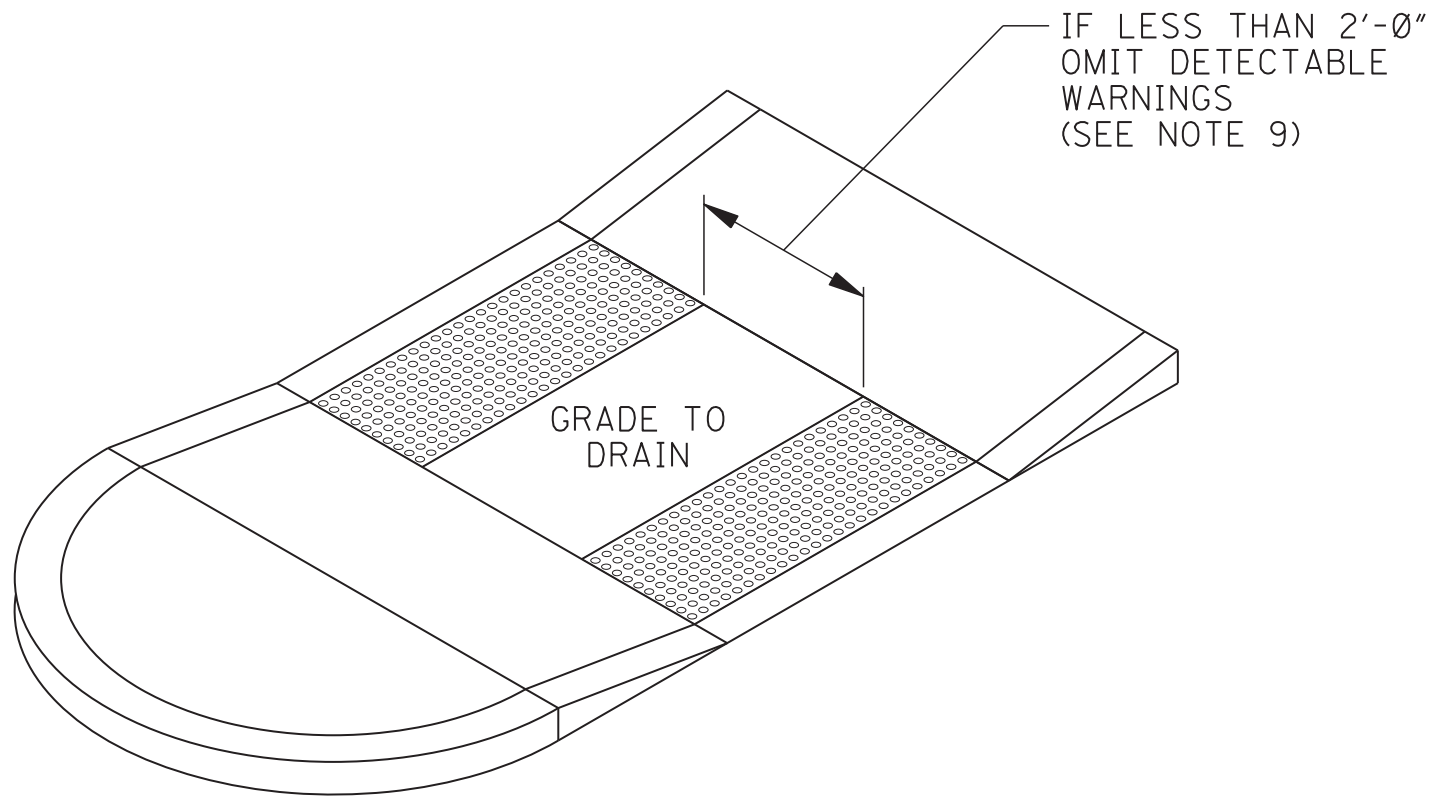
DETECTABLE WARNING AT CURB RAMP



DETECTABLE WARNINGS AT RAILROAD CROSSING

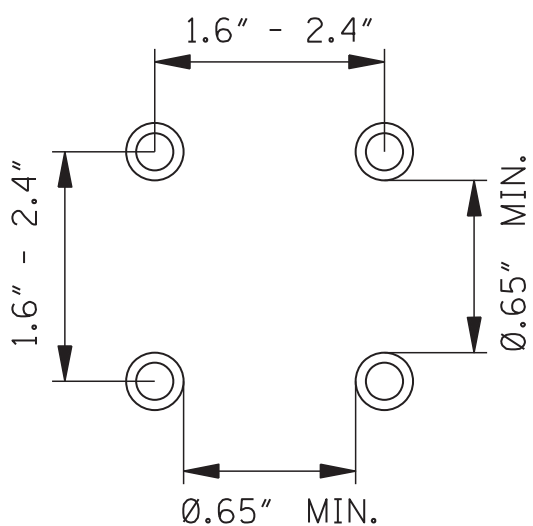


DETECTABLE WARNING AT BLENDED TRANSITION (CONFIGURATION: TYPES K AND J)

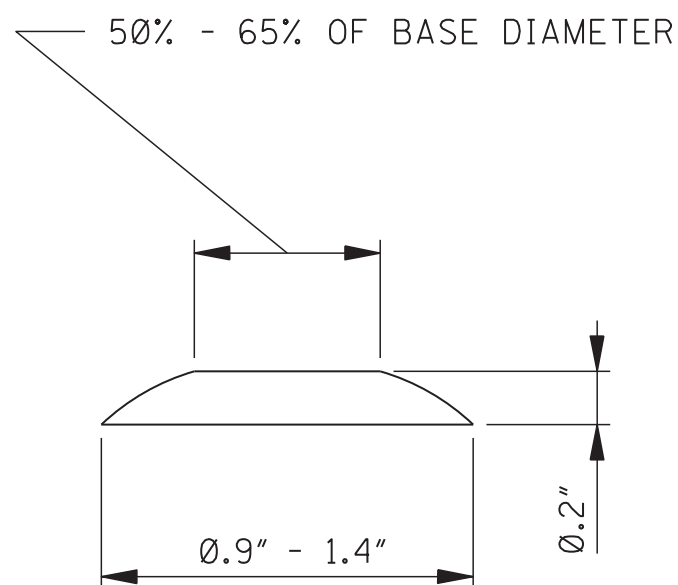


DETECTABLE WARNINGS AT MEDIAN ISLANDS

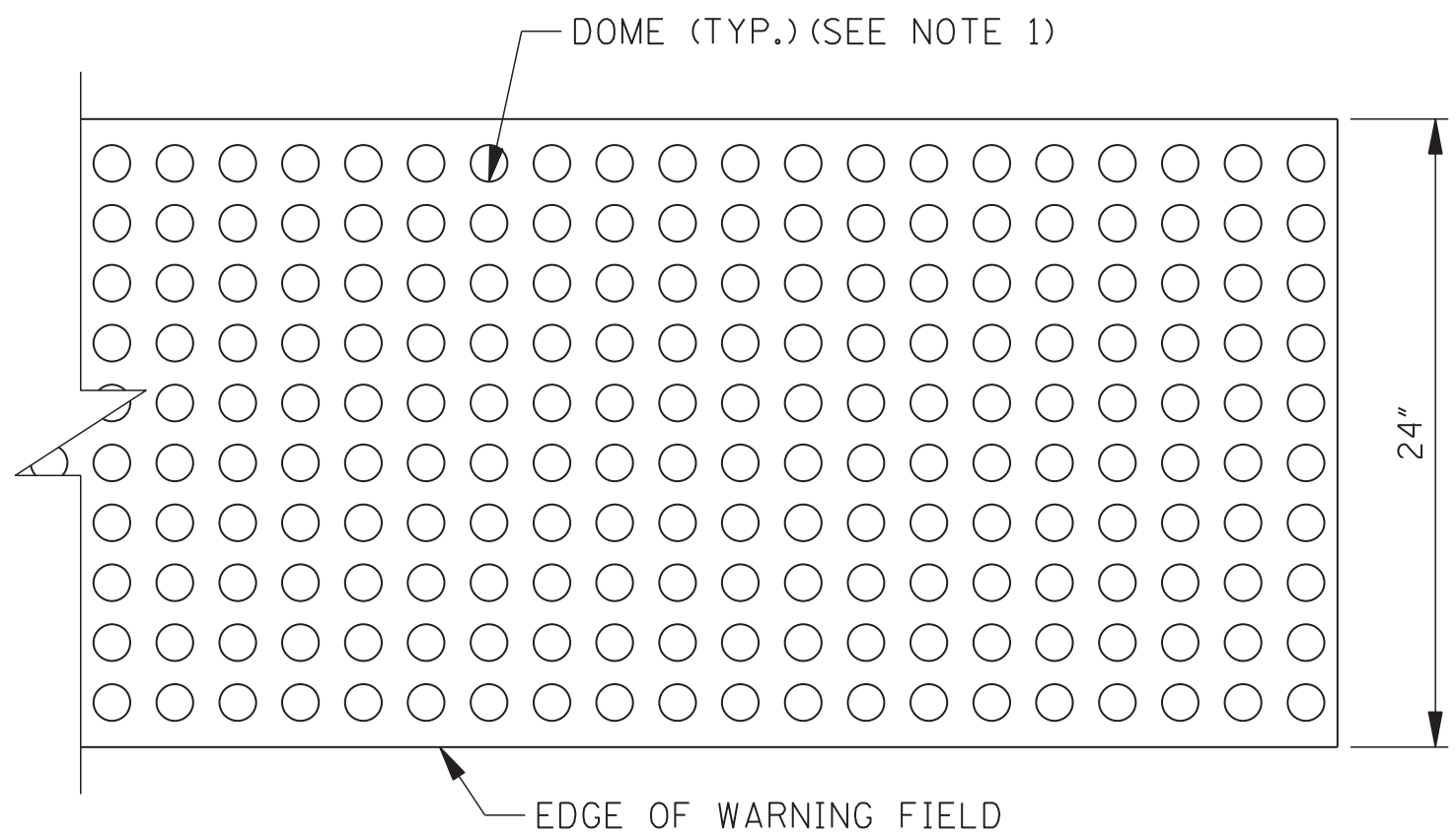
NON-ELEVATED CROSSING



DOME SPACING

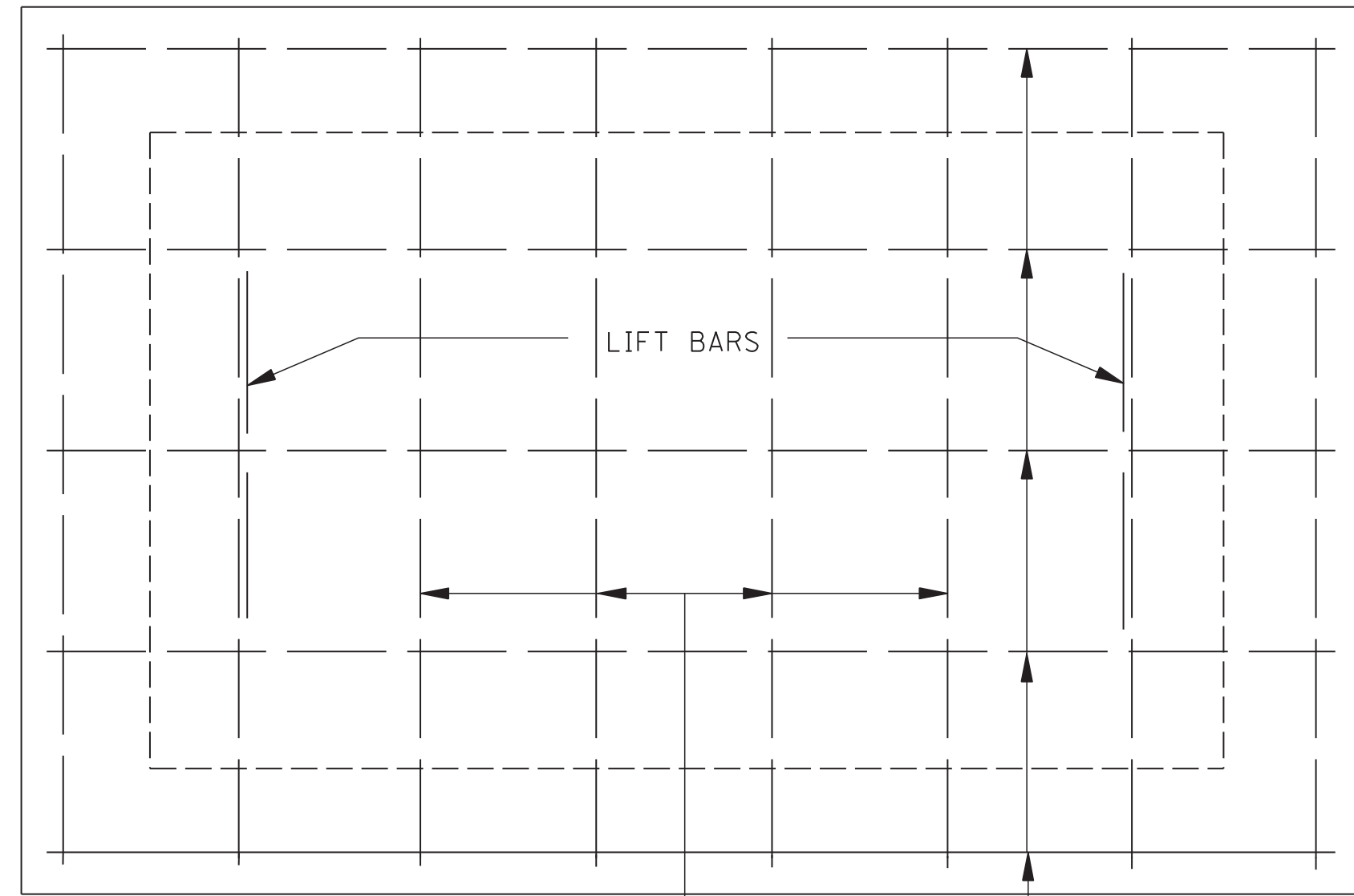


DOME SECTION

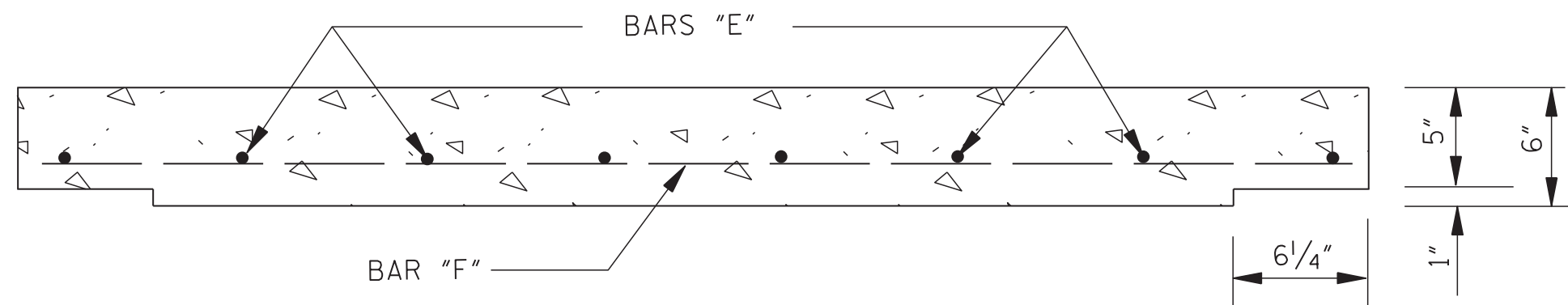


DETECTABLE WARNING LAYOUT

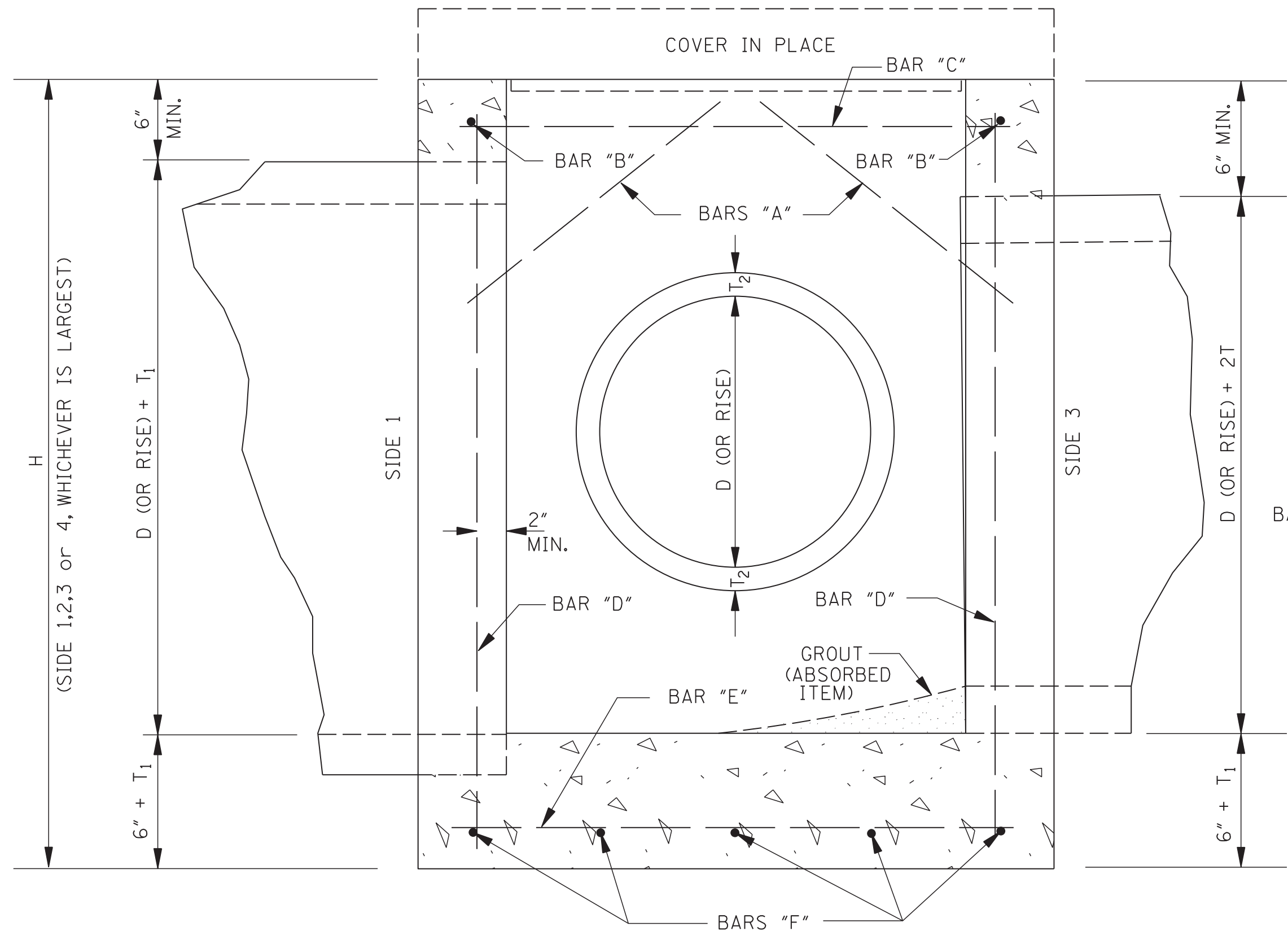
				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
				REVISION	ROADWAY DESIGN DIVISION
				DATE	STANDARD PLAN
					CURB RAMPS
					DETECTABLE WARNING
					DETAILS
					WORKING NUMBER
					CR-4
					SHEET NUMBER
					6424
					ISSUE DATE: AUGUST 01, 2017



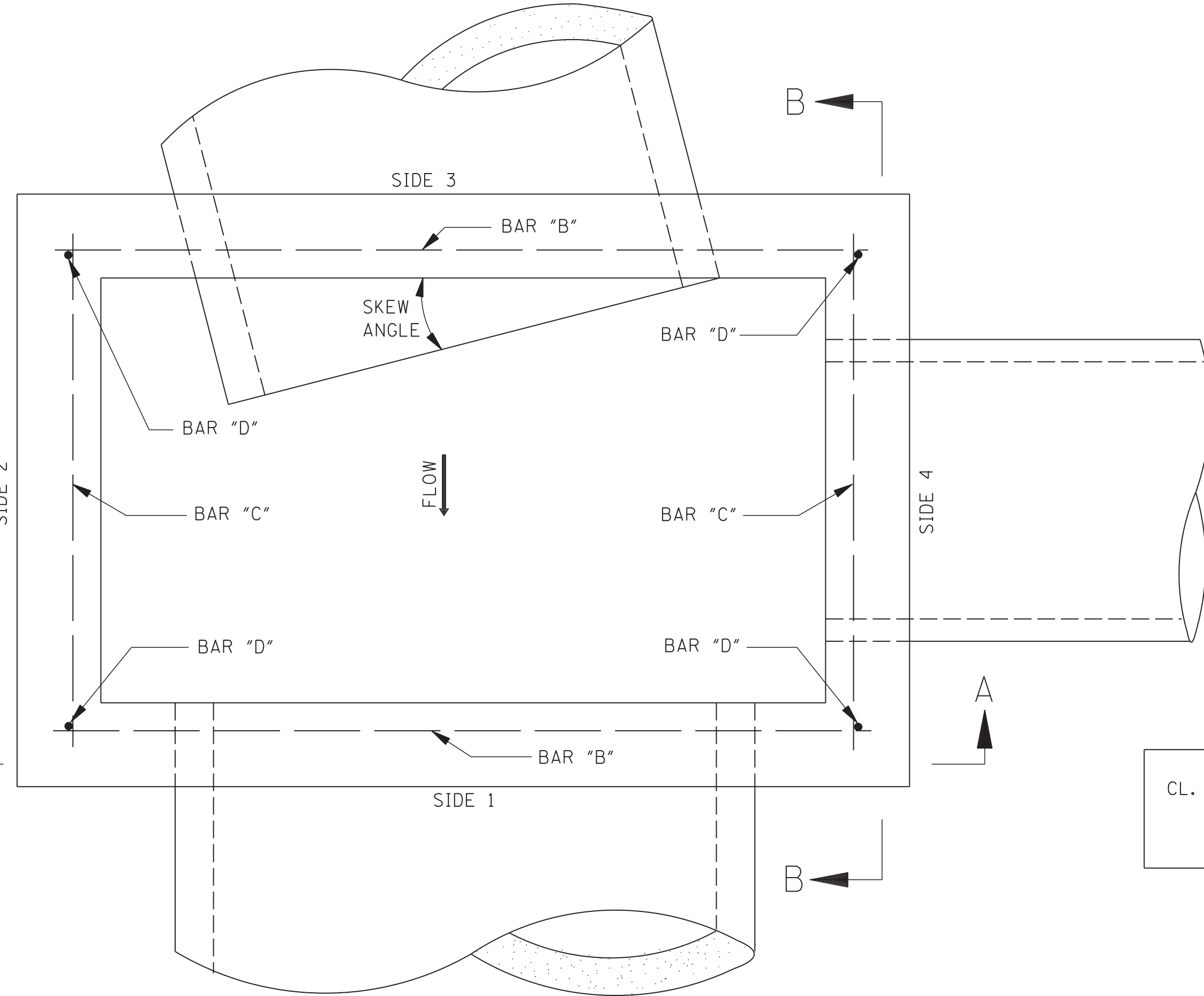
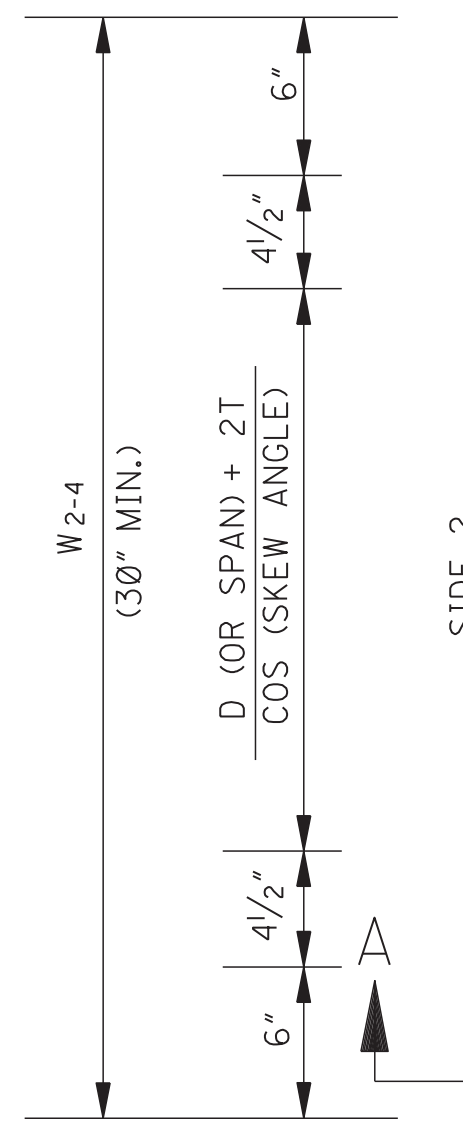
PLAN OF COVER



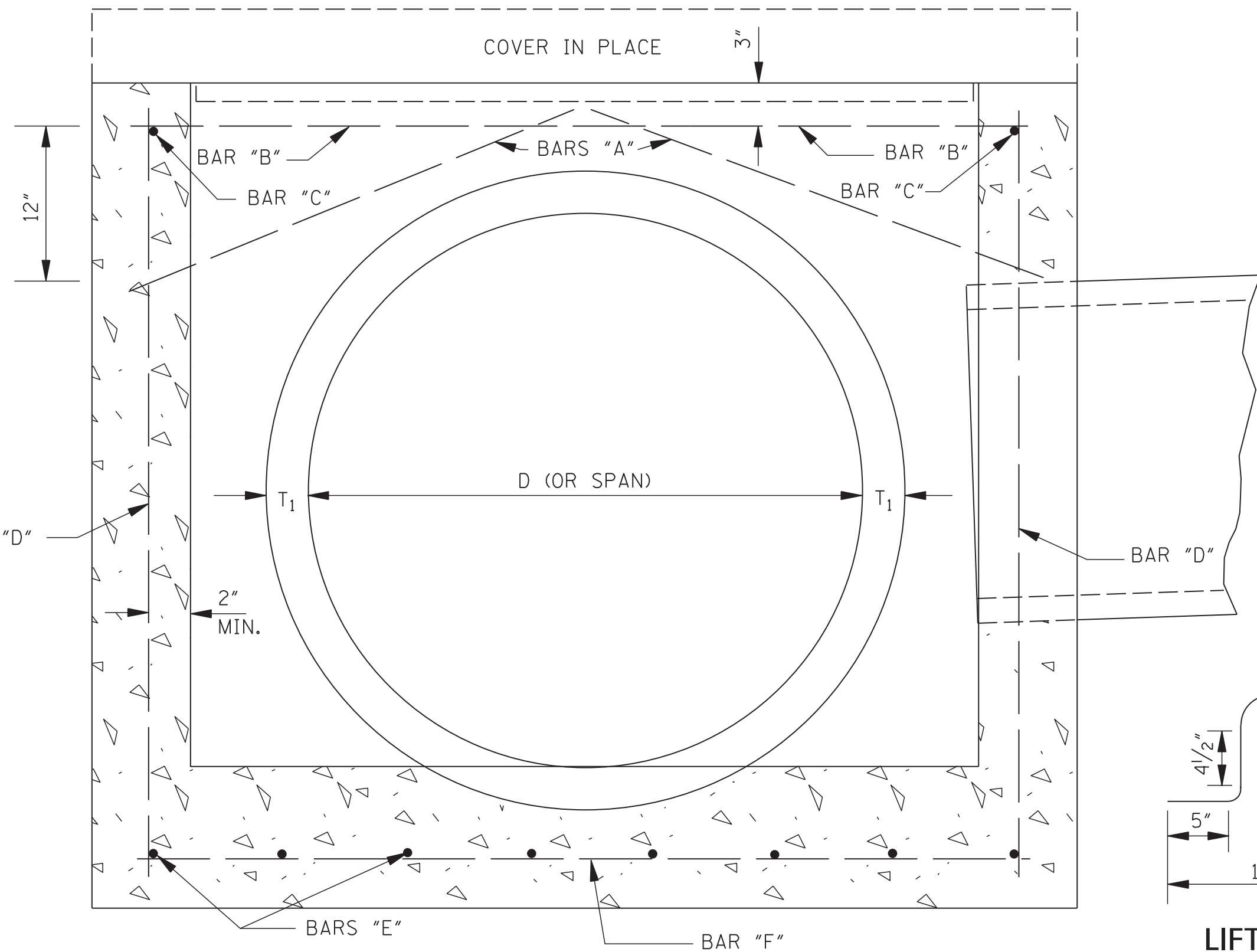
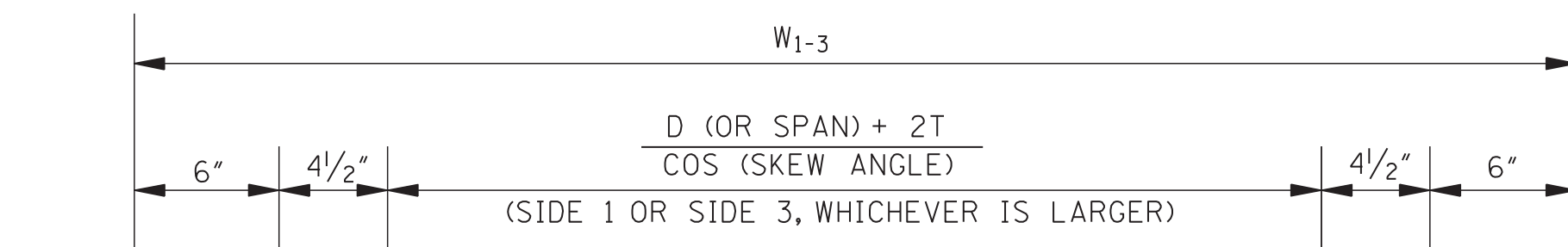
ELEVATION OF COVER



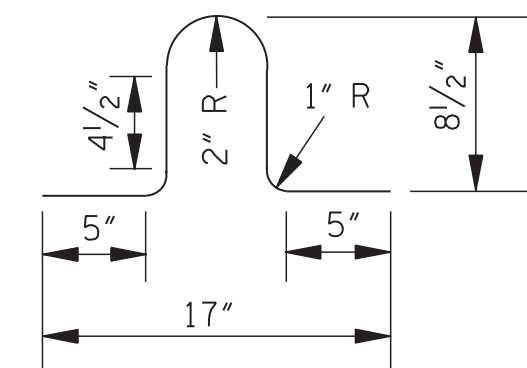
SECTION B-B



PLAN



SECTION A-A



LIFT BAR

NOTE: LIFT BAR TO BE FABRICATED FROM A #4 BAR 30" LONG. TWO LIFT BARS ARE REQUIRED. REINFORCING STEEL FOR 2 LIFT BARS = 3.3 lbs.

REINFORCING BAR LIST			
BAR	SIZE	NUMBER REQUIRED	LENGTH
A	#4	2 PER PIPE OPENING	$\sqrt{196 + \left(\frac{W^*}{2} + 2\right)^2}$
B	#4	2	$W_{1-3} - 6"$
C	#4	2	$W_{2-4} - 6"$
D	#4	4	$H - 6"$
E	#4	$2 \left[\left(\frac{W_{1-3}}{9"} \right)^{**} + 1 \right]$	$W_{2-4} - 4"$
F	#4	$2 \left[\left(\frac{W_{2-4}}{9"} \right)^{**} + 1 \right]$	$W_{1-3} - 4"$

NOTE: VARIABLES AND DESIGNATIONS ARE AS FOLLOWS:
D (OR SPAN) = PIPE DIAMETER (OR SPAN)
W₁₋₃ = WIDTH OF SIDE 1 & SIDE 3
W₂₋₄ = WIDTH OF SIDE 2 & SIDE 4
W* = W₁₋₃ OR W₂₋₄ (SIDE OF ENTERING PIPE)
** = ROUND TO NEAREST WHOLE NUMBER

CL. "B" CONC. (yd³) = [(Q1 + Q2) / 46,656] - Σ PIPE OPENING DEDUCTIONS
WHERE: Q1 = [5"W₁₋₃W₂₋₄] + [1"(W₁₋₃ - 12.5"W₂₋₄ - 12.5") + [(T₁ + 6")W₁₋₃W₂₋₄]
Q2 = 12"[H - (T₁ + 6")][(W₁₋₃ - 12") + W₂₋₄]

CIRCULAR PIPE			ARCH PIPE		
PIPE SIZE	T	PIPE OPENING DEDUCTION (yd ³)	PIPE SIZE	T	PIPE OPENING DEDUCTION (yd ³)
18"	2 1/2"	0.053	22" x 13"	2 1/2"	0.053
24"	3"	0.091	29" x 18"	3"	0.087
30"	3 1/2"	0.138	36" x 23"	3 1/2"	0.129
36"	4"	0.196	44" x 27"	4"	0.185
42"	4 1/2"	0.263	51" x 31"	4 1/2"	0.245
48"	5"	0.340	58" x 36"	5"	0.318
54"	5 1/2"	0.427	65" x 40"	5 1/2"	0.394
60"	6"	0.524	73" x 45"	6"	0.489
66"	6 1/2"	0.630			
72"	7"	0.747			

GENERAL NOTES:

- REINFORCING STEEL QUANTITIES TO BE COMPUTED FROM BAR LIST AND SHOWN ELSEWHERE ON THE PLANS.
- QUANTITIES FOR JUNCTION BOXES SHOWN ON THE PLANS WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
- CONCRETE SHALL BE CLASS "B" AND REINFORCING STEEL SHALL BE DEFORMED BARS.
- SIDE 1 OF THE JUNCTION BOX WILL ALWAYS BE THE OUTFLOW SIDE.
- IF PIPES ARE SKEWED MORE THAN 15° OR IF SKEWED PIPES PRODUCE CONFLICTS WITH ANOTHER OPENING, THE PIPE SHALL BE BROKEN BACK TO THE WALL OF THE JUNCTION BOX.

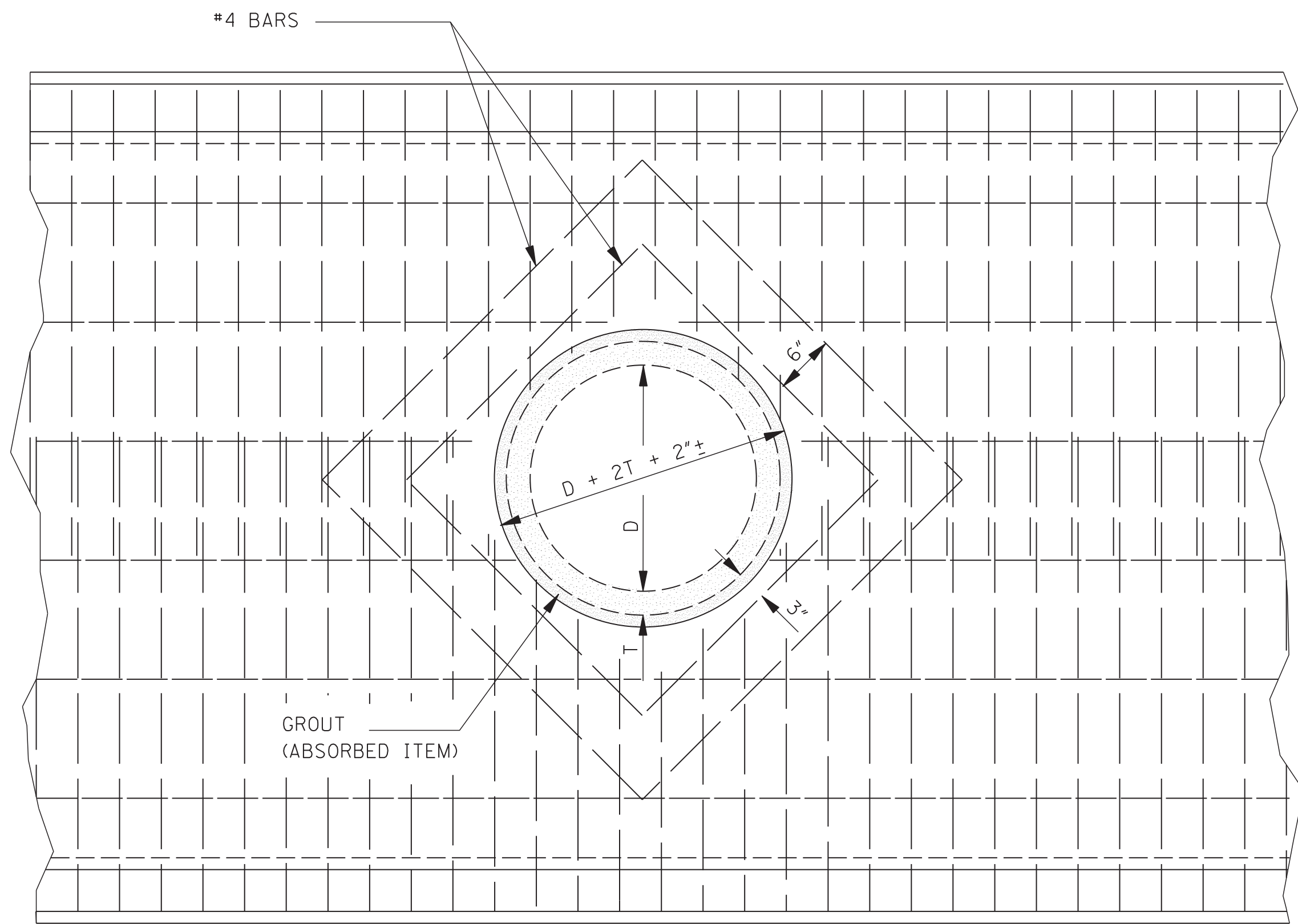
					BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
					REVISION	JUNCTION BOX FOR PIPE CULVERTS	
					DATE	ISSUE DATE: <u> AUGUST 01, 2017 </u>	



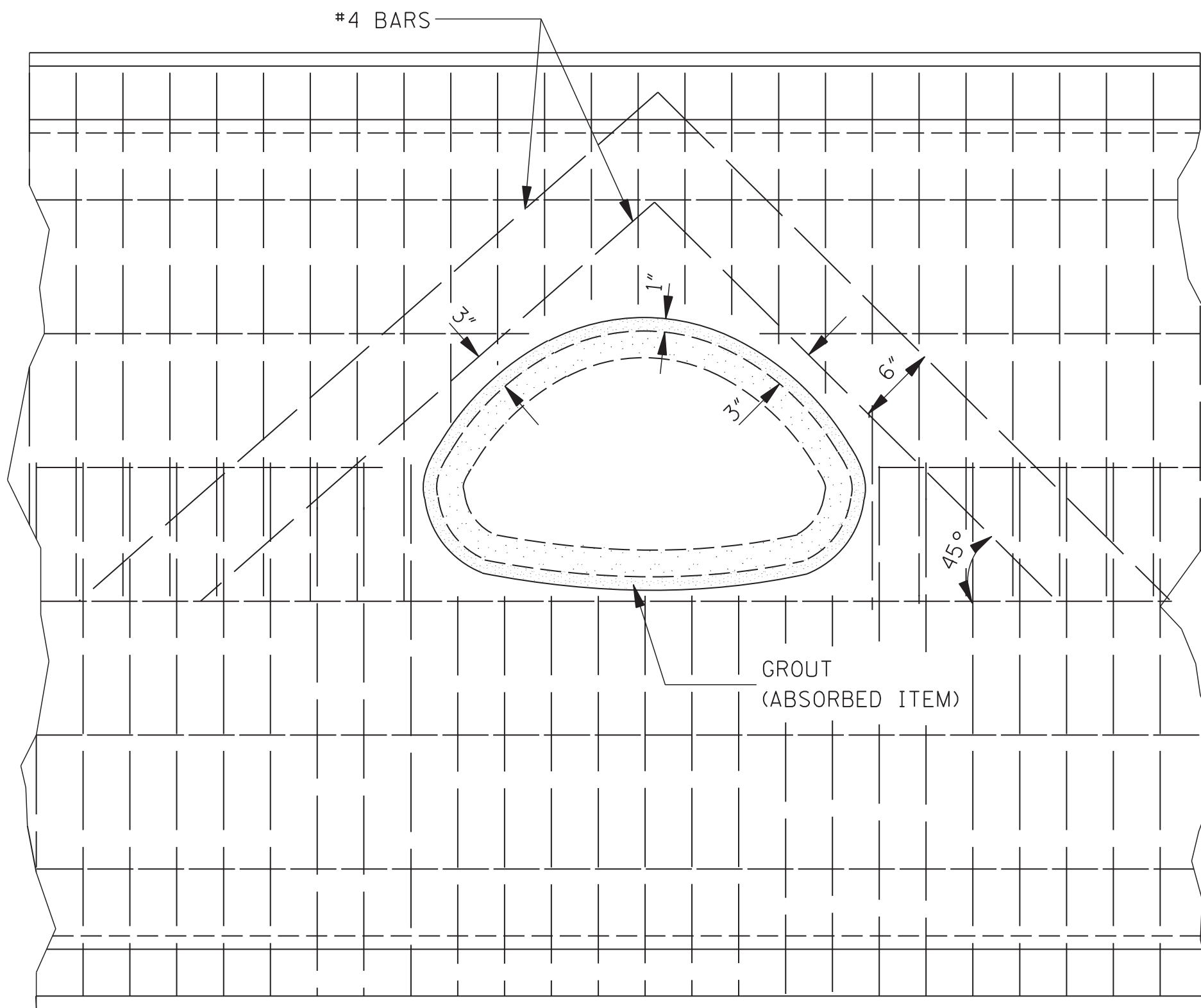
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
JB-1

SHEET NUMBER
6504



ELEVATION SHOWING CIRCULAR PIPE
STUBBED INTO BOX CULVERT BARREL OR WING-WALL



ELEVATION SHOWING ARCH PIPE STUBBED
INTO BOX CULVERT BARREL OR WING-WALL

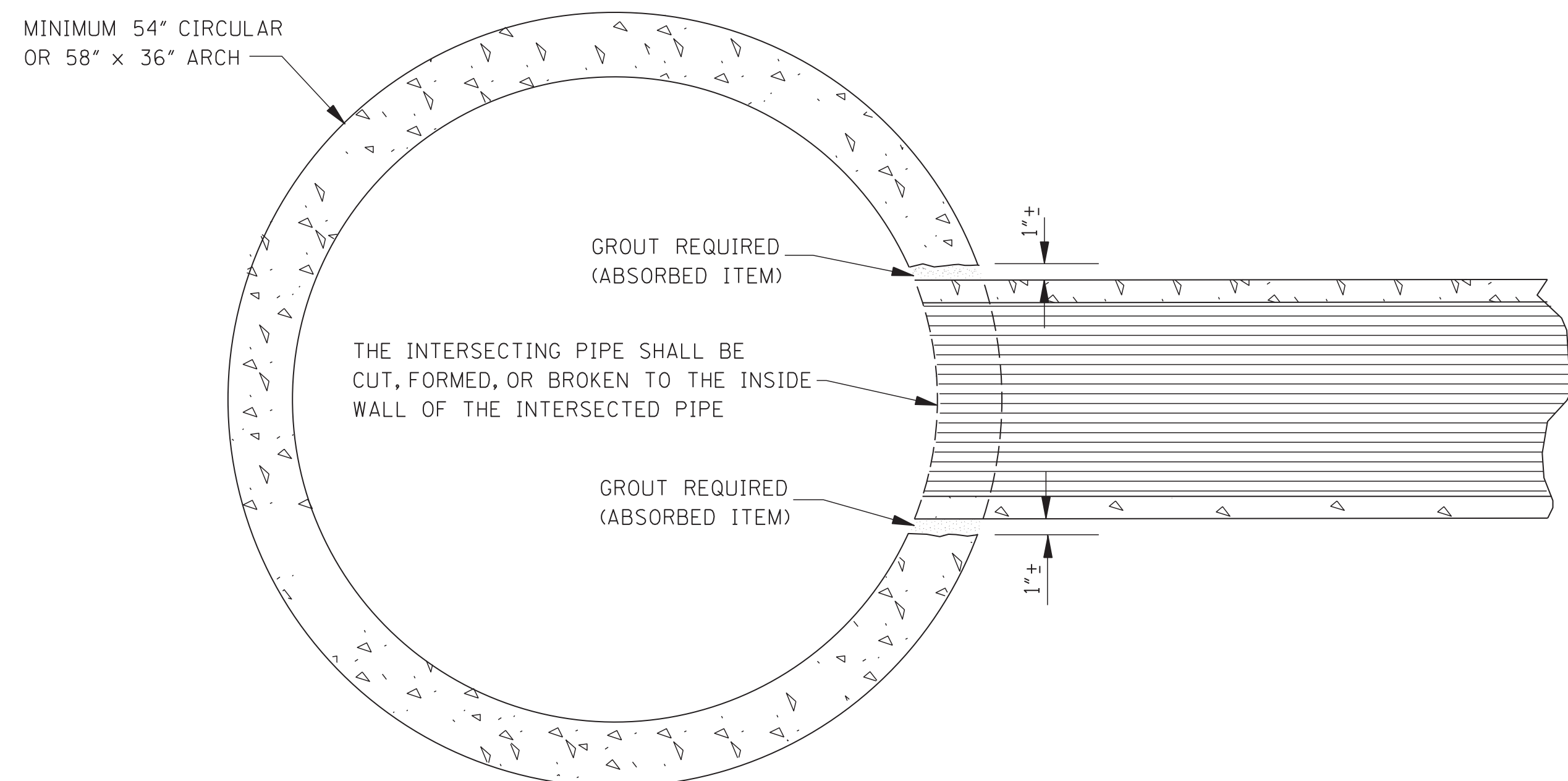
BAR LIST		
PIPE SIZE	#4 BARS	
	NO.	LGTH.
18"	4	2'-6"
	4	3'-6"
24"	4	3'-1"
	4	4'-1"
30"	4	3'-8 1/2"
	4	4'-8 1/2"
22" X 13"	2	3'-10"
	2	4'-9"
	1	5'-4"
29" X 18"	2	4'-6"
	1	5'-5"
	2	5'-5"
	1	6'-3"

NOTES:

1. A 24" DIAMETER PIPE IS THE MAXIMUM SIZE THAT MAY BE STUBBED INTO A 54" DIAMETER PIPE.
2. A 60" DIAMETER PIPE IS THE MINIMUM SIZE THAT A 30" DIAMETER PIPE MAY BE STUBBED INTO.

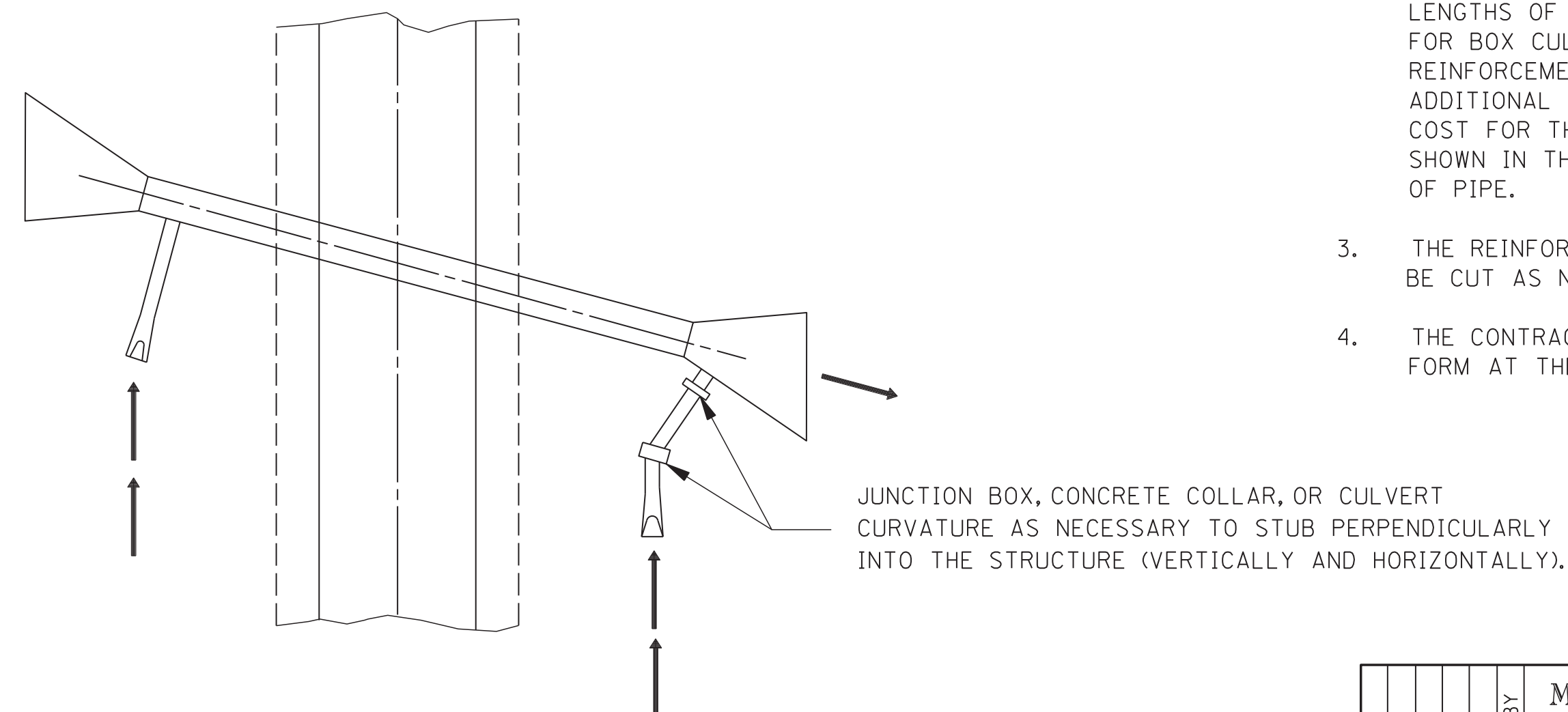
GENERAL NOTES:

1. PAYMENT FOR WORK AND MATERIALS FOR STUBBING A PIPE CULVERT INTO A BOX CULVERT OR CONCRETE PIPE SHALL BE PAID FOR AS A BRANCH CONNECTION OF THE APPROPRIATE SIZE, TYPE AND DESCRIPTION.
2. THE TABLE ON THIS SHEET INDICATES THE NUMBER AND LENGTHS OF ADDITIONAL REINFORCING STEEL BARS REQUIRED FOR BOX CULVERTS CONSTRUCTED. FOR A DOUBLE ROW OF REINFORCEMENT, DOUBLE THE NUMBER OF BARS SHOWN. THE ADDITIONAL REINFORCING STEEL SHALL BE INCLUDED IN THE COST FOR THIS TYPE OF BRANCH CONNECTION. THE QUANTITIES SHOWN IN THE TABLE ARE FOR THE MOST COMMON SIZES OF PIPE.
3. THE REINFORCEMENT OF THE INTERSECTED BOX OR PIPE SHALL BE CUT AS NECESSARY TO ACCOMMODATE THE STUBBED PIPE.
4. THE CONTRACTOR MAY INSERT THE INTERSECTING PIPE INTO THE FORM AT THE PROPER LOCATION IN LIEU OF FORMING BY BLOCKING OUT.



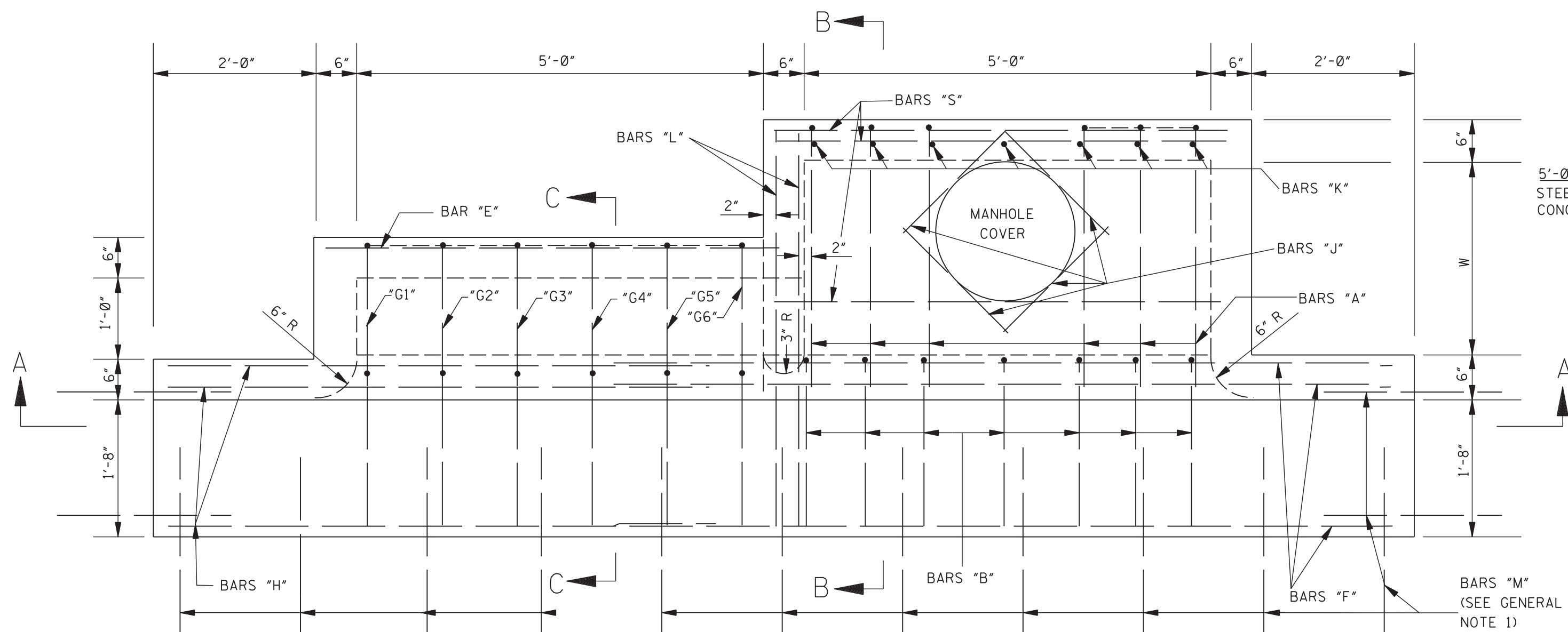
ELEVATION SHOWING PIPE CULVERT
STUBBED INTO CONCRETE PIPE CULVERT

NOTE: TYPICAL INSTALLATION FOR MEDIAN STUB TO CROSSING DRAIN WITH MINIMUM COVER.

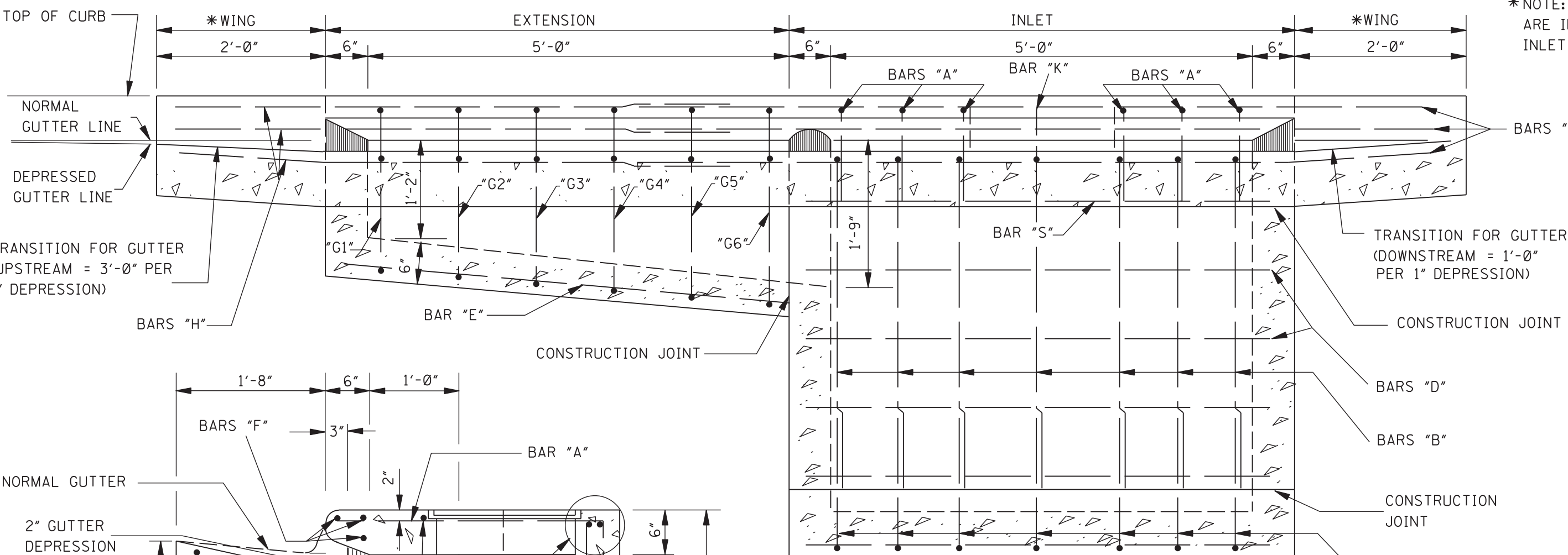


TYPICAL PLAN OF BRANCH CONNECTION
TO BOX CULVERT WING-WALL

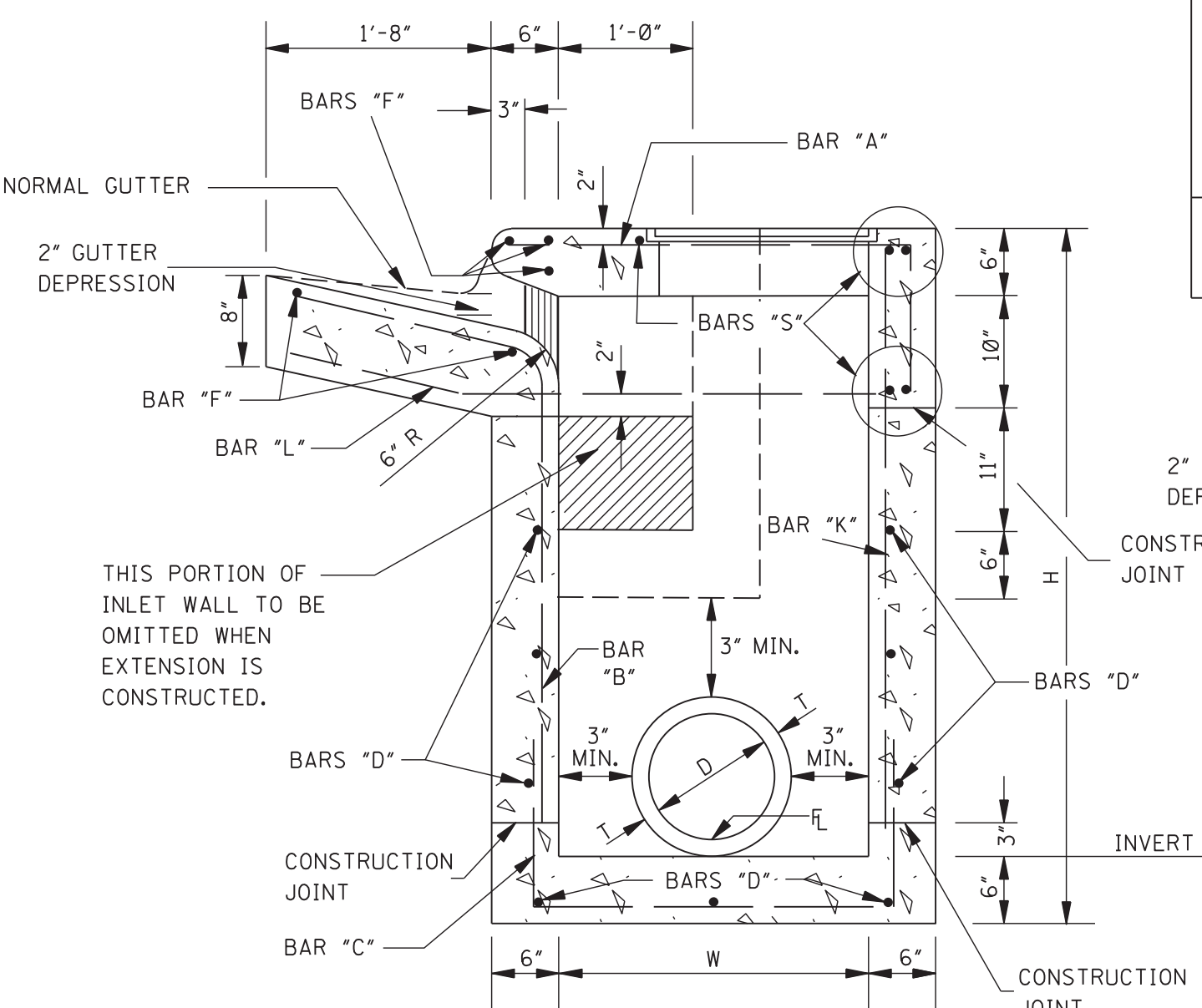
				BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
				REVISION	BRANCH CONNECTIONS
				DATE	WORKING NUMBER BC-1
				ISSUE DATE:	SHEET NUMBER 6507
					AUGUST 01, 2017



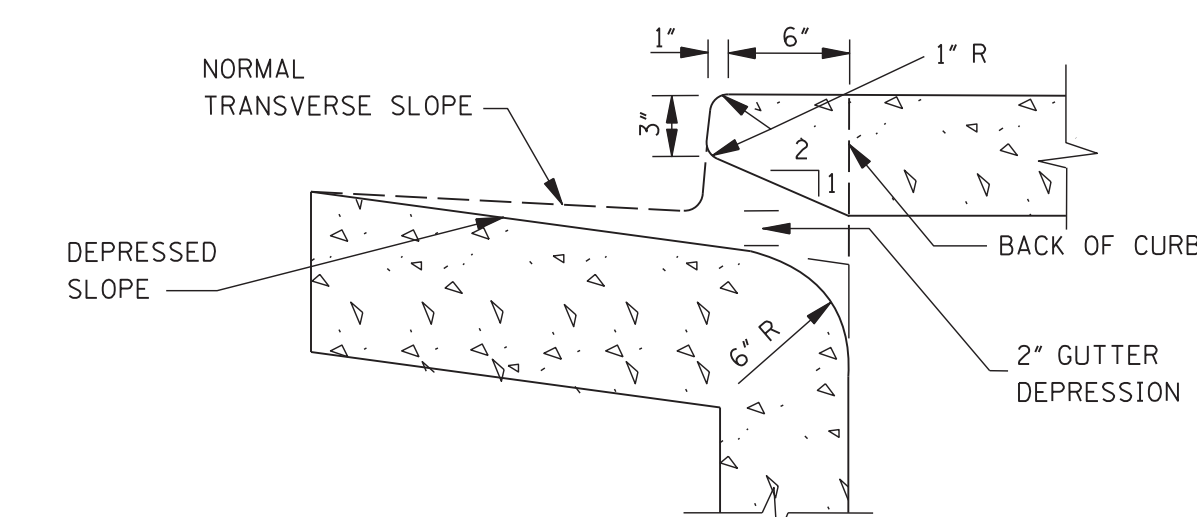
PLAN



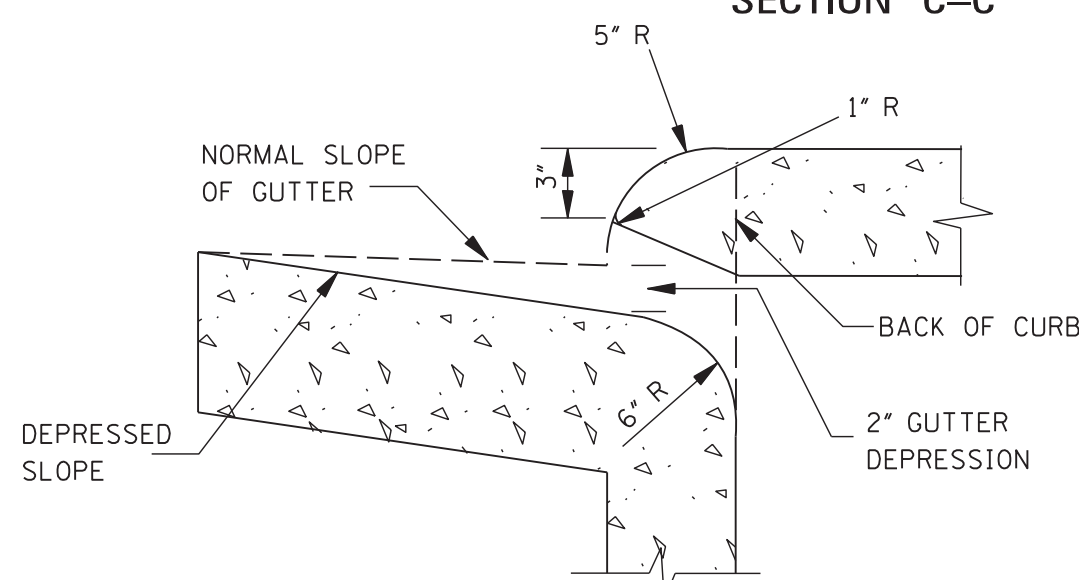
SECTION A-A



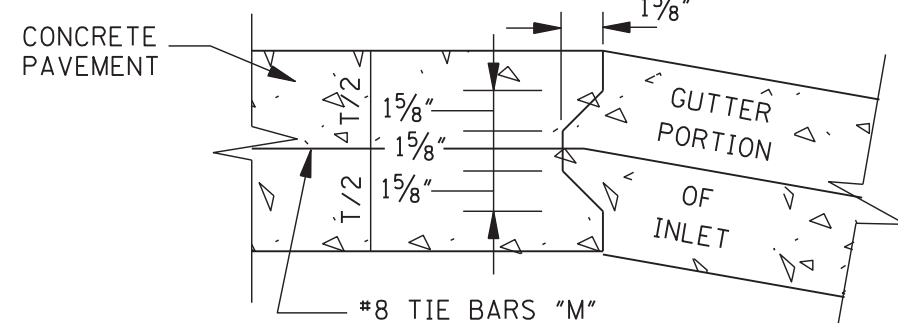
SECTION B-B



THROAT DETAIL OF BARRIER CURB

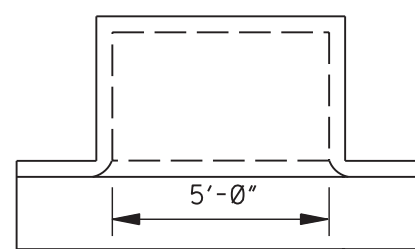


THROAT DETAIL OF ROLLED CURB



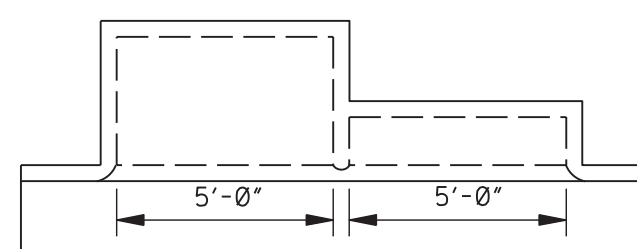
DETAIL OF KEYED CONSTRUCTION JOINTS

NOTE: FIELD BEND BARS "L" TO CENTER OF GUTTER SECTION



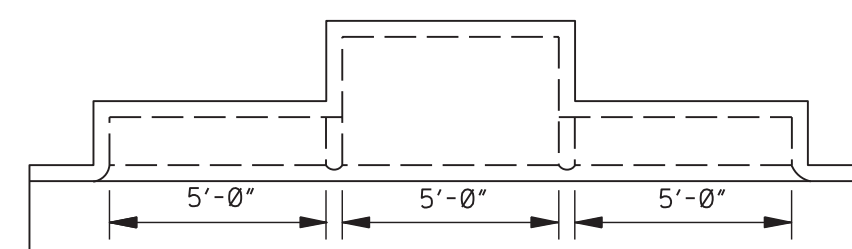
REGULAR INLET

5'-0" INLET
STEEL = 8.68W + 9.35Y + 3.79W' + 7.57H' + 121
CONC. = (WY + 5.5W + 6Y + 14.611)/27



INLET WITH ONE EXTENSION

10'-0" INLET
STEEL = 8.68W + 9.35Y + 3.79W' + 7.57H' + 231
CONC. = (WY + 5.5W + 6Y + 38.641)/27



INLET WITH TWO EXTENSIONS

15'-0" INLET
STEEL = 8.68W + 9.35Y + 3.79W' + 7.57H' + 341
CONC. = (WY + 5.5W + 6Y + 62.671)/27

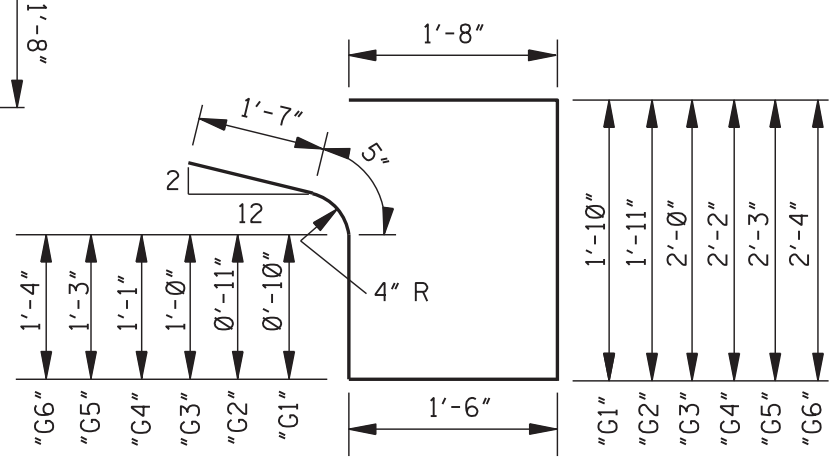
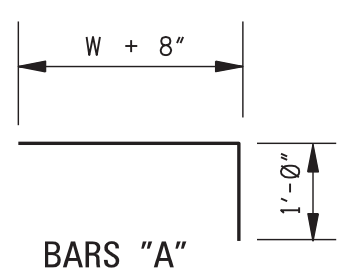
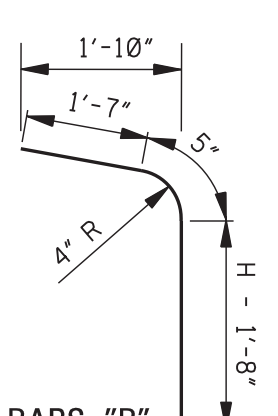
PLAN OF INLET AND EXTENSIONS

ADD. CONCRETE PER FOOT OF H		ADD. CONCRETE PER FOOT OF W	
W	yd ³ /ft	H	yd ³ /ft
2'-6"	0.315	3'-6"	0.315
3'-0"	0.333	4'-0"	0.333
3'-6"	0.352	4'-6"	0.352
4'-0"	0.371	5'-0"	0.370
4'-6"	0.389	5'-6"	0.389
5'-0"	0.408	6'-0"	0.408
5'-6"	0.426	6'-6"	0.426
6'-0"	0.445	7'-0"	0.445
6'-6"	0.463	7'-6"	0.463
7'-0"	0.481	8'-0"	0.482
		8'-6"	0.500

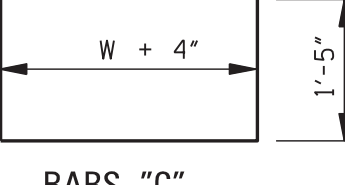
QUANTITIES FOR ONE EXTENSION					
BAR	SIZE	LENGTH	SPACING	NUMBER	WEIGHT
"E"	#4	5'-8"	AS SHOWN	3	11
"G"	#4	SEE SCHEDULE	0'-11"	6	34
"H"	#6	6'-9"	AS SHOWN	5	51
"L"	#6	4'-9"	AS SHOWN	2	14
TOTAL STEEL FOR ONE EXTENSION = 110 lbs					
TOTAL CONCRETE FOR ONE EXTENSION = 0.89 yd ³					

NOTE: WHERE EXTENSION IS USED WITH CONCRETE PAVEMENT, ADD 27 lbs OF STEEL FOR BARS "M".

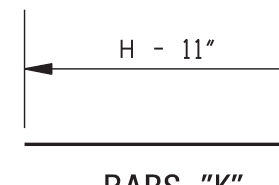
BAR "G" SCHEDULE	
BAR "G"	LENGTH
"G1"	7'-10"
"G2"	8'-0"
"G3"	8'-2"
"G4"	8'-5"
"G5"	8'-8"
"G6"	8'-10"



BARS "G"

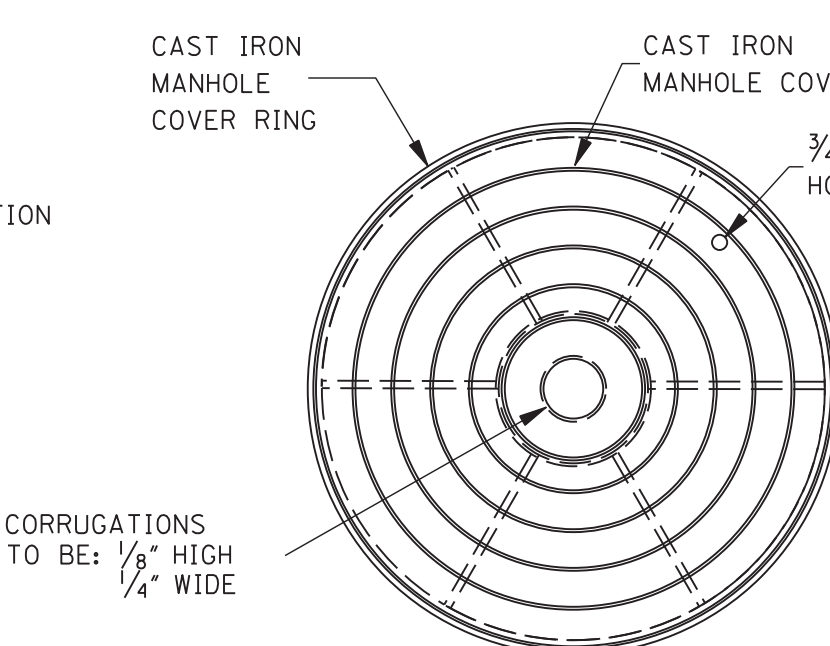


BARS "C"

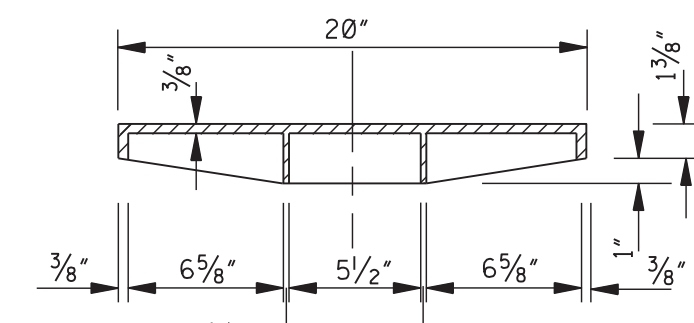


BARS "K"

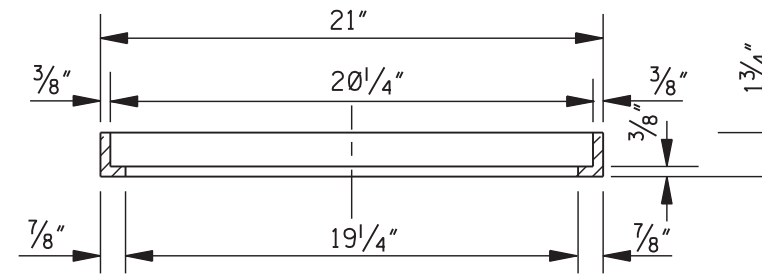
BAR DETAILS



PLAN



SECTION THRU MANHOLE COVER



SECTION THRU MANHOLE COVER RING

NOTE: WEIGHT OF RING & COVER = 79 lbs

- NOTES:
1. W AND H ARE EXPRESSED IN DECIMAL FEET.
 2. W = W ROUNDED TO NEAREST WHOLE FOOT.
 3. Y = (H-0.5).
 4. H' = (H - 2.08) ROUNDED TO NEAREST WHOLE FOOT.
 5. NO DEDUCTIONS ARE MADE FOR PIPE OPENINGS IN FORMULAS.

W=2'-6"		BILL OF REINFORCING STEEL FOR 1-5'-0" INLET														* TOTAL STEEL	TOTAL CONC.
H	BAR "A" L = 4'-2" #4 @ 9"	BAR "C" L = 5'-8" #4 @ 9"	BAR "S" L = 5'-8" #4 @ 12"	BAR "D" L = 5'-8" #4 @ 12"	BAR "F" L=9'-8" #6	BAR "J" L=2'-3" #4	BAR "B" #4 @ 9"	BAR "K" #4 @ 9"	LGTH.	NO.	lbs	LGTH.	NO.	lbs	lbs	yd ³	
3'-6"	6 17	7 27	5 19	5 19	5 73	4 6	3'-10"	7 18	2'-7"	7 12	190	2'-7"	7 12	190	1.99		
4'-0"	6 17	7 27	5 19	7 26	5 73	4 6	4'-4"	7 20	3'-1"	7 14	202	3'-1"	7 14	202	2.15		
4'-6"	6 17	7 27	5 19	7 26	5 73	4 6	4'-10"	7 23	3'-7"	7 17	207	3'-7"	7 17	207	2.31		
5'-0"	6 17	7 27	5 19	9 34	5 73	4 6	5'-4"	7 25	4'-1"	7 19	219	4'-1"	7 19	219	2.47		
5'-6"	6 17	7 27	5 19	9 34	5 73	4 6	5'-10"	7 27	4'-7"	7 21	224	4'-7"	7 21	224	2.62		
6'-0"	6 17	7 27	5 19	11 42	5 73	4 6	6'-4"	7 30	5'-1"	7 24	238	5'-1"	7 24	238	2.78		
6'-6"	6 17	7 27	5 19	11 42	5 73	4 6	6'-10"	7 32	5'-7"	7 26	240	5'-7"	7 26	240	2.94		
7'-0"	6 17	7 27	5 19	13 49	5 73	4 6	7'-4"	7 34	6'-1"	7 28	253	6'-1"	7 28	253	3.10		
7'-6"	6 17	7 27	5 19	13 49	5 73	4 6	7'-10"	7 37	6'-7"	7 31	257	6'-7"	7 31	257	3.25		

W=3'-0"		BILL OF REINFORCING STEEL FOR 1-5'-0" INLET														* TOTAL STEEL	TOTAL CONC.
H	BAR "A" L = 4'-8" #4 @ 9"	BAR "C" L = 6'-2" #4 @ 9"	BAR "S" L = 5'-8" #4 @ 12"	BAR "D" L = 5'-8" #4 @ 12"	BAR "F" L=9'-8" #6	BAR "J" L=2'-3" #4	BAR "B" #4 @ 9"	BAR "K" #4 @ 9"	LGTH.	NO.	lbs	LGTH.	NO.	lbs	lbs	yd ³	
3'-6"	6 19	7 29	5 19	5 19	5 73	4 6	3'-10"	7 18	2'-7"	7 12	194	2'-7"	7 12	194	2.15		
4'-0"	6 19	7 29	5 19	7 26	5 73	4 6	4'-4"	7 20	3'-1"	7 14	206	3'-1"	7 14	206	2.32		
4'-6"	6 19	7 29	5 19	7 26	5 73	4 6	4'-10"	7 23	3'-7"	7 17	211	3'-7"	7 17	211	2.49		
5'-0"	6 19	7 29	5 19	9 34	5 73	4 6	5'-4"	7 25	4'-1"	7 19	223	4'-1"	7 19	223	2.65		
5'-6"	6 19	7 29	5 19	9 34	5 73	4 6	5'-10"	7 27	4'-7"	7 21	228	4'-7"	7 21	228	2.82		
6'-0"	6 19	7 29	5 19	11 42	5 73	4 6	6'-4"	7 30	5'-1"	7 24	240	5'-1"	7 24	240	2.99		
6'-6"	6 19	7 29	5 19	11 42	5 73	4 6	6'-10"	7 32	5'-7"	7 26	245	5'-7"	7 26	245	3.15		
7'-0"	6 19	7 29	5 19	13 49	5 73	4 6	7'-4"	7 34	6'-1"	7 28	257	6'-1"	7 28	257	3.32		
7'-6"	6 19	7 29	5 19	13 49	5 73	4 6	7'-10"	7 37	6'-7"	7 31	262	6'-7"	7 31	262	3.49		

W=3'-6"		BILL OF REINFORCING STEEL FOR 1-5'-0" INLET														* TOTAL STEEL	TOTAL CONC.
H	BAR "A" L = 5'-2" #4 @ 9"	BAR "C" L = 6'-8" #4 @ 9"	BAR "S" L = 5'-8" #4 @ 12"	BAR "D" L = 5'-8" #4 @ 12"	BAR "F" L=9'-8" #6	BAR "J" L=2'-3" #4	BAR "B" #4 @ 9"	BAR "K" #4 @ 9"	LGTH.	NO.	lbs	LGTH.	NO.	lbs	lbs	yd ³	
3'-6"	6 21	7 31	5 19	6 23	5 73	4 6	3'-10"	7 18	2'-7"	7 12	202	2'-7"	7 12	202	2.31		
4'-0"	6 21	7 31	5 19	8 30	5 73	4 6	4'-4"	7 20	3'-1"	7 14	214	3'-1"	7 14	214	2.49		
4'-6"	6 21	7 31	5 19	8 30	5 73	4 6	4'-10"	7 23	3'-7"	7 17	219	3'-7"	7 17	219	2.66		
5'-0"	6 21	7 31	5 19	10 38	5 73	4 6	5'-4"	7 25	4'-1"	7 19	231	4'-1"	7 19	231	2.84		
5'-6"	6 21	7 31	5 19	10 38	5 73	4 6	5'-10"	7 27	4'-7"	7 21	236	4'-7"	7 21	236	3.01		
6'-0"	6 21	7 31	5 19	12 45	5 73	4 6	6'-4"	7 30	5'-1"	7 24	248	5'-1"	7 24	248	3.19		
6'-6"	6 21	7 31	5 19	12 45	5 73	4 6	6'-10"	7 32	5'-7"	7 26	253	5'-7"	7 26	253	3.37		
7'-0"	6 21	7 31	5 19	14 53	5 73	4 6	7'-4"	7 34	6'-1"	7 28	265	6'-1"	7 28	265	3.54		
7'-6"	6 21	7 31	5 19	14 53	5 73	4 6	7'-10"	7 37	6'-7"	7 31	270	6'-7"	7 31	270	3.72		

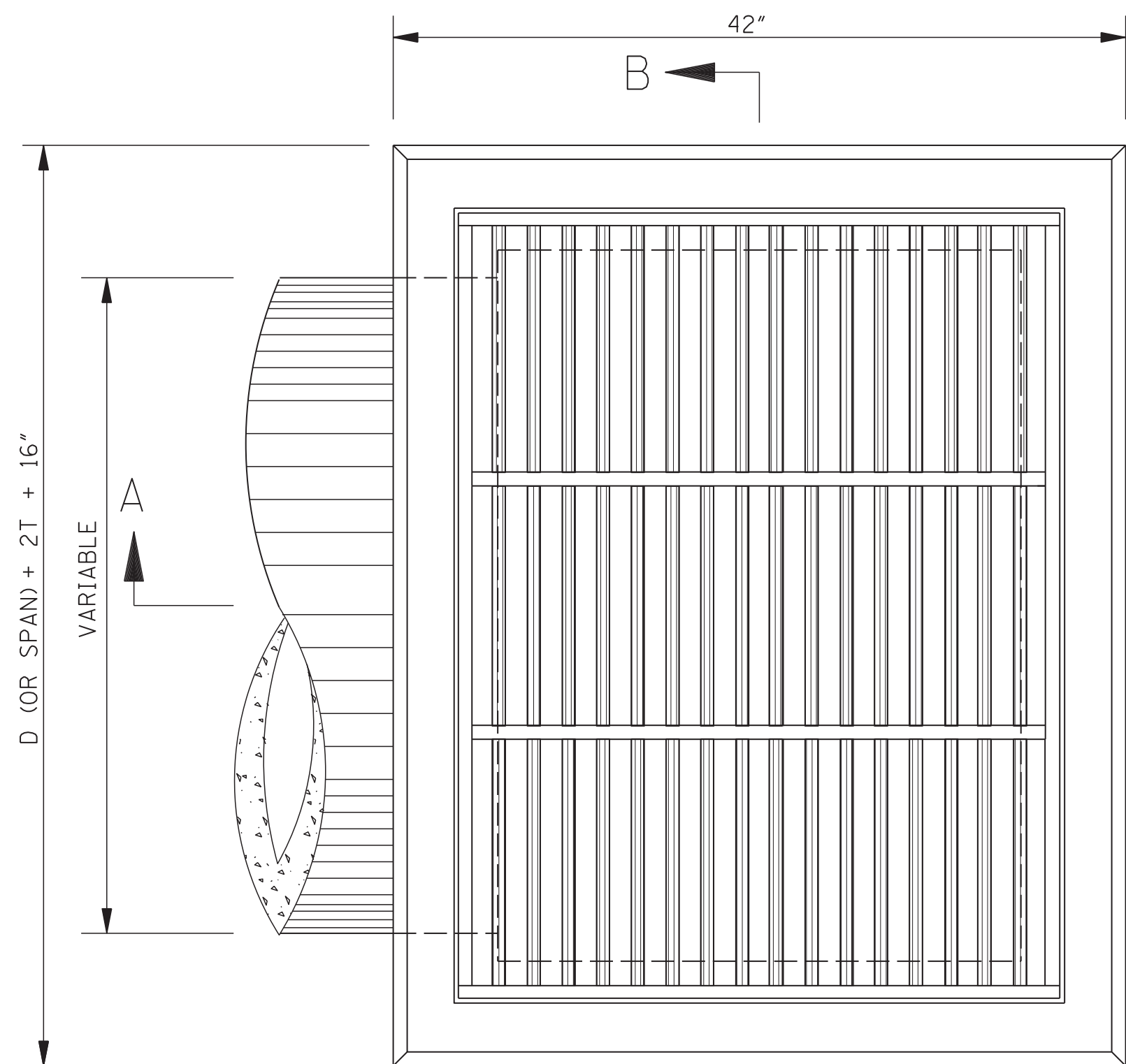
* NOTE: WHERE INLET IS USED WITH CONCRETE PAVEMENT, ADD 73 lbs OF STEEL FOR BARS "M".

- GENERAL NOTES:
1. WHERE INLET OR INLET WITH EXTENSION(S) IS USED WITH CONCRETE PAVEMENT WITH INTERGRAL CURB, THE PAVEMENT SHALL BE BLOCKED OUT TO THE DIMENSIONS AS SHOWN FOR THE GUTTER PORTION OF THE INLET OR INLET WITH EXTENSION(S). THE PORTION BLOCKED OUT SHALL BE PLACED INTEGRAL WITH THE TOP OF THE INLET OR INLET WITH EXTENSION(S). #8 DEFORMED BARS 30" LONG SHALL BE PLACED ON 18" CENTERS AT THE CENTER OF THE PAVEMENT. THESE BARS SHALL EXTEND INTO THE GUTTER PORTION OF THE INLET OR INLET WITH EXTENSION(S) 15". THE CONSTRUCTION JOINT BETWEEN THE CONCRETE PAVEMENT AND THE INLET OR INLET WITH EXTENSION(S) SHALL BE A KEYED JOINT AS SHOWN. A SMOOTH CONSTRUCTION JOINT WILL NOT BE PERMITTED. QUANTITIES FOR BLOCKED OUT AREA OF PAVEMENT SHALL BE INCLUDED IN QUANTITIES FOR INLET OR INLET WITH EXTENSION(S).
 2. THE QUANTITIES SHOWN, MINUS VOLUMETRIC DISPLACEMENT OF CONCRETE BY PIPE CULVERTS THROUGH INLET WALLS, WILL BE USED AS THE BASIS OF FINAL PAYMENT UNLESS THIS PLAN IS MODIFIED.
 3. FOR CONVENIENCE, DEPTHS OF INLETS SHOWN IN ABOVE TABLE ARE INCREMENTS OF 6". BUT ANY DEPTHS OTHER THAN THESE SHOWN MAY BE USED WHEREVER DEEMED NECESSARY. QUANTITIES FOR OTHER DEPTHS, FALLING WITHIN THE LIMITS OF THE TABLE, MAY BE FOUND BY INTERPOLATION.
 4. FIELD CUT AND BEND BARS AS NECESSARY TO ACCOMMODATE STORM SEWER. NO DEDUCTIONS ARE TO BE MADE IN STEEL QUANTITIES.
 5. WHERE INLET IS BEING USED ADJACENT TO SIDEWALK, REFER TO OTHER SHEETS FOR TOP DETAIL.

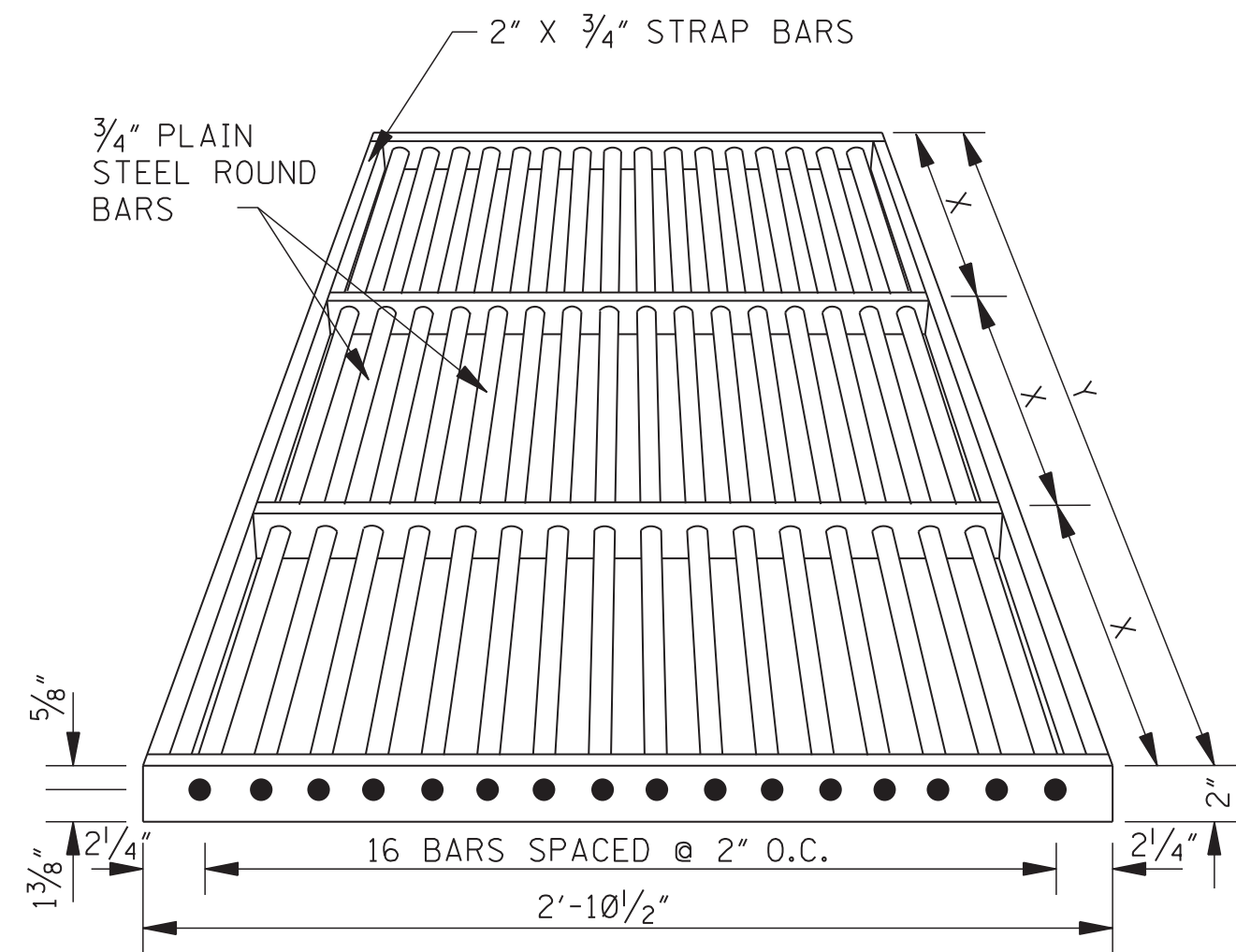
		BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
		REVISION	ROADWAY DESIGN DIVISION
		DATE	STANDARD PLAN
			STORM SEWER INLET
			TYPE SS-2
			WORKING NUMBER
			SS-2
			SHEET NUMBER
			6524
			ISSUE DATE: AUGUST 01, 2017

"A", #4 BARS	AS PER TABLE
"B", #4 BARS	D (OR SPAN) + 2T + 9"
"C", #4 BARS	34"
"D", #4 BARS	D (OR RISE) + T + 4"

BARS "A", "B", "C" & "D"

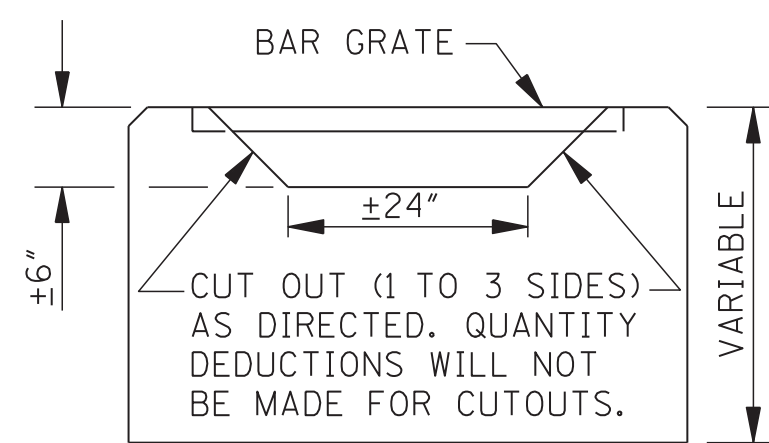


PLAN

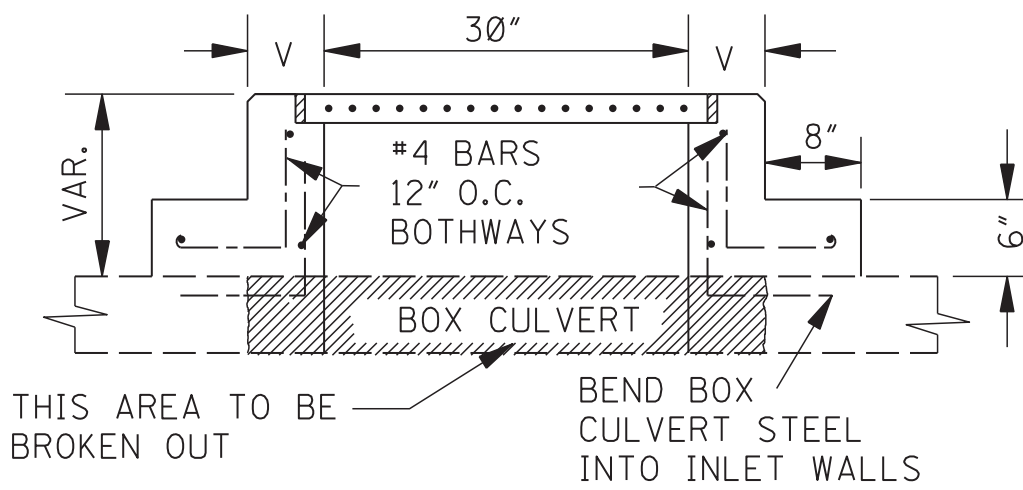


BAR GRATE DETAILS

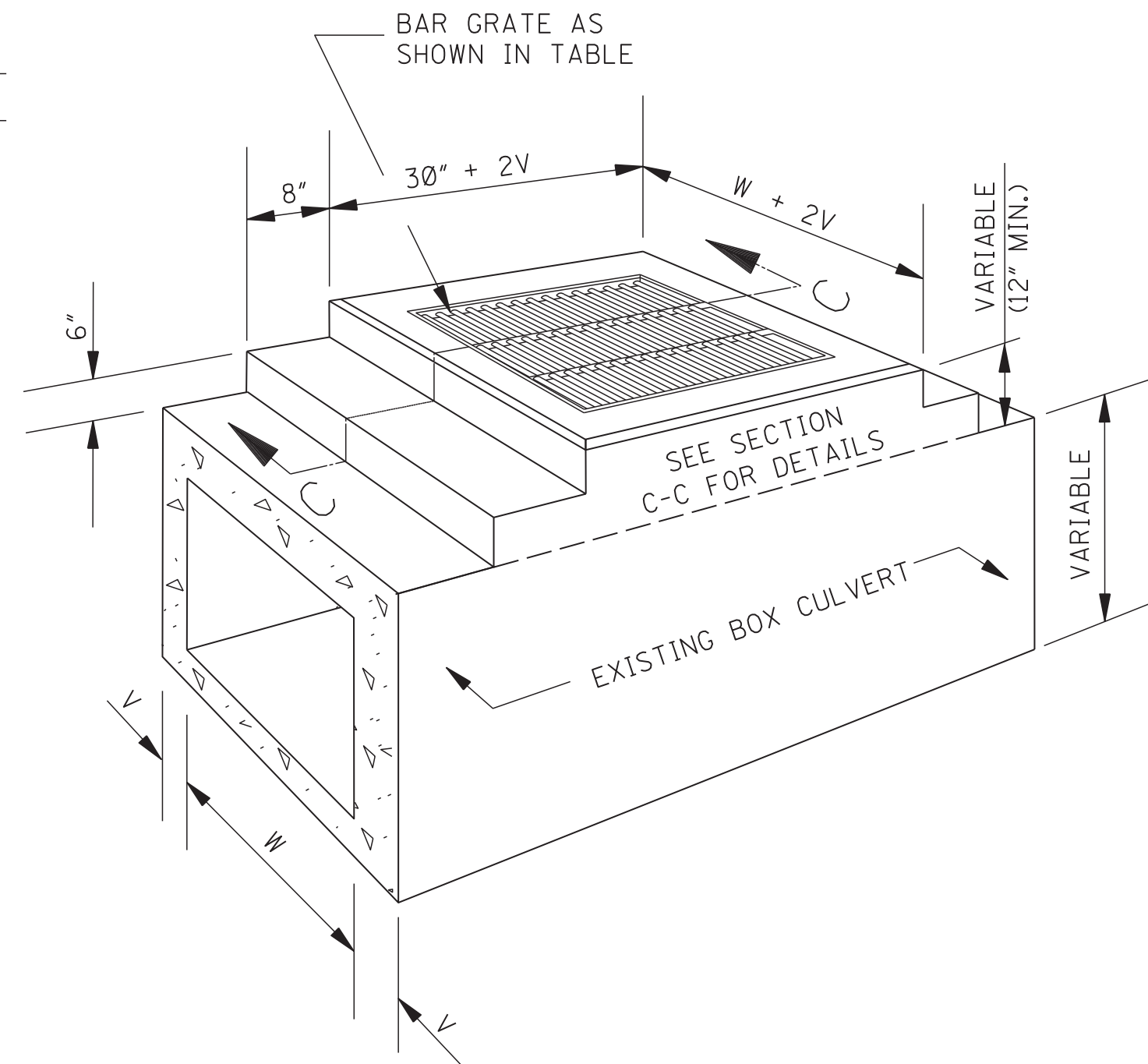
NOTE: JUNCTIONS OF ROUND AND STRAP BARS SHALL BE WELDED. GRATE SHALL BE SHOP COATED WITH APPROVED EPOXY MASTIC PAINT.



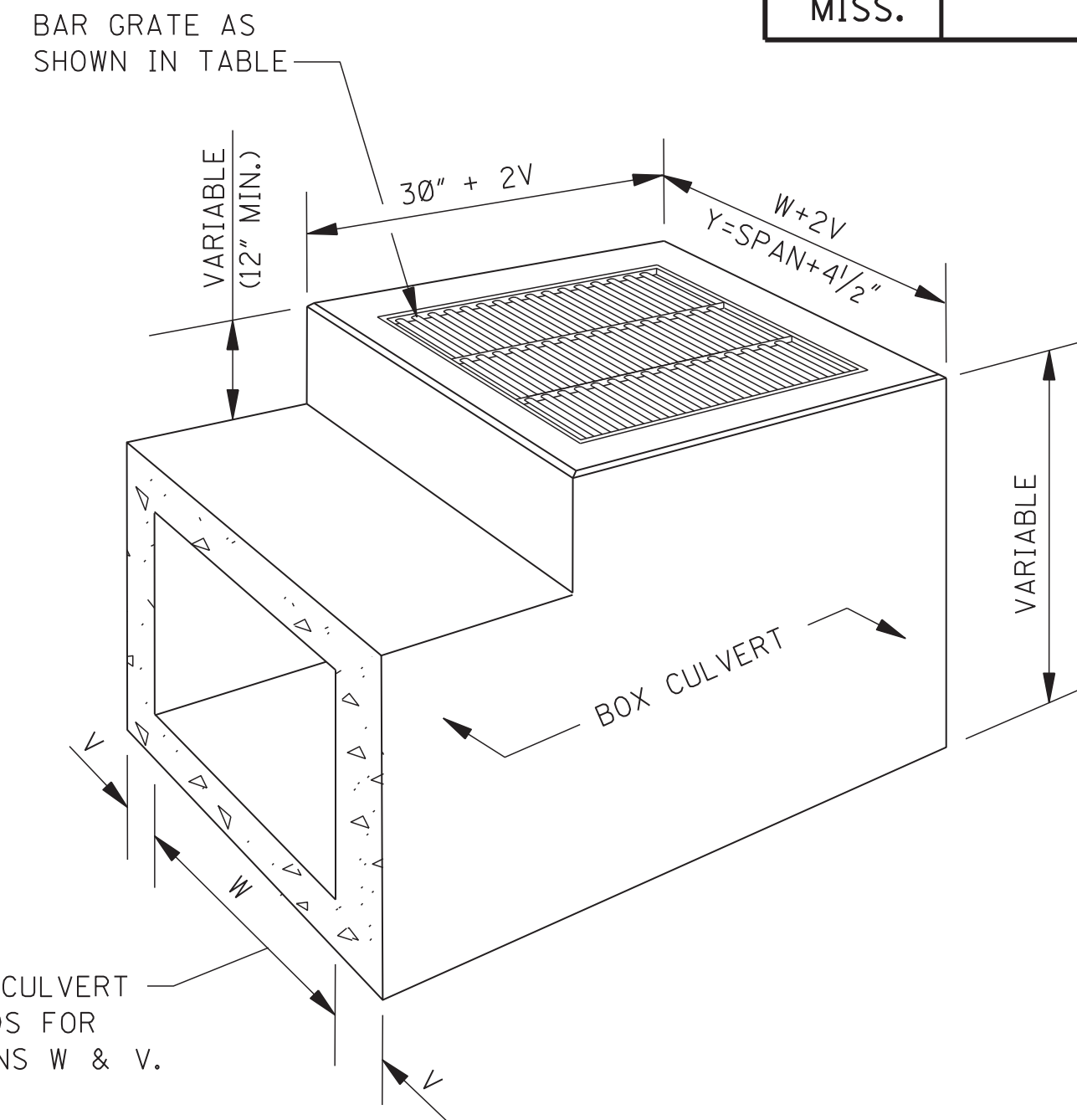
ELEVATION
MODIFIED PIPE OR
BOX CULVERT INLET



SECTION C-C



SECTIONAL PERSPECTIVE
INLET ON EXISTING BOX CULVERT



SECTIONAL PERSPECTIVE
INLET USED IN LIEU OF HEADWALLS

PIPE INLETS					BOX CULVERT INLETS				
PIPE SIZE	Y	X	NO. X-SPANS	WEIGHT (lbs)	BOX CULVERT SIZE	Y	X	NO. X-SPANS	WEIGHT (lbs)
18"	2'-7 1/2"	1'-3 3/4"	2	127	2' X 2'	2'-4 1/2"	1'-2 1/4"	2	119
22" X 13"	2'-11 1/2"	1'-5 3/4"	2	139	3' X 2'	3'-4 1/2"	1'-1 1/2"	3	166
24"	3'-2 1/2"	1'-7 1/4"	2	147	4' X 2'	4'-4 1/2"	1'-5 1/2"	3	200
29" X 18"	3'-7"	1'-2 1/2"	3	173	5' X 2'	5'-4 1/2"	1'-4 1/8"	4	247
30"	3'-9 1/2"	1'-3 3/4"	3	180	6' X 2'	6'-4 1/2"	1'-3 3/4"	5	293
36"	4'-4 1/2"	1'-5 1/2"	3	200	7' X 2'	7'-4 1/2"	1'-5 1/8"	5	328
42"	4'-11 1/2"	1'-2 1/8"	4	232	8' X 2'	8'-4 3/4"	1'-4 3/4"	6	374
48"	5'-6 1/2"	1'-4 5/8"	4	252	3' X 3'	3'-4 1/2"	1'-1 1/2"	3	166
54"	6'-1 1/2"	1'-6 3/8"	4	272	4' X 3'	4'-4 1/2"	1'-5 1/2"	3	200
60"	6'-8 1/2"	1'-4 3/32"	5	305	5' X 3'	5'-4 1/2"	1'-4 1/8"	4	247
					6' X 3'	6'-4 1/2"	1'-3 3/4"	5	293

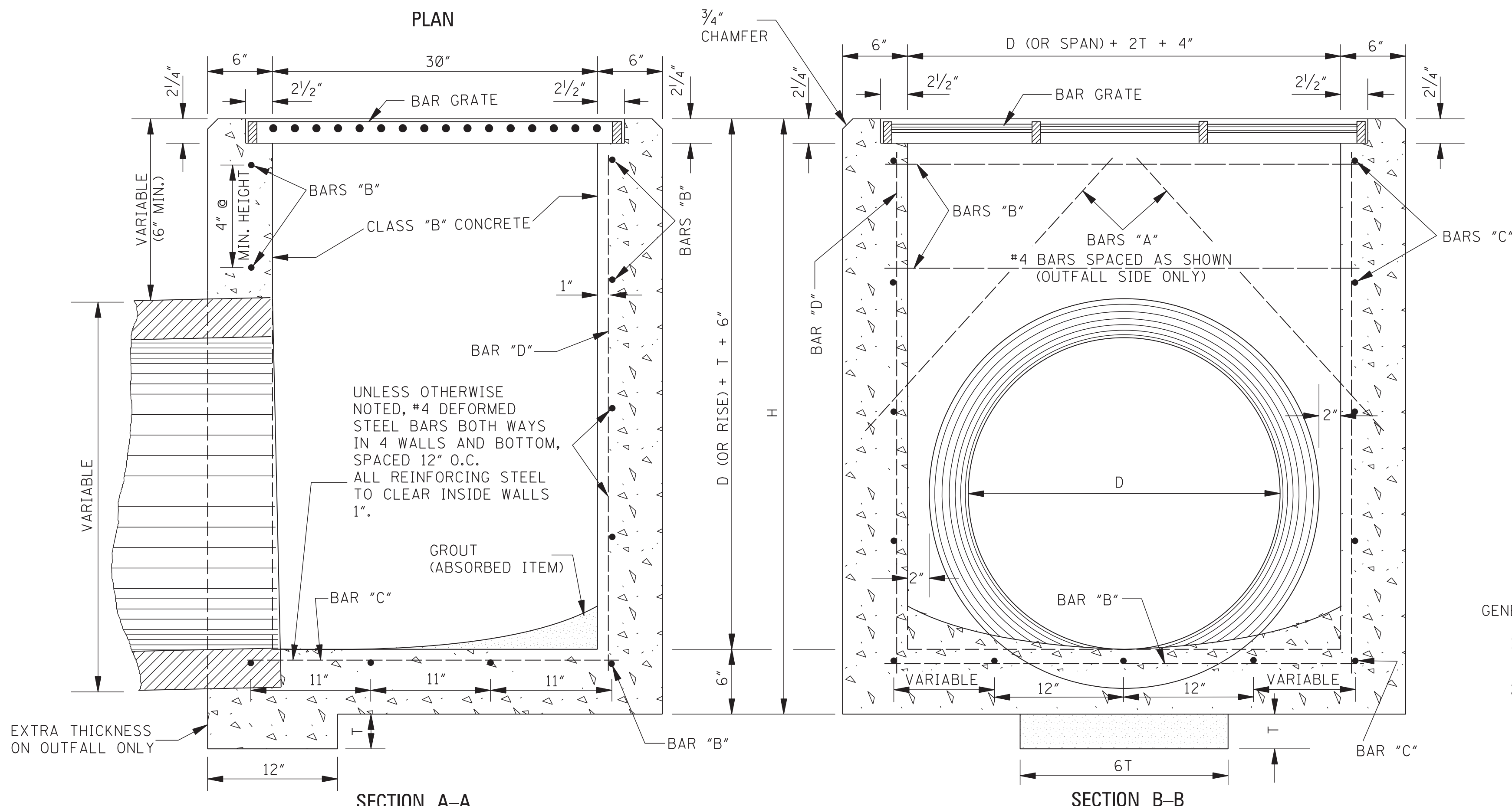
QUANTITIES

PIPE SIZE	MIN. DEPTH TO F.L.	MIN. DEPTH INLET		EACH ADDED FOOT		PIPE OPENING DEDUCTION (yd ³)	T	BARS/SIZES			
		CONC * (yd ³)	STEEL (lbs)	CONC (yd ³)	STEEL (lbs)			"A" #4	"B" #4	"C" #4	"D" #4
								NO. @ LGTH.	NO. @ LGTH.	NO. @ LGTH.	NO. @ LGTH.
18"	2.209'	0.623	42	0.213	13	0.053	2 1/2"	2 @ 21"	8 @ 32"	7 @ 34"	9 @ 24 1/2"
22" X 13"	1.833'	0.586	42	0.225	14	0.053	2 1/2"	2 @ 25"	8 @ 36"	7 @ 34"	9 @ 20"
24"	2.750'	0.800	55	0.235	14	0.091	3"	2 @ 25"	9 @ 39"	9 @ 34"	9 @ 31"
29" X 18"	2.250'	0.742	57	0.248	16	0.087	3"	2 @ 30"	9 @ 43 1/2"	9 @ 34"	11 @ 25"
30"	3.292'	0.992	70	0.256	16	0.138	3 1/2"	2 @ 30"	9 @ 46"	11 @ 34"	11 @ 37 1/2"
36"	3.834'	1.198	85	0.278	17	0.196	4"	2 @ 33"	10 @ 53"	13 @ 34"	11 @ 44"
42"	4.375'	1.418	93	0.299	18	0.263	4 1/2"	2 @ 36"	10 @ 60"	13 @ 34"	11 @ 50 1/2"
48"	4.917'	1.653	109	0.321	19	0.340	5"	2 @ 39"	11 @ 67"	15 @ 34"	11 @ 57"
54"	5.458'	1.902	136	0.343	21	0.427	5 1/2"	2 @ 42"	12 @ 74"	19 @ 34"	13 @ 63 1/2"
60"	6.000'	2.165	146	0.364	21	0.524	6"	2 @ 47"	12 @ 81"	19 @ 34"	13 @ 70"

*NOTE: ONE (1) PIPE OPENING HAS BEEN DEDUCTED FROM THE STRUCTURE.

GENERAL NOTES:

- QUANTITIES SHOWN WILL BE THE BASIS OF PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
- BOX CULVERTS:
 - UNLESS OTHERWISE SHOWN, THE DETAILS OF THE BOX CULVERT INLETS SHALL CONFORM TO THOSE SHOWN FOR THE PIPE INLETS.
 - BOX CULVERT REINFORCEMENT SHALL BE CONTINUED AND RESHAPED TO ACCOMMODATE THE INLET BOX. ADDITIONAL BARS SHALL BE THE SAME DIAMETER AS THOSE IN THE BOX CULVERT AND THE CONCRETE SHALL BE THE SAME. QUANTITIES SHALL BE COMPUTED IN CONJUNCTION WITH QUANTITIES FOR BOX CULVERT.



PIPE CULVERT INLET

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**DROP INLET AND GRATE
DETAILS FOR PIPE
AND BOX CULVERTS**



WORKING NUMBER
B-9

SHEET NUMBER
6527

ISSUE DATE: AUGUST 01, 2017

ADVERTISEMENT FOR BIDS

**FTA SIDEWALK PROJECT
HARDY STREET – KAMPER PARK
CITY OF HATTIESBURG, MISSISSIPPI**

Sealed bids will be received by the City of Hattiesburg, at the City Clerk's office, Mississippi, hereafter referred to as Owner, located at 200 Forrest Street, Hattiesburg, Mississippi, 39401, until 10:00 A.M., Local Time, Thursday, **July 21**, 2022 for supplying all labor, equipment, and materials (as specified) necessary for the construction of the above referenced project. Work consists of sidewalk, landscaping, and a pedestrian bridge along Hardy Street from Park Avenue to 17th Avenue. When bids are submitted electronically, the same requirements for submitting sealed bids shall apply. Electronic bids shall be submitted online at www.hattiesburgsbids.com and shall include a document representing the cover of the envelope containing the aforementioned criteria.

The above general outline of features of the work does not in any way limit the responsibility of the Contractor to perform all work and furnish all labor, equipment and materials required by the specifications and the drawings referred to therein.

Bidder must be qualified under Mississippi Law and show current Certificate of Responsibility issued by the Mississippi State Board of Public Contractors establishing his classification as to the value and type of construction on which he is authorized to bid.

Each Bidder shall write his Certificate of Responsibility Number on the outside of the sealed envelope containing his proposal.

Proposals shall be submitted in duplicate, sealed and deposited with the Owner prior to the hour and date hereinbefore designated. No bidder may withdraw his bid within 90 days after the actual date of the opening thereof.

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so-called Golden Rule is followed state law requires a non-resident bidder is to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

Each Bidder must deposit with his proposal, a Bid Bond or Certified Check in an amount equal to five percent of his bid, payable to the Owner, as bid security. Bidders shall also submit a current financial statement, if requested, by the Owner. The successful bidder will be required to furnish a Payment Bond and Performance Bond each in the amount of 100 percent of the contract amount.

Bid documents are being made available via paper copy or pdf. All interested bidders are required to log-in or register for an account at www.hattiesburgsbids.com OR www.neel-schafferplans.com to view and order Bid Documents. All plan holders are required to have a valid email address for registration. Bid documents are non-refundable and must be purchased through the website. Questions regarding website registration and online orders please contact Plan House Printing at (601) 336-6378.

"Mississippi Standard Specifications for Road and Bridge Construction, 2017 Edition" as referred to herein, may be purchased from the Mississippi Department of Transportation.

The Owner hereby notifies all Bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged and women's business enterprises will be afforded the full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Engineer is Neel-Schaffer, Inc., 704 Hardy Street, Hattiesburg, Mississippi 39401; Phone No. (601) 545-1565, Fax No. (601)-545-2267. Geoffrey Crosby, P.E. – Senior Project Manager.

The Owner reserves the right to reject any and all bids and to waive any informalities or irregularities therein.

BY: _____
City Clerk
City of Hattiesburg, Mississippi

DATES OF PUBLICATION:

June 15, 2022

June 22, 2022



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Lamar Rutland
cc:
Date: Tuesday, June 7, 2022
Re: Approve Plans and Specifications for the Lincoln Road Paving Project and authorize advertisement for bids.
File Number: 2022-385
Minute Book #

Summary

Approve Plans and Specifications for the Lincoln Road Paving Project and authorize advertisement for bids.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

ADVERTISEMENT FOR BIDS

**LINCOLN ROAD PAVING PROJECT
CITY OF HATTIESBURG, MISSISSIPPI**

Sealed bids will be received by the City of Hattiesburg, at the City Clerk's office, Mississippi, hereafter referred to as Owner, located at 200 Forrest Street, Hattiesburg, Mississippi, 39401, until 10:00 A.M., Local Time, Thursday, **July 21**, 2022 for supplying all labor, equipment, and materials (as specified) necessary for the construction of the above referenced project. Work consists of asphalt overlay and striping along Lincoln Road from Highway 49 to 40th Avenue (Base Bid) and along Lincoln Road from 40th Avenue to Oak Grove Road (Additive Alternate Bid). When bids are submitted electronically, the same requirements for submitting sealed bids shall apply. Electronic bids shall be submitted online at www.hattiesburgsbids.com and shall include a document representing the cover of the envelope containing the aforementioned criteria.

The above general outline of features of the work does not in any way limit the responsibility of the Contractor to perform all work and furnish all labor, equipment and materials required by the specifications and the drawings referred to therein.

Bidder must be qualified under Mississippi Law and show current Certificate of Responsibility issued by the Mississippi State Board of Public Contractors establishing his classification as to the value and type of construction on which he is authorized to bid.

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The Engineer is Neel-Schaffer, Inc., 704 Hardy Street, Hattiesburg, Mississippi 39401; Phone No. (601) 545-1565, Fax No. (601)-545-2267. Geoffrey Crosby, P.E. – Senior Project Manager.

The Owner reserves the right to reject any and all bids and to waive any informalities or irregularities therein.

BY: _____
City Clerk
City of Hattiesburg, Mississippi

DATES OF PUBLICATION:

June 15, 2022

June 22, 2022

LINCOLN ROAD PAVING PROJECT

HATTIESBURG, MISSISSIPPI FORREST COUNTY

MAYOR

TOBY BARKER

CHIEF ADMINISTRATIVE OFFICER

ANN JONES

ENGINEERING DIRECTOR

LAMAR RUTLAND, P.E.

COUNCIL MEMBERS

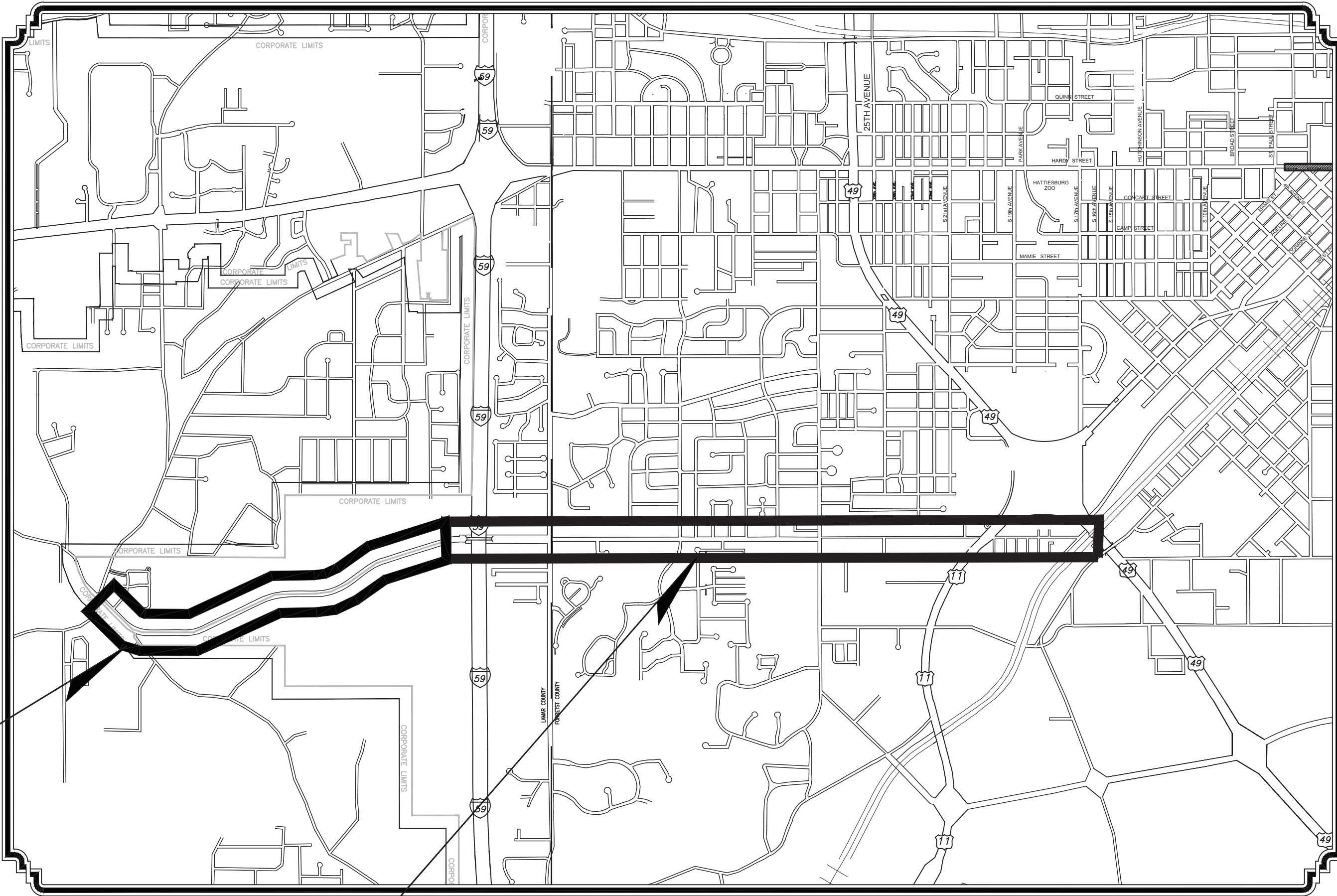
JEFFREY GEORGE	WARD 1
DEBORAH D. DELGADO	WARD 2
CARTER CARROLL	WARD 3
DAVE WARE	WARD 4
NICHOLAS BROWN	WARD 5

UTILITIES

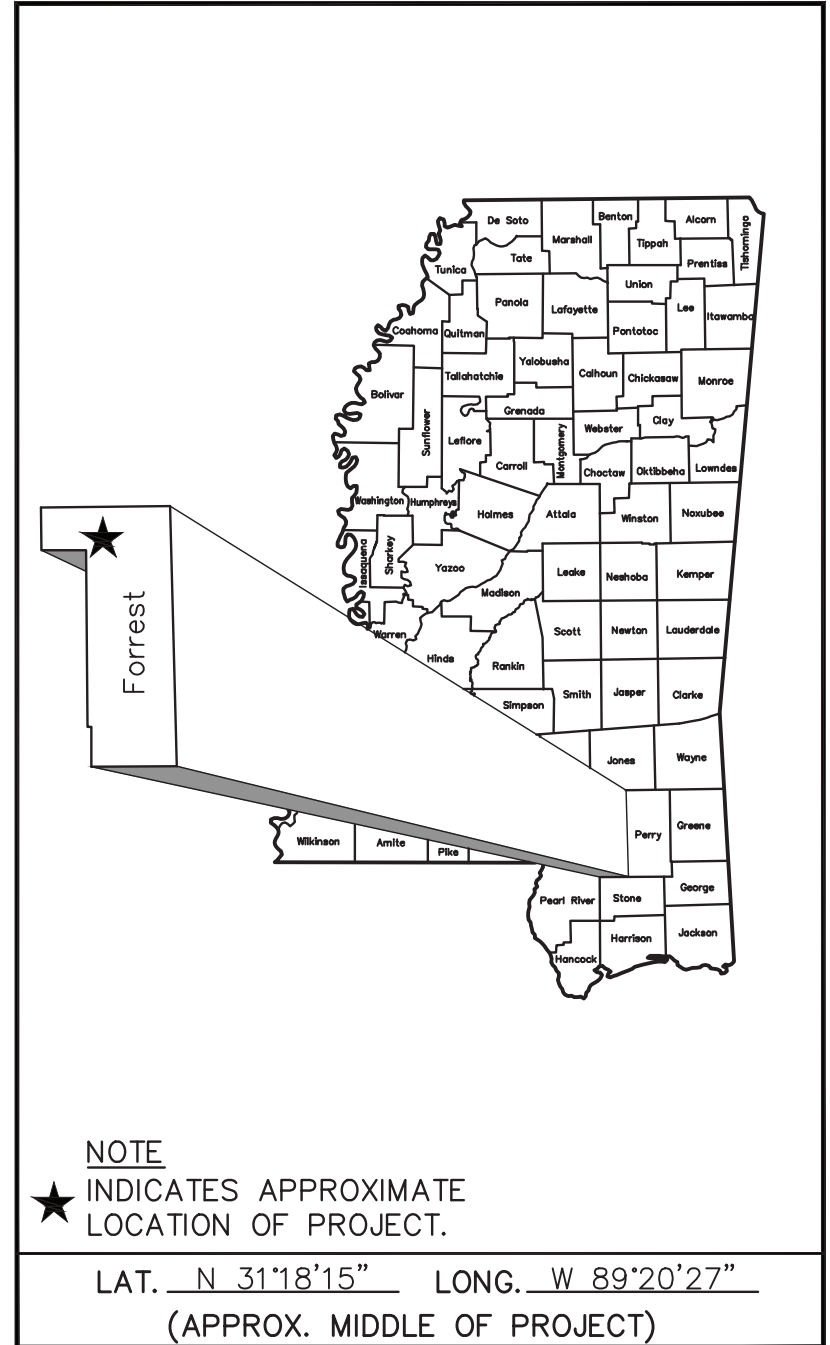
CITY OF HATTIESBURG
MISSISSIPPI POWER
AT&T
SPIRE GAS
COMCAST
CSPIRE

LINCOLN ROAD
ADD ALTERNATE BID

LINCOLN ROAD
BASE BID



VICINITY MAP
PROJECT LOCATION



PREPARED BY :
NEEL-SCHAFER
Solutions you can build upon



GEOFFREY P. CROSBY, P.E.
MISSISSIPPI LICENSE NO. 19984

DETAILED INDEX

GENERAL NOTES

DESCRIPTION OF SHEET	WKG. NO.	SHT. NO.
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DETAILED INDEX & GENERAL NOTES (1)		
DETAILED INDEX AND GENERAL NOTES	DI-1	2
TYPICAL SECTION (2)		
TYPICAL SECTION-BASE BID	TS-1	3
TYPICAL SECTION-ADDITIVE ALTERNATE NO. 1	TS-2	4
OVERALL (1)		
OVERALL LAYOUT	PLAN-1	5
PAVEMENT PLAN SHEETS (12)		
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STA. 28+50 TO 47+00 - ADDITIVE ALTERNATE NO. 1	WK-2	7
STA. 47+00 TO 65+00 - ADDITIVE ALTERNATE NO. 1	WK-3	8
STA. 65+00 TO 83+00 - ADDITIVE ALTERNATE NO. 1	WK-4	9
STA. 83+00 TO 101+00 - ADDITIVE ALTERNATE NO. 1	WK-5	10
STA. 101+00 TO 108+50 - ADDITIVE ALTERNATE NO. 1	WK-6	11
STA. 108+50 TO 126+50 - ADDITIVE ALTERNATE NO. 1	WK-7	12
STA. 126+50 TO 144+50 - BASE BID	WK-8	13
STA. 144+50 TO 162+50 - BASE BID	WK-9	14
STA. 162+50 TO 180+50 - BASE BID	WK-10	15
STA. 180+50 TO 198+50 - BASE BID	WK-11	16
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PAVEMENT MARKING - STA. 28+50 TO 47+00 - ADDITIVE ALTERNATE NO. 1	PM-2	19
PAVEMENT MARKING - STA. 47+00 TO 65+00 - ADDITIVE ALTERNATE NO. 1	PM-3	20
PAVEMENT MARKING - STA. 65+00 TO 83+00 - ADDITIVE ALTERNATE NO. 1	PM-4	21
PAVEMENT MARKING - STA. 83+00 TO 101+00 - ADDITIVE ALTERNATE NO. 1	PM-5	22
PAVEMENT MARKING - STA. 101+00 TO 108+50 - ADDITIVE ALTERNATE NO. 1	PM-6	23
PAVEMENT MARKING - STA. 108+50 TO 126+50 - ADDITIVE ALTERNATE NO. 1	PM-7	24
PAVEMENT MARKING - STA. 126+50 TO 144+50 - BASE BID	PM-8	25
PAVEMENT MARKING - STA. 144+50 TO 162+50 - BASE BID	PM-9	26
PAVEMENT MARKING - STA. 162+50 TO 180+50 - BASE BID	PM-10	27
PAVEMENT MARKING - STA. 180+50 TO 198+50 - BASE BID	PM-11	28
PAVEMENT MARKING - STA. 198+50 TO E.O.P. - BASE BID	PM-12	29
PAVEMENT MARKING DETAILS FOR 4-LANE AND 5-LANE UNDIVIDED HIGHWAYS	PM-13	30
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1. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CANNOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING GRADES AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.
3. UNLESS OTHERWISE DIRECTED BY OWNER, ALL EXISTING MATERIAL TO BE REMOVED FROM THE PROJECT SITE SHALL BE THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT HIS EXPENSE IN ACCORDANCE WITH STATE AND LOCAL LAWS AND REGULATIONS.
4. CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN WHICH MAINTAINS THROUGH AND LOCAL TRAFFIC AT ALL TIMES FOR EACH PHASE OF CONSTRUCTION. WORK SHALL NOT COMMENCE UNTIL THE TRAFFIC CONTROL PLAN IS REVIEWED AND APPROVED BY THE ENGINEER. ALL COST ASSOCIATED WITH TRAFFIC CONTROL SHALL BE ABSORBED IN THE MAINTENANCE OF TRAFFIC PAY ITEM.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, BRIDGES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
6. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES. ALL COSTS FOR ANY PROTECTIVE MEASURES INCLUDING THE MATERIALS AND LABOR FOR DESIGNING, DRAWING AND CONSTRUCTING THE PROTECTIVE MEASURES SHALL BE INCLUDED IN THE PRICE BID FOR CONTRACT ITEMS.
7. ALL SIGNS, SIGNALS, PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES ON THIS PROJECT SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).
8. PAVEMENT STRIPING SHALL BE INSTALLED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
9. FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
10. THE CONTRACTOR IS TO REMOVE AND RESET ANY SIGNS WHICH CONFLICT WITH CONSTRUCTION (NOT A SEPARATE PAY ITEM).
11. THE LOCATION AND SPACING OF SIGNS, SHOWN ON THE TRAFFIC CONTROL PLAN, ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.
12. THE CONTRACTOR IS TO NOTIFY THE CITY OF HATTIESBURG AND THE ENGINEER AT LEAST 48 HOURS PRIOR TO ANY LANE CLOSURE OR ANY IMPEDANCE OF TRAFFIC FLOW IN THE PROJECT AREA.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THROUGH AND LOCAL TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).
14. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING MANHOLES, VALVE BOXES, AND ALL OTHER AT GRADE UTILITY APPURTENANCES TO FINAL GRADES.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPAIR OR REPLACEMENT OF ANY UTILITIES THAT ARE DISTURBED BY HIS OPERATIONS.
16. THE CONTRACTOR SHALL PERFORM FIELD STAKING AT HIS OWN EXPENSE AS NECESSARY TO SUCCESSFULLY COMPLETE THE WORK.
17. MILLING DEPTH SHALL BE VARIABLE AND AS DIRECTED BY ENGINEER. WHERE EXISTING THICKNESS OF ASPHALT ALLOWS, MILLING SHALL BE PERFORMED SO THAT PROPOSED SURFACE COURSE IS FLUSH WITH EXISTING CURB AND GUTTER.
18. THE CONTRACTOR SHALL PROVIDE ACCESS (INGRESS AND EGRESS) TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO NOTIFY BUSINESSES AND HOMEOWNERS AT LEAST 48 HOURS IN ADVANCE OF ACCESS RESTRICTIONS.
19. PAPER JOINT REQUIRED AT ALL BRIDGE ENDS.

TOTAL NUMBER OF SHEETS (43)

5/17/2022 7:12 AM c:\1700\Hattiesburg\17078 - lincoln road paving project\design\plan\17078_index.dwg

NOTICE TO DRAWING HOLDER

NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

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				CHKD:	DATE:
				QA/QC:	DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY





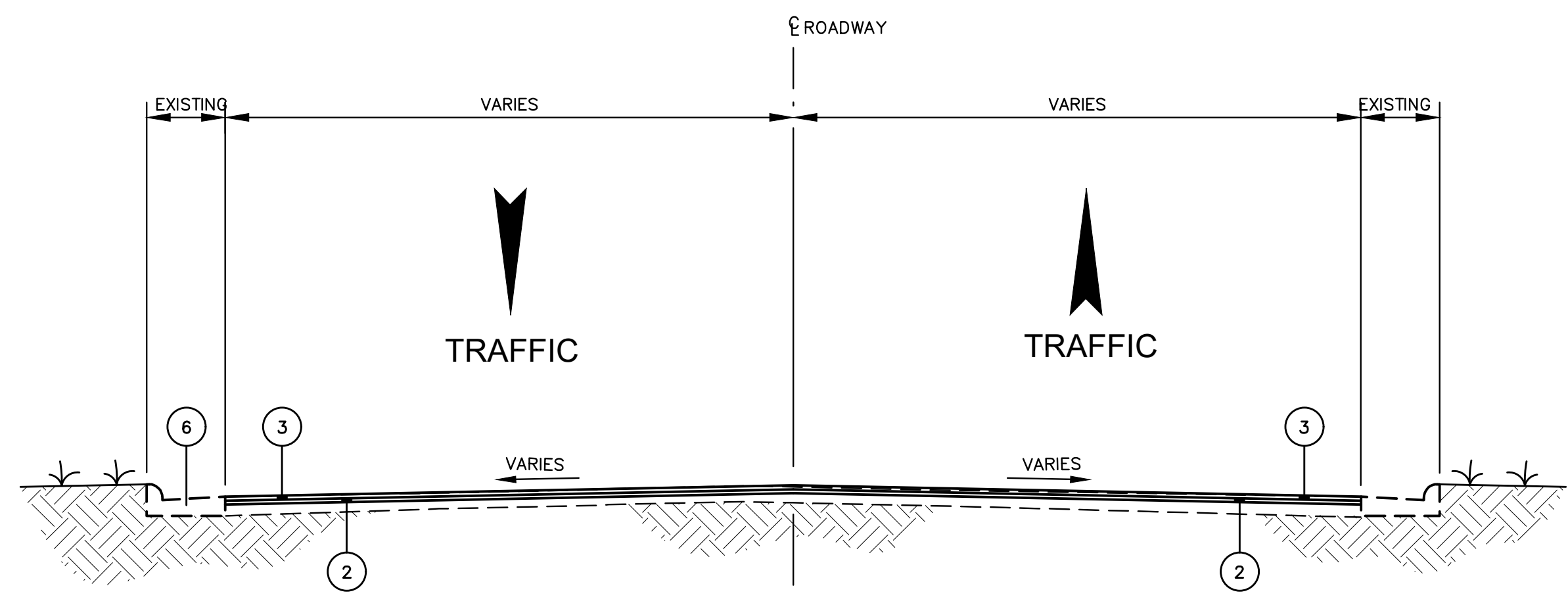
DETAILED INDEX AND
GENERAL NOTES

WORKING NUMBER: DI-1	DRAWING NUMBER: 2
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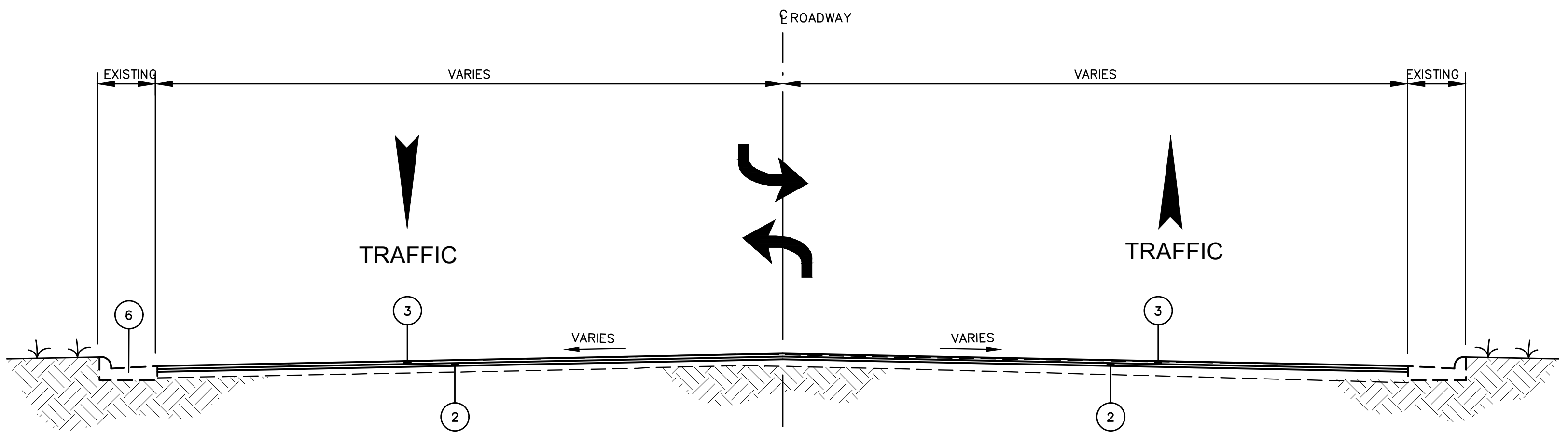
- ① VARIABLE DEPTH ASPHALT LEVELING COURSE 9.5mm
- ② 1 1/2" AND VARIABLE MILLING
- ③ 1 1/2" NOM. ASPHALT SURFACE COURSE, 9.5mm MIXTURE
- ④ 1/2" AND VARIABLE DEPTH ASPHALT LEVELING, 4.75mm MIXTURE
- ⑤ 3" ASPHALT PAVEMENT, 19.0mm MIXTURE, TRENCH WIDENING
- ⑥ EXISTING CURB AND GUTTER TO REMAIN

NOTES:

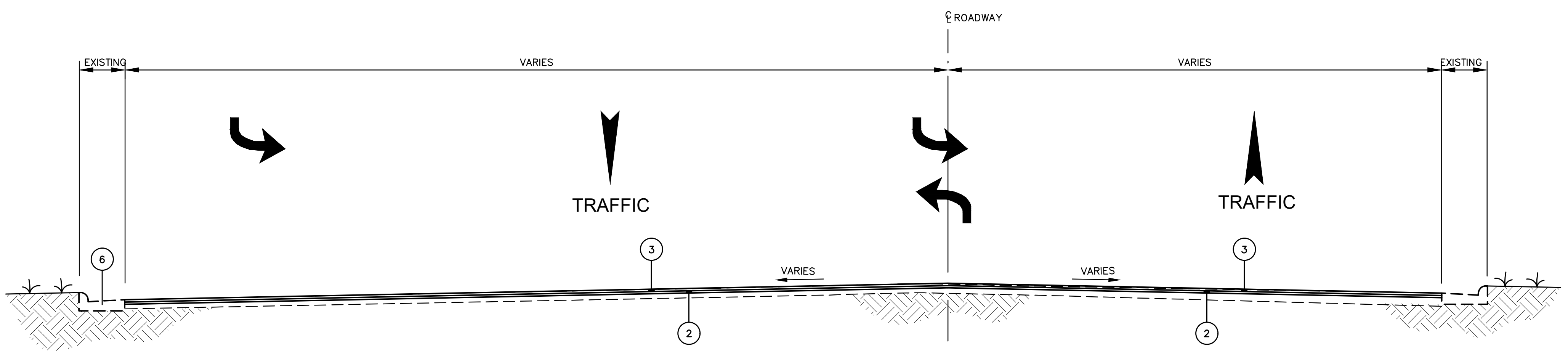
- MILLING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 406 OF THE MDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2017 EDITION.
- STREET PAVING SHALL BE PERFORMED WITHIN 72 HOURS OF MILLING A STREET.
- CROSS SLOPE SHOULD MATCH EXISTING EXCEPT WHEN CORRECTED BY LEVELING COURSE OR MILLING. CORRECTED SLOPES SHOULD BE 2% UNLESS OTHERWISE APPROVED BY ENGINEER.
- EXCAVATED MATERIAL FROM TRENCH WIDENING SHALL BE USED AS SHOULDER MATERIAL TO MATCH FINISH GRADE.



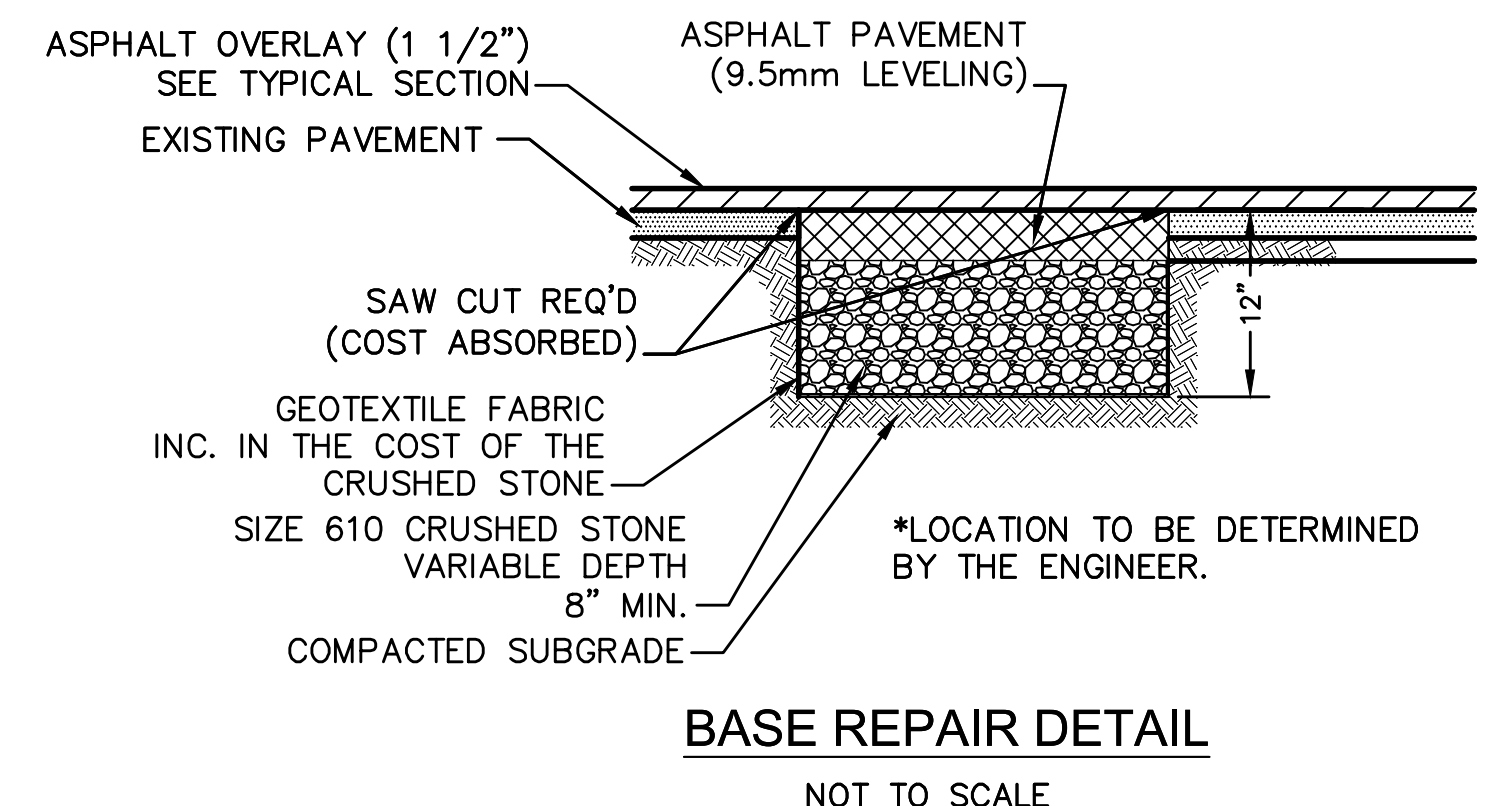
TYPICAL SECTION - LINCOLN ROAD
NOT TO SCALE
STA. 203+00 TO E.O.P.



TYPICAL SECTION - LINCOLN ROAD
NOT TO SCALE
STA. 122+50 TO STA. 203+00



TYPICAL SECTION - LINCOLN ROAD
NOT TO SCALE
STA. 108+50 TO STA. 122+50



BASE REPAIR DETAIL
NOT TO SCALE

NOTICE TO DRAWING HOLDER

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				QA/QC: DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



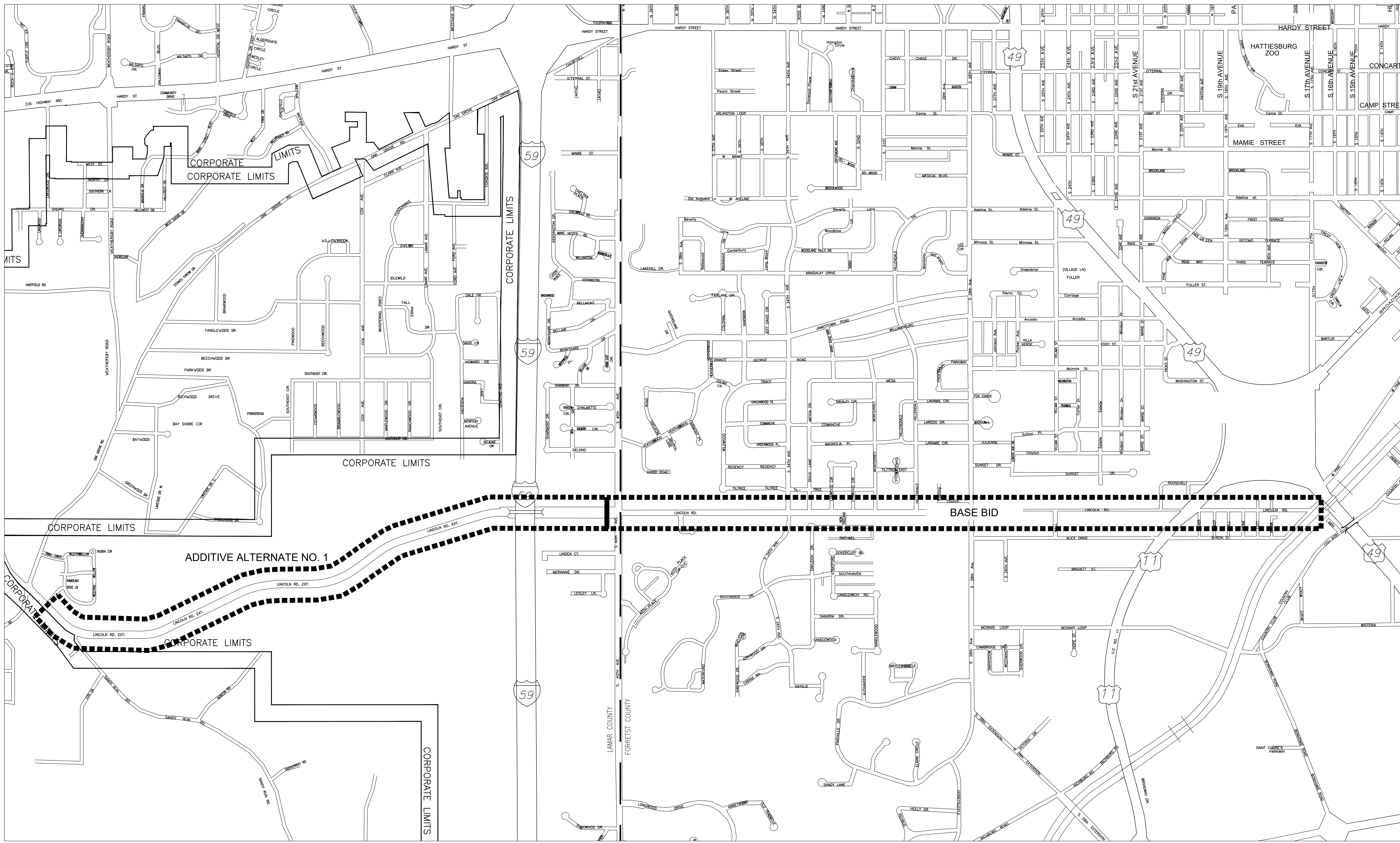
NEEL-SCHAFER
Solutions you can build upon

TYPICAL SECTIONS
BASE BID

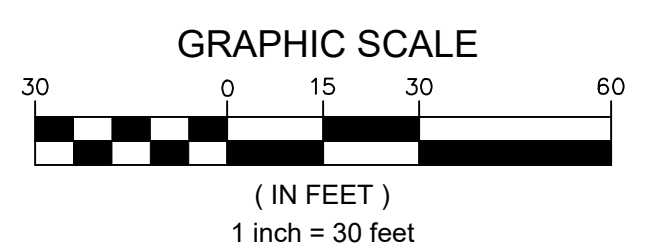
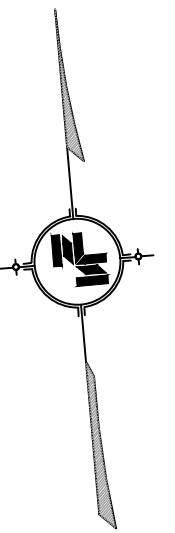
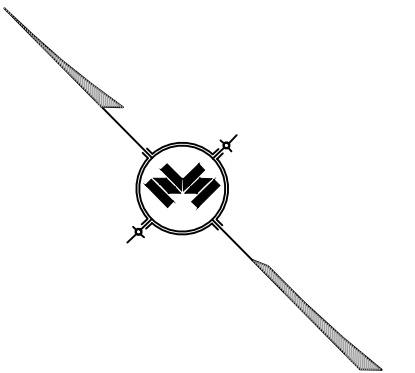
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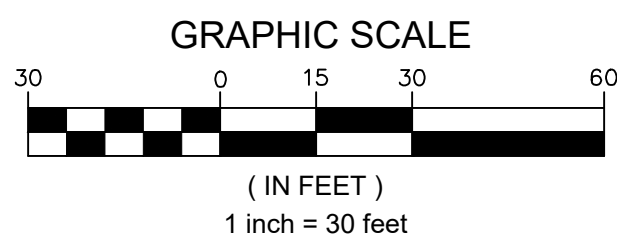
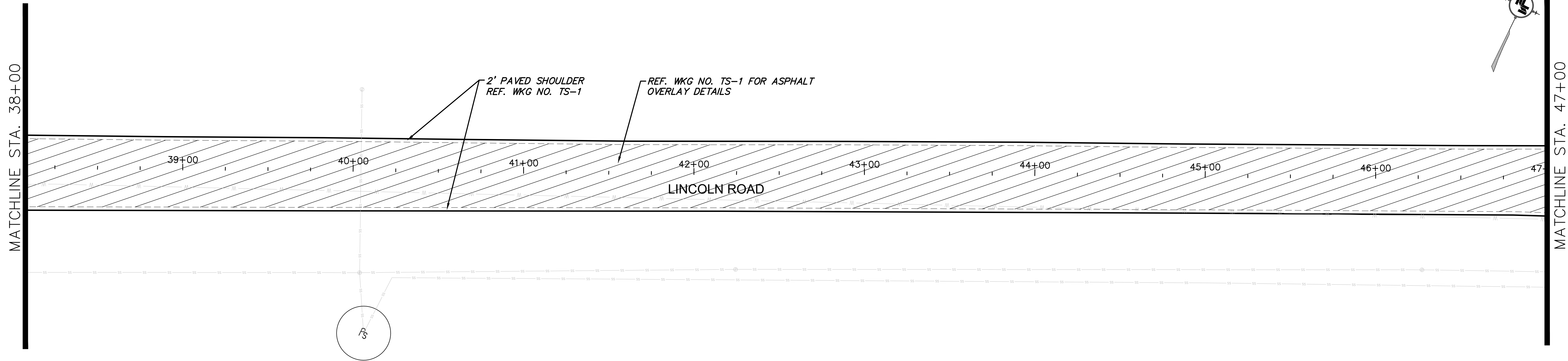
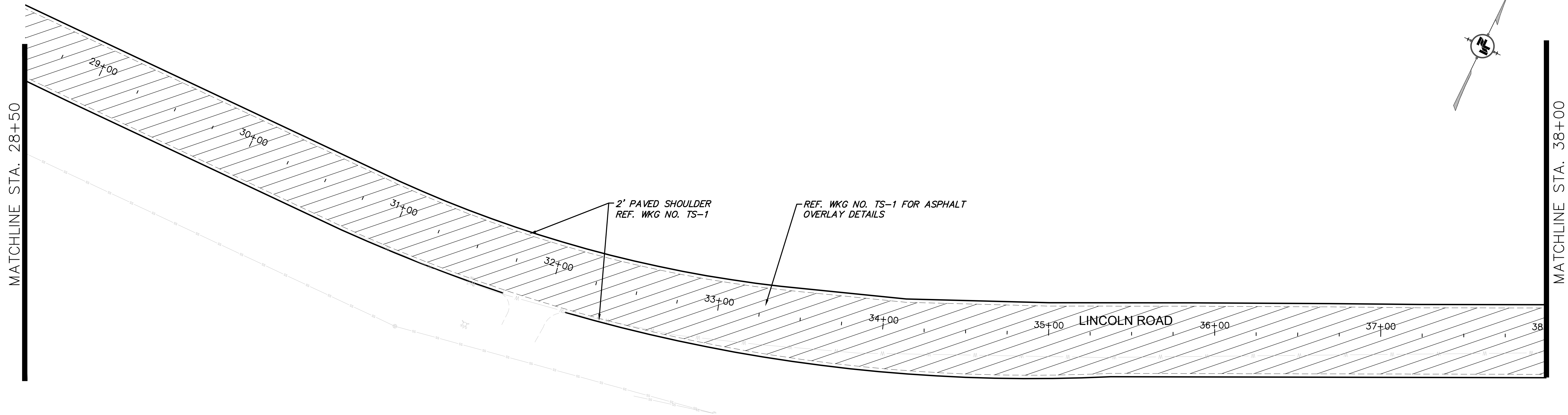


NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.		REVISIONS		DRAWING INFORMATION		LINCOLN ROAD PAVING PROJECT	CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY		OVERALL LAYOUT	
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DRAWING NUMBER:
6

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LINCOLN ROAD PAVING PROJECT

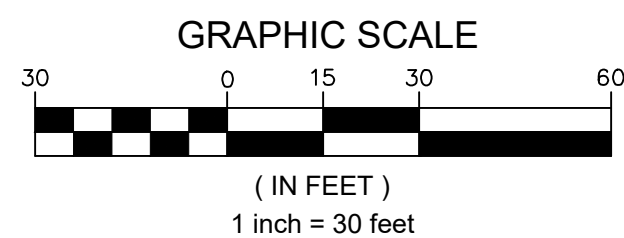
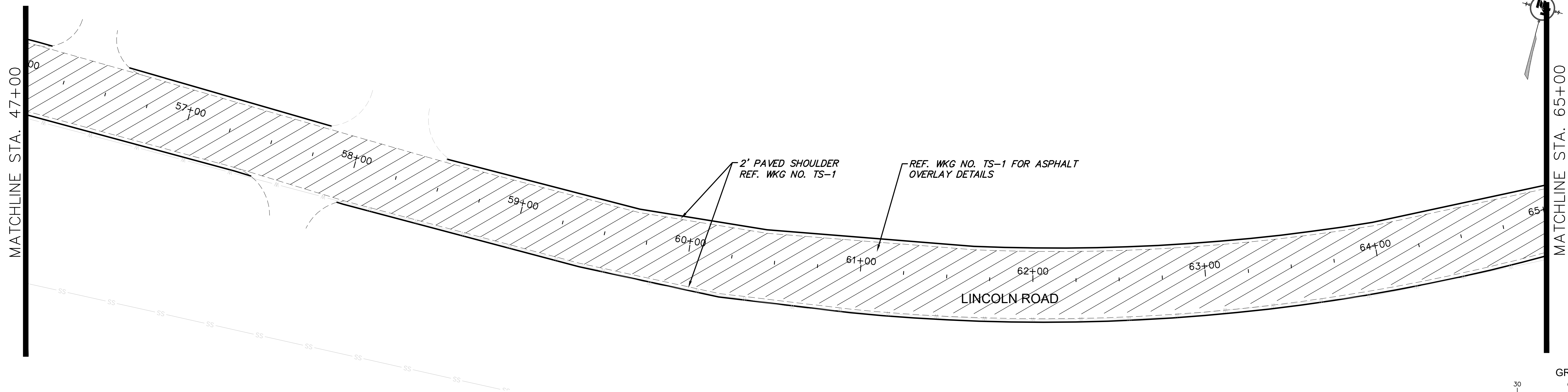
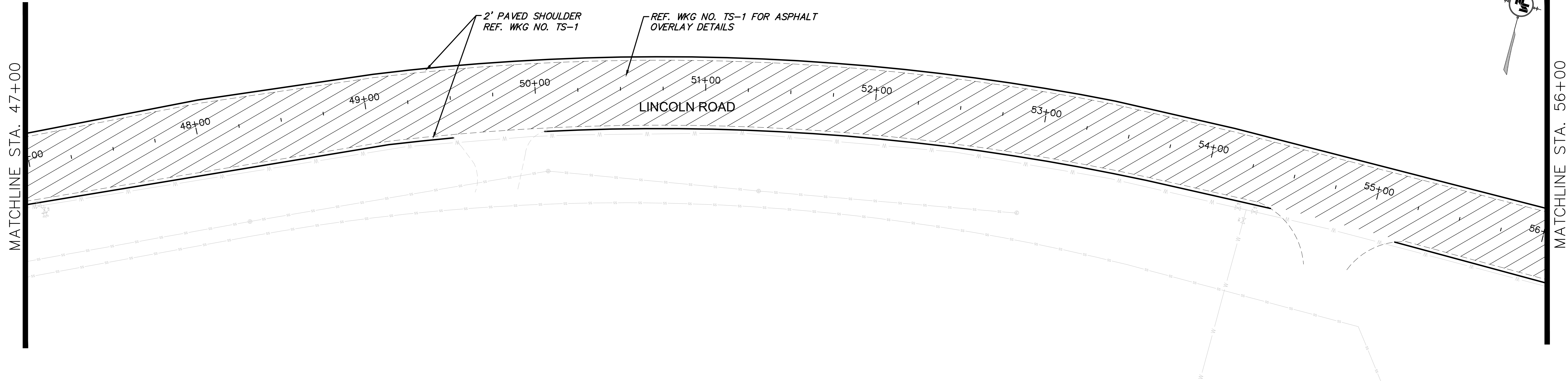
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



STA. 28+50 TO 47+00
(ADDITIVE ALTERNATE NO. 1)

WORKING NUMBER:
WK-2

DRAWING NUMBER:
7



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LINCOLN ROAD PAVING PROJECT

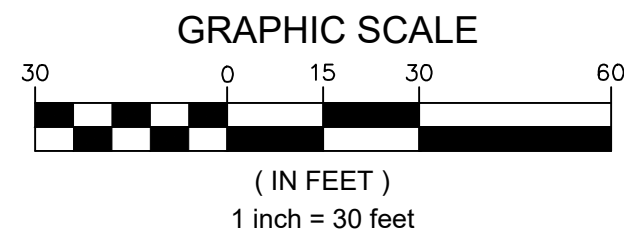
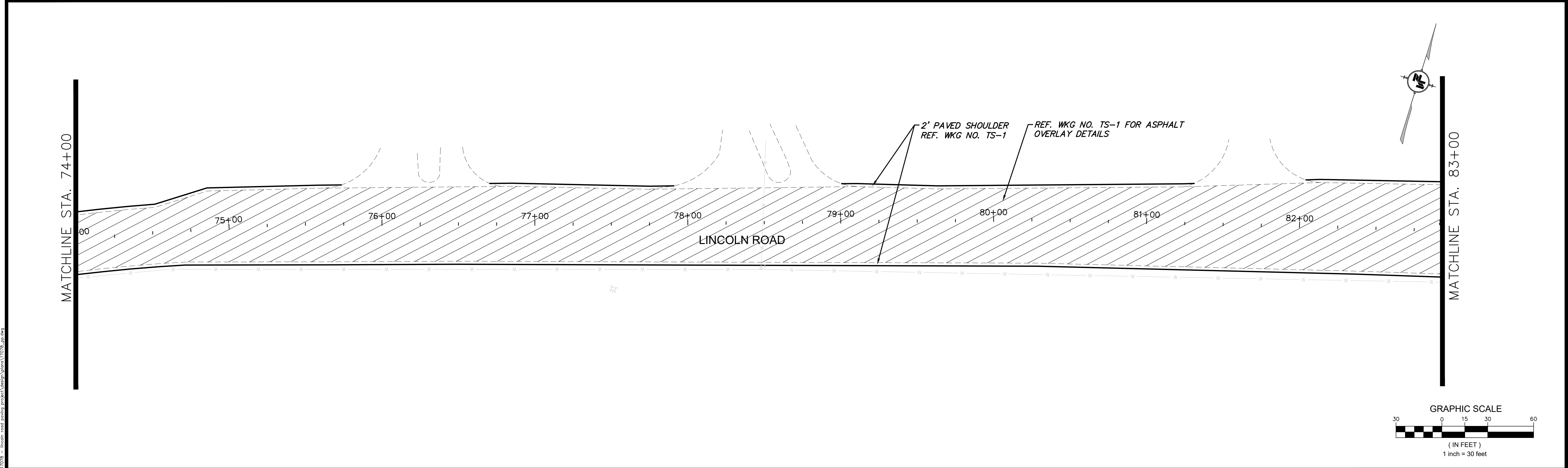
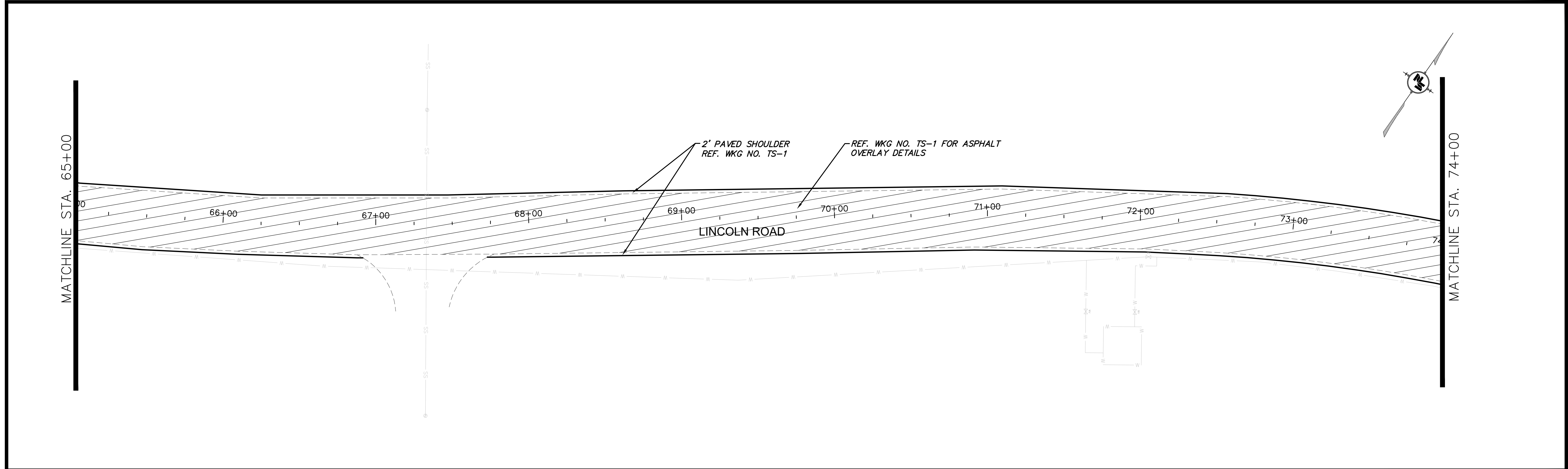
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



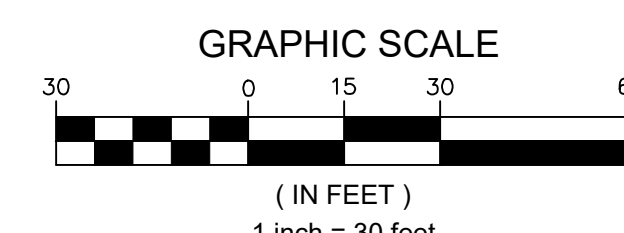
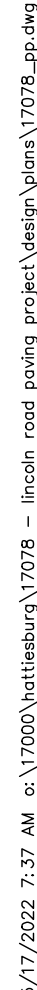
STA. 47+00 TO 65+00
(ADDITIVE ALTERNATE NO. 1)

WORKING NUMBER:
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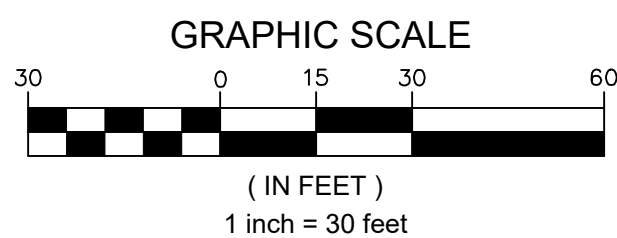
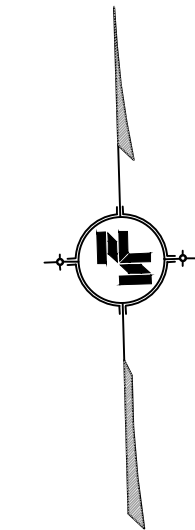
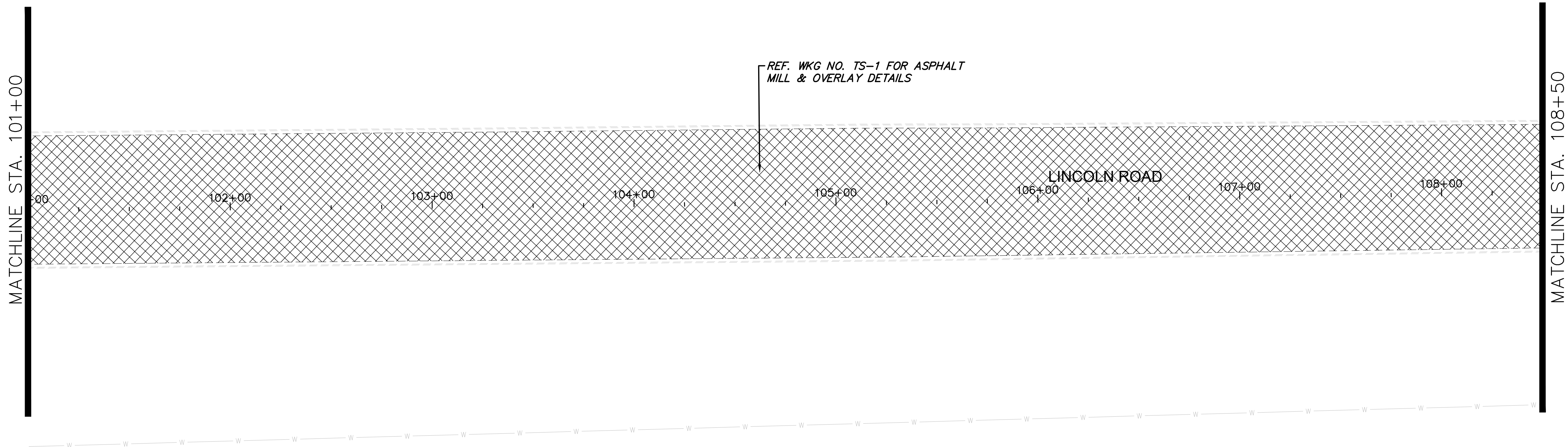
DRAWING NUMBER:
8



NOTICE TO DRAWING HOLDER NEEL—SCHAFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS				DRAWING INFORMATION		LINCOLN ROAD PAVING PROJECT CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY		NEEL—SCHAFER Solutions you can build upon	STA. 65+00 TO 83+00 (ADDITIVE ALTERNATE NO. 1)	
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DRAWING NUMBER:
10



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MATCHLINE STA. 108+50

MATCHLINE STA. 117+50

MATCHLINE STA. 117+50

MATCHLINE STA. 126+50

40TH AVENUE

SUMMIT RIDGE

LINCOLN ROAD

LINCOLN ROAD

REF. WKG NO. TSI-1 FOR SIGNAL
DETAILS

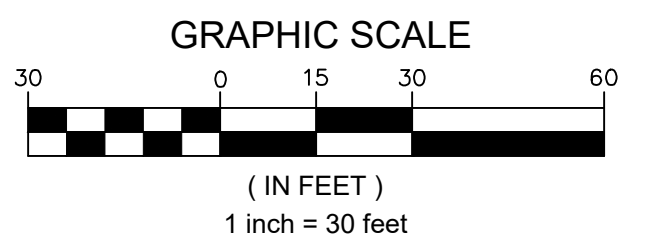
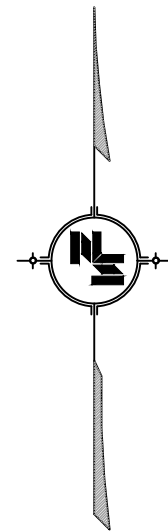
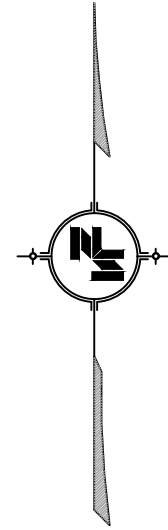
REF. WKG NO. TS-1 FOR ASPHALT
MILL & OVERLAY DETAILS

ADJUSTMENT OF WATER VALVE W/
CONCRETE PAD
REF. WKG NO. DET-1

REF. WKG NO. TS-1 FOR ASPHALT
MILL & OVERLAY DETAILS

ADJUSTMENT OF SEWER MANHOLE
W/ CONCRETE PAD
REF. WKG NO. DET-1

ADJUSTMENT OF SEWER MANHOLE
W/ CONCRETE PAD
REF. WKG NO. DET-1



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LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



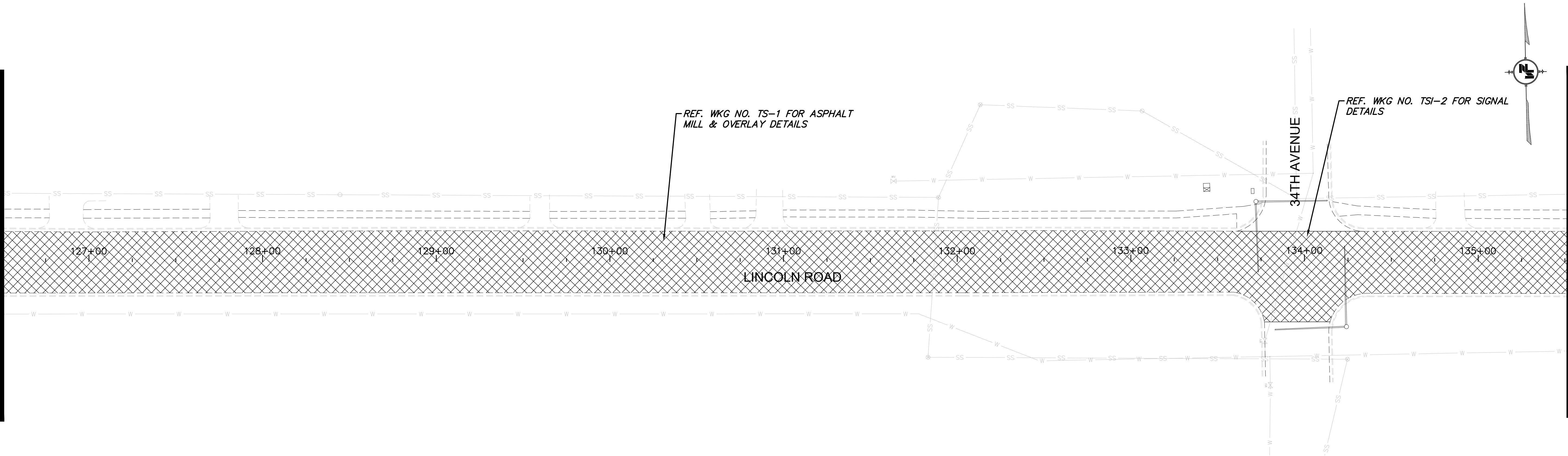
STA. 108+50 TO 126+50
(BASE BID)

WORKING NUMBER:
WK-7

DRAWING NUMBER:
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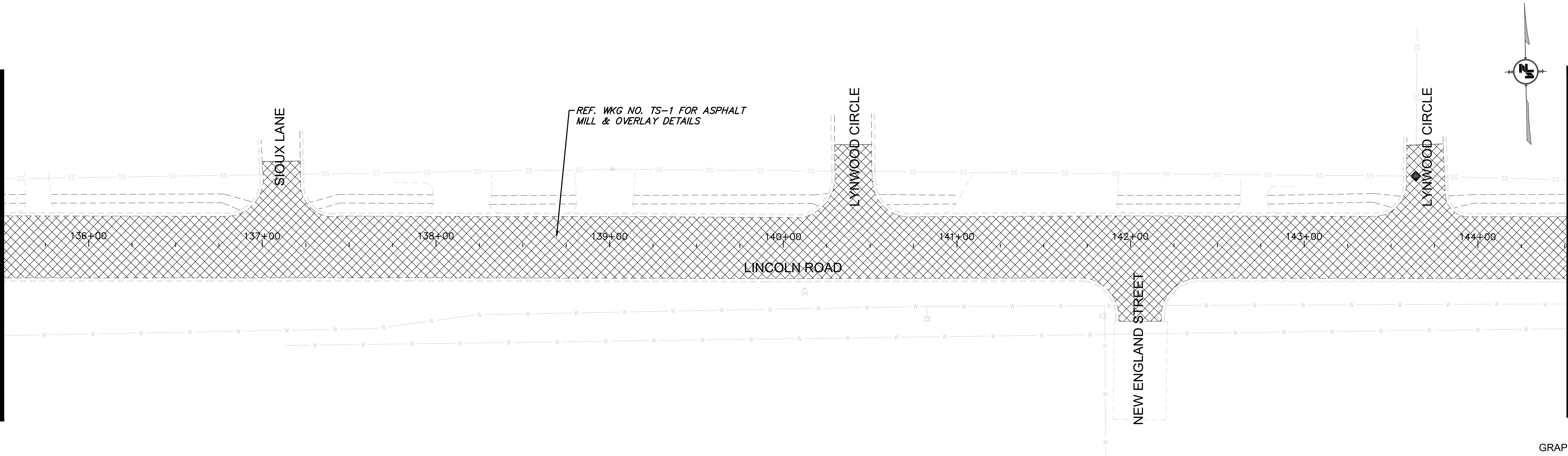
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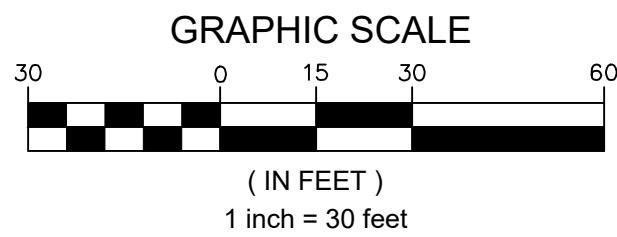


MATCHLINE STA. 135+50

MATCHLINE STA. 135+50



MATCHLINE STA. 144+50



NOTICE TO DRAWING HOLDER

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LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



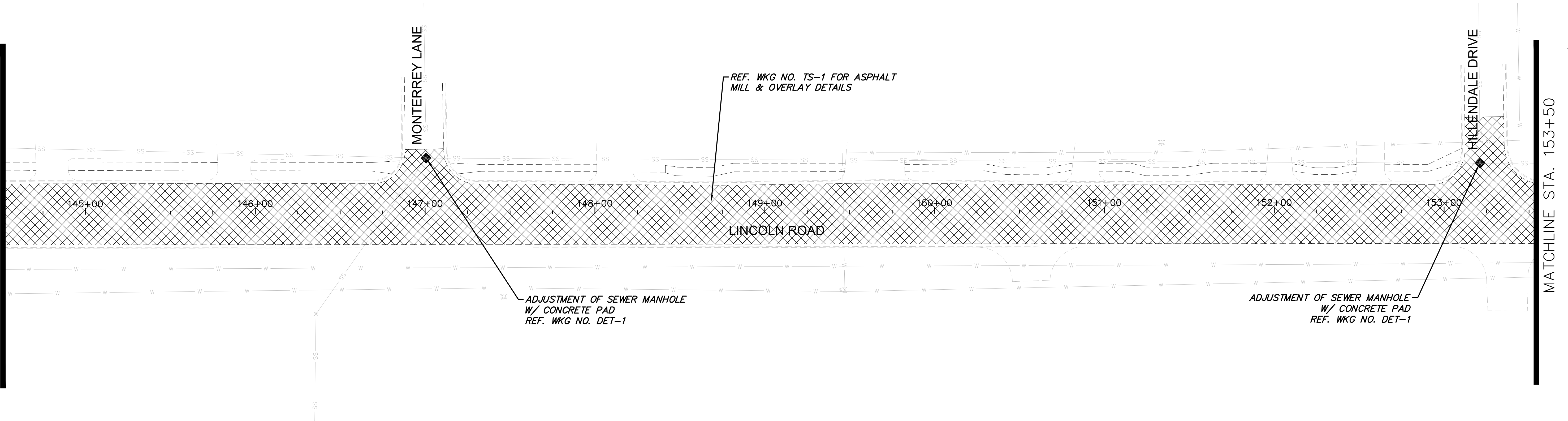
STA. 126+50 TO 144+50
(BASE BID)

WORKING NUMBER:
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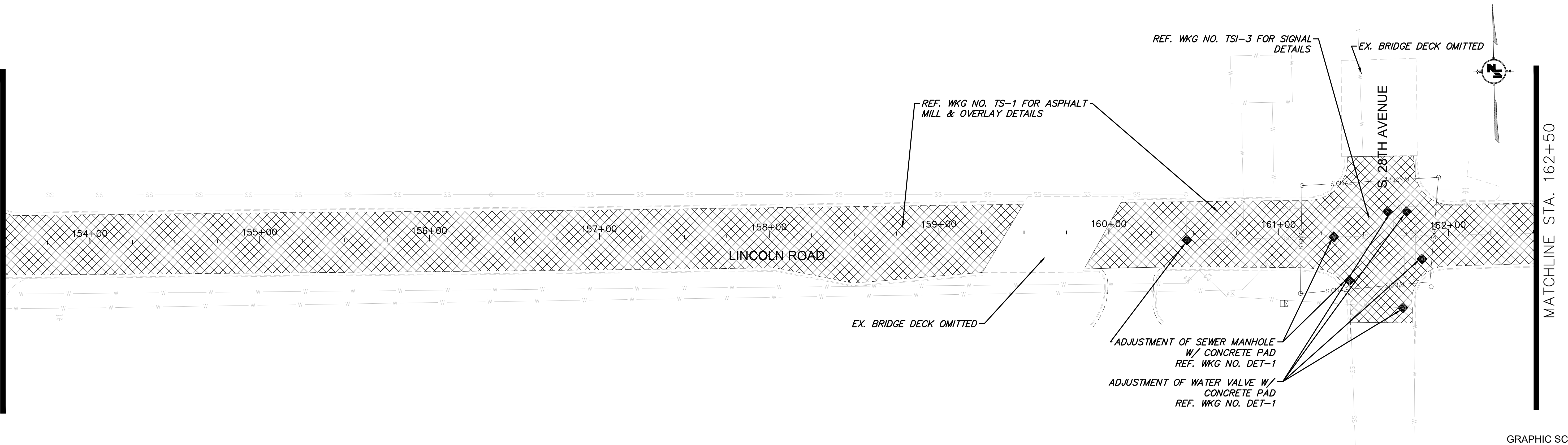
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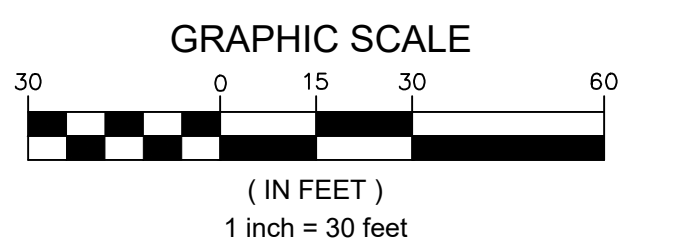


MATCHLINE STA. 153+50

MATCHLINE STA. 153+50



MATCHLINE STA. 162+50



NOTICE TO DRAWING HOLDER

NEEL-SCHAFER, INC., HERINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS			DRAWING INFORMATION	
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				SCALE: 1" = 30'
				SURVEYED BY:
				DSGN: GPC DATE: 04/2022
				DRWN: GPC DATE: 04/2022
				CHKD: DATE:
				QA/QC: DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



STA. 144+50 TO 162+50
(BASE BID)

WORKING NUMBER:
WK-9

DRAWING NUMBER:
14

5/2/2022 4:40 PM c:\17007\hattiesburg\17078 - lincoln road paving project\design\plan\17078_pp.dwg

MATCHLINE STA. 180+50

ADJUSTMENT OF WATER VALVE W/
CONCRETE PAD
REF. WKG NO. DET-1

REF. WKG NO. TS-1 FOR ASPHALT
MILL & OVERLAY DETAILS

ADJUSTMENT OF SEWER MANHOLE
W/ CONCRETE PAD
REF. WKG NO. DET-1

ADJUSTMENT OF SEWER MANHOLE
W/ CONCRETE PAD
REF. WKG NO. DET-1

LINCOLN ROAD

MATCHLINE STA. 189+50

MATCHLINE STA. 189+50

ROOSEVELT STREET

ADJUSTMENT OF WATER VALVE W/
CONCRETE PAD
REF. WKG NO. DET-1

REF. WKG NO. TS-1 FOR ASPHALT
MILL & OVERLAY DETAILS

ADJUSTMENT OF SEWER MANHOLE
W/ CONCRETE PAD
REF. WKG NO. DET-1

LINCOLN ROAD

HIGHWAY 11
(BROADWAY DRIVE)

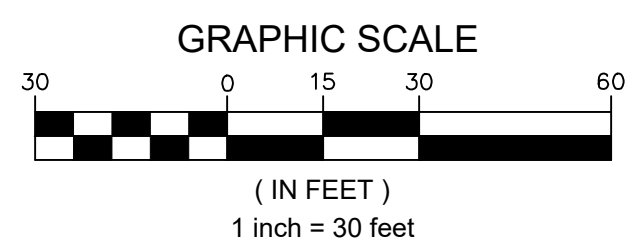
REF. WKG NO. TS-1 FOR ASPHALT
MILL & OVERLAY DETAILS

EX. PAVEMENT OMITTED

LINCOLN ROAD

TUCKER STREET

MATCHLINE STA. 198+50



NOTICE TO DRAWING HOLDER

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			DSGN: GPC	DATE: 04/2022
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			QA/QC:	DATE:

LINCOLN ROAD PAVING PROJECT

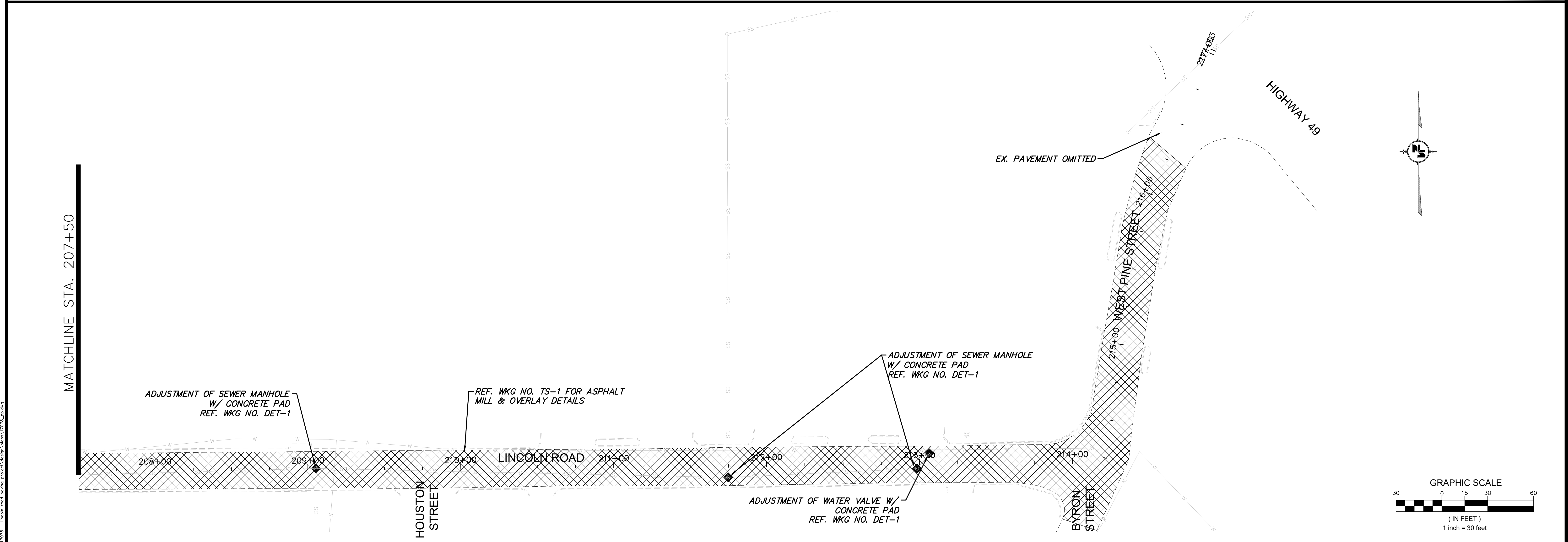
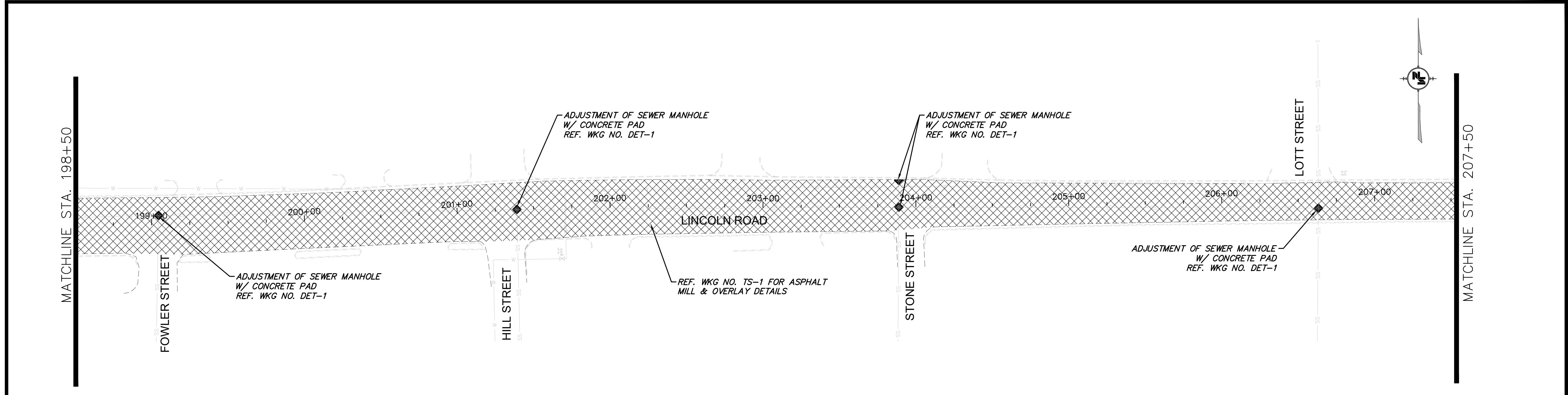
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



STA. 180+50 TO 198+50
(BASE BID)

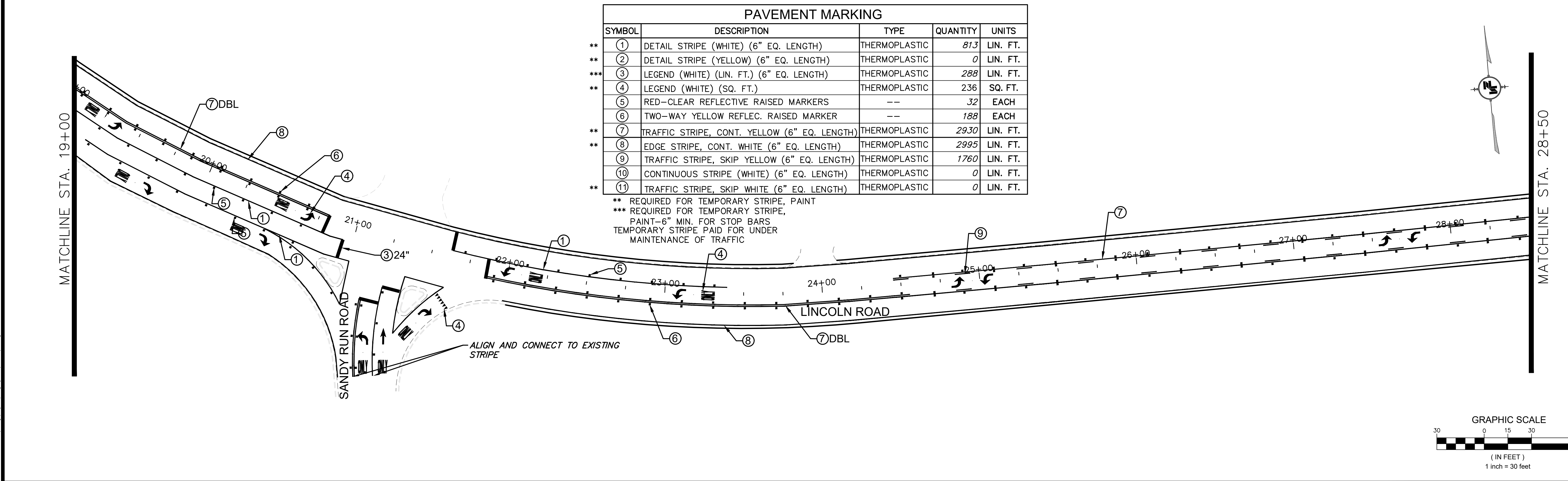
WORKING NUMBER:
WK-11

DRAWING NUMBER:
16



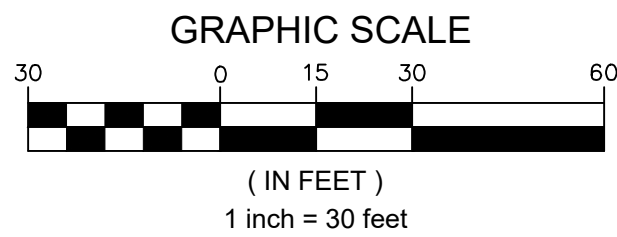
NOTICE TO DRAWING HOLDER NEEL-SCHAFER, INC., HERINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION		LINCOLN ROAD PAVING PROJECT		STA. 198+50 TO E.O.P. (BASE BID)	
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					CHKD:	DATE:			
					QA/QC:	DATE:			

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PAVEMENT MARKING				
SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** ①	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	813	LIN. FT.
** ②	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
*** ③	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	288	LIN. FT.
** ④	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	236	SQ. FT.
⑤	RED-CLEAR REFLECTIVE RAISED MARKERS	--	32	EACH
⑥	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	188	EACH
** ⑦	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	2930	LIN. FT.
** ⑧	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	2995	LIN. FT.
⑨	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	1760	LIN. FT.
⑩	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ⑪	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC

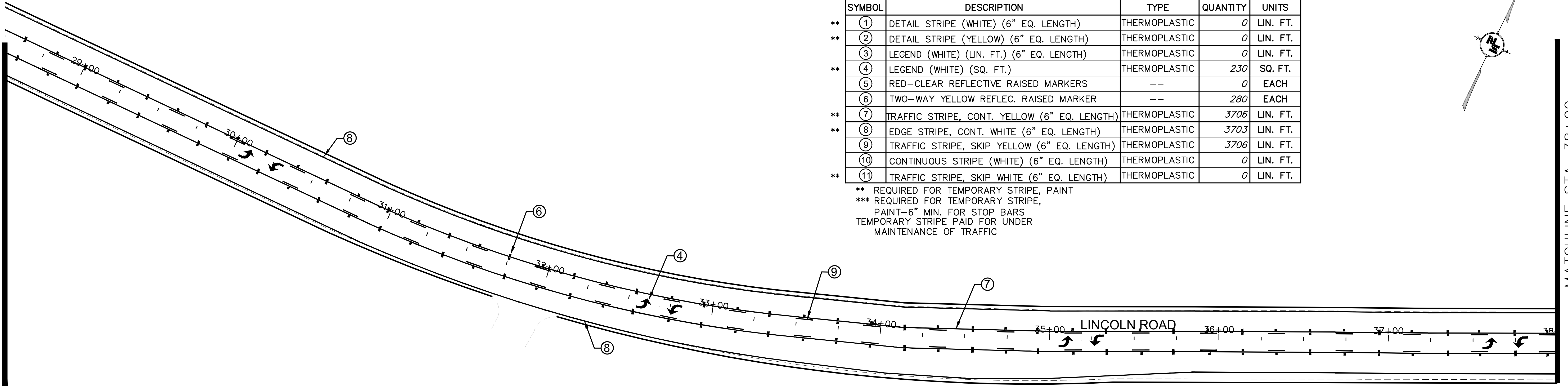


NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION		LINCOLN ROAD PAVING PROJECT		PAVEMENT MARKING STA. 10+00 TO 28+50 (ADDITIVE ALTERNATE NO. 1)	
	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17078.000			WORKING NUMBER:	DRAWING NUMBER:
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					SCALE: 1" = 30'				
					SURVEYED BY:				
					DSGN: GPC	DATE: 04/2022			
					DRWN: GPC	DATE: 04/2022			
					CHKD:	DATE:			
					QA/QC:	DATE:			

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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MATCHLINE STA. 28+50

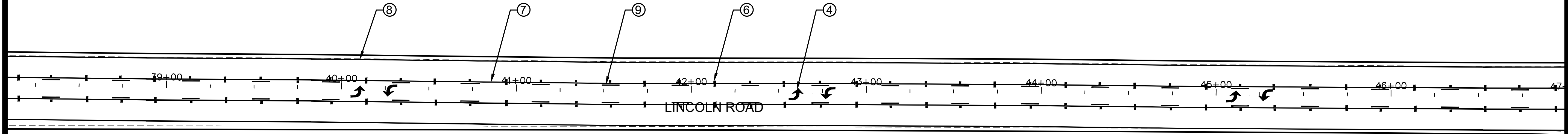


PAVEMENT MARKING				
SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** ①	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ②	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
③	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ④	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	230	SQ. FT.
⑤	RED-CLEAR REFLECTIVE RAISED MARKERS	--	0	EACH
⑥	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	280	EACH
** ⑦	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3706	LIN. FT.
** ⑧	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	3703	LIN. FT.
⑨	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3706	LIN. FT.
⑩	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ⑪	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

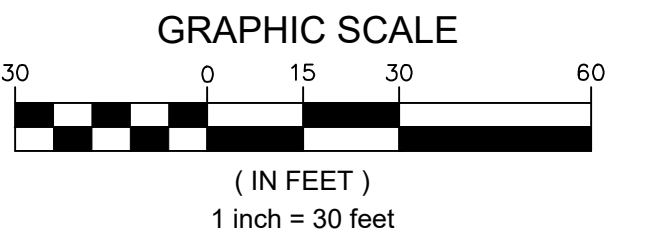
** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC

MATCHLINE STA. 38+00

MATCHLINE STA. 38+00



MATCHLINE STA. 47+00



NOTICE TO DRAWING HOLDER

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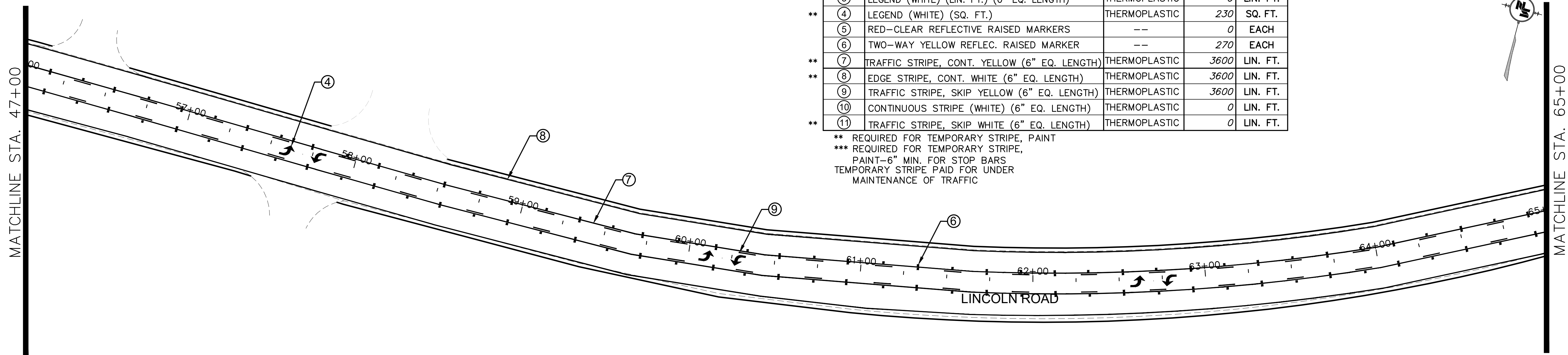
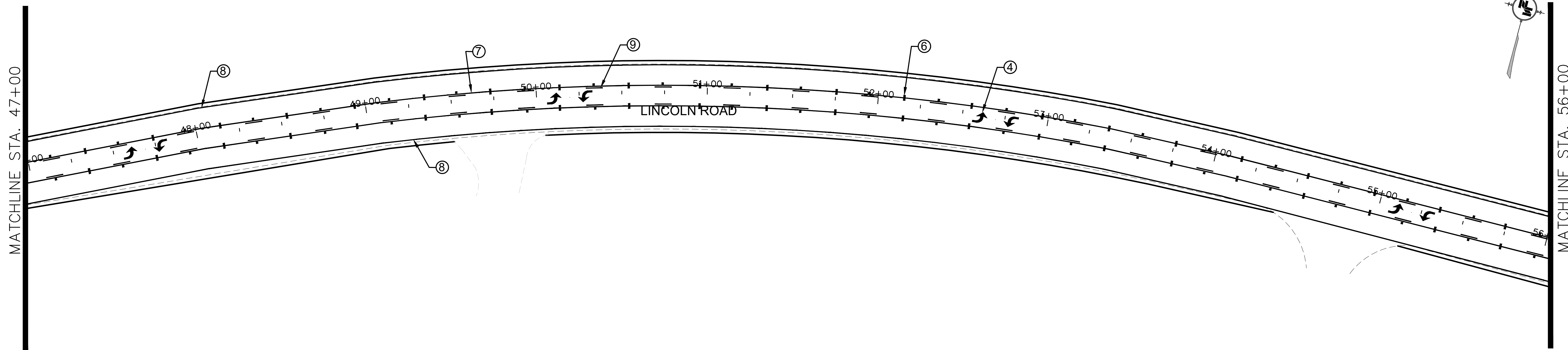
LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



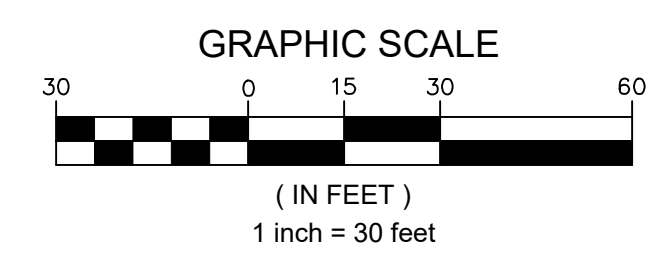
PAVEMENT MARKING
STA. 28+50 TO 47+00
(ADDITIVE ALTERNATE NO. 1)

WORKING NUMBER: PM-2	DRAWING NUMBER: 19
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PAVEMENT MARKING				
SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** ①	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ②	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ③	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ④	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	230	SQ. FT.
⑤	RED-CLEAR REFLECTIVE RAISED MARKERS	--	0	EACH
⑥	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	270	EACH
** ⑦	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3600	LIN. FT.
** ⑧	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	3600	LIN. FT.
** ⑨	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3600	LIN. FT.
** ⑩	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ⑪	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC



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				DSGN: GPC DATE: 04/2022
				DRWN: GPC DATE: 04/2022
				CHKD: DATE:
				QA/QC: DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

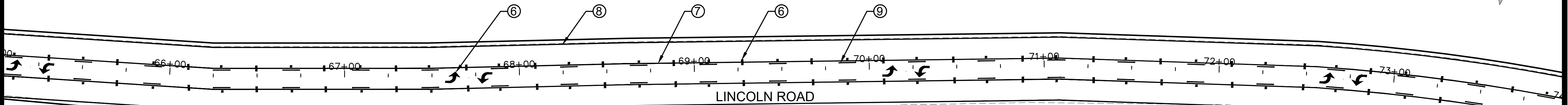
**NEEL-SCHAFER**
Solutions you can build upon

PAVEMENT MARKING
STA. 47+00 TO 65+00
(ADDITIVE ALTERNATE NO. 1)

WORKING NUMBER: PM-3	DRAWING NUMBER: 20
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MATCHLINE STA. 65+00



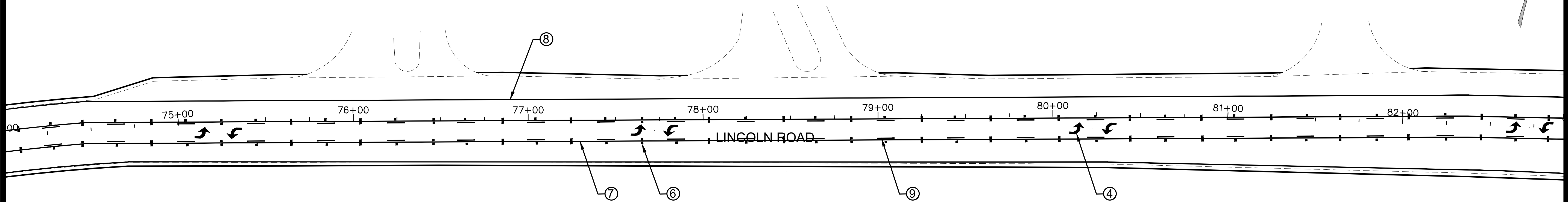
MATCHLINE STA. 74+00

PAVEMENT MARKING

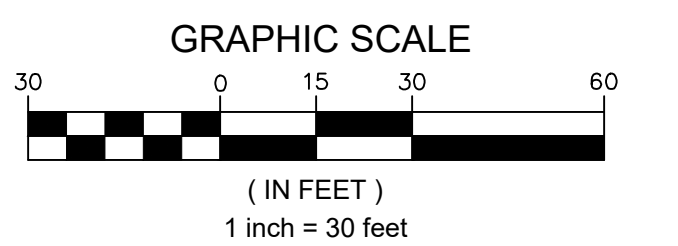
SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** ①	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ②	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
③	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ④	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	263	SQ. FT.
⑤	RED-CLEAR REFLECTIVE RAISED MARKERS	--	0	EACH
⑥	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	270	EACH
** ⑦	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3604	LIN. FT.
** ⑧	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	3604	LIN. FT.
⑨	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3604	LIN. FT.
⑩	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ⑪	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC

MATCHLINE STA. 74+00



MATCHLINE STA. 83+00



NOTICE TO DRAWING HOLDER

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LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

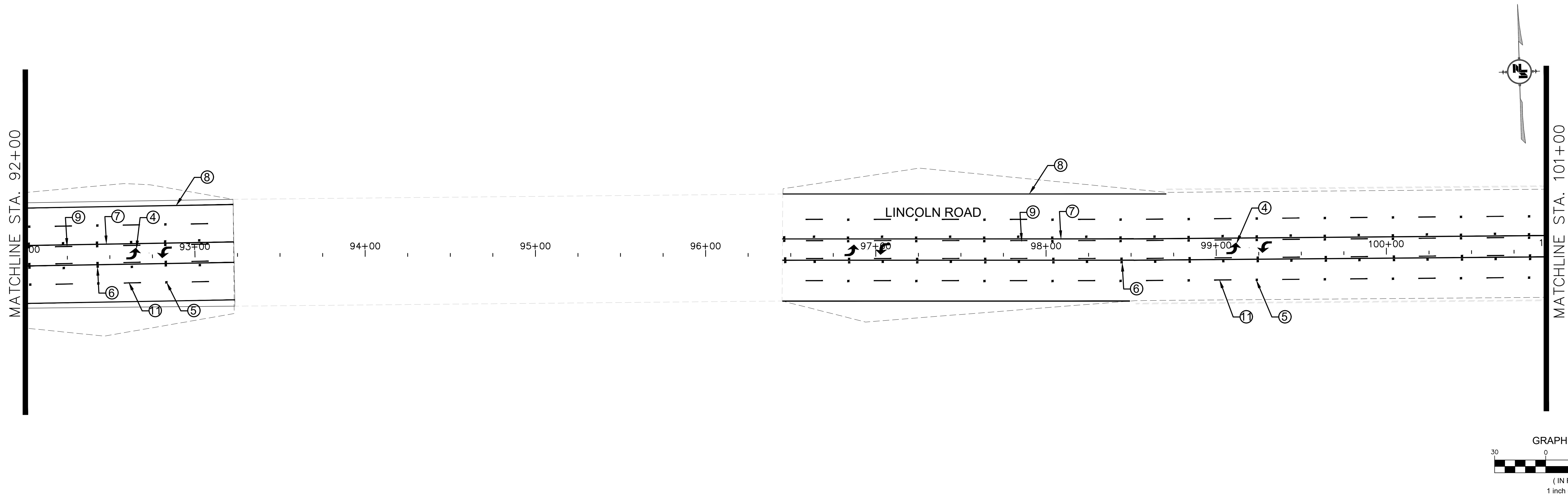
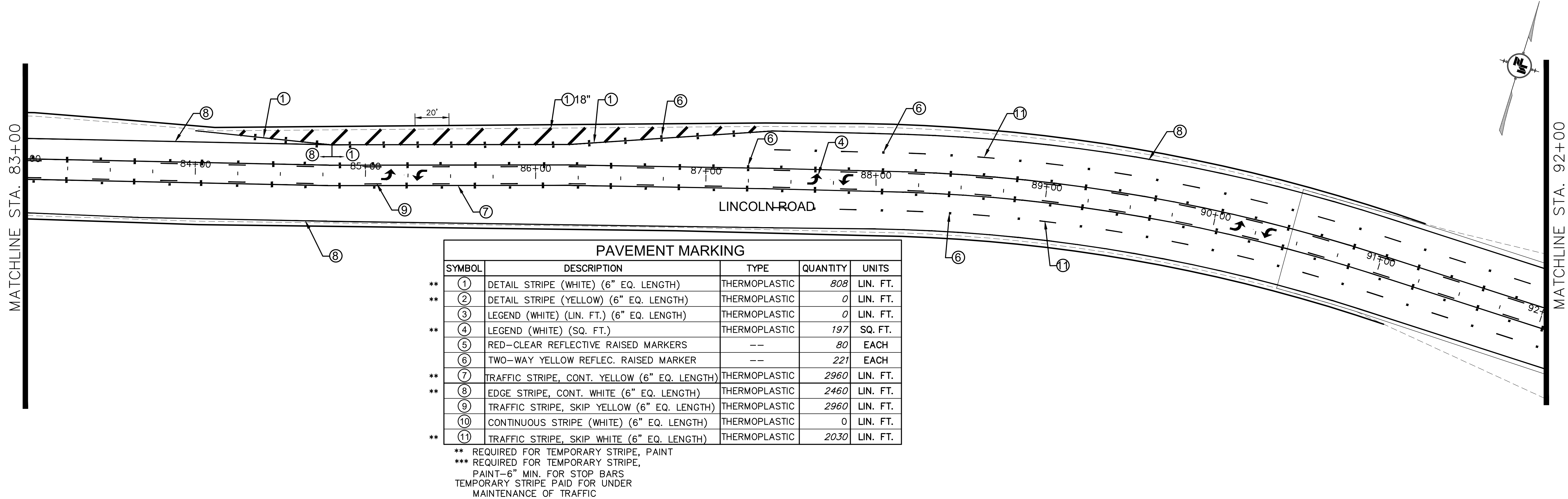


PAVEMENT MARKING
STA. 65+00 TO 83+00
(ADDITIVE ALTERNATE NO. 1)

WORKING NUMBER:
PM-4

DRAWING NUMBER:
21

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NOTICE TO DRAWING HOLDER

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			DSGN: GPC	DATE: 04/2022
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			QA/QC:	DATE:

LINCOLN ROAD PAVING PROJECT

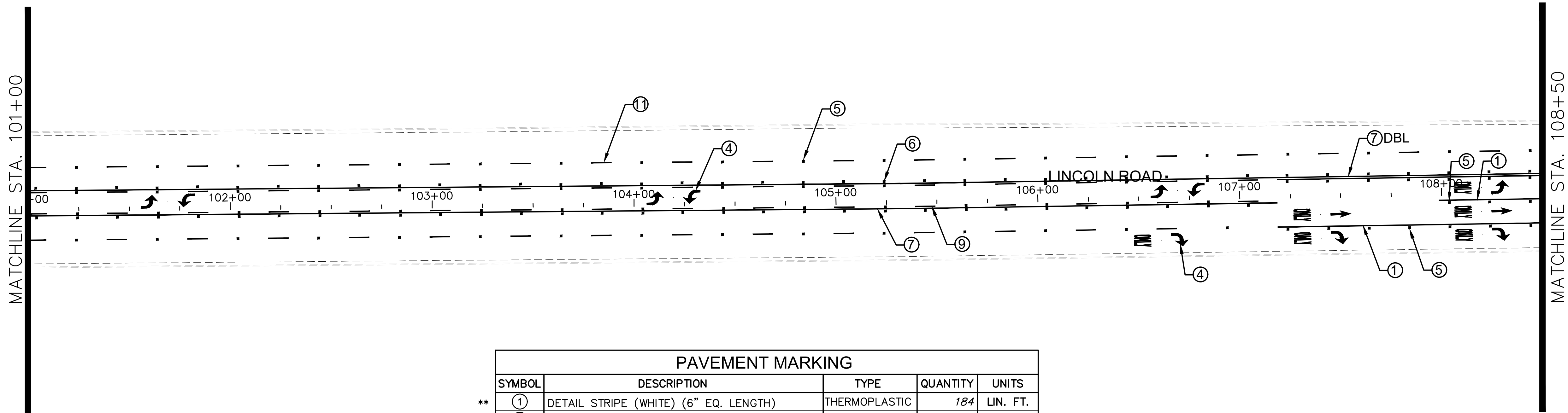
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



PAVEMENT MARKING
STA. 83+00 TO 101+00
(ADDITIVE ALTERNATE NO. 1)

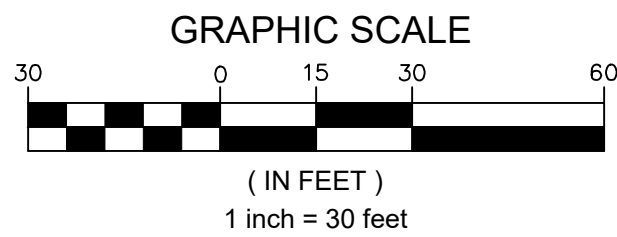
WORKING NUMBER:
PM-5

DRAWING NUMBER:
22



PAVEMENT MARKING					
	SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
**	①	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	184	LIN. FT.
**	②	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
	③	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
**	④	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	327	SQ. FT.
	⑤	RED-CLEAR REFLECTIVE RAISED MARKERS	--	44	EACH
	⑥	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	106	EACH
**	⑦	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	1500	LIN. FT.
**	⑧	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
	⑨	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	1238	LIN. FT.
	⑩	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
**	⑪	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	1300	LIN. FT.

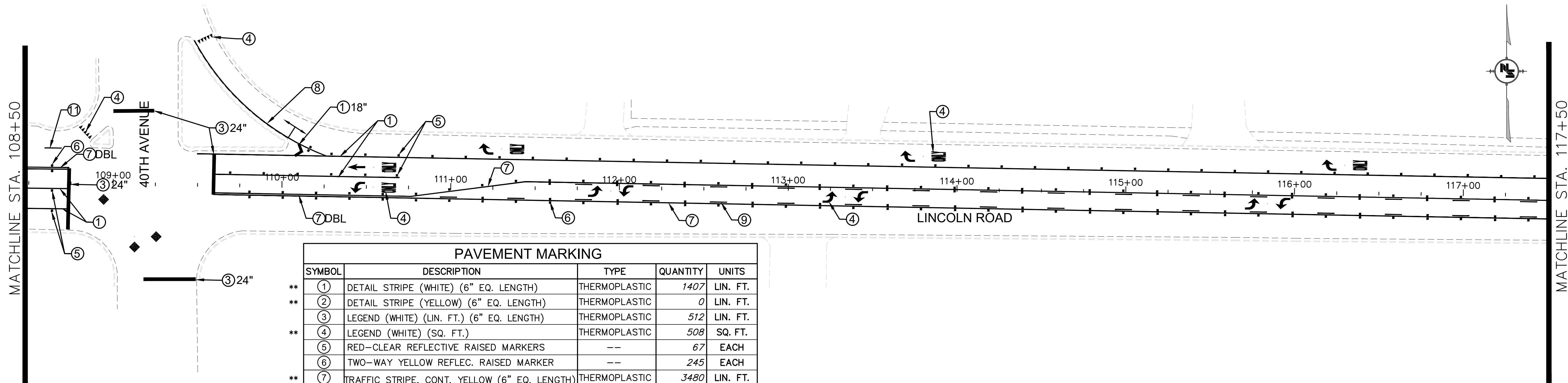
** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC



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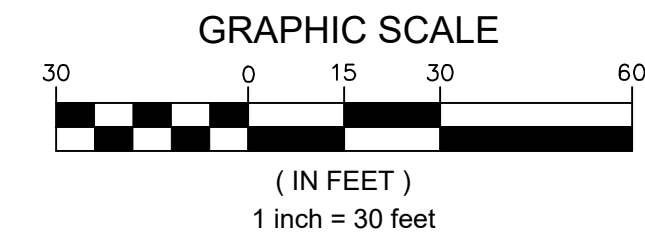
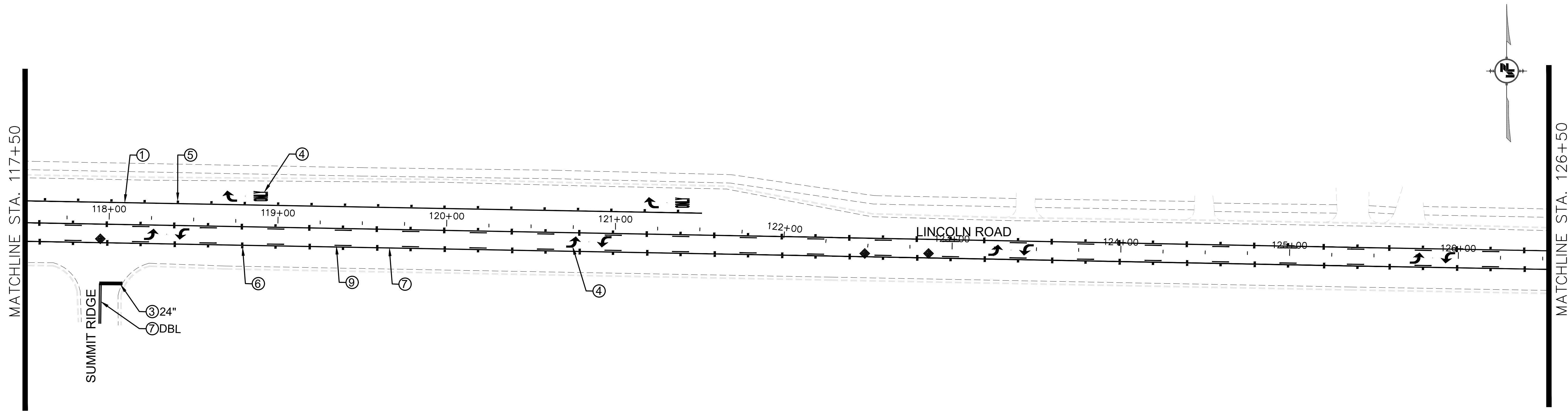
NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION		LINCOLN ROAD PAVING PROJECT CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY			PAVEMENT MARKING STA. 101+00 TO 108+50 (ADDITIVE ALTERNATE NO. 1)		
	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17078.000				WORKING NUMBER: PM-6	DRAWING NUMBER: 23	
					FILENAME: 17078_PM.dwg						
					SCALE: 1" = 30'						
					SURVEYED BY:						
				DSGN: GPC	DATE: 04/2022						
				DRWN: GPC	DATE: 04/2022						
				CHKD:	DATE:						
				QA/QC:	DATE:						

5/17/2022 7:58 AM C:\17000\Hattiesburg\17078 - Lincoln road paving project\design\plan\17078_pm.dwg



PAVEMENT MARKING				
SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** (1)	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	1407	LIN. FT.
** (2)	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** (3)	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	512	LIN. FT.
** (4)	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	508	SQ. FT.
(5)	RED-CLEAR REFLECTIVE RAISED MARKERS	--	67	EACH
(6)	TWO-WAY YELLOW REFLEC. RAISED MARKER	---	245	EACH
** (7)	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3480	LIN. FT.
** (8)	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	100	LIN. FT.
(9)	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3060	LIN. FT.
(10)	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** (11)	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

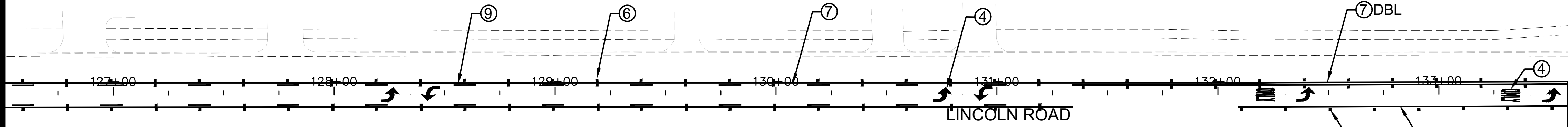
** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC



NOTICE TO DRAWING HOLDER NEEL-SCHAFER, INC., HERINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION		LINCOLN ROAD PAVING PROJECT		PAVEMENT MARKING STA. 108+50 TO 126+50 (BASE BID)	
	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17078.000 FILENAME: 17078_PM.dwg SCALE: 1" = 30' SURVEYED BY:				
					DSGN: GPC DATE: 04/2022 DRWN: GPC DATE: 04/2022 CHKD: DATE: QA/QC: DATE:				
						CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY		WORKING NUMBER: PM-7	DRAWING NUMBER: 24

5/17/2022 7:57 AM c:\17000\hattiesburg\17078 - lincoln road paving project\design\plan\17078_pm.dwg

MATCHLINE STA. 126+50



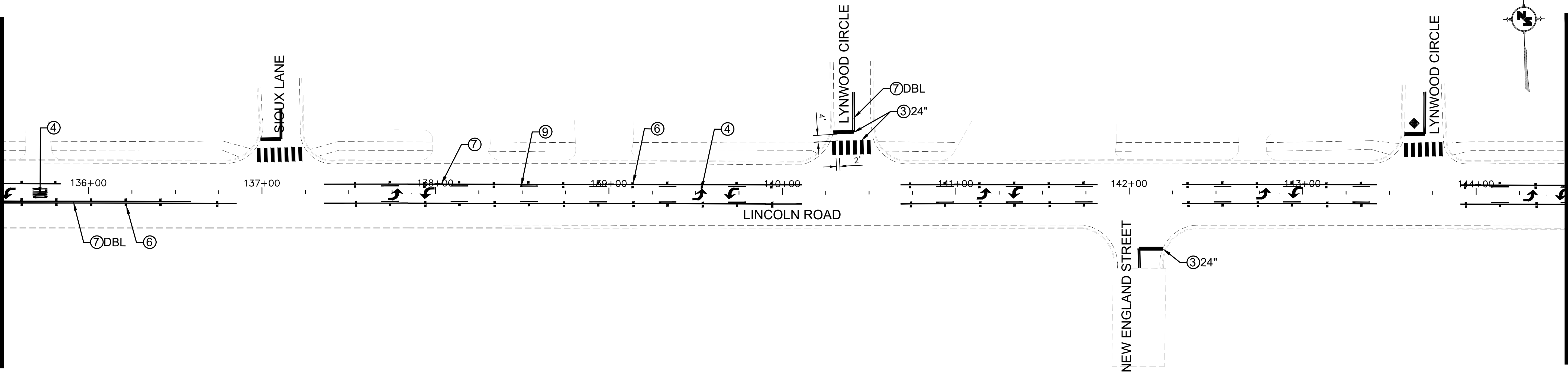
PAVEMENT MARKING				
SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** ①	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	300	LIN. FT.
** ②	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
③	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	948	LIN. FT.
** ④	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	329	SQ. FT.
⑤	RED-CLEAR REFLECTIVE RAISED MARKERS	--	16	EACH
⑥	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	204	EACH
** ⑦	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3200	LIN. FT.
** ⑧	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
⑨	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	1860	LIN. FT.
⑩	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ⑪	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC

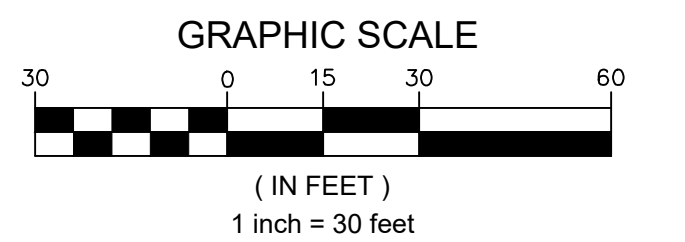
34TH AVENUE

MATCHLINE STA. 135+50

MATCHLINE STA. 135+50



MATCHLINE STA. 144+50



NOTICE TO DRAWING HOLDER

NEEL-SCHAFER, INC., HERINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

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				DSGN: GPC DATE: 04/2022
				DRWN: GPC DATE: 04/2022
				CHKD: DATE:
				QA/QC: DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



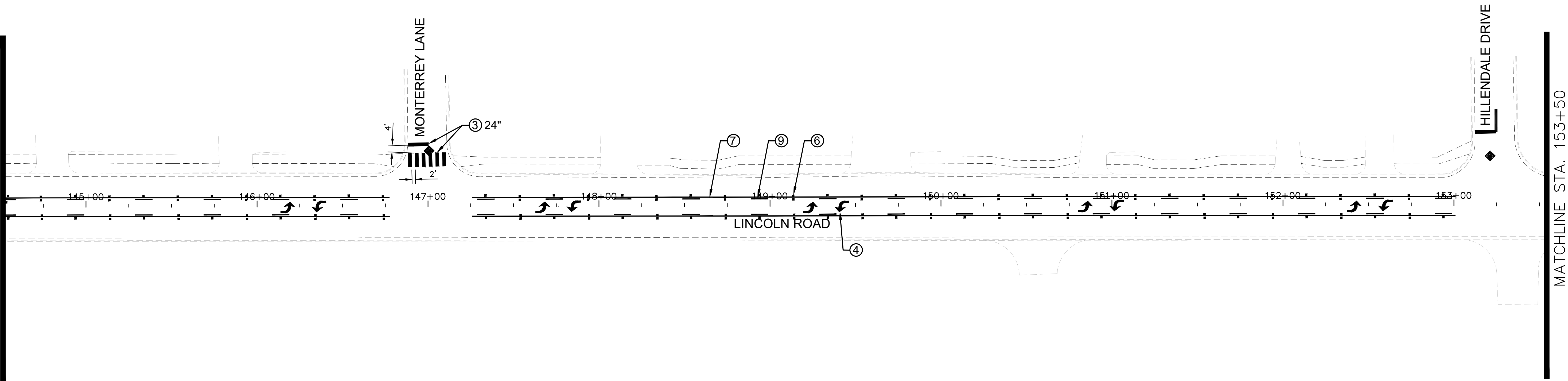
PAVEMENT MARKING
STA. 126+50 TO 144+50
(BASE BID)

WORKING NUMBER:
PM-8

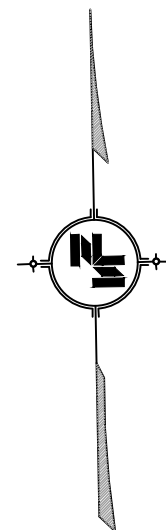
DRAWING NUMBER:
25

5/17/2022 7:59 AM c:\17000\hattiesburg\17078 - lincoln road paving project\design\plan\17078_pm.dwg

MATCHLINE STA. 144+50



MATCHLINE STA. 153+50

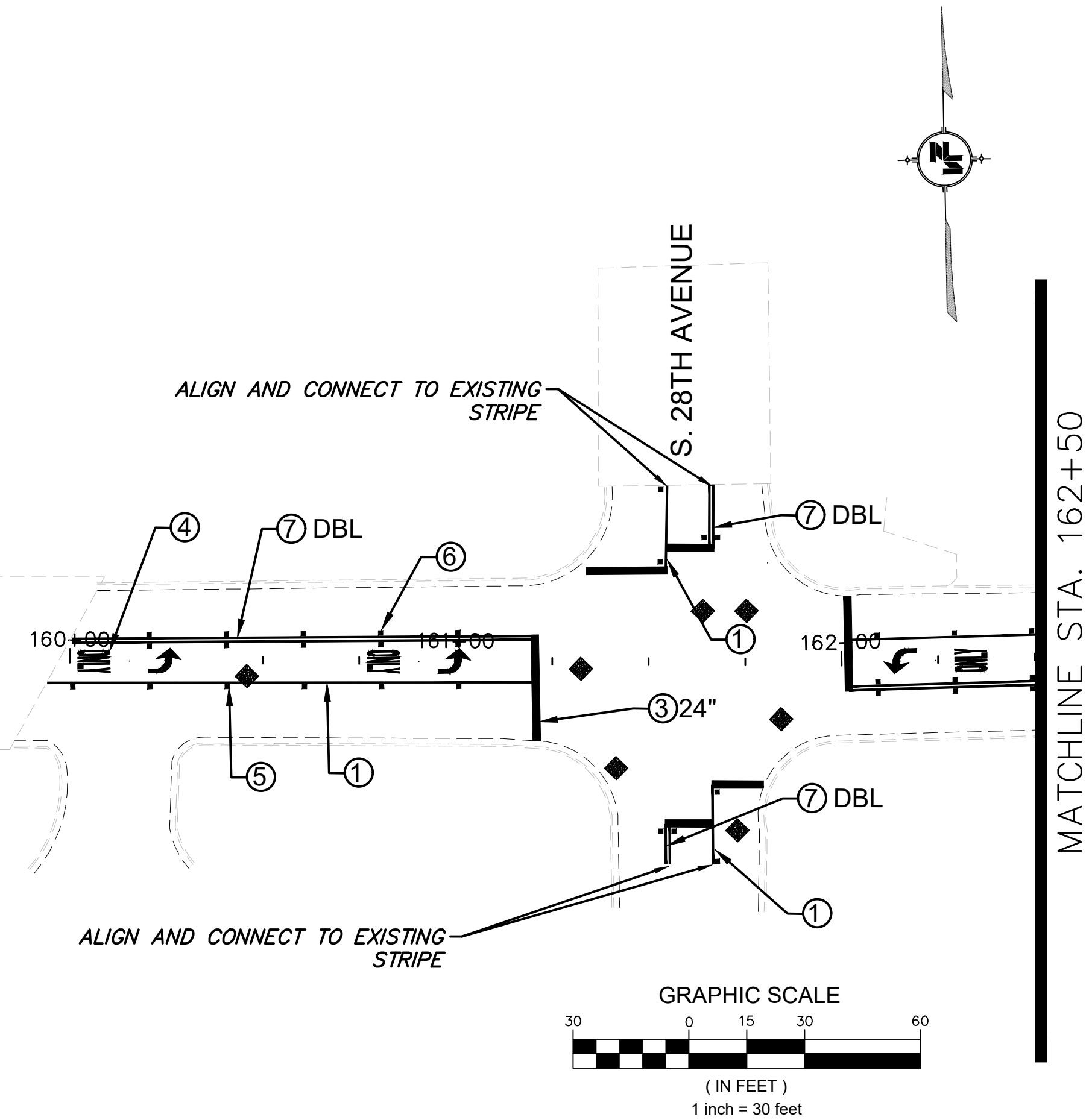
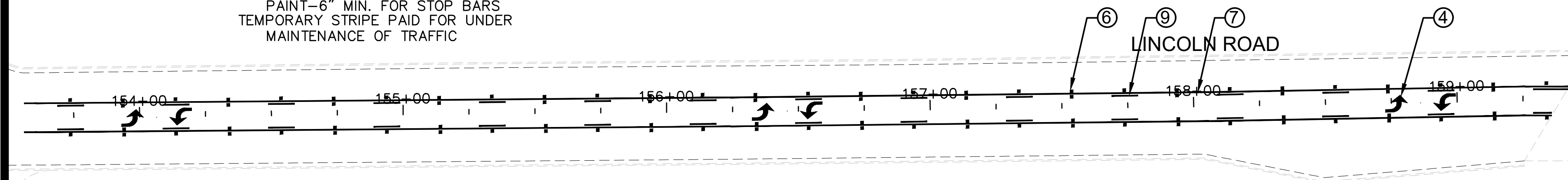


PAVEMENT MARKING

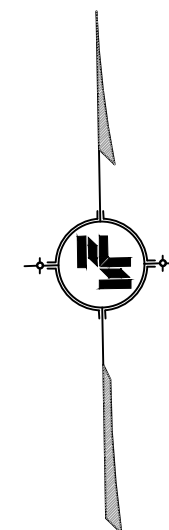
SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** (1)	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	217	LIN. FT.
** (2)	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
(3)	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	653	LIN. FT.
** (4)	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	356	SQ. FT.
(5)	RED-CLEAR REFLECTIVE RAISED MARKERS	--	13	EACH
(6)	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	228	EACH
** (7)	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3200	LIN. FT.
** (8)	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
(9)	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	2770	LIN. FT.
(10)	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** (11)	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC

MATCHLINE STA. 153+50



MATCHLINE STA. 162+50



NOTICE TO DRAWING HOLDER

NEEL-SCHAFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

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NO.	DATE	BY	DESCRIPTION	
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				DSGN: GPC DATE: 04/2022
				DRWN: GPC DATE: 04/2022
				CHKD: DATE:
				QA/QC: DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



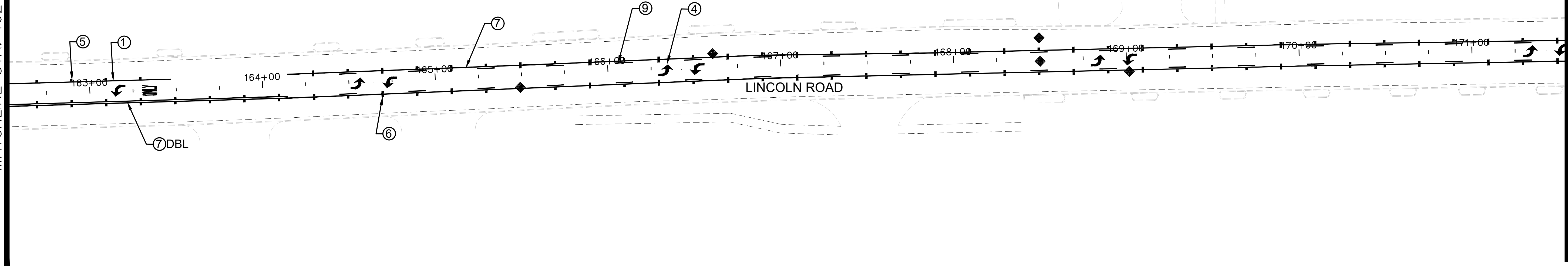
PAVEMENT MARKING
STA. 144+50 TO 162+50
(BASE BID)

WORKING NUMBER:
PM-9

DRAWING NUMBER:
26

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MATCHLINE STA. 162+50



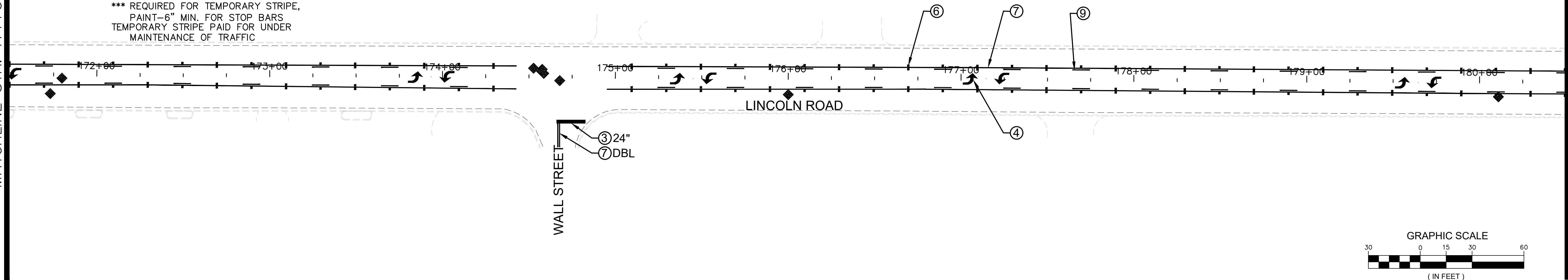
MATCHLINE STA. 171+50

PAVEMENT MARKING

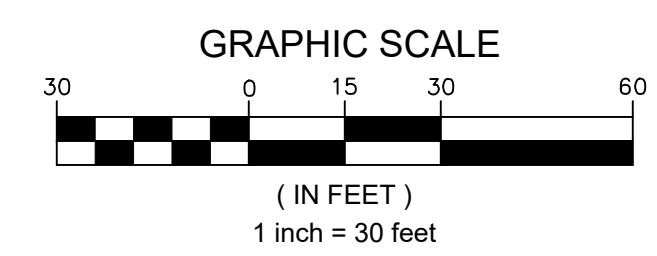
SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** (1)	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	97	LIN. FT.
** (2)	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
(3)	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	68	LIN. FT.
** (4)	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	301	SQ. FT.
(5)	RED-CLEAR REFLECTIVE RAISED MARKERS	--	4	EACH
(6)	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	254	EACH
** (7)	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3530	LIN. FT.
** (8)	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
(9)	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3045	LIN. FT.
(10)	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** (11)	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC

MATCHLINE STA. 171+50



MATCHLINE STA. 180+50



NOTICE TO DRAWING HOLDER

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				QA/QC: DATE:

LINCOLN ROAD PAVING PROJECT

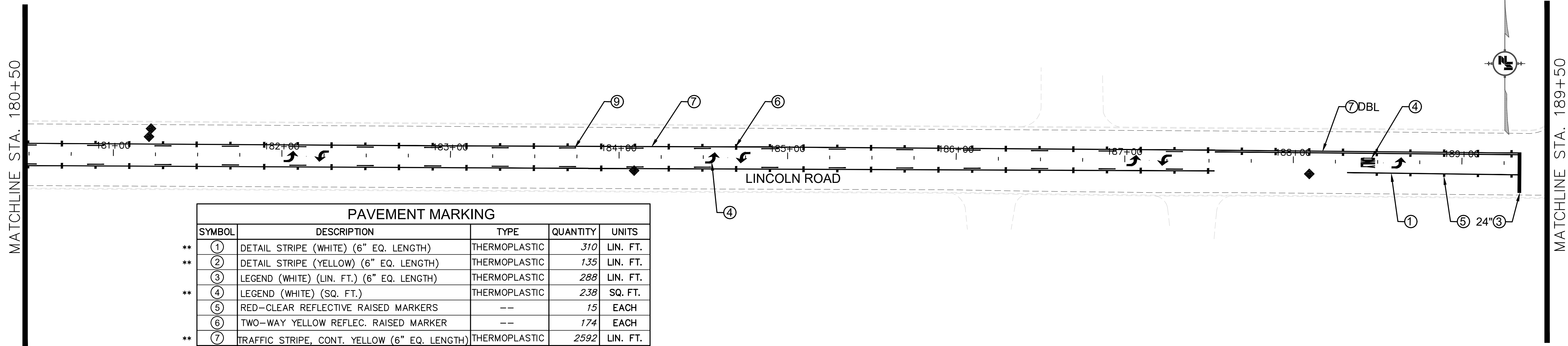
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



PAVEMENT MARKING
STA. 162+50 TO 180+50
(BASE BID)

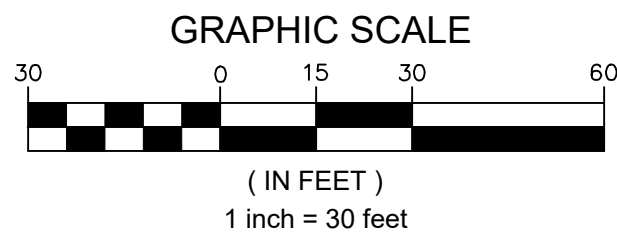
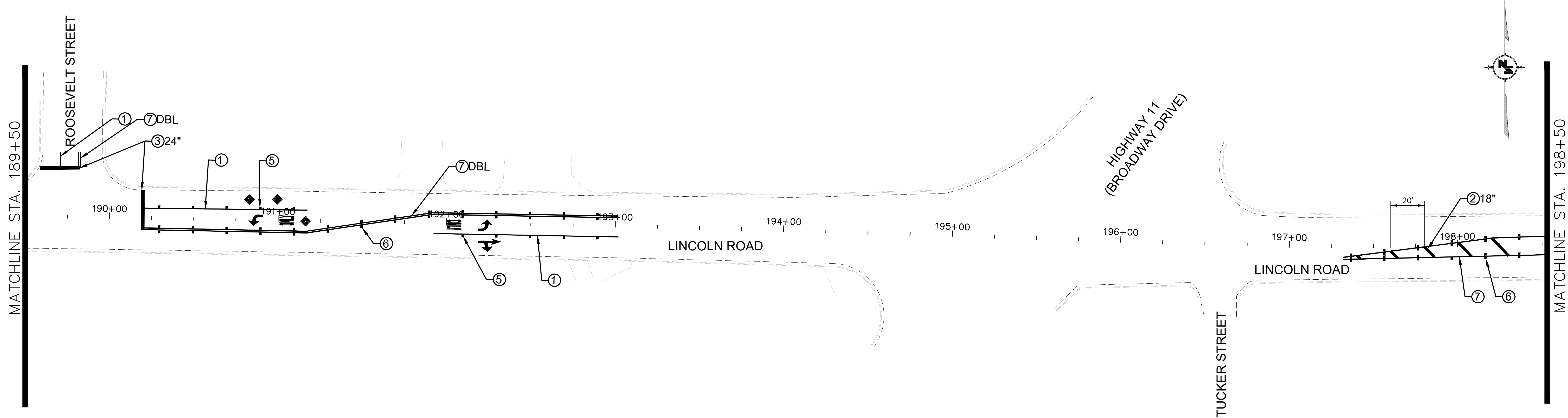
WORKING NUMBER: PM-10	DRAWING NUMBER: 27
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5/17/2022 8:00 AM c:\17000\hattiesburg\17078 - lincoln road paving project\design\plan\17078_pm.dwg



PAVEMENT MARKING				
SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** ①	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	310	LIN. FT.
** ②	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	135	LIN. FT.
** ③	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	288	LIN. FT.
** ④	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	238	SQ. FT.
⑤	RED-CLEAR REFLECTIVE RAISED MARKERS	--	15	EACH
⑥	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	174	EACH
** ⑦	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	2592	LIN. FT.
** ⑧	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
⑨	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	1410	LIN. FT.
⑩	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ⑪	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

** REQUIRED FOR TEMPORARY STRIPE, PAINT
*** REQUIRED FOR TEMPORARY STRIPE,
PAINT-6" MIN. FOR STOP BARS
TEMPORARY STRIPE PAID FOR UNDER
MAINTENANCE OF TRAFFIC



NOTICE TO DRAWING HOLDER
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			DSGN: GPC	DATE: 04/2022
			DRWN: GPC	DATE: 04/2022
			CHKD:	DATE:
			QA/QC:	DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



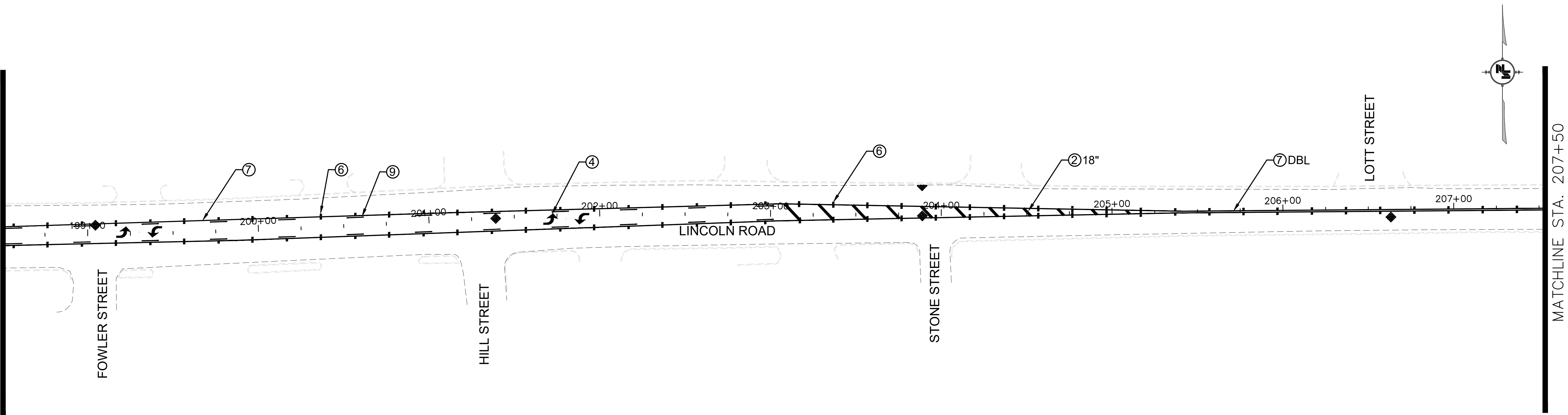
PAVEMENT MARKING
STA. 180+50 TO 198+50
(BASE BID)

WORKING NUMBER:
PM-11

DRAWING NUMBER:
28

5/17/2022 8:02 AM c:\17000\hattiesburg\17078 - lincoln road paving project\design\plans\17078_pm.dwg

MATCHLINE STA. 198+50



MATCHLINE STA. 207+50

PAVEMENT MARKING

SYMBOL	DESCRIPTION	TYPE	QUANTITY	UNITS
** ①	DETAIL STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ②	DETAIL STRIPE (YELLOW) (6" EQ. LENGTH)	THERMOPLASTIC	270	LIN. FT.
** ③	LEGEND (WHITE) (LIN. FT.) (6" EQ. LENGTH)	THERMOPLASTIC	124	LIN. FT.
** ④	LEGEND (WHITE) (SQ. FT.)	THERMOPLASTIC	66	SQ. FT.
⑤	RED-CLEAR REFLECTIVE RAISED MARKERS	--	0	EACH
⑥	TWO-WAY YELLOW REFLEC. RAISED MARKER	--	213	EACH
** ⑦	TRAFFIC STRIPE, CONT. YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	3414	LIN. FT.
** ⑧	EDGE STRIPE, CONT. WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ⑨	TRAFFIC STRIPE, SKIP YELLOW (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ⑩	CONTINUOUS STRIPE (WHITE) (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.
** ⑪	TRAFFIC STRIPE, SKIP WHITE (6" EQ. LENGTH)	THERMOPLASTIC	0	LIN. FT.

** REQUIRED FOR TEMPORARY STRIPE, PAINT

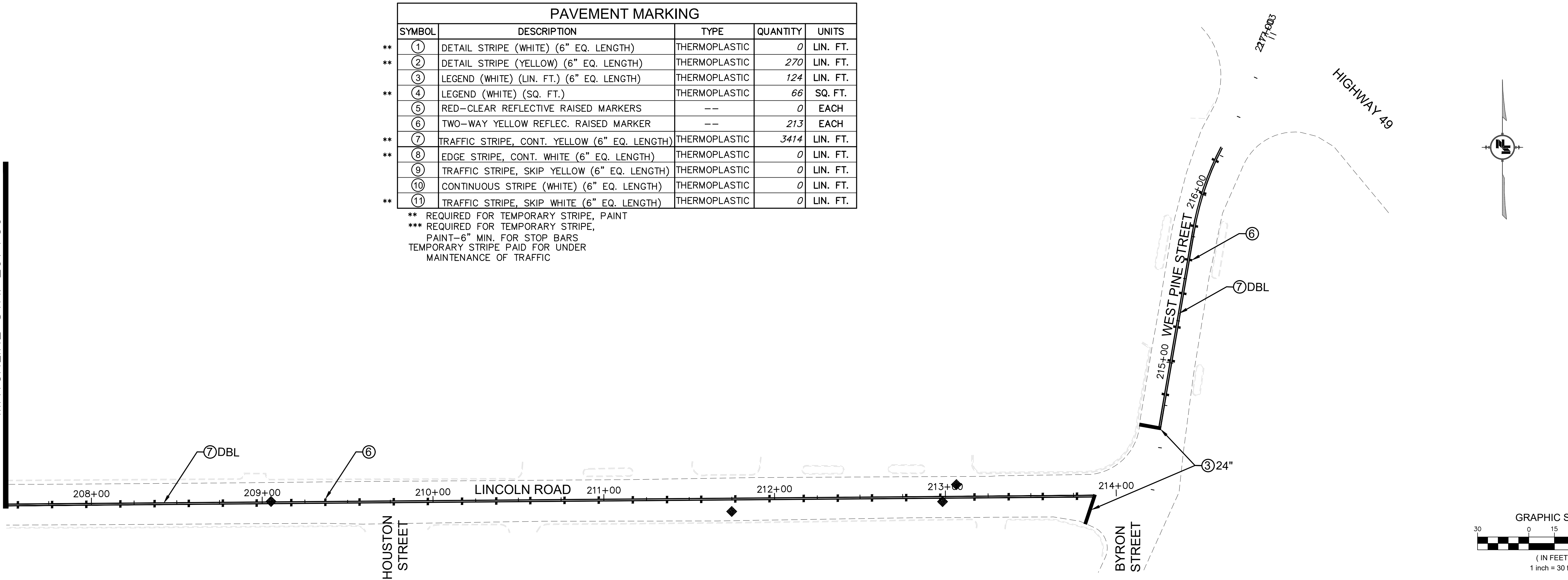
*** REQUIRED FOR TEMPORARY STRIPE,

PAINT-6" MIN. FOR STOP BARS

TEMPORARY STRIPE PAID FOR UNDER

MAINTENANCE OF TRAFFIC

MATCHLINE STA. 207+50



NOTICE TO DRAWING HOLDER

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				QA/QC: DATE:

LINCOLN ROAD PAVING PROJECT

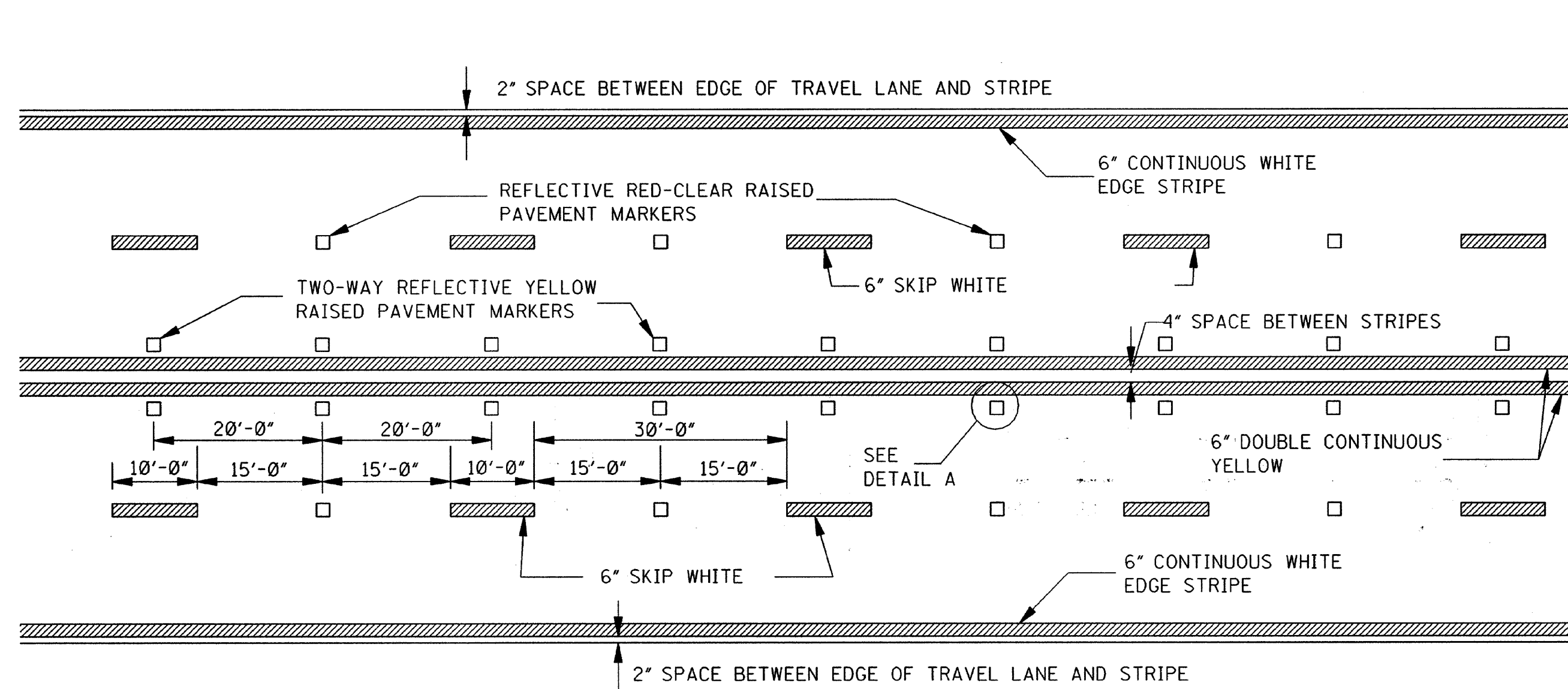
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



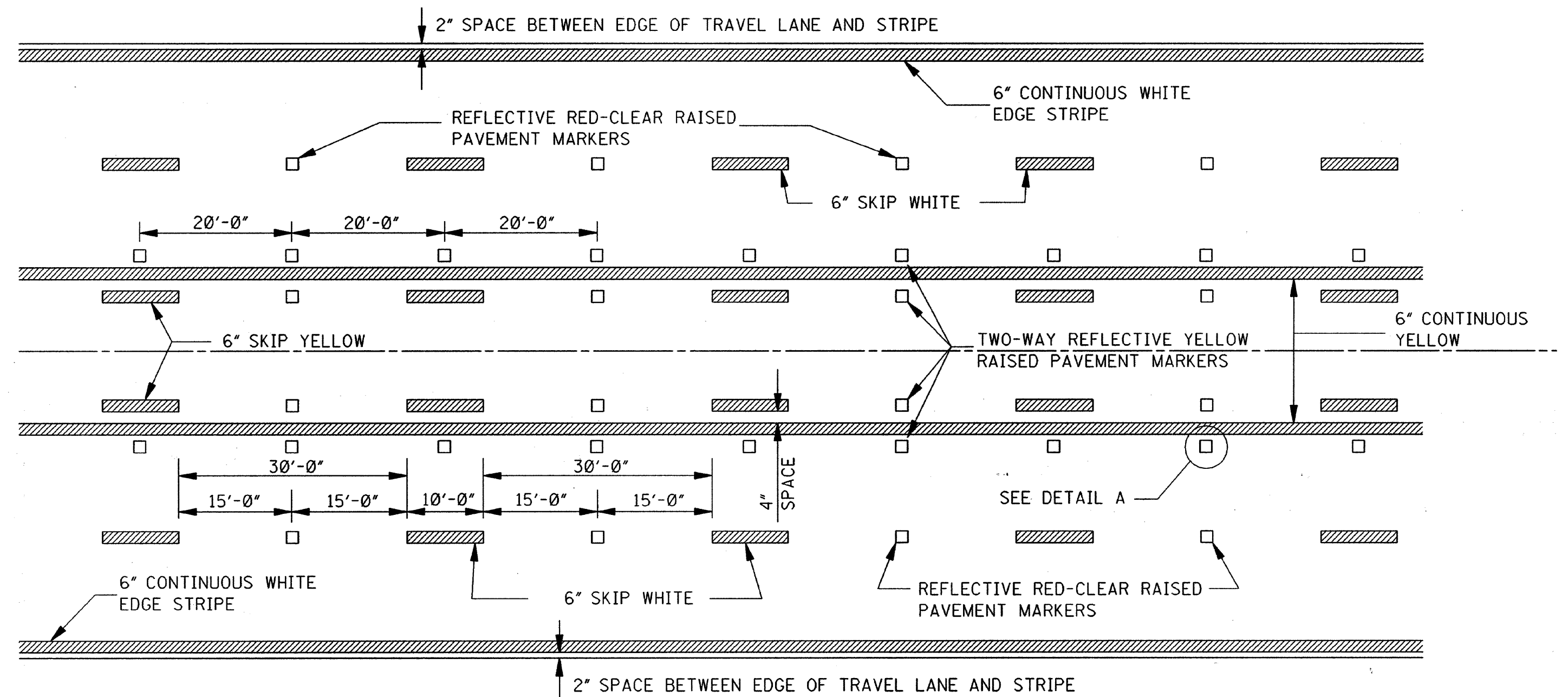
PAVEMENT MARKING
STA. 198+50 TO E.O.P.
(BASE BID)

WORKING NUMBER:
PM-12

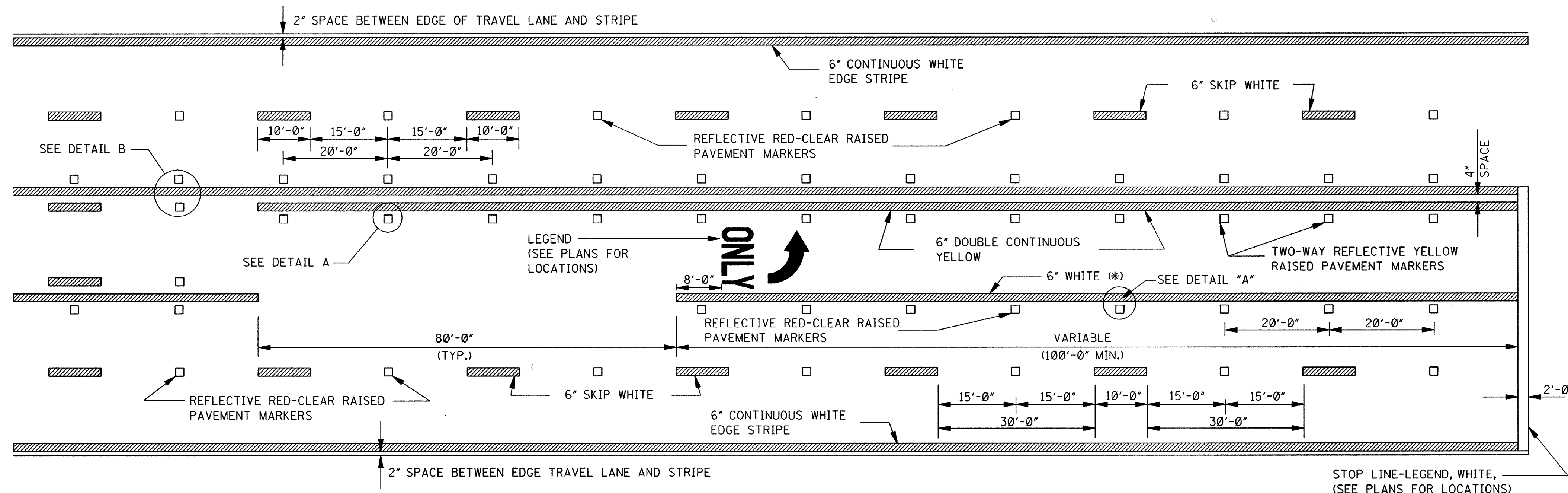
DRAWING NUMBER:
29



TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION

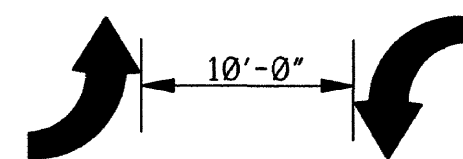


TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION



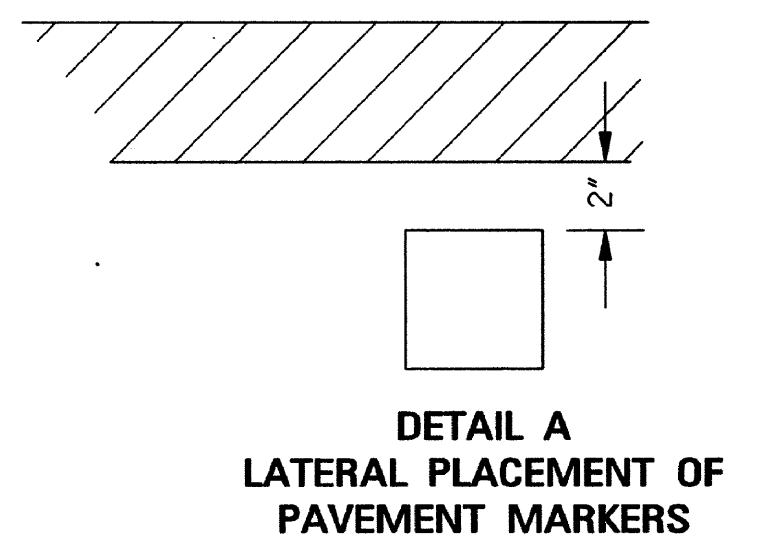
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES

*NOTE: USE DETAIL STRIPING IF LENGTH $\leq$ 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.



TYPICAL TWO-WAY ARROW INSTALLATION

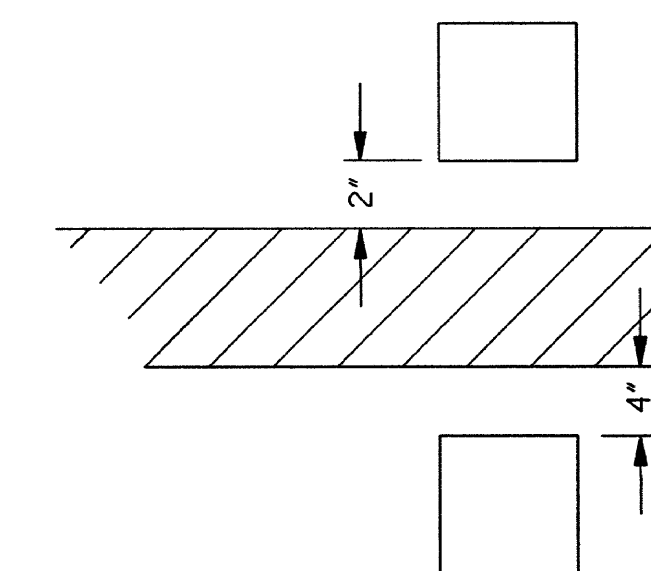
- NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.
3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).



**DETAIL A
LATERAL PLACEMENT OF
PAVEMENT MARKERS**

GENERAL NOTE:

1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS".



**DETAIL B
LATERAL PLACEMENT OF
PAVEMENT MARKERS**

NOTICE TO DRAWING HOLDER

NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS			DRAWING INFORMATION	
NO.	DATE	BY	DESCRIPTION	

N-S PROJECT NO.: 17078.000
FILENAME: 17078_Standard Details.dwg
SCALE: NOT TO SCALE
SURVEYED BY:
DSGN: GPC DATE: 04/2022
DRWN: GPC DATE: 04/2022
CHKD: DATE:
QA/QC: DATE:

LINCOLN ROAD PAVING PROJECT

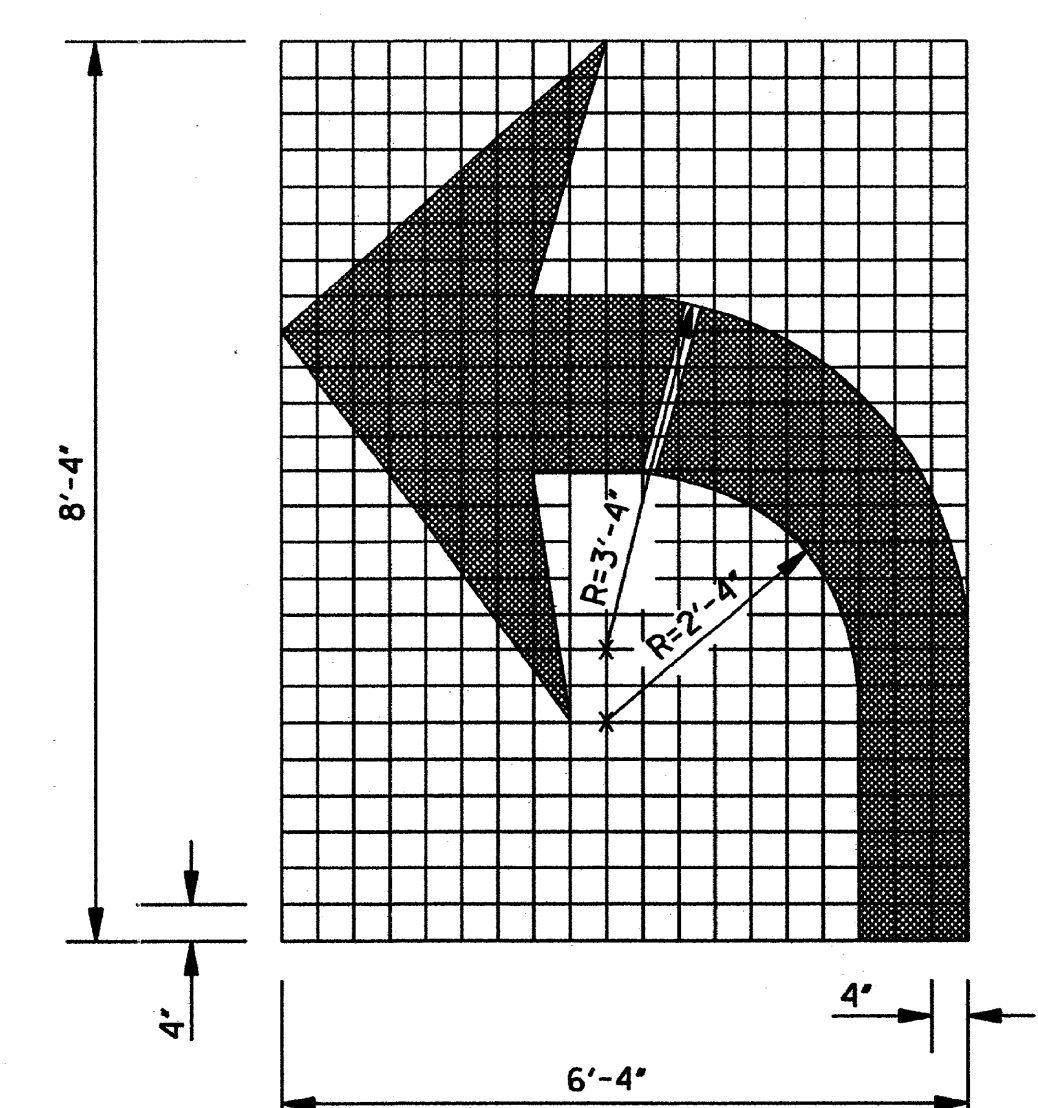
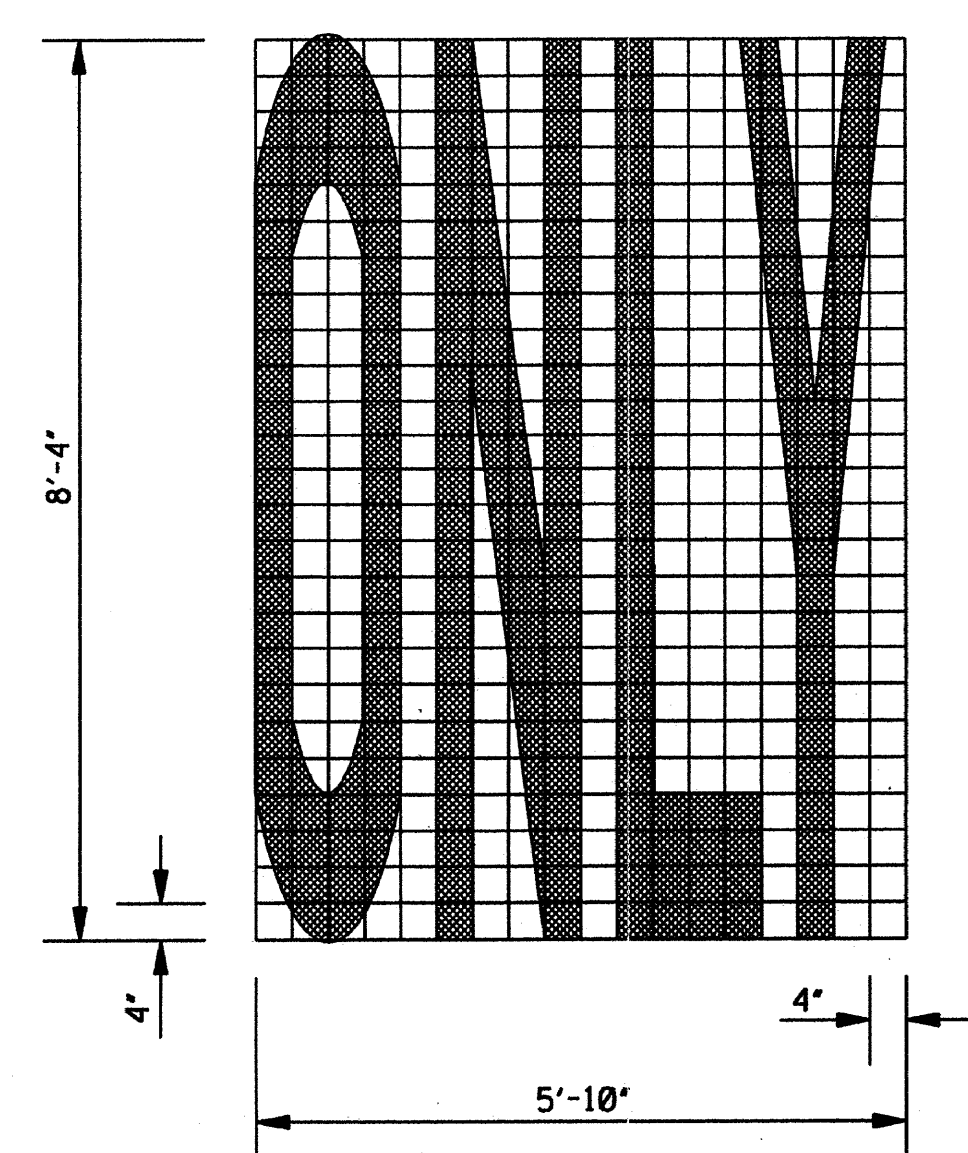
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



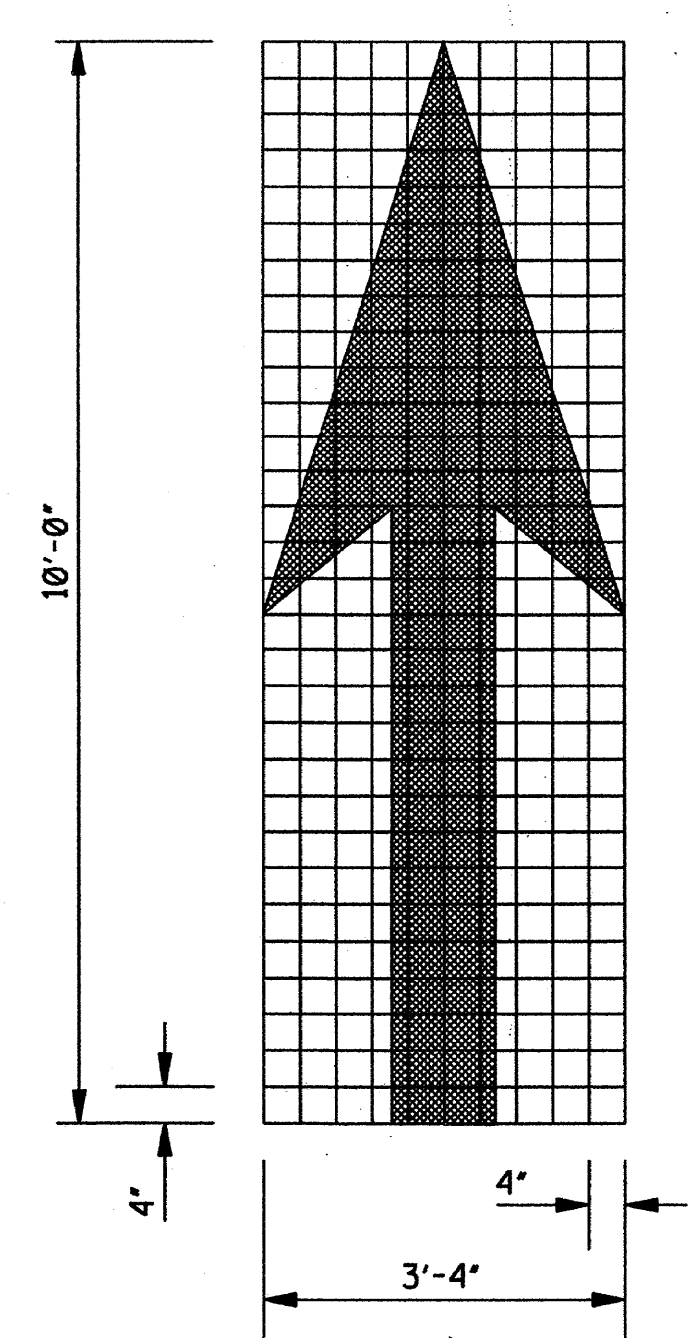
PAVEMENT MARKING DETAILS
FOR 4-LANE AND 5-LANE
UNDIVIDED ROADWAYS

WORKING NUMBER:
PM-13

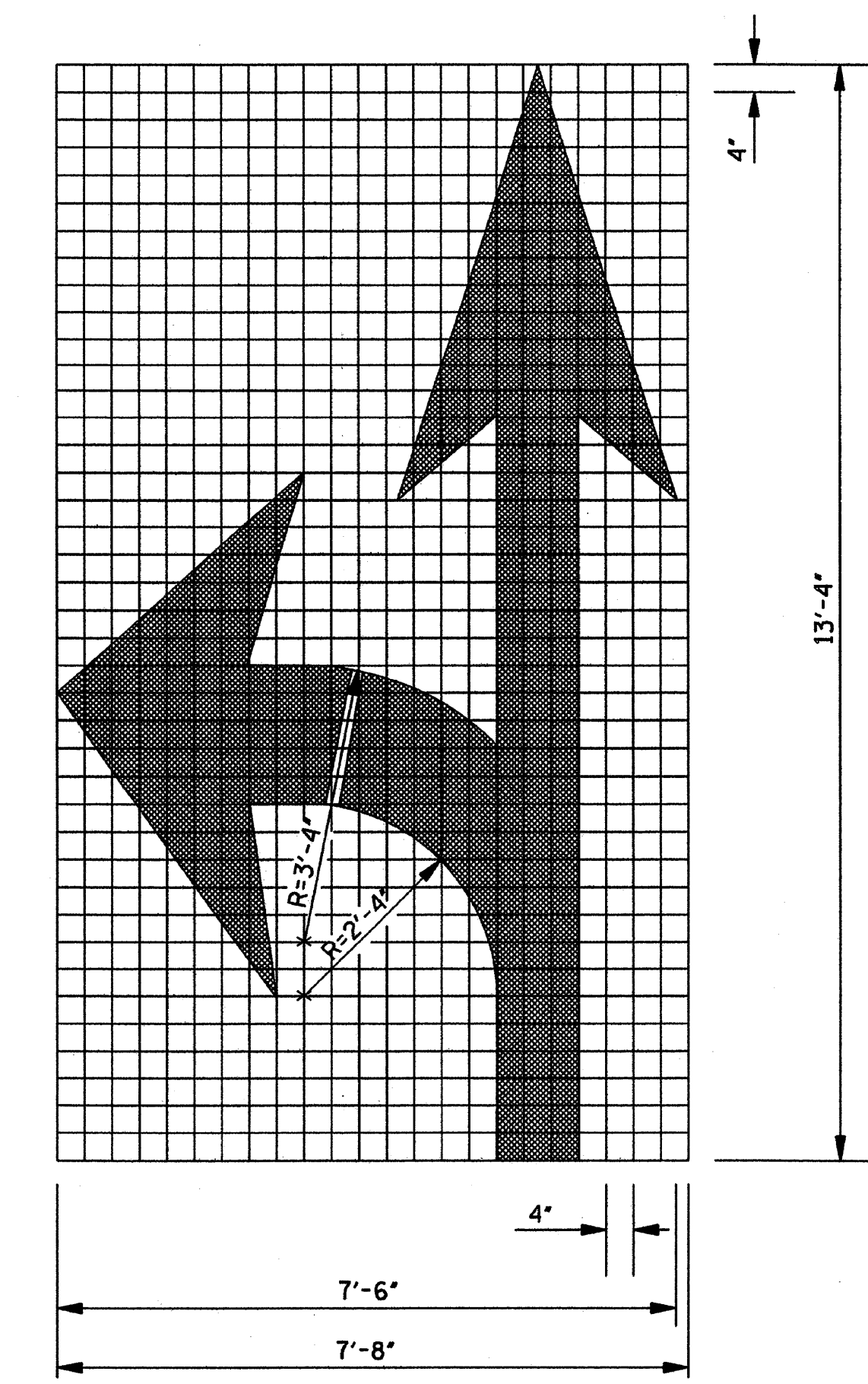
DRAWING NUMBER:
30



TURN ARROW



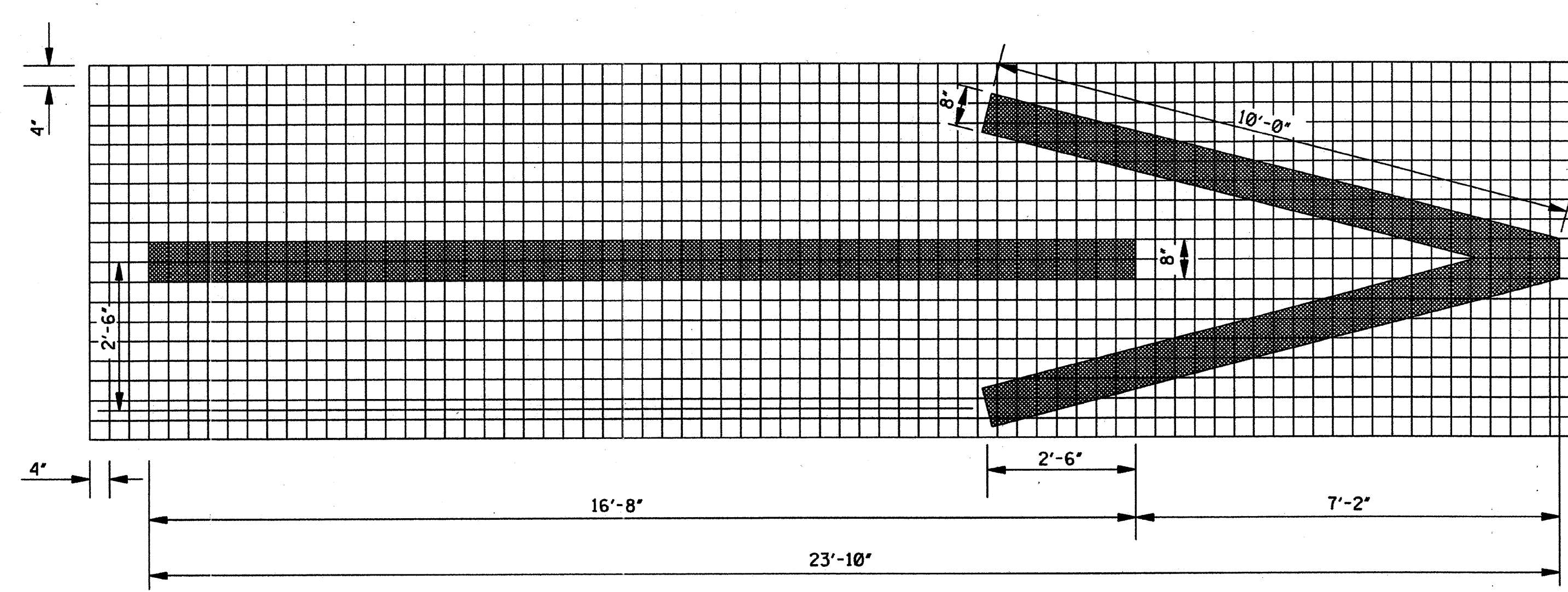
THRU ARROW



COMBINATION ARROW

- GENERAL NOTES:
1. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL PAVEMENT MARKING LEGENDS, INCLUDING TURN ARROWS, SHALL BE APPLIED USING HIGH PERFORMANCE MATERIALS.
 2. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
 3. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

PAY QUANTITIES	
LEGEND/SYMBOL	AREA (ft ²)
ONLY	22.0
TURN ARROW	16.4
THRU ARROW	12.3
COMB. ARROW	27.5
1-WAY ARROW	24.3



1-WAY ARROW

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LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



PAVEMENT MARKING
LEGEND DETAILS

WORKING NUMBER: PM-14	DRAWING NUMBER: 31
--------------------------	-----------------------

SIGNAL PLAN LEGEND

- ①

SIGNAL HEAD w BACKPLATE / TYPE
- ⑥

PEDESTRIAN SIGNAL w PUSH BUTTON
- SIGNAL CONTROLLER / CABINET
- MAST ARM SIGNAL POLE
- ②

PULL BOX / TYPE
- VIDEO / MULTI-SENSOR DETECTOR
- TRAFFIC SIGN
- SNS

STREET NAME SIGN
- LUMINAIRE
- POWER SERVICE PEDESTAL
- EMERGENCY VEHICLE DETECTOR
- DETECTION ZONE
- 5c

SIGNAL HEAD CABLE – AWG #14, 5 COND.
- 8c

SIGNAL HEAD CABLE – AWG #14, 8 COND.
- POW

POWER CABLE – AWG #6, 3 COND.
- LUM

LUMINAIRE POWER CABLE – AWG #10, 2 COND.
- ODC

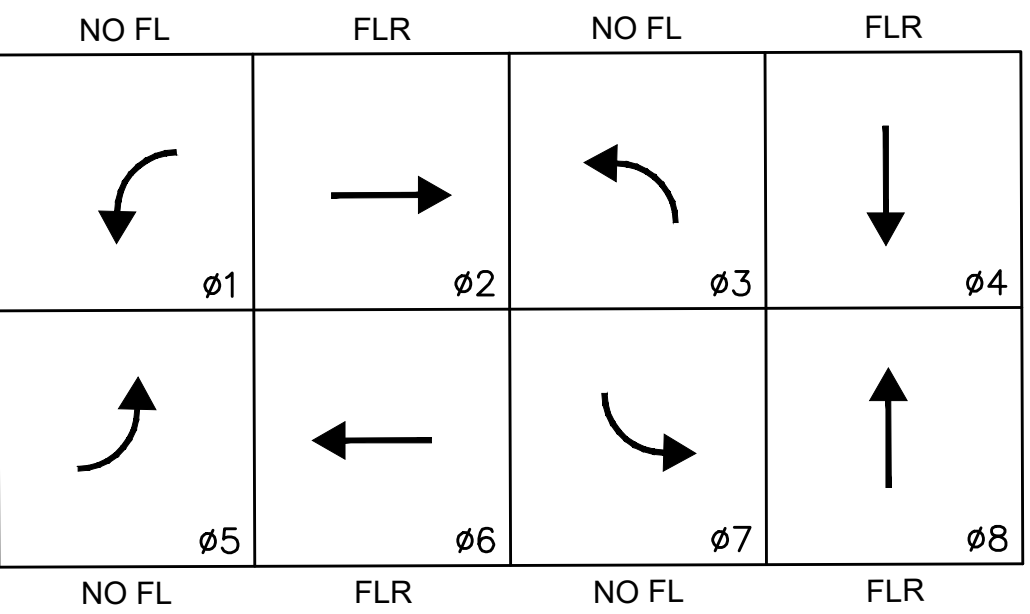
OPTICAL DETECTOR CABLE
- DC

DETECTION CABLE
- CONDUIT – ROLL PIPE (BORED)
- CONDUIT – PVC (TRENCHED)
- PP

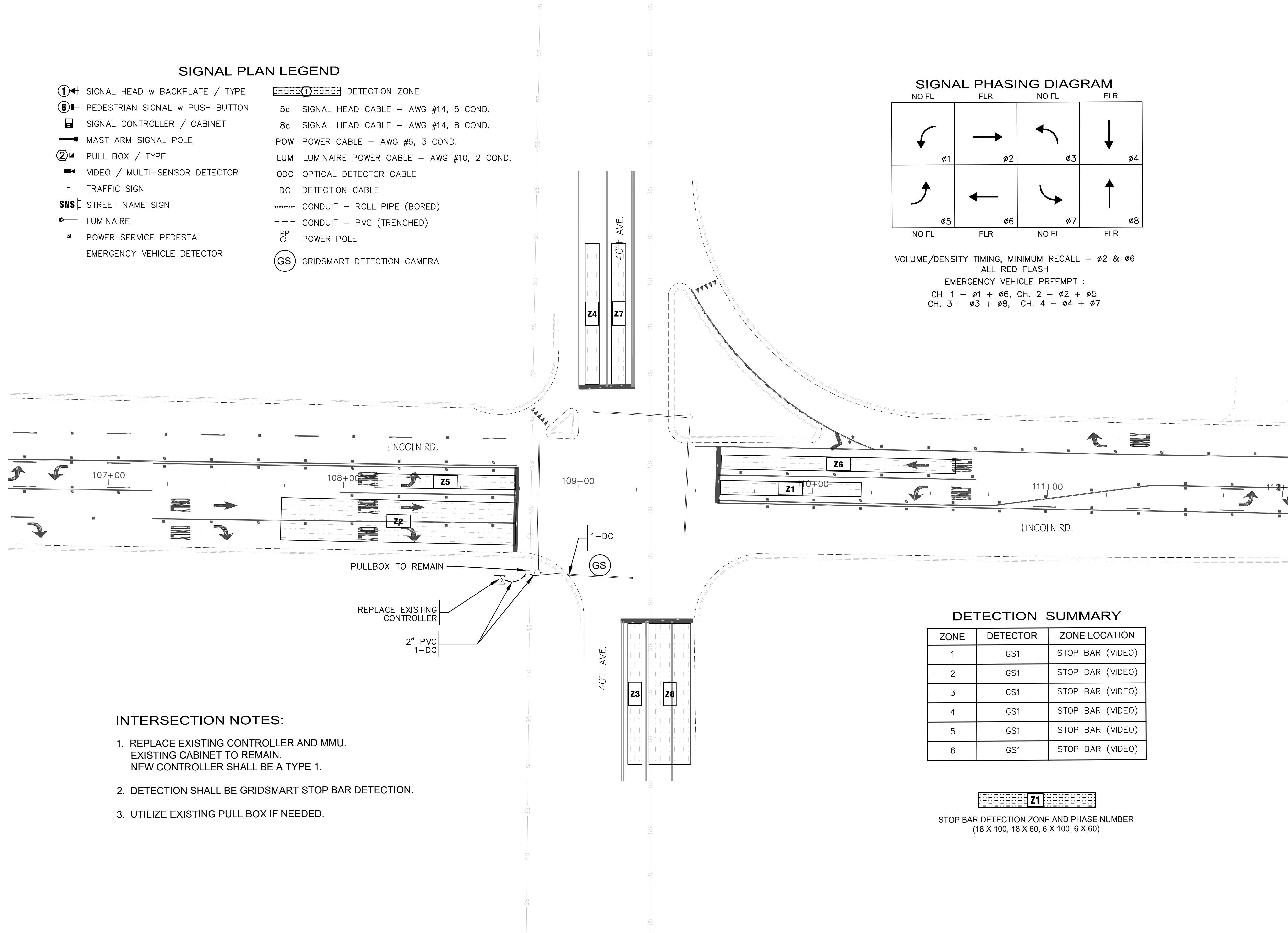
POWER POLE
- GS

GRIDSMART DETECTION CAMERA

SIGNAL PHASING DIAGRAM



VOLUME/DENSITY TIMING, MINIMUM RECALL – ø2 & ø6
ALL RED FLASH
EMERGENCY VEHICLE PREEMPT :
CH. 1 – ø1 + ø6, CH. 2 – ø2 + ø5
CH. 3 – ø3 + ø8, CH. 4 – ø4 + ø7



DETECTION SUMMARY

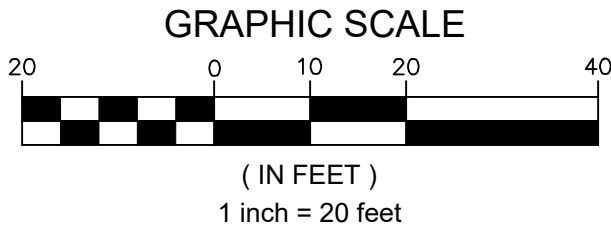
ZONE	DETECTOR	ZONE LOCATION
1	GS1	STOP BAR (VIDEO)
2	GS1	STOP BAR (VIDEO)
3	GS1	STOP BAR (VIDEO)
4	GS1	STOP BAR (VIDEO)
5	GS1	STOP BAR (VIDEO)
6	GS1	STOP BAR (VIDEO)



STOP BAR DETECTION ZONE AND PHASE NUMBER
(18 X 100, 18 X 60, 6 X 100, 6 X 60)

INTERSECTION NOTES:

- REPLACE EXISTING CONTROLLER AND MMU.
EXISTING CABINET TO REMAIN.
NEW CONTROLLER SHALL BE A TYPE 1.
- DETECTION SHALL BE GRIDSMART STOP BAR DETECTION.
- UTILIZE EXISTING PULL BOX IF NEEDED.



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				SURVEYED BY:
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			DRWN: GPC	DATE: 04/2022
			CHKD:	DATE:
			QA/QC:	DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



TRAFFIC SIGNAL INSTALLATION
40TH AVENUE

WORKING NUMBER:
TSI-1

DRAWING NUMBER:
32

SIGNAL PLAN LEGEND

- ①➡

SIGNAL HEAD w BACKPLATE / TYPE
- ⑥➡

PEDESTRIAN SIGNAL w PUSH BUTTON
- ⏏

SIGNAL CONTROLLER / CABINET
- MAST ARM SIGNAL POLE
- ②➡

PULL BOX / TYPE
- 📹

VIDEO / MULTI-SENSOR DETECTOR
- ⏏

TRAFFIC SIGN
- SNS

STREET NAME SIGN
- LUMINAIRE
- POWER SERVICE PEDESTAL
- EMERGENCY VEHICLE DETECTOR
- ①-SS-①

DETECTION ZONE
- 5c

SIGNAL HEAD CABLE — AWG #14, 5 COND.
- 8c

SIGNAL HEAD CABLE — AWG #14, 8 COND.
- POW

POWER CABLE — AWG #6, 3 COND.
- LUM

LUMINAIRE POWER CABLE — AWG #10, 2 COND.
- ODC

OPTICAL DETECTOR CABLE
- DC

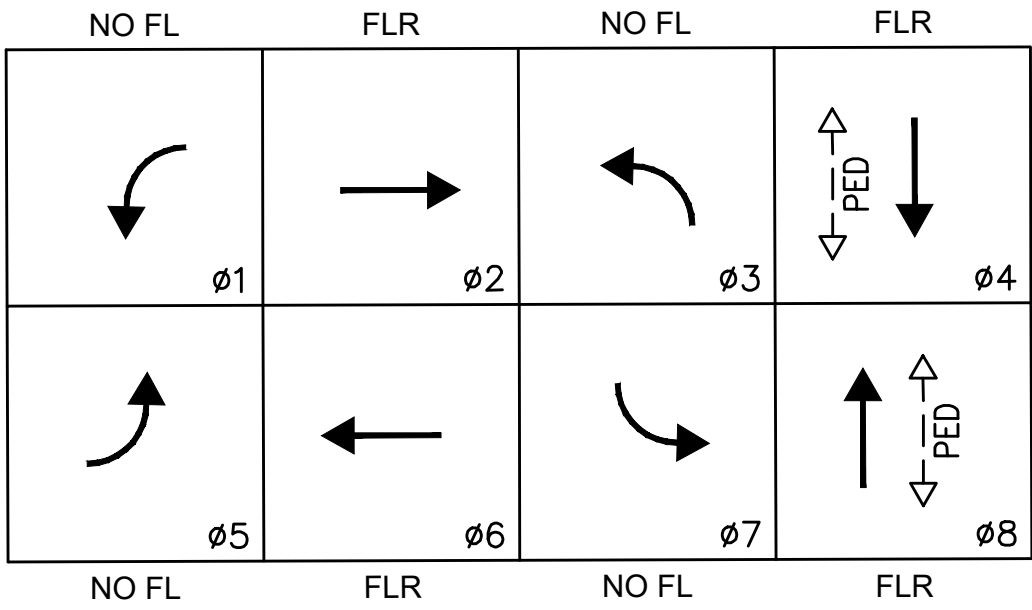
DETECTION CABLE
-

CONDUIT — ROLL PIPE (BORED)
- CONDUIT — PVC (TRENCHED)
- PP

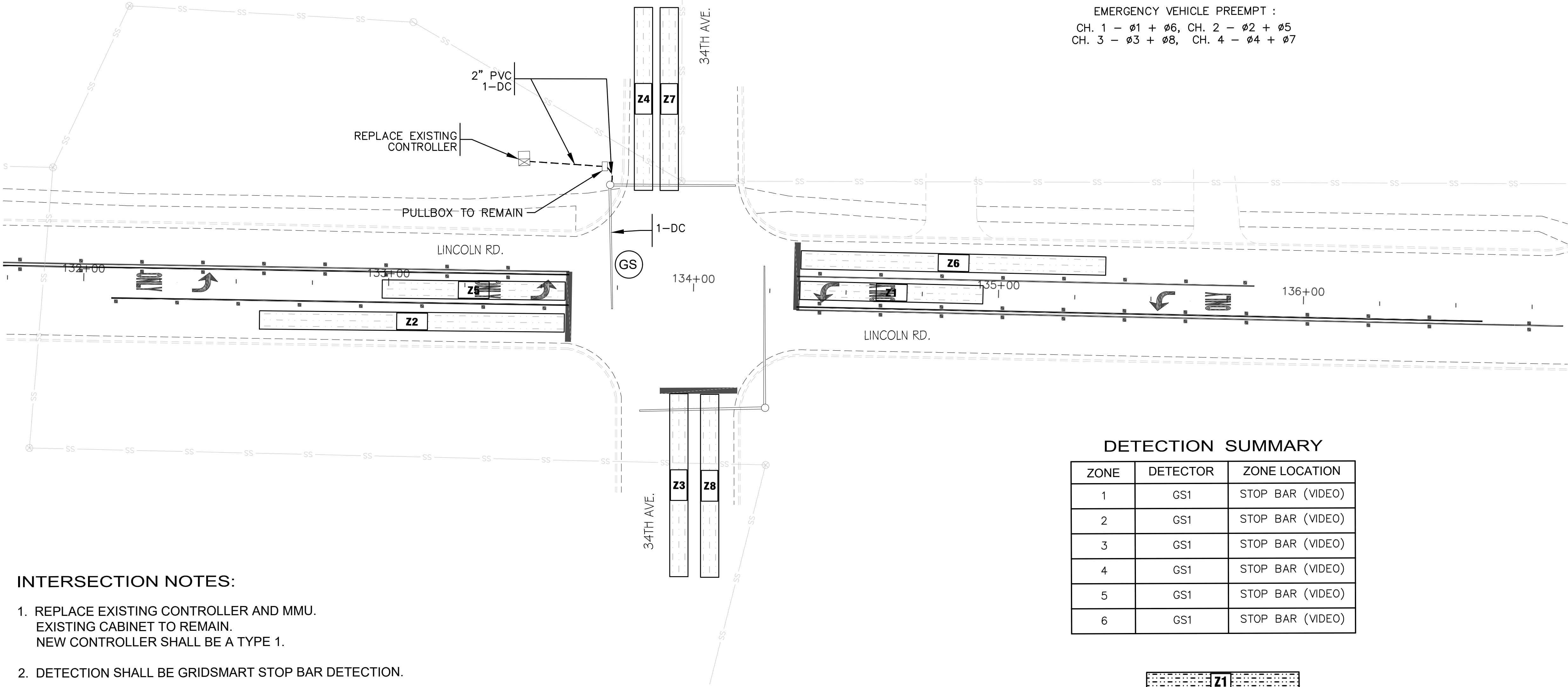
POWER POLE
- GS

GRIDSMART DETECTION CAMERA

SIGNAL PHASING DIAGRAM



VOLUME/DENSITY TIMING, MINIMUM RECALL — ø2 & ø6
ALL RED FLASH
EMERGENCY VEHICLE PREEMPT :
CH. 1 — ø1 + ø6, CH. 2 — ø2 + ø5
CH. 3 — ø3 + ø8, CH. 4 — ø4 + ø7



INTERSECTION NOTES:

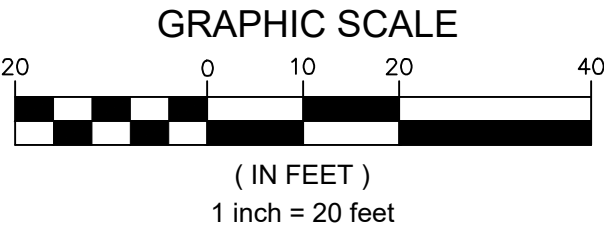
1. REPLACE EXISTING CONTROLLER AND MMU.
EXISTING CABINET TO REMAIN.
NEW CONTROLLER SHALL BE A TYPE 1.
2. DETECTION SHALL BE GRIDSMART STOP BAR DETECTION.
3. UTILIZE EXISTING PULL BOX IF NEEDED.

DETECTION SUMMARY

ZONE	DETECTOR	ZONE LOCATION
1	GS1	STOP BAR (VIDEO)
2	GS1	STOP BAR (VIDEO)
3	GS1	STOP BAR (VIDEO)
4	GS1	STOP BAR (VIDEO)
5	GS1	STOP BAR (VIDEO)
6	GS1	STOP BAR (VIDEO)



STOP BAR DETECTION ZONE AND PHASE NUMBER
(6 X 100, 6 X 60)



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NOTICE TO DRAWING HOLDER

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				CHKD:	DATE:
				QA/QC:	DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY



TRAFFIC SIGNAL INSTALLATION
34TH AVENUE

WORKING NUMBER: TSI-2	DRAWING NUMBER: 33
--------------------------	-----------------------

SIGNAL PLAN LEGEND

- ①

SIGNAL HEAD w BACKPLATE / TYPE
- ⑥

PEDESTRIAN SIGNAL w PUSH BUTTON
- SIGNAL CONTROLLER / CABINET
- MAST ARM SIGNAL POLE
- ②

PULL BOX / TYPE
- VIDEO / MULTI-SENSOR DETECTOR
- TRAFFIC SIGN
- SNS

STREET NAME SIGN
- LUMINAIRE
- POWER SERVICE PEDESTAL
- EMERGENCY VEHICLE DETECTOR
- DETECTION ZONE
- 5c

SIGNAL HEAD CABLE - AWG #14, 5 COND.
- 8c

SIGNAL HEAD CABLE - AWG #14, 8 COND.
- POW

POWER CABLE - AWG #6, 3 COND.
- LUM

LUMINAIRE POWER CABLE - AWG #10, 2 COND.
- ODC

OPTICAL DETECTOR CABLE
- DC

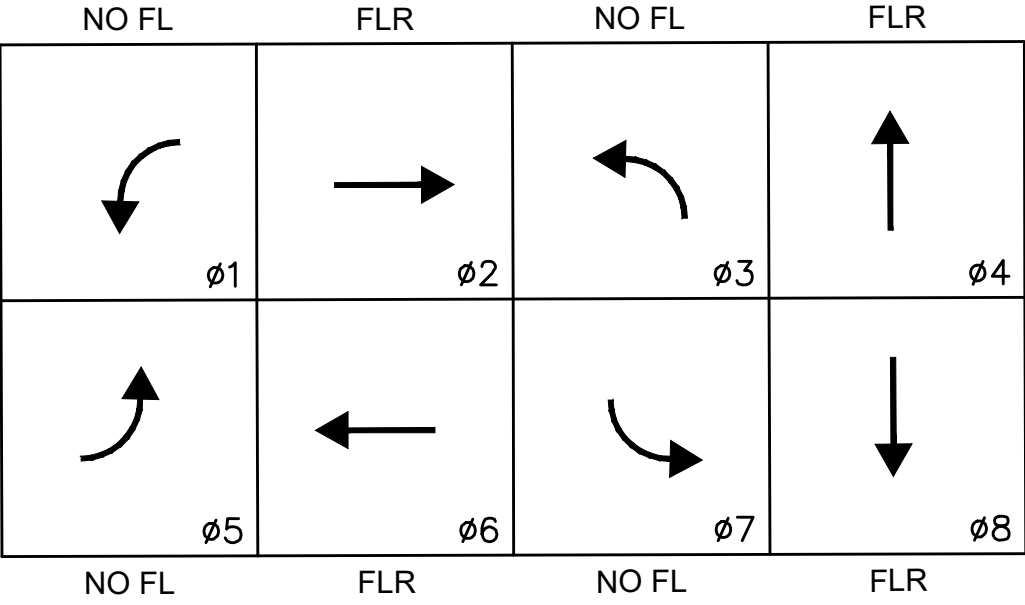
DETECTION CABLE
-

CONDUIT - ROLL PIPE (BORED)
- CONDUIT - PVC (TRENCHED)
- PP

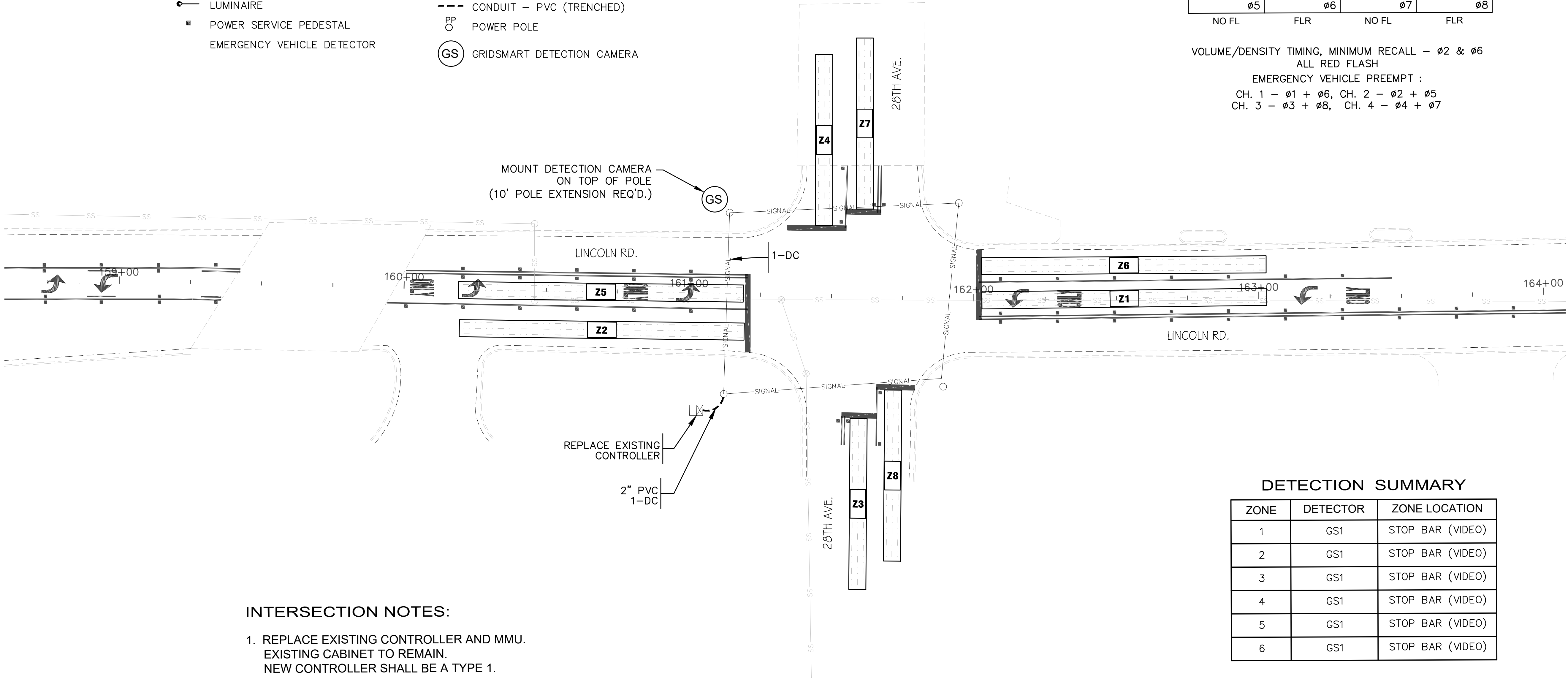
POWER POLE
- GS

GRIDSMART DETECTION CAMERA

SIGNAL PHASING DIAGRAM



VOLUME/DENSITY TIMING, MINIMUM RECALL - ø2 & ø6
ALL RED FLASH
EMERGENCY VEHICLE PREEMPT :
CH. 1 - ø1 + ø6, CH. 2 - ø2 + ø5
CH. 3 - ø3 + ø8, CH. 4 - ø4 + ø7



INTERSECTION NOTES:

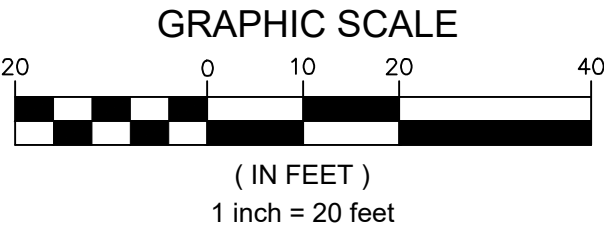
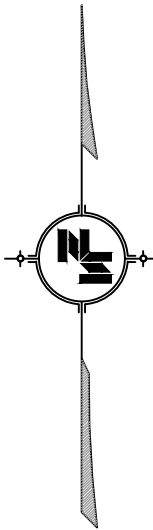
- REPLACE EXISTING CONTROLLER AND MMU. EXISTING CABINET TO REMAIN. NEW CONTROLLER SHALL BE A TYPE 1.
- DETECTION SHALL BE GRIDSMART STOP BAR DETECTION.
- CAMERA POLE MOUNT SHALL BE 120".

DETECTION SUMMARY

ZONE	DETECTOR	ZONE LOCATION
1	GS1	STOP BAR (VIDEO)
2	GS1	STOP BAR (VIDEO)
3	GS1	STOP BAR (VIDEO)
4	GS1	STOP BAR (VIDEO)
5	GS1	STOP BAR (VIDEO)
6	GS1	STOP BAR (VIDEO)



STOP BAR DETECTION ZONE AND PHASE NUMBER
(6 X 100, 6 X 60)



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NOTICE TO DRAWING HOLDER		REVISIONS		DRAWING INFORMATION		LINCOLN ROAD PAVING PROJECT	CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY		TRAFFIC SIGNAL INSTALLATION 28TH AVENUE	
NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.		NO.	DATE	BY	DESCRIPTION				WORKING NUMBER:	DRAWING NUMBER:
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						QA/QC:	DATE:			

TRAFFIC SIGNAL GENERAL NOTES

1. POLES, SIGNAL HEADS, EQUIPMENT BOXES, PULLBOXES AND CONDUIT LOCATIONS MAY BE VARIED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. HOWEVER, SIGNAL HEAD OR POLE LOCATIONS SHALL BE WITHIN REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY.
2. THE CONTRACTOR SHALL PROVIDE MAST ARM POLE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS. DESIGN STANDARD FOR MAST ARMS POLES SHALL BE 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. USE FATIGUE CATEGORY II, USE 50 YEAR DESIGN SERVICE LIFE AND DO NOT CONSIDER GALLOPING OR TRUCK-INDUCED GUSTS. WIND AND ICE LOADS VARIABLE BASED UPON MAPS IN THE 2013 AASHTO SPECIFICATION. USE UPSWEPT MAST ARMS UNLESS OTHERWISE NOTED ON PLANS. SEE TSD 3.
3. DETERMINATION OF REQUIRED SIZES, LENGTHS AND GAUGES OF TYPE I - XI STEEL POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND SECTION 722.02 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN PLANS OR SPECIFICATIONS.
4. TRAFFIC SIGNAL MAST ARM POLES SHALL BE HOT DIPPED GALVANIZED WITH FINISH APPROVED BY THE ENGINEER.
5. TRAFFIC SIGNAL MAST ARM POLES REQUIRING LUMINAIRES ARE DESIGNATED BY (L). ALL LUMINAIRES SHALL BE LED UNLESS OTHERWISE NOTED ON PLANS.
6. STAINLESS STEEL TAG ATTACHED TO THE POLE SHAFT USING 3/16 INCH STAINLESS STEEL POP RIVETS WITH PROPERTIES AND INFORMATION AS FOLLOWS:
- MINIMUM 1/16 INCH THICKNESS
- MINIMUM 1/4 INCH STAMPED LEGEND WITH FOLLOWING INFORMATION:
-- MANUFACTURER NAME
-- MONTH / YEAR OF MANUFACTURE
-- UNIQUE IDENTIFYING NUMBER FOR FUTURE MANUFACTURER REFERENCE
-- EXTERNAL PROJECT NUMBER FROM THE PLANS COVER SHEET
(EXAMPLE: STP-XXXX-XX...)
TAG TO BE INSTALLED ON SHAFT SIDE OPPOSITE THE MAINLINE HIGHWAY AND LOCATED APPROXIMATELY 48 INCHES ABOVE THE TOP OF BASE PLATE.
7. THE TOP OF THE STRAIN POLE FOUNDATION SHALL BE 6" ABOVE THE GROUND. THE CONTRACTOR SHALL PROVIDE POLES OF SUFFICIENT LENGTH PLUS 2 FEET TO PROVIDE REQUIRED VERTICAL CLEARANCE OF THE TRAFFIC SIGNAL HEADS WITHOUT EXTENDING THE FOUNDATION ABOVE THE GROUND LINE OF THE POINT WHERE THE POLE IS LOCATED, EVEN THOUGH THIS MAY BE BELOW THE FINISHED GRADE OF THE ROADWAY.
8. ALL STRAIN POLES AT AN INTERSECTION SHALL BE THE SAME DIAMETER AND UTILIZE THE SAME BOLT CIRCLE SPACING.
9. POLE FOUNDATIONS AND BASE MOUNTED CABINET FOUNDATIONS, GRADE SHALL BE ESTABLISHED TO ±3" OF EDGE OF PAVEMENT ELEVATION UNLESS APPROVED BY SIGNAL PROJECT ENGINEER.
10. TRAFFIC SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS WITH BLACK BACK PLATES
11. PEDESTRIAN HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS.
12. PEDESTRIAN PUSHBUTTONS SHALL BE EITHER STANDARD PUSHBUTTONS OR APS (ACCESSIBLE PEDESTRIAN SYSTEM) STYLE AS NOTED ON PLANS. SIGNS TO BE INCLUDED IN PAY ITEM FOR PEDESTRIAN PUSHBUTTONS AT NO ADDITIONAL COST. SIDE OF POLE LOCATIONS OF PUSHBUTTONS MAY BE FIELD ADJUSTED. PUSHBUTTON HARDWARE SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS.
13. FIELD DRILL AND TAP EXISTING POLES WHERE PEDESTRIAN SIGNALS AND PUSHBUTTONS ARE REQUIRED ON PLANS. (ABSORBED ITEM).

14. TRAFFIC SIGNAL CABINETS AND CONTROLLERS SHALL BE WIRED TO PROVIDE FOR ALL PHASES INCLUDING FUTURE PHASES IN ACCORDANCE WITH THE PHASE SEQUENCE DIAGRAM.
15. ALL TRAFFIC SIGNAL CONTROLLERS SHALL BE ETHERNET READY, AND COMPATIBLE WITH MDOT'S EXISTING TRAFFIC SIGNAL MANAGEMENT SOFTWARE. ALL TRAFFIC SIGNAL CONTROLLER FIRMWARE SHALL BE CAPABLE OF DELAYING THE ONSET OF THE FLASHING YELLOW ARROW. ALL MMU'S SHALL BE ETHERNET READY, 16 CHANNEL, AND CAPABLE OF RUNNING 12 DIFFERENT MODES OF FLASHING YELLOW ARROW OPERATION. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF MERIDIAN FOR IP ADDRESSES ON ALL NETWORKABLE DEVICES. DEVICES INCLUDE BUT NOT LIMITED TO: CONTROLLER, MMU WITH SDLC CABLE (CONFLICT MONITOR), AND DETECTION UNITS. TRAFFIC SIGNAL CONTROLLER CABINET SHALL HAVE A 16 LOAD BAY FACILITY, REAR ACCESS DOOR, LAPTOP TRAY, AND DUAL POSITION INTERNAL LED LIGHTING. ALL TRAFFIC SIGNAL CONTROLLER CABINETS SHALL HAVE A 5 POSITION CARD RACK AND ONE 175 WATT MINIMUM POWER SUPPLY AND 4 AVAILABLE SLOTS UNLESS OTHERWISE NOTED ON PLANS. SEE 907-632.02.6.1.
16. FOR PROTECTED/PERMITTED LEFT TURN PHASING USING TYPE 2 FYA TRAFFIC SIGNAL HEADS, OPERATION SHALL BE AS FOLLOWS: THE PROTECTED PHASE OF THIS OPERATION SHALL DISPLAY A SOLID GREEN ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THE PERMITTED PORTION OF THIS OPERATION SHALL START WITH A FLASHING YELLOW ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THERE SHALL BE A DELAY (AS DIRECTED BY THE ENGINEER) BETWEEN THE END OF THE PROTECTED PORTION OF THIS OPERATION AND THE BEGINNING OF THE PERMITTED PORTION OF THIS OPERATION. DURING THIS DELAY, THE OPPOSING PHASE THRU HEADS ARE CAPABLE OF DISPLAYING A GREEN BALL. SIGNAL CONTROLLER WITH FIRMWARE NECESSARY TO ACCOMPLISH THIS DELAY SHALL BE PROVIDED.
17. POLES AND FOUNDATIONS OF EXISTING SIGNAL INSTALLATION REMOVALS SHALL BE CUT OFF 6" BELOW GROUND, REMOVED AND AREA RESTORED TO MATCH ADJACENT SURFACE AS DIRECTED BY THE ENGINEER.
18. ALL REMOVED EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS SPECIFIC ITEMS ARE NOTED IN THE PLANS TO BE SALVAGED AS DIRECTED BY THE ENGINEER.
19. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ELECTRICAL SERVICE FROM THE POWER COMPANY SERVICE POINT TO THE POWER SERVICE PEDESTAL. FOR SPAN WIRE INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT AERIAL TO THE SIGNAL POLE NEAREST THE CONTROLLER, THE SERVICE SHALL THEN RUN TO THE CONTROLLER AS SHOWN ON THE PLANS. FOR MAST ARM INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT UNDERGROUND DIRECTLY TO THE POWER SERVICE PEDESTAL, THEN TO THE CONTROLLER CABINET, AS SHOWN ON THE PLANS.
20. POWER SERVICE METER SHALL NOT BE MOUNTED ON THE CONTROLLER CABINET OR MAST ARM POLE SHAFTS. A SEPARATE POWER SERVICE PEDESTAL FOR MOUNTING THESE ITEMS IS REQUIRED. (SEE TSD-6 & TSD-7).
21. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE THE NECESSARY ARRANGEMENTS WITH THE LOCAL POWER COMPANY TO PROVIDE THE POWER SUPPLY ASSEMBLY FOR ANY NEW INSTALLATION. THE CONTRACTOR SHALL PAY FOR, AT NO COST TO THE DEPARTMENT, ALL DEPOSITS, HOOK-UP CHARGES, OR OTHER SERVICE FEES REQUIRED BY THE POWER COMPANY FOR THE ESTABLISHMENT OF NEW SERVICE. THE COST OF ALL SUCH FEES SHALL BE CONSIDERED INCIDENTAL AND ABSORBED WITHIN EXISTING PAY ITEMS. THE DEPARTMENT OR THE LOCAL AGENCY WILL BE RESPONSIBLE FOR PAYMENT OF THE MONTHLY SERVICE BILL FOR THE NEW POWER SERVICE INSTALLATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SWAP THE ELECTRICAL SERVICE ACCOUNT OVER TO THE DEPARTMENT OR LOCAL AGENCY. WHEN ELECTRIC POWER SERVICE EXISTS AND IS USED FOR THE OPERATION OF AN EXISTING SYSTEM, THE MONTHLY SERVICE FEES SHALL CONTINUE TO BE PAID BY THE DEPARTMENT OR THE LOCAL AGENCY. IF THE EXISTING POWER SERVICE IS INTENDED FOR USE WITH A NEW SIGNAL SYSTEM, THEN ANY SERVICE CHARGE FEES

SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SIMILARLY, IF AN EXISTING POWER SERVICE IS TO BE DISCONNECTED, ANY SERVICE CHARGE FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF ALL SUCH FEES SHALL BE CONSIDERED INCIDENTAL AND ABSORBED WITHIN EXISTING PAY ITEMS.

22. WHEN CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SIGNALS TO ACCOMMODATE ROADWAY CONSTRUCTION, IT SHALL BE PAID FOR UNDER PAY ITEM 619-H1, TRAFFIC SIGNAL, LUMP SUM, UNLESS OTHERWISE NOTED ON PLANS.
23. VEHICLE LOOP ASSEMBLIES SHALL BE INSTALLED IN THE TOP LAYER OF BINDER OR EXISTING SURFACE BEFORE THE FINAL SURFACE COURSE IS APPLIED (BASED ON 2" FINAL LIFT MAXIMUM).
24. WHEN RADAR, VIDEO , OR MULTI-SENSOR DETECTION IS USED, THE SYSTEM MAY REQUIRE BOTH STOP BAR AND ADVANCE DETECTION. TSI PLANS SHOW A GENERIC LAYOUT FOR DETECTION; DETECTOR MAY BE RELOCATED PER MANUFACTURER'S RECOMMENDATIONS. THERE SHALL BE NO EXTRA PAY FOR MOVING OF DETECTORS OTHER THAN CABLE LENGTHS. MANUFACTURER TO HAVE FACTORY REP ON SITE DURING INSTALLATIONS UNLESS CERTIFIED BY THE MANUFACTURER. DETECTION CABLE WILL BE MEASURED BY THE LINEAR FOOT, MEASURED HORIZONTALLY ALONG THE CONDUIT, MESSENGER CABLE OR MAST ARM AND VERTICALLY ALONG THE POLE. DETECTION CABLE FOR CAMERAS, THE POWER AND VIDEO CABLE MAY BE IN THE SAME JACKET. ALL DETECTION UNITS SHALL BE NETWORKABLE DEVICES AND BE ON THE MDOT NETWORK IF NOTED ON PLANS.
25. ALL GROUNDING EQUIPMENT SHALL BE COST ABSORBED.
26. MESSENGER CABLE AND OTHER SUPPORTING DEVICES WHERE REQUIRED SHALL BE ABSORBED IN THE PAY ITEMS FOR SIGNAL CABLE.
27. THE CONTRACTOR SHALL STAKE THE LOCATION OF EACH POLE FOUNDATION AND NOTIFY THE PROJECT ENGINEER FOR CONCURRENCE IN THE LOCATION BEFORE PROCEEDING WITH THE PURCHASE OF THE POLE.
28. THE CONTRACTOR SHALL BE REQUIRED TO ADEQUATELY AND COMPLETELY COVER TRAFFIC SIGNAL HEADS DURING TIMES THAT THEY ARE NOT IN OPERATION WITH A DURABLE, OUTDOOR- HARDENED MATERIAL THAT CONTRASTS WITH THE COLOR OF THE HEAD THAT CLEARLY DESIGNATES THAT THE SIGNAL IS NOT IN "STOP AND GO" MODE. HEAD COVERS ARE TO BE APPROVED BY THE ENGINEER.
29. A NEW TRAFFIC SIGNAL INSTALLATION SHALL BE PUT IN FLASH OPERATION FOR A PERIOD OF THREE (3) TO SEVEN (7) DAYS PRIOR TO THE ACTIVATION OF THE SIGNAL'S "STOP AND GO" OPERATION. ACTIVATION OF NEW TRAFFIC SIGNALS SHALL BE DURING A MID-WEEK WEEKDAY (TUESDAY – THURSDAY) DURING A NON-PEAK TIME AND SHALL BE COORDINATED WITH THE ENGINEER. UPON INITIAL INSPECTION AND ACCEPTANCE TESTING OF THE NEW TRAFFIC SIGNAL INSTALLATION, THE CONTRACTOR SHALL REQUEST THE START OF THE 30 DAY BURN-IN PERIOD TO COMMENCE, AS OUTLINED IN SUBSECTION 631.03.4 OF THIS SPECIFICATION. ANY NOTED DEFICIENCIES FOUND WITHIN THAT 30 DAY PERIOD SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER. THE 30 DAY BURN-IN PERIOD MUST COMMENCE WITHIN THE CONTRACT TIME, AND BEFORE SUBSTANTIAL COMPLETION OF THE PROJECT IS GRANTED.
30. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING FINAL INSPECTION MEETING WITH DISTRICT OFFICE, PROJECT OFFICE AND TRAFFIC ENGINEERING FOR SIGNAL PORTION OF THE PROJECT.



TRAFFIC SIGNAL GENERAL NOTES

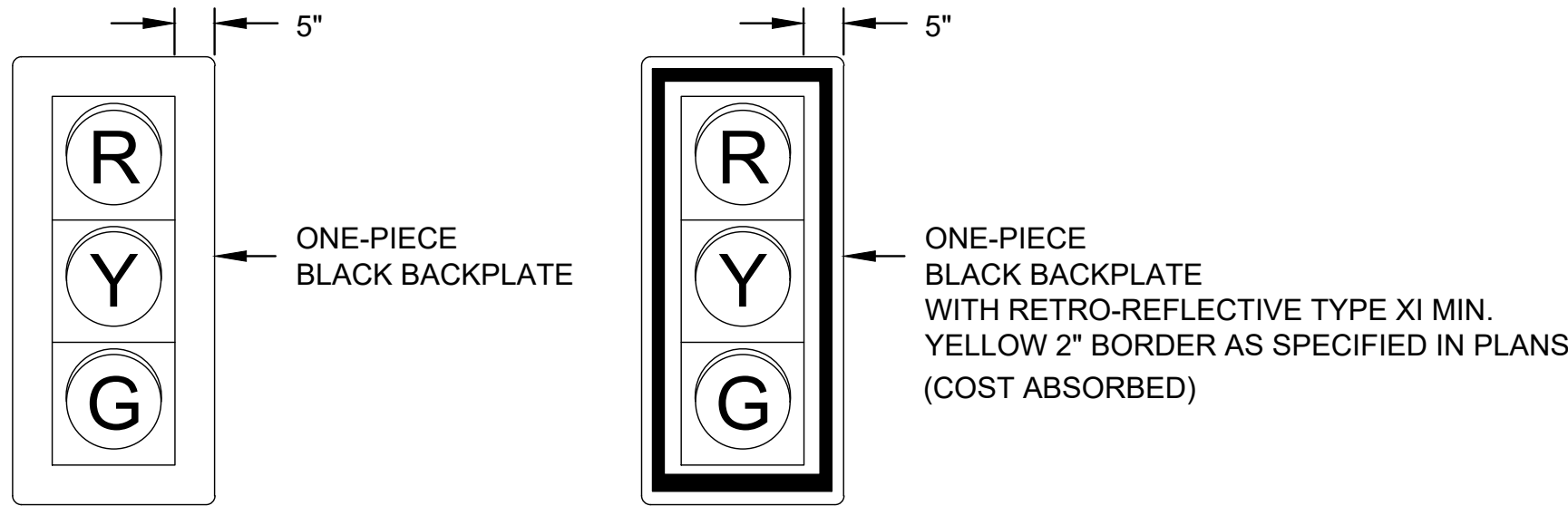
WORKING NUMBER:	DRAWING NUMBER:
TSD-1	35

DETAIL OF TYPICAL TRAFFIC SIGNAL HEADS

TYPE 1	TYPE 2	TYPE 2A FYA	TYPE 2B FYA	TYPE 3	TYPE 4	TYPE 6	TYPE 7	TYPE H

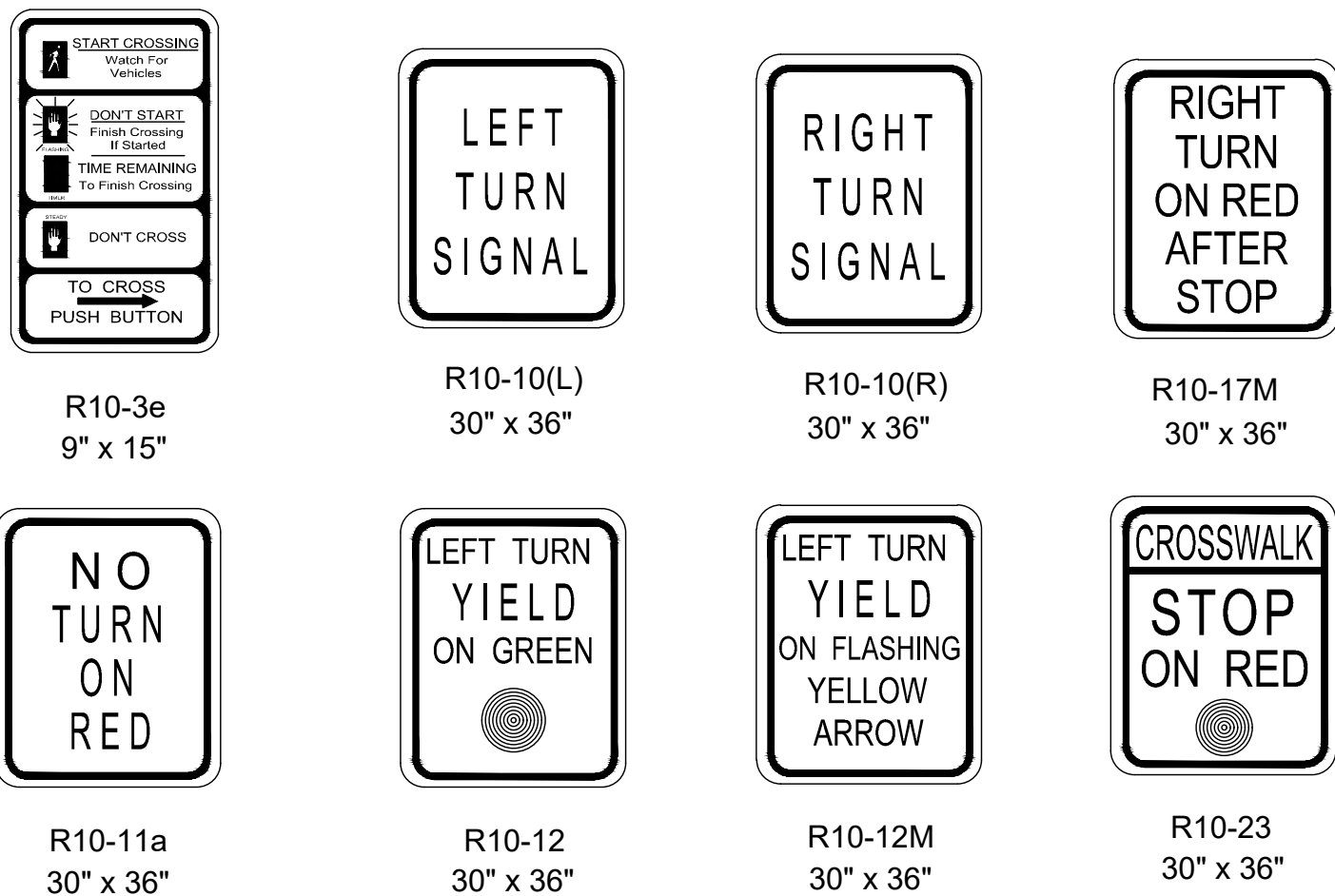
- NOTES:
- ALL SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON THE PLANS.
 - ALL SIGNAL HEADS SHALL BE L.E.D. LENSES UNLESS OTHERWISE NOTED ON THE PLANS. TYPE "A" SIGNAL HEAD IS TO BE GEOMETRICALLY PROGRAMMED VIA LOUVERS.
 - LETTER "R" ON HEAD TYPES MEANS RIGHT TURN ARROW(S).
 - TYPE 6 SIGNAL HEAD SYMBOLS/NUMBERS SHALL BE FULLY ILLUMINATED (NO OUTLINE SYMBOLS ALLOWED). THERE IS A SEPARATE PAY ITEM FOR PEDESTRIAN PUSHBUTTON. PEDESTRIAN PUSHBUTTON SHALL BE FURNISHED WITH R10-3e SIGN. (COST ABSORBED).
 - ALL FYA SIGNAL HEAD SHALL BE FURNISHED WITH R10-12M SIGN. WHEN NOTED ON PLANS, TYPE 4 & 5 SIGNAL HEADS SHALL BE FURNISHED WITH R10-10L, R10-10R, OR R10-17M SIGN. TYPE 7 SIGNAL HEAD SHALL BE FURNISHED WITH R10-12 SIGN. TYPE 7 R REQUIRES NO SIGN. TYPE H SIGNAL HEAD SHALL BE FURNISHED WITH R10-23 SIGN WHEN INDICATED ON PLANS. COST OF SIGNAL SIGNS, MOUNTING BRACKETS, HARDWARE, AND LABOR SHALL BE COST ABSORBED.
 - FOR SPAN WIRE INSTALLATION, THE HOUSING FOR THE RED INDICATION OF A TYPE 7 HEAD, SHALL BE ALUMINUM.

DETAIL OF TRAFFIC SIGNAL WITH BACKPLATE



NOTE:
ALL SIGNAL HEADS SHALL INCLUDE BACKPLATES AND VISORS
UNLESS OTHERWISE NOTED ON TRAFFIC SIGNAL INSTALLATION SHEETS.

DETAIL OF TYPICAL TRAFFIC SIGNAL SIGNS

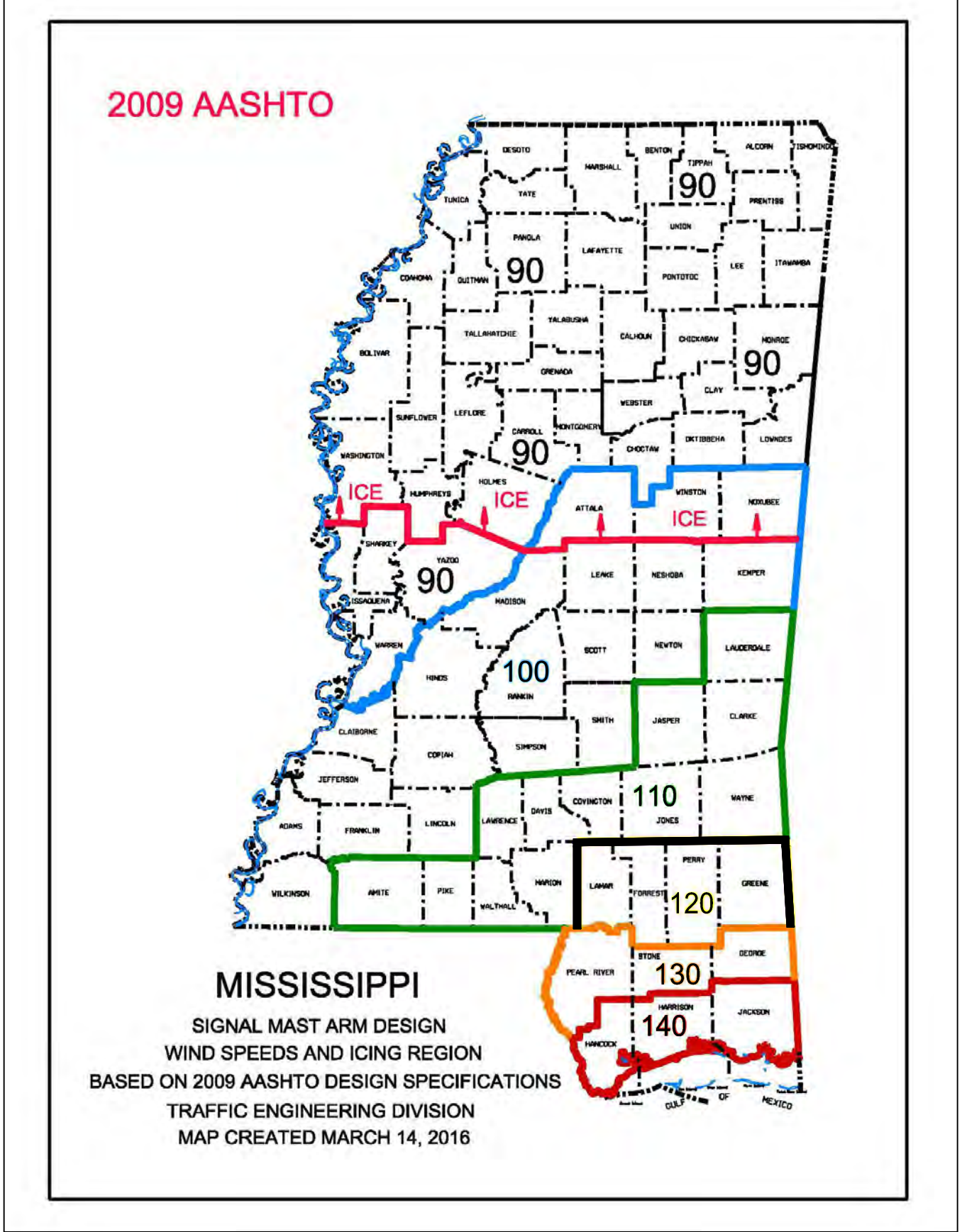


- NOTES:
- ALUMINUM SIGN BLANKS ARE TO BE ALUMINUM ALLOY 5052-H38 AND 0.10" THICK.
 - THE SIGNS SHALL BE SUPPLIED WITH MOUNTING BRACKETS AND HARDWARE AS REQUIRED.
 - NUMBER 12 PLATED JACK CHAINS SHALL BE ATTACHED TO THE BOTTOM OF ALL SPAN WIRE MOUNTED SIGNS.
 - CHAINS SHALL BE ATTACHED TO SIGN AND TETHER USING "S" HOOKS.
 - THE SIZE OF THE SIGN BLANK, LEGEND, BORDER AND THE COLOR OF THE BACKGROUND AND LEGEND IS TO CONFORM TO THE M.U.T.C.D. (LATEST EDITION).
 - REFLECTIVE SHEETING FOR TRAFFIC SIGNS SHALL BE TYPE XI PRISMATIC RETROREFLECTIVE SHEETING.

SIGNAL PLAN LEGEND

	SIGNAL HEAD REQUIRED / TYPE
	PEDESTRIAN HEAD REQUIRED
	EXISTING SIGNAL HEAD
	SIGN
	VEHICLE LOOP DETECTOR
	QUADRAPOLE VEHICLE LOOP DETECTOR
	VEHICLE LOOP DETECTOR NUMBER
	WIRELESS MAGNETOMETER SENSOR
	BASE MOUNTED CABINET FOR SIGNAL CONTROLLER
	POLE MOUNTED CABINET FOR SIGNAL CONTROLLER
	EXISTING POLE
	POLE REQUIRED
	NEW PEDESTAL POLE
	MAST ARM POLE REQUIRED
	EXISTING PULLBOX
	PULLBOX REQUIRED (TYPE SPECIFIED ON PLAN SHEETS)
	RADAR DETECTOR (RD)
	VIDEO DETECTOR (VD)
	MULTI SENSOR DETECTOR (MS)
	OPTICAL DETECTOR UNIT
	CONDUIT
	ROLL PIPE
	LUMINAIRE
	DECORATIVE LUMINAIRE
	GROUND MOUNTED PEDESTAL SERVICE PANEL
	RADIO INTERCONNECT ANTENNA
	TWO-WAY WIRELESS ANTENNA
	WIRELESS REPEATER
	GRIDSMART DETECTION CAMERA
	PTZ / FIXED CAMERA
	P.B. PUSH BUTTON
	S.C. SHIELDED CABLE
	POW POWER CABLE
	LUM LUMINAIRE POWER CABLE
	ODC OPTICAL DETECTOR CABLE
	8c NUMBER OF CONDUCTORS
	I.C. INTERCONNECT CABLE
	RAD RADIO COMMUNICATIONS CABLE
	FO FIBER OPTIC CABLE (72 SM)
	FO DROP FIBER DROP CABLE (12 SM)
	DC DETECTION CABLE
	STOP BAR DETECTION ZONE
	ADVANCED DETECTION ZONE

WIND SPEEDS AND ICING REGION MAP



2009/2013 AASHTO WIND LOAD LIST BY COUNTY

COUNTY	BASIC WIND SPEED MPH	ICE LOADING REQD
Adams	100	NO
Alcorn	90	YES
Amite	110	NO
Attala	100	YES
Benton	90	YES
Bolivar	90	YES
Calhoun	90	YES
Carroll	90	YES
Chickasaw	90	YES
Choctaw	90	YES
Claiborne	100	NO
Clarke	110	NO
Clay	90	YES
Coahoma	90	YES
Copiah	90	NO
Covington	110	NO
DeSoto	90	YES
Forrest	120	NO
Franklin	100	NO
George	130	NO
Greene	120	NO
Grenada	90	YES
Hancock	140	NO
Harrison	140	NO
Hinds	100	NO
Holmes	90	YES
Humphreys	90	YES
Issaquena	90	NO
Itawamba	90	YES
Jackson	140	NO
Jasper	110	NO
Jefferson	100	NO

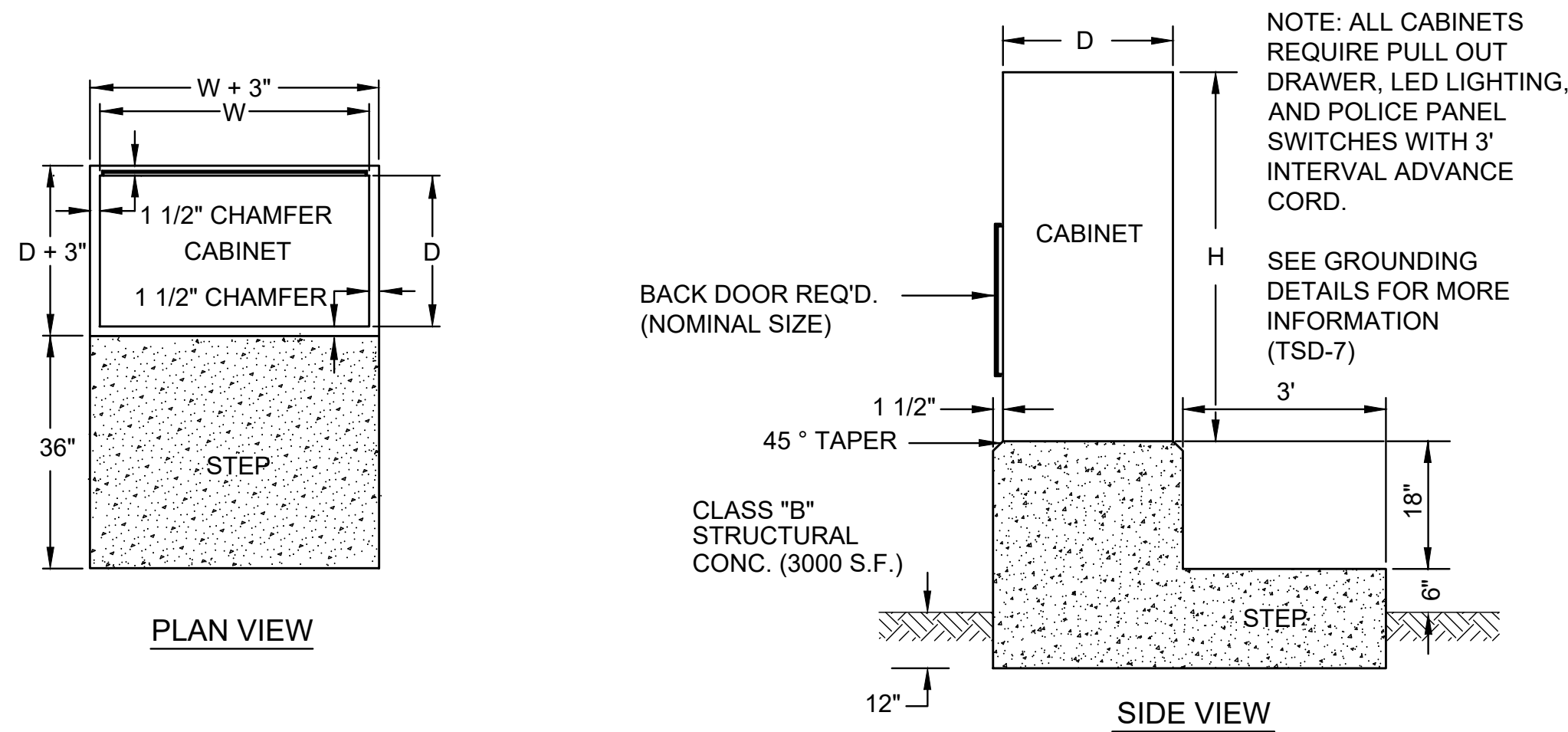
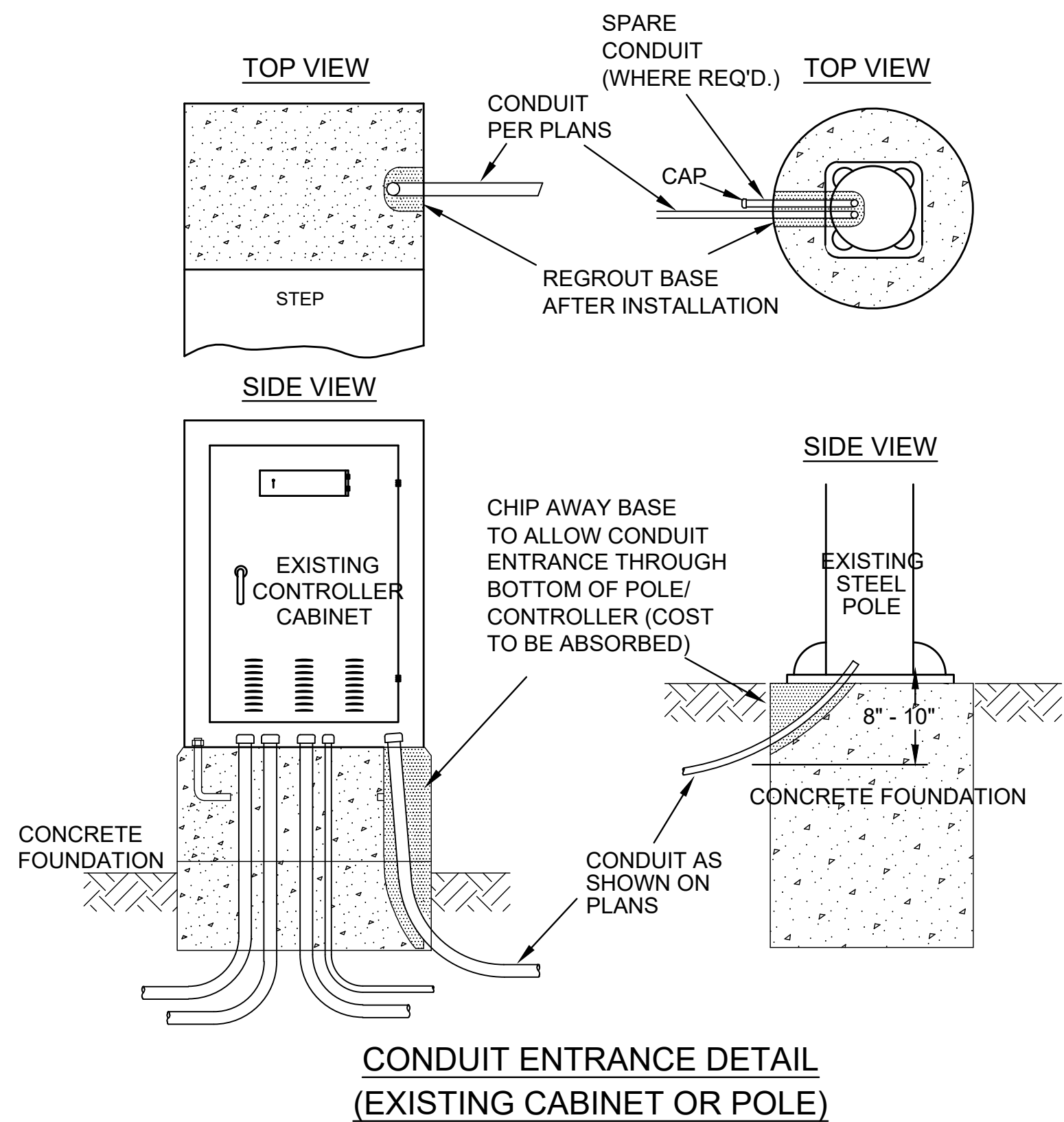
COUNTY	BASIC WIND SPEED MPH	ICE LOADING REQD
Jefferson Davis	110	NO
Jones	110	NO
Kemper	100	NO
Lafayette	90	YES
Lamar	120	NO
Lauderdale	110	NO
Lawrence	110	NO
Leake	100	NO
Lee	90	YES
Leflore	90	YES
Lincoln	100	NO
Lowndes	90	YES
Madison	100	NO
Marion	110	NO
Marshall	90	YES
Monroe	90	YES
Montgomery	90	YES
Neshoba	100	NO
Newton	100	NO
Noxubee	100	YES
Oktibbeha	90	YES
Panola	90	YES
Pearl River	130	NO
Perry	120	NO
Pike	110	NO
Pontotoc	90	YES
Prentiss	90	YES
Quitman	90	YES
Rankin	100	NO
Scott	100	NO
Sharkey	90	NO
Simpson	100	NO
Smith	100	NO
Stone	130	NO
Sunflower	90	YES
Tallahatchie	90	YES
Tate	90	YES
Tippah	90	YES
Tishomingo	90	YES
Tunica	90	YES
Union	90	YES
Walthall	110	NO
Warren	90	NO
Washington	90	YES
Wayne	110	NO
Webster	90	YES
Wilkinson	100	NO
Winston	100	YES
Yalobusha	90	YES
Yazoo	90	NO



TRAFFIC SIGNAL GENERAL NOTES

WORKING NUMBER:
TSD-2

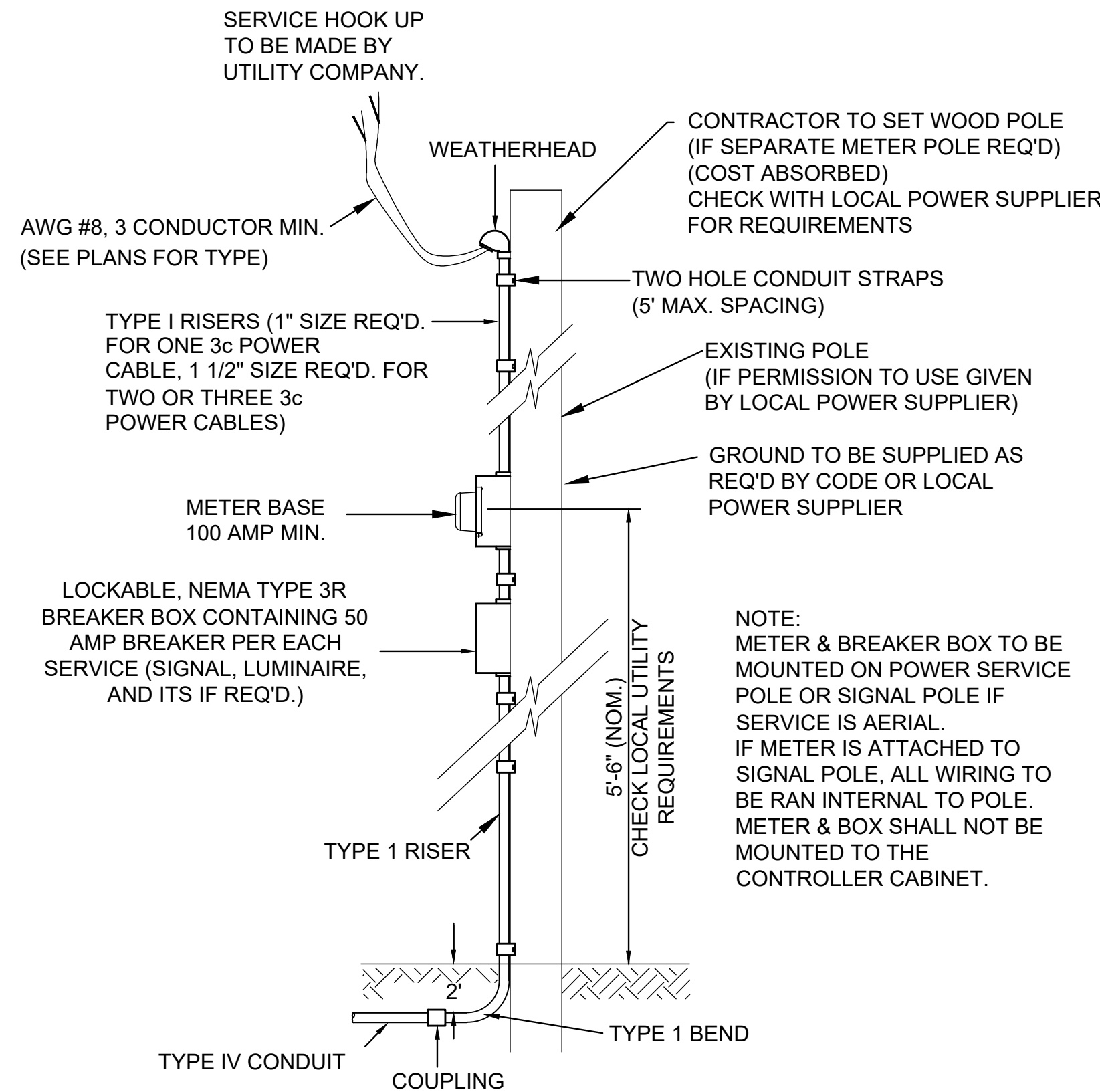
DRAWING NUMBER:
36



CABINET INFORMATION

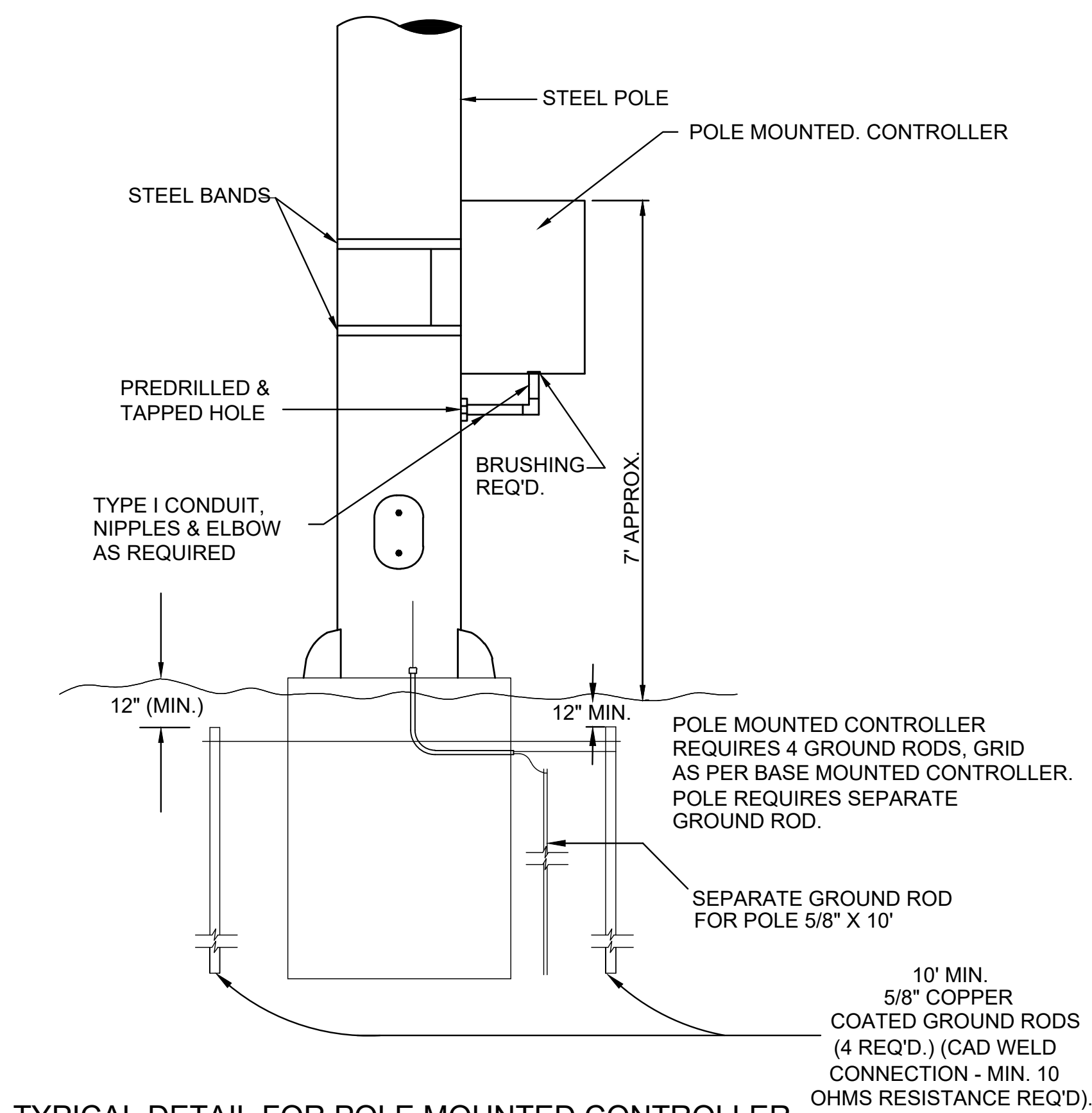
TYPE	SIZE (MIN.)	LOAD BAY
TYPE I CABINET	51"H x 30"W x 18"D	8 POSITION
TYPE II CABINET	51"H x 36"W x 18"D	12 POSITION
TYPE III CABINET	56"H x 44"W x 27"D	16 POSITION
TYPE IV CABINET	56"H x 57"W x 29"D	16 POSITION
TYPE V CABINET	77"H x 44"W x 27"D	16 POSITION

TYPE I AND II MAY BE POLE OR BASE MOUNTED, ALL OTHERS ARE BASE MOUNT. CONTRACTOR TO VERIFY CABINET SIZE BEFORE POURING FOUNDATION.



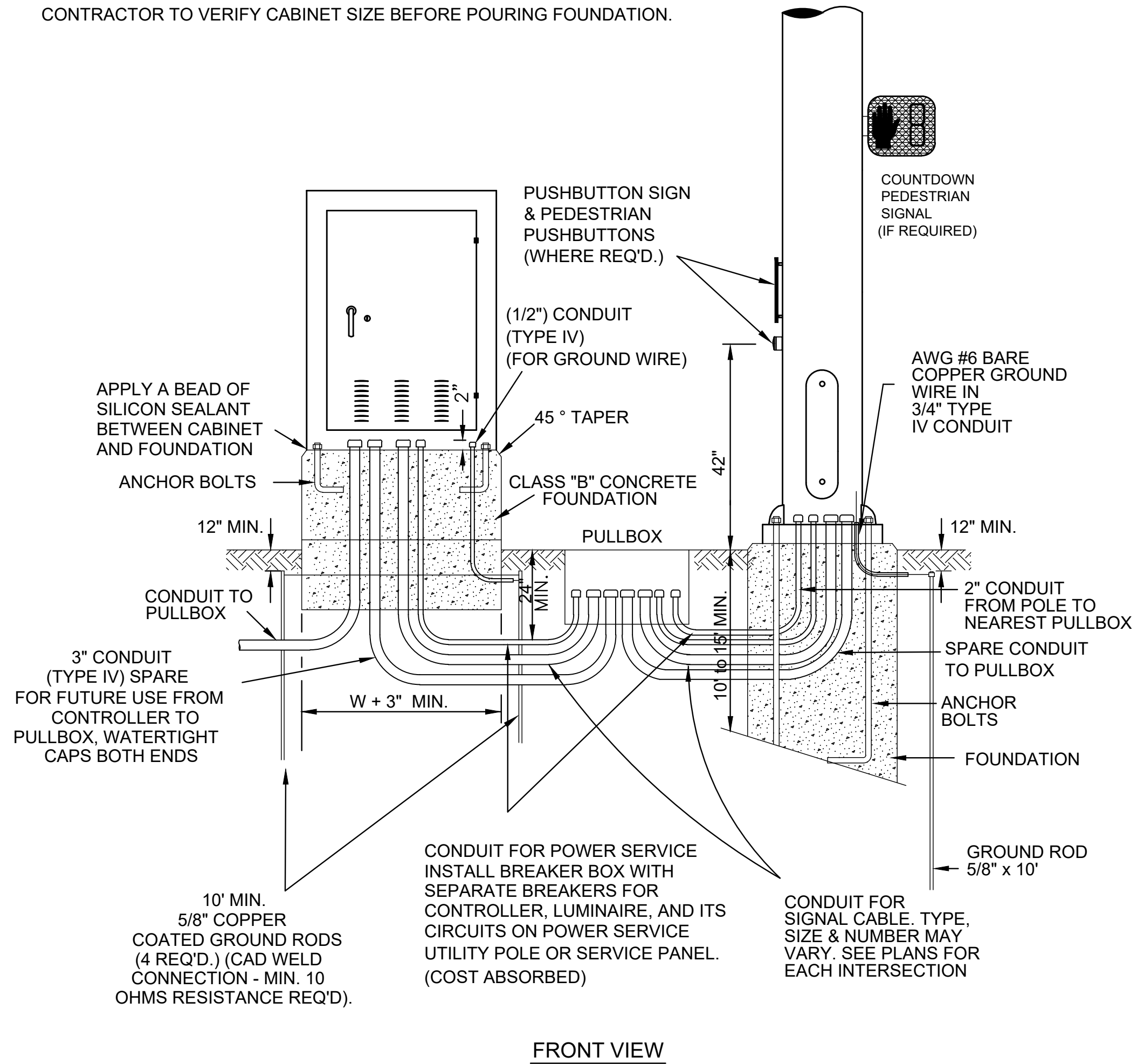
POWER SERVICE DETAIL

TO BE USED FOR SERVICE DOWN POLE OR WHEN METER IS SET ON POLE. SEE TSD-7 FOR POWER SERVICE PEDESTAL DETAILS.



TYPICAL DETAIL FOR POLE MOUNTED CONTROLLER

NOT TO SCALE



FRONT VIEW

TYPICAL DETAIL OF BASE FOR CONTROLLER EQUIPMENT CABINET

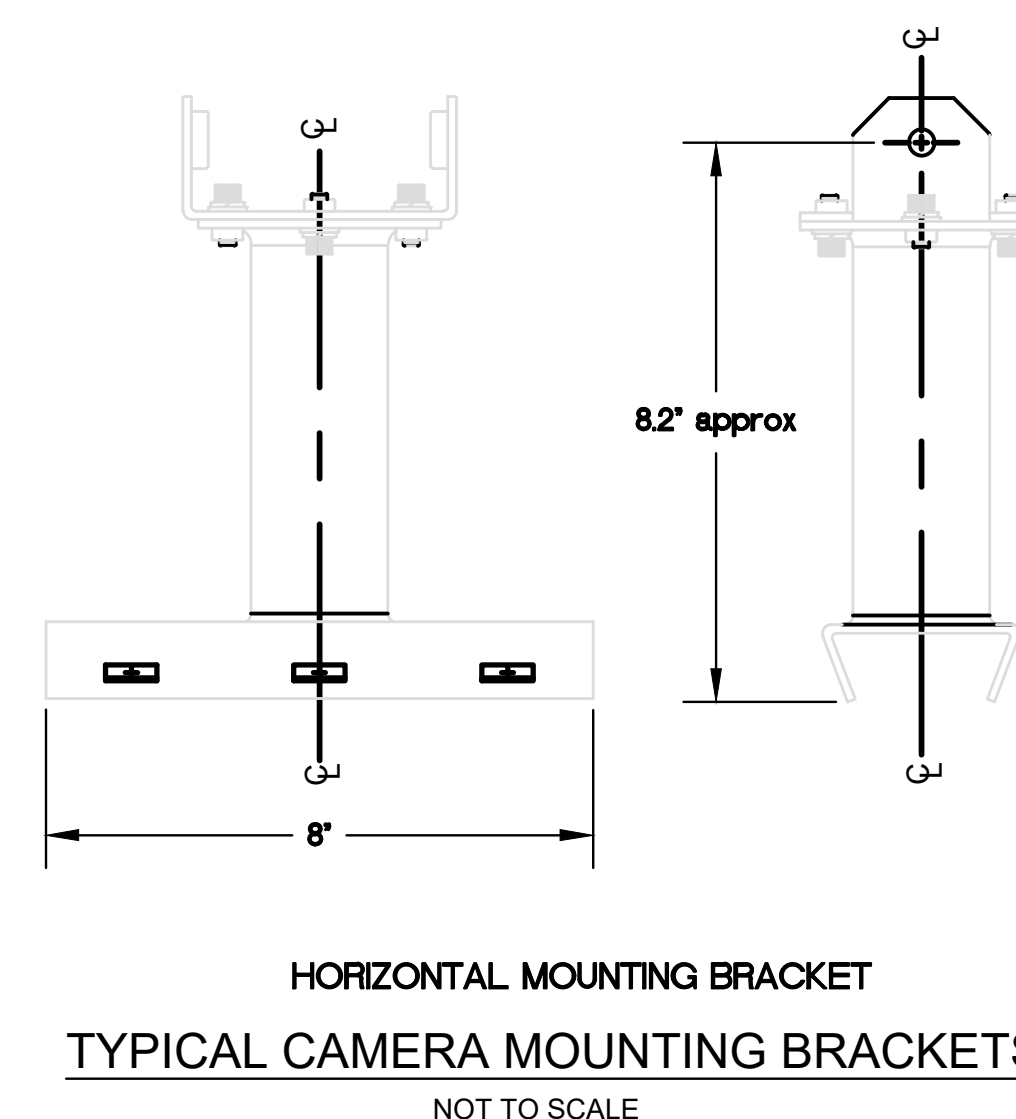
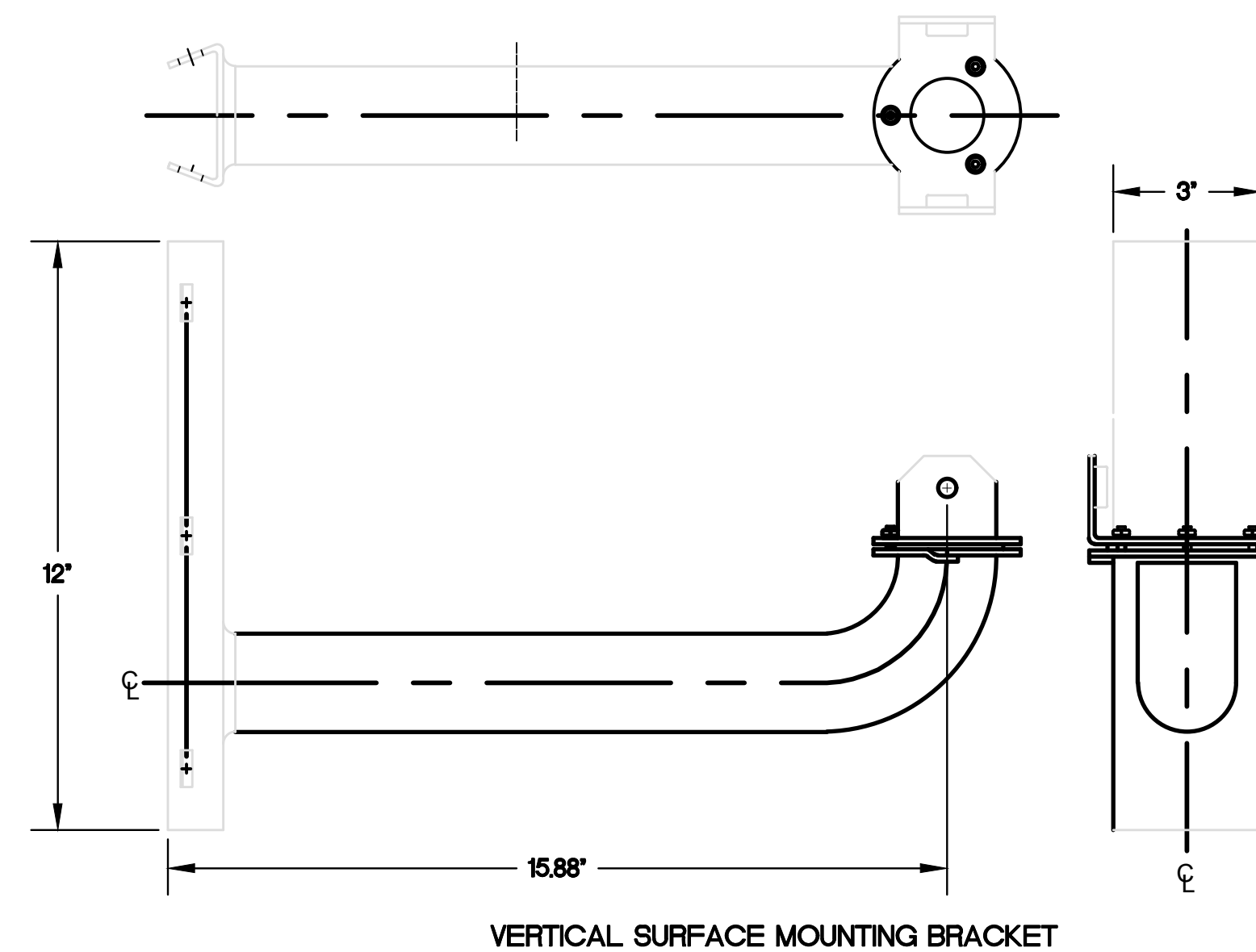
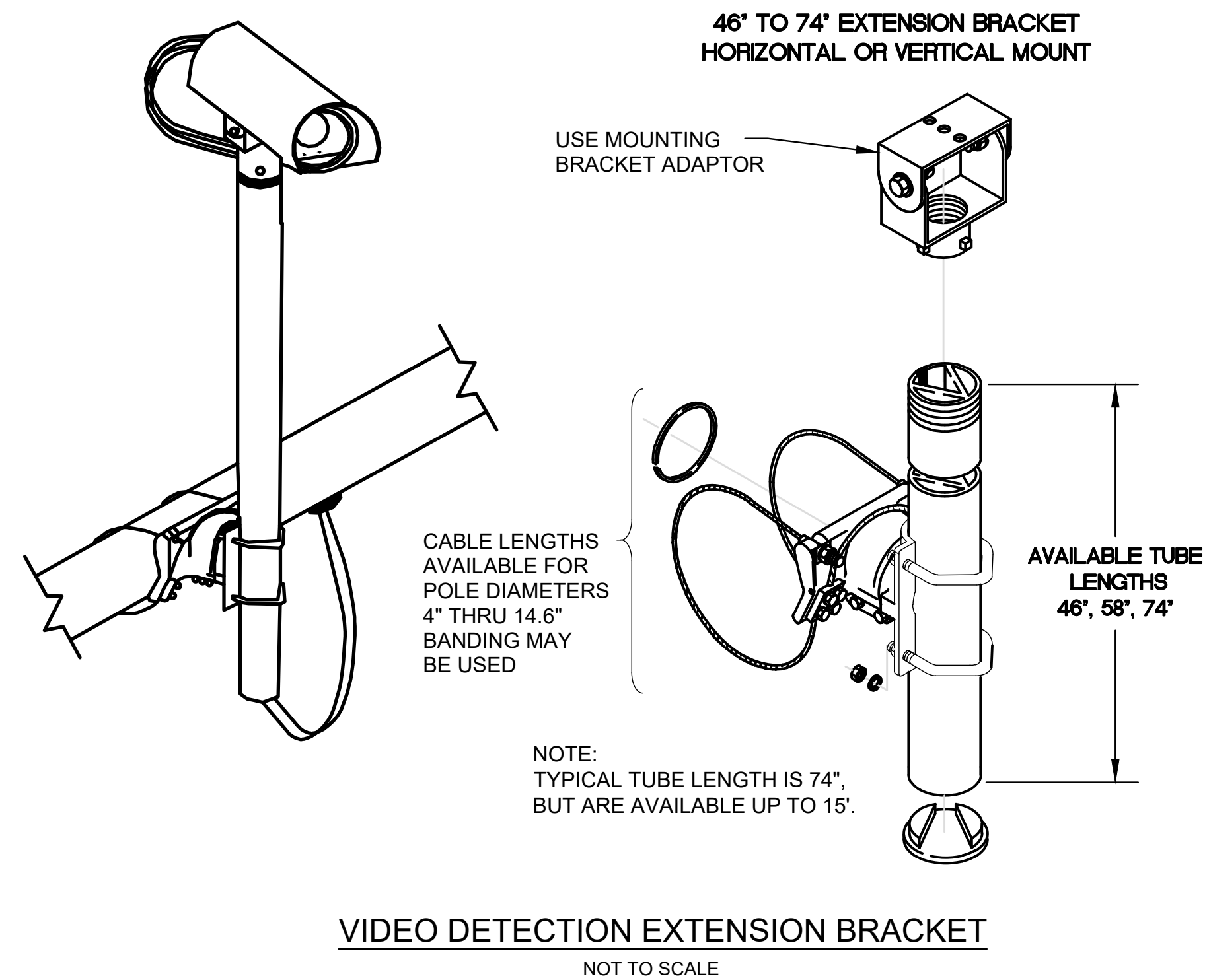
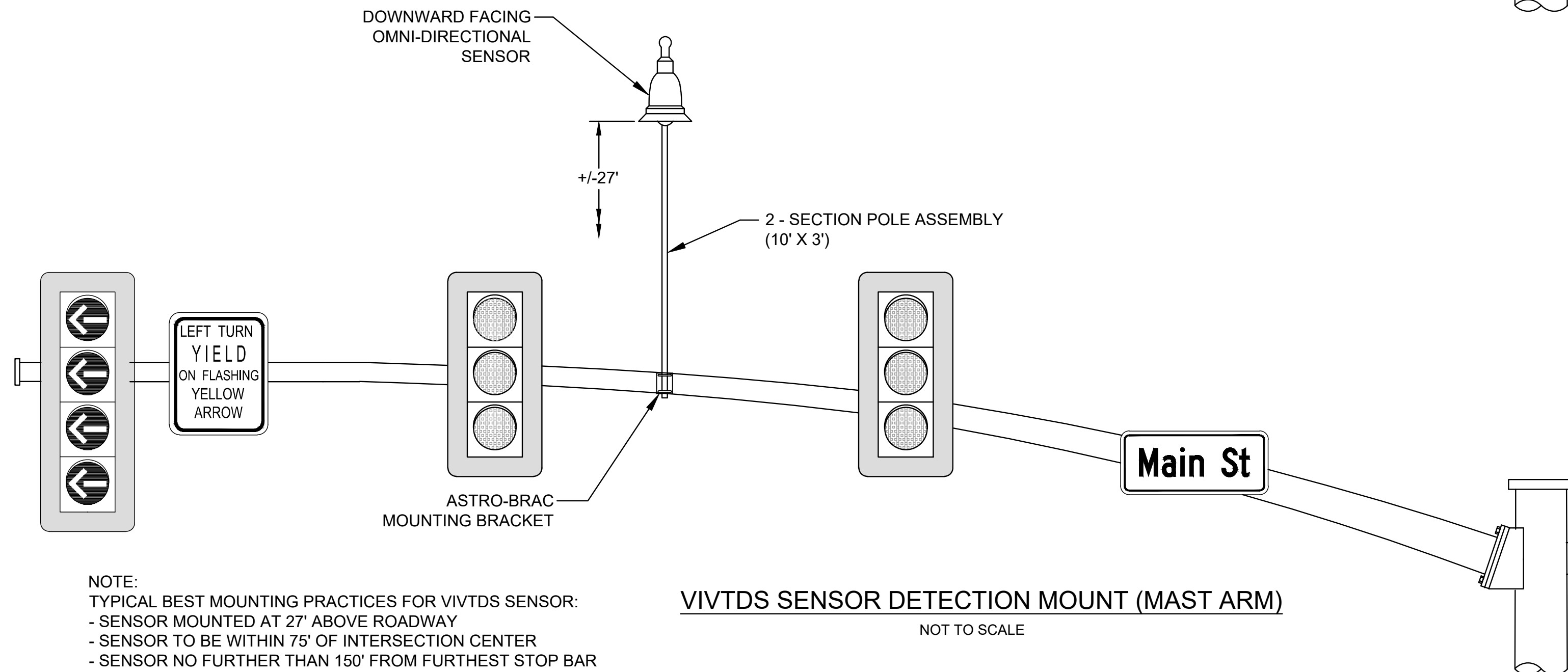
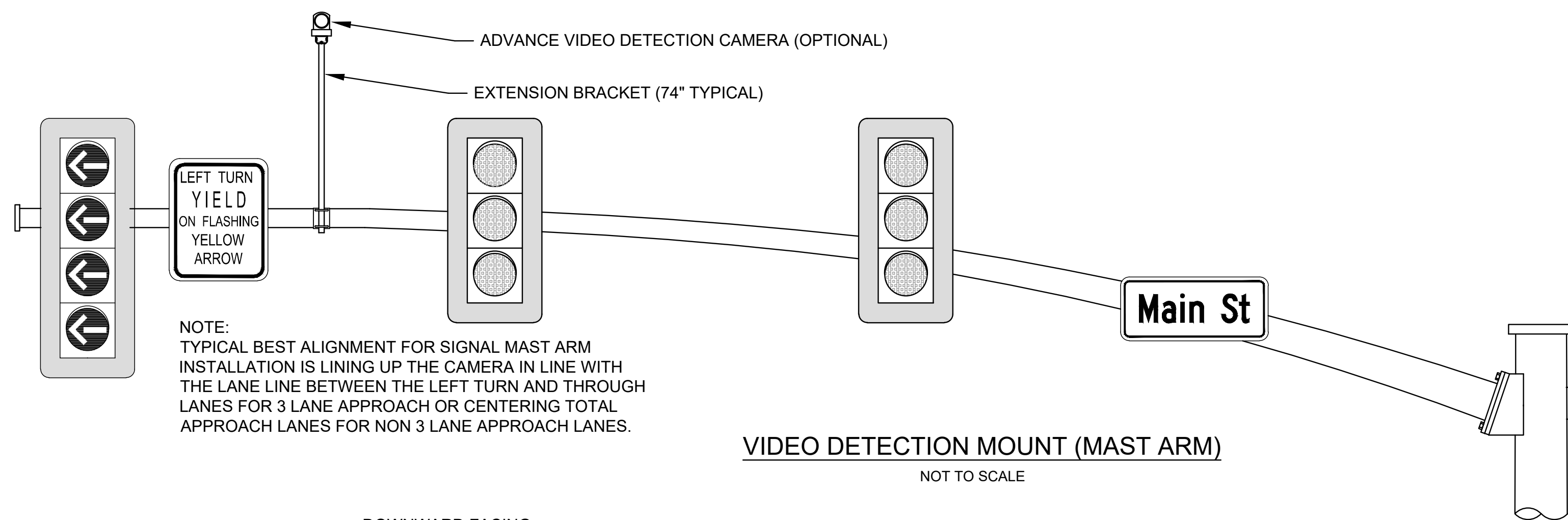
NOT TO SCALE



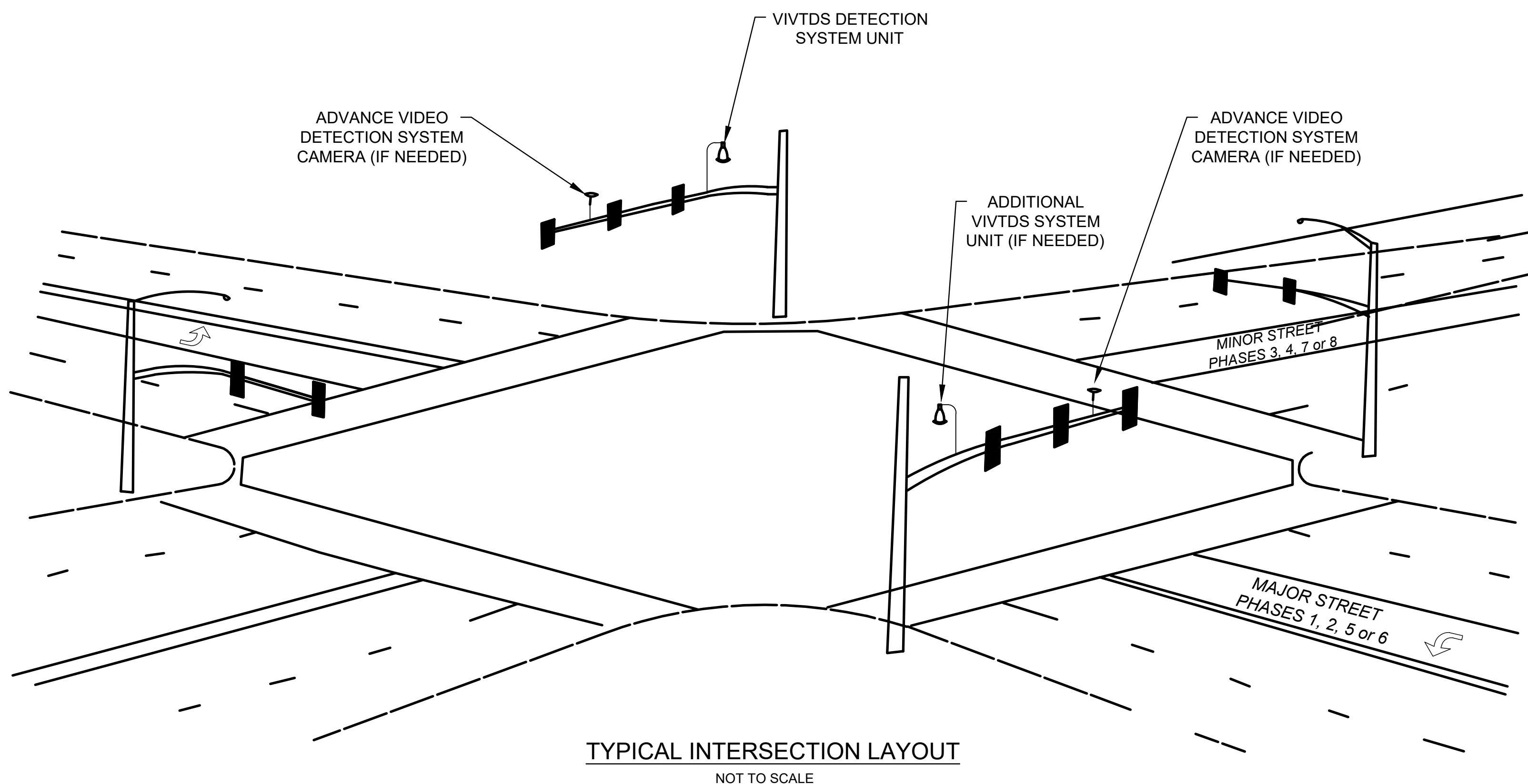
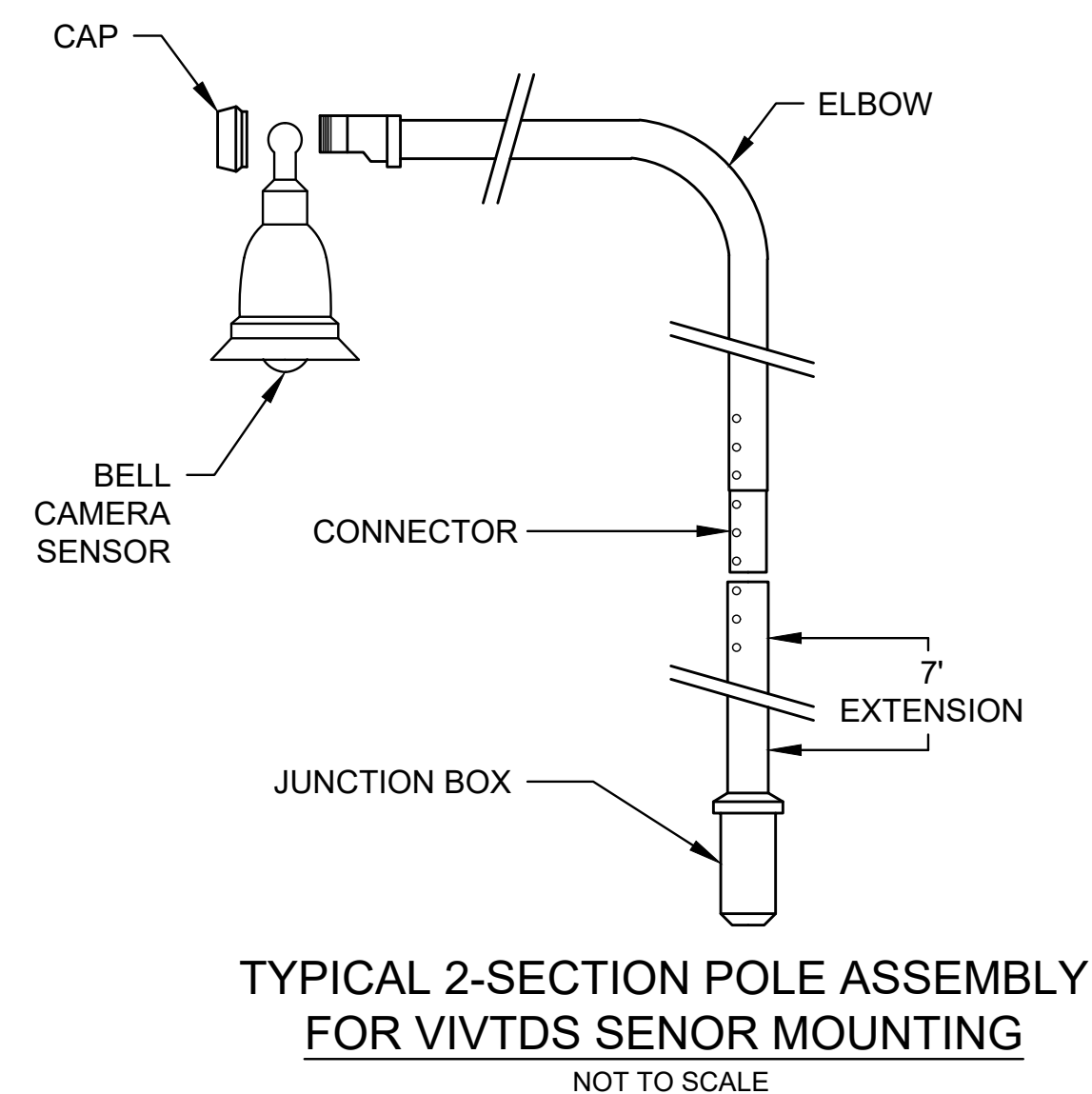
NEEL-SCHAFER
Solutions you can build upon

**CONTROLLER
CABINET
AND POWER
SERVICE DETAILS**

WORKING NUMBER: TSD-6	DRAWING NUMBER: 37
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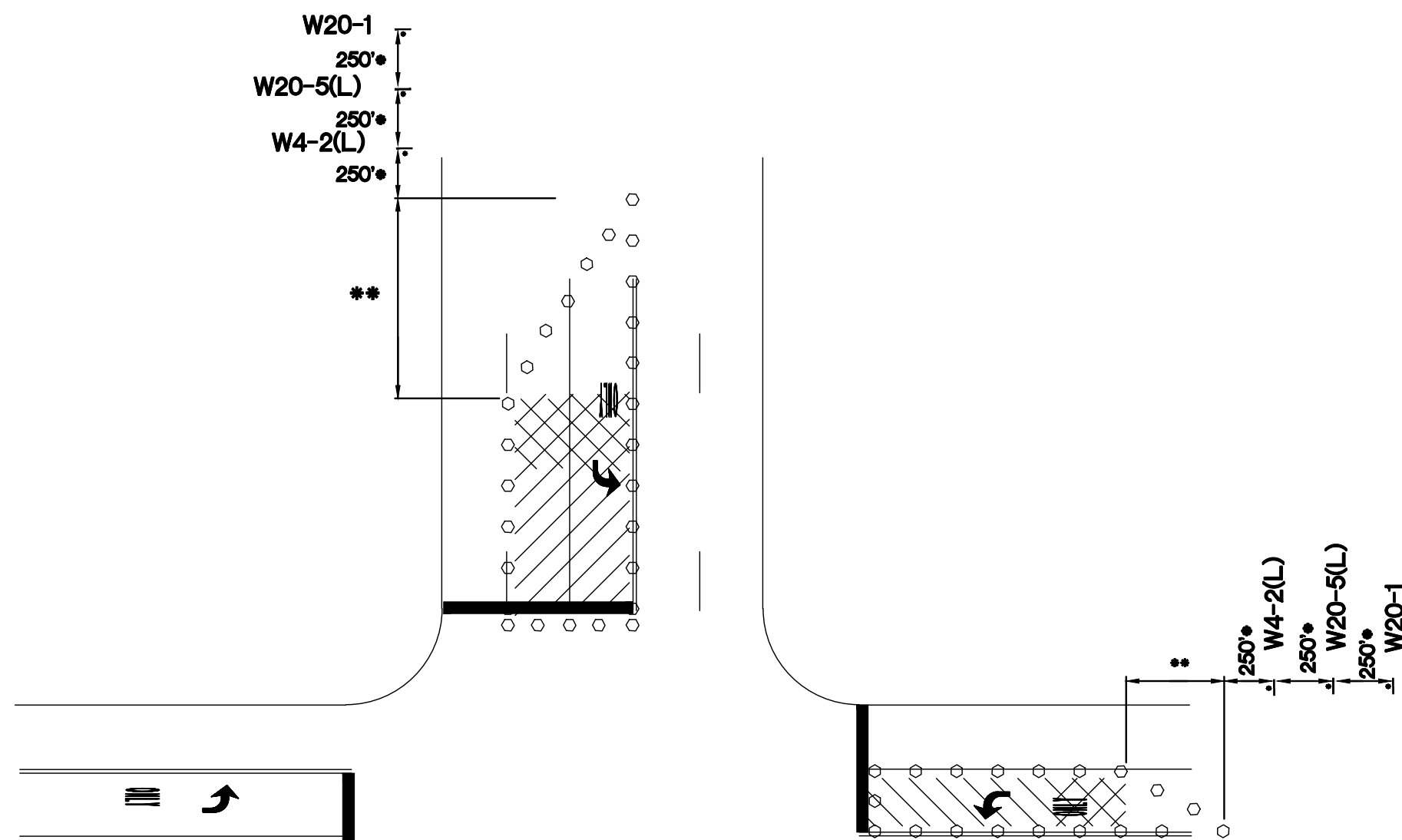
- GENERAL NOTES:
1. TYPE 3 VIDEO VEHICLE DETECTION (VIVTDS) WILL PROVIDE PRESENCE OR PULSE DETECTION OF VEHICLES, BICYCLES, AND PEDESTRIANS FOR TRAFFIC SIGNAL CONTROLLER INPUTS. TYPE 3 VIVTDS DETECTOR SHALL BE A SINGLE SENSOR HAVING A FISHEYE LENS FOR OMNIDIRECTIONAL VIEWING OF ROADWAY OR INTERSECTION. THE WORK SHALL CONSIST OF PROVIDING ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO FURNISH, INSTALL, AND TEST THE VIDEO VEHICLE DETECTION EQUIPMENT, COMPLETE AND READY FOR SERVICE.
 2. INSTALL VIDEO DETECTION PROCESSOR UNIT(S) INSIDE CONTROLLER CABINET UNLESS OTHERWISE NOTED ON PLANS.
 3. AIM THE CAMERA SO THE HORIZON IS NOT VISIBLE IN THE FIELD OF VIEW.
 4. INSURE WATER -TIGHT CABLE ENTRY AND EXIT POINTS FOR CONNECTIONS.
 5. CONTRACTOR TO USE MANUFACTURE'S SUPPLIED OR APPROVED CABLE, CONNECTIONS AND MOUNTING HARDWARE.
 6. DETECTION SUPPLIER TO ASSIST CONTRACTOR WITH INFORMATION ON BEST MOUNTING POSITION (LOCATION ON ARM, MOUNTING HEIGHT, ETC.).
 7. POWER AND VIDEO CABLE PROVIDED SHALL BE AS RECOMMENDED BY THE MANUFACTURER FOR OPTIMAL VIDEO DETECTION PERFORMANCE. THE POWER AND VIDEO CABLE MAY BE INSTALLED UNDER THE SAME OUTER JACKET. THE CABLES WILL BE MEASURED BY THE LINEAR FOOT, MEASURED HORIZONTALLY ALONG THE CONDUIT, MESSENGER CABLE OR MAST ARM AND VERTICALLY ALONG THE POLE.
 8. SURGE PROTECTION DEVICES SHALL BE PROVIDED FOR ALL NEW OR ADDED VIDEO DETECTION DEVICES AS RECOMMENDED BY THE MANUFACTURER.
 9. ALL DETECTION UNITS SHALL BE NETWORKABLE DEVICES AND BE ON THE MDOT NETWORK IF NOTED ON PLANS.



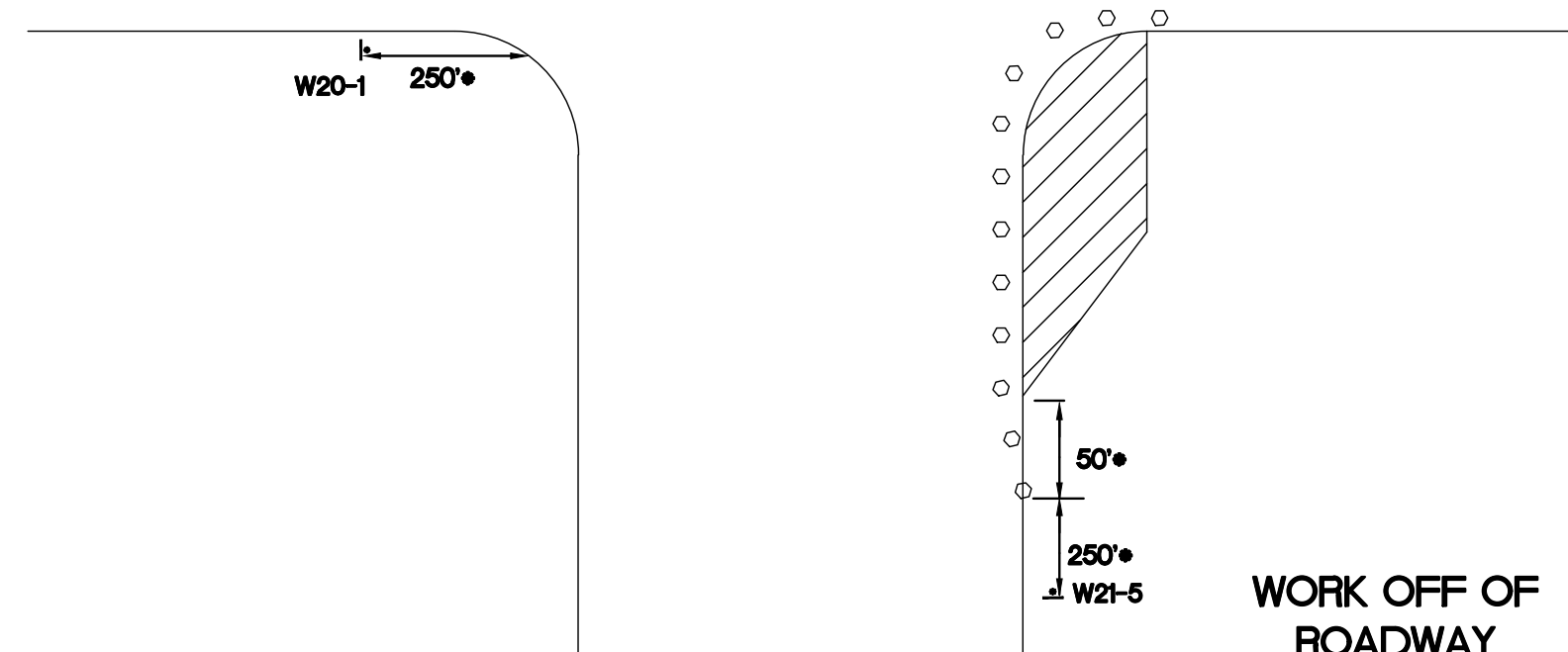
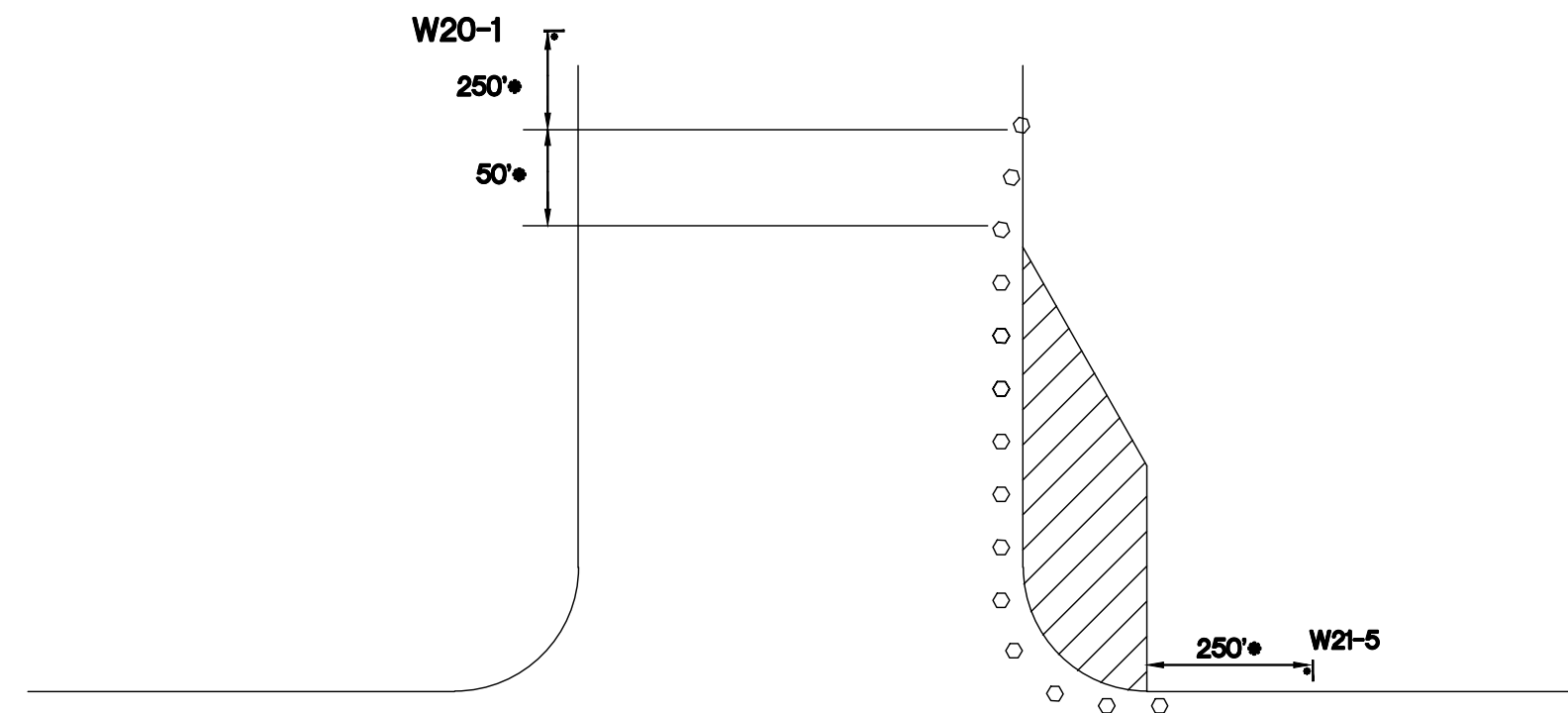
NEEL-SCHAFER
Solutions you can build upon

DETECTION INSTALLATION FOR TRAFFIC SIGNALS

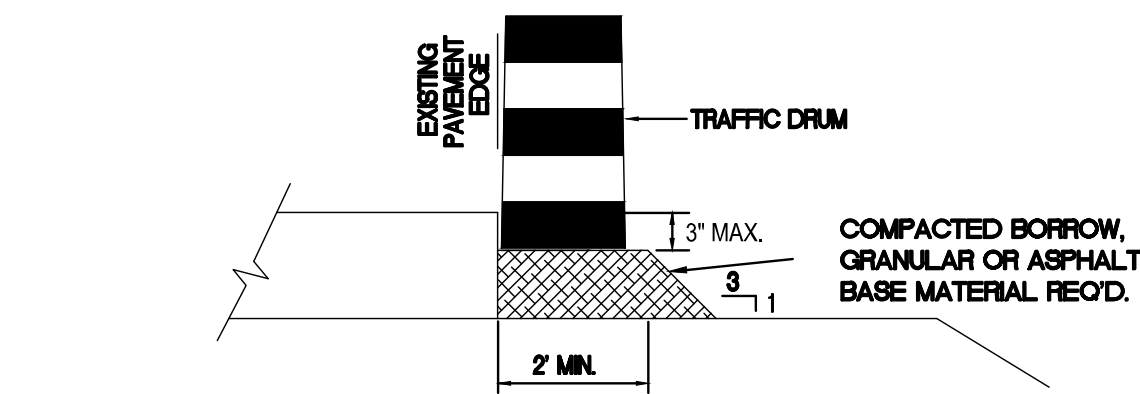
WORKING NUMBER: TSD-9	DRAWING NUMBER: 38
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LEFT OR
CENTER LANE
BLOCKED NEAR
SIDE and/or
FAR SIDE
(NOT TO SCALE)

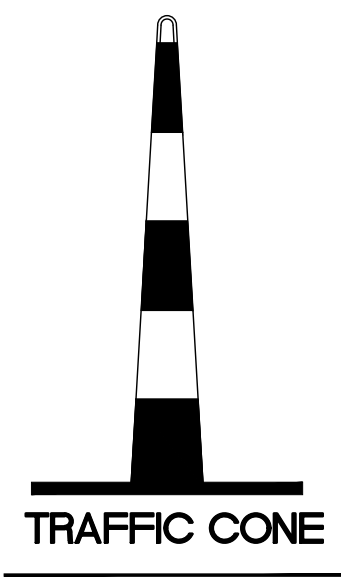


WORK OFF OF
ROADWAY
(NOT TO SCALE)



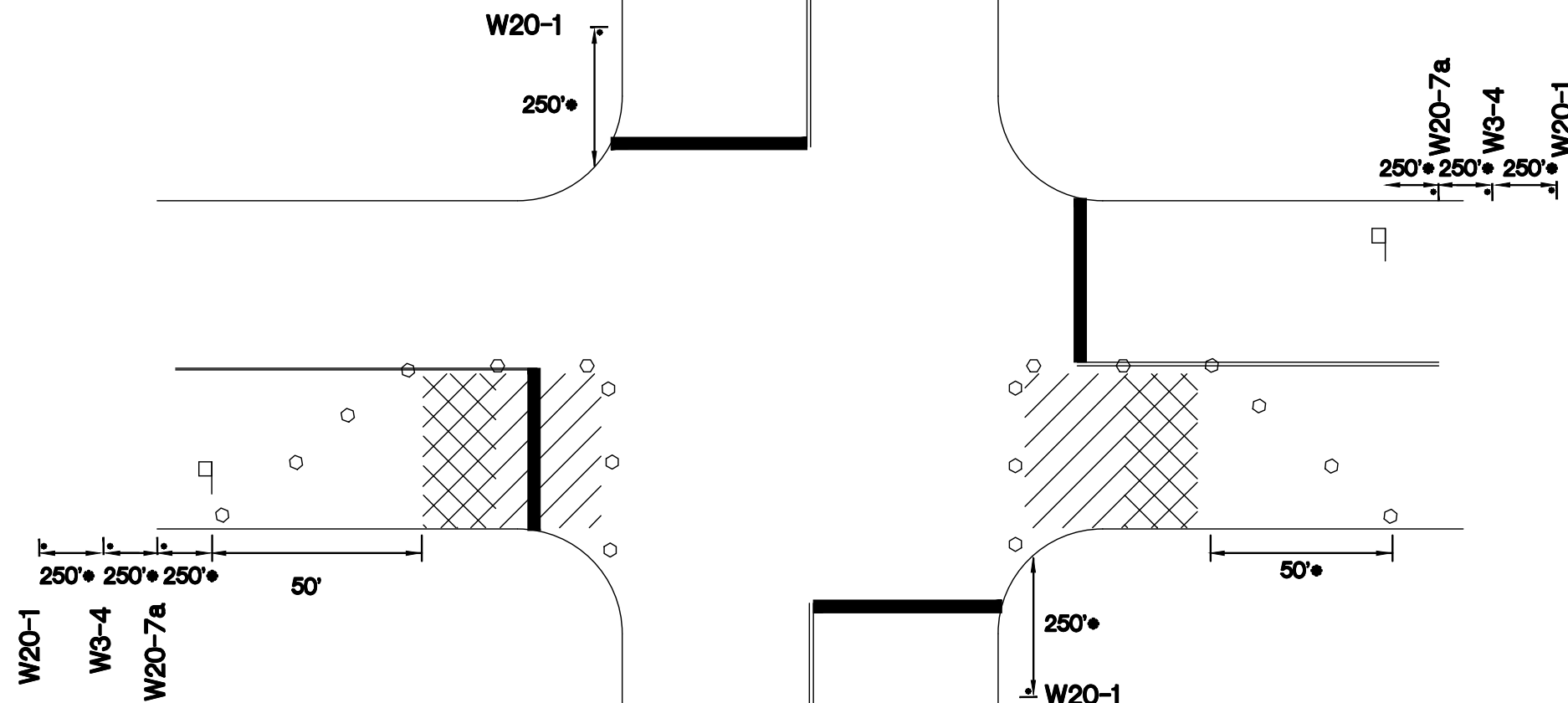
DRUM PLACEMENT ON LOW SHOULDERS OR WIDENING

CONTRACTOR SHALL PLACE PLASTIC DRUMS ADJACENT TO ROADWAY IN AREAS WHERE THE WIDENING HAS NOT BEEN CONSTRUCTED TO WITHIN TWO INCHES OF EXISTING PAVEMENT ELEVATIONS. DRUMS REQUIRED WHERE WORK ZONE INCLUDES UNDERCUT SHOULDER AND REMOVAL OF CURB AND GUTTER. DRUMS TO BE PLACED AS SHOWN IN DETAILS, LEFT FOR NIGHT OPERATION OR SUSPENSIONS OF WORK. COST TO BE ABSORBED (UNDER PAY ITEM 618-A).



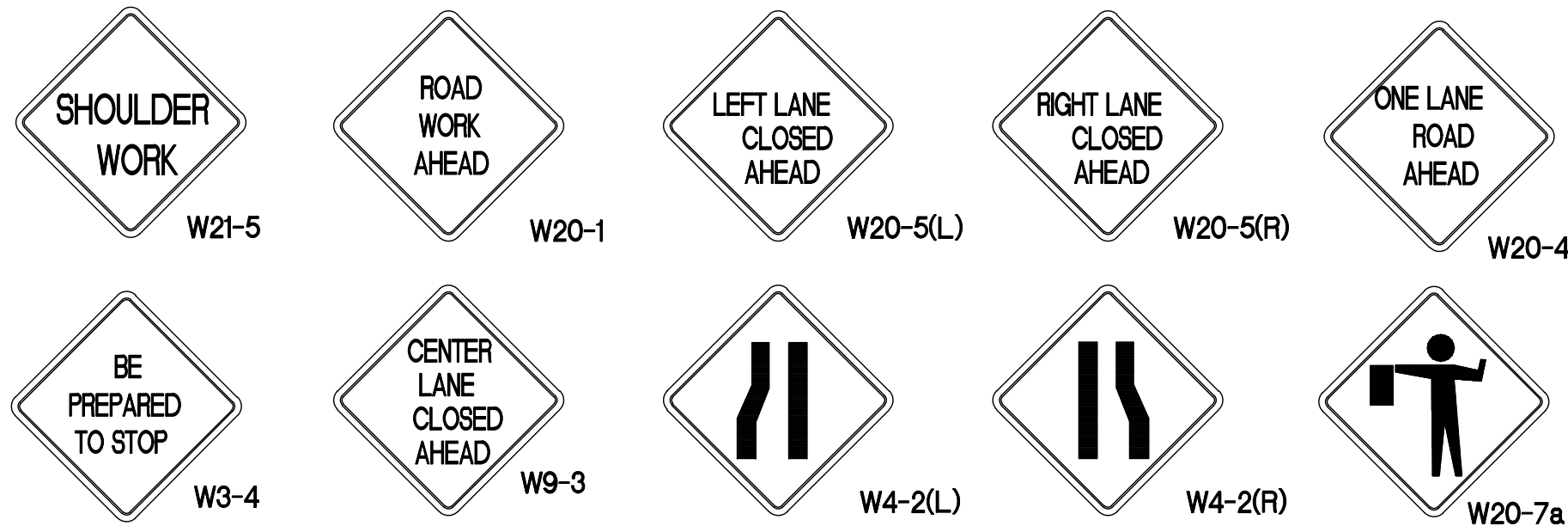
TRAFFIC CONE

CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.



ONE LANE
OPERATION
(NOT TO SCALE)

SIGN LEGEND



GENERAL NOTES:

1. ADDITIONAL ADVANCE WARNING SIGNS MAY BE NECESSARY. ANY ADDITIONAL SIGNS SHOULD BE INCLUDED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
2. POST MOUNTED SIGNS SHALL HAVE A 7' MINIMUM MOUNTING HEIGHT.
3. PAYMENT FOR ALL SIGNS, CONES, DRUMS, CONCRETE BARRIERS, STEEL PLATES AND OTHER MATERIALS, BARRICADES, LABOR AND INCIDENTALS REQUIRED TO IMPLEMENT THE TRAFFIC CONTROL PLAN SHALL BE INCLUDED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
4. APPROACH SIDE TRAFFIC CONTROL TO BE USED WHEN WORK OCCURS ON EITHER THE APPROACH SIDE OR THE FAR SIDE OF THE INTERSECTION. FAR SIDE TRAFFIC CONTROL IS NOT NEEDED WHEN WORK IS CONFINED TO THE APPROACH SIDE ONLY.
5. FOR A DIVIDED HIGHWAY SITUATION, A SECOND SET OF ADVANCE WARNING SIGNS SHALL BE ERECTED IN MEDIAN AREA (8' MIN. MEDIAN WIDTH REQUIRED).

LEGEND

- DRUMS (30' MAXIMUM SPACING) - CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.
- ◄ SIGNS - SEE SIGN LEGEND MIN. SIZE 48" x 48", BLACK ON ORANGE BACKGROUND
- ◻ FLAGGER WITH PADDLE - 18" STOP/SLOW PADDLES ACCEPTED AS PROPER TRAFFIC CONTROL DEVICES SHALL BE USED. HAND HELD FLAGS SHALL NOT BE FOR FLAGGING OPERATION.



- * CONSIDERED MINIMUM DISTANCE - ENGINEER TO DETERMINE APPROPRIATE SPACING IN THE FIELD

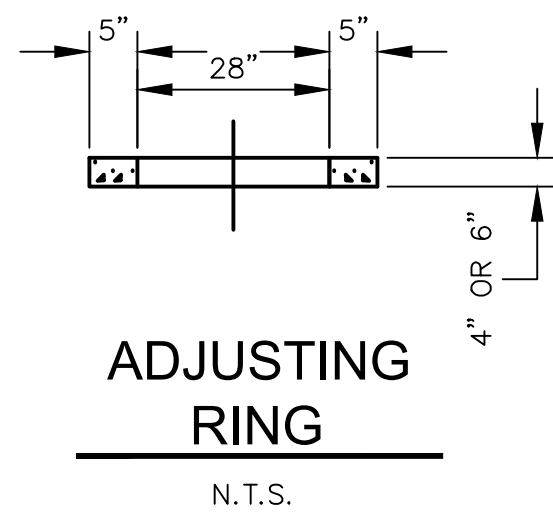
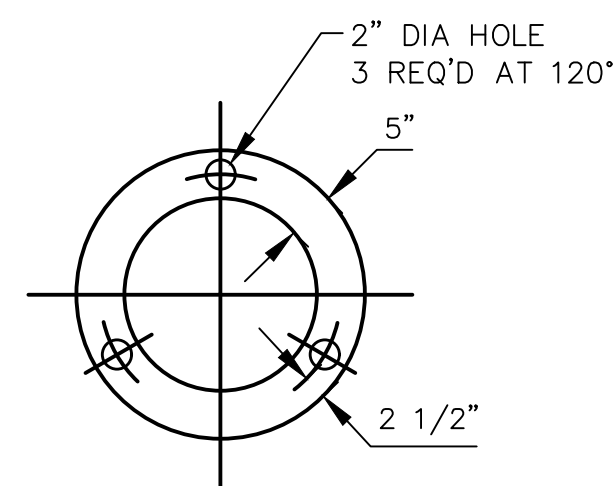
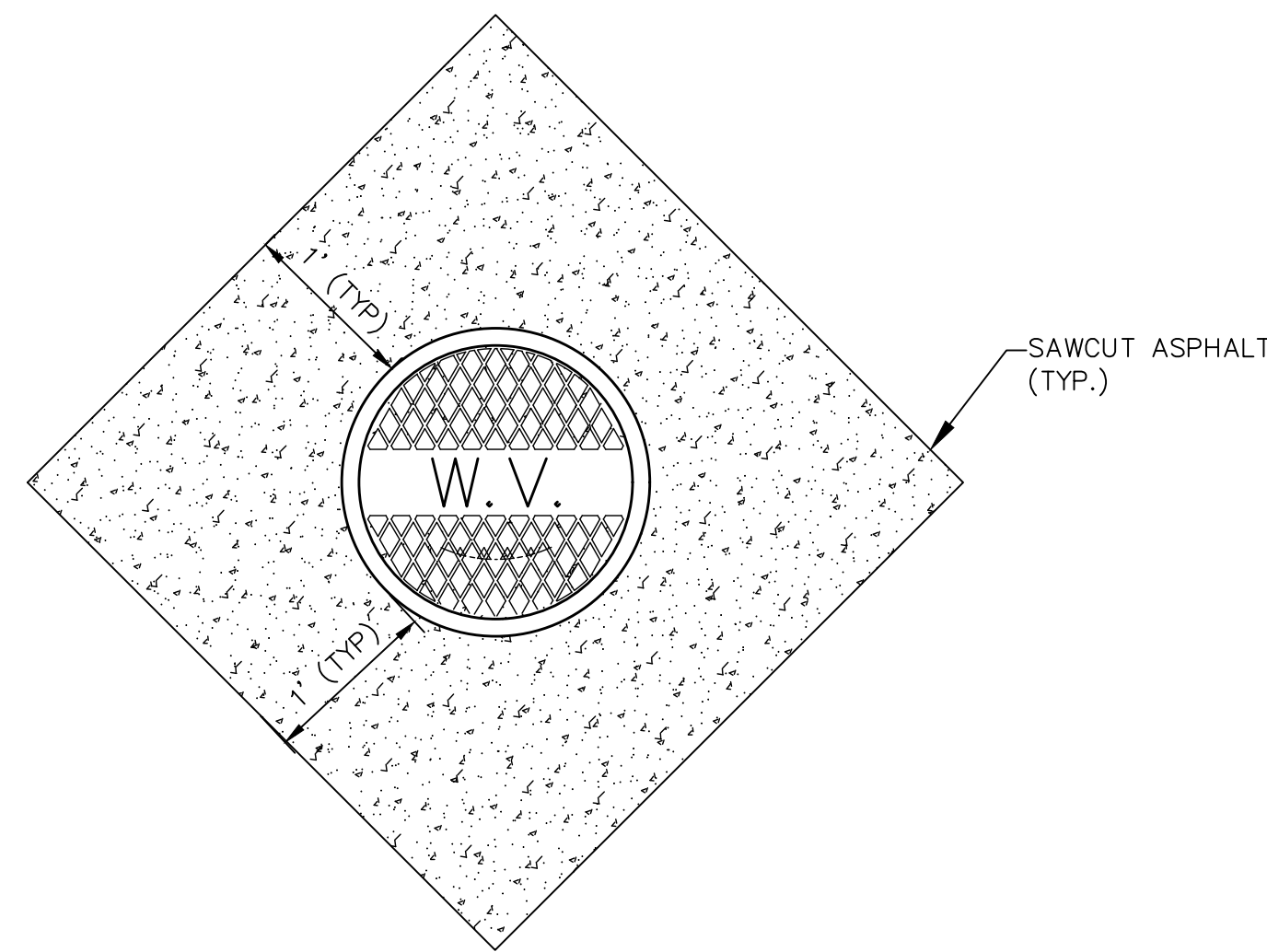
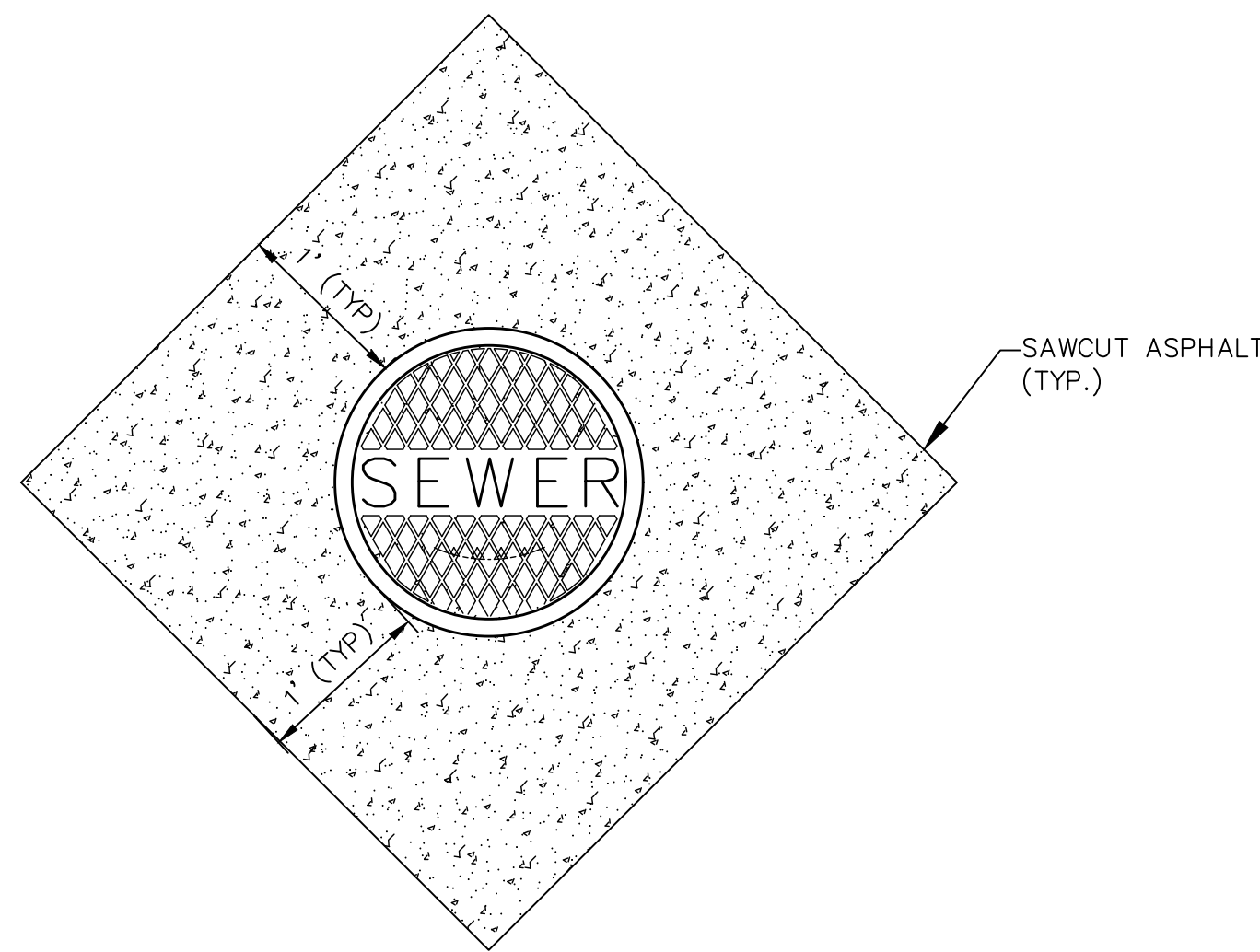
** SPEED LIMIT	BUFFER	TAPER LENGTH (Feet)
M.P.H.	FEET	(Per 12' Lane Shift)
20	115	80
25	155	125
30	200	180
35	250	245
40	305	320
45	360	540
50	425	600
55	495	660
60	570	720
65	645	780
70	730	840



TRAFFIC CONTROL
PLAN
(TYPICAL SIGNAL
INSTALLATION)

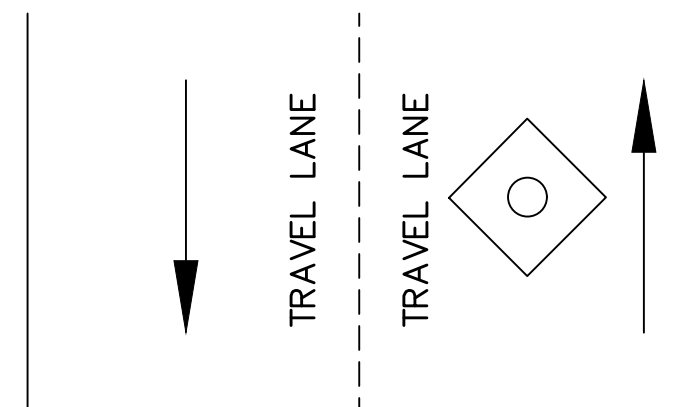
WORKING NUMBER:
TSD-11

DRAWING NUMBER:
39



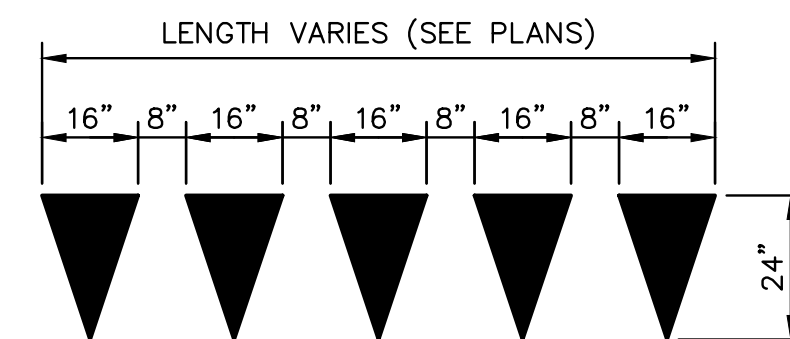
ADJUSTING
RING

N.T.S.



CONCRETE PAD FOR
MANHOLES AND VALVES

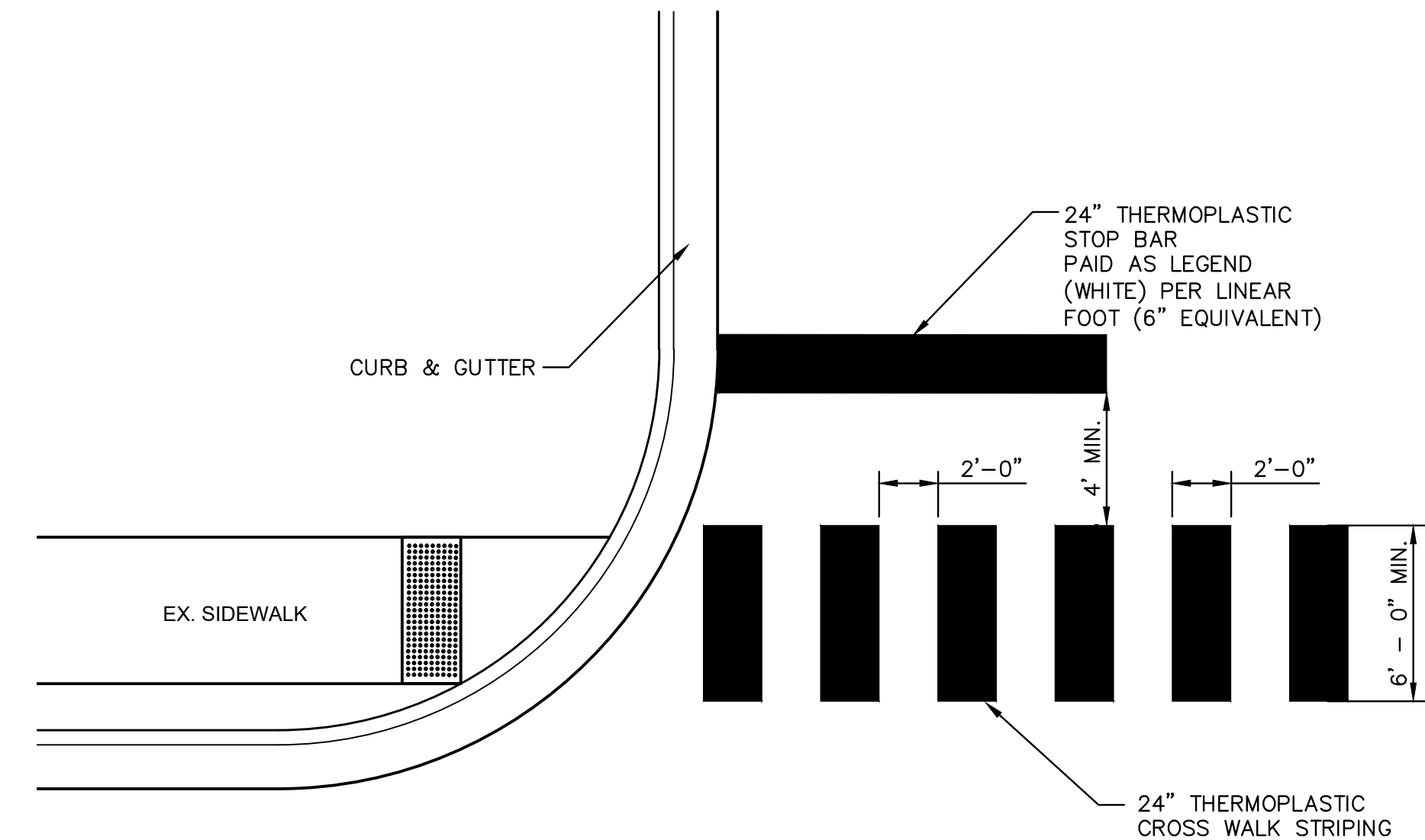
- NOTE: N.T.S.
1. CONCRETE PAD TO BE 12" THICK.
 2. #5 REBAR TO BE PLACED 3" FROM TOP OF CONCRETE PAD.
 3. CONCRETE TO BE PLACED IN A DIAMOND SHAPE ALONG TRAVEL LANE. (SEE ABOVE)
 4. PADS TO BE INSTALLED AFTER NEW ASPHALT IS IN PLACE. PAD AND LID TO MATCH NEW ASPHALT CROSS-SLOPE.



YIELD LINE PAVEMENT MARKINGS SHALL BE PAID
FOR AS LEGEND (WHITE) PER SQUARE FOOT

DETAIL - YIELD LINE PAVEMENT MARKING

NOT TO SCALE



TYPICAL CROSSWALK STRIPING

NOT TO SCALE

NOTICE TO DRAWING HOLDER

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REVISIONS			DRAWING INFORMATION	
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				SURVEYED BY:
				DSGN: GPC DATE: 04/2022
				DRWN: GPC DATE: 04/2022
				CHKD: DATE:
				QA/QC: DATE:

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

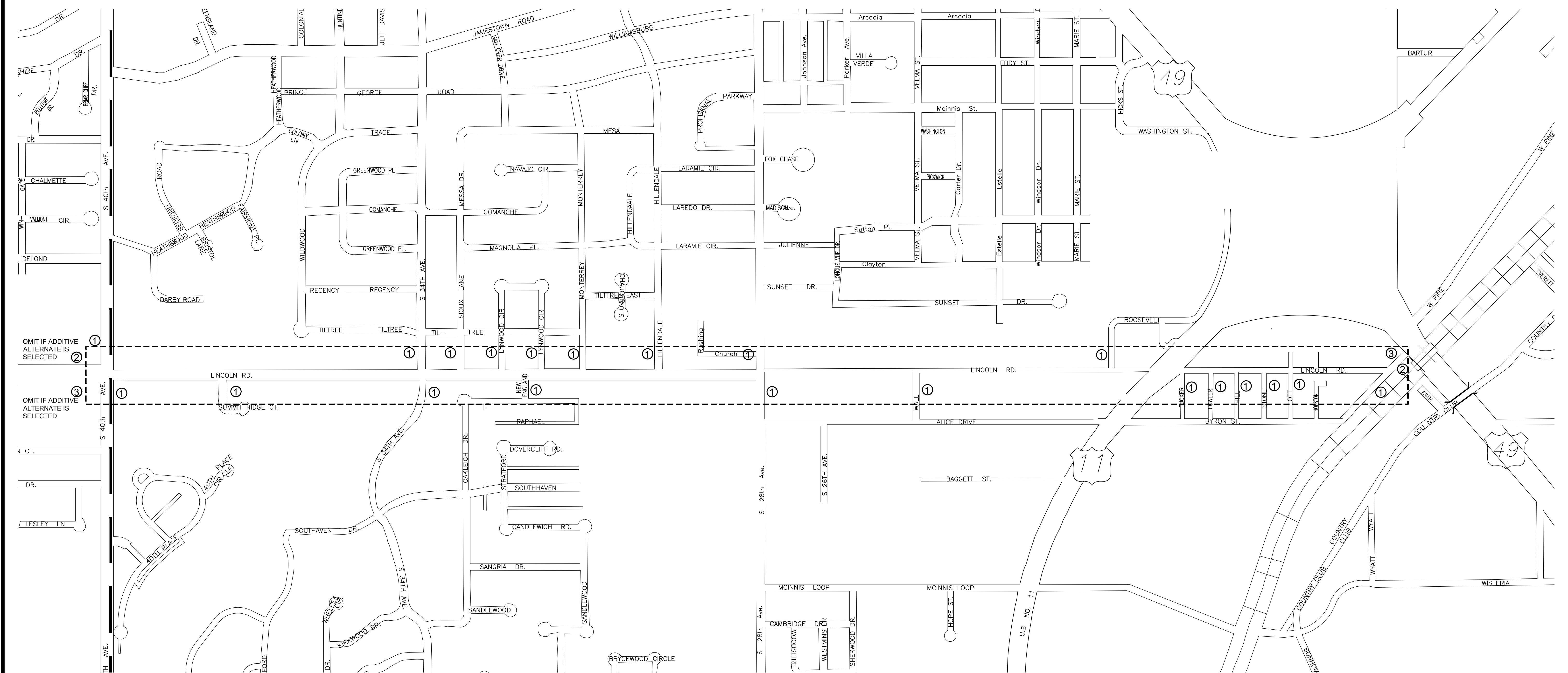


TYPICAL DETAILS

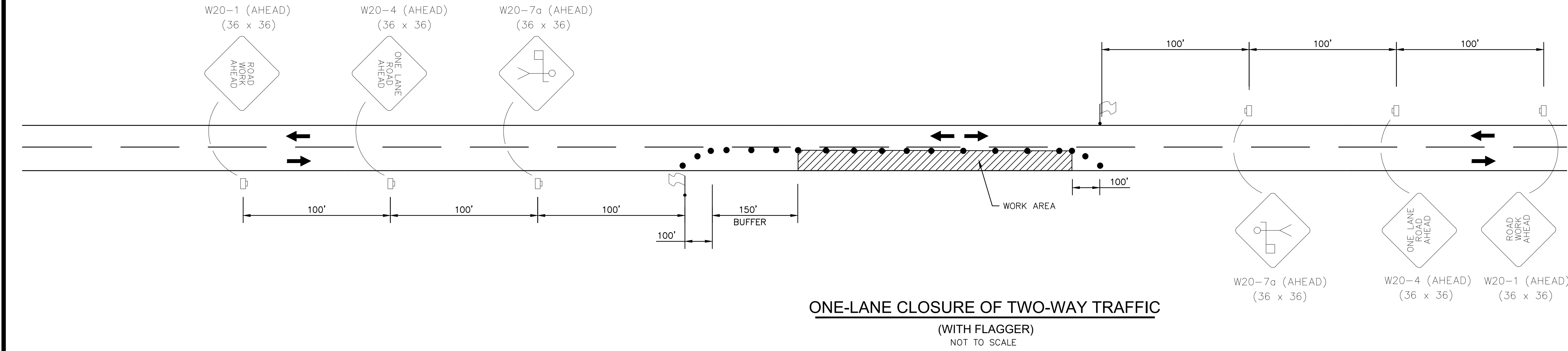
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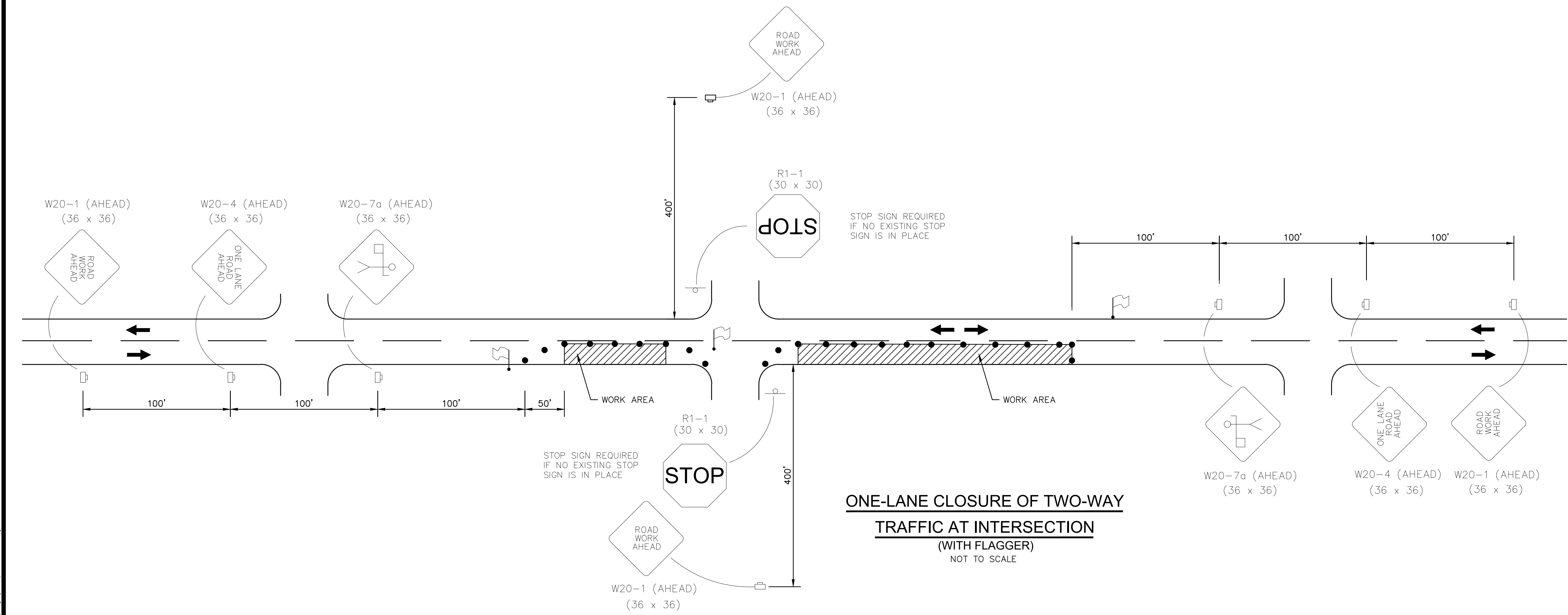


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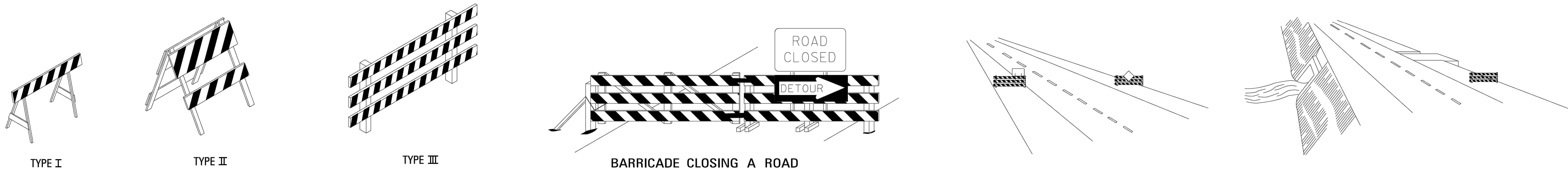
SYMBOLS

	WORK AREA
	TRAFFIC CONTROL SIGN
	WORK ZONE SIGN
	STOP SIGN
	TRAFFIC CONE OR REFLECTIVE PLASTIC DRUM
	LOCATION OF FLAGGER



- GENERAL NOTES:**
1. CONTRACTOR SHALL SET UP ALL TRAFFIC CONTROL DEVICES AND SIGNS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORK.
 2. WORK OPERATIONS SHALL BE CONFINED TO ONE TRAVEL LANE, LEAVING THE OPPOSING TRAVEL LANE OPEN TO TRAFFIC.
 3. ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE ROADWAY.
 4. FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
 5. THE CONTRACTOR SHALL PROVIDE ACCESS (INGRESS AND EGRESS) TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO NOTIFY BUSINESSES AND HOMEOWNERS 48 HOURS IN ADVANCE OF ACCESS RESTRICTIONS.
 6. CHANNELIZING DEVICES SHALL BE A MINIMUM HEIGHT OF 24".
 7. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" X 36".
 8. SPACING OF CHANNELIZING DEVICES ALONG LANE LINE AND WORK ZONE TO BE EQUAL TO THE POSTED SPEED (M.P.H.) X 1 IN FEET. (EXAMPLE 35 M.P.H. X 1 = 35')
 9. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
 10. WHEN THE WORK ZONE IS STATIONARY, THE W20-7a SIGN SHOULD BE PLACED 200 FEET IN ADVANCE OF THE FLAGGER AND SHOULD INDICATE 200' AS THE DISTANCE.
 11. ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS.
 12. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT.
 13. DISTANCES BETWEEN SIGNS ARE APPROXIMATE. SIGN SPACING SHOULD BE ADJUSTED FOR CURVES, HILLS, INTERSECTIONS, DRIVEWAYS, ETC., TO IMPROVE VISIBILITY.
 14. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THROUGH AND LOCAL TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS				DRAWING INFORMATION				LINCOLN ROAD PAVING PROJECT CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY		TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)		
	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17078.000								
					FILENAME: 17078_Traffic.dwg								
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					DSGN: GPC	DATE:	04/2022	CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY				WORKING NUMBER:	DRAWING NUMBER:
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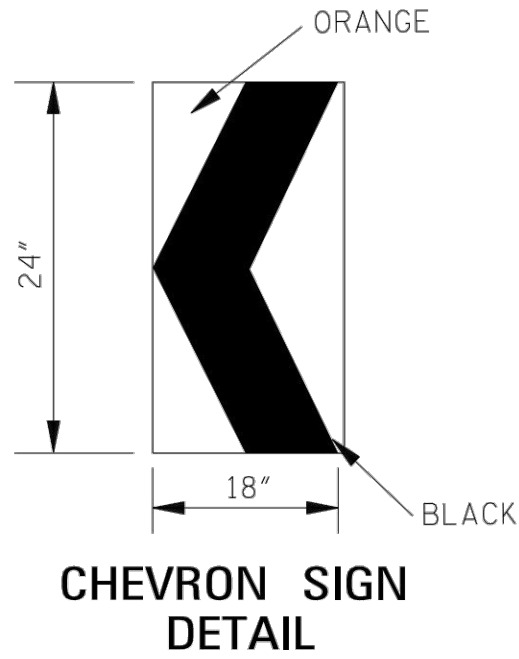
STANDARD BARRICADES

1. A TYPE I BARRICADE CONSISTS OF ONE (1) HORIZONTAL RAIL SUPPORTED BY A DEMOUNTABLE FRAME OR A LIGHT "A" FRAME. A TYPE I BARRICADE NORMALLY WOULD BE USED ON CONVENTIONAL ROADS OR URBAN STREETS AND ARTERIALS.
2. A TYPE II BARRICADE CONSISTS OF TWO (2) HORIZONTAL RAILS ON A LIGHT "A" FRAME. TYPE II BARRICADES ARE INTENDED FOR USE ON EXPRESSWAYS AND FREEWAYS AND OTHER HIGH-SPEED ROADWAYS.
3. TYPE I AND TYPE II BARRICADES ARE INTENDED FOR USE WHERE THE HAZARD IS RELATIVELY SMALL AS, FOR EXAMPLE, ON CITY STREETS, OR FOR THE MORE OR LESS CONTINUOUS DELIMITING OF A RESTRICTED ROADWAY, OR FOR TEMPORARY DAYTIME USE.
4. A TYPE III BARRICADE CONSISTS OF THREE (3) HORIZONTAL RAILS SUPPORTED BY FIXED POSTS, A RIGID SKID, A HEAVY DEMOUNTABLE FRAME OR A HEAVY, HINGED "A" FRAME.
5. TYPE III BARRICADES ARE INTENDED FOR USE ON CONSTRUCTION AND MAINTENANCE PROJECTS AS WING BARRICADES AND AT ROAD CLOSURES, WHERE THEY MUST REMAIN IN PLACE FOR EXTENDED PERIODS.
6. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
7. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
8. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.

BARRICADE CHARACTERISTICS

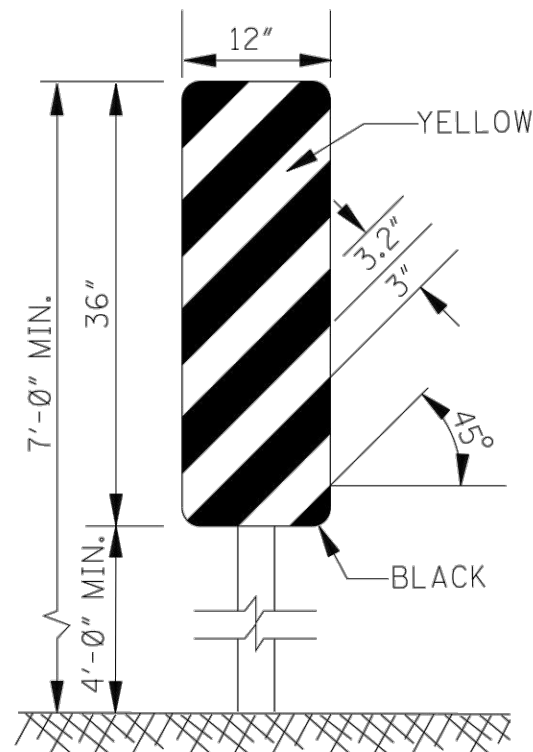
	I	II	III
WIDTH OF RAIL **	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL **	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF REFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS
TYPE OF FRAME	LIGHT	LIGHT "A" FRAME	POST OR SKID

- * 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.
- ** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in² OF REFLECTIVE AREA FACING TRAFFIC.



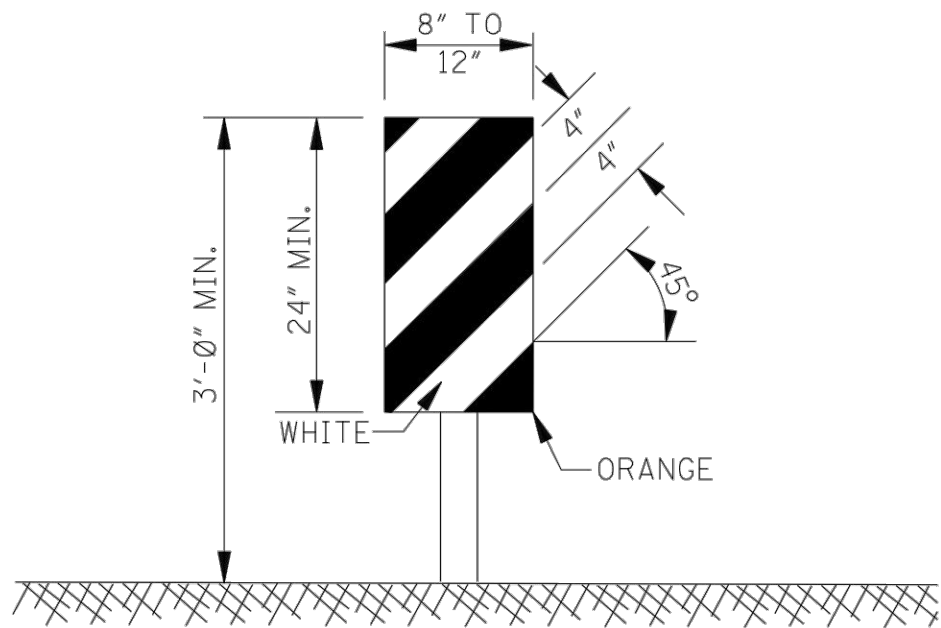
CHEVRON SIGN
DETAIL

1. A CHEVRON SIGN CONSISTS OF A BLACK CHEVRON TYPE MARKING ON AN ORANGE BACKGROUND AND SHALL POINT IN THE DIRECTION OF TRAFFIC FLOW.
2. THE CHEVRON SIGN SHALL BE MOUNTED ON FIXED POST OR RIGID SKID.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHALL BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.



TYPE 3 OBJECT MARKER
(OM-3R)

1. TYPE 3 OBJECT MARKERS SHALL BE USED AT ALL EXPOSED BRIDGE ABUTMENTS AND AT OTHER LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.
2. THE OM-3R IS SHOWN. THE OM-3L IS SIMILAR EXCEPT THE STRIPES SLOPE DOWNWARD FROM THE UPPER LEFT SIDE TO THE LOWER RIGHT SIDE AND SHALL BE PLACED ON THE LEFT SIDE OF THE OBJECT.
3. THE INSIDE EDGE OF THE MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION.



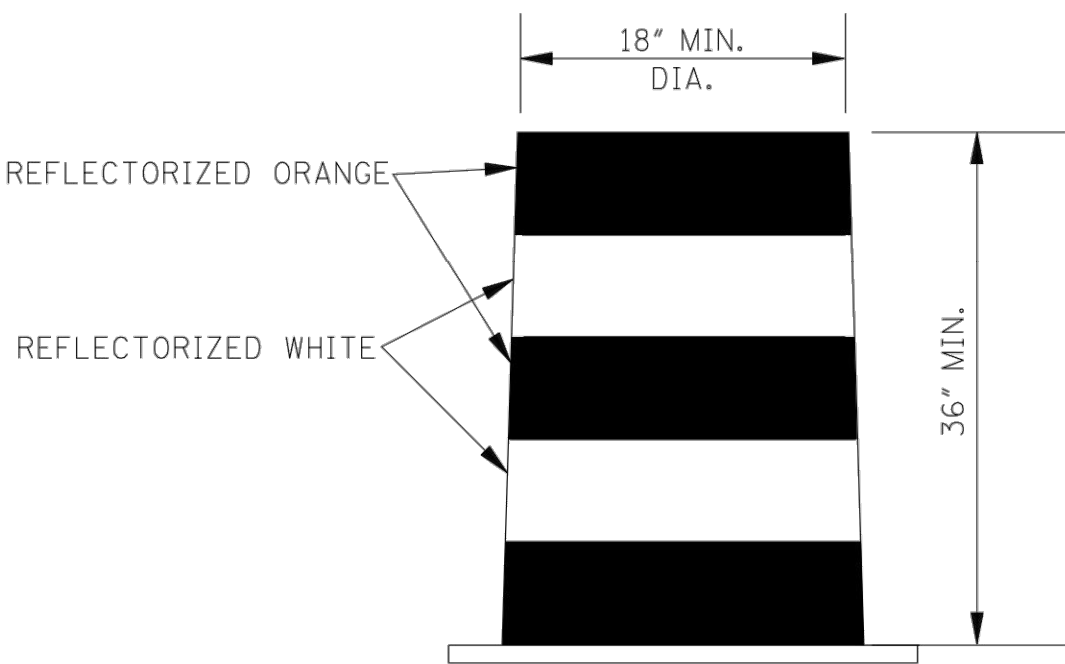
VERTICAL PANEL

1. VERTICAL PANELS CONSIST OF AT LEAST ONE PANEL 8" TO 12" IN WIDTH AND A MINIMUM OF 24" IN HEIGHT.
2. THE DIAGONAL STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION THAT TRAFFIC IS TO PASS THE PANEL. THE PANELS SHALL BE MOUNTED WITH THE TOP A MINIMUM OF 36" ABOVE THE ROADWAY ON A SINGLE LIGHTMASS POST.
3. VERTICAL PANELS USED ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH-SPEED ROADWAYS SHALL HAVE A MINIMUM OF 270 in² OF RETROREFLECTIVE AREA FACING TRAFFIC.
4. FOR TWO-WAY TRAFFIC OPERATIONS, BACK-TO-BACK PANELS SHALL BE USED.

- GENERAL NOTES:
1. MARKINGS ON ALL DEVICES SHOWN ON THIS SHEET SHALL BE HIGH INTENSITY REFLECTIVE SHEETING.
 2. THE TRAFFIC CONTROL PLAN WILL LIST THE VARIOUS TRAFFIC CONTROL DEVICES REQUIRED FOR EACH PROJECT.

WING BARRICADES

1. WING BARRICADES ARE TYPE III BARRICADES ERECTED ON THE SHOULDER ON ONE OR BOTH SIDES OF THE PAVEMENT TO GIVE THE SENSATION OF A NARROWING OR RESTRICTED ROADWAY. WING BARRICADES MAY BE USED AS A MOUNTING FOR THE ADVANCE WARNING SIGNS OR FLASHERS.
2. WING BARRICADES SHOULD BE USED:
A. IN ADVANCE OF A CONSTRUCTION PROJECT EVEN WHEN NO PART OF THE ROADWAY IS ACTUALLY CLOSED.
B. IN ADVANCE OF ALL BRIDGE OR CULVERT WIDENING OPERATIONS.



PLASTIC DRUM STRIPING DETAIL

1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) REFLECTORIZED, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 2 WHITE) 6" WIDE.
2. DRUMS SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS SHALL BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.

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NOTICE TO DRAWING HOLDER	REVISIONS				DRAWING INFORMATION		LINCOLN ROAD PAVING PROJECT			HIGHWAY SIGN BARRICADE DETAILS FOR CONSTRUCTION PROJECTS	
	NO.	DATE	BY	DESCRIPTION						WORKING NUMBER:	DRAWING NUMBER:
NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.					N-S PROJECT NO.: 17078.000		CITY OF HATTIESBURG HATTIESBURG, MS FORREST COUNTY			TCP-10	44
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					CHKD:	DATE:					
					QA/QC:	DATE:					

***CONTRACT DOCUMENTS AND TECHNICAL
SPECIFICATIONS***

FOR

LINCOLN ROAD PAVING PROJECT

FOR THE

**CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY**



MAY 2022

PREPARED BY



05/27/2022



NEEL-SCHAFFER
Solutions you can build upon

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ADVERTISEMENT FOR BIDS

**LINCOLN ROAD PAVING PROJECT
CITY OF HATTIESBURG, MISSISSIPPI**

Sealed bids will be received by the City of Hattiesburg, at the City Clerk's office, Mississippi, hereafter referred to as Owner, located at 200 Forrest Street, Hattiesburg, Mississippi, 39401, until 10:00 A.M., Local Time, Thursday, **July 21**, 2022 for supplying all labor, equipment, and materials (as specified) necessary for the construction of the above referenced project. Work consists of asphalt overlay and striping along Lincoln Road from Highway 49 to 40th Avenue (Base Bid) and along Lincoln Road from 40th Avenue to Oak Grove Road (Additive Alternate Bid). When bids are submitted electronically, the same requirements for submitting sealed bids shall apply. Electronic bids shall be submitted online at www.hattiesburgsbids.com and shall include a document representing the cover of the envelope containing the aforementioned criteria.

The above general outline of features of the work does not in any way limit the responsibility of the Contractor to perform all work and furnish all labor, equipment and materials required by the specifications and the drawings referred to therein.

Bidder must be qualified under Mississippi Law and show current Certificate of Responsibility issued by the Mississippi State Board of Public Contractors establishing his classification as to the value and type of construction on which he is authorized to bid.

Each Bidder shall write his Certificate of Responsibility Number on the outside of the sealed envelope containing his proposal.

Proposals shall be submitted in duplicate, sealed and deposited with the Owner prior to the hour and date hereinbefore designated. No bidder may withdraw his bid within 90 days after the actual date of the opening thereof.

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so-called Golden Rule is followed state law requires a non-resident bidder is to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

Each Bidder must deposit with his proposal, a Bid Bond or Certified Check in an amount equal to five percent of his bid, payable to the Owner, as bid security. Bidders shall also submit a current financial statement, if requested, by the Owner. The successful bidder will be required to furnish a Payment Bond and Performance Bond each in the amount of 100 percent of the contract amount.

Bid documents are being made available via paper copy or pdf. All interested bidders are required to log-in or register for an account at www.hattiesburgsbids.com OR www.neel-schafferplans.com to view and order Bid Documents. All plan holders are required to have a valid email address for registration. Bid documents are non-refundable and must be purchased through the website. Questions regarding website registration and online orders please contact Plan House Printing at (601) 336-6378.

"Mississippi Standard Specifications for Road and Bridge Construction, 2017 Edition" as referred to herein, may be purchased from the Mississippi Department of Transportation.

The Owner hereby notifies all Bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged and women's business enterprises will be afforded the full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Engineer is Neel-Schaffer, Inc., 704 Hardy Street, Hattiesburg, Mississippi 39401; Phone No. (601) 545-1565, Fax No. (601)-545-2267. Geoffrey Crosby, P.E. – Senior Project Manager.

The Owner reserves the right to reject any and all bids and to waive any informalities or irregularities therein.

BY: _____
City Clerk
City of Hattiesburg, Mississippi

DATES OF PUBLICATION:

June 15, 2022

June 22, 2022

INSTRUCTIONS TO BIDDERS

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG, MISSISSIPPI

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1. COORDINATION OF SPECIFICATIONS

Work under this Contract shall be performed in accordance with the Contract Documents, which includes General Conditions, Supplementary Conditions and Technical Specifications contained therein. Division 200 through 800 of the *Mississippi Standard Specifications for Road and Bridge Construction* (2017 Edition) is made a part hereof as if it were attached hereto, except where superseded by special provisions contained herein.

2. DATE AND PLACE OF OPENING OF PROPOSALS

The date, time, and place for opening Proposals will be as set out in the published "Advertisement for Bids."

The Owner reserves the right to postpone the date for presentation and opening of Proposals and will give notice of any such postponement to each known prospective Bidder.

3. FORM FOR PROPOSALS

Proposals must be submitted on the forms furnished by the Owner and the envelope (if not submitted electronically) containing the Proposals must be addressed to:

City Clerk
City of Hattiesburg
200 Forrest Street
Hattiesburg, Mississippi 39401

The outside of the envelope (if not submitted electronically) containing the Proposal shall bear the inscription:

**SEALED BID FOR: LINCOLN ROAD PAVING PROJECT
CITY OF HATTIESBURG, MISSISSIPPI**

BY _____

Certificate of Responsibility No. _____

State License No. _____

The duplicate Proposals shall be in the form of one original Proposal, marked "ORIGINAL" and one photocopy (Xerox or similarly reproduced copy) marked "PHOTOCOPY" of the original Proposal.

If Proposals are forwarded by the U.S. Postal Service, delivery shall be by Registered or Certified Mail.

4. PREQUALIFICATION

All Bidders must be in good standing with the Owner. Bidders who are not in good standing with the Owner will not be considered for award of the contract. Good standing includes, among other things: (a) whether Bidder has failed to successfully complete the work or punchlist items under another Owner contract; (b) whether Bidder is currently, or has been in the past five years, involved in litigation with the Owner regarding work under another Owner contract, either as a general contractor or subcontractor; (c) whether Bidder has been or is currently in default under another Owner contract the past five years. with the Owner; or (d) whether Bidder has failed to fulfill provisions of another Owner contract within during the past five years.

5. CERTIFICATE OF RESPONSIBILITY

Prior to filing Bids on Owner projects (in excess of \$50,000), the prospective Bidder must obtain a Certificate of Responsibility from the Mississippi State Board of Public Contractors, establishing his classification as to the value and the type of construction on which he is authorized to bid. Application must be submitted to the Board at least 30 days prior to a regular Board meeting scheduled every Quarter on the first Tuesday of January, April, July and October.

6. ANNUAL LICENSE TO BID (Not Used)

7. CHARGES FOR PROPOSALS, PLANS AND SPECIFICATIONS

Prospective Bidders may obtain Proposal forms including one copy of Contract Documents upon payment of the amount of money stipulated in the "Advertisement for Bids."

No refunds will be made for return of Plans or Specifications.

If a contract award is made, the successful Bidder will be furnished (free of charge) two additional sets of the Plans and Specifications.

In the event all Bids are rejected and the Project is re-advertised, the original Bidders shall **NOT** be entitled to free Bidders Proposal forms for the subsequent letting.

8. OMISSIONS AND DISCREPANCIES

Should a Bidder find discrepancies, errors or omissions in the Drawings or Specifications, or should he be in doubt as to the correctness of the Plan details, dimensions and layout, he should immediately notify the Engineer in order to permit checking and any necessary revisions or modifications.

9. ADDENDA

Prior to the date set for opening of Bids, the right is reserved, in the interests of the Owner, as it may require, to revise or amend the Contract Documents. Such revisions, if any, will be announced by an Addendum or Addenda, and copies of such Addenda will be furnished to all prospective Bidders who have purchased Plans and Specifications for acknowledgment by return fax. If the revisions and Addenda are of a nature which require material changes in quantities or prices Bid, or both, the date set for opening Bids may be postponed to enable Bidders to revise their Bids. In such case, the Addendum or Addenda will include an announcement of the new date for opening Bids.

10. INTERPRETATIONS

No oral interpretation made to any Bidder as to the meaning of the Contract Documents shall be considered an effective modification of any of the provisions of the Contract Documents. In order to ensure appropriate and concise responses, and avoid any misinterpretations, no verbal questions will be received. Written requests for interpretation of the Plans and Specifications shall be submitted to the Engineer at least 10 days prior to opening of Proposals so that a formal decision can be given in writing to all known prospective Bidders in the form of an Addendum. The Contract Document contains the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the Contract.

11. BID SECURITY

All Bids shall be accompanied by a Bid Security in the form of a Certified Check upon a national or state bank or a Bid Bond made by a bonding company registered in the State of Mississippi, drawn and made payable to the Owner in an amount equal to five percent of the Bid. The Certified Check or Bid Bond must be enclosed in the same envelope with the Bid. Except as noted below, the Bid Security of all known unsuccessful Bidders will be returned promptly after a Notice of Award has been sent to the successful Bidder or in the event that all Bids are rejected.

The Bid Security of the next two lowest qualified Bidders will be retained until the Contract has been executed with the lowest qualified Bidder. The Bid Security of the successful Bidder will be returned when satisfactory Performance and Payment Bonds have been furnished and approved and the Contract executed.

12. GENERAL INFORMATION

Bidders shall inform themselves and comply with all pertinent Owner regulations and ordinances, State and Federal laws, licenses and tax liabilities which may in any manner affect their Bids and the prosecution of the work. The successful bidder will be responsible for obtaining all building, plumbing, and electrical permits required by the local city government. Special attention is directed to the rules and regulations published by the Mississippi State Tax Commission outlining certain taxes imposed on Contractors by the state of Mississippi.

13. REJECTION OF PROPOSAL

Proposals may be rejected in the case of any omission, alterations of forms, additions or conditions not called for, unauthorized alternate Bids, incomplete Bids, erasures or irregularities of any kind. Bids received conditioning their consideration or rejection upon Bids for the other work submitted by the same Bidder may be classed as irregular, unless the Contract Documents specifically invite or permit conditional or combination Bids. Bids in which the prices obviously are unbalanced may be rejected.

14. CONDITIONS OF WORK

Each Bidder must inform himself fully of the conditions relating to the construction of the Project and the employment of labor thereon. Failure to do so will not relieve a successful Bidder of his obligation to furnish all materials and labor necessary to carry out the provisions of his Contract. Insofar as possible, the Contractor, in carrying out his work, must employ such methods or means as

will not cause any interruption of or interference with the work of any other Contractor.

15. SECURITY FOR FAITHFUL PERFORMANCE

Simultaneously with his delivery of the Executed Contract, the Contractor shall furnish a Performance Bond and a Payment Bond each in the sum of 100% of the Contract amount as security for faithful performance of his Contract and for the payment of all persons performing labor on the Project under his Contract and furnishing materials in connection with his Contract, as specified in the Contract Documents. The surety of such Bonds shall be issued by a duly authorized surety company listed on the Treasury Department's most current list Circular 570 (as amended) and satisfactory to the Owner.

Attorneys in fact who sign Bid Bonds or Payment Bonds and Performance Bonds must file with each bond a certified and effective dated copy of their Power of Attorney. Failure of the successful Bidder to execute the Contract and to supply the required bonds within 10 calendar days from the date that the Notice of Award is delivered, or within such extended period as the Owner may grant based upon reasons determined sufficient by the Owner, shall constitute a default, and the Owner, at his discretion, may either award the Contract to the next lowest qualified Bidder or readvertise for Bids, and may charge against the Bidder the difference between the amount for which a Contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the Bid Bond. If a more favorable bid is received by readvertising, the defaulting Bidder shall have no claim against the Owner for a refund. The Contractor's bond will not be released until all provisions of the Contract have been fulfilled.

16. INSURANCE

The Contractor will be required to carry the types and amounts of insurance named in the Contract Documents for the full life of the Contract.

17. SUBCONTRACTORS

Bidders are specifically advised that any person, firm or other party to whom it is proposed to award a Subcontract must be acceptable to the Owner. Nothing contained in the Contract Documents shall create any contractual relation between subcontractor and the Owner.

18. METHOD OF AWARD – LOWEST RESPONSIVE BIDDER

The Owner will award the Contract to the lowest and best Bid unless all Bids are rejected. The award will be based on the evaluation of the low bid for the total base bid or the total alternate bid as decided upon by the Owner.

The responsiveness of the low Bidder shall be determined by (1) the completeness and regularity of the Bidders Proposal; (2) the Bidders Proposal being without exclusions or special conditions; (3) the Bid Form having no alternative Bids for any item unless requested in the Technical Specifications; and (4) such other factors as may be considered under State law, Federal law or regulation.

The evaluation of the low bidder will be based on whether the Bidder (1) maintains a permanent place of business; (2) has adequate plant equipment to do the work properly and within the time limit that is established; (3) has adequate financial status to meet his obligations contingent to the work; (4) has adequate manpower and present workload is such that he can perform according to a reasonable

schedule; and (5) such other factors as may be considered under State law, Federal law or regulation.

19. OBLIGATION OF BIDDER

At the time of the opening of Bids, each Bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Plans and Contract Documents (including all Addenda).

The failure or omission of any Bidder to examine any form, instrument or document shall in no way relieve any Bidder from any obligation in respect to his Bid. Submission of Bid shall be accepted as prima facie evidence that Bidder has inspected the site and is familiar with the Plans and Contract Documents.

20. SUBSURFACE DATA

Not Used.

21. EXECUTION OF CONTRACT

If the successful Bidder is a corporation, the officer who signs the Contract shall furnish copies of the resolution of the Directors of the corporation authorizing him to sign the contract. Such resolution should bear the seal of the corporation.

Subject to the applicable provisions of law, the Contract shall be in full force and effect only from and after the date when a fully executed and approved counterpart thereof has been rendered or delivered, or both, to the Contractor or his duly authorized agent or representative. Deposit of said counterpart in the United States mail in an envelope or wrapper properly addressed shall constitute compliance with these provisions by the Owner.

22. INTERCHANGEABLE TERMS

The terms "Bid" and "Proposal" wherever they are used in the Contract Documents are interchangeable and have the same meaning. The terms "Contract" and "Agreement", are interchangeable and have the same meaning. The terms "Contract Drawings" and "Plans", are interchangeable and have the same meaning.

23. QUALIFICATIONS OF BIDDER, OWNER'S RIGHTS

The Owner may make such investigation as it deems necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by or investigation of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

24. MATERIALS AND EQUIPMENT

Whenever materials or equipment are specified or described in the Contract Documents by using the name of a manufacturer, fabricator, supplier, or distributor, the naming of the item in this manner is intended to establish the type, function and quality required. Materials or equipment of other manufacturers, fabricators, suppliers, or distributors may be accepted by the Engineer if sufficient

information is submitted by the Contractor to allow the Engineer to determine that the material or equipment proposed is equivalent to that named in the Contract Documents. Bidders are referred to Section 6.3 of the General Conditions regarding procedures for approval of substitute materials and equipment.

25. NON-RESIDENT BIDDERS

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident Bidder's state awards contractors to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so called "Golden Rule" is followed, state law requires a non-resident Bidder to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

26. DESIGNATING OWNER AND ENGINEER

Any reference in the Contract Documents to the State of Mississippi, Mississippi Department of Transportation, Mississippi Transportation Commission, or any official thereof shall be interpreted to mean the City of Hattiesburg, Mississippi, the "Owner".

Any reference in the Standard Specifications to the Project Engineer, District Engineer, Office Engineer, or Engineer shall be interpreted to mean the Engineer for the City of Hattiesburg, Mississippi, Neel-Schaffer, Inc.

27. MATERIALS TESTING

The Contractor shall be responsible for all testing of materials associated with the project. Materials shall be tested in accordance to the requirements and frequencies outlined in the *Mississippi Standard Specifications for Road and Bridge Construction* (2017 Edition), and shall be considered an absorbed item.

28. CONTRACT TIME

The number of calendar days to complete the work will be **120** calendar days for the Base Bid Work. An additional **90** calendar days will be added if the Additive Alternate work is awarded (40th Avenue to Oak Grove Road).

The calendar date for completion of the work to be performed by the Contractor for this project shall be a specified completion date. The specified completion date for this project will be calculated by adding the above number of calendar days to the date of the notice to proceed.

29. VIBRATORY ROLLER

Bidders are advised that the use of vibratory rollers will not be allowed and the lot density required in sections 401.02.6.4.1 and 401.03.1.4 of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction shall be reduced by **one percent**.

30. Traffic on Milled Surface

Bidders are hereby advised that when the main lanes of a road are fine milled, traffic will be allowed

to run a milled surface for up to five (5) calendar days. The Contractor will be assessed a penalty of \$1,000 per calendar day afterwards until the milled surfaces are covered with the next lift of asphalt. It shall be the Contractor's responsibility to ensure that the milling operations do not commence until such as time as forecasted weather conditions are suitable enough to allow the placement of the asphalt pavement after the milling operations.

BIDDER'S PROPOSAL
LINCOLN ROAD PAVING PROJECT
CITY OF HATTIESBURG, MISSISSIPPI

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BIDDER'S PROPOSAL
LINCOLN ROAD PAVING PROJECT
CITY OF HATTIESBURG, MISSISSIPPI

DATE: _____, 20_____

PROPOSAL OF _____
(Name of Bidder)

(Address of Bidder)

for construction of the Lincoln Road Paving Project.

The documents on which this Proposal is based include the Instructions to Bidders, Bid Forms, General Conditions, Supplementary Conditions, Supplemental General Conditions, Technical Specifications, Contract Drawings, and all supplements, amendments and addenda for this Project and are made a part hereof by reference.

TO: CITY OF HATTIESBURG
200 FORREST STREET
HATTIESBURG, MISSISSIPPI 39401

Gentlemen:

The following Proposal is submitted on behalf of the undersigned Bidder(s) and no others. Evidence of my (our) authority to submit the Proposal is hereby furnished. The Proposal is submitted without collusion on the part of any person, firm or corporation.

I (We), the undersigned Bidder(s), certify that I (we) have carefully examined the Instructions to Bidders, Bid Forms, General Conditions, Supplemental Conditions, Technical Specifications, Contract Drawings and any and all Addenda thereof.

I (We) further certify that I, (we) have visited and carefully examined the site of the proposed Work and have inspected the location and condition of all public utilities and existing structures or other facilities on the site or adjacent thereto which may be affected by the proposed construction and fully understand all conditions relative to construction difficulties, hazards, labor, transportation and all other factors affecting the prosecution of the work covered by this Proposal.

I (We) understand that the quantities mentioned below are approximate only and are subject to either increase or decrease, and hereby propose to perform any increased or decreased quantities of work at the unit prices bid. No increase in quantities of work shall be performed until a written change order is duly executed in advance and approved in the public minutes of the Owner.

In accordance with the requirements of the Instructions to Bidders, Bid Forms, Federal Supplement to

00300-2

Bidder's Proposal, Technical Specifications, General Conditions, Supplementary Conditions, Contract Drawings, and any Addenda, I (we) propose to furnish all necessary materials, equipment, labor, tools and other means of construction and will do all Work called for by the Contract Documents within the specified Contract Time. The following is my (our) itemized proposal for the project:

Prices Bid and Approximate Quantities - Base Bid

Pay Item	Pay Item Description	<u>Unit</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Price Extension</u>
202-B	REMOVAL OF ASPHALT PAVEMENT	SY	550		
203-G	EXCESS EXCAVATION, FM, AH	CY	60		
304-G	SIZE 610 CRUSHED STONE BASE, AEA	CY	60		
403-A	9.5mm MIXTURE, MT, ASPHALT PAVEMENT	TON	3950		
403-B	9.5mm MIXTURE, MT, ASPHALT PAVEMENT, LEVELING	TON	1800		
406-D	FINE MILLING OF BITUMINOUS PAVEMENT, ALL DEPTHS	SY	44,500		
407-A	ASPHALT FOR TACK COAT	GAL	6675		
613-D	ADJUSTMENT OF MANHOLE, INC. CONCRETE PAD W/ REINFORCEMENT	EA	28		
613-D	ADJUSTMENT OF WATER VALVE, INC. CONCRETE PAD W/ REINFORCEMENT	EA	17		
618-A	MAINTENANCE OF TRAFFIC	LS	1	XXXX	
618-B	ADDITIONAL CONSTRUCTION SIGNS	SF	1	\$10.00	\$10.00
620-A	MOBILIZATION	LS	1	XXXX	
626-C	6" THERMOPLASTIC EDGE STRIPE, CONTINUOUS WHITE	LF	100		
626-D	6" THERMOPLASTIC TRAFFIC STRIPE, SKIP YELLOW	LF	12,145		
626-E	6" THERMOPLASTIC TRAFFIC STRIPE, CONTINUOUS YELLOW	LF	19,416		
626-G	THERMOPLASTIC DETAIL STRIPE, WHITE	LF	2331		

00300-4

626-G	THERMOPLASTIC DETAIL STRIPE, YELLOW	LF	405		
626-H	THERMOPLASTIC LEGEND, WHITE	LF	2593		
626-H	THERMOPLASTIC LEGEND, WHITE	SF	1798		
627-K	RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS	EA	115		
627-L	TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS	EA	1318		
907-632-D	SOLID STATE TRAFFIC ACTUATED CONTROLLER, TYPE I	EA	3		
907-637-C	TRAFFIC SIGNAL CONDUIT, UNDERGROUND, TYPE 4, 2"	LF	65		
907-643-A	VIDEO VEHICLE DETECTION SENSOR, TYPE 3	EA	3		
907-643-B	VIDEO VEHICLE DETECTION CABLE	LF	300		
660-B	CABINET MODIFICATION	EA	3		
Total Base Bid \$					

Prices Bid and Approximate Quantities – Additive Alternate No. 1

Pay Item	Pay Item Description	<u>Unit</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Price Extension</u>
202-B	REMOVAL OF ASPHALT PAVEMENT	SY	100		
203-G	EXCESS EXCAVATION, FM, AH	CY	10		
304-G	SIZE 610 CRUSHED STONE BASE, AEA	CY	10		
403-A	9.5mm MIXTURE, MT, ASPHALT PAVEMENT	TON	4500		
403-B	9.5mm MIXTURE, MT, ASPHALT PAVEMENT, LEVELING	TON	75		
403-B	4.75mm MIXTURE, MT, ASPHALT PAVEMENT, LEVELING	TON	3380		
403-C	19.0mm MIXTURE, MT, ASPHALT PAVEMENT, TRENCH WIDENING	TON	650		
406-D	FINE MILLING OF BITUMINOUS PAVEMENT, ALL DEPTHS	SY	12,400		
407-A	ASPHALT FOR TACK COAT	GAL	8900		
618-A	MAINTENANCE OF TRAFFIC	LS	1	XXXX	
618-B	ADDITIONAL CONSTRUCTION SIGNS	SF	1	\$10.00	\$10.00
620-A	MOBILIZATION	LS	1	XXXX	
626-A	6" THERMOPLASTIC TRAFFIC STRIPE, SKIP WHITE	LF	3330		
626-C	6" THERMOPLASTIC EDGE STRIPE, CONTINUOUS WHITE	LF	16,362		
626-D	6" THERMOPLASTIC TRAFFIC STRIPE, SKIP YELLOW	LF	16,868		
626-E	6" THERMOPLASTIC TRAFFIC STRIPE, CONTINUOUS YELLOW	LF	18,300		

00300-6

626-G	THERMOPLASTIC DETAIL STRIPE, WHITE	LF	1805		
626-H	THERMOPLASTIC LEGEND, WHITE	LF	288		
626-H	THERMOPLASTIC LEGEND, WHITE	SF	1477		
627-K	RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS	EA	156		
627-L	TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS	EA	1335		
Total Additive Alternate No. 1 \$					

TOTAL BASE BID: \$ _____

TOTAL ADDITIVE ALTERNATE BID: \$ _____

THE BIDDER'S TOTAL ABOVE IS HIS TOTAL BID BASED ON HIS UNIT PRICES AND LUMP SUM PRICES AND THE ESTIMATED QUANTITIES. THIS FIGURE IS FOR INFORMATION ONLY AT THE TIME OF OPENING BIDS. THE OWNER WILL MAKE THE BID TABULATION FROM THE UNIT PRICES AND LUMP SUM PRICES BID. IF THERE IS AN ERROR IN THE TOTAL BY THE BIDDER, IT SHALL BE CHANGED AS ONLY THE UNIT PRICES AND LUMP SUM PRICES SHALL GOVERN.

NOTE: FAILURE OF BIDDER TO INCLUDE PRICES FOR THE ALTERNATE BID ITEMS MAY RENDER HIS PROPOSAL NON-RESPONSIVE.

NOTE: Bids shall include sales tax and all other applicable taxes and fees.

I (We) further propose to execute the Contract Agreement as bound herein within ten working days after receipt of Contract Forms from the Owner and to complete the work within the contract time. I (We) agree to pay as liquidated damages the actual costs, expenses and other losses reasonably incurred by Owner for each consecutive calendar day beyond the specified Contract Time.

I (We) also propose to execute a Performance Bond and a Payment Bond, as shown in the Specifications, each in an amount of not less than one hundred percent (100%) of the total of my (our) Bid. These Bonds shall not only serve to guarantee the completion of the Work on my (our) part, but also to guarantee the excellence of both workmanship and materials until the Work is finally accepted.

I (We) enclose a Bid Bond or Certified Check for 5 percent of _____
_____, DOLLARS (\$_____)
(Base Bid Amount)

and hereby agree that in case of my (our) failure to execute the Contract and furnish the Bonds within ten calendar days after delivery of the Notice of Award, the amount of this check (Bid Bond) will be forfeited to the Owner as liquidated damages arising out of my (our) failure to execute the Contract as proposed.

It is understood that in case I (we) am (are) not awarded the Work, the Certified Check or Bid Bond submitted as Bid security will be returned as stipulated in the Contract Documents.

Bidder acknowledges receipt of the following Addenda:

No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____

Respectfully Submitted,

Contractor(s)

By: _____
Title

Address

BIDDER'S CORPORATE DECLARATION
(TO BE FILLED IN IF BIDDER IS A CORPORATION)

Date: _____, 20_____.

Our corporation is chartered under the Laws of the state of _____ and the names,
titles and business addresses of the executives are as follows:

President

Secretary

Treasurer

DECLARATION OF PARTNERSHIP

(To be filled in if a Bidder is a Partnership)

Our Partnership is composed of the following individuals:

Address

Address

NON-COLLUSION AFFIDAVIT

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG, MISSISSIPPI

(THIS AFFIDAVIT MUST BE EXECUTED FOR THE BID TO BE CONSIDERED)

STATE OF _____)

COUNTY OF _____) ss.

_____ being first duly sworn,
(Person)
deposes and says that he is _____

(Sole owner, a partner, president, secretary, etc.)

of _____ the party making the foregoing Proposal or Bid;
(Name of Firm)

that such Bid is genuine and not collusive; that said Bidder is not financially interested in, or otherwise affiliated in a business way with any other bidder on the same contract; that said Bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder or person, to put in a sham bid, or that such other person shall refrain from bidding, and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the Owner or any person or persons interested in the proposed contract; and that all statements contained in said Proposal or Bid are true; and further, that such Bidder has not, directly or indirectly submitted his Bid, or the contents thereof, or divulged information or data relative thereto to any association or to any member or agent thereof.

Affiant

Sworn to and subscribed before me this _____ day of _____, 20_____.

Notary Public in and for

_____ County,

(SEAL)

My Commission Expires _____, 20_____.

BID BOND

LINCOLN ROAD PAVING PROJECT

CITY OF HATTIESBURG, MISSISSIPPI

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____ as Principal, and _____ as Surety, are hereby held and firmly bound unto the Owner, in the penal sum of \$ _____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. Signed this ____ day of _____, 20 _____.

The condition of the above obligation is such that whereas the Principal has submitted to the Owner, a certain bid, attached hereto and hereby made a part hereof to enter into a contract in writing for the above referenced project.

NOW THEREFORE,

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to signed by their proper officers, the day and year first set forth above.

Contractor

SEAL

By:_____

Surety

SEAL

By:_____

PROPOSED SUBCONTRACTORS
LINCOLN ROAD PAVING PROJECT
CITY OF HATTIESBURG, MISSISSIPPI

The names and addresses of all persons and parties who will be utilized for subcontract Work in the foregoing Bidder's Proposal are listed below. (The Contractor must list all Subcontractors to be utilized on the Work. Failure to list Subcontractors may cause the Bidder's Proposal to be rejected by the Owner as non-responsive.) If the Bidder does not propose Subcontractors, so state.

NAME	ADDRESS

CONTRACT FORMS

**LINCOLN ROAD PAVING PROJECT
CITY OF HATTIESBURG, MISSISSIPPI**

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CONTRACT

**LINCOLN ROAD PAVING PROJECT
CITY OF HATTIESBURG, MISSISSIPPI**

This Contract, made this the _____ day of _____, 20____, by and between the City of Hattiesburg, Mississippi, a municipal corporation, hereinafter called "Owner" and _____ doing business as a _____ located in _____ hereinafter called the "Contractor".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. THE CONTRACTOR will commence and complete the "Lincoln Road Paving Project" in strict accordance with the Contract Documents and the Contract Drawings.
2. The Contractor will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED and will attain Final Completion within the contract time stipulated in the INSTRUCTION TO BIDDERS unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
The Contractor agrees to pay, as liquidated damages, the actual damages, costs, losses and expenses reasonably incurred by Owner for each consecutive calendar day that he shall be in default in attaining Final Completion within the time stipulated as provided herein.
3. The term "CONTRACT DOCUMENTS" means and includes Advertisement for Bids, Instructions to Bidders, Bidder's Proposal, Bid Bond, Contract, Payment Bond, Performance Bond, General Conditions, Supplementary Conditions, Technical Specifications, Contract Drawings, Notice of Award, Notice to Proceed, Addenda (if any), and all subsequent Change Orders, Supplemental Agreements and/or other modifications as if formally recopied in this Contract.
4. The Contractor agrees to furnish all materials in place and to faithfully complete all of said work contemplated by this Contract in good and workmanlike manner, strictly in accordance with said Contract Documents, Contract Drawings and other requirements of the Owner, and to the complete satisfaction of the Owner or his authorized representatives, and in accordance with the Laws of the state of Mississippi and the Ordinances of the Owner, for which the Owner hereby agrees to pay and the Contractor agrees to accept a sum of money in current funds equal to the contract amount of _____ (\$ _____) plus the amount of any supplemental agreements and force accounts for extra work authorized and duly set forth in a written change order approved and executed by the Owner and set forth in the public minutes of the Owner and in full compensation for furnishing all materials, the doing of all work contemplated under the Contract, as well as all loss or damage, if any, arising out of the nature of the work, or the action of the weather, and any and all other unforeseen obstructions or difficulties that may be encountered in the prosecution of the same, the Contractor assuming all risks of every kind and description in the performance of this Contract.
5. The Contractor shall protect, indemnify and save harmless the Owner from and against any and all damage, loss, claims, judgments or expenses, including but not limited to reasonable

attorney's fees, which the Owner may suffer or be subjected to by the performance of the work, including but without limitation injury to or death of any person whomever and destruction or damage to any property whatsoever.

6. Attached hereto and made a part of this Contract is a Performance Bond, executed by a Surety Company doing business in the state of Mississippi, in the sum of

(\$_____).
7. Attached hereto and made a part of this Contract is a Payment Bond, executed by a Surety Company doing business in the state of Mississippi, in the sum of

(\$_____).
8. The Contractor agrees to allow the Owner, or any of their duly authorized representatives, access to any books, documents, papers and records of the Contractor which are directly pertinent to the project which is the subject of this Contract, for the purpose of making audits, examinations, excerpts and transcriptions, and Contractor agrees to insert an identical clause in any and all subcontracts.
9. The Owner will pay to the Contractor in the manner and at such times and amounts as set forth in the Contract Documents.
10. This Contract shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
11. If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner his obligations under this Contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, the Owner shall thereupon have the right to terminate this Contract by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least five days before the effective date of such termination. Notwithstanding the above, the Contractor shall not be relieved of liability to the Owner for damages sustained by the Owner by virtue of any breach of the Contract by the Contractor and the Owner may withhold any payments to the Contractor until such time as the exact amount of damages due the Owner from the Contractor is determined.

IN WITNESS THEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Contract in _____ counterparts, each of which shall be deemed an original on the date first above written. (number)

OWNER

CONTRACTOR

BY _____

BY _____

ATTEST _____

ATTEST _____

(Seal)

(Seal)

PARTNERSHIP CERTIFICATE

State of _____

County of _____ Ss.

On this _____ day of _____, 20_____, before me personally appeared _____, known to me and known by me to be the person who executed the above instrument, who being by me first duly sworn, did depose and say that he is a general partner in the firm of _____; that said firm consists of himself and _____; and that he executed the foregoing instrument on behalf of said firm for the uses and purposes stated herein.

Notary Public in the

County of _____

State of _____

Notary Seal

My Commission Expires:

CORPORATE CERTIFICATE

I, _____ certify that I am the Secretary of the Corporation named as Contractor in the foregoing Contract; that _____, who signed said Contract on behalf of the Contractor was then _____ of said Corporation; that said Contract was duly signed for and in behalf of said Corporation by authority of its governing body and is within the scope of its corporate powers.

Secretary

Corporate Seal

GENERAL INSTRUCTIONS FOR BONDS

1. The surety on each Bond must be a responsible surety company, which is qualified to do business in Mississippi and satisfactory to the Owner.
2. The name, including full Christian name and residence of each individual party to the Bond shall be inserted in the body thereof, and each such party shall sign the Bond with his usual signature on the line opposite the seal and if signed in Maine, Massachusetts or New Hampshire an adhesive seal shall be affixed opposite the signature. The bond must be either signed or countersigned by a Mississippi Resident Agent of the Surety Company.
3. If the principals are partners, their individual names will appear in the body of the Bond with the recital that they are partners composing a firm, naming it; and all the members of the firm shall execute the Bond as individuals.
4. The signature of a witness shall appear in the appropriate place, attesting to the signature of each individual party to the Bond.
5. If the principal or surety is a corporation, the name of the State in which incorporated shall be inserted in the appropriate place in the body of the Bond, and said instrument shall be executed and attested under the corporate seal as indicated in the form. If the corporation has no corporate seal the fact shall be stated, in which case, a scroll or adhesive seal shall appear following the corporate name.
6. The official character and authority of the person or persons executing the Bond for the principal, if a corporation, shall be certified by the secretary or assistant secretary, according to the form attached hereto. In lieu of such certificate there may be attached to the Bond copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.
7. The date of this Bond must not be prior to the date of the Contract in connection with which it is given.
8. Surety Companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal, and
(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____ Dollars,
\$(_____) in lawful money of the United States, for the payment of which sum well
and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these
presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain
contract with the OWNER, dated _____ day of _____ 20 _____,
a copy of which is hereto attached and made a part hereof for the construction of :

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings,
covenants, terms, conditions, and agreements of said contract during the original term thereof, and any
extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the
one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and
shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by
reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the
OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full
force and effect.

NOW, THEREFORE, if the Principal shall promptly make payment of all taxes, licenses, assignments,
contributions, damages, penalties, and interest thereon, when and as the same may lawfully be due the state of
Mississippi, or any county, municipality, board, department, commission, or political subdivision thereof, by
reason of and directly connected with the performance of said Contract or any part thereof as provided by
Sections 27-65-1, 27-65-21, 27-67-301 and 31-5-3, supra, or any other applicable statute or other authority,
then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change,

extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this statement is executed in _____ counterparts, each one of which shall
(number)
be deemed an original, this the _____ day of _____, 20 _____.

ATTEST:

(Principal) Secretary
(Seal)

Principal
By _____

(Address)

Witness as to Principal

(Address)

Surety
By _____

ATTEST:

Witness as to Surety

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
 If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS THAT

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal,
(Corporation, Partnership, or Individual)

and _____
(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____
Dollars, \$(_____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____ 20 _____, a copy of which is hereto attached and made a part hereof for the construction of:

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this statement is executed in _____ counterparts, each one of which shall
(number)
be deemed an original, this the _____ day of _____, 20 _____.

ATTEST:

(Seal) (Principal) Secretary

By Principal

(Address)

Witness as to Principal

(Address)

ATTEST:

Surety

By _____

Witness as to Surety

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most
current list (Circular 570 as amended) and be authorized to transact business in the State
where the PROJECT is located.

NOTICE OF AWARD

Date _____

TO: _____

RE: Lincoln Road Paving Project
 City of Hattiesburg, Mississippi

NOTICE OF AWARD

Gentlemen:

The Owner has considered the Proposal submitted by you for the above referenced Work in response to its Advertisement for Bids and Instructions to Bidders.

You are hereby notified that your Proposal has been accepted in the amount of \$_____.

You are required by the Instruction to Bidders to execute the Contract and furnish to the Owner the required Contractor's Performance Bond, Payment Bond and certificates of insurance within 10 calendar days from the date of delivery of this Notice to you. We have enclosed five copies of the necessary contract forms and bond forms. Please return all five copies of these documents to the offices of Neel-Schaffer, 704 Hardy Street, Hattiesburg, MS 39401.

If you fail to execute said Contract and to furnish said Bonds within 10 days from the date of delivery of this Notice, the Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your proposal as abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by Law.

You are required by the General Conditions and Supplementary Conditions to submit to Neel-Schaffer, Inc. an estimated progress schedule, a preliminary schedule of Shop Drawing submissions and a preliminary schedule of values of the Work within 10 days after the effective date of this Contract, all in accordance with Article 2.5 of the General Conditions.

You are required to return an acknowledged copy of this Notice of Award directly to the City of Hattiesburg, Mississippi, Attention: Lamar Rutland, P.E., and to Neel-Schaffer, Inc.

Sincerely,

NEEL-SCHAFFER, INC.

Geoffrey Crosby, P.E.
Senior Project Manager

c: Lamar Rutland, P. E.
City of Hattiesburg
200 Forrest Street
Hattiesburg, MS 39401

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged by _____ this, the
_____ day of _____, 20_____.

By _____

Title _____

NOTICE TO PROCEED

Date _____

To: _____

Attention: _____

REFERENCE: NOTICE TO PROCEED
LINCOLN ROAD PAVING PROJECT
CITY OF HATTIESBURG, MISSISSIPPI

Dear _____:

You are hereby notified to commence Work in accordance with the Contract dated _____, on or before _____. You are to complete the Work within _____ consecutive calendar days from the effective date of this Notice to Proceed. The date of Final Completion is therefore _____. Liquidated damages in the amount of the actual damages, costs, losses and expenses reasonably incurred by the OWNER per calendar day for each day the Work has not achieved Final Completion after _____ will be imposed unless the contract time is otherwise adjusted for due cause by change orders to the Contract. Liquidated Damages, as defined herein, will be assessed unless the Contract Time is otherwise adjusted for due cause by change order to the Contract.

The engineering firm of Neel-Schaffer, Inc. will act as the Engineer on behalf of the City of Hattiesburg, Mississippi for the work to be performed under the contract. Geoffrey Crosby, P.E., of Neel-Schaffer, Inc. will be the designated representative of the Engineer.

Please return a copy of this NOTICE TO PROCEED and ACCEPTANCE OF NOTICE to the undersigned and to Neel-Schaffer, Inc., indicating your receipt of this document in the space provided below.

Sincerely,

City of Hattiesburg, Mississippi

Mayor Toby Barker

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED

is hereby acknowledged by _____

this, the _____ **day**

of _____, **20** _____.

By _____

Title _____

CONTRACT CHANGE ORDER

OWNER: _____ PROJECT NAME: _____

CONTRACTOR: _____

DATE: _____

CHANGE ORDER NUMBER: _____ CONTRACT NUMBER: _____

REASON FOR CHANGE: _____

YOU ARE HEREBY REQUESTED TO COMPLY WITH THE FOLLOWING CHANGES FROM THE CONTRACT
PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS: (USE ADDITIONAL SHEETS IF REQUIRED)

ITEM NO.	DESCRIPTION OF CHANGE(S) (QUANTITIES, ETC.)	QTY	UNIT COST	TOTAL CONTRACT
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00

TOTAL CONTRACT CHANGE	\$
	TOTAL CONTRACT
ORIGINAL CONTRACT AMOUNT:	\$
CURRENT CONTRACT AMOUNT:	\$
THIS CONTRACT CHANGE	
REVISED CONTRACT AMOUNT:	\$
CURRENT CONTRACT COMPLETION DATE:	
TIME EXTENSION REQUIRED BY CHANGE:	
REVISED CONTRACT COMPLETION DATE:	
THIS DOCUMENT SHALL BE AN AMENDMENT TO THE CONTRACT AND ALL PROVISIONS OF THE CONTRACT WILL APPLY. RECOMMENDED BY: _____ ENGINEER _____ DATE _____ NEEL-SCHAFFER, INC. ACCEPTED BY: _____ CONTRACTOR _____ DATE _____ ACCEPTED BY: _____ OWNER _____ DATE _____	

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By



PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

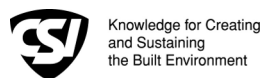
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AMERICAN SOCIETY OF CIVIL ENGINEERS

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The Associated General Contractors of America



Construction Specifications Institute

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National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314

American Council of Engineering Companies
1015 15th Street, N.W., Washington, DC 20005

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain

administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times

but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents, or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
- c. has been damaged prior to Engineer's - recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement

or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or

responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work

(unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or

3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's

sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice*: If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review*: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

- a. reviewing and checking all such information and data,
- b. locating all Underground Facilities shown or indicated in the Contract Documents,
- c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
- d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will

promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to

entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified

in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection

from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any

deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract

Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or

received from the superintendent shall be binding on Contractor.

6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services;

4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract

Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. Contractor's Expense: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual

or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer,, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Draw-

ings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples*: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.

a. Submit number of Samples specified in the Specifications.

b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals , any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents

with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 Continuing the Work

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or

disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 Contractor's General Warranty and Guarantee

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal

shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and

2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and

properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 *Insurance*

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep

Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show

partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall

promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,

2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and

Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have

resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. Costs Excluded: The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.

C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall

be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an

allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted

by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to

be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications .

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress

payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent

inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

- a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling Owner to a set-off against the amount recommended; or
- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, , Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial

Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals

that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;

b. consent of the surety, if any, to final payment;

c. a list of all Claims against Owner that Contractor believes are unsettled; and

d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. *Engineer's Review of Application and Acceptance*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations

under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance

with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be

governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or

2. agrees with the other party to submit the Claim to another dispute resolution process, or

3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS

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SUPPLEMENTARY CONDITIONS

1. Definitions

- A. The definition of "Technical Specifications" shall be the same as the definition for Specifications stated in Paragraph 1.01 under item number 43 of the General Conditions.
- B. Delete Paragraph 1.01.A.12 of the General Conditions in its' entirety.
- C. In Paragraph 1.01A.52 delete the following words, "or responding to differing or unseen subsurface or physical conditions under which the work is to be performed or to emergencies."

2. Commencement of Contract Time: Notice to Proceed

The commencement of Contract Time, as stated in Item 2.03 of the General Conditions is changed to read The Contract Time will commence to run within the sixtieth day after the Effective Date of the Agreement, or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed; but in no event shall the Contract Time commence to run later than the sixtieth day after the Effective Date of the Agreement.

Notice to Proceed may be given at any time within sixty days after the Effective Date of the Agreement. Refer to Item 21 of the Instructions to Bidders regarding execution of the Contract.

3. Before Starting Construction

In addition to the requirements of Paragraph 2.05 of the General Conditions, "**CONTRACTOR** shall deliver to the **OWNER**, with his signed Contract, all bonds and insurance which he is required to purchase and maintain in accordance with Article 5 of the General Conditions. A copy shall also be submitted to the **ENGINEER**. The **OWNER** shall deliver to the **CONTRACTOR** a copy of all policies of insurance which the **OWNER** is required to purchase and maintain in accordance with Article 5 of the General Conditions."

4. Preconstruction Conference

The time period for holding the preconstruction conference as stated in Paragraph 2.06 of the General Conditions shall be within 30 days after the Effective date of the Agreement, but before the **CONTRACTOR** starts the Work at the site.

5. Subsurface and Physical Conditions

Paragraphs 4.02 and 4.03 shall be deleted in its' entirety and replaced with the following:

DIFFERING SITE CONDITIONS PROVISION:

Execution of this Contract (Agreement) by the Contractor is a representation that the Contractor has visited the site, that general and local conditions are suitable for the work to be performed and that the Contractor accepts all conditions at the Project site. The Contractor assumes all risks with respect to the requirements of the Contract Documents, including without limitation the characteristics (natural and manmade) of the site, site accessibility, labor rates and availability, weather conditions, and any other matter that could affect the performance and cost of the work.

6. Insurance Requirements

- A. Paragraphs 5.05 and 5.06 shall be deleted in their entirety.
- B. Paragraphs 5.07.B, 5.07.B.1 and 5.07.B.2 shall be deleted in their entirety.
- C. In addition to the requirements of Article 5 of the General Conditions, insurance coverage specified herein constitutes the minimum requirements and said requirements shall in no way lessen or limit the liability of the **CONTRACTOR** under the terms of the Contract. The **CONTRACTOR** shall procure and maintain at his own expense any additional kinds and amounts of insurance that, in his own judgment, may be necessary for his proper protection in the prosecution of the Work.
 - 1. The **CONTRACTOR** shall carry insurance as prescribed herein and all policies shall be with companies satisfactory to the **OWNER**. If a part of this Contract is sublet, the **CONTRACTOR** shall require each Subcontractor to carry insurance of the same kinds and in like amounts as carried by the **CONTRACTOR**, including all additional insureds and waivers of subrogation.
 - 2. Certificates of insurance shall state that 30 days written notice will be given to the **OWNER** before the policy is canceled or changed. No **CONTRACTOR** or Subcontractor will be allowed to start any construction work on this Contract until certificates of all insurance required herein and all coverage requirements specified in contract documents are filed with and approved by the **OWNER**. The certificates shall show the type, amount, class of operations covered, effective dates and the dates of expiration of policies.
 - 3. The **CONTRACTOR** shall secure and maintain in effect for the period of the **CONTRACT** and pay all premiums for the following kinds and amounts of insurance:
 - a. Worker's Compensation and Employer's Liability Insurance: This insurance shall protect the **CONTRACTOR** against all claims under applicable State Worker's Compensation Laws. The **CONTRACTOR** shall also be protected and shall cause each Subcontractor to be protected against claims for injury, disease, or death of employees, which for any reason, may not fall within the provisions of a Worker's Compensation Law. The liability limits shall not be less than the required statutory limits for Worker's Compensation and Employer's Liability limits in the amount of ONE MILLION DOLLARS (\$1,000,000.00). **CONTRACTOR** and subcontractors shall supply **OWNER** endorsements from their carriers evidencing waiver of subrogation in favor of the **OWNER**.
 - b. **CONTRACTOR'S** and Subcontractor's Comprehensive General Liability Insurance, including bodily injury, property damage, contractual and other

standard coverage contained in Comprehensive General Liability Insurance, in an amount of not less than ONE MILLION DOLLARS (\$1,000,000) per occurrence and aggregate. **OWNER** shall be provided an endorsement naming the **OWNER** as an insured from the insurer for the work contracted. The Comprehensive General Liability policies carried by both the **CONTRACTOR** and the Subcontractors shall contain an endorsement to include the coverage of the following hazards:

- i. Explosion, collapse, and underground property damage to include any damage or destruction of property below the surface of the ground, such as wires, conduits, pipes, mains, sewers, etc., caused by the **CONTRACTOR'S** operations.
 - ii. The collapse of and structural injury to any building, structure or property on or adjacent to the **OWNER'S** premises or right-of-way caused by the **CONTRACTOR'S** operations in the removal of other buildings, structures, or supports, or by excavation below the surface of the ground.
 - iii. Contractual Liability Coverage for the Hold Harmless segments of the Contract Documents.
- c. **CONTRACTOR'S** Contingent or Protective Liability and Property Damage: In case part of this Contract is sublet, the **CONTRACTOR** shall secure contingent or protective liability and property damage insurance to protect the **CONTRACTOR** from any and all claims arising from the operation of Subcontractors in the execution of Work included in the Contract. In no case shall the amount of such protection be less than the limits of \$500,000/\$1,000,000 for Public Liability Insurance and \$500,000/\$1,000,000 for Property Damage Insurance. The coverage in each case shall be acceptable to the **OWNER**.
- d. Auto Liability: The **CONTRACTOR** shall maintain Auto Liability Insurance in the amount of not less than ONE MILLION DOLLARS (\$1,000,000) Combined Single Limit to protect him from any and all claims arising from the use of the following:
- i. **CONTRACTOR'S** own automobiles and trucks.
 - ii. Hired and non-owned automobiles and trucks.
 - iii. Automobiles and trucks owned by Subcontractors.
- The aforementioned is to cover use of automobiles and trucks on and off the site of the Project. The **OWNER** shall be provided an endorsement from the insurer naming the **OWNER** as an insured for the work contracted.
- e. **OWNER'S** Protective Liability Policy: The **CONTRACTOR** shall maintain **OWNER'S** Protective Liability Insurance with the **OWNER** as the named insured, and the **ENGINEER**, and their servants, agents and employees as additional insureds, in an amount not less than ONE MILLION DOLLARS (\$1,000,000).
- f. Umbrella Liability: The **CONTRACTOR** shall provide **OWNER** a certificate of insurance evidencing Umbrella Liability Insurance in the amount of not less than FIVE MILLION DOLLARS (\$5,000,000).
- g. Builder's Risk and Boiler and Machinery Insurance: The **CONTRACTOR** shall purchase and maintain Builder's Risk and Boiler and Machinery Insurance in the amount of the total value of the materials necessary for the

project. A certificate evidencing such coverage shall be on file with the **OWNER**.

h. Property Insurance: No property insurance is required for this project.

7. Contractor's Responsibilities

Delete Paragraph 6.02.B in its entirety.

8. Record Documents

In addition to the requirements of Paragraph 6.12 of the General Conditions, **CONTRACTOR** shall provide accurate 'mark-ups' acceptable to the **ENGINEER** on or before the date of Substantial Completion of the Project for use by the **ENGINEER** in the preparation of 'record' drawings. Final payment will not be made to the **CONTRACTOR** prior to the **ENGINEER** receiving these mark-ups from the **CONTRACTOR**.

9. Limitations on ENGINEER'S Responsibilities

In addition to the requirements of Paragraph 9.09.B, when it comes to his attention, the **ENGINEER** will immediately notify the **OWNER** in the event that the **CONTRACTOR** is not complying with the Contract Documents or is conducting the Work in such a manner that could be considered grounds for termination of the Contract. The **CONTRACTOR** shall retain responsibility for performing all Work in compliance with the Contract Documents.

The following language shall be added to Paragraph 9.09.B:

“Consistent with the express provisions of this Section 00700, Article 6.13, Article 6.17.D.2, Article 9.02.B, Article 9.09, this Article 9.09.B, and Article 14.02.B.4.b, any reference to “safety” elsewhere in this contract, including but not limited to those found in Section 00700, Articles 4.02.B.1, 4.04.A.2.d, 4.04.B.1, 4.06.B.1, 6.02.B, 6.14, 6.15, 6.16, 6.17.C.1.c, and 13.02.A, does not impose upon the Engineer any duty, obligation or other contractual undertaking to administer the “safety” aspects of Contractor’s performance, or any other matter relating to the Contractor’s means, methods, techniques, sequences or procedures. Contractor’s contractual safety obligations and means and methods during construction are the sole responsibility of the Contractor and are not being administered, overseen or reviewed in any way by the Engineer in performing its contractual obligations”

10. Change of the Contract Time

In addition to the requirements of Paragraph 12.03 of the General Conditions, rainstorms which are encountered in the project area on a regular and seasonal basis do not constitute an abnormal weather condition.

11. Payments to **CONTRACTOR**

Paragraph 14.02.A, Application for Payments, is deleted in its' entirety and the following substituted therefore:

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- A. Monthly Estimates and Partial Payments: The **CONTRACTOR'S** partial payment period shall end on the last day of each month. The **CONTRACTOR** shall submit acceptable Application for Payment to the **ENGINEER** by the date indicated on the payment schedule as supplied to **CONTRACTOR** by **ENGINEER** provided that the amount due on completed work is at least \$500.00. The partial payment request shall be filled out and signed by the **CONTRACTOR** covering the work completed as of the date of the request and accompanied by such supporting documentation as is required by the Contract Documents and also as the **ENGINEER** may reasonably require. At the discretion of the **OWNER**, the **ENGINEER** may be authorized to include in any monthly estimate advances covering approximately 95 percent of the value of unused materials delivered and stored on the site of the work. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site, the Application for Payment shall also be accompanied by such data, satisfactory to **OWNER**, as will establish **OWNER'S** title to the material and equipment and protect **OWNER'S** title to the material and equipment and protect **OWNER'S** interest therein, including applicable insurance. Each subsequent Application for Payment shall include an affidavit of **CONTRACTOR** stating that all previous progress payments received on account of the Work have been applied to discharge in full all of **CONTRACTOR'S** obligations reflected in prior Applications for Payment.
- B. After each monthly estimate has been approved, the **OWNER** shall pay to the **CONTRACTOR** 95 percent of the amount of said estimate. From the total value of each estimate there will be deducted an amount equivalent to 5 percent of the whole as a retainage to be held by the **OWNER**. The monthly estimates will be approximate only and subject to correction in any subsequent estimate rendered following discovery of the error. At the discretion of the **OWNER**, the **ENGINEER** may be authorized to include any monthly advances covering approximately 95 percent of the value of unused materials delivered and stored on the site of the work.
- C. Subsequent to discovery of any defective or questionable work, an amount equal to the estimated value of such work will be deducted from the next current estimate. The sum will not be included in a subsequent estimate until the defects have been remedied to the **ENGINEER'S** satisfaction.
- D. The **OWNER** reserves the right to withhold payment of any monthly estimate that becomes due if, in the opinion of the **OWNER'S** Attorney, such action is warranted because of any breach of the Contract Provisions or malfeasance on the part of the **CONTRACTOR** or because the progress or the quality of the work is unsatisfactory and does not comply with the Plans and Specifications.

Paragraph 14.02.C of the General Conditions is modified to read "60 days after presentation of the Application for Payment to **OWNER** with **ENGINEER'S** recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by **OWNER** to **CONTRACTOR**."

Paragraph 14.07.C of the General Conditions is modified to read, "If the Application and accompanying documentation are appropriate as to form and substance, **OWNER** shall, within 60 days after receipt thereof, pay **CONTRACTOR** the amount recommended by **ENGINEER**."

Delete Paragraph 14.09.A.2 in its entirety.

12. List of Contract Drawings: Not Used.

13. Liquidated and Special Damages

The **CONTRACTOR** will be subject to liquidated damages and actual damages in the amount of the actual costs incurred by the Owner after the time stipulated for Final Completion of the work.

The **CONTRACTOR** will be subject to liquidated damages in the amount of **\$750** for each consecutive calendar day after the time stipulated for Final Completion of the work. The actual costs includes, but is not limited to construction related costs resulting from the Contractor's failure to complete the work on schedule.

When the Contractor fails to complete the work within the time stipulated, a deduction will be made of \$750 a day from the money due the Contractor not as a penalty but as liquidated damages. The Contractor and the Contractor's Sureties shall be liable for all liquidated damages in excess of money due the Contractor

The liquidated damages provided for herein were not calculated in contemplation or anticipation that the **CONTRACTOR** would default or otherwise abandon the project. In the event the **CONTRACTOR** does default or otherwise abandon the project, the **OWNER** reserves the right to collect from the **CONTRACTOR** or its surety, in addition to the liquidated damages, the actual damages including, but not limited to, additional engineering costs, incurred by the **OWNER** as a result of the default or abandonment.

14. Suspension of Work and Termination

In Paragraph 15.04.A delete the following words: "or Engineer fails to act on any Application for Payment within thirty days, after it is submitted" and add the words "if the". In Paragraph 15.04.B delete the following words: "if Engineer has failed to act on an Application for Payment within thirty days after it is submitted" and add the words "if the".

16. Methods and Procedures

Delete sentence 16.01.C.2 in its entirety

*** * END OF SECTION * ***

SECTION 01010
SUMMARY OF WORK

PART 1 GENERAL

1.01 Location of Work

All of the work of this Contract is located in public right-of-way or on easements and property owned or obtained by the Owner.

1.02 Work to be Done

- A. The CONTRACTOR shall furnish all labor, materials, equipment, tools, services and incidentals to complete all work required by these Specifications and as shown on the Drawings.
- B. The CONTRACTOR shall perform the work complete, in place, and ready for continuous service, and shall include repairs, testing, permits, cleanup, replacements and restoration required as a result of damages caused during this construction.
- C. All materials, equipment, skills, tools and labor which are reasonably and properly inferable and necessary for the proper completion of the work in a substantial manner and in compliance with the requirements stated or implied by these Specifications or Drawings shall be furnished and installed by the CONTRACTOR without additional compensation, whether specifically indicated in the Contract Documents or not.
- D. The CONTRACTOR shall comply with all county, state, federal, and other codes which are applicable to the proposed construction work.

1.03 General Description of Work to be Performed

- A. The Work included in the Contract shall be as described in the Contract Documents.
- B. All work shall be done as described in the Specifications and as shown on the Drawings, complete, tested and ready for operation.

1.04 Work Sequence

- A. All work to be done under the Contract shall be done with minimum inconvenience to the OWNER. The CONTRACTOR shall coordinate his work with private property owners such that existing drainage, water service, sewer service and garbage pickup and other public services are maintained at all times.
- B. Construct Work in stages to accommodate the OWNER'S use of the premises during the construction period; coordinate the construction schedule and operations with the ENGINEER.
- C. Construct the Work in stages to provide for public convenience. Do not close off public

access until completion of one stage of construction will provide alternative usage.

1.05 Construction Areas

- A. CONTRACTOR shall limit his use of the construction areas for Work and for storage, to allow for:
 - 1. Work by other contractors.
 - 2. OWNER use.
 - 3. Public use.
- B. Coordinate use of work site under direction of ENGINEER.
- C. Assume full responsibility for the protection, security and safekeeping of products under this Contract stored on the site.
- D. Move any stored products, under CONTRACTOR'S control which interfere with operations of the OWNER or other contractors.
- E. Obtain and pay for the use of additional storage or work areas needed for operations.

1.06 Owner Occupancy

- A. OWNER will have full access to and use of all existing sewer facilities during the entire period of construction for the conduct of his normal operations. Cooperate with ENGINEER in all construction operations to minimize conflict and to facilitate OWNER usage.
- B. CONTRACTOR shall at all times conduct his operations as to insure the least inconvenience to the general public.

1.07 Partial Owner Occupancy

The CONTRACTOR shall schedule his operations for completion of portions of the Work, as designated, for the OWNER'S occupancy prior to Substantial Completion of the entire Work.

1.08 Plans and Specifications

- A. Specifications: The Technical Specifications consist of three parts: General, Products, and Execution. The General section contains general requirements which govern the work. The Products and Execution sections modify and supplement these by detailed requirements of the work and shall always govern whenever there appears to be a conflict.
- B. Intent:
 - 1. All work called for in the Specifications applicable to the Contract but not shown on the Plans in their present form or vice versa shall be of like effect as if shown or mentioned in both. Work not specified in either the Plans or in the Specifications but involved in carrying out their intent or in the complete and proper execution of the work is required and shall be performed by the CONTRACTOR as though it were specifically delineated or described at the CONTRACTOR'S expense.
 - 2. The apparent silence of the Specifications as to any detail, or the apparent omission

from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

- C. Conflict between Drawings and Specifications. Where an obvious conflict exists between the Plans and Specifications, the ENGINEER shall decide which governs and the CONTRACTOR shall comply with the decision. Such decision shall not be grounds for additional payment to the CONTRACTOR, i.e., the CONTRACTOR shall include the price of the most expensive alternative in his bid.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 Description

- A. CONTRACTOR shall furnish all labor, materials, tools, equipment, appurtenances and all services necessary to perform all Work required, at the lump sum or unit prices for the items listed in the Prices Bid Table located in the Bid Proposal.
- B. The pay items listed in the Bid Proposal constitute all of the pay items for the completion of the Contract. No direct or separate payment will be made for providing miscellaneous temporary or accessory works, plant, services, CONTRACTOR'S or ENGINEER'S field offices, layout surveys, job signs, sanitary requirements, testing, safety devices, approval and record drawings, water supplies, power, removal of waste, watchmen, bonds, insurance, and all other requirements of the Contract Documents. Compensation for all such services, things and materials shall be included in the prices stipulated for the lump sum and unit pay items listed herein.

1.02 Engineer's Estimate of Quantities

The ENGINEER's estimated quantities for unit bid prices, as listed in the Bid Form, are approximate only and are included solely for the purpose of comparison of Bids. The OWNER does not expressly or by implication agree that the nature of the materials encountered below the surface of the ground or the actual quantities of material encountered or required will correspond therewith and reserves the right to increase or decrease any quantity or to eliminate any quantity as OWNER may deem necessary.

1.03 Related Provisions Specified Elsewhere

- A. Payments to CONTRACTOR: Refer to General Conditions and Supplemental Conditions.
- B. Changes in Contract Price: General Conditions and Contract Forms.
- C. Schedule of Values: Section 01026.

1.04 Measurement of Quantities

- A. The measurement and determination of quantities for each pay item will be made in general as prescribed hereinafter and specifically as set out under Method of Measurement and Basis of Payment for each respective pay item section. Actual authorized quantities of work, complete and accepted under the contract, will be measured by the Engineer according to United States standard measures, and in accordance with well recognized engineering practices.
- B. A station when used as a definition or term of measurement will be 100 linear feet.

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- C. Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures having an area of nine square feet or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered by the Engineer.
 - D. Where the area unit for measurement and payment is specified for erosion control items, the measurements will be taken on the slope of the ground to compute the actual surface area for payment.
 - E. Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.
 - F. All items which are measured by the linear foot, such as pipe culverts, guardrail, underdrains, etc., will be measured as specified under the Method of Measurement for the item unless otherwise shown on the plans.
 - G. No payment will be made for unauthorized excavation. Excavation or embankment performed beyond the required neat lines or slope stakes will not be measured for payment unless within tolerances specified or otherwise provided.
 - H. In computing volumes of excavation and embankment, the average end area method will be used, unless otherwise specified.
 - I. When size number is used in the measurement of wire, it will mean the size number specified in AASHTO Designation: M 32.
 - J. The term ton will mean the short ton consisting of 2000 pounds avoirdupois. All materials which are specified for measurement by the ton shall be weighed by competent personnel on approved scales set at locations approved by the Engineer or in the case of prepackaged materials, the manufacturer's bag weight may be used. If material is shipped by rail, the car weight may be accepted provided it is the actual weight of material and not minimum car weight used for assessing freight tariff. However, car weights will not be acceptable for material to be used in mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such time as the Engineer directs, and each truck shall bear a plainly legible identification mark.
 - K. When a complete structure or structural unit, in effect "lump sum" work, is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.
 - L. Volumes of materials computed in cubic yards by the average end area method are designated as "Final Measure" (FM), or "Final Measure - Embankment" (FME). Volumes of materials designated for measurement loose in the vehicle are designated as "Loose Vehicle Measure" (LVM).

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- M. Volumetric measurement of excavation, embankment, granular materials or similar materials in cubic yards will be made by the methods designated on the plans or in the proposal. For justifiable reasons, such as impracticability of measurement of volumes (usually small) by the designated method, the Engineer may order measurement by another method as follows:
1. Volumes designated for payment by FM may be measured LVM and converted to contract measurement by multiplying the loose measure by 80 percent.
 2. Volumes designated for payment by LVM may be measured in its original position by the average end area method and multiply the FM measure by 125 percent.
 3. Volumes designated for payment by FME may be measured in its original position by the average end area method and multiply the FM measure by 90 percent.
 4. Small volumes of surplus, excess excavation or other small volumes of excavation which are impractical to measure by the average end area method but are designated to be measured by FME may be measured LVM and multiply the loose measure by 72 percent.

When the Engineer orders the use of a conversion factor for converting a unit of measure, the ordered method of measurement shall be deemed acceptable to all parties and shall be final.

- N. When requested by the Contractor and with written approval of the Engineer, material specified to be measured by the cubic yard or ton may be converted to the other measure as appropriate. Factors for this conversion will be determined by the Engineer and agreed to by the Contractor before such method of measurement is used.
- O. All materials measured by the cubic yard LVM shall be hauled in approved vehicles and verified at the point of delivery. Vehicles may be of any size or type acceptable to the Engineer provided the body is of such shape that the capacity may be readily and accurately determined to the whole cubic yard. Unless all vehicles on the work are of uniform capacity, each vehicle must be plainly labeled to indicate its measured capacity. All vehicles shall be legibly numbered for identification.
- P. The vehicles shall be loaded to ensure a water level load when they arrive at the point of delivery. Loads hauled in unapproved vehicles and loads of a quantity less than the measured quantity for the hauling vehicle, will be subject to rejection.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01026

SCHEDULE OF VALUES

PART 1 GENERAL

1.01 Requirements Included

The Schedule of Values is an itemized list that establishes the value or cost of each part of the work as defined in Section 01025, Part 1.04. All other work shall be paid according to the Prices Bid Table. It shall be used as the basis for preparing progress payments and may be used as a basis for negotiations concerning additional work or credits which may arise during the construction. Quantities and unit prices may be included in the schedule when approved by or required by the ENGINEER.

1.02 Preparation

- A. Schedule shall show breakdown of labor, materials equipment and other costs used in preparation of the Bid.
- B. Costs shall be in sufficient detail to indicate separate amounts for each Section of the Specifications.
- C. CONTRACTOR may include items for bond, insurance, temporary facilities and job mobilization within the mobilization bid item.
- D. Schedule of Values shall be prepared on 8-1/2 inch by 11 inch white paper.
- E. Use Table of Contents of the Specifications as basis for Schedule format and identify each item with number and title in the Table of Contents. List sub-items of major products or systems as appropriate or when requested by ENGINEER.
- F. When requested by ENGINEER, support values with data that will substantiate their correctness.
- G. The sum of the individual values shown on the Schedule of Values must equal the total Contract Price.
- H. The manner in which overhead and profit are shown shall be supported by the ENGINEER.
- I. Schedule shall show the purchase and delivery costs for materials and equipment that the CONTRACTOR anticipates he shall request payment for prior to their installation.

1.03 Submittal

Submit two copies of Schedule to ENGINEER for approval at least 20 days prior to submitting first application for a progress payment. After review by ENGINEER, revise and resubmit Schedule as required until it is approved.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01027

APPLICATIONS FOR PAYMENT

PART 1 GENERAL

1.01 Requirements Included

Submit Applications for Payment to the ENGINEER in accordance with the General Conditions and in the form required by the OWNER.

1.02 Format and Data Required

- A. Submit applications typed with itemized Schedule of Values data typed on 8-1/2 inch x 11 inch white continuation sheets.
- B. Provide detailed substantiating data on additional sheets, including paid invoices where applicable.

1.03 Preparation of Application for Progress Payments

- A. Application Form:
 - 1. Fill in required information, including that for Change Orders executed prior to date of submittal of application.
 - 2. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
 - 3. Execute certification with signature of a responsible officer of the CONTRACTOR.
- B. Continuation Sheets:
 - 1. Fill in total list of all scheduled component items of work, with item number and scheduled dollar value for each item.
 - 2. Fill in dollar value in each column for each scheduled line item when work has been performed or products stored. Round off values to the nearest dollar or as specified for Schedule of Values.
 - 3. List each Change Order executed prior to date of submission by Change Order Number and description.
 - 4. To receive payment for materials stored on site, submit copies of the original paid invoices with the application for payment.

1.04 Substantiating Data for Progress Payments

- A. Provide substantiating data containing suitable information for review of costs requested with the applications for progress reports identifying:
 - 1. The payment item to which the substantiating data applies.
 - 2. Application number and date.
 - 3. Detailed list of enclosures.
 - 4. For stored materials:
 - a. Item number and identification as shown on application.
 - b. Description of specific material and invoice of delivered material.

-
- c. Consolidated inventory of stored materials showing:
 - (1) Materials received.
 - (2) Materials used.
 - d. Additional stored materials may not be claimed upon reaching 75% completion of the total project.
 - e. Stored Materials shall be inventoried jointly prior to each pay request.
 - B. Submit one copy of data for each copy of application for payment.
 - C. The CONTRACTOR is to maintain an updated set of record drawings in accordance with Section 01720. As a prerequisite for monthly progress payments, the CONTRACTOR is to exhibit the updated record drawings for review by the OWNER and the ENGINEER.
 - D. Construction photographs as required by Section 01380 will be submitted with each progress payment and shall be considered a part of that payment request.
 - E. Updated construction schedule showing work completed and work projected by month to the completion of the project.

1.05 Preparation of Application for Final Payment

- A. Fill in application form as specified for progress payments.
- B. Use continuation sheet for presenting the final statement of accounting.

1.06 Submittal Procedure

- A. Submit applications for payment to the ENGINEER at the times stipulated in the General Conditions.
- B. Initially a pencil draft application shall be informally submitted to the ENGINEER who shall review the draft with the CONTRACTOR and make adjustments as appropriate. The CONTRACTOR shall then prepare a formal typed application using the informally approved amounts and submit three (3) complete sets to the ENGINEER.
- C. When the ENGINEER finds the application properly completed and correct, as informally approved, he will transmit it to the OWNER for payment with a copy to the CONTRACTOR.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01030

SPECIAL PROJECT PROCEDURES

PART 1 GENERAL

1.01 WORKMANSHIP, MATERIAL AND EQUIPMENT

- A. When a particular product is specified or called for, it is intended and shall be understood that the Contractor include those products in his bid. Should the Contractor desire to substitute products which he purports to be equal to those specified, the Contractor shall furnish information as described in Section 00700, General Conditions, The alternative products(s) submitted by the Contractor shall meet the requirements of the specifications and shall, in all respects, be equal to the products specified by name herein.
- B. All apparatus, mechanism, equipment, machinery, and manufactured articles for incorporation into the Work shall be new and unused and the standard products of recognized reputable manufacturers.

1.02 PROVISIONS FOR CONTROL OF EROSION AND POLLUTANTS

Sufficient precautions shall be taken during construction to minimize the runoff of polluting substances such as silt, clay, fuels, oils, bitumens, calcium chloride, or other materials harmful to humans, fish, or other life, into the ground and surface waters of the state. Contractor will give all notices and comply with all laws, notices, ordinances, rules and regulations applicable to the work, without exception.

1.03 ON-SITE STORAGE

The Contractor's attention is invited to special storage requirements and possible charges for noncompliance of on-site storage requirements for materials and equipment as specified in Section 01600.

1.04 INCLEMENT WEATHER

- A. In the event of inclement weather, or whenever Engineer shall direct, Contractor and Subcontractors will protect carefully the work and materials against damage or injury from the weathers, including sudden rises in flows due to storms outside the immediate construction zone. Damaged Work and materials shall be removed and replaced. If, in the opinion of Engineer, any portion of Work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or Subcontractors to so protect the Work, no additional time for removal and replacement will be given by the Owner.

1.05 WARRANTIES

- A. All work supplied under the Contract shall be warranted for a period of one (1) year or such longer period of time as may be prescribed by any special guarantee required by Change Orders or issued by Subcontractor, suppliers, or manufacturers, from the date of acceptance for operations (beneficial use) by the Owner as specified in Section 01740, Warranties and Bonds.
- B. The work shall be warranted to be free from defects in workmanship, design and materials. If any part of the work should fail during warranty period, it shall be replaced or restored to service at no expense to the Owner.

1.06 CONSTRUCTION CONDITIONS

The Contractor shall strictly adhere to the specific requirements of the governmental units(s) or agency(ices) having jurisdiction over the work. Wherever there is a difference in the requirements of a jurisdictional body and these Specifications, the more stringent shall apply.

1.07 PUBLIC NUISANCE

The Contractor shall not create a public nuisance, including, but not limited to, encroachment on adjacent lands, flooding of adjacent lands, or excessive noise.

1.08 SUSPENSION OF WORK DUE TO WEATHER

During inclement weather, all work which might be damaged or rendered inferior by such weather conditions shall be suspended. The orders and decisions of the Engineer as to suspensions shall be final and binding. The authority of the Engineer to issue such an order shall not be interpreted as a requirement to do so. During suspension of the work from any cause, the work shall be suitably covered and protected so as to preserve it from injury by the weather. Notwithstanding this provision, it is understood and agreed that the General Conditions shall control.

1.09 RELOCATIONS

The Contractor shall be responsible for the relocation of structures, including, but not limited to, light poles, signs, sign poles, fences, mailboxes, piping, conduits and drains that interfere with the positioning of the work as set out on the Drawings. The cost of all such relocations shall be included in the bid.

1.10 SALVAGE

Any existing equipment or materials, including, but not limited to, valves, pipes, fittings, couplings, etc., which are removed or replaced as a result of construction under this project may be designated as salvage by the Engineer and, if so, shall be removed and delivered to the Owner at a location directed by the Engineer.

1.11 PERMITS

Upon notice of award, the Contractor shall immediately apply for all applicable permits not previously obtained by the Owner to do the work from the appropriate governmental agency or agencies. No work shall commence until all applicable permits have been obtained and copies delivered to the Engineer. The costs for obtaining all permits shall be borne by the Contractor.

1.12 HAZARDOUS LOCATION

- A. The existing wet wells, manholes, sewers, force mains, pipes, and other related areas are hazardous locations in that explosive concentrations of sewage gas may be present. The Contractor is cautioned that the above areas, especially the wet well, may be deficient in oxygen. Checks shall be made by the Contractor whenever personnel are working in these areas to insure that adequate ventilation has been provided.
- B. In his operations in hazardous locations, the Contractor shall use spark-proof tools and explosion-proof temporary lighting and shall not use electric power tools, open flame devices, electric welding or any device or methods which might conceivably cause ignition or explosion.
- C. If a working is atmosphere is unsafe, the Contractor shall furnish, install, operate, and later remove such temporary auxiliary ventilating facilities as are necessary to provide a safe atmosphere.
- D. The Contractor shall also instruct and caution his employees and the employees of his subcontractors to avoid smoking while in the hazardous areas. Suitable prominent "No Smoking" signs shall be placed at locations where sewage gas could be present.

1.13 NOTIFICATION OF WORK ON EXISTING FACILITIES

Before commencing work on any of the existing structures or equipment, the Contractor shall notify the Engineer, in writing, at least ten (10) calendar days in advance of the date he proposes to commence such work.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01041

PROJECT COORDINATION

PART 1 GENERAL

1.01 Work Progress

The CONTRACTOR shall furnish personnel and equipment which will be efficient, appropriate, and large enough to secure a satisfactory quality of work and a rate of progress which will insure the completion of the work within the time stipulated in the contract. If at any time such personnel appear to the ENGINEER to be inefficient, inappropriate, or insufficient for performing the quality of work required or for producing the rate of progress aforesaid, he may order the CONTRACTOR to increase the efficiency, change the character or increase the personnel and equipment, and the CONTRACTOR shall conform to such order at his own expense. Failure of the ENGINEER to give such order shall in no way relieve the CONTRACTOR of his obligations to perform the work at the specified quality and rate of progress.

1.02 Private Land

The CONTRACTOR shall not enter or occupy private land outside of the OWNER'S land, right-of-ways, or servitudes except by written permission of both the OWNER and the Owner of the private land. Such permission shall be obtained by and at the expense of the CONTRACTOR and at no additional cost to the OWNER.

1.03 Work Locations

Work shall be located substantially as indicated on the Drawings, but the Engineer reserves the right to make such modifications in locations as may be found desirable to avoid interference with existing structures or for other reasons.

1.04 Open Excavations

All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons and damage to property. The CONTRACTOR shall, at his own expense, provide suitable and safe bridges and other crossings for accommodating travel by the public, OWNER'S and ENGINEER'S personnel, and workmen.

1.05 Test Pits

Test pits for the purpose of locating underground utilities or structures which may interfere with installation of the Work shall be excavated in advance of the Work and backfilled by the CONTRACTOR. Test pits shall be backfilled immediately after their purpose has been satisfied and maintained in a manner satisfactory to the ENGINEER. The costs for such test pits shall be included in the cost of the work for which the test pits benefit.

1.06 Water for Construction Purposes

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- A. In locations where public water supply is available, the CONTRACTOR shall purchase water for all construction purposes.
 - B. The CONTRACTOR shall make his own arrangements and pay all costs for connections to public water systems and for water used. Existing OWNER supplies or connections shall not be used without prior approval by OWNER.

1.07 Maintenance of Flow

The CONTRACTOR shall maintain the flow of sewers, drains, and water courses interrupted during the progress of the Work, including complete pumped bypass systems where necessary. The CONTRACTOR shall immediately remove all offensive matter. The entire procedure of maintaining existing flow shall be fully discussed with the ENGINEER well in advance of the interruption of any flow. All temporary works installed for flow maintenance shall be removed when the permanent work is finished and the areas cleaned and restored to good condition.

1.08 Protection of Construction and Equipment

- A. All newly constructed work shall be carefully protected from injury in any way. No wheeling or walking or placing of heavy loads on it shall be allowed. All portions of the work injured shall be reconstructed by the CONTRACTOR at his own expense.
- B. All structures shall be protected in a suitable manner. Should any parts of the structures become heaved, cracked or otherwise damaged, all such damaged portions of the work shall be completely repaired and made good by the CONTRACTOR at his own expense and to the satisfaction of the ENGINEER. If, in the final inspection of the work, any defects, faults or omissions are found, the CONTRACTOR shall cause the same to be repaired or removed and replaced by proper materials and workmanship without extra compensation for the materials and labor required. Further, the CONTRACTOR shall be fully responsible for the satisfactory maintenance and repair of the construction and other work undertaken herein for at least the guarantee period described in the contract.
- C. The CONTRACTOR shall take all necessary precautions to prevent damage to any structure due to water pressure (groundwater or surface water) during and after construction and until such structure is accepted and taken over by the OWNER.
- D. The CONTRACTOR is responsible for security of the site. Security of all equipment, material, tools, machinery, supplies, structures, buildings, vehicles and offices is the responsibility of the CONTRACTOR. Measures to affect job site security and limit unauthorized access, including temporary fencing, security guards, and other measures are the responsibility of the CONTRACTOR at his expense.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01041.1

UTILITIES COORDINATION

PART 1 GENERAL

1.01 UTILITIES

Utilities for the purpose of these specifications shall be considered as including, but not limited to: pipelines, conduits, cables, transmission lines and appurtenances of Public Utilities and those of Special Utility Districts, Cities or Towns, businesses or individuals solely for their own use or for use of their tenants; and storm drains, sanitary sewers, street lighting, traffic signal and fire alarm systems.

1.02 UNDERGROUND INSTALLATIONS

Existing underground pipelines and utilities are indicated on the Drawings only to the extent such information was made available to or discovered by Engineer in preparing drawings. There is no guarantee as to the accuracy or completeness of such information, and all responsibility for the accuracy and completeness thereof is expressly disclaimed by the Owner and the Engineer.

1.03 UTILITIES LOCATED IN CITY RIGHT-OF-WAY

Unless otherwise provided or excepted herein, the removal, adjusting, relocation, or replacement of utility structures or facilities within City right-of-way which may be necessary for construction of the work in accordance with these Contract Documents, shall be at the expense of the Contractor.

It shall be the Contractor's responsibility to protect and maintain those utilities which, in the opinion of the Engineer, do not need to be disturbed in order to accomplish the work required by the contract.

1.04 RELOCATIONS OF EXISTING GAS LINES, TELEPHONE LINES, ELECTRIC LINES, CABLE TV LINES AND WATER LINES

The Contractor shall notify the proper authority of the utility involved when relocation of these lines is required. The Contractor shall coordinate all work by the utility so that the progress of construction will not be hampered.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

The Contractor, when the Notice to Proceed is received, shall notify the owners of utilities affected by the work, the approximate date upon which he will begin work, and shall submit a progress schedule of the proposed work. This shall be deemed sufficient notice if the project progresses according to the progress schedule submitted with the notification. If changes in the schedule of the

work occur, the Contractor shall appraise both the owner of the utility affected and the Engineer so that adjustments in the work schedule of utility can be made. The Contractor shall be responsible for damages to the utility facility and construction delays resulting from failure to notify the utility and the Engineer of changes in procedure or location.

3.02 PROTECTION OF EXISTING UTILITIES

- A. The attention of the Contractor is drawn to the fact that during excavation, the possibility exists of the Contractor encountering various water, gas, telephone, electrical, or other utility lines not shown on the Drawings. The Contractor shall exercise extreme care before and during excavation to locate and flag these lines so as to avoid damage to the existing lines. Should damage occur to an existing line, the Contractor shall repair the line at no cost to the Owner.
- B. The Contractor shall assume full responsibility for the protection of all utilities, public and private, including poles, services to buildings, gas pipes, water pipes, hydrants, sewers, drains, and electric and telephone cables, whether or not they are shown on the Drawings. The Contractor shall carefully support and protect all such utilities from injury of any kind. Any damage resulting from the Contractor's operation shall be repaired by him at his expense.

The protection and preservation of utility facilities which are located within the right-of-way, but outside the normal limits of construction, as determined by the Engineer, shall be the responsibility of the Contractor. The Contractor shall be responsible for all damage to utilities which are due to his negligence.

- C. The Contractor shall bear full responsibility for obtaining locations of all underground structures and utilities (including existing water services, drain lines, and sewer). Services to buildings shall be maintained, and all costs or charges resulting from damage thereto shall be paid by the Contractor.
- D. If, in the opinion of the Engineer, permanent relocation of a utility owned by the City is required, he may direct the Contractor, in writing, to perform the work. Work so ordered will be paid for at the Contract unit prices, if applicable, or as extra work under Article 10 of the General Conditions. If relocation of a privately owned utility is required, the Contractor will notify the Utility to perform the work as expeditiously as possible. The Contractor shall fully cooperate with the County and Utility and shall have no claim for delay due to such relocation.
- E. The Contractor shall notify public and private utility companies in writing at least two, but not more than five full days (excluding Saturdays, Sundays, and legal holidays) before excavating near their utilities.

3.03 UTILITIES TO BE ADJUSTED

The owners of utility facilities which require relocation, removal, adjustment or replacement shall, if possible and feasible, perform this work prior to the commencement of the Contractor's work. Where utility work must be done in conjunction with the Contractor's work on the project or in conjunction with the work of other utilities, arrangements for when, how and where the operation is to proceed

shall be worked out among the parties concerned. If disputes arise, the Engineer shall decide the course of action to be taken.

3.04 UTILITIES CONFLICTING WITH OPERATIONS

Those utility facilities which do not conflict with the improvement, but which are obstructions to the operations required for installation or which are obstructions to the operations required for installation of which present unusual difficulty due to their close proximity to the area of the operations, shall be located with certainty by the owners of the utility prior to the arrival of the Contractor's operation which would be hindered by the utility facility. The Contractor is required to preserve the utility facility in place without damage and shall be responsible for damages sustained, if the utility owner has located the facility by exposing it to the view of the Contractor or has otherwise made the Contractor aware, with certainty, of the location of the facility. Any other arrangements that the Contractor may make with a utility owner as a substitute for the requirements of this Section shall require the approval of the Engineer, in writing.

3.05 MISLOCATED UTILITIES

The owner of a utility shall be wholly responsible for the proper location of his facilities which are affected by construction work performed according to these specifications. Improperly located or mislocated facilities which are damaged during construction shall be the responsibility of the utility, providing proper notification has been given.

*** * END OF SECTION * ***

SECTION 01045
CUTTING AND PATCHING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Contractor shall be responsible for all cutting, fitting and patching, including attendant excavation and backfill, required to complete the Work to include:

- A. Make its several parts fit together properly.
- B. Uncover portions of the Work to provide for installation of ill-timed work.
- C. Remove and replace defective work.
- D. Remove and replace work not conforming to requirements of the Contract Documents
- E. Remove samples of installed work as specified for testing.

1.02 SUBMITTALS

- A. Submit a written request to the Engineer well in advance of executing any cutting or alteration which affects:
 - 1. Work of the Owner or any separate contractor.
 - 2. Structural value or integrity of any element of the Project or work.
 - 3. Integrity or effectiveness of weather-exposed or moisture-resistant elements or systems.
 - 4. Efficiency, operational life, maintenance or safety of operational elements.
 - 5. Visual qualities of sight-exposed elements.
- B. Request shall include:
 - 1. Identification of the work.
 - 2. Description of affected work.
 - 3. The necessity for cutting, alteration or excavation.
 - 4. Effect on work of Owner or any separate Contractor, or on structural or weatherproof integrity of work.

-
5. Description of proposed work:
 - a. Scope of cutting, patching, alteration, or excavation.
 - b. Trades who will execute the work.
 - c. Products proposed to be used.
 - d. Extent of refinishing to be done.
 6. Alternatives to cutting and patching.
 7. Cost proposal, when applicable.
- C. Submit written notice to the Engineer designating the date and the time the work will be uncovered.

PART 2 PRODUCTS

2.01 MATERIALS

Comply with specifications and standards for each specific product involved.

PART 3 EXECUTION

3.01 INSPECTION

- A. Inspect existing conditions of Project, including elements subject to damage or to movement during cutting and patching.
- B. After uncovering work, inspect conditions affecting installation of products or performance or work.
- C. Report unsatisfactory or questionable conditions to the Engineer in writing; do not proceed with work until the Engineer has provided further instructions.

3.02 PREPARATION

- A. Provide adequate temporary support as necessary to assure structural value or integrity of affected portion of Work.
- B. Provide devices and methods to protect other portions of Project from damage.
- C. Provide protection from elements for the portion of the Project which may be exposed by cutting and patching work, and maintain excavations free from water.

3.03 PERFORMANCE

- A. Execute cutting and demolition by methods which will prevent damage to other work and will provide proper surfaces to receive installation of repairs.
- B. Execute excavating and backfilling by methods which will prevent settlement or damage to other work.
- C. Employ original installer or fabricator to perform cutting and patching for:
 - 1. Weather-exposed or moisture-resistant elements.
 - 2. Sight-exposed finished surfaces.
- D. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes.
- E. Restore work which has been cut or removed; install new products to provide completed work in accord with requirements of Contract Documents.
- F. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:
 - 1. For continuous surfaces, refinish to nearest intersection.
 - 2. For an assembly, refinish entire unit.

*** * END OF SECTION * ***

SECTION 01050
FIELD ENGINEERING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Contractor shall provide and pay for field engineering services for:
 - 1. Survey work required in execution of work.
 - 2. Civil, structural, or other professional engineering services specified or required to execute the Contractor's construction method.
- B. The method of field staking for the construction of the work shall be at the option of the Contractor. The Owner shall provide the engineering surveys to establish reference points which in his judgment are necessary to enable the Contractor to proceed with his work.
- C. The accuracy of any method of staking shall be responsibility of the Contractor. All engineering for vertical and horizontal control shall be the responsibility of the Contractor.
- D. The Contractor shall be held responsible for the preservation of all stakes and marks. If any stakes or marks are carelessly or willfully disturbed by the Contractor, the Contractor shall not proceed with any work until he has reestablished such points, marks, lines and elevations as may be necessary for the prosecution of the work.
- E. The Contractor shall retain the services of a competent surveyor, registered in the State of Mississippi, to layout the work and maintain a survey during construction. The Contractor shall be solely responsible for proper location of the work.

1.02 SURVEY REFERENCE POINTS

Locate and protect control points prior to starting site work, and preserve all permanent reference points during construction.

- 1. Make no changes or relocations without prior written notice to the Engineer.
- 2. Report to the Engineer when any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations.

1.03 PROJECT SURVEY REQUIREMENTS

- A. Establish temporary bench marks as needed, referenced to data established by survey control points. Record locations, with horizontal and vertical data, on Record Drawings.
- B. Establish lines and levels, and locate and lay out, by instrumentation and similar appropriate

means:

1. Site improvements, including utility slopes and invert elevations.
 2. Batter boards for structures.
- C. From time to time, verify layouts by same methods.
- D. Establish all lines and grades prior to construction of site improvements.

1.04 RECORDS

- A. Maintain a complete, accurate log of all control and survey work as it progresses.
- B. At Contract closeout, submit a survey of installation of water mains, fire hydrants, and valves at the same scale as the Engineer's drawings indicating elevations and channel stationing at 100 foot increments.

1.05 SUBMITTALS

- A. On request of the Engineer, submit documentation to verify accuracy of field engineering work.
- B. Submit Drawings showing locations of all pipes and structures constructed. This Drawing shall be included with the Record Drawings.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01060

REGULATORY REQUIREMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Abbreviations and acronyms used in Contract Documents to identify reference standards are as indicated herein.

1.02 QUALITY ASSURANCE

- A. Applications: When a standard is specified by references, comply with requirements and recommendations stated in the standard, except when requirements are modified by the Contract Documents, or applicable codes establish stricter standards.
- B. Publications Date: The publication in effect on the date of issue of Contract Documents, except when a specific publication date is specified.

1.03 ABBREVIATIONS, NAMES, AND ADDRESSES OF ORGANIZATIONS

The following standards may be referenced in the Contract Documents. The contractor shall obtain copies of reference standards directly from the publication source when needed for proper performance of Work or when required for submittal by Contract Documents.

AAN	American Association for Nurserymen 1250 I Street N.W., Suite 500 Washington, DC 20005 (202) 789-2900
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W., Suite 225 Washington, DC 20001 (202) 624-5800
ACI	American Concrete Institute Post Office Box 19150 22400 W. Steven Mile Road Detroit, MI 48219 (313) 532-2600
ACPA	American Concrete Pipe Association 8320 Old Courthouse Road, Suite 201 Vienna, VA 22180 (703) 821-1990
AI	Asphalt Institute

	Asphalt Institute Building College Park, MD 20740-1802
AISC	American Institute of Steel Construction 400 North Michigan Avenue Chicago, IL 60611 (312) 670-2400
AISI	American Iron and Steel Institute 1133 15th Street N.W., Suite 300 Washington, DC 20005 (202) 452-7100
ANSI	American National Standard Institute 1430 Broadway New York, NY 10018 (212) 354-3300
ASCE	American Society of Civil Engineers 345 East 47th Street New York, NY 10017 1-800-548-ASCE 345 East 47th Street New York, NY 10017 (212) 705-7722
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103 (215) 299-5400
AWPA	American Wood Preserver's Association Post Office Box 849 Stevensville, MD 21666 (301) 643-4163
AWS	American Welding Society Post Office Box 351040 550 LeJeune Road, N.W. Miami, FL 33126 1-800-443-9353
AWWA	American Water Works Association 6666 W. Quincy Avenue Denver, CO 80235 (303) 794-7711
CLFMI	Chain Link Fence Manufacturers Institute

	1776 Mass Avenue N.W., Suite 500 Washington, DC 20036 (202) 659-3537
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Road Schaumburg, IL 60173 (312) 517-1200
DIPRA	Ductile Iron Pipe Research Association 245 Rivercase Parkway E., Suite 100 Birmingham, AL 35244 (205) 988-9870
FS	Federal Specification General Services Administration Specifications and Consumer Information & Distribution Section (WFSIS) 7 and D Street S.W., Room 654 Washington, DC 20407 (202) 472-2140
IEEE	Institute of Electrical and Electronic Engineers Service Center 345 E. 47th Street New York, NY 10017 (212) 705-7900
MDOT	Mississippi Department of Transportation P. O. Box 1850 Jackson, Ms 39215-1850 (601) 359-1213
MIL	Department of the Navy Navel Publications and Forms Center 5801 Torbor Avenue Philadelphia, PA 19120-5099 (215) 697-2667
NEC	National Electric Code National Fire Protection Association Batterymarch Park Quincy, MA 02269 (617) 770-3000
NEMA	National Electrical Manufacturer's Association 2101 L Street, NW, Suite 300 Washington, DC 20037 (202) 457-8400
NSPE	National Society of Professional Engineers

	1420 King Street Alexandria, VA 22314 (703) 684-2835
OSCI	Office of Standards Code and Information National Bureau of Standards Gaithersburg, MD 20899 (301) 975-4029
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077 (312) 966-6200
PCI	Prestressed Concrete Institute 175 W. Jackson Blvd., Suite 1859 Chicago, IL 60604 (312) 786-0300
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association Post Office Box 70 Merrifield, VA 22116 (703) 790-9890
SSPC	Steel Structures Painting Council 4400 5th Avenue Pittsburgh, PA 15213 (412) 268-3327
UL	Underwriter's Laboratories, Inc. 333 Pfingsten Road Northbrook, IL 60062 (312) 272-8800

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION(NOT USED)

*** * END OF SECTION * ***

SECTION 01200
PROJECT MEETINGS

PART 1 GENERAL

1.01 Requirements Included

- A. The ENGINEER shall schedule and administer a preconstruction meeting, construction progress meetings, and specially called meetings throughout the progress of the work. The ENGINEER will:
 - 1. Prepare agenda for meetings.
 - 2. Make physical arrangements for meetings.
 - 3. Preside at meetings.
 - 4. Record the minutes; include significant proceedings and decisions.
 - 5. Reproduce and distribute copies of minutes.
- B. The CONTRACTOR and representatives of, where appropriate, subcontractors and suppliers shall attend meetings. The representative shall be qualified and authorized to act on behalf of the entity each represents.
- C. The CONTRACTOR shall attend and identify at the meetings the actual status of the Contract Work and, when the Work is not being performed consistently with the Contract Documents and construction schedules, shall identify at the meetings the steps he is taking to resolve the inconsistency.

1.02 Pre-construction Meeting

- A. The CONTRACTOR shall participate in a preconstruction meeting to be held after the effective date of the Agreement and prior to the date of Notice to Proceed.
- B. The following are expected to be in attendance:
 - 1. OWNER'S Representative and other staff as appropriate.
 - 2. ENGINEER and his professional consultants as appropriate.
 - 3. ENGINEER's Resident Project Representative.
 - 4. CONTRACTOR's Representative and Construction Superintendent.
 - 5. Subcontractors as appropriate.
 - 6. Utility representatives as appropriate.
 - 7. Others as appropriate.
- C. The following matters are expected to be addressed:
 - 1. Distribution and discussion of:
 - a. List of major subcontractors.
 - b. Project construction schedules.
 - 2. Critical work sequencing.
 - 3. Project Coordination.
 - 4. Designation of responsible personnel.
 - 5. Procedures and processing of:

-
- a. Field decisions.
 - b. Proposal requests.
 - c. Submittals.
 - d. Change Orders.
 - e. Applications for Payment.
 6. Distribution of Contract Documents.
 7. Procedures for maintaining Record Documents.
 8. Use of premises:
 - a. Office, work and storage areas.
 - b. OWNER'S requirements.
 9. Construction facilities, controls and construction aids.
 10. Temporary utilities.
 11. Housekeeping procedures.
 12. Insurance certifications.
 13. Liquidated damages for delay.
 14. Weekly job meetings.
 15. Laboratory testing of material requirements.

1.03 Construction Progress Meetings

- A. Construction progress meetings will be held monthly with the first meeting 30 days or less after the date of Notice to Proceed.
- B. Special construction progress meetings will be held as required by progress of the Work.
- C. The following are expected to be in attendance:
 1. OWNER Representative and other staff as appropriate.
 2. The ENGINEER and his professional consultants as appropriate.
 3. CONTRACTOR's Representative and/or construction Superintendent.
 4. Subcontractors as appropriate.
 5. Suppliers as appropriate.
 6. Others as appropriate.
- D. The following matters are expected to be addressed:
 1. Review and approve minutes of previous meeting.
 2. Review of work progress.
 3. Field observations, problems, conflicts.
 4. Problems which impede Construction Schedule.
 5. Review of off-site fabrication, delivery schedules.
 6. Corrective measures and procedures to regain Construction Schedule.
 7. Revisions to Construction Schedule.
 8. Progress and schedule during succeeding work period.
 9. Payment applications and processing.
 10. Submittals.
 11. Maintenance of quality standards.
 12. Changes, substitutions, and Change Orders.

-
- 13. Review proposed changes for:
 - a. Effect on Construction Schedule and completion date.
 - b. Effect on other contracts of the Project.
 - 14. Other matters as appropriate.
 - 15. Record drawings.
- E. The CONTRACTOR shall be prepared to discuss the above topics and to make commitments for resolving deficiencies.
- F. The CONTRACTOR shall provide a current submittal log at each progress meeting in accordance with Section 01340.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01310
CONSTRUCTION SCHEDULES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Contractor shall comply with the General Conditions.
- B. Submit revised progress schedules periodically.

1.02 FORM OF SCHEDULES

- A. Prepare schedules in the form of a horizontal bar chart.
 - 1. Provide separate horizontal bar for each trade or operation.
 - 2. Horizontal time scale; identify the first work day of each week.
 - 3. Scale and spacing: To allow for notations and future revisions.
 - 4. Minimum sheet size: 8-1/2 inches by 11 inches.
- B. Format of listings: The table of contents of the Contract Documents.
- C. Identification of listings: Items of work.

1.03 CONTENT OF SCHEDULE:

- A. Construction Progress Schedule:
 - 1. Show the complete sequence of construction by activity.
 - 2. Show the dates for the beginning, and completion of each major element of construction.
 - 3. Show projected percentage of completion for each item, as of the first day of each month.
 - 4. Show an anticipated monthly payment schedule.
- B. Submittal Schedule for Shop Drawings, Product Data and Samples. Show:
 - 1. The dates for Contractor's submittal.
 - 2. The dates approved submittal will be required from the Engineer.

1.04 PROGRESS REVISIONS

- A. Indicate progress of each activity to date of submission.
- B. Show changes occurring since previous submission of schedule:
 - 1. Major changes in scope.
 - 2. Activities modified since previous submission.
 - 3. Revised projections of progress and completion.
 - 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
 - 1. Problem areas, anticipated delays, and the impact on the schedule.
 - 2. Corrective action recommended, and its effect.

1.05 SUBMISSIONS

- A. Submit initial schedules in accordance with the General Conditions.
 - 1. Engineer will review schedules and return review copy within ten (10) days after receipt.
 - 2. If required, Contractor shall resubmit within seven (7) days after return of review copy.
- B. Submit revised progress schedules with each Application for Payment.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01340

SHOP DRAWINGS, PROJECT DATA, AND SAMPLES

PART 1 GENERAL

1.01 Requirements Included:

- A. The Contractor shall submit to the Engineer for review and exception, if any, such working drawings, shop drawings, test reports and data on materials and equipment (hereinafter in this article called data), and material samples (hereinafter in this article called samples) as are required for the proper control of work, including but not limited to those working drawings, shop drawings, data and samples for materials and equipment specified elsewhere in the Specifications and in the Contract Drawings.
- B. Within fifteen (15) calendar days after the Effective Date of the Agreement, the Contractor shall submit to the Engineer a complete list of preliminary data on items for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way relieve the Contractor from submitting complete shop drawings, data, and samples in accordance with the Specifications. This procedure is required in order to expedite final review of Shop Drawings.
- C. The Contractor is to maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting. This log should include the following items:
 - 1. Submittal Description and Number assigned.
 - 2. Date to Engineer.
 - 3. Date returned to Contractor (from Engineer).
 - 4. Status of Submittal (No exceptions taken, returned for confirmation or resubmittal, rejected).
 - 5. Date of Resubmittal and Return (as applicable).
 - 6. Date material released (for fabrication).
 - 7. Projected date of fabrication.
 - 8. Projected date of delivery to site.
 - 9. Status of O&M manuals submittal.

1.02 Contractor's Responsibility

-
- A. It is the duty of the Contractor to check all drawings, data and samples prepared by or for him before submitting them to the Engineer for review. Each and every copy of the Drawings and data shall bear Contractor's stamp showing that they have been so checked. Shop drawings submitted to the Engineer without the Contractor's stamp or evidence that the Contractor has not performed the required review will be returned to the Contractor for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the Contract Documents.
 - B. Determine and verify:
 - 1. Field measurements.
 - 2. Field construction criteria.
 - 3. Catalog numbers and similar data.
 - 4. Conformance with Specifications and indicate all variances from the Specifications.
 - C. The Contractor shall furnish the Engineer a schedule of Shop Drawing submittals fixing the respective dates for the submission of shop and working drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.
 - D. The Contractor shall not begin any of the work covered by a drawing, data, or a sample returned for correction until a revision or correction thereof has been reviewed and returned to him by the Engineer with no exceptions taken.
 - E. The Contractor shall submit to the Engineer all drawings and schedules sufficiently in advance of construction requirements to provide no less than twenty-one (21) calendar days for checking and appropriate action from the time the Engineer receives them.
 - F. The Contractor shall submit five (5) copies of shop drawings and descriptive or product data submittal to complement shop drawings to the Engineer which will be retained for his use.
 - G. The Contractor shall be responsible for and bear all cost of damages which may result from the ordering of any material or from proceeding with any part of work prior to the completion of the review by Engineer of the necessary shop drawings.
 - H. The Contractor shall utilize a Sequential Numbering System for submittals (1-999). Resubmittals or confirming material shall be assigned a letter next to the submittal number, i.e. A= second submittal, B= third submittal, etc.
 - I. Submittals shall include a certified statement of compliance to the requirements detailed in the specifications in addition to other submittal requirements. This certification shall be prepared by the manufacturer and not the local supplier. Validity of the authority and position of the person signing the certification shall be verified by a Notary Public. The statement of compliance shall address each point of conformance contained in the governing specifications with definite comments of either compliance or non-compliance. Statements of non-compliance with points of conformance shall be accompanied by a statement of

justification as to the reason for non-conformance and why the non-complying feature is considered to be either equal to or better than the specified feature. The Engineer will use the certified statement of compliance in his evaluation of the submittal rendering a judgment as to equality to the specified product and issuing a statement as to whether the product is acceptable for or rejected from incorporation into the work.

- J. When a manufacturer named in the controlling specification is chosen to supply a product and the details of manufacture, size, and installation are shown on this standard catalog cut sheets, the manufacturer may submit the certified statement of compliance as detailed above along with installation details specific to the work such as laying schedules, etc. as required, deleting the standardized catalog data.

1.03 Engineer's Review of Shop Drawings

- A. The Engineer's review of drawings, data and samples submitted by the Contractor will cover only general conformity to the Specifications, external connections, and dimensions which affect the installation.
- B. The review of drawings and schedules will be general, and shall not be construed:
1. as permitting any departure from the Contract requirements;
 2. as relieving the Contractor of responsibility for any errors, including details, dimensions, omissions and materials;
- C. If the drawings or schedules as submitted describe variations per subparagraph (1.04.D), and show a departure from the Contract requirements which Engineer finds to be in the best interest of the Owner and to be so minor as not to involve a change in Contract Price or Time, The Engineer may return the reviewed Drawings without noting any exception.
- D. After the ENGINEER completes his review, the Shop Drawings will be marked with one of the following notations:
1. No Exceptions Taken.
 2. Make Corrections Noted.
 3. Revise and Resubmit.
 4. Rejected.
 5. Submit Specified Item.
- E. If a submittal is acceptable, it will be marked "No Exception Taken" or "Make Corrections Noted". Three copies of the submittal will be returned to the CONTRACTOR.
- F. Upon return of a submittal marked "No Exception Taken" or "Make Corrections Noted", the CONTRACTOR may order, ship or fabricate the materials included on the submittal, provided it is in accordance with the corrections indicated.
- G. If a Shop Drawing action is "Make Corrections Noted" but has extensive corrections or corrections affecting other drawings or Work, the ENGINEER may require that the CONTRACTOR make the corrections indicated thereon and resubmit the Shop Drawings for

record purposes. In this case, the submittal will be marked "Make Corrections Noted-Resubmit".

- H. If a submittal is unacceptable, two copies will be returned to the CONTRACTOR with one of the following notations:
 - 1. "Revise and Resubmit"
 - 2. "Rejected"
- I. Upon return of a submittal marked "Revise and Resubmit", the CONTRACTOR shall make the corrections indicated and repeat the initial approval procedure. The "Rejected" notation is used to indicate material or equipment that is not acceptable. Upon return of a submittal so marked, the CONTRACTOR shall repeat the initial approval procedure utilizing acceptable material or equipment.
- J. Submittals lacking adequate details or information to allow the ENGINEER to determine whether or not the submittal meets the intent of the Contract specifications shall be marked "Submit Specified Item" and returned without further comment.
- K. Shop Drawings or other submittals not bearing the ENGINEER'S "No Exception Taken" or "Make Corrections Noted" notations shall not be issued to Subcontractors nor utilized for construction purposes. No Work shall be performed or equipment installed without a drawing or submittal bearing one of these notations.
- L. In the event the CONTRACTOR obtains the ENGINEER'S approval for the use of equipment other than that which is shown or specified, the CONTRACTOR shall, at his own expense and using methods approved by the ENGINEER, make all changes to the Work, including structures, piping, electrical, equipment and controls, that may be necessary to accommodate this equipment.
- M. Resubmittals will be handled in the same manner as first submittals. The Contractor shall direct specific attention to revisions other than the corrections requested by the Engineer on previous submissions by written details or markings on the resubmitted Shop Drawings. The Contractor shall make any corrections required by the Engineer.
- N. If the Contractor considers any correction indicated on the Drawings to constitute a change to the Contract Drawings or Specifications, the Contractor shall give written notice thereof to the Engineer.
- O. The Engineer will review a submittal/resubmittal a maximum of three times after which cost of review will be borne by the Contractor. The cost of engineering shall be equal to the Engineer's charges to the Owner under the terms of the Engineer's agreement with the Owner.
- P. When the Shop Drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions or approval from the Engineer.

Q. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor, and will be considered "NOT APPROVED" until resubmitted.

1.13 SHOP DRAWINGS

- A. Shop drawings shall be complete and detailed.
- B. Drawings and schedules shall be checked and coordinated with the work of all trades involved, before they are submitted for review by the Engineer and shall bear the Contractor's stamp of approval as evidence of such checking and coordination. Drawings or schedules submitted without this stamp of approval shall be returned to the Contractor for resubmission.
- C. Each shop drawing shall have a blank area 3-1/2 inches by 3-1/2 inches, located adjacent to the title block. The title block shall display the following:
 - 1. Number and title of the drawing.
 - 2. Date of drawing or revision.
 - 3. Name of project building or facility.
 - 4. Name of contractor and subcontractor submitting drawing.
 - 5. Clear identification of contents and location of the work.
 - 6. Specification number and title.
- D. If Drawings show variations from Contract requirements because of standard Shop practice or other reasons, the Contractor shall describe such variations in his letter of transmittal. If acceptable, proper adjustment in the Contract shall be implemented where appropriate. If the Contractor fails to describe such variations, he shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such Drawings have been reviewed.
- E. Data on materials and equipment include, without limitation, materials and equipment lists, catalog data sheets, cuts, performance curves, diagrams, materials of construction and similar descriptive material as required. Materials and equipment lists shall give for each item thereon the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish, and all other pertinent data.
- F. The Contractor shall provide a list including the equipment name, address, and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained for all mechanical and electrical equipment furnished.
- G. All manufacturers or equipment suppliers who proposed to furnish equipment or products shall submit an installation list to the Engineer along with the required Shop Drawings. The

installation list shall include at least five installations where identical equipment has been installed and has been in operation for a period of at least one (1) year.

- H. Only the Engineer will utilize the color red in marking Shop Drawing submittals.
- I. Before final payment is made, the Contractor shall furnish to Engineer five (5) sets of record shop drawings all clearly revised, complete and up to date showing the permanent construction as actually made for all reinforcing and structural steel, miscellaneous metals, process and mechanical equipment, yard piping, electrical system and instrumentation system.

1.13 Working Drawings

- A. Working drawings shall be considered to mean the Contractor's plans for temporary structures.
- B. Copies of working drawings as noted in subparagraph 1.02, shall be submitted to the Engineer where required by the Contract Documents or requested by the Engineer, and shall be submitted at least thirty (30) calendar days (unless otherwise specified by the Engineer) in advance of their being required for work.
- C. The Engineer will not review working drawings but shall use them as information to monitor the work performed by the Contractor.

1.14 Samples

- A. The Contractor shall furnish for the review of the Engineer samples required by the Contract Documents or requested by the Engineer. Samples shall be delivered to the Engineer as specified or directed and the Contractor shall prepay all shipping charges. Materials or equipment for which samples are required shall not be used in work until reviewed by the Engineer.
- B. Samples shall be of sufficient size and quantity to clearly illustrate:
 - 1. Functional characteristics of the product, with integrally related parts and attachment devices.
 - 2. Name of Contractor and Subcontractor
 - 3. Material or Equipment represented
 - 4. Place of Origin
 - 5. Name of Producer and Brand (if any).
 - 6. Location in Project

(Samples of finished materials shall have additional marking that will identify them under the finished schedules.)

- C. The Contractor shall prepare a transmittal letter in triplicate for each shipment of samples containing the information required in subparagraph 1.06B above. He shall enclose a copy of this letter with the shipment and send a copy of this letter to the Engineer under separate cover and the remaining copy shall be for the Contractor's records. Review of a sample shall be only for the characteristics or use named and shall not be construed to change or modify any Contract requirements.
- D. Reviewed samples not destroyed in testing shall be sent to the Engineer or stored at the site of the work. Reviewed samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the reviewed samples. Samples which failed testing or were rejected will be returned to the Contractor at his expense, if so requested at time of submission.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01410

TESTING LABORATORY SERVICES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Contractor will employ and pay for the services of an Independent Testing Laboratory to perform testing specifically indicated on the Contract Documents or specified in the Specifications and may at any other time elect to have materials and equipment tested for conformity with the Contract Documents.

- A. Employment of the laboratory shall in no way relieve Contractor's obligations to perform the Work of the Contract.

1.02 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

Laboratory is not authorized to:

- A. Release, revoke, alter or enlarge on requirements of Contract Documents.
- B. Approve or accept any portion of the Work.
- C. Perform any duties of the Contractor.

1.03 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with laboratory personnel; provide access to Work, to Manufacturer's operations.
- B. Secure and deliver to the laboratory adequate quantities of representational samples of materials proposed to be used and which require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other materials mixes which require control by the testing laboratory.
- D. Materials and equipment used in the performance of work under this Contract are subject to inspection and testing at the point of manufacture or fabrication. Standard specifications for quality and workmanship are indicated in the Contract Documents. The Owner may require the Contractor to provide statements or certificates from the manufacturers and fabricators that the materials and equipment provided by them are manufactured or fabricated in full accordance with the standard specifications for quality and workmanship indicated in the Contract Documents. All costs of this testing and providing statements and certificates shall be a subsidiary obligation of the Contractor, and no extra charge to the Owner shall be allowed on account of such testing and certification.
- E. Furnish incidental labor and facilities:
 - 1. To provide access to Work to be tested.

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2. To obtain and handle samples at the Project site or at the source of the product to be tested.
 3. To facilitate inspections and tests.
 4. For storage and curing of test samples.
- F. Notify laboratory at least 24 hours in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.
- G. Employ and pay for the services of the same or a separate, equally qualified independent testing laboratory to perform additional inspections, sampling and testing required for the Contractor's convenience and as approved by the Owner.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01600

MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Material and equipment incorporated into the Work shall:

- A. Conform to applicable specifications and standards.
- B. Comply with size, make, type, and quality specified to the greatest extent possible, detailing all aspects and providing explicit reasons for parameters not in compliance and specifically approved in writing by the Engineer.
- C. Manufactured and Fabricated Products:
 - 1. Design, fabricate, and assemble in accord with the best engineering and standard shop practices.
 - 2. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - 3. Two or more items of the same kind shall be produced, by the same manufacturer.
 - 4. Products shall be suitable for service conditions.
 - 5. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
- D. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

1.02 APPROVAL OF MATERIALS

- A. Only new materials and equipment shall be incorporated in the Work. All materials and equipment furnished by the Contractor shall be subject to the inspection and approval of the Engineer. No material shall be delivered to the Work without prior approval of the Engineer.
- B. The Contractor shall submit to the Engineer, data relating to materials and equipment he proposes to furnish for the work. Such data shall be in sufficient detail to enable the Engineer to identify the particular product along with references to the applicable section(s) of the specifications to form an opinion as to its conformity to the specifications. The data shall comply with Paragraph 1.06 of this Section.
- C. Facilities and labor for handling and inspection of all materials and equipment shall be furnished by the Contractor. If the Engineer requires, the Contractor shall submit samples of materials for such special tests as may be necessary to demonstrate that they conform to the

specifications. Such samples shall be furnished, stored, packed, and shipped as directed at the Contractor's expense. Except as otherwise noted, the Contractor will make arrangements for and pay for the tests. Where such tests confirm compliance with the specifications, the Owner will reimburse the actual charges of the testing firm paid by the Contractor.

- D. Contractor shall submit data and samples sufficiently early to permit consideration, approval, manufacture, and delivery of materials before they are necessary for incorporation in the work. Any delay of approval resulting from the Contractor's failure to submit samples or data promptly shall not be used as a basis of claim against the Owner or the Engineer.
- E. The materials and equipment used in the Work shall correspond to the approved samples or other data.

1.03 MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION

- A. When Contract Documents require that installation of the Work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including five copies to the Engineer. One complete set of the installation instructions shall be available for use on the job site during and through completion of the Work.
- B. Handle, install, connect, clean, condition and adjust products as required by the manufacturer's instructions and in conformity with specified requirements.
 - 1. Should the specified requirements conflict with the manufacturer's instructions, the manufacturer's instructions shall have priority unless changes are authorized in writing by the manufacturer.
 - 2. Should job conditions conflict with the manufacturer's instructions, consult with the manufacturer for clarification.
 - 3. Clarifications of installation instructions shall be issued only by the manufacturer, shall be in writing, and shall be distributed to all parties involved in the installation as stated above and prior to alteration of the installation procedures.
 - 4. Do not proceed with the Work without clear instructions concerning the specific installation procedures.
- C. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by the manufacturer.

1.04 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of Products as required by the currently approved construction schedule coordinating each delivery to avoid conflict with other work and conditions at the site.
 - 1. Deliver Products in a undamaged condition, in the manufacturer's original containers or packaging and with identifying labels intact and legible.
 - 2. Prior to accepting delivery, inspect shipments to assure compliance with approved submittal, and that the Products have been properly protected and are undamaged.
- B. Provide equipment and personnel to handle Products preventing soiling or damage to the Products or their protective packaging.

1.05 STORAGE AND PROTECTION

- A. Store Products in accord with manufacturer's instruction, with seals and labels intact and legible.
 - 1. Store products subject to damage by the elements in weathertight enclosures.
 - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
 - 3. Store fabricated products above the ground, on blocking or skids, prevent spoiling, staining or corrosion. Cover products which are subject to deterioration with impervious sheet coverings and provide adequate ventilation to avoid condensation.
 - 4. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
- B. All materials and equipment to be incorporated in the Work shall be handled and stored in a manner to prevent warping, twisting, bending, breaking, chipping, rusting, and other injury, theft or damage.
- C. Cement and lime shall be stored under a roof and off the ground and shall be kept completely dry at all times. All miscellaneous steel, structural steel and reinforcing steel shall be stored off the ground, kept free of accumulations of dirt and grease, and in areas free of standing water to minimize rusting. Precast concrete sections shall be handled and stored in a manner to prevent staining, chipping or cracking. Brick, block and similar masonry products shall be handled and stored in a manner to reduce staining, breaking, chipping, cracking, and spalling.
- D. All materials which, in the opinion of the Engineer, have become so damaged as to be unfit for the use intended, including aesthetics, shall be promptly removed from the site of the work.
- E. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections and exercise or rotate moving parts of stored products as required by the

manufacturer to assure that products are maintained under specified conditions and free from damage or deterioration.

- F. Provide substantial coverings as necessary to protect installed products from damage caused by traffic and subsequent construction operations. Remove the protective covering when no longer needed.
- G. The Contractor shall be responsible for all material, equipment, and supplies sold and delivered to the Owner under this Contract until final inspection of the Work and acceptance thereof by the Owner. In the event any such material, equipment, and supplies are lost, stolen, damaged, or destroyed prior to final inspection and acceptance they shall be replaced by the Contractor.
- H. Should the Contractor fail to take proper action to properly store and handle equipment supplied under this Contract, the Owner retains the right to notify the Contractor in writing of the deficiencies, to correct all deficiencies and deduct the cost associated with these corrections from the contractor's Contract. These costs may be comprised of expenditures for labor, equipment usage, administration, clerical, engineering and any other costs associated with making the necessary corrections.

1.06 SUBSTITUTIONS AND PRODUCT OPTIONS

A. Products List:

Within fifteen (15) days after the Notice to Proceed, submit to the Engineer complete list of major products proposed to be used, with the name of the manufacturer and the installing subcontractor.

B. Contractor's Options:

- 1. For Products specified only by reference standard, select any product meeting that standard.
- 2. For Products specified by naming one or more Products or manufacturers and "or equal", Contractor must submit a request as for substitutions for any Product or manufacturer not specifically named.

C. Substitutions:

- 1. For a period of thirty (30) days after the Effective Date of the Agreement, the Engineer will consider written requests from Contractor for substitution of Products.

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2. Submit a separate request for each Product, supported with complete data, with drawings and samples as appropriate, including:
 - a. Comparison of the qualities of the proposed substitution with that specified.
 - b. Changes required in other elements of the work because of the substitution.
 - c. Effect on the construction schedule.
 - d. Cost data comparing the proposed substitution with the Product specified.
 - e. Any required license fees or royalties.
 - f. Availability of maintenance service, and source of replacement materials.
 3. The Engineer shall be the judge of the acceptability of the proposed substitution.
- D. Contractor's Representation:
- A request for a substitution constitutes a representation that Contractor:
1. Has investigated the proposed Product and determined that it is equal to or superior in all respects to that specified.
 2. Will provide the same warranties or bonds for the substitution as for the Product specified.
 3. Will coordinate the installation of an accepted substitution into the Work, and make such other changes as may be required to make the Work complete in all respects.
 4. Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.

1.07 SPECIAL TOOLS

Manufacturers of equipment and machinery shall furnish any special tools required for normal adjustment, operations and maintenance, together with instructions for their use. The Contractor shall preserve and deliver to the Owner these tools and instructions in good order no later than upon completion of the Contract.

1.08 WARRANTY

For all major pieces of equipment, submit a warranty from the equipment manufacturer. The manufacturer's warranty period shall be concurrent with the Contractor's as stipulated in the specifications for each piece of equipment.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01630

SUBSTITUTIONS

PART 1 GENERAL

1.01 General

Requests for review of a substitution shall conform to the requirements of Article 6.05 of the General Conditions and shall contain complete data substantiating compliance of proposed substitution with Contract Documents.

1.02 Substitutions

- A. During a period of 60 days after execution of Contract, ENGINEER will consider written requests from CONTRACTOR for substitution of products or construction methods (if specified).
 - 1. After end of specified period, requests will be considered only in case of unavailability of products or other conditions beyond control of CONTRACTOR.
 - 2. If the CONTRACTOR proposes to use products other than named manufacturers in the technical Specification, the ENGINEER reserves the right to require the CONTRACTOR to submit information within the first 30 days after the NOTICE TO PROCEED verifying that the proposed equipment will comply with the Specifications.
- B. Requests for review of a substitution shall conform to the requirements of Article 6.05 of the General Conditions, and shall contain complete data substantiating compliance of proposed substitution with the Contract Documents.
- C. In making request for substitution, CONTRACTOR represents:
 - 1. CONTRACTOR has investigated proposed product or method, and determined that it is equal or superior in all respects to that specified.
 - 2. CONTRACTOR will provide the same or better warranties or bonds for proposed substitution as for product or method specified.
 - 3. CONTRACTOR waives all claims for additional costs or extension of time related to proposed substitution that subsequently may become apparent.
- D. Proposed substitutions will not be accepted if:
 - 1. They are only shown or implied on the Shop Drawings.
 - 2. Acceptance will require substantial revision of Contract Documents.
 - 3. They will change design concepts or Specifications.
 - 4. They will delay completion of the Work, or the work of other contractors.
- E. The ENGINEER will determine whether substitute brands or products are equal to those specified in the Contract Documents. No substitute will be ordered or installed without the ENGINEER'S prior written acceptance.
- F. The OWNER may require CONTRACTOR to furnish at CONTRACTOR'S expense a

special performance guarantee or other surety with respect to any substitute.

- G. If the ENGINEER determines that a proposed substitute is not equal to that specified or described in the Drawings or Specifications, CONTRACTOR shall furnish one of the brands or products specified or described, at no additional cost to the OWNER.
- H. Engineering Costs:
1. The ENGINEER will record all time required in evaluating substitutions proposed by CONTRACTOR and in making any change in the Drawings or Specifications occasioned thereby. Whether or not the ENGINEER accepts a proposed substitute CONTRACTOR will reimburse the OWNER for the actual cost of the ENGINEER for evaluating any proposed substitute which either does not meet the requirements of the Drawings and Specifications, or the acceptance of which would require changes to other portions of the Work.
 2. CONTRACTOR shall reimburse OWNER for all associated engineering costs, including redesign, additional shop drawing reviews, investigations, consultant fees and revision of the Contract Documents required because of the substitution.
- I. The time required by the ENGINEER to evaluate and either accept or reject proposed substitutes is included in the Contract Time and no extension of the Contract Time shall be allowed therefore.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01710

CLEANING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Cleaning shall include daily "policing" of the work and surrounding areas to clear general debris waste paper, wood scraps, broken concrete, loose riprap, and other objectionable material along with the final cleanup of site(s) required for project acceptance. **DAILY CLEANUP IS REQUIRED.**

1.02 DISPOSAL REQUIREMENTS

Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 DURING CONSTRUCTION

- A. Execute daily cleaning to keep the Work, the site and adjacent properties, free from accumulations of waste materials, rubbish and windblown debris, resulting from construction operations.
- B. Provide onsite containers for the collection of waste materials, debris and rubbish. All waste materials including containers, food debris and other miscellaneous materials must be disposed of daily in onsite containers.
- C. Remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal areas away from the site.

3.02 FINAL CLEANING

- A. Employ skilled workmen for final cleaning.
- B. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
- C. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.
- D. Prior to final completion or Owner occupancy, Contractor shall conduct an inspection of sight-exposed interior and exterior surfaces and all work areas to verify that the entire Work is clean.

*** * END OF SECTION * ***

SECTION 01720
PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Maintain at the site for the Owner one record copy of:

- A. Conformed Drawings.
- B. Conformed Specifications.
- C. Change Orders and other Modifications to the Contract.
- D. Engineer's Field Orders or written instructions.
- E. Approved Shop Drawings, Working Drawings and Samples.
- F. Field Test records.
- G. Construction photographs.
- H. Latest, Approved Progress Schedule.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store documents and samples in a manner and location to prevent damage.
 - 1. Provide files and racks for storage of documents.
 - 2. Provide secure storage space for storage of samples.
- B. File documents and samples in accordance with CSI section numbers.
- C. Maintain documents in a clean, dry, legible, condition and in good order. Do not use record documents for construction purposes.
- D. Make documents and samples available at all times for inspection by the Owner.
- E. As a prerequisite for monthly progress payments, the Contractor is to exhibit the currently updated "record documents" for review by the Owner.

1.03 MARKING DEVICES

Provide felt tip marking pens for recording information in the color code designated by the Owner.

1.04 RECORDING

- A. Label each document "PROJECT RECORD" with rubber stamp.
- B. Record information concurrently with construction progress and do not conceal any work until required information is recorded.
- C. Legibly mark drawings to record actual construction:
 - 1. The Contractor shall use the following color code in marking Contract Drawings:
 - a. Yellow for no change.
 - b. Red to indicate additions, deletions and changes.
 - 2. Elevations of various structure elements in relation to elevation datum.
 - a. Elevations referenced to control points established by the Owner's agent.
 - b. Specifically, elevations of drainage culvert inverts, ditch grades, top of roadway and driveway curbs, bridges, etc.
 - 3. Location of internal utilities and appurtenances concealed in the construction by referencing to visible and accessible features of the structure.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Field Order or by Change Order.
 - 6. Details not on original contract drawings.
- D. Specifications and Addenda; Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and Supplier of each Product and item of equipment actually installed.
 - 2. Changes made by Field Order or by Change Order.
- E. Shop Drawings (after final review):

-
- F. Certified site survey and line elevations and stationing at 100 foot increments and all points of change of direction of channel improvements (Section 01050) by a registered land surveyor.

1.05 SUBMITTAL

- A. At Contract close-out, deliver Record Documents to the Owner.
- B. Accompany submittal with transmittal letter in duplicate, containing:
 - 1. Date.
 - 2. Project title and number.
 - 3. Contractor's name and address.
 - 4. Title and number of each Record Document.
 - 5. Signature of Contractor or his authorized representative.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01740

WARRANTIES AND BONDS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Compile specified warranties and bonds, as in Articles 5 and 13 of the General Conditions.
- B. Co-execute submittals when so specified.
- C. Review submittals to verify compliance with Contract Documents.
- D. Submit to the Owner for review.

1.02 SUBMITTAL REQUIREMENTS

- A. Assemble and include warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, couplers, and subcontractors including effective dates.
- B. Number of original signed copies required. Two (2) each.
- C. Table of Contents. Neatly typed in orderly sequence. Provide complete information for each item.
 - 1. Product or work item.
 - 2. Firm, with name of principal, address and telephone number.
 - 3. Scope.
 - 4. Date of beginning warranty, and bond.
 - 5. Duration of warranty.
 - 6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure.
 - b. Instances which might affect the validity of warranty or bond.
 - 7. Contractor, name of responsible principal, address and telephone number.

1.04 FORM OF SUBMITTALS

- A. Prepare in duplicate packets.
- B. Format:
 - 1. Size 8-1/2-inches x 11-inches, punch sheets for standard 3-post binder.
 - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS." List:
 - a. Title of Project.
 - b. Name of Contractor.
- C. Binders: Commercial quality, three-post binder, with durable and cleanable plastic covers and maximum post width of 2-inches, "D" ring.

1.05 WARRANTY SUBMITTAL REQUIREMENTS

- A. For all components of the work, unless stated otherwise in the specifications for each individual item of equipment, submit a written warranty from the manufacturer to replace promptly any component thereof which, in the sole opinion of the Engineer, has defects in design, workmanship, materials, or performance within a one (1) year period following the date of acceptance for operation (Substantial Completion) by the Owner. The manufacturer's warranty period shall be concurrent with the Contractor's for one (1) year, unless otherwise specified, commencing at the time of acceptance for operation (beneficial use) by the Owner and shall be read in conjunction with the Contractor's warranty which shall operate together to provide for replacement of defective components and restoration of proper operation. The Contractor shall be solely responsible for both warranties.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-632-1

CODE: (IS)

DATE: 11/15/2017

SUBJECT: Traffic Signal Cabinet Assemblies

Section 632, Traffic Signal Cabinet Assemblies, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 632 on pages 517 thru 538, and substitute the following.

SECTION 907-632 - TRAFFIC SIGNAL CABINET ASSEMBLIES

907-632.01--Description. This work consists of furnishing, assembling, configuring and installing all component materials and software required to form completed traffic signal controller assemblies, closed loop master controller assemblies and signal system installation of the types specified, in conformity with these specifications, to ensure fully operational traffic signal installations as shown on the plans.

907-632.02--Materials.

907-632.02.1--Cabinet Assembly. Cabinet Assemblies shall meet the NEMA 3R requirements and be constructed principally of 0.125-inch thick, 5052-H32 aluminum. The aluminum shall have a mill finish per NEMA TS 2 7.7.3. Intermittent welds may be used for construction and any unwelded cabinet seams shall be sealed with clear RTV silicone. All external fasteners shall be stainless steel and no holes will be allowed in top of cabinet.

The door handles shall be stainless steel or cast aluminum. Door hinges shall be of the continuous type with a stainless steel hinge pin. Rivets are not be used to attach the hinge. The main door stop rod shall be constructed using stainless steel. The door stop mechanism shall be adjustable and capable of being securely latched in multiple opened positions including 90 degrees and a maximum of 120 degrees. The brackets attaching the stop rod to the door and cabinet shall be aluminum and welded in place. The main door cylinder lock shall be a #2 key type lock. Two (2) traffic industry standard No. 2 keys shall be provided with each cabinet and shall be made using heavy duty key blanks.

Extruded aluminum channels permanently attached to the right and left cabinet sides shall be provided for attaching adjustable shelving and mounting of other component panels. The cabinet shall have two (2) shelves installed. Both shelves shall be provided with the front edge pre-drilled with 0.25-inch holes located twelve (12) inches apart.

907-632.02.2--Physical Features.

907-632.02.2.1--Pull Out Drawer. A pull out drawer shall be installed and centered under the

bottom shelf. The drawer shall be made of 0.080-inch thick, 5052-H32 aluminum and come out on full extension drawer slides. The pull out drawer shall provide an approximate 16-inch x 14-inch working area and have the ability to bear a constant 25 pound burden. There shall be a compartment for document storage. The lid shall be hinged at the rear, to gain access to the storage area. The drawer will be used to store documents as well as support a notebook computer. The drawer slides shall be of the full extension ball bearing type. Dimensions of the drawer shall be large enough to support a notebook computer and a drawer of sufficient size to hold at least two (2) copies of the cabinet drawings and other related cabinet documentation. The surface of the lid shall have a non-slip surface.

907-632.02.2.2--Cabinet Lighting. Cabinets shall be provided with a minimum of two (2) white light LED modules. One (1) lighting module shall be installed along the front top section of the cabinet and the second lighting module shall be installed underneath the bottom cabinet shelf in such a location as to provide direct lighting of the load bay area of the cabinet but must not interfere with the cabinet drawer operation.

Both LED lighting modules shall be controlled by a NEMA rated, commercial quality, pushbutton door switch. The cabinet lighting shall turn on when the cabinet main door is opened and shall turn off when the main door is closed or an ON/OFF NEMA rated, commercial quality, toggle switch mounted on the inside cabinet door service panel shall be provided to turn both LED lighting modules on or off.

907-632.02.2.3--Police Panel Switches. Police panel switches shall be provided with all controller cabinets. All switches shall be hard wired and labeled as to their function.

NORMAL-FLASH: When this switch is in the FLASH position, all signal indications shall transfer to the flashing mode. AC power shall be removed from the load switches when the signal indications transfer to the flashing mode.

The controller unit shall operate in accordance with appropriate specifications during the flashing mode. When the switch is placed in the NORMAL position, transfer from the flash mode to normal operation shall be made in accordance with uniform code flash requirements.

SIGNAL ON-OFF: AC power shall be removed from the signal heads and the intersection will become dark when this switch is in the OFF position.

MANUAL CONTROL ON-OFF: When this switch is in the ON position, a logic ground shall be applied to the manual control enable input of the controller unit.

INTERVAL ADVANCE INPUT JACK: A manual jack shall be installed on the police panel. The jack shall inter-mate with a 3-circuit, 1/4-inch diameter phone plug. The tip and ring (middle) circuits of the jack shall be connected to the logic ground and the interval advance inputs of the controller unit. When the manual hand cord is plugged into the jack and the pushbutton is pressed, logic ground shall be connected to the interval advance input of the controller unit.

When specified in the contract documents, an interval advance cord shall be provided. The cord

shall have a minimum length of three (3) feet. It shall have a ¼-inch diameter, three circuit plug connected to one end and a manual pushbutton enclosed in a hand-held enclosure at the other end. A complete cycle (push-release) of the manual pushbutton shall terminate the controller unit interval which is active except the vehicular yellow and red clearance intervals. Cycling the pushbutton during the vehicular yellow or all red clearance intervals shall not terminate the timing of those intervals.

907-632.02.2.4--Service Panel Switches. Service panel switches shall be hard wired and clearly labeled to identify as to their functions. Service panel switches shall be mounted on the service panel located on the inside of the main cabinet door. Alternate switch locations may be described in the plans or contract documents but final switch design and location shall be approved by the Engineer prior to cabinet fabrication.

NORMAL-FLASH: When this switch is in the FLASH position, all signal indications shall transfer to the flashing mode. AC power shall be removed from the load switches when the signal indications transfer to the flashing mode.

The controller unit shall operate in accordance with appropriate specifications during the flashing mode. When the switch is placed in the NORMAL position transfer from the flash mode to normal operation shall be made in accordance with uniform code flash requirements.

CONTROLLER ON-OFF: When this switch is in the OFF position, AC power shall be removed from the controller. When this switch is returned to the ON position, the controller unit shall perform normal start up functions and resume normal operation in accordance with the applicable specification.

STOP TIME-RUN-NORMAL: A 3-position manual switch shall be provided which places the controller into Stop Time mode manually or through remote input.

VEHICLE DETECTORS: A 3-position switch shall be provided for each vehicle and pedestrian detector circuit. All switches shall be located on a panel mounted on the inside of the main cabinet door. The switch panel shall be labeled CALL SWITCH. Labeling of phase number and intended function (vehicles or pedestrian calls) shall be provided for each switch.

The vehicle detector switch functions are defined as follows:

Locked Call	Call is continually placed into the controller unit.
Off (center)	Vehicle detector is connected to the controller unit vehicle detector input, i.e. normal detector operation.
Momentary Call	Call is continuous as long as the switch is manually held in this position.

907-632.02.2.5--Police and Service Panel Locations. The police and service panels shall be constructed of 5052-H32 0.125-inch thick aluminum.

The police panel shall be located behind the police door which is enclosed within the main door.

The police door shall be hinged and provided with a neoprene gasket seal. Access to any portion or equipment contained behind the main cabinet door shall not be accessible through any part of the police panel. The police panel shall be of appropriate dimensions to accommodate all switch or devices described within this specification, the plans or contract document. The police door shall be provided with a treasury #2 key type lock and two (2) keys for the police door lock shall be provided with each cabinet.

The service panel shall be mounted on the inside portion of the main cabinet door, adjacent to the back side of the police panel or on the left hand side of the cabinet.

907-632.02.2.6--Cabinet Ventilation. Cabinets shall be vented to allow dissipation of the heat generated by the equipment contained within. All cabinets shall have a thermostatically controlled exhaust fan located at the top of the cabinet that is capable of 100 cubic feet per minute air displacement. The thermostat shall be mounted on the inside top of the cabinet and shall have a nominal temperature range from 80°F to 170°F.

The intake vent shall be louvered or equivalent design to prevent rain infiltration. The vent area will be located along the bottom portion of the cabinet door. A 16-inch x 12-inch x 1-inch disposable pleated air filter shall be provided on the inside portion of the cabinet and shall fully cover the vent area.

907-632.02.2.7--Air Filter Assembly. Air filters shall be one piece and shall be held firmly in place against the cabinet door in order to prevent dust from bypassing the perimeter of the filter and shall fully cover the vent area. Wing nuts or thumbscrews are preferred. Air filter shall be a 16-inch x 12-inch x 1-inch disposable pleated filter.

907-632.02.2.8--Cabinet Sizes.

907-632.02.2.8.1--Type I Cabinet. A Type I cabinet, 51"H x 30"W x 18"D, may be used for both pole and base mounted cabinets that require a maximum eight (8) position load bay. Pole mounted cabinets do not require rear access.

907-632.02.2.8.2--Type II Cabinet. A Type II cabinet, 51"H x 36"W x 18"D, may be used for both pole and base mounted cabinets that require a maximum twelve (12) position load bay. Pole mounted cabinets do not require rear access.

907-632.02.2.8.3--Type III Cabinet. A Type III cabinet, 56"H x 44"W x 27"D, shall be used for base mount installations and shall require a sixteen (16) position load bay and rear access door.

907-632.02.2.8.4--Type IV Cabinet. A Type IV dual chamber cabinet, 56"H x 57"W x 29"D, shall be used for base mount installations and shall require a sixteen (16) position load bay, rear access door, and external generator plug. When called for in the plans, a UPS shall be housed inside this cabinet.

907-632.02.2.8.5--Type V Cabinet. A Type V cabinet, 77"H x 44"W x 27"D, shall be used for base mount installations and shall require a sixteen (16) position load bay and rear access door.

907-632.02.3--Power Distribution Panel. The power panel shall be wired to provide the necessary power to all equipment. It shall be manufactured from 0.125-inch thick, 5052- H32 aluminum. The power panel shall house the following components: Main Breaker, Auxiliary Breakers, and Terminal Block. The panel shall be of such design so as to allow a technician to easily access the main and auxiliary breakers.

A 3-position terminal block with a removable insulated cover accepting up to AWG #4 stranded wire shall be supplied for accepting only the incoming power lines. This terminal block shall be in advance of and supply only the 30-amp main breaker, 10-amp and 5-amp Auxiliary breakers, AC neutral buss and earth ground buss.

907-632.02.3.1--Ground and Neutral Busbars. Cabinet grounding shall meet the requirements set forth in Subsection 722.09 for grounding and ground rods. A solid copper ground busbar shall be mounted on the side of the cabinet wall adjacent to the power panel for the connection of chassis ground wires. If more than one (1) ground busbar is used in a cabinet, a minimum of an AWG #6 copper wire shall be used to bond them.

The copper ground busbar shall have a minimum of thirteen (13) connector points, each capable of securing at least one (1) AWG #6 conductor.

A solid copper neutral busbar shall be mounted on the side of the cabinet wall adjacent to the power panel for the connection of AC neutral wires.

The copper neutral busbar shall have a minimum of thirteen (13) connector points, each capable of securing at least one (1) AWG #6 conductor.

907-632.02.3.2--Terminal Strips. Conductors shall be terminated on terminal strips with insulated terminal lugs. When two (2) or more conductors are terminated on field wiring terminal strip screws, a terminal ring lug shall be used for termination of those conductors. The voltage and current rating of terminal strips shall be greater than the voltage and current rating of the wire which is terminated on the terminal strip.

907-632.02.3.3--Cabinet Receptacles. A 3-wire 115 Volt AC (15A) Ground Fault Circuit Interrupt (GFCI) duplex receptacle shall be provided in the cabinet for maintenance use. It shall be securely mounted near the bottom right side of the cabinet and easily accessible.

Two (2) 3-wire 115 Volt AC (15A) non-GFCI protected outlets shall be installed, one on each side of the cabinet. These two (2) outlets are used for communication or other auxiliary equipment.

907-632.02.3.4--Operating Line Voltage. All equipment shall be designed to operate from a 120 volt, 60 cycle AC supply. Operation shall be satisfactory at voltages from 105 volts to 130 volts. All operating voltages into and out of the controller shall be NEMA level DC voltages except for the controller AC power source (Connector A, Pin p – AC-Control and Pin U – AC Common).

907-632.02.3.5--Circuit Breakers. Circuit breakers shall meet the requirements set forth in

Subsection 722.07. A 30-amp main breaker, with a minimum of 10,000 amp interrupting capacity, shall be provided for all cabinets to supply power to the controller, MMU, signals, and rack power supply.

Two (2) auxiliary breakers shall be provided. The first breaker, 10-amp, shall supply power to the fan, light, GFCI utility receptacle and two (2) auxiliary standard receptacles. The second breaker, 5-amp, shall be installed to supply power for the Controller Unit and MMU2. The above circuit breakers line side shall be jumpered together and will be fed from an external main circuit. A third 5-amp breaker shall be required if an ITS camera panel is called for in the plans.

907-632.02.3.6--Main Line Arrestors. Surge protection shall be provided that meets the requirements set forth in Subsection 722.12. A main line arrestor shall be provided to reduce the effects of voltage transients on the AC power line. It shall be installed after the circuit breaker. The main line arrestor shall be sufficient to protect all equipment and devices as per the plans and the following minimum specifications.

- Multi-stage Hybrid Design
- Series induction filtering
- Thermally protected Metal Oxide Varistors (TMOV's)
- Operating Voltage: 120 VAC
- Clamping Voltage: 395 VAC
- Operating Current: 15 A
- Peak Surge Current: 50 kA/Mode, 100 kA/Phase
- Operating Frequency: 47-63Hz
- EMI Attenuation: 40 dB Typ
- SPD Technology: TMOV's w/ W-C Filter
- Modes of Protection: L-N, L-G, N-G
- Status Indication: Power On & TMOV's Functional
- Connection Type: ¼-20 Stainless Steel Stud
- Operating Temperature: -40°F to +185°F

907-632.02.3.7--Solid State Main Line Relay (SSR). A normally-open, 75-amp, hybrid SSR shall be provided on the power distribution panel. The relay shall include a LED indicator to verify circuit power.

907-632.02.4--Terminal Facilities Board. The Terminal Facility shall be a hardwired load bay for NEMA TS 2 Type 1 actuated controllers. The load bay shall include either eight (8), twelve (12) or sixteen (16) load switch positions, as specified by the plans, and shall be centered along the back of the cabinet below the bottom shelf.

All wires terminated behind the backboard, as well as any additional panels, shall be soldered. No pressure or solderless connectors shall be used, unless they are soldered to the wire and tab after connection.

907-632.02.4.1--Load Switches and Flashers. Solid State Load Switches, compatible with low

wattage LED signals, shall be provided for the sequence called for on the plans. The load switch sockets shall be wired for triple-signal load switches conforming to NEMA TS 1-1994 and NEMA TS 2-2003 requirements.

The flasher socket shall be wired for and provided with a Type 3, two (2) circuit Solid State Flasher conforming to NEMA TS 1-1994 and NEMA TS 2-2003 requirements. It shall be possible to flash either the amber or red indication on any load switch outputs. It shall be possible to easily change the flash indication from the front side of the panel using readily available tools such as a screwdriver. A nominal flash rate of 50 to 60 FPM shall be provided. Flash rate shall be stable when used with generators or inverters.

Support(s) shall be provided to support the Flasher and Load Switches at some point approximately half of the total length from the panel surface. Sufficient area beneath the Load Switch or Flasher shall be clear in order to allow for free flow of air across the Load Switches or Flasher. Load Switches and Flashers must be provided with LED indicator lights on the side facing the cabinet door.

907-632.02.4.2--Flash Transfer Relay. All flash transfer relays, as a minimum, shall meet NEMA TS 1 requirements. The number of relays that shall be supplied with each cabinet shall accommodate the number of signal phases as indicated in the project plans. The coil of the flash transfer relay must be de-energized for flash operation.

907-632.02.5--Cabinet Wiring. Controller cabinets shall be wired in accordance with the signal phasing plans. If phases are indicated as omitted for future use, or if phases are not shown to be used in the plans, the cabinet shall be wired for use of the phases shown as future or unused. Load Switches shall not be provided for future or unused phases.

Wiring in the cabinets shall conform to the requirements of the National Electrical Code (NEC) and all of these specifications. All conductors in the cabinet shall be stranded copper. All wiring shall be laced. All wiring shall be in accordance as specified by Section 636 and Subsection 722.03 for Electric Cable and IMSA Specification 19 and/or 20 for Signal Wiring.

Connector harnesses for controller, conflict monitor, vehicle detectors, and accessory equipment (including NEMA defined Card Rack with power supply and pre-wired optical detection slots) shall be provided and wired into the cabinet circuitry. Connecting cables for controller and conflict monitor harnesses shall be sleeved in a braided mesh. All wires shall be securely terminated on terminal strips. The lay of the interconnect cable between the components must be such that when the door is closed, it does not press against the cables or force the cables against the various components inside the cabinets.

All communication wiring shall be bundled and routed independently of all other wiring. All live conductors shall be covered with suitable insulating material. All equipment grounds shall run directly and independently to the grounding bus.

All wires shall be cut and terminated as close as possible to the proper length before assembly. Consideration of equipment location adjustments must be made when determining appropriate

wire lengths. Excessive lengths of wire or cable shall not be allowed. All line voltage conductors used in controller cabinet shall conform to the following color code:

AC Neutral: White
AC Hot: Black
Safety Ground: Green

907-632.02.5.1--Signal Terminal Arrestor Grounding Bar. A field terminal arrestor grounding bar shall be provided along the back portion of the cabinet for the installation of signal arrestors. This bar shall be attached using an AWG #10 stranded copper to the earth ground circuitry.

907-632.02.5.2--Signal Terminal Arrestors. The field terminal arrestor shall be a three (3) circuit protective device intended for use on traffic control load relay outputs. The arrestor shall be furnished with three (3) leads and a grounding stud which will be used to attach the arrestor to the grounding bar. The field terminal arrestor shall meet the following minimum specifications:

- Operating Voltage: 120 VAC
- Clamping Voltage: 475 VAC
- Peak Surge Current: 10 kA
- Operating Frequency: 47 – 63 Hz
- SPD Technology: MOV's
- Connection Type: Wire Leads
- Lead Wire: 14 AWG 12" Length
- Ground Stud: 10 x 32 5/8" Length
- Operating Temperature: -40°F to +185°F

907-632.02.6--Accessory Components.

907-632.02.6.1--Traffic Actuated Controller Unit. The fully actuated controller unit shall, at a minimum, meet the requirements of both NEMA TS 1–1989 and NEMA TS 2-2003 requirements for actuated controller units. The controller shall be of the TS 2 Type 2 configuration. The controller shall be provided with the multiple communication interface devices or properties as defined below.

- 10 Base-T Ethernet with front panel RJ-45 connector
- IEEE defined MAC address
- EIA-232 port
- External Serial Fiber options for both single and multi-mode (optional as per plans)
- External FSK 1200 bps modem (optional as per plans)
- D connector with 37 pin configuration for TS 1 compatibility
- USB port for signal controller database upload/download to the controller flash
- Controller
- ECOMM Compatible

The controller unit must have an alphanumeric backlit LCD display with a minimum of sixteen

(16) lines at 40 characters per line. The controller must be air-cooled with sufficient ventilation openings and capable of operating between -30°F and 165°F. The controller unit must be provided with a time-of-day clock, automatic daylight savings time adjustment and a power supply for maintaining SRAM during a power outage. The controller unit shall be capable of being used in a Closed-Loop System and must be capable of operating in the role of master controller in a Closed Loop System. The controller unit firmware shall be fully compatible with the Department's existing Traffic Signal Management Software. The Contractor shall ensure all controller firmware versions are compatible with the existing Traffic Signal Management Software that the Regional Department staff currently utilizes prior to submitting the controller for approval. The Contractor shall notify the Department if any special controller configuration or firmware is needed prior to submitting the controller for approval based on project requirements.

Where Flashing Yellow Arrow (FYA) operations are being used, all traffic signal controller firmware shall be capable of delaying the onset of the flashing yellow arrow.

All operator entered data shall be stored and backed up on to a flash memory device provided with the controller unit at no cost. This flash memory device shall require no battery to support value storage. No internal components of circuitry shall require battery support. The database shall be able to be backed up to a USB drive via the USB drive on the controller.

Traffic Actuated Controllers shall be of the Type shown on the plans. Type 1 Controllers shall have a Linux based processor and a minimum of one (1) USB port. Type 2 Controllers shall have the same features as Type 1 Controllers with the addition of an ATC backplane.

Type 3 Controllers shall have all features of the Type 2 Controller with the addition of the ATC module. All three (3) types of actuated controllers shall have Master controller capability, and if required shall be designated with 'M' in the plans.

907-632.02.6.2--Closed Loop Master Controller Unit. When called for in the plans, this work also consists of furnishing, installing and configuring the equipment, software and accessories necessary to connect one (1) traffic Closed-Loop Master Controller to its corresponding central or portable PC-based Traffic Computer Facility Control System via a communications connection. The communications or network connection device will be either existing or provided by the Contractor.

907-632.02.6.2.1--General. The Master shall monitor intersections in the system, display status and operational state and provide traffic flow data from intersection vehicle detectors. The Master shall include all communications equipment and software necessary to provide reporting to a remote terminal as well as upload/download of all local intersection data and provide timing synchronization. Communications to local controllers from the Master and from the Master to the central-office computer facility shall be by FSK, 900 MHz Radio, Broadband Radio, Serial Fiber, Ethernet, Fiber, Cell Modem or Leased Line, as indicated in the plans. The Master shall be able to run on the same controller simultaneously operating the intersection, with the local signal control software, on any given controller unit.

907-632.02.6.2.2--System Configuration. The system architecture shall be designed to minimize

the effect of equipment failures on system operation and performance. The system consists of four (4) principal elements:

- Local System Intersection Controllers
- Communication (Telemetry Links)
- On-Street Master(s)
- Central-Office Computer Software

907-632.02.6.2.3--Local System Intersection Controller. The local system intersection controllers connected to the Master controller unit shall be capable of controlling a fully actuated two (2) to sixteen (16) phase intersection and shall meet or exceed NEMA TS 1-1989 and TS 2-2003 standards for fully actuated traffic control units. The local controller shall have internal communication capability with direct access to the data memory. The local system controller shall be capable of processing controller and detector data and provide all necessary intersection control functions. The local system intersection controller shall meet the requirements of the Traffic Actuated Controller Unit.

907-632.02.6.2.4--Communications (Telemetry) Links. The communications links for the "Closed-Loop" System shall perform the following functions:

- Provide the medium (radio/fiber/hardwire/etc.) for two-way communications between the On-Street Master and the local intersection controllers.
- Provide the medium for two-way communication between the On-Street Master and the central-office computer facility.
- Error checking shall be included in both mediums to assure transmission and reception of valid data.

907-632.02.6.2.5--On-Street Master. The On-Street Master may be located at an intersection and connected via the communication network to at least 32 local intersection controllers. The Master shall be capable of implementing Traffic Responsive Control, Time Base Control, Manual Control or Remote Control modes of operation.

Analysis of sampling sensor data from at least 64 system detectors and corresponding selection of the best Traffic Responsive timing pattern shall be provided by the On-Street Master during the Traffic Responsive mode of operation.

Automatic and continuous monitoring of system activity shall be provided by the On-Street Master to include both Master and intersection alarm conditions.

System parameter entry shall be provided via the On-Street Master including all Master and local intersection assignment and group parameters. Master parameters shall include:

- System coordination setup and pattern data entry by group
- System time base event scheduler
- System traffic responsive computational and pattern selection setup by group
- Intersection system group and detector assignments

The On-Street Master shall provide comprehensive system report generation including, as a minimum: system, intersection, detector and failure status and history reports in addition to system performance reporting.

A RS-232C interface shall be provided on the On-Street Master to allow for printing of reports or for interconnecting to a remote central site.

To enhance overall system operation and increase system management flexibility, the On- Street Master shall also support two-way dial-up communications to a central office computer for control, monitoring, data collection and for timing pattern updating purposes, all from a remote central office location. Continuous, seven (7) days/week - 24 hours/day, system monitoring shall be enhanced by the On-Street Master's capability to automatically dial-up the central office computer upon detection of user defined critical alarm conditions.

907-632.02.6.2.6--System Functional Requirements.

907-632.02.6.2.6.1--Operator Interface. In order to provide ease in programming and operation, the system shall provide a simplified user-friendly menu format at each local, master and central office facility. No special programming skills shall be required for the user to fully access and operate this control and monitoring system at any level.

All programming, both of the local intersection controllers and the On-Street Master(s) shall be via a front panel keyboard and display, driven by English Language menus. All data change entries will be automatically verified against established ranges prior to acceptance to prevent programming data errors. Data access shall be controlled by user- definable access controls.

907-632.02.6.2.6.2--System Traffic Control. The system shall have the capability of controlling a minimum of sixteen (16) vehicle phases and eight (8) pedestrian phases. The system shall have the capability of implementing a minimum of four (4) timing rings, fifteen (15) alternate sequences, and sixteen (16) offsets.

The system shall provide the capability of selecting any of the following operational modes on a group basis:

- Traffic Responsive
- Time Base (Time-of-Day/Day-of-Week)
- Remote (External Command)
- Manual (Operator Entry)

The system shall be capable of implementing system FLASH and system FREE operation. The system shall have the capability to command, on/off based on time, up to eight (8) independent special functions.

907-632.02.6.2.6.3--Detectors. The system shall have the capability of accepting and processing data from at least 632 system detectors for Traffic Responsive program selection.

907-632.02.6.2.6.4--Pattern Selection. In addition to providing Manual and Remote program selection capability, the Master shall provide for Traffic Responsive and Time Base modes of operation for timing pattern selection.

907-632.02.6.2.6.4.1--Traffic Responsive Mode. Traffic plan selection in the Traffic Responsive mode shall be user-enabled and supplied with the controller, per the plans and specifications. The pattern selection shall be based on sampling detector volume and occupancy analysis by the On-Street Master.

907-632.02.6.2.6.4.2--Time Base Mode. The system shall provide the capability of implementing time-of-day, day-of-week and week-of-year control for each of the two (2) groups using an internal time clock referenced to the 60-Hz AC power line frequency for its time base. The Time Base mode shall contain automatic adjustment for leap year and daylight savings time changes.

The system Time Base mode shall provide, as a minimum, 100 events each capable of requesting any of the 48 traffic control patterns along with Traffic Responsive override enable or auxiliary events consisting of enable/disable any of up to four (4) system-wide special functions and setting sample and log interval time periods.

907-632.02.6.2.6.5--System Control Priority. The system coordination control (program-in-effect) for each group shall be selected on a priority basis. The priority from highest to lowest shall be as follows:

- Manual Control Entry
- External Control (Remote Command)
- Time Base Control (Time-of-Day/Day-of-Week) (Traffic Responsive control will prevail whenever Traffic Responsive Override Enable is active and the selected cycle length is greater than that being commanded by Time Base)
- Traffic Responsive Control

907-632.02.6.2.6.6--Measures of Effectiveness. The system shall have the capability to report selected Measures of Effectiveness (MOE's) on an intersection basis. MOE calculations shall be made on all phases by the local system intersection controller and as a minimum shall include measures such as: volume, number of stops, delays and green utilization. These measures shall be calculated on the basis of the active timing plan. Alternate ways of reporting MOE'S may be approved on a case-by-case review.

907-632.02.6.2.6.7--Uploading and Downloading. The system shall provide, for any selected local system intersection controller, the capability of uploading and downloading any or all, new or modified local intersection parameters from the central-office computer and the Department Central Traffic Signal Management Software, and shall include, as a minimum, all: Phase Timing and Unit Data; Coordination Data, Time Base Data; Preemption Data, System Communication Parameters, System Traffic Responsive Data, and any other System Data residing at the intersection such as Detector Diagnostic Values, Report Parameters and Speed Parameters.

During either uploading or downloading operations, normal traffic control operations shall not be suspended. All data shall be continually accessible and may be displayed at the On- Street Master or the central office computer.

907-632.02.6.2.6.8--System Monitoring and Diagnostics. The system shall automatically and continually monitor system activity and log/report occurrences of Master and intersection alarm conditions. All alarm condition events shall include at the intersection, (Master and central-office computer) an alpha-numeric description of the event as well as the time and date of occurrence.

As a minimum, monitored master alarms conditions shall include:

- Insufficient or Improper Data
- Failed Computational Channels
- Failed System Detectors
- Intersection Communication Failure
- Failed Controllers
- Minimum of six (6) special user defined alarms for user application flexibility
- Monitored intersection alarms conditions shall include as a minimum:
 - Cycle Faults and Failures
 - Coordination Failures
 - Voltage Monitor
 - Conflict, Local and Remote Flash Conditions
 - Preempt
 - Local Free
- Minimum of six (6) special user defined alarms for additional user flexibility.

When the Master detects a critical alarm condition, as defined by the user, it shall automatically dial-up the central office computer and report the condition. On a BUSY or NO ANSWER, the system may be programmed, at user option, to alert a secondary computer.

The system shall also automatically and continually monitor, verify and attempt to correct Sync Pulse, Time Base Clock and Pattern-In-Effect. The system shall provide capabilities to perform diagnostics on system and local detectors, communications and intersection operations. When a fault has been detected, an indication shall be provided. It shall be possible to isolate the fault to the failed unit from controls and indicators available on the Master unit. Auxiliary equipment such as a data terminal or CRT shall not be required to identify the failure.

907-632.02.6.2.6.9--Real Time Display. The Master shall provide for any selected local system intersection controller, real-time status information on its front panel. Real-time intersection status information shall include simultaneous display of: vehicle and pedestrian signal and detector status by phase, overlap signal status and cars waiting count by phase. Real-time controller status information shall include simultaneous display of: two (2) Ring Active timers, On/Next, Call/Recall and Hold/Omit Status by phase, Coordination, Preempt and Stop Time Status.

907-632.02.6.2.6.10--System Management. The system, without hardware changes but with its

ability to directly modify Master and intersection parameters, shall provide the user system configuration and operational controls of the following functions: add/delete controllers and system detectors, enable Traffic Responsive mode, assign intersections to groups, assign system detectors to computational channels and channels to pattern select routines, and assign special and/or standard detectors as system detectors for use with computational channels or to track activity.

907-632.02.6.2.6.11--System Logging and Reports. The system shall automatically and continually process system data and log/report on occurrence of changes in intersection status, system detector status, communications status, controller status and local detector status in addition to system program changes, Traffic Responsive computations, measures of effectiveness and performance.

907-632.02.6.2.6.12--Security. The On-Street Master shall provide for a user-specified security code entry before any data may be altered. In order to view any parameter, security code entry shall not be required. Security access shall be automatically rescinded approximately ten (10) minutes after either access was gained or the last parameter change was entered. The Master and local controller shall have the ability via keyboard to disable security code requirements, allowing for perpetual access without requiring hardware changes.

907-632.02.6.2.7--Design Characteristics. The On-Street Master shall be designed to operate in either an office or field environment and shall be suitably housed in a separate enclosure or in a local intersection cabinet. The Master shall be designed to meet the following electrical and mechanical requirements:

907-632.02.6.2.7.1--Programming and Security. Operator programmable data entry shall be accomplished through panel keyboard(s). The Master shall prevent the alteration of keyboard set variables prior to the user having entered a specific access code through the keyboard. The Master shall maintain user-programmable variables in non-volatile memory with a battery-backed RAM to assure continued efficient system operation.

907-632.02.6.2.7.2--Test and Repair. To enhance maintenance and trouble-shooting activities, On-Street Masters shall include resident diagnostics as a standard. No extender- cards, special tools or PROMs shall be necessary to fully maintain these components. The Master unit design shall ensure that all printed circuit boards be readily accessible for maintenance testing purposes. All fuses, connectors and controls shall be accessible from the front of the Master unit.

907-632.02.6.2.8--Traffic Signal System Software. All Traffic Signal System Software shall be compatible with the latest version of the Department's existing Master and local controllers and existing Traffic Signal Management Software for the Department region.

907-632.02.6.2.8.1--Traffic Signal Closed Loop Software. The Traffic Signal Closed-Loop Software shall provide the ability to manage Master and local controller databases including the uploading and downloading of data parameters. The software shall provide status information and provide reporting capabilities for Master and local controller data, alarms and logs.

907-632.02.6.2.8.2--Traffic Signal System Workstation Software. The Traffic Signal System Workstation shall provide the ability to manage Master and local controller databases including the uploading and downloading of data parameters. The software shall provide status information and provide reporting capabilities for Master and local controller data, alarms and logs.

The Traffic Signal System Workstation Software shall also be capable of operating as a network-connected user workstation to existing centralized signal systems and their associated databases.

When disconnected from the centralized signal system, the software shall be capable of running as a standalone system similar to the Closed-Loop Software. Under this mode, the software shall provide management, report and status functions for Master and local controllers. Under Standalone Mode of operation the software shall allow for its own database(s) for data management without the need for connecting to a centralized signal system database.

907-632.02.6.2.9--Services. Technical services shall be provided, as required, to assist in installation and initial setup of the Closed-Loop Master System and its sub-components. Technical assistance with database migration and/or setup, as well as the development of graphics (such as master maps and local intersection depictions) and the assignment of associated attributes such as detectors, phasing, signals, etc., shall be provided as required. Additionally, training shall be provided on a basic or advanced target user level, as required.

907-632.02.6.3--Malfunction Management Unit (MMU2). The Malfunction Management Unit (MMU2) shall be a shelf-mountable, sixteen (16) channel, solid-state, IP addressable MMU. The MMU2 shall accomplish the detection of, and response to, improper and conflicting signals and improper operating voltages in a traffic signal controller assembly, including support for four (4) section Flashing Yellow Arrow (FYA) left turn displays. The MMU2 shall be capable of running a minimum of twelve (12) different modes of FYA operation.

The MMU2 shall meet or exceed Section 4 requirements of the NEMA Standards Publication No. TS 2-2003 including NEMA TS 2 Amendment #4-2012 and provide downward compatibility to NEMA Standards Publication No. TS 1-1989: Type 12 Operation, in addition to those specifications set forth in this document.

The MMU2 shall include a graphics based Liquid Crystal Display (LCD) to view the current monitor status and navigate the unit's menus. An RJ-45 Ethernet Port shall be provided for communications.

A built-in Diagnostic Wizard shall be provided that displays detailed diagnostic information regarding the fault being analyzed. This mode shall provide a concise view of the signal states involved in the fault, pinpoint faulty signal inputs and provide guidance on how the technician should isolate the cause of the malfunction. The Diagnostic Wizard shall be automatically invoked when the MMU2 is in the fault mode and the HELP button is pressed. It shall also be automatically invoked when the MMU2 is in the Previous Fail (PF) event log display and the HELP button is pressed.

A built-in Setup Mode shall be provided that automatically configures the Dual Indication Enable, Field Check Enable, Red Fail Enable and Minimum Yellow Plus Red Clearance Enable parameters from user input consisting only of channel assignment and class (vehicle, ped, pp-turn, FYA, etc.) responses.

The MMU2 shall be capable of operating in the Type 12 mode with SDLC communications enabled on Port 1. The Channel Status display shall operate in the Type 12 configuration and provide the Field Check function for up to four (4) Pedestrian Walk inputs.

In the interest of reliability and repair ability, printed circuit board mounted MS connectors shall not be acceptable. Internal MS harness wire shall be a minimum of nineteen (19) strand AWG 22 wire.

907-632.02.6.4--NEMA defined Card Rack and Power Supply. A minimum of one (1) NEMA compliant detector card rack with five (5) slot positions (first slot for power supply and four (4) available slots) shall be provided in each cabinet. The detector rack shall be installed on the bottom shelf of the cabinet. The power supply for the NEMA defined card slots shall be provided as a 175W minimum with four (4) independent regulated channels of 24 VDC each rated at 0.75 amps over the full NEMA operating temperature range of -30°F to +165°F. The output should be regulated to 24 VDC +/- 15%. Each of the four (4) outputs shall be independently fused, each with a separate LED for displaying output and fuse status for each of the four (4) outputs. Each of the four (4) outputs shall be protected against voltage transients by a minimum 1500 watt suppressor. All card racks shall be wired for the type detection shown in the plan sheets.

Card Guides shall be provided on the top and bottom of the card rack for each connector position.

907-632.02.6.5--In-Cabinet Network.

907-632.02.6.5.1--Communications Arrestor. The Controller Cabinet network shall consist of an SDLC connection between the Controller Unit and MMU2. Surge suppression for this network shall meet the requirements set forth in Subsection 722.12 and the following minimum requirements below:

- Operating Voltage: 5 VDC
- Clamping Voltage: 8 VDC
- Operating Current: 1.5 A
- Peak Surge Current: 47 A (10x1000 μ s)
- Frequency Range: 0 to 20 MHz
- Insertion Loss: < 0.1 dB at 20 MHz
- SPD Technology: SAD
- Connection Type: DB-15
- Operating Temperature: -40°F to +185°F

907-632.02.6.6--System Communications.

907-632.02.6.6.1--Traffic Signal Ethernet Switch. When specified in the plans or contract

documents, a traffic signal Ethernet switch shall be installed in the cabinet assembly. It shall meet the requirements for the type specified in Section 907-663. Ethernet patch cables of sufficient length shall be provided for all supplied Ethernet ready cabinet components. The switch and all components shall be connected and configured.

907-632.02.6.6.2--Fiber Optic Patch Panel. When specified in the plans or contract documents, fiber optic attenuator patch cords shall be installed in the cabinet assembly as specified in Section 907-661.

907-632.02.6.6.3--Wireless Communications. When specified in the plans or contract documents, wireless communication components shall be installed in the cabinet assembly and shall be as specified in Section 907-662.

907-632.02.6.6.4--Serial Port Server or Terminal Server. When specified in the plans or contract documents, serial port servers shall be installed in the cabinet assembly and shall be as specified in Subsection 907-663.02.2.

907-632.02.6.6.5--GPS Clock. This work includes furnishing a Global Positioning System (GPS) Synchronization clock that can be used to sync the internal clocks in traffic signal controllers when coordination is desired, but communication is not necessary. The GPS Clock System shall provide GPS based time and date synchronization to provide coordination of traffic controllers to a common time base. The system shall process GPS Time data using a tamper/vandal resistant GPS antenna and correct for Time Zone, Daylight Savings Time, Leap Years, and GPS Leap Seconds. The processed time information shall be sent to the traffic controller in the native format for the respective controller. A contact closure synchronization pulse with variable pulse width shall be available for a once per day update. If the GPS antenna is blocked for up to one (1) hour prior to scheduled time of synchronization, the system shall synchronize the traffic controllers with less than 0.4 seconds variance from the accuracy provided under normal operation with GPS satellites in view.

- The GPS Clock shall also meet the following minimum specifications:
- Input Voltage: 9-24 VDC
- Current Draw: 150 mA (max) at 12 VDC: 125 mA (max) at 24 VDC
- Contact Closure: 750 mA at 30 VDC
- Temperature Rating: -29.4°F to +167°F

GPS unit shall be mounted to the traffic signal controller cabinet as per the manufacturer's recommendation. Any and all holes created in the cabinet for the purpose of mounting the GPS unit shall be sealed to the satisfaction of the Engineer at no direct pay.

907-632.02.6.6.6--Power-Over-Ethernet Arrestor. Surge suppression that meets the requirements set forth in Subsection 722.12 shall be provided. In addition, the following minimum specifications shall be supplied for loads that require Power-Over-Ethernet with isolated shielded or non-shielded cable:

- Operating Voltage: 48 VDC
- Clamping Voltage: 68 VDC
- Operating Current: 0.75 A per Pin Continuous
- Peak Surge Current: 10 kA
- Insertion Loss: < 0.1 dB
- SPD Technology: GDT, SAD, with series PTC
- Modes of Protection: All Lines (1-8) Protected (L-L) and (L-G): Signal High- Low; High-Ground; Low-Ground
- Transmission Speeds: 10BaseT; 100BaseT; 1000BaseT
- Connection Type: RJ-45
- Operating Temperature: -40°F to +185°F

907-632.02.7--Detector Panel. A vehicle detector harness shall be provided to connect the detector panel to the card rack. The detector panel shall accept the connection of sixteen (16) field loop inputs and four (4) pedestrian detector inputs.

907-632.02.7.1--Detector Input Arrestors. Field Loop and Pedestrian input arrestors shall meet the requirements set forth in Subsection 722.12. Field loop arrestors shall have differential and common mode protection and be provided with the following minimum specifications:

- Operating Voltage: 75 VDC
- Clamping Voltage: 130 VDC
- Peak Surge Current: 250 A
- SPD Technology: Silicon Break-Over
- Operating Temperature: -40°F to +185°F

Pedestrian input arrestors shall be a four (4) circuit device provided with the following minimum specifications:

- Operating Voltage: 30 VDC
- Clamping Voltage: 36 VDC
- Operating Current: 0.15 A
- Peak Surge Current: 10 kA (8 x 20 μ s)
- Frequency Range: 0 to 20 MHz
- Insertion Loss: < 0.1 dB at 20 MHz
- SPD Technology: GDT, SAD, with Series PTC
- Connection Type: Terminal Block with compression lugs; Terminals accept up to 10 AWG
- Operating Temperature: -40°F to +185°F

907-632.02.8--System Detectors. The controller shall have the ability to receive input data from up to eight (8) special system detectors in addition to the normal actuated controller unit phase detectors. The user shall have the option to assign any of the phase detectors as “system detectors”.

907-632.02.9--Preemption. The cabinet shall be completely wired to accept and service calls from preemption phase selector modules, associated optical detector units and GPS units. Optical detector units and GPS unit cabinet components shall be as specified in Section 639. Provision for two (2) standard card modules shall be accommodated in a separate card rack for preemption. The preemption card rack shall provide a minimum of eight (8) channels.

Provisions shall also be made in the cabinet to accommodate Railroad Preemption when specified in the plans or contract documents. Railroad Preemption shall meet the requirements set forth in Section 639. While it is not necessary that a Railroad Preemption interface board be provided with the cabinet, the cabinet and back panel shall be designed so that a Railroad Preemption interface panel that uses a relay to isolate the track switch from the controller cabinet circuitry can be installed. Preempt 1 and 2, in the case of gate down preemption, shall be reserved for Railroad Preemptions; all subsequent preemptions shall be reserved for Emergency Vehicle, Fire Station, or Police Preemption.

907-632.02.10--Uninterruptable Power Supply. When specified in the plans or contract documents an Uninterruptable Power Supply (UPS) System shall be installed in the cabinet assembly. The UPS shall be installed in the cabinet and meet the requirements set forth in Section 633.

907-632.02.11--Power Service Pedestal. A Power Service Pedestal shall be provided as described in Section 631.03.2.

907-632.03--Construction Requirements.

907-632.03.1--Mounting. Traffic Signal Cabinet Assemblies shall be wall or pole mounted, base mounted on a concrete cabinet pad, or base mounted using a composite enclosure as specified below and as shown in the plans.

Power Service Pedestal shall be base mounted on a concrete cabinet pad or on a composite enclosure as specified below and as shown in the plans.

907-632.03.1.1--Wall or Pole Mounted. Wall or pole mount hardware shall be provided for mounting cabinets in specific installations as indicated in the design plans. Wall or pole mounted cabinets shall be manufactured with rigid tabs, rigid brackets or other acceptable configuration for attachment of the cabinet to the wall or pole support. Rigid attachment devices must allow for field alignment of cabinet to the wall or pole support.

907-632.03.1.2--Concrete Cabinet Pad. Concrete foundations shall be constructed of Class B concrete in specific installations as indicated in the design plans.

Cabinets for installation on a concrete base shall be manufactured with rigid tabs, rigid brackets or other acceptable configuration for attachment of the cabinet bottom to its flat support structure. Rigid attachment devices must allow for field alignment of cabinet with the support base. Concrete base construction details shall be provided in the design plan drawings.

907-632.03.1.3--Composite Enclosure. Cabinets for installation on a composite enclosure base shall be manufactured with rigid tabs, rigid brackets or other acceptable configuration for attachment of the cabinet bottom to its' flat support structure. Rigid attachment devices must allow for field alignment of cabinet with the composite enclosure. Composite enclosure attachment details shall be provided as shown in the plans.

907-632.03.2--Documentation. Documentation packages shall be delivered for each unit at the same time as the equipment to which it pertains.

A minimum of two (2) sets of complete schematic drawings and equipment documentation shall be supplied with each cabinet. The first copy shall be placed in a clear re-sealable print pouch of sufficient size to accommodate one (1) complete set of folded cabinet prints and placed in the pull-out drawer of the cabinet and the second copy shall be provided to the Department. Comprehensive controller data shall be included as part of the cabinet documentation package and shall be placed in the cabinet drawer pouch. Digital copies of all cabinet documentation shall be provided to the Department before final acceptance.

The documentation packages shall contain a schematic wiring diagram of the controller cabinet assembly and all auxiliary equipment. The schematic wiring diagram, including a symbols legend, shall show in detail all integrated circuits, transistors, resistors, capacitors, inductors as well as switches and indicators. All parts shown shall be easily identified on both in the cabinet and on the schematic diagram. Model numbers shall be used on schematic diagram when available.

A complete physical description of the signal cabinet assembly shall be provided to include at least the physical dimensions of the unit, weight, temperature ratings, voltage requirements, power requirements, material of construction, and complete performance specifications.

A complete set of operation guides, user manuals, and performance specifications shall be provided.

Detailed programming instructions, preventative maintenance requirements, and troubleshooting procedures shall also be provided for the controllers. These documents shall fully cover all programming procedures and programmable options capable of being made to the controllers and associated traffic control equipment. Instructions for modifications within the range of the capabilities of the unit such as changes in phases or sequences and programming matrix boards shall be included.

An intersection diagram shall be provided on the cabinet door showing geometric configuration, lane use assignments, controller cabinet and signal pole locations, vehicle and pedestrian signal head locations, vehicle and pedestrian detector zone locations, ring-barrier phasing diagram, and detector channel assignments. The intersection diagram shall be labeled with, at a minimum, a North Arrow, main street name(s), side street name(s), signal pole numbers, vehicle and pedestrian head type(s), detector zone designations, volume density and phase recall requirements, flash sequence. All field wires within the cabinet shall be labeled to coincide with those shown on the intersection diagram.

907-632.04--Method of Measurement. Traffic Signal Cabinet Assembly will be measured as a unit per each.

Remove and Replace Existing Traffic Signal Cabinet Assembly will be measured as unit per each.

Modify Existing Traffic Signal Cabinet will be measured as a unit per each.

Solid State Traffic Actuated Controller, of the type specified in the project plans, will be measured as a unit per each.

Signal Software License, of the type specified in the project plans, will be measured as a unit per each.

Malfunction Management Unit, of the type specified in the project plans, will be measured as a unit per each.

Card Rack, of the type specified in the project plans, will be measured as a unit per each.

GPS Clock, as specified in the project plans, will be measured as a unit per each.

Power Service Pedestal, as specified in the project plans, will be measured as a unit per each.

All pay items shall be inclusive of all materials, work, system integration, testing and incidentals necessary for a complete and operable unit in place and accepted. All removal, turn on, and acceptance of equipment, devices, traffic signals, and traffic signal assemblies shall follow Section 631 - Traffic Signal Systems-General prior to payment.

907-632.05--Basis of Payment. Traffic Signal Cabinet Assembly, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for furnishing, installing, configuring, wiring, testing, and mounting foundation construction, cabinets, relays, terminals, circuit breakers, modules, coordination and time base control programs, connectors wiring, overlap equipment, load switches, power cables, power supplies, controller mechanism and housing, MMU2, mounting material, all other materials, and all equipment, labor, tools, and incidentals necessary to complete the work.

Remove and Replace Existing Traffic Signal Cabinet Assembly, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for furnishing, installing, configuring, wiring, testing, cabinets, relays, terminals, circuit breakers, modules, coordination and time base control programs, connectors wiring, overlap equipment, load switches, power cables, power supplies, controller mechanism and housing, MMU2, mounting material, all other materials, removal, disposal, transfer, storage, and/or resetting of components that are existing, all other components included in the traffic signal cabinet, and all equipment, labor, tools, and incidentals necessary to complete the work.

Modify Existing Traffic Signal Cabinet, measured as prescribed above, will be paid for at the

contract unit price per each, which price shall be full compensation for furnishing, installing, configuring, and mounting all components, wiring, and devices; rewiring, reconfiguring, removal, disposal, transfer, storage, and/or resetting of existing components and devices, installing or changing coordination and time base control programs in the traffic signal cabinet assemblies, testing, final cleanup, all equipment, labor, tools, and incidentals necessary to complete the work.

Solid State Traffic Actuated Controller, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of the controller mechanism(s) and housing(s), all power cables, power supplies, wiring, factory and manufacturing inspection, attachment hardware, testing, storage, packaging, shipping, warranty, and all work, equipment, and appurtenances, and all incidentals necessary to provide a fully functional traffic controller ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the traffic controller.

Signal Software Licenses, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of furnishing, installing and configuring the Signal Software, all power cables, power supplies, wiring, factory and manufacturing inspection, testing, storage, packaging, shipping, warranty, appurtenances, and all incidentals necessary to provide fully functional Signal Software ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the Signal Software.

Malfunction Management Unit, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of furnishing, installing and configuring the Malfunction Management Unit (MMU2), all power cables, power supplies, wiring, attachment hardware, factory and manufacturing inspection, testing, storage, packaging, shipping, warranty, and all work, equipment, and appurtenances, and all incidentals necessary to provide a fully functional Malfunction Management Unit (MMU2) ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the Malfunction Management Unit (MMU2).

Card Rack, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of furnishing, installing and configuring the Card Rack, all power cables, power supplies, wiring, attachment hardware, factory and manufacturing inspection, testing, storage, packaging, shipping, warranty, and all work, equipment, and appurtenances, and all incidentals necessary to provide a fully functional Card Rack ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the Card Rack.

GPS Clock, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of furnishing, installing and configuring the Global

Positioning System (GPS) Clock(s), all power cables, power supplies, wiring, attachment hardware, factory and manufacturing inspection, testing, storage, packaging, shipping, warranty, and all incidentals necessary to provide a fully functional GPS Clock ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the GPS Clock.

Power Service Pedestal, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for furnishing, installing, configuring, wiring, testing, and mounting foundation construction, cabinets, circuit breakers, connectors wiring, mounting material, all other materials, and all equipment, labor, tools, and incidentals necessary to complete the work.

Payment will be made under:

907-632-A: Solid State Traffic Signal Cabinet Assembly, Type __ Cabinet, Type __ Controller	- per each
907-632-B: Remove and Replace Existing Traffic Signal Cabinet Assembly, Type __ Cabinet, Type __ Controller	- per each
907-632-C: Modify Existing Traffic Signal Cabinet Assembly	- per each
907-632-D: Solid State Traffic Actuated Controller, Type ____	- per each
907-632-E: Single-user Workstation Signal Software License	- per each
907-632-F: Single-user Server Signal Software License	- per each
907-632-G: Malfunction Management Unit	- per each
907-632-H: Card Rack, ____ Position	- per each
907-632-I: GPS Clock	- per each
907-632-J: Power Service Pedestal	- per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-637-3

CODE: (IS)

DATE: 05/25/2021

SUBJECT: Traffic Signal Conduit and Pull Boxes

Section 637, Traffic Signal Conduit and Pull Boxes, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-637.02--Materials.

907-637.02.1--Pull Box / Enclosures. Delete the first sentence of the second paragraph of Subsection 637.02.1 on page 558, and substitute the following.

For grade level pull boxes and enclosures only, Tier 22 (22,500-pound design load, 33,750-pound test load) enclosures with minimum size dimensions as shown in the detail drawings on the plans shall be installed for use in traffic signal construction. Enclosure boxes shall be open bottom.

Delete the fourth sentence of the second paragraph of Subsection 637.02.1 on page 558.

907-637.03--Construction Requirements.

907-637.03.1--Pull box/Enclosures. Delete the sixth sentence of the first paragraph of Subsection 637.03.1 on page 559, and substitute the following.

Enclosures located in soil or sodded areas shall be installed with a supporting poured concrete collar or approved composite collar assembly, as shown by details on the plans.

907-637.03.2.1--Conduit Duct Bank. Delete the first sentence of subparagraph a) under Bored or drilled conduit in Subsection 637.03.2.1 on page 560, and substitute the following.

All conduits under railroad tracks shall be horizontal directional bored or drilled at a minimum of ten (10) feet below the railroad bed, or as required by the Railroad Company.

Delete Subsections 637.03.2.4 and 637.03.2.5 on pages 561 & 562, and substitute the following.

907-637.03.2.4--Blank.

907-637.03.2.5--Blank.

After Subsection 637.03.2.7 on page 563, add the following.

907-637.03.3--Submittals. The submittal requirements defined in the Notice to Bidders entitled “ITS General Requirements” shall be met if the NTB is included as part of the Project Proposal

and Contract Documents. In all cases, submittals shall be thorough and timely. All costs associated with submittals shall be included in the overall contract price; no separate payment will be made for any documenting and submitting.

907-637.03.4--Quality Assurance. The quality assurance requirements defined in the Notice to Bidders entitled "ITS General Requirements" shall be met if the NTB is included as part of the Project Proposal and Contract Documents. In all cases, the Contractor shall conduct, maintain, and leave the worksite in a professional and organized manner. All costs associated with the quality assurance requirements shall be included in the overall contract price.

907-637.04--Method of Measurement. Delete subparagraphs a) and b) in Subsection 637.04 on page 563, and substitute the following.

- a) From center to center of pull box and/or foundation.
- b) Any above ground vertical conduit runs, as indicated in the plans. Measurement in underground conduit is only in the horizontal plane and no additional quantity shall be added for conduit depth or change in elevation of the conduit.

907-637.05--Basis of Payment. Delete the first, second, third, fourth and fifth paragraphs of Subsection 637.05 on page 564, and substitute the following.

Pull Box Enclosures, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials including the cover, installing, crushed gravel underlayment, poured concrete collars, replacement of sod or existing grassing, final clean-up and for all equipment, all documentation and submittals, tools, labor and incidentals necessary to complete the work and quality assurance.

Conduit / Duct Bank, measured as prescribed above, will be paid for per linear feet, which price shall be full compensation for all materials, equipment, labor, trenching, installing, backfilling trench, plowing, directional boring, restoration, marking tape, pull tape, duct plugs, fittings, testing, bore logs, all documentation and submittals, and all other incidentals necessary for the installation and quality assurance of the conduit system.

Rigid Galvanized Steel, measured as prescribed above, will be paid for per linear feet, which price shall be full compensation for all materials, equipment, labor, all documentation and submittals, all related materials including but not limited to couplings, mounting straps, bonding to ground, etc., that is installed on sign structures, poles or between the pull boxes, and all other incidentals necessary for the installation and quality assurance of the conduit system.

Duct Plugs and Sealant will be included in the cost of the conduit and will not be measured separately.

Delete the pay items listed on page 564 and substitute the following.

907-637-A: Pull Box Enclosure, Type

- per each

907-637-B:	Pull Box Enclosure, Structure Mounted, <u>Type</u>	- per each
907-637-C:	Traffic Signal Conduit, Underground, <u>Type</u> , <u>Size</u>	- per linear foot
907-637-D:	Traffic Signal Conduit, Underground Drilled or Jacked, <u>Type</u> , <u>Size</u>	- per linear foot
907-637-E:	Traffic Signal Conduit, Structural Conduit, <u>Type</u> , <u>Size</u>	- per linear foot
907-637-F:	Traffic Signal Conduit, Aerial Supported, <u>Type</u> , <u>No.</u> , <u>Size</u>	- per linear foot
907-637-G:	Traffic Signal Conduit, Underground Encased in Concrete, <u>Type</u> , <u>Size</u>	- per linear foot
907-637-H:	Traffic Signal Conduit Bank, Underground, <u>Type</u> , <u>No.</u> , <u>Size</u>	- per linear foot
907-637-I:	Traffic Signal Conduit Bank, Underground Drilled or Jacked, <u>Type</u> , <u>No.</u> , <u>Size</u>	- per linear foot
907-637-J:	Traffic Signal Conduit Bank, Structural Conduit, <u>Type</u> , <u>No.</u> , <u>Size</u>	- per linear foot
907-637-K:	Traffic Signal Conduit Bank, Aerial Supported, <u>Type</u> , <u>Size and Number</u>	- per linear foot

CITY OF HATTIESBURG, MISSISSIPPI

SPECIAL PROVISION NO. 907-643-3

CODE: (IS)

DATE: 09/20/2021

SUBJECT: Video Vehicle Detection

Section 643, Video Vehicle Detection System, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 643 on pages 601 thru 628 and substitute the following.

SECTION 907-643 - VIDEO VEHICLE DETECTION

907-643.01--Description. This section specifies the minimum requirements for Video Vehicle Detection (VVD) and Multi-Sensor Vehicle Detection (MSVD) furnished and installed in accordance with the design(s) for the location(s) designated on the project plans, in any related notice to bidders, or as directed. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, test, and operate VVD and/or MSVD. The video vehicle detection system shall at a minimum use one or more cameras recommended by the manufacturer or an integrated thermal sensor and video analytics hardware and software to detect vehicle presence, provide a detection output, and generate volume, occupancy, and speed data.

Type 1 Video Vehicle Detection will provide presence or pulse detection of vehicles, bicycles, and pedestrians for Traffic Signal Controller inputs. There are two variations of Type 1 Video Vehicle Detection: Type 1A – camera with independent video detection processor, Type 1B – a single integrated camera with video detection processor. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Video Vehicle Detection equipment, complete and ready for service.

Type 2 Video Vehicle Detection will provide presence or pulse detection of vehicles, bicycles, and pedestrians for Traffic Signal Controller inputs. Type 2 Video Vehicle Detection shall be designed to be span wire mounted. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Video Vehicle Detection equipment, complete and ready for service.

Type 3 Video Vehicle Detection will provide presence or pulse detection and tracking of vehicles, bicycles, and pedestrians for Traffic Signal Controller inputs. Type 3 Video Vehicle Detection shall be a single fish-eye lens camera, designed to be mounted on signal pole or mast arm. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Video Vehicle Detection equipment, complete and ready for service.

The Multi-Sensor Vehicle Detection (MSVD) will provide detection of vehicles on a roadway using a Multi-Sensor Detection for Traffic Signal Controller inputs. The Multi-Sensor shall utilize two (2) different sensors of different technologies, video imaging and radar, to detect and track vehicles. The module shall process information from both video imaging and radar sensors simultaneously in real-time. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Multi-Sensor Vehicle Detection equipment, complete and ready for service.

907-643.02--Materials.

907-643.02.1--Materials Type 1 Video Vehicle Detection. The Type 1 Video Vehicle Detection shall consist of power supply, video camera, mounting brackets, and lightning protection as recommended by the manufacturer, video detection processors/extension modules capable of processing the number of camera and phase combination video sources shown on the project plans or in the purchase order. In addition, Type 1B Video Vehicle Detector shall consist of a single integrated camera with video detection processor, a cabinet interface which mounts in a standard detector rack or as a standalone shelf mount unit.

907-643.02.1.1--Functional Requirements for Type 1 Video Vehicle Detection. The Type 1 Video Vehicle Detection configuration shall utilize video processors with one or more video inputs and one (1) video output, responding to specific site applications, camera locations and detection zones shown on the project plans. Video processors or interface modules shall be provided which plug directly into NEMA TS 1 and TS 2 detector racks without adapters. Extension modules which allow detection zones from one camera to be routed to other card slots shall also be provided if required. The system shall be Ethernet compatible with an RJ45 port. The Type 1 Video Vehicle Detection shall be able to detect vehicles and bicycles in multiple lanes using only the video image.

907-643.02.1.2--Interface Type 1 Video Vehicle Detection. The following interfaces shall be provided:

- 1) Video inputs that accept RS 170 (NTSC) signals from an external video source. A BNC type interface connector shall be provided and located on the front of the video processing unit.
- 2) A LED indicator to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.
- 3) One (1) video output per processor module. The video output shall be RS 170 compliant and shall pass through the input video signal. The video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Control of the overlays and video switching shall also be provided through the serial communications port. The video output interface connector shall be BNC or RCA type. If RCA connector is used, an RCA to BNC adapter shall be provided.
- 4) A serial communications port on the front panel. The serial port shall be compliant with RS-232 or RS-422 electrical interfaces and shall use a DB9 or RJ45 type connector. The serial communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information.
- 5) Interface software. The interface protocol shall support multi-drop or point-to-multipoint communications. Each video detection sensor shall have the capability to be individually IP addressable either built in or with third party video server units.
- 6) Open collector contact closure outputs meeting NEMA TS-2 requirements. The open collector output will be used for vehicle detection indicators as well as discrete outputs for alarm conditions.
- 7) LED status indicators on the front panel. The LED's shall illuminate when a contact closure

- output occurs. Provide one output LED for each contact closure output.
- 8) A mouse compatible port (PS-2 or USB) on the front panel of the video processing unit. The mouse port shall be used as part of the system setup and configuration.
 - 9) A Cabinet Interface shall be provided that is specifically designed to mount in a standard NEMA TS 1 and TS 2 detector rack without adapters or rewiring, or as a stand-alone shelf mount unit. The Interface shall operate in a temperature range from -31°F to +165°F and a humidity range from 0% to 95% relative humidity. The Cabinet Interface shall be powered by 100v to 240v AC, 50 or 60Hz. The front of the Interface shall include LED detection indications for each channel of detection. One BNC video output and detector test switches that allow the user to place calls on each channel

907-643.02.1.3--Functionality Type 1 Video Vehicle Detection. Detection zones shall be programmed via an on-board menu displayed on a video monitor and a pointing device connected to the video detection processor. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. The video detection processor shall detect vehicles, bicycles, and pedestrians in real time as they travel across each detection zone. The video detection processor shall have an RS-232 (DB9 or RJ45) port for communications with an external computer. The video detection processor port shall be multi-drop capable.

It shall be possible to upload and save all configuration data including loop placement and save the file on a computer. It shall be possible to download a configuration file from a computer to the detection device.

The video detection processor shall accept new detection patterns from an external computer through the RS-232 port when the external computer uses the correct communications protocol for downloading detection patterns.

A WindowsTM based software designed for local and remote connection shall be provided for video capture, real-time detection indication and detection zone modification capability. The video detection processor shall send its detection patterns to an external computer through the RS-232 port.

The video detection processor shall default to a safe condition, such as minimum recall, fixed recall or a constant call on each active detection channel, in the event of unacceptable interference with the video signal, low visibility conditions, or power failure.

The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined detection zones in a constant call mode. The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

907-643.02.1.4--Detection. Type 1A shall have a minimum of 24 detection zones per camera input and each detection zone shall be capable of being sized to suit the site and the desired vehicle detection area. Type 1B shall have a minimum of 8 detection zones per camera input and each detection zone shall be capable of being sized to suit the site and the desired vehicle detection area.

A single detection zone shall be able to replace multiple inductive loops and the detection zones

shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

Placement of detection zones shall be done by using only a pointing device, and a Graphical Interface built into the video detection processor and displayed on a video monitor, to draw the detection zones on the video image from each video camera. Detection zones created in this manner shall be compatible with the PC-based software provided with the system.

The video detection processor shall support bicycle type zones where the zone can differentiate between motorized vehicles and bicycles, producing a call for one but not the other. Bicycle zones shall only output when a bicycle is detected. The video detection processor shall provide the ability to assign a separate output channel for bicycle zones to allow traffic controllers to implement special bicycle timing for applications where the traffic controller has separate bicycledetection inputs. Bicycle zones shall have the ability to have extensions assigned to individual bicycle zones for applications where the traffic controller does not have bicycle specific detectioninputs.

For Type 1A, six (6) additional count zones for bicycles shall be provided to accumulate bicycle counts at user specified intervals.

The video detection processor's memory shall be non-volatile to prevent data loss during power outages.

When a vehicle is detected crossing a detection zone, the corners or entire zone of the detection zone shall flash/change color on the video overlay display to confirm the detection of the vehicle. It shall be possible to record the operation of the unit in real time with the detection zones operating.

Detection shall be at least 98% accurate in all weather conditions, with slight degradation acceptable under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility.

The video detection processor shall maintain normal operation of existing detection zones when one (1) zone is being added or modified.

The video detection processor shall output a constant call on any detector channel corresponding to a zone being modified and shall resume normal operation upon completion.

Detection zones shall be directional to reduce false detections from objects traveling in directions other than the desired direction of travel in the detection area.

The video detection processor shall process the video input from each camera using a microprocessor at 30 frames per second at one volt, peak to peak, 75 ohms, or EIA 170 NTSC video standard.

The video detection processor shall output minimum recall, fixed recall or constant call for each enabled detector output channel if a loss of video signal occurs. The recall behavior shall be user selectable for each output. The video detection processor shall output a constant call during the

background "learning" period.

Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds in increments of 0.1 seconds.

Type 1A shall have up to six (6) detection zones per camera view that have the capability to count the number of vehicles detected, measure classification, **occupancy**, and speed. The data values shall be internally stored within the processor module for later retrieval through the RS-232 port. The data collection interval shall be user definable in periods of 5, 15, 30, or 60 minutes or by intersection cycle. Real-time data shall be retrieved from the PC-based software provided with the system.

~~907-643.02.1.5~~---Camera. Type 1A cameras shall be completely compatible with the video detection processor and shall be certified by the manufacturer to ensure proper system operation.

Type 1B shall be a single integrated camera with built in video detection processor.

The Video Vehicle Detection shall produce accurate detector outputs under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.009 to 930 foot-candles.

The camera shall use a color CCD sensing element with resolution of not less than 470 lines horizontal and 400 lines vertical.

The camera shall include mechanisms to compensate for changing of lighting by using an electronic shutter and/or auto-iris lens.

The camera shall include a variable focal length lens with factory preset focus that requires no field adjustment. Zooming of the camera lens to suit the site geometry by means of a portable interface device designed for that purpose. The horizontal field of view shall be adjustable. Camera configuration shall be customized for each approach based on field site conditions and the project plans.

The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate

of the enclosure. The heater shall directly heat the glass lens and require less than five (5) watts over the temperature range.

Power consumption of the camera shall be 15 watts or less under all conditions.

The camera enclosure shall be equipped with separate, weather-tight connections for power and setup video cables at the rear of the enclosure. These connections shall allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module furnished under this bid item.

The video signal output by the camera shall in accordance with NTSC standards.

All necessary mounting brackets shall be mounted to pole shafts, mast arms, or other structures to mount cameras as indicated on the project plans. Mounting brackets shall result in a fixed- position mounting. Mounting Brackets shall be included at no additional cost.

907-643.02.1.6--Video Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance. The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.1.7--Power Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance.

Camera power cable shall be suitable for installation in conduit and in exposed sunlight environment, and UL listed.

The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.1.8--Surge Protection. Surge protection devices shall be provided for all new or added video detection devices as recommended by the manufacturer. A surge protection device (SPD) shall be installed at the point the video detection devices receive 120 volt power and connected in series with the circuits. SPDs shall be selected and installed according to recommendation from the device manufacturer. The units shall be configured with receptacles. The units shall have an internal fuse protection and shall provide common mode (L+N-G) protection.

Video and/or Power cable shall be protected with an inline surge suppressor as recommended by the manufacturer or a panel mounted surge suppressor as recommended by the manufacturer or approved equal, installed and grounded per manufacturer's recommendations.

907-643.02.1.9--Physical and Environmental Specifications. Physical and Environmental Specifications shall be as follows.

Video Vehicle Detection Processor: The video vehicle detection processor shall operate reliably in a typical roadside traffic cabinet environment. Internal cabinet equipment and a videovehicle detection processor shall be provided that meets the environmental requirements of NEMATS-2-2003 Section 2. If the processor is located in the sensor, it shall meet the same requirements.

Video Camera Sensor: The operating ambient temperature range shall be -30°F to 140°F. Additionally, a heater shall be included to prevent the formation of ice and condensation in cold weather. The heater shall not interfere with the operation of the video camera sensor electronics, or cause interference with the video signal.

Vibration: Vibrations shall meet the requirements of NEMA TS 2-2003 Section 2.1.9. Shock: Shock shall meet the requirements of NEMA TS 2-2003 Section 2.1.10.

Acoustic Noise: A video camera sensor and enclosure shall be provided that can withstand 150 dB for 30 minutes continuously, with no reduction in function or accuracy.

907-643.02.2--Materials Type 2 Video Vehicle Detection. The Type 2 Video Vehicle Detection shall be span wire mounted and consist of power supply, video camera, mounting brackets, and lightning protection as recommended by the manufacturer, video detection processors/extension modules capable of processing the number of camera and phase combination video sources shown on the project plans or in the purchase order

907-643.02.2.1--Functional Requirements for Type 2 Video Vehicle Detection. The Type 2 Video Vehicle Detection configuration shall utilize video processors with one or more video inputs and one (1) video output, responding to specific site applications, camera locations and detection zones shown on the project plans. Video processors or interface modules shall be provided which plug directly into NEMA TS 1 and TS 2 detector racks without adapters. Extension modules which allow detection zones from one camera to be routed to other card slots shall also be provided if required. The system shall be Ethernet compatible with an RJ45 port. The Type 2 Video Vehicle Detection shall be able to detect vehicles and bicycles in multiple lanes using only the video image.

907-643.02.2.2--Interface Type 2 Video Vehicle Detection. The following interfaces shall be provided:

- 1) Video inputs that accept RS 170 (NTSC) signals from an external video source. A BNC type interface connector shall be provided and located on the front of the video processing unit.
- 2) A LED indicator to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.
- 3) One (1) video output per processor module. The video output shall be RS 170 compliant and shall pass through the input video signal. The video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Control of the overlays and video switching shall also be provided through the serial communications port. The video output interface connector shall be BNC or RCA type. If RCA connector is used,

- an RCA to BNC adapter shall be provided.
- 4) A serial communications port on the front panel. The serial port shall be compliant with RS-232 or RS-422 electrical interfaces and shall use a DB9 or RJ45 type connector. The serial communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information.
 - 5) Interface software. The interface protocol shall support multi-drop or point-to-multipoint communications. Each video detection sensor shall have the capability to be individually IP addressable either built in or with third party video server units.
 - 6) Open collector contact closure outputs meeting NEMA TS 2 requirements. The open collector output will be used for vehicle detection indicators as well as discrete outputs for alarm conditions.
 - 7) LED status indicators on the front panel. The LED's shall illuminate when a contact closure output occurs. Provide one output LED for each contact closure output.
 - 8) A mouse compatible port (PS-2 or USB) on the front panel of the video processing unit. The mouse port shall be used as part of the system setup and configuration.
 - 9) A Cabinet Interface shall be provided that is specifically designed to mount in a standard NEMA TS 1 and TS 2 detector rack without adapters or rewiring, or as a stand-alone shelf mount unit. The Interface shall operate in a temperature range from -31°F to +165°F and a humidity range from 0% to 95% relative humidity. The Cabinet Interface shall be powered by 100v to 240v AC, 50 or 60Hz. The front of the Interface shall include LED detection indications for each channel of detection. One BNC video output and detector test switches that allow the user to place calls on each channel

907-643.02.2.3--Functionality Type 2 Video Vehicle Detection. Detection zones shall be programmed via an on-board menu displayed on a video monitor and a pointing device connected to the video detection processor. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. The video detection processor shall detect vehicles, bicycles, and pedestrians in real time as they travel across each detection zone. The video detection processor shall have an RS-232 (DB9 or RJ45) port for communications with an external computer. The video detection processor port shall be multi-drop capable.

It shall be possible to upload and save all configuration data including loop placement and save the file on a computer. It shall be possible to download a configuration file from a computer to the detection device.

The video detection processor shall accept new detection patterns from an external computer through the RS-232 port when the external computer uses the correct communications protocol for downloading detection patterns.

A WindowsTM based software designed for local and remote connection shall be provided for video capture, real-time detection indication and detection zone modification capability. The video detection processor shall send its detection patterns to an external computer through the RS-232 port.

The video detection processor shall default to a safe condition, such as minimum recall, fixed recall or a constant call on each active detection channel, in the event of unacceptable interference with

the video signal, low visibility conditions, or power failure.

The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined detection zones in a constant call mode. The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

907-643.02.2.3.1--Functionality for Type 2 Video Vehicle Detection. The Video Detection Processor (VDP) for the Type 2 Video Vehicle Detection shall employ Dynamic Zone Stabilization to provide motion tracking and compensation for swaying camera sensors mounted on dual or single span wires. The VDP shall include software that discriminately detects the presence of vehicles and bicycles in single or multiple lanes using only the video image. The VDP shall compensate for swaying motions by tracking the position of the stop bar for the approaching vehicle or bicycle movement. The VDP shall compensate for low frequency (cable sag) motion due to temperature changes during the day. The VDP shall compensate for moderate frequency motion induced by winds. The VDP shall compensate for up to ± 5 degrees of tilt from vertical without any adverse detection false calls or dropped calls.

907-643.02.2.4--Detection. Type 2 shall have a minimum of 24 detection zones per camera input shall be possible, and each detection zone shall be capable of being sized to suit the site and the desired vehicle detection area. .

A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

Placement of detection zones shall be done by using only a pointing device, and a Graphical Interface built into the video detection processor and displayed on a video monitor, to draw the detection zones on the video image from each video camera. Detection zones created in this manner shall be compatible with the PC-based software provided with the system.

The video detection processor shall support bicycle type zones where the zone can differentiate between motorized vehicles and bicycles, producing a call for one but not the other. Bicycle zones shall only output when a bicycle is detected. The video detection processor shall provide the ability to assign a separate output channel for bicycle zones to allow traffic controllers to implement special bicycle timing for applications where the traffic controller has separate bicycledetection inputs. Bicycle zones shall have the ability to have extensions assigned to individual bicycle ones for applications where the traffic controller does not have bicycle specific detection inputs.

Six (6) additional count zones for bicycles shall be provided to accumulate bicycle counts at user specified intervals.

The video detection processor's memory shall be non-volatile to prevent data loss during power outages.

When a vehicle is detected crossing a detection zone, the corners or entire zone of the detection

zone shall flash/change color on the video overlay display to confirm the detection of the vehicle. It shall be possible to record the operation of the unit in real time with the detection zones operating.

Detection shall be at least 98% accurate in all weather conditions, with slight degradation acceptable under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility.

The video detection processor shall maintain normal operation of existing detection zones when one (1) zone is being added or modified.

The video detection processor shall output a constant call on any detector channel corresponding to a zone being modified and shall resume normal operation upon completion.

Detection zones shall be directional to reduce false detections from objects traveling in directions other than the desired direction of travel in the detection area.

The video detection processor shall process the video input from each camera using a microprocessor at 30 frames per second at one volt, peak to peak, 75 ohms, or EIA 170 NTSC video standard.

The video detection processor shall output minimum recall, fixed recall or constant call for each enabled detector output channel if a loss of video signal occurs. The recall behavior shall be user selectable for each output. The video detection processor shall output a constant call during the background "learning" period.

Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds in increments of 0.1 seconds.

The processor shall have up to six (6) detection zones per camera view shall have the capability to count the number of vehicles detected, measure classification and speed. The data values shall be internally stored within the processor module for later retrieval through the RS-232 port. The data collection interval shall be user definable in periods of 5, 15, 30, or 60 minutes or by intersection cycle. Real-time data shall be retrieved from the PC-based software provided with the system.

907-643.02.2.5--Camera. Type 2 cameras shall be completely compatible with the video detection processor and shall be certified by the manufacturer to ensure proper system operation.

The Video Vehicle Detection shall produce accurate detector outputs under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.009 to 930 foot-candles.

The camera shall use a color CCD sensing element with resolution of not less than 470 lines horizontal and 400 lines vertical.

The camera shall include mechanisms to compensate for changing of lighting by using an

electronic shutter and/or auto-iris lens.

The camera shall include a variable focal length lens with factory preset focus that requires no field adjustment. Zooming of the camera lens to suit the site geometry by means of a portable interface device designed for that purpose. The horizontal field of view shall be adjustable. Camera configuration shall be customized for each approach based on field site conditions and the project plans.

The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure. The heater shall directly heat the glass lens and require less than five (5) watts over the temperature range.

Power consumption of the camera shall be 15 watts or less under all conditions.

The camera enclosure shall be equipped with separate, weather-tight connections for power and setup video cables at the rear of the enclosure. These connections shall allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module furnished under this bid item.

The video signal output by the camera shall in accordance with NTSC standards.

All necessary mounting brackets shall be mounted to pole shafts, mast arms, or other structures to mount cameras as indicated on the project plans. Mounting brackets shall result in a fixed- position mounting. Mounting Brackets shall be included at no additional cost.

907-643.02.2.6--Video Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance. The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.2.7--Power Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance.

Camera power cable shall be suitable for installation in conduit and in exposed sunlight environment, and UL listed.

The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.2.8--Surge Protection. Surge protection devices shall be provided for all new or added video detection devices as recommended by the manufacturer.

Video and/or Power cable shall be protected with an inline surge suppressor as recommended by the manufacturer or a panel mounted surge suppressor as recommended by the manufacturer or approved equal, installed and grounded per manufacturer's recommendations.

907-643.02.2.9--Physical and Environmental Specifications. Physical and Environmental Specifications shall be as follows.

Video Vehicle Detection Processor: The video vehicle detection processor shall operate reliably in a typical roadside traffic cabinet environment. Internal cabinet equipment and a video vehicle detection processor shall be provided that meets the environmental requirements of NEMA TS 2-2003 Section 2. If the processor is located in the sensor, it shall meet the same requirements.

Video Camera Sensor: The operating ambient temperature range shall be -30°F to 140°F. Additionally, a heater shall be included to prevent the formation of ice and condensation in cold weather. Do not allow the heater to interfere with the operation of the video camera sensor electronics, or cause interference with the video signal.

Vibration: Vibrations shall meet the requirements of NEMA TS 2-2003 section 2.1.9. Shock: Shock shall meet the requirements of NEMA TS 2-2003 section 2.1 .10.

Acoustic Noise: A video camera sensor and enclosure shall be provided that can withstand 150 dB for 30 minutes continuously, with no reduction in function or accuracy.

907-643.02.3--Materials Type 3 Video Vehicle Detection and Tracking System. The Type 3 Video Vehicle Detection and Tracking System (VIVTDS) shall consist of the following:

- One VIVTDS processor capable of connecting with 1 to 8 sensors
- One or more VIVTDS sensors, with at least one sensor having a fisheye lens for omnidirectional viewing of the roadway or intersection.
- One surge protector junction unit, per each advanced/stopline sensor
- One mounting pole and bracket (90° pole per each fisheye sensor; or straight, vertical pole per each advanced/stopline sensor). Pole should be assembled in two (2) pieces (3' x 3' plus 7' straight, vertical base)
- One ball-swivel, bracket, and surge protector junction unit, per each fisheye sensor
- One Ethernet Protection Module (surge protector located in the traffic cabinet), per each VIVTDS sensor
- VIVTDS interface cables to the traffic signal controller based on model/type.
- Optional portable field computer to configure and monitor system operations
- Optional computer to configure and monitor system operations at the TOC or other remote location
- Optional Ethernet Repeater to extend VIVTDS sensors beyond 300 feet

- Optional Fiber interconnect to extend VIVTDS sensors up to 2000 feet
- Optional POE Powered Switch for use with more than two sensors

907-643.02.3.1--Functional Requirements for Type 3 Video Vehicle Detection. The Type 3 Video Vehicle Detection configuration shall be for a system that views, captures, and derives data based on the objects that pass within the sensor field of view along a highway, road, ramp, or other commonly used transit pathway via processing video images. The detection of objects by a VIVTDS can be accessed and used by and for many applications, including:

- Vehicle detection and actuation at intersections
- Pedestrian Actuation
- Pedestrian Counting
- In the Box bicycle discrimination and clearance extension
- Bicycle Counting
- Highway flow monitoring
- Ramp metering
- Advanced detection
- Pedestrian crossing extensions
- Temporary construction zone detection
- Situational awareness of location area, including an intersection center
- Automated alerts and reports of potentially unsafe conditions, incidents, malfunctions, or signal timing inefficiencies
- Collecting and archiving traffic data on the Cloud for future analysis to improve performance by optimizing timing plans at intersections
- Non-recurring charges for Cloud Data access
- Occupancy-based vehicle actuation
- Signal Performance Metrics
- User-defined zone output pulses
- Onboard video recording and playback
- Open API for data access

The system shall have a modular electrical design and use Ethernet to connect and network with the different system components. Streaming video images, alerts, and data shall be transmitted from the field back to a Traffic Operations Center (TOC) via the systems client software and to the VIVTDS's cloud by using any or combination of the following:

- Fiber optic
- Wireless Radios
- WAN
- TCP/IP
- Optional Internal modem
- Any other means of commonly used communication practices and standards for digital content and information.

The VIVTDS client software shall provide graphical user interfaces between the administrator(s) and permissioned users of the system and the VIVTDS sensor(s) itself. The software shall allow the user to configure sites, conduct maintenance, monitor information relayed from the sensor(s), and provide access to real-time data, system and user defined alerts, and access to historical data collected by the sensor(s). The client software should be installed on a single personal computer or across a network of computers. One or more users will be able to access VIVTDS simultaneously.

907-643.02.3.2—Processor Hardware.

The VIVTDS processor shall support 1 or 2 fisheye sensors, or if equipped with 1 fisheye sensor the VIVTDS processor should, at a minimum, be capable of simultaneously supporting up to four (4) additional VIVTDS sensors for special requirements such as advance detection or underpass detection.

The VIVTDS processor shall comply with NEMA standards, TS1, TS2 Type 1 and Type 2; 170/2070; and ITS. The VIVTDS processor shall provide the following inputs and outputs:

Type	Inputs	Outputs
TS1	24	24
TS2	16	64
170/2070	8	24
ITS	16	64

The VIVTDS processor will have at a minimum four (4) USB 3.0 ports for expansion flexibility and have an optional, built-in modem.

The VIVTDS processor shall be no more than 1U high with dimensions, excluding connectors, not to exceed 8.5" x 11.5" x 1.75" and weigh no more than 5.2 lbs. The unit shall have flexible mounting options including the ability to lie flat on a cabinet shelf, be mounted in a standard traffic cabinet rack with optional mounting ears or be installed vertically with optional base. The outer enclosure shall be a powdered coated aluminum.

907-643.02.3.3-- Type 3 Video Vehicle Detection System Software.

Each VIVTDS system shall include software for up to six (6) sensors for detecting and counting the vehicle's entrance and exit of the intersection. The VIVTDS system will also include software for communicating with the traffic controllers and other electronic devices.

Client software shall be included free of charge with each VIVTDS system and should be downloaded and run on any personal computer with a Windows 7 or newer operating system. The client software at minimum should include management tools to perform the following:

- View, diagnose, configure, and reset individual sensor outputs
- View the status of inputs to enable setup and troubleshooting in the field
- Configure and view calls and phases
- The ability to create and define, as well as edit, vehicle zones, road masks, object masks, and pedestrian zones by drawing arbitrary shaped polygons using a computer
- The ability to detect and track vehicles, motorcycles, bicycles, and pedestrians through the entire 360-degree field of view
- Distinguish between bicycles and vehicles in the center of the intersection (The Box) and provide distinct detector calls to the traffic controller for each object type
- Provide system calls based on zone occupancy
- View the site's configuration history
- Publish and revert back to previous configuration
- View real-time image streaming from the sensor(s) within the software's Client interface
- Optionally access and use an API that is documented online and uses HTTP
- Enterprise security with user-based roles

- Ability to utilize LDAP for user access
- Provide System Alerts for diagnostic and administrative events

The VIVTDS system shall support optional performance data packages for purchase that provide count data, access to real time data, and system and user defined alerts. The performance data shall be accessible directly from the processor or from a remote computer with a network connection, or via a Cloud storage platform. The performance data shall include the following types of reports and alerts:

- Turning movement counts, including U-turns
- Length based vehicle classifications
- Incident reporting
- Volume
- 7 Day Volume
- Occupancy on Green
- Occupancy on Red
- Percentage of Arrivals on Green
- Percentage of Arrivals on Red
- Speed
- Pedestrian Counts
- Bicycle Turning Movements
- Bicycle Counts
- RTSP (H.264) streaming capability
- Wrong way vehicle detection
- Loss of visibility event
- Volume Exceeded

Reports should be exportable and downloadable in the following formats:

- PDF
- Excel
- Synchro Export – Turning Movement Counts

907-643.02.3.4--Detection. VIVTDS system shall provide real time vehicle detection (within 500 milliseconds (ms) of vehicle arrival). The system should detect the presence of vehicles for up to 64 detection zones per VIVTDS sensor. The detection zones shall be sensitive to the direction a vehicle travels and the direction to be detected by each detection zone shall be programmable by a client software user.

The VIVTDS system should provide a flexible detection zone placement anywhere within one hundred (150) feet of the VIVTDS sensors. Preferred presence detector configurations shall be arbitrarily shaped polygons, including simple boxes, drawn across lanes of traffic or placed in line with lanes of traffic. A single VIVTDS sensor should replace one or more conventional detectors. Advanced detection zones may be placed up to three hundred (300) feet from a Fisheye sensor when mounted at least forty (40) feet high.

Placement of detection zones will be done by means of a graphical interface using the MJPEG image of the roadway. The client software displays images of the detection zones overlaid on the video image of traffic while the VIVTDS processor is running. The detection zones, when

operating, shall display outlined or filled, with a visible change indicating activation.

A laptop should be used to draw detection zones. Alternatively, a mouse, keyboard, and monitor may be connected directly to the processor to configure a site. The detection zones should be capable of being sized and shaped to provide optimal road coverage and detection. It should be possible to upload detector configurations to the VIVTDS processor and to retrieve the sensor configuration that is currently running in the VIVTDS processor through the client software. The configuration should also be retrievable from the VIVTDS system's cloud if properly backed up.

The user will be able to edit previously defined detector configurations in order to fine tune the detection zone placement size and shape. Once a detection configuration has been created, the system will provide a graphic display of the new configuration on its monitor. While this fine-tuning is being done, the sensor will be required to continue to operate from the sensor configuration, currently in place. A user should be able to use a system command to revert to previous configurations stored in the client software or on the VIVTDS system's cloud if properly backed up.

When a vehicle occupies a detection zone, the detection zone on the live video will indicate the presence of a vehicle, thereby verifying proper operation of the system.

The presence of the vehicle as well as the signal states will be indicated via colored LED lights on the front panel of VIVTDS processor. With the absence of images, the VIVTDS processor's display shall indicate proper operation of the detection zones.

Detection zones shall be sensitive to the direction of vehicle travel. The direction will be capable of being detected by each detection zone and will be programmable by the user. The vehicle detection zones will not activate if a vehicle is traveling in any direction other than the one specified for detection in the zone. Cross-street and wrong way traffic shall not cause a false detection.

Detection zones will be capable of an optional user defined call to detect a side entrance (90° or less angled entrance).

The VIVTDS system will be able to reliably detect vehicle presence in the design field of view. The design field of view shall be defined as the sensor view when the image sensor is mounted thirty-five (35) feet (10.5 meters) or higher above the roadway, when the sensor is in front of all stop lines, no more than seventy-five (75) feet from the intersection center, and the beginning of the detection area is not greater than one hundred and fifty (150) feet from the image sensor. Within this design field of view, the VIVTDS processor should be capable of setting up detection zones for point detection (equivalent to the operation of a 6' x 6' inductive loop). A VIVTDS sensor, placed at the proper mounting height, is able to monitor up to and including five (5) traffic lanes per approach simultaneously. A single fisheye sensor, placed at the proper mounting height, should be able to monitor detection zones in an intersection of five (5) approaches, at a minimum. Fisheye sensors mounted no less than forty (40) feet should be capable of advanced vehicle detection of up to three hundred (300) feet.

Detection accuracy of the VIVTDS system shall be comparable to properly operating inductive loops. Detection accuracy should include the presence of any vehicle in the defined detection zone regardless of the lane the vehicle is occupying. Occlusion produced by vehicles in the same or adjacent lanes shall not be considered a failure of the VIVTDS processor, but a limitation of the VIVTDS sensor placement.

Detection shall be 98% accurate with slight degradation possible under adverse weather or road conditions (i.e. rain, snow, fog). Detection will be expected for the entire design field of view on a lane by lane or by approach basis.

Equipment failure, either sensor or VIVTDS processor, shall result in constant vehicle detection on affected detection zones. The VIVTDS system will be required to have the ability to place a constant call to a specific zone, if said zone loses visibility, while simultaneously making calls in the traditional manner in the remaining zones.

907-643.02.3.5--Camera. The VIVTDS should have at least one downward-facing fisheye sensor capable of seeing the center of the intersection and have an omnidirectional line of site to track vehicles entering and exiting the intersection. Other required features shall include the following:

- Color images outputted into digital format as MJPEG images
- Camera lens shall not require adjustment and is always in focus
- A thermostatically controlled heater residing inside the enclosure to reduce the effects of ice and condensation
- Any plastics used in the enclosure shall have ultraviolet inhibitors
- A waterproof and dust tight aluminum enclosure

The sensor dimensions excluding connectors shall not exceed 9.9" x 7.9" (height x diameter). The weight of the sensor including the enclosure shall not exceed eight pounds. The VIVTDS sensor manufacturer shall provide a lifetime "always in focus" guarantee on the iconic bell-shaped fisheye camera. The sensor's mounting bracket shall utilize a two (2) piece, ten (10) foot 90° mounting pole. The sensor junction box should mount at the base of the vertical pole and allow for the installer to adjust the sensor's horizontal position with one hand and tighten the bracket without having to support the sensor simultaneously.

907-643.02.3.5.1—Optional VIVTDS sensors.

Certain projects will have special requirements or needs, such as advanced detection beyond three hundred (300) feet and/or stopline detection. In these instances, an additional VIVTDS sensor with a field of view of either 30° - 50° for stopline detection or a field of view of 9° - 18° for advanced detection should be used. The sensor dimensions excluding connectors and mounting bracket shall not exceed 8" x 15" x 3.5" and the weight should not exceed eight pounds. Other required features are the following:

- Color images outputted into digital format as MJPEG images
- A 5 – 50 mm varifocal lens set for the specific application
- A thermostatically controlled heater residing inside the enclosure to reduce the effects of ice and condensation
- A sun shield to minimize lens exposure to the sun
- A waterproof and dust tight powdered coated aluminum housing

The VIVTDS should support thermal imaging sensors for use in specific situations.

907-643.02.3.6—Power.

The VIVTDS sensor(s) will use five (5) watts nominally and a maximum of fifty (50) watts with active heaters. The sensor(s) will be Power Over Ethernet (POE) and will only require a single shielded, burial grade, gel-filled CAT5e cable for both power and data or composite fiber cable.

Each VIVTDS sensor shall have its own surge protector junction unit and EPM surge protection unit in the traffic cabinet.

The VIVTDS processor shall operate within a range of 89 to 240 VAC, 60Hz single phase. Power to the VIVTDS processor is from the transient protected side of the AC power distribution system in the traffic control cabinet where the VIVTDS processor is installed.

907-643.02.3.6—CAT5E Cable. CAT5E cabling shall be a high performance shielded direct burial data cable capable of 350MHz bandwidth for data applications. The cabling shall consist of a 24 AWG solid core copper wire with 8 solid conductors in a gel-filled jacket. The jacket shall consist of linear low-density polyethylene (LLDPE) that is UV resistant and have a cable diameter of no more than 6.5 mm. The cable shall have easily identifiable striped pairs as follows:

- Orange-White, Orange
- Green-White, Green
- Blue-White, Blue
- Brown-White, Brown

The cable shall be rated at a minimum for 60 V.

The surge protector junction unit for the VIVTDS sensor shall provide protection against a transient pulse with a pulse shape of 8/20 μ s and a max current of 75A. The unit shall weigh no more than two (2) lbs.

The EPM, surge protection unit for the VIVTDS sensor, shall have at most a max impulse discharge current of 40 KA and an impedance of at least 100 ohms. The unit should have at least Line-Line and Line-Ground protection options, and the POE current should not exceed 1.8A.

907-643.02.3.7—Composite Fiber. Composite Fiber cable shall meet the following requirements:

- Multimode, OM3, Indoor-Outdoor rated
- Meet ICEA-S-83-597 Standard
- Four Fiber Strands and Two 16 AWG Copper Power Conductors

Fiber cable shall be terminated with FASTconnect LC connectors and maintain a signal strength between -20 dBm and -24 dBm.

The Fiber cable shall connect the Fisheye Sensor and/or other Optional Sensors using PoE Media Converters.

PoE Media Converters shall meet the following requirements:

- Material: UV Stabilized, Polycarbonate/ASA Blend
- Environmental: -29° F - 165° F (-34° C - 74° C)
- IP66

907-643.02.3.8—Physical and Environmental Specifications. The VIVTDS processor will meet or exceed the NEMA TS-2 standard of -29° F - 165° F (-34° C - 74° C) and meet or exceed a 5-30Hz vibration test as well as a 10G shock test.

The VIVTDS processor shall operate properly in an environment with 0% to 95% relative humidity, non-condensing. The VIVTDS sensor(s) shall operate properly in an environment with 0% to 100% relative humidity.

907-643.02.3.9—System Software Operation. The VIVTDS must transmit and receive all information needed for sensor setup, to monitor vehicle detection, to view vehicle traffic flow, and to interpret stored data. The remote communications link between the VIVTDS processor shall not interfere with the on-street detection of the VIVTDS processor.

The user should be able to view the detection area in a horizon to horizon fisheye view or in a configurable four (4) pane flattened view on the same screen. Each view should be able to be customized by the user, with the ability to digitally pan-tilt-zoom.

907-643.02.3.10—Installation and Training. The supplier of the VIVTDS system shall supervise the installation and testing of the sensors, processor, and other sensor components.

System installers will be required to be certified by the system manufacturer. A manufacturer's instructional guide will not be considered an adequate substitute for practical, classroom training and formal certification by an approved agency.

However, the manufacturer shall provide an online user guide and an electronic copy of the user guide within the client software and on board the VIVTDS processor for reference.

Formal levels of factory authorized training are required for installers, contractors and system operators. All training must be certified by the VIVTDS system manufacturer.

907-643.02.3.10—Warranty, Maintenance and Support. The video detection system must be warranted to be free of defects in material and workmanship for a period of 3 years from date of shipment from the manufacturer's facility. During the warranty period, the system manufacturer will be required to repair with new or refurbished materials, or replace at no charge, any product containing a warranty defect provided the product is returned FOB to the supplier's factory or authorized repair site. Return product, product for repair, or product to be replaced under warranty by the supplier shall have prepaid transportation. This warranty does not apply to any products damaged by accident, improperly operated, abused, serviced by unauthorized personnel or unauthorized modification.

Ongoing software support by the manufacturer includes updates of the VIVTDS processor's engine and updates to the client software shall be provided free of charge for the life of the system.

907-643.02.4--Materials Multi-Sensor Vehicle Detection.

907-643.02.4.1--General. The Multi-Sensor Vehicle Detector shall utilize two (2) different sensors of different technologies, video imaging and radar, to detect and track licensed and unlicensed vehicles at distances up to 600 feet. The detector shall fuse vehicle information from the two sensors to provide highly accurate and precise detection for special or advanced applications.

The Multi-Sensor Vehicle Detector shall use a primary detector rack mounted processor to interface with the traffic control cabinet. The module shall process information from both video imaging and radar sensors simultaneously in real-time.

907-643.02.4.2--Detector Configuration. The proposed MSVD shall be available in various configurations to allow maximum deployment flexibility. Each configuration shall have an identical user interface for system setup and configuration. The communications protocol to each

configuration shall be identical and shall be hardware platform independent.

The detector shall include software that detects vehicles in multiple lanes. Video imaging detection zones shall be defined using only an on-board video menu and a pointing device to place the zones on a video image. Up to 24 video detection zones per camera view shall be available. Two (2) additional trigger zones for the radar sensor shall be available and be configurable by using the same system setup menu on the DP. A separate computer shall not be required to program the detection zones. A pre-programmed setup tool is required to align and input radar information and set the camera field of view (zoom and focus).

907-643.02.4.3--Multi-Sensor Vehicle Detection Hardware. The MSVD hardware shall consist of the following four (4) elements:

- 1) Video Imaging Camera Sensor
- 2) Radar Sensor
- 3) Sensor Data Combiner
- 4) Detection Processor

907-643.02.4.3.1--Video Imaging Camera Sensor. The video imaging camera sensor shall meet the following minimum requirements:

- To accommodate deployment flexibility, the MSVD camera sensor shall be compatible with the Data Processor platforms. The MSVD camera sensor shall be supplied by the MSVD manufacturer.
- The advanced camera enclosure shall utilize technology for the heating element of the front glass. The transparent coating shall not impact the visual acuity and shall be close to optically clear.
- Cable terminations at the data combiner for video and power shall not require crimping or special tools.
- The camera sensor shall allow the user to set the focus and field of view via Wi-Fi connectivity.
- The camera shall produce a useable video image of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 1.0 lux to 10,000 lux.
- The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.
- The imager luminance signal to noise ratio (S/N) shall be more than 50 dB with the automatic gain control (AGC) disabled.
- The imager shall employ three (3) dimensional dynamic noise reduction (3D-DNR) to remove unwanted image noise.
- The camera image shall employ wide dynamic range (WDR) technology to compensate for wide dynamic outdoor lighting conditions. The dynamic range shall be greater than 100 dB.
- The camera shall be digital signal processor (DSP) based and shall use a CCD sensing element and shall output color video with resolution of not less than 550 TV lines.
- The camera sensor shall include an electronic shutter control based upon average scene

luminance and shall be equipped with an auto-iris lens that operates in tandem with the electronic shutter. The electronic shutter shall operate between the range of 1/1 to 1/10,000th second.

- The camera sensor shall utilize automatic white balance.
- The camera sensor shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry by means of a portable interface device designed for that purpose and manufactured by the detection system supplier.
- The horizontal field of view shall be adjustable. This camera configuration may be used for the majority of detection approaches in order to minimize the setup time and spares required by the user. The lens shall be a minimum 10X zoom lens with a variable focal length.
- The lens shall also have an auto-focus feature with a manual override to facilitate ease of setup.
- The camera shall incorporate the use of preset positioning that store zoom and focus positioning information. The camera shall have the capability to recall the previously stored preset upon application of power.
- The camera shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications. The housing shall allow the camera to be rotated to allow proper alignment between the camera and the traveled road surface.
- The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.
- The camera enclosure shall be designed so that the pan, tilt and rotation of the camera assembly can be accomplished independently without affecting the other settings.
- The camera enclosure shall include a proportionally controlled heater design that maximizes heat transfer to the lens. The output power of the heater shall vary with temperature, to assure proper operation of the lens functions at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.
- The glass face on the front of the enclosure shall have an anti-reflective coating to minimize light and image reflections.
- When mounted outdoors in the enclosure, the camera shall operate in a temperature range from -29°F to +165°F and a humidity range from 0% RH to 100% RH.
- Measurement of satisfactory video shall be based upon DP system operation.
- The camera sensor shall acquire its power from the sensor data combiner.
- Recommended camera placement height shall be 18 to 33 feet above the roadway, and over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. The camera shall view approaching vehicles at a distance not to exceed 350 feet for reliable detection (height to distance ratio of 10:100). Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.
- The video signal shall be fully isolated from the camera enclosure and power cabling.
- A weather-proof protective cover shall be provided to protect all terminations at the camera.

907-643.02.4.3.2--Radar Sensor. The radar sensor shall meet the following minimum requirements:

- The radar sensor shall operate in the 24 GHz frequency band.
- The radar detection range shall be 600 feet minimum, $\pm 5\%$.
- The radar sensor shall be able to track up to 20 independent objects simultaneously.
- Object speed detection shall be within a range of zero (0) to 150 mph ± 1.0 mph.
- The radar sensor shall be able to detect vehicles in one (1) to four (4) traffic lanes.
- The radar sensor shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications. The housing shall allow the radar to be adjusted to allow proper alignment between the sensor and the traveled road surface.
- When mounted outdoors in the enclosure, the radar shall operate in a temperature range from -29°F to $+165^{\circ}\text{F}$ and a humidity range from 0% RH to 100% RH.
- The radar sensor shall communicate with the sensor data combiner.
- The radar sensor shall acquire its power from the sensor data combiner.
- Data and power cables between the radar sensor and sensor data combiner shall be fully isolated from the sensor enclosure.

907-643.02.4.3.3--Multi-Sensor Vehicle Detection Assembly. Multi-Sensor Vehicle Detection Assembly shall meet the following requirements:

- Both camera and radar sensors shall be housed in an overall, single enclosure assembly.
- The maximum power consumption for the Multi-Sensor Vehicle Detection Assembly shall be less than ten (10) watts typical, 20 watts peak.

907-643.02.4.3.4--Sensor Data Combiner. The sensor data combiner (if required) shall meet the following minimum requirements:

- A sensor data combiner that combines sensor information from both video and radar sensors shall be employed.
- Sensor data combiner shall supply primary power to each sensor unit.
- Sensor data combiner shall facilitate digital communications between the sensor data combiner and each of the sensor units.
- Sensor data combiner shall get its primary power from an AC power source using industry standard 3-conductor cabling.
- Sensor data combiner shall communicate with the detection processor using a single coax cable. Both video imaging and radar data shall use the single coax cable.
- The sensor data combiner shall also employ industry standard Wi-Fi connectivity for remote sensor system setup using a mobile programming device such as a netbook or tablet computer. Video camera and radar sensor shall be able to be configured independently.
- Sensor data signal shall be fully isolated from the mechanical enclosure and power cabling.
- Cable terminations at the sensor data combiner shall not require crimping tools.
- The Sensor Data Combiner shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications.

907-643.02.4.3.5--Detection Processor. The detection processor shall meet the following minimum requirements:

- Each sensor input shall accept RS170 (NTSC) or CCIR (PAL) signals from an external video source. The interface connector shall be BNC type and shall be located on the front of the processing unit. The sensor input shall have the capability to be terminated into 75- ohms or high impedance (Hi-Z) using dip switches or software control from the user menu. The sensor input shall also facilitate the data from the radar sensor.
- A LED indicator shall be provided to indicate the presence of the sensor signal. The LED shall illuminate upon valid sensor synchronization and turn off when the presence of a valid sensor signal is removed.
- One (1) video output shall be provided. The video output shall be RS170 or CCIR compliant and shall pass through the input video signal. For multi-channel video input configurations, a momentary push-button shall be provided on the front panel to cycle through each input video channel. In the absence of a valid sensor signal, the channel shall be skipped and the next valid sensor signal shall be switched. The real time video output shall have the capability to show text and graphical overlays to aid in system setup. The video output interface connector shall be positive locking BNC type. Friction type (e.g. RCA type) connectors shall not be allowed.
- A communications port shall be provided on the front panel. The communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information. The interface protocol shall be documented or interface software shall be provided. Each MSVD shall have the capability to be addressable. The DP shall support data rates of 1200 bps to 230,400 bps, inclusive.
- Open collector (contact closure) outputs shall be provided. Four (4) open collector outputs shall be provided for the single or dual channel rack-mount configuration. Additionally, the DP shall allow the use of extension modules to provide up to 24 open collector contact closures per camera input. Each open collector output shall be capable of sinking 30 mA at 24 VDC. Open collector outputs will be used for vehicle detection indicators as well as discrete outputs for alarm conditions. The DP outputs shall be compatible with industry standard detector racks assignments.
- Logic inputs such as delay/extend or delay inhibit shall be supported through the appropriate detector rack connector pin or front panel connector in the case of the I/O module. For DPs and extension modules, four (4) inputs shall be supported via detector rack interface. The I/O module shall accommodate eight (8) inputs through a 15-pin "D" connector.
- Detection status LEDs shall be provided on the front panel. The LEDs shall illuminate when a contact closure output occurs. The front panel of the DP shall have detector test switches to allow the user to manually place calls on each DP output channel. The test switch shall be able to place either a constant call or a momentary call depending on the position of the switch.
- A USB mouse port shall be provided on the front panel of the rack mount detection processing unit. The mouse port shall not require special mouse software drivers. The mouse port shall be used as part of system setup and configuration.
- Extension modules (if required) shall be connected to the DP by an 8-wire twisted- pair cable with modular RJ45 connectors. DP and EM communications shall be accommodated by methods using differential signals to reject electrically coupled noise.
- Extension modules (EM) shall be available to eliminate the need of rewiring the detector

rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack to provide additional open collector outputs. The extension module shall be available in both two (2) and four (4)-channel configurations. The DP and EM shall be specifically designed to mount in a standard detector rack, using the edge connector to obtain power, provide contact closure outputs and accept logic inputs (e.g. delay/extend). No adapters shall be required to mount the DP or EM in a standard detector rack. Detector rack rewiring shall not be required.

- The DP shall utilize non-volatile memory technology to store on-board firmware and operational data.
- The DP shall enable the loading of modified or enhanced software through the EIA232 or USB port (using a USB thumb drive) and without modifying the DP hardware.
- The DP and EM shall be powered by 12 or 24 volts DC. DP and EM modules shall automatically compensate for either 12 or 24 VDC operation. DP power consumption shall not exceed 7.5 watts. The EM power consumption shall not exceed three (3) watts.
- The DP shall operate satisfactorily in a temperature range from -40°F to +165°F and a humidity range from zero (0) %RH to 95 %RH, non-condensing as set forth in NEMA specifications.
- A video surge suppresser shall be provided for each sensor input. The surge suppresser shall be appropriately grounded to the cabinet ground rod using AWG 14 minimum.

907-643.02.4.4--Detection Software. The detection software shall meet the following general system functions:

- Detection zones shall be programmed via an on board menu displayed on a video monitor and a pointing device connected to the DP. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. A separate computer shall not be required for programming detection zones or to view system operation.
- The DP shall store up to three (3) different detection zone patterns in non-volatile memory. The DP can switch to any one of the three (3) different detection patterns within one (1) second of user request via menu selection with the pointing device. Each configuration shall be uniquely labeled and able to be edited by the user for identification. The currently active configuration indicator shall be displayed on the monitor.
- The DP shall detect vehicles in real time as they travel across each detection zone.
- The DP shall accept new detection patterns from an external computer through a communications port when the external computer uses the correct communications protocol for downloading detection patterns. A Windows™ based software designed for local or remote connection and providing video capture, real-time detection indication and detection zone modification capability shall be provided with the system.
- The DP system shall have the capability to automatically switch to any one of the stored configurations based on the time of day which shall be programmable by the user.
- The DP shall send its detection patterns to an external computer through the communications port when requested when the external computer uses the appropriate communications protocol for uploading detection patterns.
- The DP shall default to a safe condition, such as a constant call on each active detection channel, in the event of unacceptable interference or loss of the sensor signal.
- The system shall be capable of automatically detecting a low-visibility condition such as

fog and respond by placing all effected detection zones in a constant call mode. A user-selected alarm output shall be active during the low-visibility condition that can be used to modify the controller operation if connected to the appropriate controller input modifier(s). The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

- Up to 24 detection zones per camera input shall be supported and each detection zone can be sized to suit the site and the desired vehicle detection region.
- The DP shall support two (2) independent trigger points for radar outputs for dilemma zone applications.
- The DP shall provide up to 24 open collector output channels per sensor input using one or more extension modules.
- A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single approach of traffic movement.
- Placement of detection zones shall be done by using only a pointing device, and a graphical interface built into the DP and displayed on a video monitor or laptop computer to draw the detection zones on the video image from each video camera.
- When a vehicle is detected within a detection zone, a visual indication of the detection shall activate on the video overlay display to confirm the detection of the vehicle for the zone.
- Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon site geometry, camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality.
- The DP shall provide dynamic zone reconfiguration (DZR). DZR enables normal operation of existing detection zones when one zone is being added or modified during the setup process. The new zone configuration shall not go into effect until the configuration is saved by the operator.
- Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.
- The DP shall process the video input from each camera at 30 frames per second. Multiple camera processors shall process all video inputs simultaneously.
- The DP shall output a constant call during the background learning period of no more than three (3) minutes.
- Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse, extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds.
- Up to six (6) video detection zones per sensor input shall have the capability to count the number of vehicles detected. The count value shall be internally stored for later retrieval through the communications port.
- In addition to the count type zone, the DP shall be able to calculate and/or acquire average speed and lane occupancy using both video and radar sensors. These values shall be stored in non-volatile memory for later retrieval.
- The DP shall have an "advance" zone type where detection outputs to the traffic controller

are compensated for angular occlusion and distance.

- The user shall have the ability to enable or disable the display of the phase information on the video output.
- The DP shall have the capability to change the characteristics of a detection zone based on external inputs such as signal phase. Each detection zone shall be able to switch from one zone type (i.e. presence, extension, pulse, etc.) to another zone type based on the signal state. For example, a zone may be a “count” zone when the phase is green but change to a “presence” zone type when the phase is not green. Another application would be zone type of “extension” when the signal phase is green and then “delay” when red.
- The DP shall aid the user in drawing additional detection zones by automatically drawing and placing zones at appropriate locations with only a single click of the mouse. When the user wishes to modify the location of a zone, the DP shall allow the user move a single zone, multiple zones or all zones simultaneously.
- On-screen zone identifiers shall be modifiable by the user. The user shall be allowed to select channel output assignments, zone type, input status, zone labels or zone numbers to be the identifier.
- For multiple camera input DPs, the user shall have the ability to enable automatic video output switching. The dwell time for each sensor input shall be user programmable.
- For the radar sensor zones the output can be triggered by presence of a vehicle only or by presence of a vehicle above a speed defined by the user.

907-643.02.4.5--Multi-Sensor Cable. The cable to be used between the Multi-Sensor Vehicle Detection Assembly and the DP in the traffic cabinet shall be per manufacturer’s specifications. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. BNC plug connectors shall be used where applicable. The cable, BNC connector, and crimping tool shall be approved by the supplier of the MSVD, and the manufacturer's instructions must be followed to ensure proper connection.

907-643.02.4.6--Power Cable. The power cabling shall be per manufacturer’s specifications. The cabling shall comply with the National Electric Code, as well as local electrical codes.

907-643.05--Construction Requirements. The Construction and testing requirements for Type 1, Type 2, and Multi-Sensor Vehicle Detection are the same.

907-643.05.1--General Requirements. The Contractor shall perform the following:

- 1) Install all sensors, system processors and associated enclosures and equipment at the locations specified in the plans, in any related notice to bidders, per manufacturer’s recommendations, or as directed.
- 2) Install all cabinet-mounted equipment in the intersection equipment cabinet or as specified in the plans.
- 3) Cabling from all sensors shall be installed in accordance with the manufacturer's recommendations.
- 4) Make all necessary adjustments and modifications to the total VVD/MSVD prior to requesting inspection for system/device acceptance.
- 5) Mount the sensors as per manufacturer’s recommendations or as shown in the plans.

- 6) Mount the sensors so as to view approaching traffic unless otherwise directed.
- 7) Optimize the sensors location and zone of detection as directed by the Engineer, or authorized designee.
- 8) Adjust the sensor zoom lens to match the width of the road/detection area, and minimize lane vehicle occlusion.
- 9) Fasten all other cabinet components, with hex-head or Phillips-head machine screws insulated with nuts (with locking washer or insert) or into tapped and threaded holes. Do not use self-tapping or self-threading fasteners.
- 10) Provide electrical cables for video, communications signaling and power supply between the cabinet and the VVD/MSVD image sensor cameras as recommended by the manufacturer, and as required for a fully functional System.

907-643.05.2--Contractor Training. Installation of the Video Vehicle Detection shall be as recommended by the manufacturer and performed by a Contractor trained and certified by the supplier. Where time does not reasonably permit training of the installing Contractor, a supplier factory representative shall supervise and assist a Contractor during installation of the Video Vehicle Detection.

Installation of the Multi-Sensor Vehicle Detection shall be as recommended by the supplier and performed by a Contractor with factory-certified installers and documented in installation materials provided by the supplier. Proof of factory certification shall be provided.

907-643.05.3--Testing. All equipment associated with the Video Vehicle Detection System site shall undergo testing to verify conformance to requirements of the plans and these special provisions. All costs associated with testing shall be included in the overall contract price; no separate payment will be made for any testing.

907-643.05.3.1--Standalone Acceptance Test (SAT). The SAT shall include videos of the approach with detection zones overlaid showing detector activations.

- 1) One (1) hour videos shall be made of each approach and compared to actual detection calls.
- 2) 30-minute videos shall be made starting 15 minutes prior to sunrise and sunset for each approach and compared to actual detection calls.
- 3) All videos shall be date and time stamped.
- 4) Provide all videos to the Engineer with a summary of the results included total calls, missed calls and false calls.
- 5) All test results must meet a 98% accuracy requirement.

The Contractor must demonstrate the accuracy requirements specified in Subsection 907-643.02.1.7 at selected intersections after a sixty (60) day burn in period for Type 1 and a thirty (30) day burn in period for Type 2 and MSDS. The intersections to be tested will be randomly selected by the Project Engineer.

907-643.05.4--Warranty. The Video Vehicle Detection shall be warranted to be free of manufacturer defects in materials and workmanship for a period of three (3) years from the date of final acceptance. Equipment covered by the manufacturer's warranties shall have the

registration of that component placed in the Department's name prior to final inspection. The Contractor is responsible for ensuring that the vendors and/or manufacturers supplying the components and providing the equipment warranties recognize the Department as the original purchaser and owner/end user of the components from new. During the warranty period, the supplier shall repair or replace with new or refurbished material, at no additional cost to the State, any product containing a warranty defect, provided the product is returned postage-paid by the Department to the supplier's factory or authorized warranty site. Products repaired or replaced under warranty by the supplier shall be returned prepaid by the supplier.

The Multi-Sensor Vehicle Detector shall be warranted to be free of manufacturer defects in materials and workmanship for a period of three years (3) from the date of final acceptance.

During the warranty period, technical support shall be available from the supplier via telephone within four (4) hours of the time a call is made by the Department, and this support shall be available from factory certified personnel. During the warranty period, updates and corrections to Control Unit Software shall be made available to the Department by the supplier at no additional cost.

907-643.05.5--Training. When called for in the Plans, the Contractor shall submit to the Project Engineer for approval a detailed Training Plan including course agendas, detailed description of functions to be demonstrated and a schedule. The Contractor must also submit the Trainer's qualifications to the Project Engineer for approval prior to scheduling any training. The training must include both classroom style training and hands-on training in the field of the maintenance and troubleshooting procedures required for each component. The training should also consist of a hands-on demonstration of all software configuration and functionality where applicable.

The supplier of the detection system shall, at a minimum, provide a 16-hour operations and maintenance training class with suitable documentation for up to eight (8) persons selected by the Department. The operations and maintenance class shall be scheduled at a mutually acceptable time and location.

907-643.05.6--Maintenance and Technical Support. The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the detection system. Spare parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale of said spare parts.

The suppliers shall maintain an ongoing program of technical support for the detection system. This technical support shall be available via telephone or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale of said technical support services.

The installation or training support shall be provided by a factory-authorized representative and shall be a minimum IMSA-Level II Certified Traffic Signal Technician.

All product documentation shall be written in the English language.

907-643.06--Method of Measurement. Video Vehicle Detection Sensor of the type specified will be measured as a unit per each.

Video Vehicle Detection Cable and/or Power Cable will be measured by the linear foot, measured horizontally along the conduit, messenger cable or mast arm and vertically along the pole.

Video Vehicle Detection Training will be measured as a lump sum after the completion of all training.

Multi-Sensor Vehicle Detection of the type specified will be measured as a unit per each.

Multi-Sensor Detection Cable and/or Power Cable will be measured by the linear foot, measured horizontally along the conduit, messenger cable or mast arm and vertically along the pole.

907-643.07--Basis of Payment. Video Vehicle Detection Sensor, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for installation, system integration, documentation, system software, and testing of a complete video detection sensor site including video camera sensor/processor, the sensor environmental enclosure, attachment hardware and brackets, completion of all testing requirements, [warranties](#) and all work, equipment and appurtenances as required to provide and install a complete video detection system. The price bid shall also include all system documentation including: shop drawings, operations and maintenance manuals, wiring diagrams, block diagrams and other materials necessary to document the operation of the Video Vehicle Detection Sensor. This price shall be full compensation for all labor, tools, materials, equipment and incidentals necessary to complete the work [and quality assurance](#).

Video Vehicle Detection Cable and/or Power Cable will be paid at the contract unit price per linear foot, which price shall be full compensation for all labor, materials, equipment tools, furnishing, installing, system integration, connections, testing, and all incidentals necessary to complete the work.

Video Vehicle Detection Training, measured as prescribed above, will be paid for at the contract unit lump sum price, which price shall be full compensation for all training costs [including all coordination, materials, labor, training location costs, and all incidentals required to complete the training](#).

Multi-Sensor Vehicle Detection Sensor, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for installation, system integration, documentation, and testing of a complete Multi-Sensor Vehicle Detection Sensor site including video imaging camera sensor, radar sensor, sensor data combiner, detection processor, system software, the sensor environment enclosure, attachment hardware and brackets, completion of all testing requirements and all work, equipment and appurtenances as required to provide and install a complete Multi-Sensor Vehicle Detection Sensor. The price bid shall also include all system documentation including: shop drawings, operations and maintenance manuals, wiring diagrams, block diagrams and other materials necessary to document the operation of the multi-sensor detection system. This price shall be full compensation for all labor, tools, materials,

equipment and incidentals necessary to complete the work.

Multi-Sensor Detection Cable and/or Power Cable will be paid at the contract unit price per linear foot, which price shall be full compensation for all labor, materials, equipment tools, furnishing, installing, system integration, connections, testing, and all incidentals necessary to complete the work.

Payment will be made under:

907-643-A: Video Vehicle Detection Sensor, Type ____	- per each
907-643-B: Video Vehicle Detection Cable	- linear foot
907-643-C: Video Vehicle Detection Power Cable	- linear foot
907-643-D: Video Vehicle Detection Training	- lump sum
907-643-E: Multi-Sensor Vehicle Detection Sensor	- per each
907-643-F: Multi-Sensor Vehicle Detection Cable	- linear foot
907-643-G: Multi-Sensor Vehicle Detection Power Cable	- linear foot



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Lamar Rutland

cc:

Date: Tuesday, June 7, 2022

Re: Approve Plans and Specifications for the Bobby L. Chain Airport Hangar 6 Door Replacement project and authorize re-advertisement for bids for same.
File Number: 2022-391
Minute Book #

Summary

Approve Plans and Specifications for the Bobby L. Chain Airport Hangar 6 Door Replacement project and authorize re-advertisement for bids for same.

Recommendation Statement

I recommend approval of this item.

Please place this on the June 7, 2022 City Council meeting for consideration.

ADVERTISEMENT FOR BIDS:

NOTICE is hereby given that the City Clerk of the **City of Hattiesburg**, MISSISSIPPI, will receive sealed bids until **10:00 A.M. on July 21, 2022** in the City Council Chambers at City Hall, 200 Forrest Street, Hattiesburg, MS 39401, and then at said location opened and read aloud for furnishing the City's requirements for the following:

**HANGAR 6 DOOR REPLACEMENT
BOBBY L. CHAIN AIRPORT
HATTIESBURG, MISSISSIPPI**

Official bid documents can be downloaded from www.sd-wprojects.com. Electronic bids can be submitted at www.sd-wprojects.com. For any questions relating to the electronic bidding process, please call Plan House at 662-407-0193. All bids must be accompanied by bid security equal to 5% of the amount of the bid, in the form of a certified check, cashier's check or a bid bond written by a company properly licensed in Mississippi.

Each BID must be received sealed and marked EXACTLY as follows:

**BID:
HANGAR 6 DOOR REPLACEMENT
BOBBY L. CHAIN AIRPORT
HATTIESBURG, MISSISSIPPI**

No bid may be withdrawn for a period of sixty (60) days. The lowest and best proposal received will be accepted, subject to the provisions of Section 31-7-13 of the Mississippi Code of 1972, Annotated and Amended, and other applicable State law; but the Council reserves the right to reject any or all proposals received and to waive informalities.

PUBLISHED by Order of the Council on the 7th day of June, 2022.

CITY OF HATTIESBURG, MISSISSIPPI

BY: _____
Kermas Eaton, City Clerk

Publish on June 16, 2022 and June 23, 2022
City of Hattiesburg
Return PROOF to SDW, Inc.
301 Second Avenue
Hattiesburg, MS 39401

SPECIFICATIONS AND CONTRACT DOCUMENTS

FOR

HANGAR 6 DOOR REPLACEMENT

FOR THE

CITY OF HATTIESBURG



MAY 2022

PREPARED BY:

SHOWS, DEARMAN & WAITS, INC.
CONSULTING ENGINEERS

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Return PROOF to SDW, Inc.
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Hattiesburg, MS 39401

INFORMATION FOR BIDDERS

BIDS will be received by City of Hattiesburg, MS herein called the "OWNER", at City Hall until 10:00 AM on July 21, 2022, and then at said office publicly opened and read aloud.

Each BID must be submitted in sealed envelope, addressed to the City Clerk of said City. Each sealed envelope containing a BID must be plainly marked on the outside as BID for **HANGAR 6 DOOR REPLACEMENT, Hattiesburg, Mississippi** and the envelope should bear on the outside the BIDDER'S name, address, and license number if applicable. If forwarded by mail, the sealed BID shall be included in a delivery package addressed to the Owner at 200 Forrest Street, Hattiesburg, MS 39401.

All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be completed and executed when submitted. Only one copy of the BID form is required.

The OWNER may waive any informalities or minor defects or reject any and all BIDS. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within 60 days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period; the time may be extended by mutual agreement between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the drawings and specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

The OWNER shall provide to BIDDERS prior to BIDDING, all information which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve him from fulfilling any of the conditions of the contract.

Each BID must be accompanied by a BID BOND payable to the OWNER for five percent (5%) of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the BONDS of all except the three lowest responsive, responsible BIDDERS upon request of the BIDDER. When the Agreement is executed the BONDS of

the two remaining unsuccessful BIDDERS will be returned upon request of the BIDDER. The BID BOND of the successful BIDDER will be retained until the PAYMENT BOND and PERFORMANCE BOND have been executed and approved, after which it will be returned upon request of the BIDDER. A certified check may be used in lieu of a BID BOND.

A PERFORMANCE BOND and a PAYMENT BOND, each in the amount of 100 percent (100%) of the CONTRACT PRICE, with a corporate surety approved by the OWNER, will be required for the faithful performance of the contract.

Attorneys-in-fact who sign BID BONDS or PAYMENT BONDS and PERFORMANCE BONDS must file with each BOND a certified and effective dates copy of their Power of Attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the PERFORMANCE BOND and PAYMENT BOND within ten (10) calendar days from the date when NOTICE OF AWARD shall be accompanied by the necessary Agreement and BOND forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

The OWNER within thirty (30) days of receipt of acceptable PERFORMANCE BOND, PAYMENT BOND and Agreement signed by the party to whom the Agreement was awarded, shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may by WRITTEN NOTICE withdraw the signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued within thirty (30) days of the execution of the Agreement by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period; the time may be extended by mutual agreement between the OWNER and CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the thirty (30) day period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party.

The OWNER may make such investigations as deemed necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein.

A conditional or qualified BID will not be accepted.

Award will be made to the lowest and best responsive and responsible BIDDER.

All applicable Laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to his BID.

FURTHER, the BIDDER agrees to abide by the requirements under Executive Order No. 11246, as amended, including specifically the provisions of the equal opportunity clause.

The BIDDER shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when required to do so by the OWNER.

The ENGINEER is SHOWS, DEARMAN & WAITS, INC. The address of the ENGINEER is 301 2nd Avenue, HATTIESBURG, MISSISSIPPI.

PROPOSAL FORM

I (we) agree to begin work within (10) calendar days after the issuance of Notice to Proceed, and to complete the work within 60 calendar days thereafter.

It is understood that the quantities of work listed for unit prices bid are approximate and are intended to merely indicate the general scope of the various items entering into the complete work and for comparison of bids. It is further understood and agreed that the Owner may increase or decrease the quantities listed in the Proposal and that no change in the unit prices proposed shall be occasioned thereby.

The undersigned further agrees that the unit and lump sum prices quoted include all items of work required or necessary for the accomplishment of the projected work and that these items include all work indicated on the Plans and Specifications for which no specific pay items have been established.

The undersigned certifies that the bid prices contained herein have been carefully checked and are submitted as correct and final.

If within sixty (60) days the scheduled closing time for receipt of bids, this Proposal is accepted, the undersigned will execute a formal contract within ten (10) days after official notification thereof, will deliver a surety bond for the faithful performance of this contract, and will complete the work within the time specified from the date of execution of the contract.

Respectfully Submitted,

Authorized by:

ADDRESS

HANGAR 6 DOOR REPLACEMENT					
PROPOSAL FORM					
Item	Description	Unit	Quantity	Unit Price	Extension
1	Mobilization	LS	1.0		
2	Removal of Existing 18 x 80 Door	LS	1.0		
3	Installation & Modification of Existing Building	LS	1.0		
4	Installation of New Door	LS	1.0		
				BID TOTAL	

ALL ITEMS NOT LISTED AND REQUIRED FOR CONSTRUCTION BY THE PLANS AND SPECIFICATIONS SHALL BE ABSORBED INTO THE LISTED PROPOSAL ITEMS

Base Bid Respectfully Submitted, Name of Firm or Bidder: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS: that we, the under signed, _____
_____ Principal, and _____
_____ as Surety, are hereby held and firmly bound unto the City of Hattiesburg as Owner in the penal sum of 5% (Five Percent) for payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this _____ day of _____, 20_____.

The Condition of the above obligation is such that whereas the Principal has submitted to a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the following project:

HANGAR 6 DOOR REPLACEMENT HATTIESBURG, MISSISSIPPI

NOW, THEREFORE,

(a) If said BID shall be rejected, or

(b) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year set forth above.

PRINCIPAL

SURETY

BY: _____

IMPORTANT: Surety companies executing BONDS must appear on the Treasure Department's most current line (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into this ____ day of _____, 20____ by and between _____ hereinafter called the CONTRACTOR, the City of Hattiesburg hereinafter called the OWNER, Witnesseth that the CONTRACTOR and the OWNER, for the consideration hereafter named and agrees as follows.

ARTICLE 1: SCOPE OF WORK

The CONTRACTOR agrees to furnish all tools, labor, equipment, materials, and supplies required to be furnished, and perform all work required under and in accordance with the plans entitled:

HANGAR 6 DOOR REPLACEMENT HATTIESBURG, MISSISSIPPI

which are on file at the office of the OWNER, and the Specifications, Proposals, General and Special Conditions, attached hereto and made a part hereof as fully as though copied herein, under the direct supervision and to the entire satisfaction of the OWNER and in accordance with the Laws of the State of Mississippi.

ARTICLE 2: THE CONTRACT SUM

It is further agreed and understood by and between the parties hereunto that the OWNER agrees to pay and the CONTRACTOR agrees to accept full and final compensation for all work done under this agreement, the lump sum amount adjusted for variation of quantities at the unit prices named in the Proposal, which is hereto attached, such payment to be made in lawful money of the United States, at the time and in the manner hereinafter set forth.

ARTICLE 3: TIME OF COMPLETION

The CONTRACTOR agrees, for the consideration above expressed, to begin and complete the work within the time specified in the Proposal. If the CONTRACTOR fails to complete the work in the time specified, he shall pay the OWNER as **liquidated damages**, ascertained and agreed, and not in the nature of a penalty, the sum of **\$750.00** for each day delayed, which shall be deducted from the final amount to be paid under the contract; provided that the extension of time with the waiver of liquidation damages may be granted as provided for in the Specifications. The Contractor and the Contractor's Sureties shall be liable for all liquidated damaged in excess of money due the Contractor.

ARTICLE 4: PROGRESS PAYMENTS

The OWNER agrees to make progress payments during the construction as provided herein as follows:

The CONTRACTOR will on or before the tenth (10th) day of each month make an estimate of the value of the work done, based on contract prices, and submit to the ENGINEER, along with an affidavit by the CONTRACTOR that progress payments theretofore received from OWNER have discharged in full all the CONTRACTOR's obligations stated in prior progress payments. ENGINEER will recommend partial payment to the OWNER within a reasonable time of receipt of CONTRACTOR's estimate based on the ENGINEER's estimated quantities.

The OWNER agrees to pay the CONTRACTOR one hundred percent (100%) of the value of the work done each month, less retainage in accordance with MS Code of 1972 Section 31-5-33 until final acceptance of the work has been made. If defective and/or materials are discovered or reasonable doubt arises to the integrity of any part of the work for which partial payment has been allowed, a deduction from subsequent estimates in the amount equal to the work in question will be made until the defects have been remedied or the cause for doubt removed.

ARTICLE 5: ACCEPTANCE AND FINAL PAYMENT

Upon receipt of written notice that the work is ready for final acceptance and inspection, the ENGINEER shall promptly make such inspection, and when he finds the work acceptable under the contract, and the contract fully performed, he shall promptly issue a final certificate, over his own signature, stating that the work provided for in this Contract has been completed and is accepted by him under the terms and conditions thereof. Then, the entire balance shall be due the CONTRACTOR within forty-five (45) days the date of said final acceptance and receipt of the closeout documents required per the Supplement to General Conditions and recommendation of the same to the OWNER.

Before issuance of final certificate, the CONTRACTOR shall submit evidence satisfactory to the ENGINEER that all payrolls, materials, bills, and other indebtedness connected with the work have been paid.

The making and acceptance of the final payment shall constitute a waiver of all claims by the OWNER, other than those arising from unsettled liens, from faulty work or materials appearing within one (1) year after payment, or claims previously made and still unsettled.

If, after the work has been substantially completed, full completion thereof is materially delayed through no fault of the CONTRACTOR, and the ENGINEER, so certifies, the OWNER shall, upon certificate of the ENGINEER and without terminating the Contract, make payment of the balance due for that portion of the work fully completed and

accepted. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

ARTICLE 6: THE PERFORMANCE BOND

The CONTRACTOR agrees to furnish a bond, with an approved surety thereon guaranteeing the performance of this contract, in no less than one hundred percent (100%) of the amount of the Contract. Said Bond shall be conditioned on full and complete performance of the Contract, and for the payment of all labor and materials for a period of one (1) year after completion. The Surety on said Bond shall be a surety company of financial resources satisfactory to the OWNER and authorized to do business in the State of Mississippi.

ARTICLE 7 INSURANCE

The CONTRACTOR agrees to also carry public liability insurance, property damage insurance, and workman's compensation insurance in amounts as required by the specifications.

WITNESSETH: that for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of the project specified herein.
2. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the project described herein.
3. The CONTRACTOR will commence the work required by the "Contract Documents" and complete the project on or before the completion date unless the period for completion is extended otherwise by the "Contract Documents."
4. The CONTRACTOR agrees to perform all of the work described in the "Contract Documents" and comply with the terms therein for the sum as shown in the bid schedule.
5. The term "Contract Documents" means and includes the following:

Advertisement for Bids	Notice of Award
Instructions to Bidders	Notice to Proceed
Bid	Change Order
Bid Bond	General Conditions
Contract Agreement	Supplemental General Conditions
Payment Bond	Technical Specifications

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the "General Conditions" such amounts as required by the "Contract Documents."
7. This "Contract Agreement" shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

OWNERS:

SEAL

City of Hattiesburg

Authorized by:

DATE

(Printed Name & Title)

ATTEST _____

CONTRACTOR:

SEAL

DATE

ATTEST _____

IMPORTANT NOTE: Surety companies executing bonds must appear on the US Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the state where the project is located.

PAYMENT AND PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: THAT WE, the Undersigned _____ (hereinafter called the Principal), a corporation, partnership or individual duly unauthorized by law to do business as a construction contractor in the State of Mississippi, and _____ of _____ (herein called the Surety), a corporation duly authorized to do surety business under the laws of the State of Mississippi, are held and firmly bound unto the City of Hattiesburg, MS (hereinafter called the Obligee), a Municipality existing under the laws of the State of Mississippi, in the penal sum of _____ Dollars (_____) lawful money of the United States, for the payment of which well and truly to be made, the said Principal and the said Surety do hereby bind ourselves, our heirs, executors, administrators and assigns, jointly and severally, by these presents, as follows:

The Condition of this obligation is such that; whereas Principal by an instrument in writing attached hereto and bearing date of _____ has agreed with said Obligee to do all work necessary and to furnish labor, materials, tools, supplies and services to construct HANGAR 6 DOOR REPLACEMENT, HATTIESBURG, MISSISSIPPI as shown on Plans and specified thereby in the Specifications, Proposal and other Contract Documents hereto attached.

NOW THEREFORE, if said Principal shall well and truly in good, sufficient and workmanlike manner, and to the satisfaction of Obligee perform and complete the work required, and shall defend, indemnify and save harmless said Obligee against all damages, claims, demands, expense and charge of every kind (including claims of patent infringement) arising out of injury or damage to persons or property by reason or arising from any act, omission or neglect of said Principal, his agent, servants or employees with relation to said work; and shall pay all cost, charges, rentals and expenses for labor, material, supplies and equipment and deliver the said improvement to Obligee completed and ready for occupancy or operation, and free from all liens, encumbrances or claims for labor, material or otherwise; and shall pay all other expenses lawfully chargeable to Obligee by reason of any default or neglect of the said Principal in the relation of said agreement and said work, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED FURTHER, that the said surety for value received hereby stipulates and agrees that no charge, extension of time, alteration or addition to the terms of the Contract, or the work to be performed thereunder, or the Specifications accompanying the same, shall in any way affect its obligation on this bond and does hereby waive notice of any change, extension of time, alteration or addition to the terms of the Contract, or to the work, or to the Specifications.

PROVIDED FURTHER, that if Principal, or his, or its subcontractor or subcontractors fail to duly pay for any labor, materials, team hire, sustenance provisions or any other supplies or materials used or consumed by such Principal or his, their or its subcontractors in performance of the work contracted to be done, the Surety will pay the same in any amount not exceeding the sum specified in the bond, together with interest as provided by law.

IN WITNESS THEREOF: Said Principal and Surety have hereunto set their hands and seals at _____ this _____ day of _____, 20__.

(SEAL)

WITNESSES:

PRINCIPAL

ADDRESS

Name of person executing for Principal

TITLE

SURETY

ADDRESS

WITNESSES:

Name of person executing for Surety

TITLE

GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents, the following terms shall have the meaning indicated which shall be applicable to both the singular and plural thereof.

ACCEPTANCE: By the OWNER of the Work as being fully complete in accordance with the Contract Documents.

AGREEMENT: The written agreement between the OWNER and the CONTRACTOR covering the Work to be performed: The Contract Documents are attached to and made a part of the Agreement. Also designated as the Contract.

ADDENDA: Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the Contract Documents, Drawings and Specifications, by addition, deletions, clarifications or corrections.

APPLICATION FOR PAYMENT: The form furnished by the ENGINEER which is to be used by the CONTRACTOR in requesting progress payments and an affidavit of the CONTRACTOR that progress payments theretofore received from the OWNER on account of the WORK have been applied by the CONTRACTOR to discharge in full all of the CONTRACTOR'S obligations stated in prior Applications for Payment.

APPROVAL: Accept as satisfactory.

BID: The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

BIDDER: Any person, firm or corporation submitting a Bid for the Work.

BONDS: Bid, performance and payment bonds and other instruments of security furnished by the CONTRACTOR and his surety in accordance with the Contract Documents and in accordance with the law of the place of the project.

CHANGE ORDER: A written order to the CONTRACTOR signed by the OWNER authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time issued after execution of the Agreement.

CONTRACT DOCUMENTS: The Agreement, Addenda, Instruction's to Bidders, CONTRACTOR'S BID, the Bonds, the Notice of Award, these General Conditions,

the Supplementary conditions, Special Conditions, Technical Conditions, the Specifications, Drawings and Modifications, and Notice to Proceed.

CONTRACT PRICE: The total moneys payable to the CONTRACTOR under the Contract Documents.

CONTRACT TIME: The number of calendar days stated in the Agreement for the completion of the Work.

CONTRACTING OFFICER: The OWNER (Grantee) - The individual who is authorized to sign the contract documents on behalf of the OWNER'S governing body.

CONTRACTOR: The person, firm or corporation with whom the OWNER has executed the Agreement.

DAY: A calendar day of twenty-four hours measured from midnight to the next midnight.

DRAWINGS: The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by the ENGINEER and are referred to in the Contract Documents.

ENGINEER: The person, firm or corporation named as such in the Contract Documents.

FIELD ORDER: A written order issued by the ENGINEER which clarifies or interprets the Contract Documents in accordance with Paragraph 9.3 or orders minor changes in the Work in accordance with paragraph 10.2.

HE, HIS, AND HIM: These are several pronouns that shall represent both male and female genders.

MODIFICATION: (a) A written amendment of the Contract Documents signed by both parties, (b) a Change Order (c) a written clarification or interpretation issued by the ENGINEER in accordance with paragraph 9.3 or (d) a written order for a minor change or alteration in the Work issued by the ENGINEER pursuant to paragraph 10.2. A modification may only be issued after execution of the Agreement.

NOTICE OF AWARD: The written notice by OWNER to the apparent successful Bidder stating that upon compliance with the conditions precedent to be fulfilled by him within the time specified, OWNER will execute and deliver the Agreement to him.

NOTICE TO PROCEED: A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform his obligations under the Contract Documents.

OWNER: A public body or authority, corporation, association, partnership, or individual for whom the Work is to be performed.

PROJECT: The entire construction to be performed as provided in the Contract Documents.

CONSTRUCTION OBSERVER, RESIDENT INSPECTOR, CONSTRUCTION INSPECTOR, PROJECT REPRESENTATIVE: An authorized representative of the ENGINEER assigned to observe the Work performed and materials furnished by the CONTRACTOR or such other person as may be appointed by the OWNER as his representative. The CONTRACTOR shall be notified in writing of the identity of this representative.

SHOP DRAWINGS: All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a Subcontractor, manufacturer, supplier or distributor and which illustrate the equipment, material or some portion of the Work and as required by the Contract Documents.

SAMPLES: Physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

SPECIFICATIONS: Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work.

SUBCONTRACTOR: An individual, firm or corporation having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

SUBSTANTIAL COMPLETION: Substantial completion may be granted for all or portions of the work prior to final completion and stopping of contract time. Substantial completion is defined as the date when the construction is sufficiently completed in accordance with the contract documents so that the project or specified part of the project can be utilized for the purpose for which it was intended. The contract provides that the retainer may be reduced for that portion of the work which substantial completion is granted, but the granting of substantial completion will not stop contract time or liquidated damages.

SUPPLEMENTARY GENERAL CONDITIONS: Federal and State conditions in effect at time of submission of Bid in addition to those Supplementary General Conditions attached here to.

SUPPLIER: Any person or organization who supplies materials or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site.

SPECIAL CONDITIONS: When included as a part of the Contract Documents, Special Conditions refer only to the Work under this Contract.

SURETY: The corporate body which is bound with the CONTRACTOR and which engages to be responsible for the CONTRACTOR and his acceptable performance of the Work.

WORK: Any and all obligations, duties and responsibilities necessary to the successful completion of the Project assigned to or undertaken by CONTRACTOR under the Contract Documents, including all labor, materials, equipment and other incidentals, and the furnishing thereof.

WRITTEN NOTICE: The term "Notice" as used herein shall mean and include all written notices, demands, instructions, claims, approvals, and disapprovals required to obtain compliance with Contract requirements. Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or to an authorized representative of such individual, firm or corporation, or if delivered at or sent by registered mail to the last business address known to him who gives the notice. Unless otherwise stated in writing, any notice to or demand upon the OWNER under this Contract shall be delivered to the OWNER through the ENGINEER.

ARTICLE 2 - PRELIMINARY MATTERS:

AWARD:

2.1 The award of the Contract, if it is awarded, will be to the lowest and best responsible, responsive Bidder. No Notice of Award will be given until the OWNER has concluded such investigations as he deems necessary to establish the responsibility, qualifications, and financial ability of the Bidders to do the Work in accordance with the Contract Documents to the satisfaction of the OWNER within the time prescribed. The OWNER reserves the right to reject the BID of any Bidder who does not pass such investigation to the OWNER'S satisfaction. In analyzing Bids, the OWNER may take into consideration alternates and unit prices, if requested by the Bid Form. If the Contract is awarded, the OWNER will issue the NOTICE of AWARD and give the successful Bidder a contract for execution with sixty (60) days after opening of Bids.

EXECUTION OF AGREEMENT:

2.2 At least three counterparts of the Agreement and such other Contract Documents will be executed and delivered by CONTRACTOR to the ENGINEER within 10 days of receipt from the OWNER.

FORFEITURE OF BID SECURITY:

2.3 Failure of the successful Bidder to execute and deliver the Agreement and deliver the required Bonds as stipulated in paragraph 2.3 shall be just cause for the OWNER to annul the Notice of Award and declare the Bid and any security therefore forfeited.

The quantities appearing in the bid schedule are approximate and have been prepared for comparison of bids. The OWNER does not guarantee or assume any responsibility that quantities shown on the plans will not vary during actual construction of the contract. The CONTRACTOR further acknowledges the possibility of variation of quantities, shall be precluded from claiming in the construction of the project, and the CONTRACTOR shall not claim deception or misunderstanding because of any variation in quantities, location, character of work, or any other condition. Payment will be made only for actual quantities of work performed.

The OWNER makes no guarantees regarding the character or extent of water levels, soil, rock, utilities, or any other subsurface condition the BIDDER may encounter during work. The OWNER requires BIDDERS to make their own evaluation of subsurface soil conditions and to determine how these conditions may affect methods of construction.

CONTRACTOR'S PRE-BID REPRESENTATIONS:

2.4 CONTRACTOR represents that he has familiarized himself with, and assumes full responsibility for having familiarized himself with, the nature and extent of the Contract Documents, Work, Locality, and local conditions and will obey all federal, state, and local laws, ordinances, rules and regulations that may in any manner affect performance of the Work, and represents that he has correlated his study and observations with the requirements of the Contract Documents. CONTRACTOR also represents that he has studied all surveys and investigation reports of subsurface and latent physical conditions referred to in the Specifications and made such additional surveys and investigations as he deems necessary for the performance of the Work at the Contract Price in accordance with the requirements of the Contract Documents and that he has correlated the results of all such data with the requirements of the Contract Documents.

COMMENCEMENT OF CONTRACT TIME:

2.5 The Contract Time will commence to run in accordance with the Notice to Proceed.

STARTING THE PROJECT:

2.6 CONTRACTOR shall start to perform his obligations under the Contract Documents on the date when the Contract Time commences to run. No Work shall be done at the site prior to the date on which the Contract Time commences to run, except with the written consent of the OWNER.

BEFORE STARTING CONSTRUCTION:

2.7 Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. He shall at once report in writing to ENGINEER any conflict, error or discrepancy which he may discover; however, he shall not be liable to OWNER or ENGINEER for his failure to discover any conflict, error or discrepancy in the Drawings or Specifications. CONTRACTOR shall pot-hole existing utilities to ascertain exact location throughout the entire project. CONTRACTOR shall notify the ENGINEER any such locations of utilities which will prevent the work from being performed as designed, any work performed in which conflicts with an existing utility shall be remedied by the CONTRACTOR at his sole expense.

SCHEDULE OF COMPLETION:

2.8 Within ten (10) days after delivery of the Notice to Proceed by OWNER to CONTRACTOR, CONTRACTOR shall submit to ENGINEER an estimated progress schedule with earnings indicating the starting and completion dates of the various stages of the Work, and a preliminary schedule of Shop Drawing submissions. (See paragraphs 6.22 through 6.26.) The ENGINEER shall review and return this schedule or require revisions thereto within 14 days of its submittal. If there is more than one CONTRACTOR involved in a project, the responsibility for coordinating the Work of all CONTRACTORS shall be as provided in the Special Conditions.

2.9 At a time deemed appropriate by the OWNER to but before starting the Work at the site, a preconstruction conference may be held to review the above schedules, to establish procedures for handling shop drawings and other submissions and for processing Applications for Payment, and to establish a working understanding between the parties as to the project. Present at the conference will be the OWNER or his representative, ENGINEER, Resident Project Representatives, CONTRACTOR and his Superintendent.

QUALIFICATION OF SUBCONTRACTORS MATERIALMEN AND SUPPLIERS:

2.10 Within ten (10) working days after bid opening, the CONTRACTOR will (if required) submit to the OWNER and the ENGINEER, for acceptance, a list of the names of Subcontractors and such other persons and organizations (including those who are to furnish principal items of material or equipment) proposed for those portions of the Work as to which the identity of the Subcontractors and other person and organizations must be submitted as specified in the Contract Documents. Within thirty (30) working days after receiving the list, the ENGINEER will notify the CONTRACTOR in writing if either the OWNER or the ENGINEER, after due investigation, has reasonable objection to any Subcontractor, person or organization on such list. The failure of the OWNER or the ENGINEER to make objection to any Subcontractor, person or organization on the list within thirty days of receipt shall constitute an acceptance of such Subcontractor, person or organization. Acceptance of any such Subcontractor, person or organization shall not constitute a waiver of any right of the OWNER or the ENGINEER to reject defective Work, material or equipment, or Work, material or equipment not in conformance with the requirements of the Contract Documents.

ARTICLE 3 - CORRELATION, INTERPRETATION AND INTENT OF CONTRACT DOCUMENTS:

3.1 It is the intent of the Specifications and Drawings to describe a complete Project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Agreement between the OWNER and the CONTRACTOR. They may be altered only by a Modification.

3.2 The Contract Documents are complementary; what is called for by one is as binding as if called for by all. If CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, he shall call it to the ENGINEER'S attention in writing at once and before proceeding with the Work affected thereby; however, he shall not be liable to OWNER or ENGINEER for his failure to discover any conflict, error or discrepancy in the Specifications or Drawings. The various Contract Documents shall be given precedence, in case of conflict, error or discrepancy, as follows: Agreement Modifications, Addenda, Special Conditions, and Instruction's to Bidders, General Conditions, Technical Specifications and Drawings. If the requirements of one are more stringent than the other, the more stringent requirements shall apply.

3.3 The words "furnish", "furnish and install", "install", and "provide" or words with similar meaning shall be interpreted, unless otherwise specifically stated, to mean "furnish and install complete in place and ready for service."

3.4 Miscellaneous items and accessories which are not specifically mentioned, but which are essential to produce a complete and properly operating installation, or usable structure or plant providing the indicated function, shall be furnished and installed without change in the Contract Price. Such miscellaneous items and accessories shall be of the same quality standards including material, style, finish, strength, class, weight and other applicable characteristics, as specified for the major component of which the miscellaneous item or accessory is an essential part, and shall be approved by the ENGINEER before installation. The above requirement is not intended to include major components not covered by or inferable from the Drawings and Specifications.

3.5 The Work of all trades under this Contract shall be coordinated by the CONTRACTOR in such a manner as to obtain the best workmanship possible for the entire Project, and all components of Work shall be installed or erected in accordance with the best practices of the particular trade.

3.6 Manufacturer's literature, when referenced, shall be dated and numbered and is intended to establish the minimum requirements acceptable. Whenever reference is given to codes or standard specifications or other data published by regulating agencies or accepted organizations, including but not limited to National Electrical Code, applicable State Building Code, Federal Specifications, ASTM Specifications, various institute specifications, and the like, it shall be understood that such reference is to the latest edition including addenda in effect on the date of Bid.

3.7 Brand names where used in the Technical Specifications, are intended to denote the standard of quality required for the particular material or product. The use of a brand name item is to set a standard of quality and is not intended to restrict the Contractor from offering an equal item from other source(s) of supply. The term "equal" or "equivalent" when used in connection with brand names, shall be interpreted to mean a material or product that is similar and equal in type, quality, size, capacity, composition, finish, color and other applicable characteristics to the material or product specified by trade name, and that is for the same use and capable of performing the same function, in the opinion of the ENGINEER, as the material or product so specified. Proposed equivalent items must be approved by ENGINEER before they are purchased or incorporated in the Work.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE CONDITIONS; REFERENCE POINTS:

Availability of Lands

4.1 The OWNER will furnish, as indicated in Contract Documents, the lands upon which the Work is to be done, rights-of-way for access thereto, and such other

lands which are designated for use of the CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the OWNER, unless otherwise specified in the Contract Documents. Other access to such lands or rights-of-way for the CONTRACTOR'S convenience shall be the responsibility of the CONTRACTOR. The CONTRACTOR will provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 The OWNER will, upon request, furnish to the BIDDERS copies of all available boundary surveys.

Subsurface Conditions:

4.3 The CONTRACTOR acknowledges that he has investigated prior to bidding and satisfied himself as to the conditions affecting the Work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides, water tables or similar physical conditions at the site, the conformation and conditions of the grounds, the character of equipment and facilities needed preliminary to and during prosecution of the Work. The CONTRACTOR further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done on behalf of the OWNER on the site or any contiguous site, as well as from information presented by the Drawings and Specifications made a part of this Contract, or any other information made available to him prior to receipt of Bids. Any failure by the CONTRACTOR to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the Work. Any additional information necessary to ascertain subsurface soil conditions, including test holes and soil borings, not provided by the OWNER shall be undertaken by the BIDDER prior to bidding at his cost. Such exploration shall be adequate to satisfy the BIDDER of the materials expected to be encountered on the project. The OWNER assumes no responsibility for any conclusions or interpretations made by the CONTRACTOR on the basis of the information made available by the OWNER.

Differing Site Conditions

4.4 (a) The CONTRACTOR shall promptly, and before such conditions are disturbed, notify the OWNER in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this contract. The OWNER shall promptly

investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.

(b) No claim of the CONTRACTOR under this clause shall be allowed unless the CONTRACTOR has given the notice required in (a) above.

(c) No claim by the CONTRACTOR for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

ARTICLE 5 - BONDS AND INSURANCE:

Performance and Payment Bonds:

5.1 The contractor's attention is directed to the Information for Bidders and Supplement to General Conditions.

Contractor's Liability Insurance:

5.2 The CONTRACTOR shall provide the OWNER with insurance certificates certifying that all required insurance is in force; and such insurance certificates shall include provisions that the insurance shall not be canceled, allowed to expire or be materially changed without giving the OWNER advance notice by registered mail.

5.3 The CONTRACTOR agrees that if any part of the Work under the contract is sublet, he will require the Subcontractor(s) to carry insurance as required, and that he will require the Subcontractor(s) to furnish to him insurance certificates similar to those required by the OWNER in 5.1 and 5.2 above.

5.4 The CONTRACTOR agrees to add ENGINEER to insurance policy as additional insured.

Owner's Liability Insurance

5.5 The OWNER will be responsible for purchasing and maintaining his own liability insurance and, at his option, may purchase and maintain such insurance as will protect him against claims which may arise from operations under the Contract Documents.

Fire and Extended Coverage Insurance (Builders' Risk):

5.6 The CONTRACTOR shall maintain, as applicable, in an Insurance Company or Insurance Companies acceptable to the OWNER, Fire, Extended Coverage and

Vandalism & Malicious Mischief Insurance on buildings and structures, while in the course of construction, including foundations, additions, attachments and all permanent fixtures belonging to and constituting a part of said buildings or structures. The policy or policies shall also cover machinery, if the cost of machinery is included in the Contract. The amount of insurance should at all times be at least equal to the actual cash value of the insured property. The policy shall be in the name of the OWNER and the CONTRACTOR, as their interests may appear, and shall also cover the interests of all Subcontractors performing work.

5.7 The CONTRACTOR shall provide the OWNER with satisfactory evidence certifying that the foregoing insurance is in force; and such evidence shall include provisions that the insurance shall not be canceled, allowed to expire or be materially changed without giving the OWNER advance notice by registered mail.

Cancellation and Re-Insurance:

5.8 If any insurance should be canceled or changed by the insurance company or should any insurance expire during the period of this Contract, the CONTRACTOR shall be responsible for securing other acceptable insurance to provide the coverage specified in this section to maintain continuous coverage during the life of this Contract.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES:

Supervision and Superintendence:

6.1 The CONTRACTOR will supervise and direct the Work. He will be solely responsible for the means, methods, techniques, safety, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the Work. (Copies of written communications given to the Superintendent shall be mailed to the Contractor's home or office.)

Labor, Materials and Equipment:

6.2 The CONTRACTOR will provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. He will at all times maintain good discipline and order at the site.

6.3 The CONTRACTOR will furnish all materials, equipment, labor, transportation,

construction equipment and machinery, tools, appliances, fuel, power, light, heat, local telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of the Work.

6.4 All materials and equipment will be new, except as otherwise provided in the Contract Documents. When special makes or grades of material which are normally packaged by the supplier or manufacturer are specified or approved, such materials shall be delivered to the site in their original packages or container with seals unbroken and labels intact.

6.5 All materials and equipment shall be applied, handled, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors and industry standards, except as otherwise provided in the Contract Documents.

Materials, Equipment, Products and Substitutions:

6.6 Materials, equipment and products incorporated in the Work must be approved for use before being purchased by the CONTRACTOR. The CONTRACTOR shall submit to the ENGINEER a list of proposed materials, equipment or products, together with such samples as may be necessary for him to determine their acceptability and obtain his approval, within ninety (90) calendar days after award of Contract. No request for payment for "or equal" equipment will be approved until this list has been received and approved by the ENGINEER.

6.6.1 Whenever a material, article or piece of equipment is identified on the drawings or Specifications by reference to brand names or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the Contract Documents by reference to brand names or catalog number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Incidental charges or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the Contract Price, or Contract Time.

6.6.2 No substitute shall be ordered or installed without the written approval of the ENGINEER who shall be the judge of equality.

6.6.3 Delay caused by obtaining approvals for substitute materials will not be considered justifiable grounds for an extension of construction time.

6.6.4 Should any work or materials, equipment or products not conform to requirements of the Drawings and Specifications or become damaged during the process of the Work, such Work or materials shall be removed and replaced, together with any work disarranged by such alterations, at any time before completion and acceptance of the Project. All such work shall be done at the expense of the CONTRACTOR. (See paragraph 7.10)

6.6.5 No materials or supplies for the Work shall be purchased by the CONTRACTOR or by any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the Seller. The CONTRACTOR warrants that he has good title to all materials and supplies used by him in the Work.

Concerning Subcontractors:

6.7 The CONTRACTOR will not employ any Subcontractor, other person or organization of the types referred to in paragraph 2.10 (whether initially or as a substitute) against whom the OWNER or the ENGINEER may have reasonable objection, nor will the CONTRACTOR be required to employ any Subcontractor against whom he has reasonable objection. The CONTRACTOR will not make any substitution for any Subcontractor who has been accepted by the OWNER and the ENGINEER, unless the ENGINEER determines that there is good cause for doing so.

6.8 The CONTRACTOR shall be fully responsible for all acts and omissions of his Subcontractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any Subcontractor or other person or organization having a direct contract with CONTRACTOR, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any Subcontractor or other person or organization, except as may otherwise be required by law. OWNER or ENGINEER may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to CONTRACTOR on account of specific Work done in accordance with the schedule of values.

6.9 The divisions and sections of the Specifications and the identifications of any drawings shall not control the CONTRACTOR in dividing the work among Subcontractors or delineating the Work to be performed by any specific trade.

6.10 The CONTRACTOR agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the OWNER.

6.11 All Work performed for the CONTRACTOR by a Subcontractor shall be pursuant to an appropriate agreement between the CONTRACTOR and the Subcontractor.

6.12 The CONTRACTOR shall be responsible for the coordination of the trades, Subcontractors and material men engaged upon his Work.

6.12.1 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the CONTRACTOR by the terms of these General Conditions and other Contract Documents insofar as applicable to the Work of Subcontractors, and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provisions of the Contract Documents.

6.12.2 The OWNER or ENGINEER will not undertake to settle any differences between the CONTRACTOR and his Subcontractors or between Subcontractors.

6.12.3 If in the opinion of the ENGINEER, any Subcontractor on the project proves to be incompetent or otherwise unsatisfactory, he shall be replaced if and when directed in writing.

Patent Fees and Royalties:

6.13 The CONTRACTOR will pay all license fees and royalties and assume all costs incident to the use of any invention, design, process or device which is the subject of patent rights or copyrights held by others. He will indemnify and hold harmless the OWNER and ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses, and expenses (including attorneys' fees) arising out of any infringement of such rights during or after completion of the Work and shall defend all such claims in connection with any alleged infringement of such rights.

6.14 The CONTRACTOR shall be responsible for determining the application of patent rights and royalties on materials, appliances, articles or systems prior to bidding. However, he shall not be responsible for such determination on systems which do not involve purchase by him of materials, appliances, and articles.

Permits:

6.15 The CONTRACTOR will secure and pay for all construction permits and licenses and will pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of his Bid. When such charges are normally made by the OWNER, there will be no charges to the CONTRACTOR. The OWNER shall assist the CONTRACTOR, when necessary, in obtaining such permits and licenses. The CONTRACTOR will also pay all public

utility charges.

Laws and Regulations:

6.16 The CONTRACTOR will give all notices and comply with all laws, ordinances, rules and regulations applicable to the Work. If the CONTRACTOR observes that the Specifications or Drawings are at variance therewith, he will give the ENGINEER prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate Modification. If the CONTRACTOR performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the ENGINEER, he will bear all costs arising wherefrom; however, it shall not be his primary responsibility to make certain that the Drawings and Specifications are in accordance with such laws, ordinances, rules and regulations.

Taxes:

6.17 Cost of all sales and other taxes for which the CONTRACTOR is liable under the Contract shall be included in the Contract Price stated by the CONTRACTOR.

Record Drawings:

6.18 The CONTRACTOR will keep one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to the Engineer and shall be delivered to him for the OWNER upon completion of the Project. It shall be used for this purpose only.

Safety and Protection:

6.19 The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to:

6.19.1 All employees on the work and other persons who may be affected thereby.

6.19.2 All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site.

6.19.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

6.20 The CONTRACTOR will designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the CONTRACTOR'S superintendent unless otherwise designated in writing by the CONTRACTOR to the OWNER.

Emergencies:

6.21 In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER or OWNER, is obligated to act, at his discretion, to prevent threatened damage, injury or loss. He will give the ENGINEER prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order shall be issued covering the changes and deviations involved. If the CONTRACTOR believes that additional work done by him in an emergency which arose from causes beyond his control entitles him to an increase in the Contract Price or an extension of the Contract Time, he may make a claim therefore as provided in Articles 11 & 12.

Shop Drawing and Samples:

6.22 After checking and verifying all field measurements, the CONTRACTOR will submit to the ENGINEER for review, in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.9) three (3) copies (or at the ENGINEER'S option, one reproducible copy) of all Shop Drawings, which shall have been checked by and stamped with the approval of the CONTRACTOR. The data shown on the Shop Drawings will be complete with respect to dimensions, design criteria, materials of construction and the like to enable the ENGINEER to review the information as required.

6.23 The CONTRACTOR will also submit to the ENGINEER for review, with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and stamped with the approval of the CONTRACTOR, identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended.

6.24 At the time of each submission, the CONTRACTOR will in writing call the ENGINEER'S attention to any deviations that the Shop Drawings or sample may have from the requirements of the Contract Documents.

6.25 The ENGINEER will review with reasonable promptness Shop Drawings and samples, but his review shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The review of a separate item as such will not indicate review of the assembly in which the item functions. The CONTRACTOR will make any corrections required by the ENGINEER and will return the required number of

corrected copies of Shop Drawings and resubmit new samples until the review is satisfactory to the ENGINEER. The CONTRACTOR shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections called for by the ENGINEER on previous submissions. The CONTRACTOR'S stamp of approval on any Shop Drawings or sample shall constitute a representative to the OWNER and the ENGINEER that the CONTRACTOR has either determined and verified all quantities, dimensions, field construction criteria, materials, catalogue numbers and similar data or he assumes full responsibility for doing so, and that he has reviewed or coordinated each Shop Drawings or sample with the requirements of the Work and the Contract Documents.

6.26 No Work requiring a Shop Drawing or sample submission shall be commenced until the submission has been reviewed by the ENGINEER. A copy of each Shop Drawing and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

6.27 The ENGINEER'S review of Shop Drawings or samples shall not relieve the CONTRACTOR from his responsibility for any deviations from the requirements of the Contract Documents unless the CONTRACTOR has in writing called the ENGINEER'S attention to such deviation at the time of submission and the ENGINEER has given written approval to the specific deviation, nor shall any review by the ENGINEER relieve the CONTRACTOR from responsibility for errors or omission in the Shop Drawings.

Cleaning Up:

6.28 The CONTRACTOR shall clean up behind the Work as much as is reasonably possible as the Work progresses. Upon completion of the Work, and before acceptance of and final payment for the Project by the OWNER, the CONTRACTOR shall remove all his surplus and discarded materials excavated material and rubbish from the roadways, sidewalks, parking areas, lawns and all adjacent property; shall clean his portion of Work involved in any building under this Contract, so that no further cleaning by the OWNER is necessary prior to his occupancy; shall restore all property, both public and private, which has been disturbed or damaged during the prosecution of the Work; and shall leave the whole in a neat and presentable condition.

6.29 Clean-up operations shall consistently be carried on by the CONTRACTOR at all times to keep the premises free from accumulation of waste materials and rubbish. Upon completion of the Work he shall remove all rubbish, tools, scaffolding, surplus materials, etc., and shall leave his work "broom clean", or its equivalent, unless more exactly specified elsewhere in the Contract. The CONTRACTOR shall do the cleaning for all trades upon completion of the Work.

6.30 General. In case of dispute, the OWNER may remove the rubbish and charge the cost to the CONTRACTOR as the ENGINEER shall determine to be just.

Public Convenience and Safety:

6.31 The CONTRACTOR shall, at all times, conduct the Work in such a manner as to insure the least practicable obstruction to public travel. The convenience of the general public and of the residents along and adjacent to the area of the Work shall be provided for in a satisfactory manner, consistent with the operation and local conditions. "Street Closed" signs shall be placed immediately adjacent to the Work, in a conspicuous position at such locations as traffic demands in accordance with the MUTCD. At any time that streets are required to be closed, the CONTRACTOR shall notify law enforcement agencies, fire departments, and parties operating emergency vehicles before the street is closed and again as soon as it is opened. Access to fire hydrants and other fire extinguishing equipment shall be provided and maintained at all times. The CONTRACTOR shall keep the portion of the project being used by the public in satisfactory condition. It may become necessary for the CONTRACTOR to sweep the roadway surface to completely remove debris.

Sanitary Provisions:

6.32 The CONTRACTOR shall furnish necessary toilet conveniences, secluded from public observation, for use of all personnel on the Work, whether or not in his employ. They shall be kept in a clean and sanitary condition and shall comply with the requirements and regulations of the Public Authorities having jurisdiction. He shall commit no public nuisance. Temporary sanitary facilities shall be removed upon completion of the Work and the premises shall be left clean.

Indemnification:

6.33 The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses, and expenses including attorneys' fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss, or expense (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than Work itself) including the loss of use resulting wherefrom and (b) is caused in whole or in part by any negligent act or omission of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

6.34 In any and all claims against the OWNER or the ENGINEER or any of their agents or employees, by any employee of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.33 shall

not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefit acts.

6.35 The obligations of the CONTRACTOR under paragraph 6.33 shall not extend to the liability of the Engineer's negligent acts, errors or omissions or those of his employees or agents.

Responsibility for Connecting to Existing Work:

6.36 It shall be the express responsibility of the CONTRACTOR to connect his Work to each part of the existing work or work previously installed as required by the Drawings and Specifications to provide a complete installation.

Work in Street, Highway and Other Rights-of-Way:

6.37 Excavation, grading, fill, storm drainage, paving and any other construction or installations in rights-of-way of streets, highways, public carrier lines, utility lines (either aerial, surface or subsurface), etc., shall be done in accordance with requirements of the Contract Documents. The CONTRACTOR will be responsible for obtaining all permits necessary for the work. Upon completion of the Work, CONTRACTOR shall present to ENGINEER certificates, in triplicate, from the proper authorities stating that the Work has been done in accordance with their requirements.

6.37.1 The OWNER will cooperate with the CONTRACTOR in obtaining action from any utilities or public authorities involved in the above requirements.

6.37.2 The ENGINEER shall be responsible for obtaining elevations of curbs and gutters, pavement, storm drainage structures, and other such items which must be established by governmental departments as soon as grading operations are begun on the site and, in any case, sufficiently early in the construction period to prevent any adverse effect on the Project.

Cooperation with Governmental Departments, Public Utilities, Etc.:

6.38 The OWNER shall be responsible for making all necessary arrangements with governmental departments, public utilities, public carriers, service companies and corporations owning or controlling roadways, railways, water, sewer, gas, electrical, telephone, and telegraph facilities such as pavements, tracks, piping, wires, cables, conduits, poles, guys, etc., including incidental structure connected therewith, that are encountered in the work in order that such items may be properly shored, supported and protected, or the CONTRACTOR may relocate them if he so desires. The CONTRACTOR shall give all proper notices, shall comply with requirements of

such parties in the performance of his Work, shall permit entrance of such parties on the Project in order that they may perform their necessary work, and shall pay all charges and fees made by such parties for this work.

6.38.1 The CONTRACTOR'S attention is called to the fact that there may be delays on the Project due to work to be done by governmental departments, public utilities, and others in repairing or moving poles, conduits, etc. The CONTRACTOR shall cooperate with the above parties, in every way possible, so that the construction can be completed in the least possible time.

6.38.2 The CONTRACTOR shall have made himself familiar with all codes, laws, ordinances and regulations which in any manner affect those engaged or employed in the Work, or materials and equipment used in or upon the Work, or in any way affect the conduct of the Work, and no plea of misunderstanding will be considered on account of his ignorance thereof.

Use of Premises:

6.39 CONTRACTOR shall confine his apparatus, storage of materials, and operations of his workmen to limits indicated by law, ordinances, permits, and directions of ENGINEER and OWNER, and shall not unnecessarily encumber any part of site.

6.39.1 CONTRACTOR shall not overload or permit any part of any structure to be loaded with such weight as will endanger its safety, nor shall he subject any part of the Work to stresses or pressures that will endanger it.

6.39.2 CONTRACTOR shall enforce OWNER'S instructions in connection with signs, advertisements, fires and smoking.

6.39.3 CONTRACTOR shall arrange and cooperate with OWNER in routing and parking of automobiles of his employees, subcontractors and other personnel and in routing material delivery trucks and other vehicles to the Project Site.

Protection of Existing Property Improvements:

6.40 Any existing surface or subsurface improvements, such as pavements, curbs, sidewalks, pipes or utilities, footings or structures (including portions thereof), trees, and shrubbery not indicated on the Drawings or noted in the Specifications as being removed or altered shall be protected from damage during construction of the Project. Any such improvements damaged during construction of the Project shall be restored to a condition equal to that existing at time of award of Contract.

Temporary Heat:

6.41 The General CONTRACTOR shall provide heat, fuel and services as necessary to protect all work and materials, within all habitable areas of permanent building construction, for all contracts against injury from dampness and cold until final acceptance of all work and materials for the Project, unless building is fully occupied by the OWNER prior to such acceptance, in which case the OWNER shall assume all expenses of heating from date of full occupancy. In areas outside those covered above, each prime contractor shall be responsible for providing such temporary heat, fuel and services as required to protect his work or shall make all necessary arrangements with the General CONTRACTOR for providing such temporary heat, fuel and services. Unless otherwise specifically permitted by Special Conditions, the permanent heating system shall not be used to provide temporary heat. CONTRACTOR'S proposed methods of heating shall be submitted for approval.

ARTICLE 7 - WORK BY OTHERS:

7.1 The OWNER may perform additional work related to the Project by himself, or he may let other direct contracts therefore which shall contain General Conditions similar to these. The CONTRACTOR will afford the other contractors who are parties to such direct contracts (or the OWNER, if he is performing the additional work himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of work and shall properly connect and coordinate his Work with theirs.

7.2 If any part of the CONTRACTOR'S work depends for proper execution or results upon the work of any such other CONTRACTOR (or the OWNER), the CONTRACTOR will promptly report to the ENGINEER in writing any defects or deficiencies in such work that render it unsuitable for such proper execution and results.

7.3 The CONTRACTOR will do all cutting, fitting, and patching of his Work that may be required to make its several parts come together properly and fit it to receive or be received by such other work. The CONTRACTOR will not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of the ENGINEER and of the other contractors whose work will be affected.

7.4 If the performance of additional work by other contractors or the OWNER is not noted in the Contract Documents prior to the execution of the Contract, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional work. If the CONTRACTOR believes that the performance of such additional work by the OWNER or others involves him in additional expense or entitles him to an extension of the Contract Time, he may make a claim therefore as

provide in Articles 11 and 12.

7.5 Where practicable, the CONTRACTOR shall build around the work of other separate contractors or shall leave chases, slots and holes as required to receive and to conceal within the general construction work the work of such other separate contractors as directed by them. Where such chases, slots, etc., are impracticable, the work shall require specific approval of the ENGINEER.

7.6 Necessary chases, slots and holes not built or left by the CONTRACTOR shall be cut by the separate contractor requiring such alterations after approval of the CONTRACTOR. The CONTRACTOR shall do all patching and finishing of his Work where cut by other contractors at the expense of such other contractors.

7.7 Cooperation is required in the use of site facilities and in the detailed execution of the Work. Each contractor shall coordinate his operations with those of the other contractors for the best interest of the Work in order to prevent delay in the execution thereof.

7.8 Each contractor shall keep himself informed of the progress of the work of other contractors. Should lack of progress or defective workmanship on the part of other contractors interfere with his operations, the CONTRACTOR shall notify the ENGINEER immediately. Lack of such notice to the ENGINEER will be construed as acceptance by the CONTRACTOR of the status of the work of other contractors as being satisfactory for proper coordination of his own work.

7.9 Each contractor shall give notices of the progress of his work so as to allow other contractors adequate opportunity to properly direct and coordinate their work. The CONTRACTOR shall give notices of the progress of his Work so that work of other contractors, when required to be concealed, may be placed before the general construction Work. All such notices shall be submitted to the ENGINEER with copies to other prime contractors on the Project sufficiently ahead of job progress to permit adequate time for the other prime contractors to coordinate their work.

7.10 The cost of extra work resulting from lack of notices, untimely notices, failure to respond to notices, defective work or lack of coordination shall be borne by the CONTRACTOR responsible for such lack of notices, etc.

ARTICLE 8 - OWNER'S RESPONSIBILITIES:

8.1 The OWNER will issue all communications to the CONTRACTOR through the ENGINEER.

8.2 In case of termination of the employment of the ENGINEER, the OWNER will appoint an engineer against whom the CONTRACTOR makes no reasonable

objection, whose status under the Contract Documents shall be that of the former ENGINEER. Any dispute in connection with such appointment shall be subject to arbitration, if mutually agreeable.

8.3 The OWNER will furnish the data required of him under the Contract Documents promptly and shall make payments to the CONTRACTOR promptly after they are due as provided in Article 14.

8.4 OWNER'S duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1, 4.4 and the Special Conditions. Paragraphs 4.2 and 4.3 refer to OWNER'S identifying and making available to CONTRACTOR copies of surveys and investigation reports of subsurface and latent physical conditions at the site or otherwise affecting performance of the Work which have been relied upon by ENGINEER in preparing the Drawings and Specifications.

8.5 The OWNER'S responsibilities in respect of liability and property insurance are set forth in paragraph 5.4.

8.6 In addition to his rights to request changes in the Work in accordance with Article 10, the OWNER (especially in certain instances as provided in paragraph 10.4) will be obligated to execute Change Orders.

8.7 In connection with the OWNER'S right to stop Work or suspend Work; see paragraph 15.1. Paragraph 15.3 deals with the OWNER'S right to terminate services of the CONTRACTOR under certain circumstances.

8.8 The OWNER shall have the right to take possession of and use any completed or partially completed portions of the Work, notwithstanding the fact that the time for completing the entire Work or any portion thereof may not have expired; but such taking possession and use shall not be deemed an acceptance of any Work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the Work, the CONTRACTOR shall be entitled to such extra compensation or extension of time or both, except by prior agreement, as the ENGINEER may determine. See paragraph 14.11.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION:

Owner's Representative:

9.1 The ENGINEER shall be the OWNER'S representative during the construction period. The duties and responsibilities and the limitations of authority of the ENGINEER as the OWNER'S representative during construction are set forth in Articles 1 through 17 of these General Conditions and shall not be extended without written consent of the OWNER and the ENGINEER.

9.1.1 The ENGINEER'S decision, in matters relating to aesthetics shall be final, if within the terms of the Contract Documents.

9.1.2 Except as may be otherwise provided in this contract all claims, counter-claims, disputes and other matters in question between the OWNER and the CONTRACTOR arising out of or relating to this agreement or the breach thereof will be decided by arbitration if the parties hereto mutually agree, or in a court of competent jurisdiction within the State in which the OWNER is located.

Visits to Site:

9.2 The ENGINEER will make periodic visits to the site to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. He will not be required to make continuous on-site observations to check the quality or quantity of the Work. His efforts will be directed toward ascertaining on behalf of the OWNER that the completed Project will conform to the requirements of the Contract Documents. On the basis of his on-site observations as an experienced and qualified design professional, he will keep the OWNER informed of the progress of the Work and will endeavor to guard the OWNER against defects and deficiencies in the Work of contractors.

Clarifications and Interpretations:

9.3 The ENGINEER will issue with reasonable promptness such written clarification or interpretations of the Contract Documents (in the form of Drawings or otherwise) as he may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If the Contractor believes that a written clarification and interpretation entitles him to an increase in the Contract Price or extension of Contract Time, he may make a claim therefore as provided in Articles 11 and 12.

Measurement of Quantities:

9.4 All Work completed under the Contract will be measured by the CONTRACTOR according to the United States Standard Measures. All linear surface measurements will be made horizontally or vertically as required by the item measured.

Rejecting Defective Work:

9.5 The ENGINEER will have authority to disapprove or reject Work which is "defective" (which term is hereinafter used to describe Work that is unsatisfactory, faulty or defective, or does not meet the requirements of any inspection, test or

approval or has been damaged prior to final acceptance). He will also have authority to require special inspection or testing of the Work whether or not the Work is fabricated, installed or completed.

Shop Drawings, Change Orders and Payments:

9.6 In connection with the ENGINEER'S responsibility as to Shop Drawings and samples, see paragraphs 6.22 through 6.27, inclusive.

9.7 In connection with the ENGINEER'S responsibility for Change Orders; see Articles 10, 11, and 12.

9.8 In connection with the ENGINEER'S responsibilities in respect of Application for Payment, etc., see Article 14.

Resident Project Representative:

9.9 The OWNER or the ENGINEER will provide on-site representation sufficient to guarantee that construction is in general compliance with the construction drawings and the contract specifications.

Decisions on Disagreements:

9.10 The ENGINEER will be the initial interpreter of the terms and conditions of the Contract Documents and the judge of the performance hereunder. In his capacity as interpreter and judge, he will exercise his best efforts to insure faithful performance by both the OWNER and the CONTRACTOR. He will not show partiality to either and shall not be liable for the result of any interpretation or decision rendered in good faith. Claims, disputes and other matters relating to the execution and progress of the Work or the interpretation of or performance under the Contract Documents shall be referred initially to the ENGINEER for decision; which he shall render in writing within a reasonable time.

9.11 Either the OWNER or the CONTRACTOR, if the other agrees, may request legal action with respect to any such claim, dispute or other matter that has been referred to the ENGINEER, except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.11, such legal action to be in accordance with Article 16. However, no request for legal action of any such claim, dispute or other matter shall be made until the earlier of (a) the date on which the ENGINEER has rendered his decision or (b) the tenth day after the parties have presented their evidence to the ENGINEER if he has not rendered his written decision before that date. No request for legal action shall be made later than thirty (30) days after the date on which the ENGINEER rendered his written decision in respect of the claim, dispute or other matter as to which legal action is sought; and the failure to request legal action within said thirty (30) days period shall result in

the ENGINEER'S decision being final and binding upon the OWNER and the CONTRACTOR. If the ENGINEER renders a decision after legal proceedings have been initiated, such decision may be entered as evidence but shall not supersede the legal proceedings, except where the decision is acceptable to the parties concerned.

Limitations on Engineer's Responsibilities:

9.12 Neither the ENGINEER'S authority to act under this Article 9 nor any decision made by him in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the ENGINEER to the CONTRACTOR, any Subcontractor, any of their agents or employees or any other person performing any of the Work.

9.13 The ENGINEER will not be responsible for the construction means, methods, techniques, sequences or procedures, or the safety precautions and programs incident thereto, and he will not be responsible for the CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

9.14 The ENGINEER will not be responsible for the acts or omissions of the CONTRACTOR, or any Subcontractors, or any of his or their agents or employees, or any other person performing any of the Work.

ARTICLE 10 - CHANGES IN THE WORK:

10.1 Without invalidating the Agreement, the OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by Change Orders. Upon receipt of a Change Order, the CONTRACTOR will proceed with the Work involved. All such Work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in Article 11 or Article 12. A Change Order signed by the CONTRACTOR indicates his agreement therewith.

10.2 The ENGINEER may authorize minor changes or alterations in the Work not involving extra cost and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order. If the CONTRACTOR believes that any minor change or alteration authorized by the ENGINEER entitles him to an increase in the Contract Price or extension of Contract Time, he may make a claim therefore as provided in Articles 11 and 12.

10.3 Additional Work performed by the CONTRACTOR without authorization of a Change Order will not entitle him to an increase in the Contract Price or an extension of the Contract Time, except in the case of an emergency as provided in paragraph 6.21 and except as provided in paragraph 10.2.

10.4 The OWNER will execute appropriate Change Orders prepared by the ENGINEER covering changes in the Work to be performed as provided in paragraph 4.4, and Work performed in an emergency as provided in paragraph 6.21 and any other claim of the CONTRACTOR for a change in the Contract Time or the Contract Price which is approved by the ENGINEER.

10.5 It is the CONTRACTOR'S responsibility to notify his surety of any changes affecting the general scope of the Work or change in the Contract Price and the amount of the applicable bonds shall be adjusted accordingly. The CONTRACTOR will furnish proof of such adjustment to the OWNER.

ARTICLE 11 - CHANGE OF CONTRACT PRICE:

11.1 The Contract Price constitutes the total compensation payable to the CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the CONTRACTOR shall be at his expense without changing the Contract Price.

11.2 (a) The OWNER may, at any time, without notice to the sureties, by written order designated or indicated to be a change order, make any change in the Work within the general scope of the contract, including but not limited to changes:

- (1) In the specifications (including drawings and designs);
- (2) In the method or manner of performance of the work;
- (3) In the Owner-furnished facilities, equipment, materials, services, or site; or
- (4) Directing acceleration in the performance of the work.

(b) Any other written order or an oral order (which terms as used in this paragraph (b) shall include direction, instruction, interpretation or determination) from the OWNER, which causes any such change, shall be treated as a change order under this clause, provided that the CONTRACTOR gives the OWNER written notice stating the date, circumstances, and source of the order and that the CONTRACTOR regards the order as a change order.

(c) Except as herein provided, no order, statement, or conduct of the OWNER shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment hereunder.

(d) If any change under this clause causes an increase or decrease in the CONTRACTOR'S cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any order, an equitable adjustment shall be made and the contract modified in writing accordingly: PROVIDED, HOWEVER, that except for claims based on defective specifications, no claim for any change under (b) above shall be allowed for any costs incurred more

than 20 days before the CONTRACTOR gives written notice as therein required. And provided further, that in the case of defective specifications for which the OWNER is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the CONTRACTOR in attempting to comply with such defective specifications.

(e) If the CONTRACTOR intends to assert a claim for an equitable adjustment under this clause, he must, within 30 days after receipt of a written change order under (a) above or the furnishing of a written notice under (b) above, submit to the OWNER a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the OWNER. The statement of claim hereunder may be included in the notice under (b) above.

(f) No claim by the CONTRACTOR for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

11.3 The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

11.3.1 Where the Work involved is covered by unit prices contained in the Contract Documents by application of unit prices to the quantities of the items involved.

11.3.2 By negotiated lump sum.

11.3.3 The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work plus a fixed amount to be agreed upon to cover the cost of general overhead and profit to be negotiated.

11.4 The term Cost of the Work means the sum of all costs necessarily incurred and paid by the CONTRACTOR in the proper performance of the Work. Except as otherwise maybe agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5:

11.4.1 Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to salaries and wages plus the costs of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing work after regular working hours, on Sunday or legal holidays shall be included in the

above to the extent authorized by OWNER.

11.4.2 Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and manufacturer's field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

11.4.3 Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to him and shall deliver such Bids to OWNER who will then determine with the advice of ENGINEER, which Bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of Work plus a Fee, the cost of the Work shall be determined in accordance with paragraphs 11.4 and 11.5.

11.4.4 Costs of special consultants (including but not limited to, engineers, architects, testing laboratories, surveyors, lawyers and accountants) employed for services specifically related to the Work.

11.4.5 Supplemental costs including the following:

11.4.5.1 The proportion of necessary transportation, travelling and subsistence expenses of CONTRACTOR'S employees incurred in discharge of duties connected with the Work.

11.4.5.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workmen, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.

11.4.5.3 Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or other in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the cost of transportation, loading, unloading, installation, dismantling and removal thereof--all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall end when the use thereof is no longer necessary for the Work.

11.4.5.4 Sales, use or similar taxes related to the Work, and for which CONTRACTOR is liable imposed by any governmental authority.

11.4.5.5 Deposits lost for causes other than CONTRACTOR'S negligence, royalty payments and fees for permits and licenses. Costs for permits and licenses must be shown as a separate item.

11.4.5.6 Losses, damages and expenses, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the execution of, and to, the Work, provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractors, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of Work for the purpose of determining CONTRACTOR'S fee. If, however, any such loss or damage requires reconstruction and CONTRACTOR is placed in charge thereof, he shall be paid for his services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.7 The cost of utilities, fuel and sanitary facilities at the site.

11.4.5.8 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.4.5.9 Cost of premiums for additional Bonds and Insurance required because of changes in the Work.

11.5 The term cost of the Work shall not include any of the following:

11.5.1 Payroll costs and other compensation of CONTRACTOR'S officers, executives, principals, (of partnership and sole proprietorships), general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in his principal or a branch office for general administration of the Work and not specifically included in the schedule referred to in subparagraph 11.4.1 -- all of which are to be considered administrative costs covered by the CONTRACTOR'S Fee.

11.5.2 Expenses of CONTRACTOR'S principal and branch offices other than his office at the site.

11.5.3 Any part of CONTRACTOR'S capital expenses, including interest on CONTRACTOR'S capital employed for the Work and charges against CONTRACTOR'S for delinquent payments.

11.5.4 Cost of premiums for all bonds and for all insurance policies whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except as otherwise provide in subparagraph 11.4.5.9.)

11.5.5 Costs due to the negligence of CONTRACTOR, any Subcontractors, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable including but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied and making good any damage to property.

11.5.6 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

11.6 The CONTRACTOR'S Fee which shall be allowed to CONTRACTOR for his overhead and profit shall be determined as follows;

11.6.1 A mutually acceptable firm fixed price; or if none can be agreed upon,

11.6.2 A mutually acceptable fixed fee based on the estimate of the various portions of the Cost of the Work.

11.7 The amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost will be the amount of the actual net decrease. When both additions and credits are involved in any one change, the net shall be computed to include overhead and profit, identified separately, for both additions and credits.

11.8 Whenever the cost of any Work is to be determined pursuant to paragraphs 11.4 and 11.5, CONTRACTOR will submit in form prescribed by ENGINEER an itemized cost breakdown together with supporting data.

11.9 Allowances: It is understood that the CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such material men, suppliers, or Subcontractors and for such sums within the limit of the allowances as the ENGINEER may approve. Upon final payment, the Contract Price shall be adjusted as required and an appropriate Change Order issued. The CONTRACTOR agrees that the original Contract Price includes such sums as he deems proper for costs and profit on account of cash allowances. No demand for additional cost or profit in connection therewith will be allowed.

11.9.1 These allowances shall cover the cost to the CONTRACTOR less any applicable trade discount, of the materials and equipment required by the allowance delivered at the site, and all applicable taxes.

11.9.2 The CONTRACTOR'S costs for unloading and handling on site, labor, installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Price and not in the allowance.

11.9.3 Whenever the cost, as described in 11.9.1 above, is more than or less than the allowance, the Contract Price shall be adjusted accordingly by Change Order. The amount of the Change Order will recognize changes, if any, in handling costs on the site, labor, installation costs, overhead, profit and other expenses, except that whenever unit price allowances are stipulated for brick, the Change Order will not include any cost as described in 11.5 above.

ARTICLE 12 - CHANGE OF THE CONTRACT TIME:

12.1 The Contract Time may only be changed by a Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to OWNER and ENGINEER within ten days of the occurrence of the event giving rise to the claim. Notice of the extent of the claim with supporting data shall be delivered within forty-five days of such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data. All claims for adjustment in the Contract Time shall be determined by ENGINEER if OWNER and CONTRACTOR cannot otherwise agree. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order.

12.2 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR if he makes a claim therefore as provided in paragraph 12.1. Such delays shall include, but not be restricted to, acts or neglect by any separate contractor employed by OWNER, fires, floods, labor disputes, epidemics, or acts of God.

12.3 All time limits stated in the Contract Documents are of the essence of the Agreement. The provisions of the Article 12 shall not exclude recovery for damages (including compensation for additional professional services) for delay by either party.

12.4 No claim for delay shall be allowed because of failure to furnish Drawings until two weeks after demand for such drawings and not then unless such claim be reasonable.

12.5 This article does not exclude the recovery of damages for delay by either party under other provisions in the Contract Documents.

ARTICLE 13 - GUARANTY:

13.1 The CONTRACTOR shall guarantee all materials and equipment furnished and Work performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship

and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs or adjustments, in the Work that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

ARTICLE 14 - PAYMENTS AND COMPLETION:

Payments to Contractors:

14.1 At least ten (10) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present the partial payment estimate to the OWNER or revise the partial payment estimate provides the same to the CONTRACTOR indicating in writing his reasons for refusing or revising payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within forty-five (45) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate. The OWNER may retain a portion of the amount otherwise due the CONTRACTOR. Except as State law otherwise provides, the amount the OWNER retains shall be limited to the following:

14.1.1 Withholding of not more than 5 percent of the payment claimed until work is 50 percent complete;

14.1.2 When Work is 50 percent complete, reduction of the withholding to 2.5 percent of the dollar value of all Work satisfactorily completed to date, provided that the CONTRACTOR is making satisfactory progress and there is no specific cause for greater withholding and the same is requested by the CONTRACTOR in writing;

14.1.3 When the Work is substantially complete (operational or beneficial occupancy), the withheld amount shall be further reduced below 5 percent to only that amount necessary to assure completion.

14.1.4 The OWNER may reinstate up to 5 percent withholding if the OWNER determines, at its discretion, that the CONTRACTOR is not making satisfactory progress or there is other specific cause for such withholding.

Contractor's Warranty of Title:

14.2 The CONTRACTOR warrants and guarantees that title to all work, materials and equipment covered by an Application for Payment, whether incorporated in the Project or not, will have passed to the OWNER prior to the making of the Application for payment, free and clear of all liens, claims, security interests and encumbrances (hereafter in these General Conditions referred to as "Liens") and that no work, materials or equipment covered by an Application for Payment will have been acquired by the CONTRACTOR or by any other person performing the Work at the Site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the CONTRACTOR or such other person.

Approval of Payments:

14.3 The ENGINEER'S approval of any payment requested in an Application for Payment shall constitute a representation by him to the OWNER, based on the ENGINEER'S on-site observations of the Work in progress as an experienced and qualified design professional and on his review of the Application of Payment and the supporting data, that the Work has progressed to the point indicated; That, to the best of his knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning Project upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and any qualifications stated in his approval), and that the CONTRACTOR is entitled to payment of the amount approved. However, by approving any such payment, the ENGINEER shall not thereby be deemed to have represented that he made exhaustive or continuous on-site observations to check the quality or the quantity of the Work, or that he has reviewed the means, methods, techniques, sequences, and procedures of construction or that he has made any examination to ascertain how or for what purpose the CONTRACTOR has used the moneys paid or to be paid to him on account of the Contract Price, or that title to any Work, materials, or equipment has passed to the OWNER free and clear of any Liens.

14.4 The CONTRACTOR shall make the following certification on each request for payment:

"I hereby certify that the labor and materials listed on this request for payment has been used in the construction of this work or that all materials included in this request for payment and not yet incorporated into the construction are now on the site or stored at an approved location; and payment received from the last request

for payment has been used to make payments to all first-tier subcontractors and suppliers except as listed below."

14.5 The ENGINEER'S approval of final payment shall constitute an additional representation by him to the OWNER that the conditions precedent to the CONTRACTOR'S being entitled to final payment as set forth in paragraph 14.11 have been fulfilled.

14.6 The ENGINEER may refuse to approve the whole or any part of any payment if, in his opinion, he is unable to make such representations to the OWNER. He may also refuse to approve any such payment, because of subsequently discovered evidence or the results of subsequent inspections or tests nullify any such payment previously approved, to such extent as may be necessary in his opinion to protect the OWNER from loss because:

14.6.1 The Work is defective, reasonable doubt exists to the integrity, or completed Work has been damaged requiring correction or replacement,

14.6.2 The Work for which payment is request cannot be verified,

14.6.3 Claims or Liens have been filed or there is reasonable evidence indicating the probable filing thereof,

14.6.4 The Contract Price has been reduced because of Modifications,

14.6.5 The OWNER has been required to correct defective Work or complete the Work in accordance with paragraph 13.1,

14.6.6. Of unsatisfactory prosecution of the Work, including failure to clean up as required by paragraphs 6.29 and 6.30,

14.6.7. Of persistent failure to cooperate with other contractors on the Project and persistent failure to carry out the Work in accordance with the Contract Documents,

14.6.8. Of liquidated damages payable by the CONTRACTOR or,

14.6.9. Of any other violation of, or failure to comply with, the provisions of the Contract Documents.

14.7 Prior to Substantial Completion, the OWNER, with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the Work. Such use shall not constitute and acceptance of such portions of the Work.

14.8 The OWNER shall have the right to enter the premises for the purpose of doing

work not covered by the Contract Documents. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the Work, or restoration of any damaged Work, except such as may be caused by agents or employees of the OWNER.

14.9 Upon completion and acceptance of the Work, the ENGINEER shall issue a certificate attached to the final payment request that the Work has been accepted by him under the conditions of the Contract Documents. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within forty-five (45) days of completion and acceptance of the Work.

14.10 The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the Work. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed, in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the Contract Documents by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

Acceptance of Final Payment as Release:

14.11 When all items of work are completed to the satisfaction of the ENGINEER and the ENGINEER has been advised by the CONTRACTOR that a final inspection is desired, time will be suspended until final inspection is conducted and for an additional 14 calendar days after the CONTRACTOR has been notified in writing of the results of the inspection. If after the end of the 14-day suspension all necessary items of work have not been completed, time changes will resume. If the specified completion date had not been reached at the time the CONTRACTOR called for a final inspection, the calendar day difference between the specified completion date and the date the CONTRACTOR called for a final inspection will be added after the 14-day period before starting liquidated damages. If a project is on liquidated damages at the time a final inspection is scheduled, liquidated damages will be

suspended until the final inspection is conducted and for seven (7) calendar days after the CONTRACTOR has been notified in writing of the results of the inspection. If after the end of the 7-day suspension all necessary items of work have not been completed, liquidated damages will resume. When final inspection has been made by the ENGINEER and all items of work have been completed, the daily time charge will cease.

14.12 The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this Work and for every act and neglect of the OWNER and others relating to or arising out of this Work. Any payment however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the Contract Documents or the Performance Bond and Payment Bonds.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION:

Owner May Suspend Work:

15.1 The OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to the CONTRACTOR and the ENGINEER which shall fix the date on which Work shall be resumed. The CONTRACTOR will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if he makes a claim therefore as provided in Articles 11 and 12.

Work During Inclement Weather:

15.2 No Work shall be done under these Specifications except by permission of the OWNER when the weather is unfitting for good and careful work to be performed. Should the severity of the weather continue, the CONTRACTOR, upon the direction of the OWNER, shall suspend all work until instructed to resume operations by the OWNER and the Contract Time shall be extended to cover the duration of the order. Work damaged during periods of suspension due to inclement weather shall be repaired and/or replaced by the CONTRACTOR. Any compensation for repairs or replacements shall be subject to approval of the OWNER.

Owner May Terminate:

15.3 If the CONTRACTOR is adjudged bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property; or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable

materials or equipment, or if he repeatedly fails to make prompt payments to Subcontractors or for labor, materials or equipment or he disregards laws, ordinances, rules regulations or orders of any public body having jurisdiction, or if he disregards the authority of the ENGINEER, or if he otherwise violates any provision of the Contract Documents, then the OWNER may without prejudice to any other right or remedy and after giving the CONTRACTOR and his surety seven days written notice, terminate the services of the CONTRACTOR and take possession of the Project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the Work by whatever method he may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Project, including compensation for additional professional services, such excess shall be paid to the CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR or the Surety will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a Change Order.

15.4 Where the CONTRACTOR'S services have been so terminated by the OWNER, said terminations shall not affect any rights of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys by the OWNER due the CONTRACTOR will not release the CONTRACTOR from liability.

15.5 Upon seven days written notice to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Project and terminate the Agreement. In such case, the CONTRACTOR shall be paid for all Work executed and any expense sustained plus a reasonable profit.

Removal of Equipment:

15.6 In the case of termination of this Contract before completion, for any cause whatever, the CONTRACTOR if notified to do so by the OWNER, shall promptly remove any part or all of his equipment and supplies from the property of the OWNER. Should the CONTRACTOR not remove such equipment and supplies, the OWNER shall have the right to remove them at the expense of the CONTRACTOR. Equipment and supplies shall not be construed to include such items for which the CONTRACTOR has been paid in whole or in part.

Contractor May Stop Work or Terminate:

15.7 If, through no act or fault of the CONTRACTOR, the Work is suspended for a period of more than ninety (90) days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any Application for Payment within sixty (60) days after it is submitted, or the OWNER fails to pay the CONTRACTOR any sum approved by the ENGINEER or awarded by court ruling within forty-five (45) days of its approval and presentation, then the CONTRACTOR may, upon seven (7) days written notice to the OWNER and the ENGINEER, and if the OWNER or ENGINEER fails to reasonably respond in writing, terminate the Agreement and recover from the OWNER payment for all Work executed and any expense sustained plus a reasonable profit. In addition, and in lieu of terminating the Agreement, if the ENGINEER has failed to act on an Application for Payment or the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon seven (7) days' notice to the OWNER and the ENGINEER stop the Work until he has been paid all amounts then due.

Owner Furnished Equipment:

15.8 In case the OWNER furnishes equipment to the CONTRACTOR to install but fails to deliver it to the CONTRACTOR as required and in case such failure causes the CONTRACTOR additional expense or need for extension of time, the CONTRACTOR may make such claims upon the OWNER and obtain adjustments as provided herein.

Liquidated Damages:

15.9 If the CONTRACTOR shall fail to complete the work within the contract time, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the Contract Documents for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the Contract Documents.

ARTICLE 16 - DISPUTE SETTLEMENT:

16.1 All claims, disputes and other matters in question arising out of, or relating to, this Agreement or the breach thereof except for claims which have been waived by the making or acceptance of final payment as provided by paragraph 14.11, shall be decided in a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS:

17.1 Whenever any provision of the Contract Documents requires the giving of written notice it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to him who gives the notice.

17.2 If the OWNER fails to make payment forty-five (45) days after payment is due, in addition to other remedies available to the CONTRACTOR, there shall be added to each such progress payment, interest at 1% per month commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

17.3 All Specifications, Drawings and copies thereof furnished by the ENGINEER shall remain his property. They shall not be used on another Project, and, with the exception of those sets which have been signed in connection with the execution of the Agreement, shall be returned to him on request upon completion of the Project.

17.4 The duties and obligations imposed by these General Conditions, and the rights and remedies available hereunder, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.36 and 14.3 and the rights and remedies available to OWNER and ENGINEER there under, shall be in addition to, and shall not be construed in any way as a limitation of, any rights and remedies available by law, by special guarantee or by other provisions of the CONTRACT DOCUMENTS.

17.5 Should the OWNER or the CONTRACTOR suffer injury or damage to its person or property because of any error, omission or act of the other or of any of his employee or agents or others for whose acts he is legally liable, claim shall be made in writing to the other party within a reasonable time of the first observance of such injury or damage.

17.6 The CONTRACT DOCUMENTS shall be governed by the law of the place of the Project.

Progress Charts and Requirements for Overtime Work

17.7 The CONTRACTOR shall within 5 days or within such time as determined by the OWNER after date of commencement of work prepare and submit to the OWNER for approval a practicable schedule, showing the order in which, the CONTRACTOR proposes to carry on the work, the date on which he will start the several salient features (including procurement of materials, plans and equipment) and the contemplated dates for completing the same. The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion at any time. The CONTRACTOR shall enter on the chart the actual progress at such intervals as directed by the OWNER and shall immediately deliver to the OWNER three (3) copies thereof. If the CONTRACTOR fails to submit a progress schedule within the time herein prescribed, the owner may withhold approval of progress payment estimates until such time as the CONTRACTOR submits the required progress schedule.

17.8 If, in the opinion of the OWNER, the CONTRACTOR falls behind the progress schedule, the CONTRACTOR shall take such steps as may be necessary to improve his progress and the OWNER may require him to increase the number of shifts, or overtime operations, days of work, or the amount of construction plant, or update the progress schedule to reflect increased production for meeting the completion date, or all of them, and to submit for approval such supplementary schedule or schedules in chart form as may be deemed necessary to demonstrate the manner in which the agreed rate of progress will be regained, all without additional cost to the OWNER.

17.9 Failure of the CONTRACTOR to comply with the requirements of the OWNER under this provision shall be grounds for determination by the OWNER that the CONTRACTOR is not prosecuting the work with such diligence as will insure completion within the time specified. Upon such determination the OWNER may terminate the CONTRACTOR'S right to proceed with the work or any separable part thereof in accordance with the clause of the contract entitled, "Termination for Default-Damages for Delay - Time Extensions.

17.10 Should the Contractor fail to complete the work within the specified time, or within any extra time allowed under these specifications, a sum of money, determined by the following schedule, shall be deducted from any funds due the Contractor, the Owner shall have the right recover the said sum or sums from the Contractor or from the surety, or from both. The amounts of these deductions are to cover the liquidated damages to the Owner incurred by additional or other expenses due to the failure of the Contractor to complete the work or any part of the work within the time specified, and such deductions are not to be considered penalties.

17.11 The damages indicated above shall be considered as liquidated damages for the loss to the OWNER on account of the expense due to the employment of Engineers and their assistants and to any others expenses incurred after the expiration of the Contract time as determined by the ENGINEER in section 14.11

17.12 Work requiring the presence or services of the ENGINEER, based-solely on the opinion of the ENGINEER, will not be permitted on Sunday or holidays observed by the State unless the ENGINEER determines that an emergency or necessity exists. Work on these days solely to complete the project within the contract time will not be considered a necessity or emergency.

17.13 The ENGINEER will prepare and submit to the CONTRACTOR one (1) preliminary punch list of items that do not meet the contract requirements after the final inspection and one (1) final punch list immediately before final completion and final payment.

SUPPLEMENTAL GENERAL CONDITIONS

ARTICLE 1 - SPECIAL CONDITIONS

SCOPE AND INTENT

Special conditions shall prevail over General Conditions in case of conflict. The Contractor shall furnish all labor, materials, equipment (including fuel), tools, appliances, transportation and perform all operations in connection with the construction of, alterations to, or repair of, the building, including utilities, complete, in strict accordance with the specifications and the plans governing the construction of, alterations to, or repair of, the project.

EXAMINATION OF PREMISES

Before submitting a proposal for his work, each bidder shall be held responsible to have examined the site and satisfied himself as to the conditions under which work is to be performed.

PERMITS, TAXES, AND ORDINANCES

The Contractor shall pay for all required permits, give legal notices, and pay taxes and assessments levied in connection with this contract. Building regulations shall be strictly adhered to and the contractor shall be responsible for knowledge thereof.

INSURANCES, ETC.

In addition to the requirements of the General Conditions, insurance coverage specified herein constitutes the minimum requirements and said requirements shall in no way lessen or limit the liability of the **CONTRACTOR** under the terms of the Contract. The **CONTRACTOR** shall procure and maintain at his own expense any additional kinds and amounts of insurance that, in his own judgment, may be necessary for his proper protection in the prosecution of the Work.

The **CONTRACTOR** shall carry insurance as prescribed herein and all policies shall be with companies satisfactory to the **OWNER**.

If a part of this Contract is sublet, the **CONTRACTOR** shall require each Subcontractor to carry insurance of the same kinds and in like amounts as carried by the **CONTRACTOR**. Certificates of insurance shall state that 30 days written notice will be given to the **OWNER** before the policy is canceled or changed. No **CONTRACTOR** or Subcontractor will be allowed to start any construction work on this Contract until certificates of all insurance required herein are filed and approved by the **OWNER**. The certificates shall show the type, amount, class of operations covered, effective dates and the dates of expiration of policies.

The **CONTRACTOR** shall secure and maintain in effect for the period of the Contract and pay all premiums for the following kinds and amounts of insurance.

A. **Workers' Compensation and Employer's Liability Insurance**

This insurance shall protect the **CONTRACTOR** against all claims under applicable State Worker's Compensation Laws. The **CONTRACTOR** shall also be protected and shall cause each Subcontractor to be protected against claims for injury, disease, or death of employees which, for any reason, may not fall

within the provisions of a Worker's Compensation Law. The liability limits shall not be less than the required statutory limits for Worker's Compensation and Employer's Liability or the amount of ONE HUNDRED THOUSAND DOLLARS (\$100,000.00) for each person whichever is more. This policy shall include an all states endorsement.

B. **CONTRACTOR'S Comprehensive Public Liability and Property Damage Insurance**, covering all operations in connection with the performance of this Contract in amounts not less than the following:

Bodily injury liability in the amount of FIVE HUNDRED THOUSAND DOLLARS (\$500,000) for each person and ONE MILLION DOLLARS (\$1,000,000) for each accident and property damage liability in the amount of TWO HUNDRED FIFTY THOUSAND DOLLARS (\$250,000) for all damages arising out of the injury or destruction of property in any one accident and subject to that limit per accident a total for aggregate limit of FIVE HUNDRED THOUSAND DOLLARS (\$500,000) for all damages arising out of injury to or destruction of property during the policy period.

The Comprehensive Public Liability and Property Damage policies carried by both the **CONTRACTOR** and the Subcontractors shall contain an endorsement to include the coverage of the following hazards:

- a. Explosion, collapse, and underground property damage to include any damage or destruction of property below the surface of the ground, such as wires, conduits, pipes, mains, sewers, etc., caused by the **CONTRACTOR'S** operations.
- b. The collapse of and structural injury to any building, structure or property on or adjacent to the **OWNER'S** premises or right-of-way caused by the **CONTRACTOR'S** operations in the removal of other buildings, structures, or supports, or by excavation below the surface of the ground.
- c. Contractual Liability Coverage for the Hold Harmless segments of the Contract Documents.

C. **CONTRACTOR'S Contingent or Protective Liability and Property Damage:**

In case part of this Contract is sublet, the **CONTRACTOR** shall secure contingent or protective liability and property damage insurance to protect him from any and all claims arising from the operation of his Subcontractors in the execution of Work included in the Contract. In no case shall the amount of such protection be less than the limits of \$500,000/\$1,000,000 for Public Liability Insurance and \$500,000/\$1,000,000 for Property Damage Insurance. The coverage in each case shall be acceptable to the **OWNER**.

D. Automotive Public Liability and Property Damage

The **CONTRACTOR** shall maintain automobile public liability insurance in the amount of not less than FIVE HUNDRED THOUSAND DOLLARS (\$500,000) for injury to one person and ONE MILLION DOLLARS (\$1,000,000) for one accident; and automobile property damage insurance in the amount of not less than FIVE HUNDRED THOUSAND DOLLARS (\$500,000) for one accident to protect him from any and all claims arising from the use of the following:

- a. **CONTRACTOR'S** own automobiles and trucks.
- b. Hired automobiles and trucks.
- c. Automobiles and trucks owned by Subcontractors.

The aforementioned is to cover use of automobiles and trucks on and off the site of the Project.

E. OWNER'S Protective Liability Policy

The **CONTRACTOR** shall maintain **OWNER'S** Protective Liability Insurance with the **OWNER** as the named insured, and the **ENGINEER**, and their servants, agents and employees as additional insureds in amounts not less than the following:

- a. Bodily Injury in the amount of ONE MILLION DOLLARS (\$1,000,000) for each person and ONE MILLION DOLLARS (\$1,000,000) for each accident and property damage liability in the amount of FIVE HUNDRED THOUSAND DOLLARS (\$500,000) for all damages arising out of an injury or destruction of property in any one accident and subject to that limit per accident a total (or aggregate) limit of ONE MILLION DOLLARS (\$1,000,000) for all damages arising out of injury to or destruction of property during the policy period.

CLEANING UP

The **CONTRACTOR** shall, at all times, keep the premises free from accumulations of waste materials and at the completion of the work, be shall remove all his rubbish, tools, temporary buildings, etc. from and about the site and shall leave his work "broom" clean unless more exactly specified elsewhere. All glass shall be washed and left free from stains of any nature.

ARTICLE 2 - SPECIAL INSTRUCTIONS

LIMITATIONS

During construction, care is to be taken to prevent damage to the work in place. As soon as work is completed, all work is to be thoroughly cleaned. Before completion, all damaged work is to be repaired and left in perfect condition. The CONTRACTOR will be responsible for all clean up of the premises. All trash, etc. will be hauled away from the site, and the site left in a clean and neat condition. Alcoholic beverages of any type will not be permitted on job site.

PRODUCT/MATERIALS SUBSTITUTION

CONTRACTOR will submit prior to starting work on project any changes to materials specified. CONTRACTOR will submit all specification data, company name, and supplier of material that he wishes to substitute. All material will be evaluated. CONTRACTOR will be given approval/disapproval by OWNER. No substitutes will be taken into consideration after work has begun, no substitutes will be allowed if CONTRACTOR does not submit specification data within time allowed.

INSPECTION

All work covered by these specifications shall be subject to inspection by OWNER or his authorized representative. CONTRACTOR will coordinate with OWNER for inspections as required during construction and furnish to the OWNER in writing a project schedule prior to mobilization of work at the job site.

SPECIFICATIONS AND DRAWINGS ARE RECIPROCAL

The specifications and drawings are intended mutually to explain each other and anything which is referred to in the specifications and not shown on the drawings shall be considered as being shown and mentioned and referred to in both of these documents. Such work shall be done and performed accordingly. Any drawing attached to this specification form is an integral part thereof and where such drawings, if any, differ from these specifications, the specifications shall govern.

AS-BUILT DRAWINGS

Occasionally, during the course of construction, modifications and changes may occur due to site conditions, unforeseen circumstances and problems encountered. This may result in a modification of construction as originally depicted on drawings. Contractor will furnish the OWNER a marked-up set of prints in red line of all changes and/or modifications that pertain to this contract. Drawings will be labeled. "AS-BUILT DRAWINGS".

ARTICLE 3 - GUARANTEES, WARRANTIES AND BONDS

1. All work will be guaranteed by the CONTRACTOR for a period of one (1) year from the date of substantial completion.
2. Wording for the notarized guarantee shall be as follows:
"We hereby guarantee all work performed by us on the above captioned project to be free from defective materials and workmanship for a period of one (1) year, or such longer period of time as may be called for in the Contract Documents for such portions of the work."

3. **Guarantee Compliance:**

Except as otherwise specified, all work shall be guaranteed by the CONTRACTOR and through him each sub-contractor against defects resulting from the use of inferior materials, equipment or workmanship for one (1) year from the date of substantial completion of the Contract. In case of work performed by his sub-contractors, the CONTRACTOR shall secure warranties from said sub-contractors and deliver copies of the same to the OWNER upon completion of the work. If, within any guarantee period, repairs or changes are required in connection with guaranteed work which, in the OWNER'S opinion, are rendered necessary as the result of use of materials, equipment or workmanship which are inferior, defective or not in accordance with terms of the Contract: CONTRACTOR shall promptly upon receipt of OWNER'S written notice, and without expense of the OWNER;

- a. Place in satisfactory condition in every particular all such guaranteed work, correct all defects therein.
- b. Make good all damage to the building, site, equipment or building contents which in the OWNER'S opinion is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with terms of the Contract.
- c. Make good any work or material or the equipment and contents of building or site disturbed in fulfilling such guarantee.

In any case where fulfilling the requirements of the Contract, or any guarantee embraced in or required thereby, the CONTRACTOR disturbs any work guaranteed under another's Contract, he shall restore such disturbed work to condition satisfactory to the OWNER and guarantee such restored work to the same extent as it was guaranteed under such other contract. If the CONTRACTOR, after notice, fails to proceed promptly to comply with terms of the guarantee, the OWNER may have the defects corrected and the CONTRACTOR and his surety shall be liable for all expense incurred. All special guarantees applicable to definite parts of the work that may be stipulated in the specification or other Contract Documents shall be subject to the terms of this Specification Section during the first year of the life of such special guarantees. All guarantees and warranties shall be obtained in the OWNER'S name and evidence thereof shall be promptly delivered to the OWNER'S Representative for transfer to the OWNER.

ARTICLE 4 - CLOSE-OUT DOCUMENTS

In general documents for close out, to be submitted by the CONTRACTOR to the OWNER, prior to final payment, shall be; but not limited to the following:

1. APPLICATION FOR PAYMENT: AIA Document G-702
2. CERTIFICATE OF SUBSTANTIAL COMPLETION: AIA Document G-704
3. CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS:
AIA Documents G-706 and G-706A: The Contractor shall furnish these AIA Documents complete with attached notarized full release of liens, damages, and a guarantee that all materials and labor are paid in accordance with Contract Documents with the following wording:

"WE HEREBY CERTIFY THAT ALL BILLS FOR LABOR AND MATERIALS

INCORPORATED INTO THE ABOVE CAPTIONED PROJECT UNDER OUR CONTRACT HAVE BEEN PAID AND THAT THE OWNER IS RELEASED FROM ANY AND ALL CLAIMS AND/OR DAMAGES UNDER THIS CONTRACT."

4. CONSENT OF SURETY COMPANY TO FINAL PAYMENT: AIA Document G-707
To be completed in full by the Bonding Company.
5. CONTRACTOR'S NOTARIZED STATEMENT:
Notarized statement that project has been constructed in accordance with Contract Documents.
6. CONTRACTOR'S NOTARIZED STATEMENT OF GUARANTEE/S:
All work will be guaranteed by the Contractor for a period of one (1) year from the date of substantial completion. Wording will be as follows:
"WE HEREBY GUARANTEE ALL WORK PERFORMED BY US ON ABOVE CAPTIONED PROJECT TO BE FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR, OR SUCH LONGER PERIOD OF TIME AS MAY BE CALLED FOR IN THE CONTRACT DOCUMENTS FOR SUCH PORTIONS OF THE WORK."
In the case of work performed by his sub-contractors, the Contractor shall secure warranties from said sub-contractors and deliver copies of same to the Owner upon completion of work.
7. OPERATING AND MAINTENANCE MANUALS:
All manufacturer's operating instructions and maintenance manuals will be compiled in a tabbed and labeled 3-ring binder. (Furnish Owner with two (2) sets).
8. FORM W-9, PAYER'S REQUEST FOR TAXPAYER IDENTIFICATION NUMBER AND CERTIFICATION (IRS):
Form W-9 is to be completed by non-corporation contractors. Non-applicable if Contractor's firm is Incorporated.
9. FINAL CLEANING:
At close out time clean and re-clean entire work to normal level for "FIRST CLASS" maintenance/cleaning.

MEASUREMENT AND PAYMENT

Measurement and payment for the following bid items shall be as described and shall include all material equipment, labor and testing to install and make operational a complete aircraft hangar door as detailed on the contract drawings and in these specifications.

MOBILIZATION

Mobilization shall be part of the project to mobile equipment to the site with the inclusion of any preliminary items including taxes, bonds, etc. The item shall be paid at 50% upon commencement of the project and the remaining 50% shall be due upon commencement of actual construction. The item shall be Lump Sum.

REMOVAL OF EXISTING 18X80 DOOR

Payment for Removal of Existing 18x80 Door shall include removal of the existing hydraulic door. Removal shall include the removal of the door, hinges, hydraulic system and any part of the hydraulic door system. The materials from the removal process shall become the property of the contractor and the contractor shall be responsible for disposal of the materials off site. The contractor shall assume full responsibility for the removal process and any damage as a result of the removal shall be corrected fully and the owner shall bear no financial or other responsibility. Payment shall be Lump Sum.

INSTALLATION & MODIFICATION OF EXISTING BUILDING

Payment for Installation & Modification of Existing Building shall include furnishing and installing all components necessary for accommodation of the proposed stack door system. This shall include painting of any surfaces scratched from the hydraulic door system, installation of steel framing, metal building flashing, concrete modification for door track system and other items necessary for accommodation of the stack door system. Item shall include forming, materials, placement, finishing, labor and equipment necessary to meet the plans and specifications. Payment shall be Lump Sum.

INSTALLATION OF NEW DOOR

Payment for Installation of New Door shall include furnishing and installing of an approximately 18x80 stack door system. Item shall include all materials, labor and equipment necessary to install the stack door system including hinges, trolleys, panels, etc to produce a fully functional stack door system. Payment shall be Lump Sum.

TECHNICAL SPECIFICATIONS

1. Applicable Specifications

The Technical Specifications entitled Mississippi Standard Specifications for Road and Bridge Construction, 2017 Edition, shall be the specifications applicable to this project except as for herein specified. Any testing required by those specifications for material submittal and approval shall be the responsibility of the CONTRACTOR. The testing laboratory used by the CONTRACTOR shall be a laboratory certified by the Mississippi Department of Transportation and shall be approved by the ENGINEER. Any reference to Unit Item for pay shall be modified and paid based on the Pay Items included in the proposal of the specifications.

2. References Amended to Mean Engineer

Any reference in the above-mentioned specifications to Commission, Director, Chief Engineer, Testing Engineer, or Project Engineer shall be amended in these specifications to mean the ENGINEER, or his duly authorized representative, of the City of Hattiesburg.

CONCRETE WORK

GENERAL

1.1 General contractor shall furnish all labor, materials, and equipment required for all concrete work called for on the drawings, as herein specified or as otherwise required for a complete job.

MATERIALS

2.1 Cement - Portland Cement, ASTM C-150, Type I.

2.2 Aggregate - ASTM C-33 with maximum size of 1".

2.3 Forms - for exposed concrete surfaces shall be $\frac{3}{4}$ " exterior plywood, "Plyform," undamaged, supported on studs or joists.

2.4 Water - from utility lines.

2.5 Hardener - "Lapidolith" manufactured by Sonneborn, "Demicon" manufactured by Hausman, "Saniseal 50" manufactured by Master Builders, or approved equal.

2.6 Form Oil - "nox-crete" or approved equal

2.7 Engineer shall have free access to all materials used, and the required samples are to be furnished by the Contractor as required.

LABORATORY TESTS AND CONTROL

3.1 The Contractor shall obtain and pay for the services of a testing laboratory, approved by the Engineer, to furnish the following: Tests on cement and aggregate, design and control of mixes, casting and testing of concrete cylinders and furnishing reports of all tests.

3.2 The required tests on cement and aggregates are covered by ASTM C-150 and C-33 respectively.

3.3 Design mix to be established to provide concrete of 10% higher strength than the specified job strength, and the proposed mix is to be submitted to the Engineer for review and approval prior to use on the job. Laboratory cylinders are to be made according to ASTM C-192 and compression tests according to ASTM C-39, using representative materials. Control of mixes is to be maintained at the ready-mix plant and on the job. When the mix is approved by the laboratory, no change shall be made without the written consent of the Engineer.

3.4 Cylinders are to be cast on the job according to ASTM C-31 and laboratory compression tests will follow ASTM C-39. For each pour, two cylinders will be cured in the laboratory. One cylinder will be tested at 7 days and the other at 28 days. Results from the cylinders will determine compliance with specifications.

3.5 Copies of all test reports shall be furnished as directed by the Engineer.

CONSTRUCTION

4.1 Forms

- A. Forms shall be properly aligned, adequately braced and mortar tight to produce concrete shapes required by the drawings. Forms shall be aligned so that the actual surface does not vary from true surfaces by more than $\frac{1}{8}$ ". The surface shall be clear, undamaged, and free of offsets and irregularities at the joints. Bracing and framing shall be fully adequate to retain true shapes under vibration and placing strains without leaks, bowing or deflection.
- B. Forms shall be lightly oiled prior to placing reinforcing. Oil will not be permitted on reinforcing.

4.2 Proportioning And Mixing

- A. All concrete shall have 4,000 psi strength at 28 days.
- B. Mixes shall be controlled as follows:
 - 4,000 - At least 5.5 sacks of cement per cubic yard and not over 7 gallons of water per sack. Slump 3-5 inches.
- C. Ready-mixed concrete shall be used and shall be mixed and delivered according to requirements of ASTM C-94. Proportions shall be by weight and shall be uniformly and accurately controlled.

4.3 Placing Concrete

- A. Concrete shall be placed so as to avoid segregation of materials and to prevent cold joints by avoiding rehandling, by keeping pours generally level, and by adequate vibration.
- B. Placing is not to be started during rain or snow, and if placing is underway when such conditions occur, continue operation only long enough to provide a suitable construction joint.
- C. During hot weather or periods of low humidity combined with a definite breeze, rapid loss of moisture shall be discouraged by thorough wetting of forms and by using a fine fog spray when finishing. At these times particular attention shall be given to providing an adequate number of finishers to expedite this operation.
- D. During cold weather fresh concrete shall be protected from freezing.

4.4 Construction Joints: Construction joints in slabs on grade in the building shall be as shown on the plans and concrete shall be allowed to set for 24 hours before an adjoining pour is started. Slabs across the joint shall be level and the surface shall not be feathered.

4.5 Finishes: Exterior paving shall receive a light brush finish after troweling, as directed by the Engineer. Provide joints as shown on the drawings, or as directed by the Engineer.

4.6 Curing: All concrete is to be kept moist for three (3) days after placing by covering with 4

mil Visquene, by leaving forms in place, or by covering with sand or burlap combined with regular wettings.

4.7 Replacement of Faulty Work: Concrete finish will be emphasized, and levels and grades will be checked. Any concrete placed and/or finished that does not meet specifications insofar as strength, grade, slope or finish shall be replaced as directed by the Engineer.

END OF SECTION

METAL HANGAR BUILDING

DESCRIPTION

1.1 The intent of these specifications is to cover the materials and the fabrication of a metal hangar door, which shall be designed by the manufacturer and erected by the Contractor in accordance with these specifications.

1.2 The Contractor shall furnish all materials, labor and tools to construct pre-engineered a metal building which shall include the structural framing, roof panels, braces, fasteners, valley gutters, flashing, anchor bolts and all items imbedded in concrete. The manufacturer shall be regularly engaged in the fabrication of pre-engineered metal buildings.

1.3 The building is of a clear span H-Section frame design.

1.4 Shop Drawings shall be submitted by the low bidder to the Engineer prior to award of the contract. No steel shall be ordered until the erection diagrams have been approved by the Engineer.

ABBREVIATIONS

2.1 The abbreviations listed below shall mean:

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

ASTM American Society for Testing and Materials

AWS American Welding Society

BOCA Building Officials & Code Administrators Intl., Inc.

MBMA Metal Building Manufacturers Association

IBC International Building Code

UBC Uniform Building Code

CODES AND STANDARDS

3.1 The following codes and standards shall apply to the extent indicated herein:

AISC Steel Construction Manual (Eighth Edition)

AISI	Cold-Formed Steel Design Manual (1986 Ed.)
AWS D1.1	Structural Welding Code (1983)
FS TT-P	Federal Specification for Primer Coating. 664C
BOCA	Building Officials & Code Administrators Intl., Inc. (1984 or 1987 Edition)
MBMA	Metal Building Systems Code of Standard Practice (1986 Edition)
IBC	International Building Code (2006 Edition)
UBC	Uniform Building Code (1985 or 1988 Edition)

DESIGN REQUIREMENTS

4.1 Building Structures

4.1.2 Design of structural steel sections and welded plate members shall be based upon the applicable specifications of AISC Specifications for the Design, Fabrication, and Erection of Structural Steel for Buildings as determined by the manufacturer.

4.1.3 Light-gage, cold-formed structural members and exterior coverings shall be designed based upon the applicable sections of AISI Specifications for the Design of Cold-Formed Steel Structural Members as determined by the manufacturer.

4.1.4 The design of primary and secondary structural framing as well as wall covering shall be per manufacturer's standard and shall be based upon the provisions of the specified code.

The primary and secondary structural framing as well as wall covering shall be designed for all applicable loads and combinations of these loads as set forth in the 1986 Edition of the MBMA Recommended Design Practices Manual.

4.1.5 Vertical wall bracing shall be round rods or angle bracing as determined by the building manufacturer. Bracing shall be located such that it does not interfere with window or door openings. In walls where cross bracing interferes with openings, portal braces or portal frames may be used.

4.1.6 Design Loads

- a. In accordance with IBC 2006 Edition
- b. Use Category: 1 (General Use)
- c. Wind Speed: 110 mph

4.1.7 Hangar Door: A stack door shall be mounted flush to the building, with an unobstructed clear opening. The door side columns and header shall be designed to withstand the forces from the stack door as the door opens and in all positions.

4.1.8 Exhaust Fan: N/A

4.1.9 Connections: Field connections, made with high strength bolts, shall be made in accordance with the AISC Specification for Structural Joints Using ASTM A325 or A490 bolts. Recommended method of installation: "Turn-of-Nut" method.

4.2 Metal Siding and Roofing

4.2.1 Metal siding shall be designed for loads in accordance with the specified code.

4.2.2 All metal siding shall be designed, fabricated and erected to withstand the loading conditions without loss of weathertightness, without permanent distortion and without damage to any part of the installation.

MATERIALS

5.1 Structural

5.1.1 Structural steel shall generally conform to ASTM A529, ASTM A572, and/or ASTM A36.

5.1.2 Cold-formed structural steel shall generally conform to ASTM A570 or A607 and shall have a minimum yield strength of 50 KSI.

5.1.3 **Bolts:** Bolts and nuts shall conform to ASTM A325 for high strength bolts, and ASTM A307 for common bolts.

5.1.4 **Frames:** Frames shall be a clear span H-section.

5.2. Metal Siding

5.2.1 **Flashing and Trim:** Exposed flashing and trim shall be minimum 26 gauge and shall be of the same finish as the walls. Trim colors shall be as selected from the manufacturer's standard colors.

5.2.2 **Fasteners:** Fasteners shall be self-drilling structural fasteners for panel to secondary connections. Panel to panel connections shall be self-tapping screws. Wall fasteners shall have colored heads to match the colors of the material fastened.

5.2.3 **Sealants, Mastics and Closures:**

- a. Tube sealant shall be a synthetic elastomer based material which becomes tack-free in less than 2 hours at 75 deg. F. but remain flexible. Service range shall be -30°F to 160°F.
- b. Tape mastic shall be preformed butyl rubber based compound. Service range shall be -30°F to 160°F.
- c. Panel closures shall be Ethylene-Propylene-Diene-Monomer or equivalent closed cell strips formed to match panel configuration.

Sealants, mastics and closures shall be applied in strict accordance with the manufacturer's drawings.

FABRICATION

6.1 Steel fabricators shall have been engaged in steel fabrication for the past 10 years, and shall have ICBO approval as a steel fabricator.

6.2 Fabrication shall be based on approved drawings in accordance with AISC Code of Standard Practice.

6.3 All steel members shall be prefabricated into subassemblies of the largest practical size suitable for transportation, handling and field erection. Field cutting, welding and drilling shall be kept to the minimum.

6.4 Light gage cold formed sections shall be manufactured by precision roll or brake forming.

6.5 Structural steel shall be detailed and fabricated in accordance with the MBMA Code of Standard Practice.

6.6 The detailing and fabrication of anchor bolt assemblies shall be in accordance with AISC.

6.7 All welders shall be AWS Certified in the positions and type of welding they will be performing during fabrication.

ASSEMBLY

7.1 **General:** Erection shall be done by a contractor who has a minimum of 5 years experience in the erection of pre-engineered buildings. The building shall be erected in accordance with the MBMA Code of Standard Practice and the manufacturer's erection drawings and instructions.

Field modifications will not be made to any primary structural member except as authorized and specified by the building manufacturer.

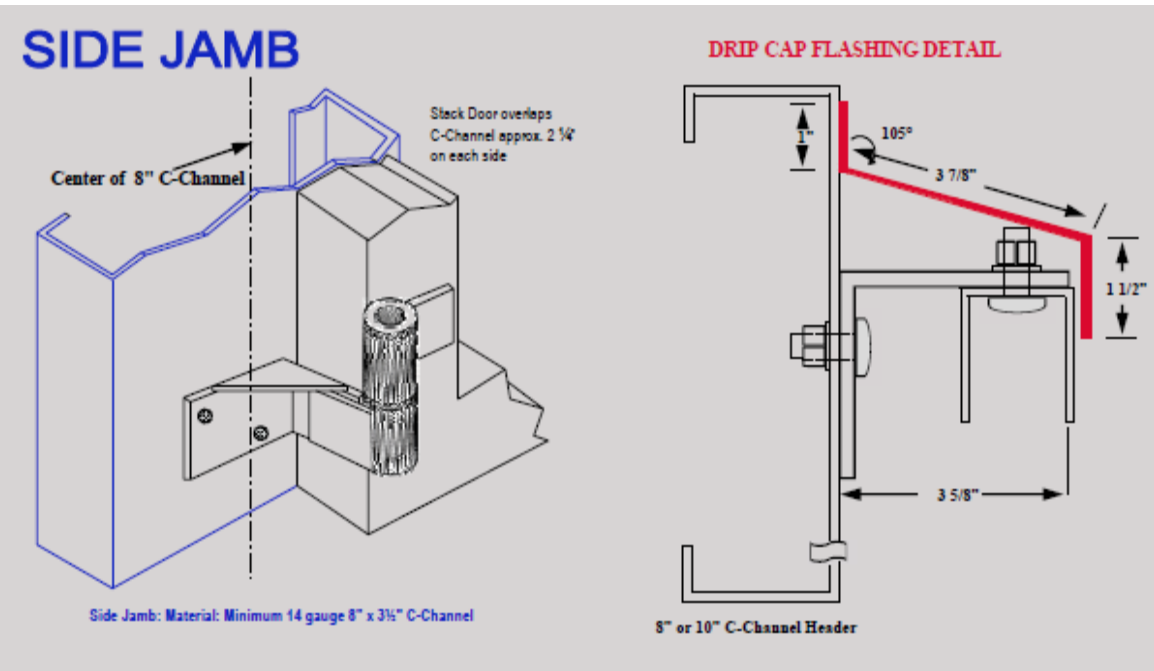
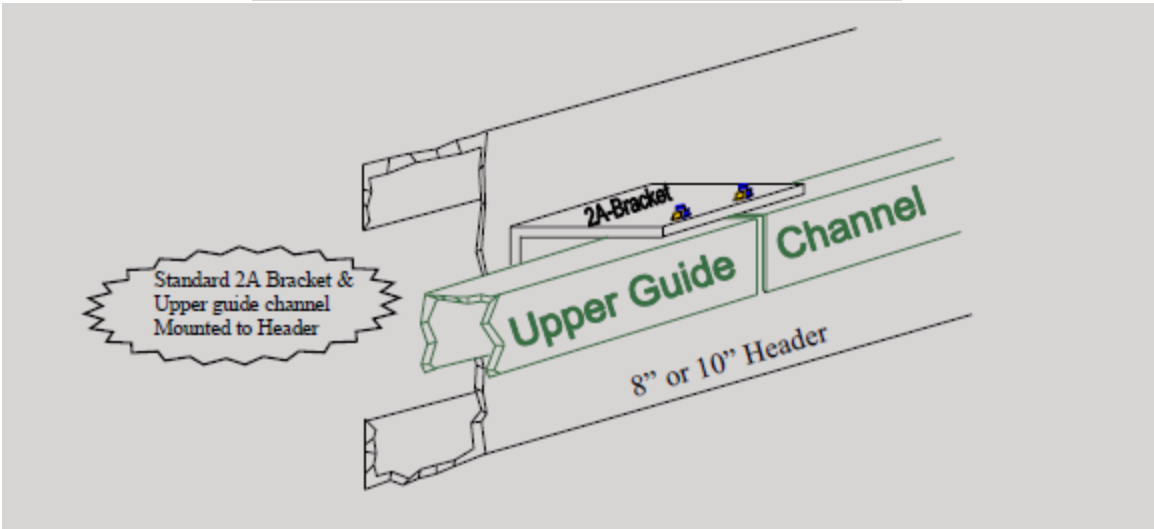
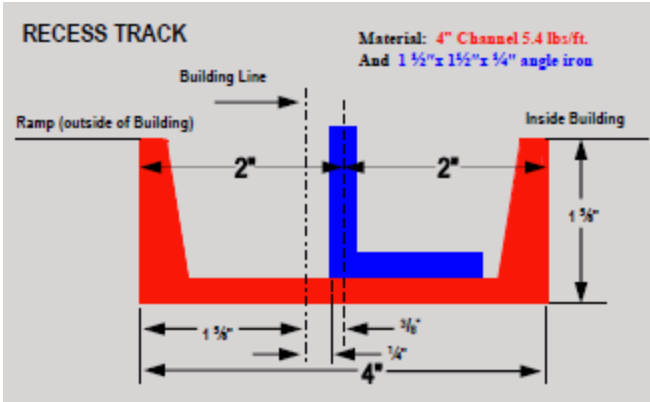
7.2 Touch-up Painting

7.2.1 Structural steel connections and all areas damaged subsequent to shop painting shall be repaired, cleaned, and touch-up painted, prior to roofing/siding installation.

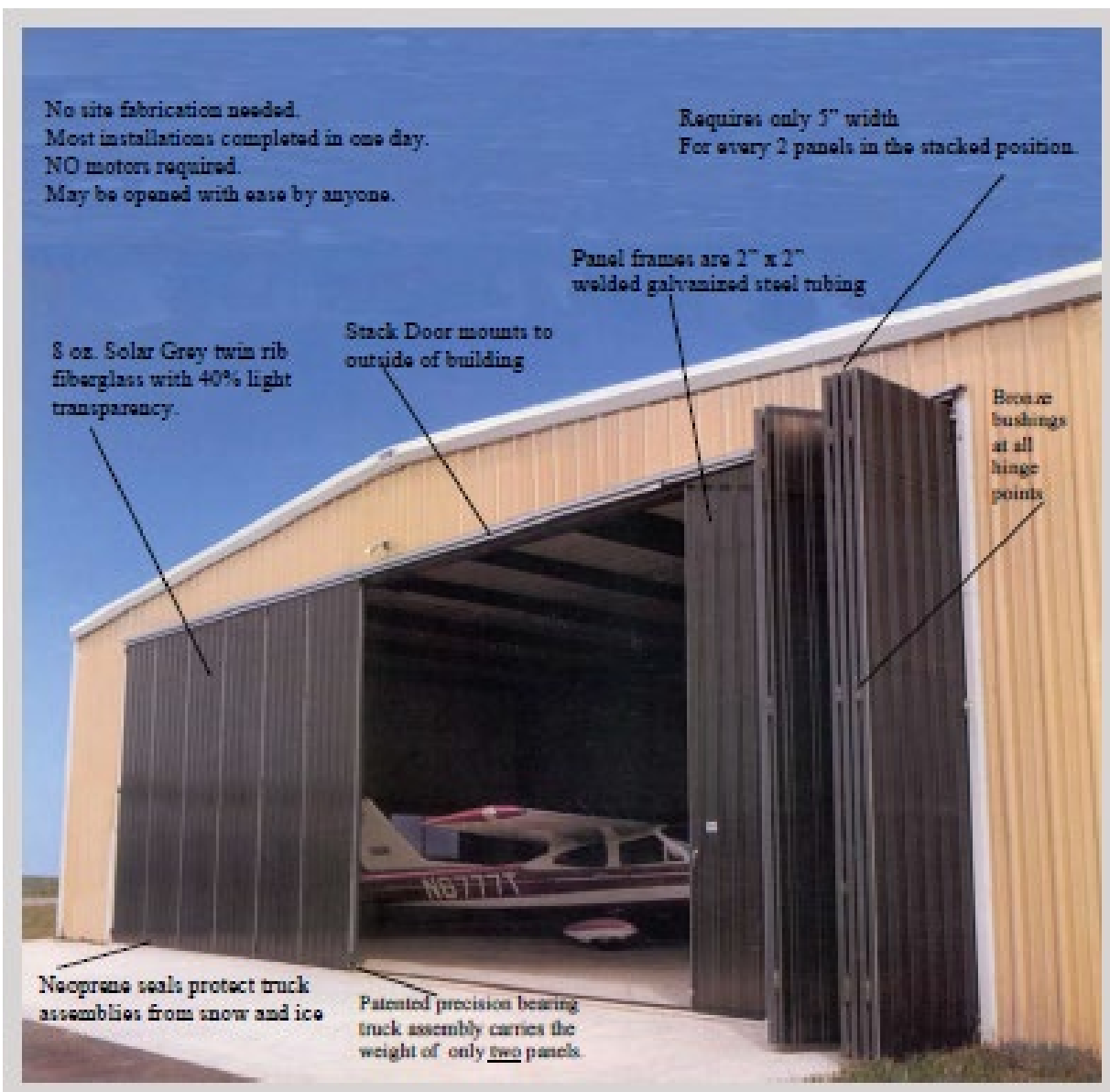
7.2.2 Damaged or stained areas of roofing, siding, and accessories shall be touched up with the manufacturer's current published instructions.

END OF SECTION

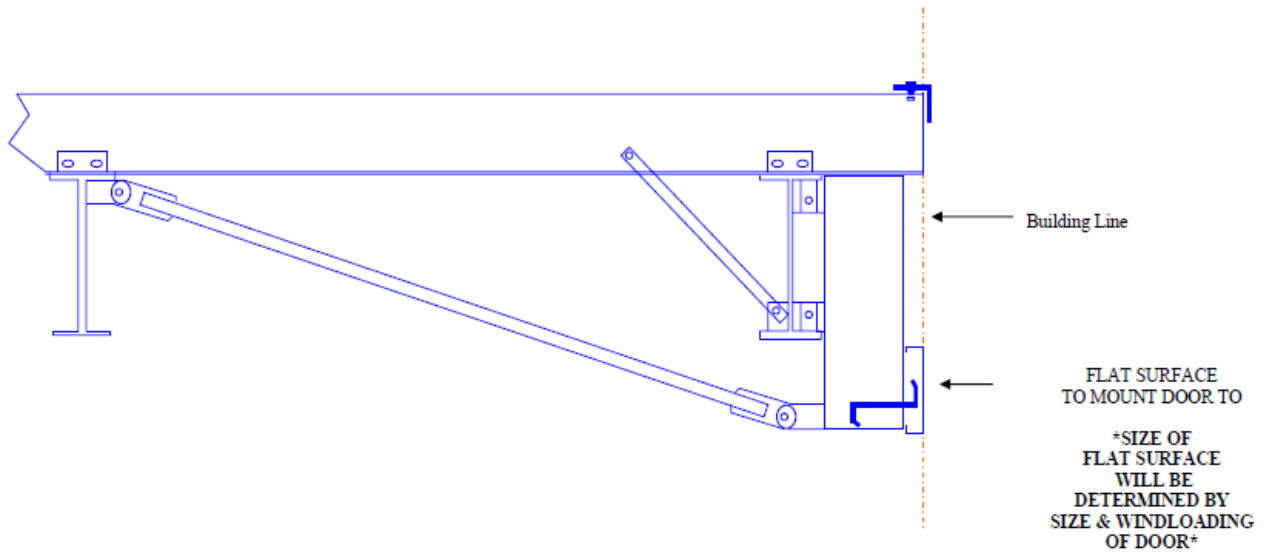
Stack Door



Stack Door



Stack Door



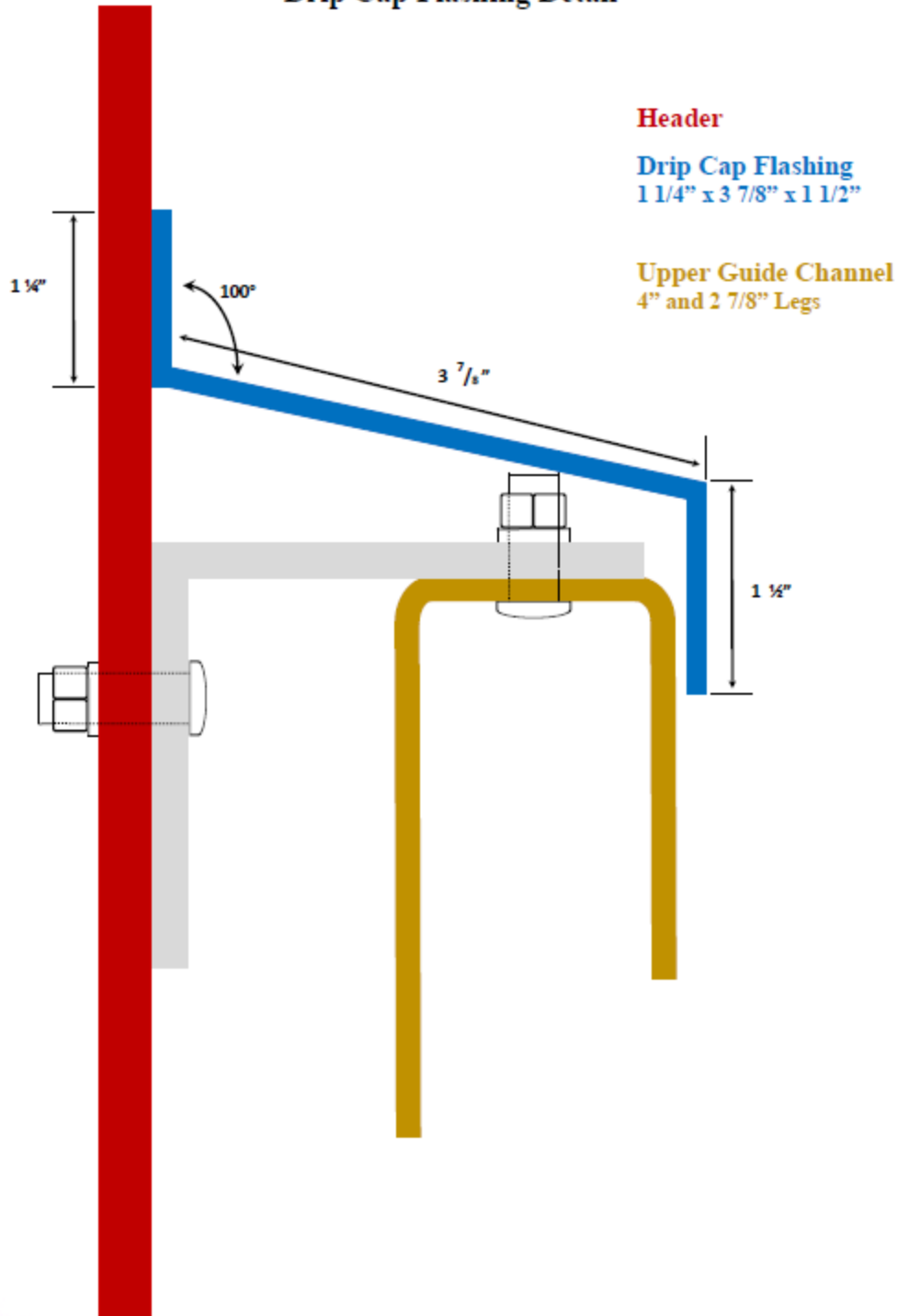
TYPICAL SECTION THRU HEADER

DESIGN OF BUILDING RESPONSIBILITY OF
BUILDING MANUFACTURER

*******REFERENCE DRAWING ONLY*******

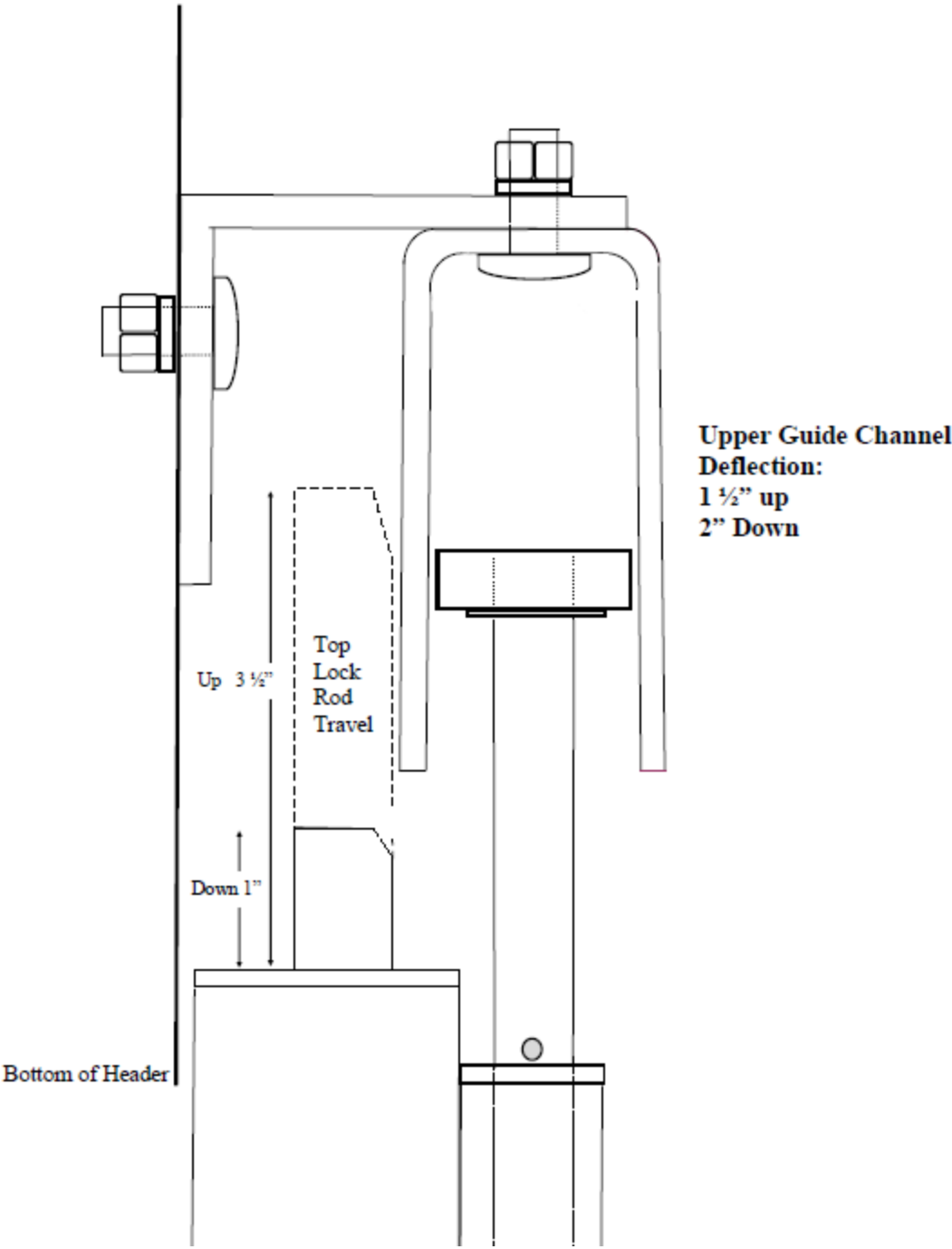
Stack Door

Drip Cap Flashing Detail



Stack Door

Deflection and Rod Travel (4" Track)

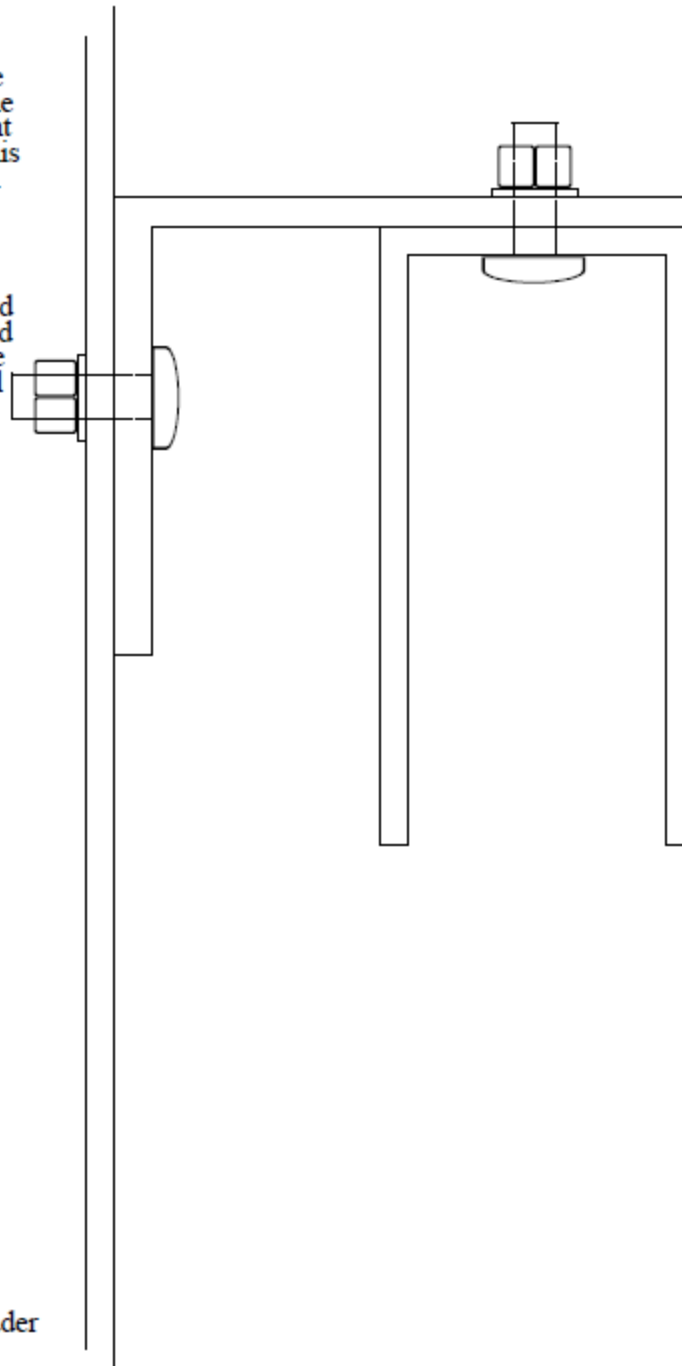


Stack Door

Header Requirement (4" Track)

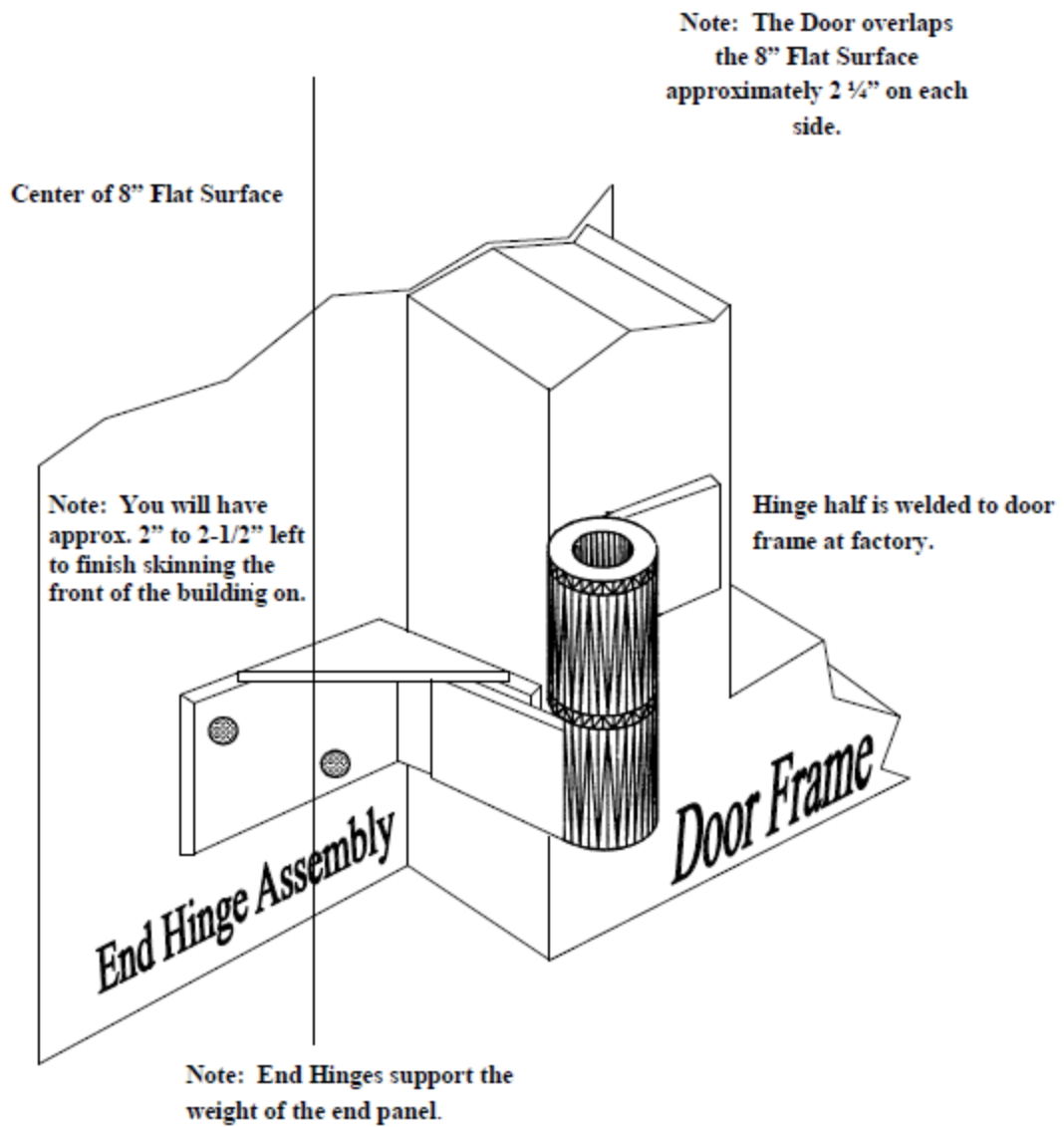
All Doors 19'11" high, and 18 or more panels, must have a minimum 12" vertical flat surface on the same plane as the jambs. The only weight that will be bolted to this is header is about 4 lbs. per foot.

The Header must be supported to hold it vertical and back braced to support the wind load that is required, that the Horton Stack Door will transfer to it.



Bottom of Header

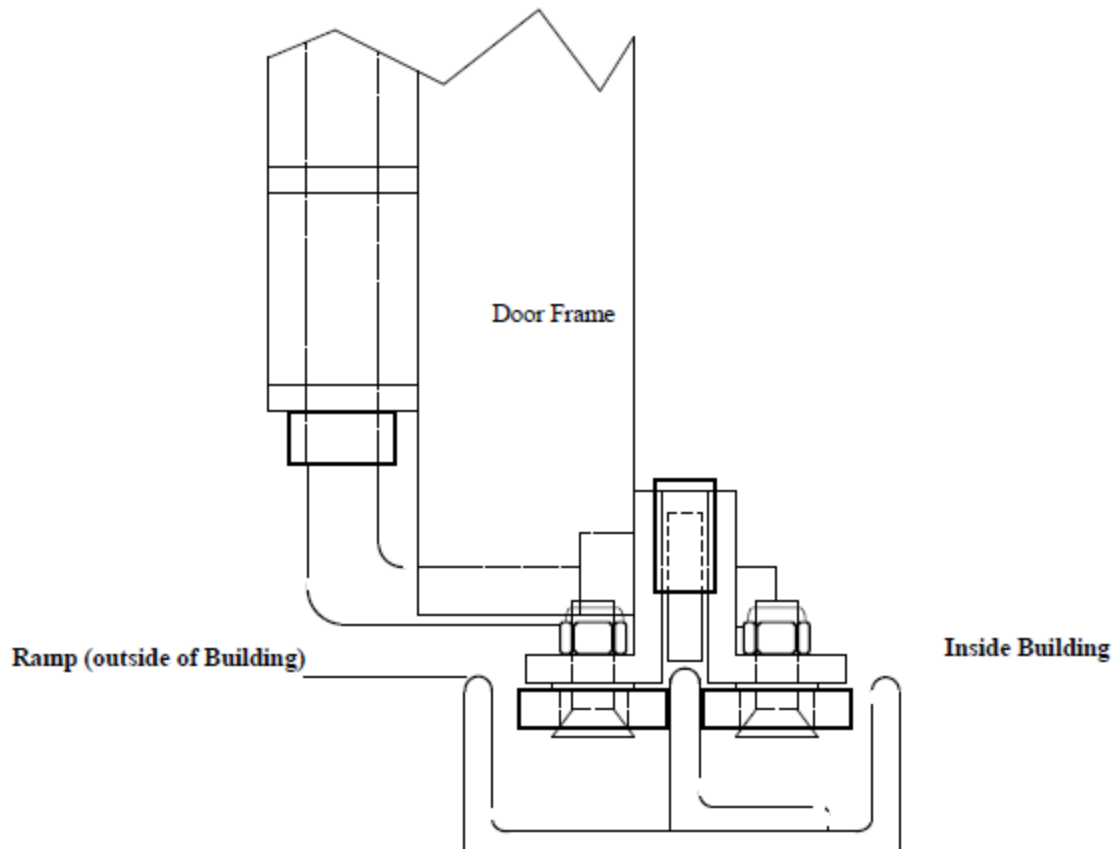
Stack Door



Stack Door

Truck Assembly (Recess Track)

This Patented design includes two sealed precision bearings riding on the top of the track, and two sealed bearings riding on each side of the bottom track. Each Truck Assembly carries the weight of only two panels.

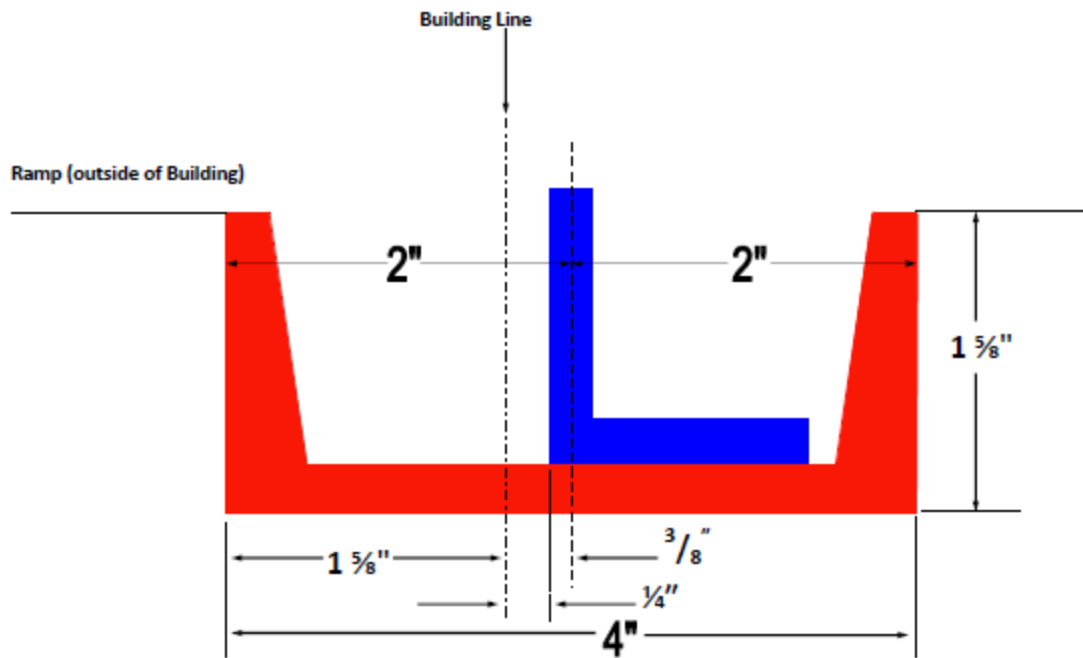


When Standing up the panels, the truck assembly sets on the Recess Track, as shown in the above diagram.

Stack Door

RECESS TRACK DETAIL DRAWING

Recess Track is installed by removal and replacement of concrete. The stem wall required for the bottom track must be poured below frost line, level, extend full width of framed opening and extend at least 3" outside and 6" inside of the building.



Weld the Angle Iron (1 1/2" x 1 1/2" x 1/4") in the center of the 4" channel.

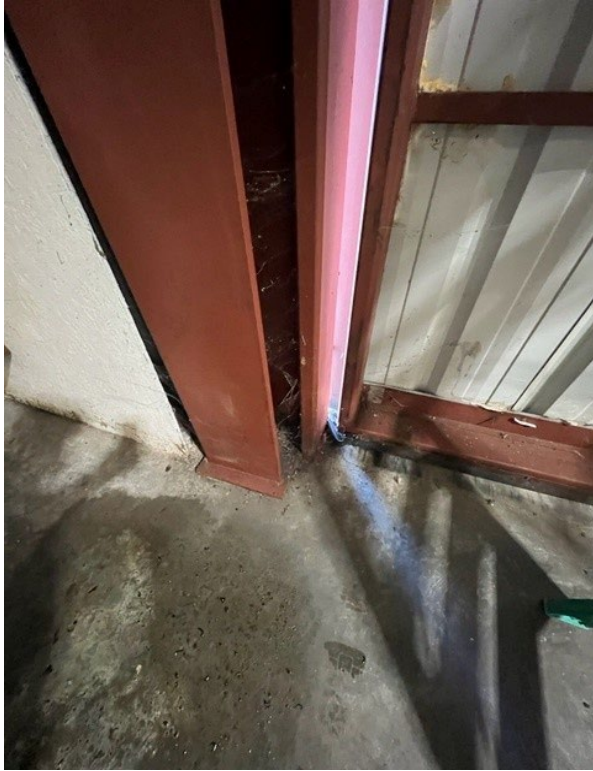
To install the Recess Track Correctly, from the BUILDING LINE the 4" Channel sets 1 5/8" outside. The 1 1/2" x 1 1/2" x 1/4" angle sets in the center of the 4" Channel. From the BUILDING LINE this will make the 1 1/2" x 1 1/2" x 1/4" angle 1/4" to the inside of the building.

END OF SECTION

Hangar 6 Door Replacement
Existing Hangar Door



Hangar 6 Door Replacement
Hangar Door Column



Hangar 6 Door Replacement
Existing Hangar Door & Building Connection



END OF SECTION



Engineering Progress

May 16, 2022

City of Hattiesburg
P.O. Box 1898
Hattiesburg, MS 39403

Attn: Lamar Rutland, P.E.

**RE: Hangar 6 Door Replacement
Bobby L. Chain Airport
City of Hattiesburg, MS**

Dear Lamar:

Enclosed please find the Advertisement for Bids and Specifications and Contract Documents for the above referenced project. We would like to request permission to re-advertise on the June 7th City Council agenda.

If you should have any questions or comments, please do not hesitate to call.

Sincerely,

A handwritten signature in blue ink, appearing to read 'K. Wallace', written over a horizontal line.

Kyle D. Wallace, P.E.
Project Engineer

/md

Enclosure



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Chris McGee, Director of Parks and Recreation
cc:
Date: Tuesday, June 7, 2022
Re: Acknowledge the issuance of corrected cemetery deed to Dillard & Sandra Ball due to incorrect description (as recorded in MB 2021-252).
File Number: 2022-350
Minute Book #

Summary

Corrected Deed for Dillard & Sandra Ball. Original Deed was approved on October 19, 2021 Agenda Minute Book#2021, page 252, incorrect section # 37, Lot#6. Corrected Section is Section 39, Lot # 6. See attached Incorrect Deed and Corrected Deed.

Recommendation Statement

I am recommending approval for a corrected Deed for Dillard & Sandra Ball, Lot# 6, Section 39.

Please place this on the June 7, 2022 City Council meeting for consideration.

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

CORRECTED DEED

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Dillard & Sandra Ball, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Northeast Quarter (NE¹/₄)

Lot Number 6 Section Number 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

MB 2021-252

Oct. 19, 2021- Agenda

Incorrect Deed
**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Dillard & Sandra Ball, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Northeast Quarter (NE¼)

Lot Number 6 Section Number 37

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 19th day October, 2021.

ATTEST:

CITY CLERK

(SEAL)



CITY OF HATTIESBURG, MISSISSIPPI

MAYOR

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kemas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 19th day of October, 2021

My Commission Expires:

05-28-2022



Lan Luu Jolly
NOTARY PUBLIC



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Chris McGee, Director of Parks and Recreation

cc:

Date: Tuesday, June 7, 2022

Re: Approve the City's purchase of four (4) grave spaces, located in the West Half (W1/2) of Lot 147, Section 25, at Highland Cemetery. Minute Book# 1986-1, Page# 185, in the amount of \$ 700.00, from Patricia Ruth Shaw, Authorize manual check for the same.
File Number: 2022-351
Minute Book #

Summary

Approve the City's purchase of four (4) grave spaces, located in the West Half (W1/2) of Lot 147, Section 25, at Highland Cemetery. Minute Book# 1986-1, Page# 185, in the amount of \$ 700.00, from Patricia Ruth Shaw, Authorize manual check for the same.

Recommendation Statement

I am recommending approval of the City's purchase of (4) grave spaces.

Please place this on the June 7, 2022 City Council meeting for consideration.



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

COUNCIL - WARD THREE
Carter Carroll

COUNCIL - WARD FOUR
Mary Dryden

COUNCIL - WARD FIVE
Nicholas Brown

Date: 5-9-2022

To whom it may concern:

I, PATRICIA RUTH SHAW am requesting to sell back (4) grave space (s)

Located at Highland Cemetery, in Section 25, lot 147, W 1/2 of the --- 1/4, to the

City of Hattiesburg, which was purchased on January 2nd, 1986 at the price

of \$ 175.⁰⁰ per grave space. Total amount due this request \$ 700.⁰⁰
MB# 1986-1 Page 185

Sincerely,

Patricia Ruth Shaw

Mail to:
Patricia Ruth Shaw
10,000 CAIN ROAD
Bay St. Louis, MS 39520
Phone# 228 216-0487

Approved By:
Deborah Denard

STATE OF MISSISSIPPI
County of Forrest
City of Hattiesburg

DEED TO CEMETERY LOT
HIGHLAND CEMETERY
HATTIESBURG, MISS.

For and in consideration of the sum of Seven Hundred and No/100 Dollars
(\$ 700.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto J. S. (Bill) Shaw, Jr. subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Lot Number: 147 in Section Number: 25
according to the Cemetery Survey of the City of Hattiesburg,
Mississippi known as Highland Cemetery, and containing
4 grave spaces.

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space or spaces herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the

21st day of January, 19 86.

ATTEST:

Claris Wansley
City Clerk

(S E A L)

CITY OF HATTIESBURG, MISSISSIPPI

By: A. D. Williamson
Mayor

STATE OF MISSISSIPPI,
Forrest County

Personally appeared before me, the undersigned authority in and for said County and State,

G. D. Williamson and Clarice Wansley
Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 21st day of January,
19 86.

My Commission expires:

My Commission Expires March 18, 1988.

John W. Hutton
Notary Public

CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES

Hattiesburg, Miss., 1-2- 1986

SOLD TO:

Mr. Mrs. Miss J. S. (Bill) Shaw, Jr.

ADDRESS 302 S 32nd Ave.

desires to purchase the grave space described below, subject to Cemetery regulations.

W 1/2 — 1/4 Lot No. 147 Section No. 25 in Highland Cemetery.

Number of grave spaces 4 Price per grave space \$ 175.00

Price Received \$ 700.00

CITY OF HATTIESBURG, MISSISSIPPI

By John Meador
Supt. of City Cemeteries



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Chris McGee, Director of Parks and Recreation

cc:

Date: Tuesday, June 7, 2022

Re: Approve the City's purchase of (3) three grave spaces, located in the South Half (S 1/2) of the Northeast Quarter (NE 1/4), Lot 8, Section 30, North Half (N 1/2) of the Southeast Quarter (SE 1/4), Lot 8, Section 30, and South Half (S 1/2) of the Southeast Quarter (SE 1/4), Lot 8, Section 30 at Highland Cemetery, Minute Book 2012-1/203, and Minute Book 2012-1/236 in the amount of \$ 525.00, from Louis R. & Debbie Brown, Authorize manual check for the same.
File Number: 2022-354
Minute Book #

Summary

Approve the City's purchase of (3) three grave spaces, located in the South Half (S 1/2) of the Northeast Quarter (NE 1/4), Lot 8, Section 30, North Half (N 1/2) of the Southeast Quarter (SE 1/4), Lot 8, Section 30, and South Half (S 1/2) of the Southeast Quarter (SE 1/4), Lot 8, Section 30 at Highland Cemetery, Minute Book 2012-1/203, and Minute Book 2012-1/236 in the amount of \$ 525.00, from Louis R. & Debbie Brown, Authorize manual check for the same.

Recommendation Statement

I am recommending approval of the City's purchase of (3) grave spaces.

Please place this on the June 7, 2022 City Council meeting for consideration.

Date: May 19, 2022

To whom it may concern:

We, Louis R. + Debbie Brown are requesting to sell back (4) grave space (s)

Located at Highland Cemetery, In Section 30, Lot 8, S 1/2 of the NE 1/4, to the
30 8 N SE
30 8 S SE

City of Hattiesburg, which was purchased on May 16, 2012 at the price
June 07, 2012
August 16, 2012

Of \$ 175.⁰⁰ per grave space. Total amount due this request \$ 525.⁰⁰ MB# 2012

Page# 1/203, MB 2012-1/236

Sincerely,

Louis R. Brown
Debbie Brown

Mail to:
Louis R. + Debbie Brown
6351 Shawnee St.
Hattiesburg, MS. 39556

Phone#

601-520-4096

Approval By:
Deborah Brown

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

DEED TO CEMETERY LOT HIGHLAND CEMETERY

For and in consideration of the sum of ONE HUNDRED SEVENTY FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Louis R & Debbie Brown, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

~~South~~
South Half (S1/2) Southeast Quarter (SE 1/4)

Lot Number: 8

Section Number: 30

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing
One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 4th day of September, 2012.

ATTEST:

CITY CLERK

(SEAL)

CITY OF HATTIESBURG, MISSISSIPPI

MAYOR

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Johnny L. DuPree and Eddie R. Myers, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 4th day of September, 2012.

My Commission Expires



NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Louis R & Debbie Brown, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S1/2) Northeast Quarter(NE 1/4)

Lot Number:8

Section Number:30

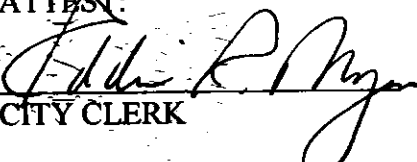
according to the Cemetery Survey of the City of Hattiesburg,
Mississippi known as Highland Cemetery, and containing
One (1) Grave space (s).

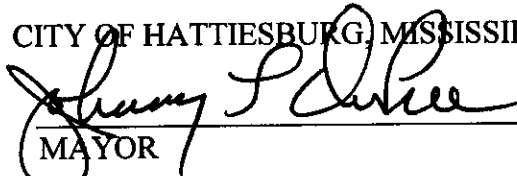
SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 4th day of September, 2012.

ATTEST:


CITY CLERK

CITY OF HATTIESBURG, MISSISSIPPI

MAYOR

(SEAL)

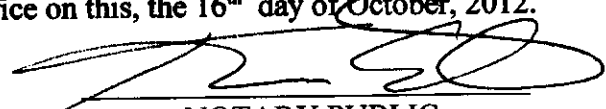
STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Johnny L. DuPree and Eddie R. Myers, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 16th day of October, 2012.

My Commission Expires




NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Louis R. and Debbie Brown subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S1/2) Southeast Quarter(SE 1/4)

Lot Number:8

Section Number:30

according to the Cemetery Survey of the City of Hattiesburg,
Mississippi known as Highland Cemetery, and containing
One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 19th day of June, 2012.

ATTEST

CITY CLERK

(SEAL)

CITY OF HATTIESBURG, MISSISSIPPI

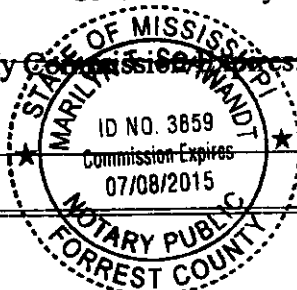
MAYOR

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Johnny L. DuPree and Eddie R. Myers, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 19th day of June, 2012.

My Comm. Expires:



NOTARY PUBLIC

Mail to:
43 Creekside
Purvis, MS 39475

CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES

Hattiesburg, Miss. 5-16-2012

OLD TO:

Mr. Mrs. Miss

ADDRESS

desires to purchase the grave space described below, subject to Cemetery regulations.

S 1/2 SE 1/4 Lot No. 8 Section No. 30 in Highland Cemetery

Number of grave spaces

Price per grave space \$ 175.00

Price Received \$ 175.00

check 3840

CITY OF HATTIESBURG, MISSISSIPPI

By

Nealyn K. Hinton

CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES

Hattiesburg, Miss. 6-7-2012

SOLD TO:

Mr. Mrs. Miss

ADDRESS

desires to purchase the grave space described below, subject to Cemetery regulations.

N 1/2 SE 1/4 Lot No. 8 Section No. 30 in Highland Cemetery

Number of grave spaces

Price per grave space \$ 175.00

Price Received \$ 175.00

check 3843

CITY OF HATTIESBURG, MISSISSIPPI

By

Nealyn K. Hinton

Mail to:
43 Creekside
Purvis, MS. 39475

CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES

Hattiesburg, Miss. 8-16-2012

SOLD TO:

Mr. Mrs. Miss

ADDRESS

desires to purchase the grave space described below, subject to Cemetery regulations.

S 1/2 NE 1/4 Lot No. 8 Section No. 30 in Highland Cemetery

Number of grave spaces

Price per grave space \$ 175.00

Price Received \$ 175.00

CITY OF HATTIESBURG, MISSISSIPPI

Nealyn K. Hinton



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Chris McGee, Director of Parks and Recreation

cc:

Date: Tuesday, June 7, 2022

Re: Approve the City's purchase of (2) grave spaces, located at South Half (S 1/2) of the Southeast Quarter (SE 1/4), Lot 43, Section 28, and North Half (N 1/2) of the Northeast Quarter (NE 1/4), Lot 43, Section 28, at Highland Cemetery. Minute Book# 2003-1/187-198, in the amount of \$ 350.00 from M. Ellen Dearman, Authorize manual check for the same.
File Number: 2022-355
Minute Book #

Summary

Approve the City's purchase of (2) grave spaces, located at South Half (S 1/2) of the Southeast Quarter (SE 1/4), Lot 43, Section 28, and North Half (N 1/2) of the Northeast Quarter (NE 1/4), Lot 43, Section 28, at Highland Cemetery. Minute Book# 2003-1/187-198, in the amount of \$ 350.00 from M. Ellen Dearman, Authorize manual check for the same.

Recommendation Statement

I am recommending approval of the City's purchase of (2) two grave spaces.

Please place this on the June 7, 2022 City Council meeting for consideration.



MAYOR
Toby Barker

COUNCIL - WARD ONE

Jeffrey George

COUNCIL - WARD TWO

Deborah Denard Delgado

COUNCIL - WARD THREE

Carter Carroll

COUNCIL - WARD FOUR

Mary Dryden

COUNCIL - WARD FIVE

Nicholas Brown

Date: 05/20/2022

To whom it may concern:

I, M. Ellen Dearman am requesting to sell back (2) grave space (s)

Located at Highland Cemetery, In Section 28, Lot 43, S 1/2 of the SE 1/4, to the
N 1/2 NE 1/4

City of Hattiesburg, which was purchased on January 02, 2003 at the price

Of \$ 175.⁰⁰ per grave space. Total amount due this request \$ 350.⁰⁰

MB# 2003-1/187-198

Sincerely,

M. Ellen Dearman

Mail to:

M. Ellen Dearman

18 Postwood Rd

The Hills, TX 78738

Phone#

214-704-4464

Approved By:
Deborah Baine

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of SEVEN HUNDRED AND NO/100 Dollars (\$700.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto M. Ellen Dearman, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

East Half (E½)

Lot Number : 43

Section Number: 28

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing four (4) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 21st day of January, 2003.

ATTEST:

Eddie R. Myers
CITY CLERK

(SEAL)

CITY OF HATTIESBURG MISSISSIPPI

Johnny L. DuPree
MAYOR

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Johnny L. DuPree and Eddie R. Myers, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 21st day of January, 2003.

My Commission Expires:

My Commission Expires 6-23-2003

Caroline Repinto
NOTARY PUBLIC

CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES

Hattiesburg, Miss., 1-2 2073

SOLD TO:

Mr. Mrs. Miss M. Ellen Desrosiers

ADDRESS 606 Langford Ct. Hattiesburg, Miss. 37402

desires to purchase the grave space described below, subject to Cemetery regulations.

E 1/2 Lot No. 43 Section No. 29 in Hughes Cemetery.

Number of grave spaces 4 Price per grave space \$ 175.00

Price Received \$ 700.00

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]

Supt. of City Cemeteries

CK # 4795



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Chris McGee, Director of Parks and Recreation
cc:
Date: Tuesday, June 7, 2022
Re: Approve the sale of grave spaces per attached, Memo's, Receipts, and Deeds.
File Number: 2022-374
Minute Book #

Summary

Approve the sale of grave spaces per attached, Memo's, Receipts, and Deeds.

Recommendation Statement

I am recommending approval of the sale of grave spaces.

Please place this on the June 7, 2022 City Council meeting for consideration.

To: CITY COUNCIL

From: Deborah Bourne, Division Manager of Cemeteries

Date: May 16, 2022

Debbie & Linda K. Smith

(1) Space \$ 175.00

North Half (N ½) of the Northwest Quarter (NW ¼)

Lot 53, Section 34, Highland Cemetery

Lena Mae McCree

(1) Space \$ 175.00

South Half (S ½) of the Northwest Quarter (NW ¼)

Lot 70, Section 39, Highland Cemetery

Todd & Marina Little

(1) Space \$ 175.00

North Half (N ½) of the Southeast Quarter (SE ¼)

Lot 24, Section 38, Highland Cemetery

Todd & Marina Little

(2) Spaces \$ 350.00

Northeast Quarter (NE ¼)

Lot 24, Section 38, Highland Cemetery

Todd & Marina Little

(4) Spaces \$ 700.00

West Half (W ½)

Lot 24, Section 38, Highland Cemetery

Regina R. Wilson

(1) Space \$ 150.00

North Half (N ½) of the Southwest Quarter (SW ¼)

Lot 58, Section 2, South Hill Cemetery

Todd & Marina Little

(2) Spaces \$ 350.00

Southeast Quarter (Se ¼)

Lot 8, Section 38, Highland Cemetery

Lonnie Mickell

(1) Space \$ 150.00

West Half (W ½) of the Southeast Quarter (SE ¼)

Lot 97, Section 1, South Hill Cemetery

Todd & Marina Little

(4) Spaces \$ 700.00

West Half (W ½)

Lot 8, Section 38, Highland Cemetery

Regina R. Wilson

(2) Spaces \$ 300.00

Northwest Quarter (NW ¼)

Lot 58, Section 2, South Hill Cemetery

Todd & Marina Little

(8) Spaces \$ 1,400.00

Entire Lot 16

Section 38, Highland Cemetery

To: CITY COUNCIL

From: Deborah Bourne, Division Manager of Cemeteries

Date: May 18, 2022

Dorothy Pruitt

(1) Space \$ 175.00

South Half (S ½) of the Southeast Quarter (SE ¼)

Lot 117, Section 39, Highland Cemetery

Peggy J. & Diedra A. Fluker

(2) Spaces \$ 350.00

Northwest Quarter (NW ¼)

Lot 27, Section 36, Highland Cemetery

Nora Gillispie

(1) Space \$ 175.00

South Half (S ½) of the Northwest Quarter (NW ¼)

Lot 115, Section 38, Highland Cemetery

Micah J. Scott, Sr.

(2) Spaces \$ 350.00

Northwest Quarter (NW ¼)

Lot 3, Section 37, Highland Cemetery

Cynthia Lee

(2) Spaces \$ 350.00

Southeast Quarter (SE ¼)

Lot 71, Section 38, Highland Cemetery

Lakeisha Kindred

(2) spaces \$ 300.00

Northwest Quarter (NW ¼)

Lot 52, Section 2, South Hill Cemetery

Louis & Debbie Brown

(4) Spaces \$ 700.00

West Half (W ½)

Lot 121, Section 39, Highland Cemetery

Louis & Debbie Brown

(2) Spaces \$ 350.00

Northwest Quarter (NW ¼)

Lot 127, Section 39, Highland Cemetery

Charles Haynes

(1) Space \$ 175.00

North Half (N ½) of the Northeast Quarter (NE ¼)

Lot 79, Section 38, Highland Cemetery

Lettie Burger

(1) Space \$ 175.00

South Half (S ½) of the Northeast Quarter (NE ¼)

Lot 131, Section 39, Highland Cemetery

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05/19/ 2022

SOLD TO:

Mr. Mrs. Miss Charles Haynes

ADDRESS 323 N. 20th Ave. Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

N 1/2 NE 1/4 Lot No. 79 Section No. 38 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.00

Price Received \$ 175.00

CASH

CITY OF HATTIESBURG, MISSISSIPPI

By Dorothy Bourne
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-19- 2022

SOLD TO:

Mr. Mrs. Miss Louis & Debbie Brown

ADDRESS 6351 Shawnee St. Kilm, MS 39556

desires to purchase the grave space described below, subject to Cemetery regulations.

W 1/2 Lot No. 121 Section No. 39 in Highland Cemetery

Number of grave spaces 4 Price per grave space \$ 175.00

Price Received \$ 700.00

Cash

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-19- 2022

SOLD TO:

Mr. Mrs. Miss Louis & Debbie Brown

ADDRESS 6351 Shawnee St. Kilm, MS 39556

desires to purchase the grave space described below, subject to Cemetery regulations.

1/2 NW Lot No. 127 Section No. 39 in Highland Cemetery

Number of grave spaces 2 Price per grave space \$ 175.00

Price Received \$ 350.00

CITY OF HATTIESBURG, MISSISSIPPI

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-13- 2022

SOLD TO:

Mr. Mrs. Miss Nora Gillispie

ADDRESS 502 Broad St Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

S 1/2 NW 1/4 Lot No. 115 Section No. 38 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.⁰⁰

Price Received \$ 175.⁰⁰

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

CK# 1080

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-16- 2022

SOLD TO:

Mr. Mrs. Miss Peggy J. & Diedra A. Fluker

ADDRESS 105 Chickasaw Dr Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

1/2 NW 1/4 Lot No. 27 Section No. 36 in Highland Cemetery

Number of grave spaces 2 Price per grave space \$ 175.⁰⁰

Price Received \$ 350.⁰⁰

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

cond

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-17 2022

SOLD TO:

Mr. Mrs. Miss Micah J. Scott Sr.

ADDRESS 611 South 21st Ave. Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

1/2 NW 1/4 Lot No. 3 Section No. 37 in Highland Cemetery

Number of grave spaces 2 Price per grave space \$ 175.⁰⁰

Price Received \$ 350.⁰⁰

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

card

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-16 2022

SOLD TO:

Mr. Mrs. Miss Dorothy Pruitt

ADDRESS 1528 50th Ave Meridian, MS 39307

desires to purchase the grave space described below, subject to Cemetery regulations.

5 1/2 SE 1/4 Lot No. 117 Section No. 39 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.⁰⁰

Price Received \$ 175.⁰⁰

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

CK#6014

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05/18/ 2022

SOLD TO:

Mr.. Mrs. Miss Cynthia Lee

ADDRESS 13228 Chasae Lane, Gulfport, MS 39503

desires to purchase the grave space described below, subject to Cemetery regulations.

1/2 SE 1/4 Lot No. 71 Section No. 38 in Highland Cemetery

Number of grave spaces 2 Price per grave space \$ 175.00

Price Received \$ 350.00

CITY OF HATTIESBURG, MISSISSIPPI

By Deborah Brune
Supt. of City Cemeteries

Delta Card
(Tracy G. Jones)

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-18- 2022

SOLD TO:

Mr.. Mrs. Miss Lakeisha Kindred

ADDRESS 239 North Gate Rd. Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

1/2 NW 1/4 Lot No. 52 Section No. 2 in South Hill Cemetery

Number of grave spaces 2 Price per grave space \$ 150.00

Price Received \$ 300.00

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

Card

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05/10/ 2022

SOLD TO:

Mr. Mrs. Miss Debbie Smith & Linda K. Smith

ADDRESS 6 Nelson St. Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

1 1/2 NW 1/4 Lot No. 53 Section No. 34 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.⁰⁰

Price Received \$ 175.⁰⁰

card

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-11- 2022

SOLD TO:

Mr. Mrs. Miss Lena Mae McCree

ADDRESS P.O. Box 158 Petal, MS 39465

desires to purchase the grave space described below, subject to Cemetery regulations.

S 1/2 NW 1/4 Lot No. 70 Section No. 39 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.⁰⁰

Price Received \$ 175.⁰⁰

card

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-11- 2022

SOLD TO:

Mr. Mrs. Miss

Todd & Marina Little

ADDRESS

37 Marais Ridge Hattiesburg, MS 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

N $\frac{1}{2}$ SE $\frac{1}{4}$ Lot No. 24 Section No. 38 in Highland Cemetery

Number of grave spaces 1

Price per grave space \$ 175.00

Price Received \$ 175.00

CK# 57134

CITY OF HATTIESBURG, MISSISSIPPI

By

[Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-11- 2022

SOLD TO:

Mr. Mrs. Miss

Todd & Marina Little

ADDRESS

37 Marais Ridge Hattiesburg, MS 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

NE $\frac{1}{2}$ Lot No. 24 Section No. 38 in Highland Cemetery

Number of grave spaces 2

Price per grave space \$ 175.00

Price Received \$ 350.00

CK# 57134

CITY OF HATTIESBURG, MISSISSIPPI

By

[Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-11- 2022

SOLD TO:

Mr. Mrs. Miss

Todd & Marina Little

ADDRESS

37 Marais Ridge Hattiesburg, MS 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

W $\frac{1}{2}$ Lot No. 24 Section No. 38 in Highland Cemetery

Number of grave spaces 4

Price per grave space \$ 175.00

Price Received \$ 700.00

CK# 57134

CITY OF HATTIESBURG, MISSISSIPPI

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-12- 2022

SOLD TO:

Mr. Mrs. Miss Regina Wilson

ADDRESS 5449 Quail Creek Circle D'Iberville, MS 39540

desires to purchase the grave space described below, subject to Cemetery regulations.

N 1/2 SW 1/4 Lot No. 58 Section No. 2 in South Hill Cemetery

Number of grave spaces 1 Price per grave space \$ 150.00

Price Received \$ 150.00

Cash

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-12- 2022

SOLD TO:

Mr. Mrs. Miss Lonnie Mickell

ADDRESS 220 Hood Rd. Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

W 1/2 SE 1/4 Lot No. 99 Section No. 1 in South Hill Cemetery

Number of grave spaces 1 Price per grave space \$ 150.00

Price Received \$ 150.00

ck# 466

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-12- 2022

SOLD TO:

Mr. Mrs. Miss Regina B. Wilson

ADDRESS 5449 Quail Creek Circle D'Iberville, MS 39540

desires to purchase the grave space described below, subject to Cemetery regulations.

1/2 NW 1/4 Lot No. 58 Section No. 2 in South Hill Cemetery

Number of grave spaces 2 Price per grave space \$ 150.00

Price Received \$ 300.00

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-11- 2022

SOLD TO:

Mr. Mrs. Miss Todd & Marina Little

ADDRESS 37 Marais Ridge Hattiesburg MS 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

1/2 SE 1/4 Lot No. 8 Section No. 38 in Highland Cemetery

Number of grave spaces 2 Price per grave space \$ 175.00

Price Received \$ 350.00

CK# 57134

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-11- 2022

SOLD TO:

Mr. Mrs. Miss Todd & Marina Little

ADDRESS 37 Marais Ridge Hattiesburg MS 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

W 1/2 1/4 Lot No. 8 Section No. 38 in Highland Cemetery

Number of grave spaces 4 Price per grave space \$ 175.00

Price Received \$ 700.00

CK# 57134

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-11- 2022

SOLD TO:

Mr. Mrs. Miss Todd & Marina Little

ADDRESS 37 Marais Ridge Hattiesburg MS 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

Entire 1/2 1/4 Lot No. 16 Section No. 38 in Highland Cemetery

Number of grave spaces 8 Price per grave space \$ 175.00

Price Received \$ 1400.00

4-21-21

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 05-21-2022

SOLD TO:

Mr. Mrs. Miss Lettie Burger

ADDRESS P.O. Box 1952 Hattiesburg, MS 39403

desires to purchase the grave space described below, subject to Cemetery regulations.

S $\frac{1}{2}$ NE $\frac{1}{4}$ Lot No. 131 Section No. 39 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.⁰⁰

Price Received \$ 175.⁰⁰

CK# 11045

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]

Supt. of City Cemeteries

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Debbie & Linda K. Smith, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

North Half (N½) of the Northwest Quarter (NW¼)

Lot 53 Section 34

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Lena Mae McCree, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S½) of the Northwest Quarter (NW¼)

Lot 70 Section 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Todd & Marina Little, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

North Half (N½) of the Southeast Quarter (SE¼)

Lot 24 Section 38

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Todd & Marina Little, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Northeast Quarter (NE¼)

Lot Number 24 Section Number 38

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Todd & Marina Little, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Southeast Quarter (SE¼)

Lot Number 8 Section Number 38

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of SEVEN HUNDRED AND NO/100 Dollars (\$700.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Todd & Marina Little, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Lot 24 West Half (W $\frac{1}{2}$) Section Number: 38

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing Four (4) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE THOUSAND FOUR HUNDRED AND NO/100 Dollars (\$1,400.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Todd & Marina Little, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Entire Lot
Lot Number: 16 Section Number: 38

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

eight (8) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires: _____ Notary Public: _____

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

DEED TO CEMETERY LOT
SOUTH HILL CEMETERY

For and in consideration of the sum of ONE HUNDRED FIFTY AND NO/100 Dollars (\$150.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Regina R. Wilson, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

North Half (N½) of the Southwest Quarter (SW¼)

Lot Number: 58 Section Number: 2

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as South Hill Cemetery, and containing
One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of Junes, 2022.

ATTEST: CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK
(S E A L)

MAYOR

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and Deputy City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
SOUTH HILL CEMETERY**

For and in consideration of the sum of THREE HUNDRED AND NO/100 Dollars (\$300.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Regina R. Wilson, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Northwest Quarter (NW¼)

Lot Number: 58

Section Number: 2

according to the Cemetery Survey of the City of Hattiesburg,
Mississippi known as South Hill Cemetery, and containing
Two (2) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK
(S E A L)

MAYOR

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton Mayor and Deputy City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

DEED TO CEMETERY LOT
SOUTH HILL CEMETERY

For and in consideration of the sum of ONE HUNDRED FIFTY AND NO/100 Dollars (\$150.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Lonnie Mickell, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

West Half (W½) of the Southeast Quarter (SE¼)

Lot Number: 97 Section Number: 1

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as South Hill Cemetery, and containing
One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of Junes, 2022.

ATTEST: CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK
(S E A L)

MAYOR

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and Deputy City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Dorothy Pruitt, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S½) of the Southeast Quarter (SE¼)

Lot 117

Section 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Peggy J. & Diedra A. Fluker, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Northwest Quarter (NW¼)

Lot Number 27 Section Number 36

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Nora Gillispie, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S½) of the Northwest Quarter (NW¼)

Lot 115 Section 38

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

DEED TO CEMETERY LOT
HIGHLAND CEMETERY

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Micah J. Scott, Sr., subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Northwest Quarter (NW¼)

Lot Number 3 Section Number 37

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
SOUTH HILL CEMETERY**

For and in consideration of the sum of THREE HUNDRED AND NO/100 Dollars (\$300.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Lakeisha Kindred, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Northwest Quarter (NW¹/₄)

Lot Number: 52

Section Number: 2

according to the Cemetery Survey of the City of Hattiesburg,
Mississippi known as South Hill Cemetery, and containing
Two (2) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK
(S E A L)

MAYOR

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton Mayor and Deputy City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Cynthia Lee, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Southeast Quarter (SE¼)

Lot Number 71 Section Number 38

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Charles Haynes, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

North Half (N½) of the Northeast Quarter (NE¼)

Lot 79 Section 38

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Louis & Debbie Brown, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Northwest Quarter (NW¼)

Lot Number 127 Section Number 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of SEVEN HUNDRED AND NO/100 Dollars (\$700.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Louis & Debbie Brown, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Lot 121 West Half (W½) Section Number: 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing Four (4) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Lettie Burger, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S½) of the Northeast Quarter (NE¼)

Lot 131 Section 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 7th day of June, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 7th day of June, 2022.

My Commission Expires:

NOTARY PUBLIC



Memorandum

To: Mayor Toby Barker and Members of City Council
From:
cc:
Date: Tuesday, June 7, 2022
Re: Approve claims docket for the period ending May 31, 2022.
File Number: 2022-399
Minute Book #

Summary

Recommendation Statement

Please place this on the June 7, 2022 City Council meeting for consideration.

05/26/2022 16:18
6050jthorne

City of Hattiesburg, MS
A/P CASH DISBURSEMENTS JOURNAL
JOURNAL ENTRIES TO BE CREATED

P 37
apchdsb

FUND		DUE TO	DUE FR
001	General Fund		840,544.65
002	PARKS & RECREATION FUND		49,377.65
009	WATER & SEWER OPERATION/MAINT.		706,811.10
019	POLICE FORFEITURES FUND		261.48
039	AIRPORT IMPROVEMENT FUND		15,013.33
072	MUNICIPAL ROAD & BRIDGE		249,642.71
073	MASS TRANSIT FUND		70,285.75
075	WATER&SEWER CONSTRUCTION FUND		626,742.57
077	COMMUNITY CENTERS' FUND		6,478.07
082	COMMUNITY DEVELOP. BLOCK GRANT		349.01
086	SPEC SALES TAX-P&R/UNIV IMPROV		40,499.24
087	INDUSTRIAL PARK DEVELOPMENT		117,500.00
088	PUBLIC SAFETY/REC CONSTRUCTION		796,995.34
801	CLAIMS FUND		
		3,520,500.90	
	TOTAL	3,520,500.90	3,520,500.90

** END OF REPORT - Generated by Jacqueline Thorne **

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8														
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR TYP S				WARRANT	CHECK	DESCRIPTION		
001000					BALANCE SHEET									
001000 060100					GAS/LUBRICANT-CITY BARN									
003497	MAPLES	GAS	COMPANY	228795	227871	2022	8	INV	P	20,136.60	053122	290998	GAS FOR FUEL STATIO	
003497	MAPLES	GAS	COMPANY	229304	227963	2022	8	INV	P	32,943.74	053122	290998	GAS FOR FUEL STATIO	
003497	MAPLES	GAS	COMPANY	229694	228067	2022	8	INV	P	44,381.51	053122	290998	GAS FOR FUEL STATIO	
										97,461.85				
ACCOUNT TOTAL										97,461.85				
001000 063700					PREPAID WORKMAN'S COMP									
003696	MS MUNICIPAL WORKERS	0108WC2021-7		0	2022	8	INV	P		226,743.83	053122	291015	PAYMENT 3 OF 3 10/	
ACCOUNT TOTAL										226,743.83				
ORG 001000 TOTAL										324,205.68				
001003					CITY COUNCIL									
001003 606000					TELEPHONE AND TELEGRAPH									
002160	AT&T MOBILITY	287273578351X050522		0	2022	8	INV	P		291.38	053122	290881	MB2016-287/WIRELESS	
ACCOUNT TOTAL										291.38				
001003 611001					TRAVEL EXP-WARD 1									
002893	GEORGE, JEFFREY	OT#9358		0	2022	8	INV	P		334.40	053122	290947	COUNCIL - JGEORGE'S	
ACCOUNT TOTAL										334.40				
001003 611003					TRAVEL EXP-WARD 3									
002419	CARROLL, E CARTER	OT#9360		0	2022	8	INV	P		334.40	053122	290901	COUNCIL - CCARROLL'	
ACCOUNT TOTAL										334.40				
001003 611004					TRAVEL EXP-WARD 4									
047719	WARE, DAVE	OT#9361		0	2022	8	INV	P		334.40	053122	291089	COUNCIL - DWARE'S T	
ACCOUNT TOTAL										334.40				
001003 611005					TRAVEL EXP-WARD 5									
002337	BROWN, NICHOLAS	OT#9362		0	2022	8	INV	P		334.40	053122	290896	COUNCIL - NBROWN'S	
ACCOUNT TOTAL										334.40				
001003 6110DC					TRAVEL EXP-DEPCLERK									
003462	JOLLY, LISA L	OT#9363		0	2022	8	INV	P		334.40	053122	290982	COUNCIL - LLJOLLY'S	
ACCOUNT TOTAL										334.40				
ORG 001003 TOTAL										1,963.38				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
001015 CITY COURT										
001015 604800				OTHER PROF.-VICTIM'S ADV.GRANT						
002564	COURT PROGRAMS INC	4564717	0	2022	8	INV P	665.00 053122		290920	GR# 1H79TI081923-01
003917	PINE BELT MENTAL HEA	2022-04	0	2022	8	INV P	11,242.05 053122		291035	GR#1H79TI081923-01
ACCOUNT TOTAL							11,907.05			
001015 604901										
003135 HOWARD COMPUTERS INC		22-00549830	227719	2022	8	INV P	2,457.00 053122		290970	SCANNER FOR NEW TYL
004050	RICOH CORP	36581869	0	2022	8	INV P	287.51 053122		291050	MB# 2018-183-184 CO
ACCOUNT TOTAL							2,744.51			
001015 606000										
002160 AT&T MOBILITY		287273578351X050522	0	2022	8	INV P	468.88 053122		290881	MB2016-287/WIRELESS
ACCOUNT TOTAL							468.88			
001015 635000										
002136 ANOINTED HANDS SERVI		7157	0	2022	8	INV P	684.43 053122		290870	MB# 2020-95 COURT M
ACCOUNT TOTAL							684.43			
001015 699900										
002905 GILLILANDS ELECTRONI		7866	0	2022	8	INV P	90.00 053122		290949	COURT SERVICE CALL
ACCOUNT TOTAL							90.00			
ORG 001015 TOTAL							15,894.87			
001020 MAYOR/ADMIN.										
001020 606000				TELEPHONE AND TELEGRAPH						
002160	AT&T MOBILITY	287273578351X050522	0	2022	8	INV P	171.86 053122		290881	MB2016-287/WIRELESS
002160	AT&T MOBILITY	287289913717X050522	0	2022	8	INV P	98.84 053122		290878	MB2016-287/WIRELESS
							270.70			
ACCOUNT TOTAL							270.70			
001020 615000										
004651 WILLIAM CAREY UNIVER		5242022	0	2022	8	INV P	250.00 053122		291096	ADVERTISIMENT FOR W
ACCOUNT TOTAL							250.00			
ORG 001020 TOTAL							520.70			
001040 MUNICIPAL CLERK										
001040 501000				OTHER EXPENDABLE OFF.SPL						
002709	EATON, ALVIN K (PETT PC	4/2022	0	2022	8	INV P	27.82 053122		290929	PETTYCASH 4/2022

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8									
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
ACCOUNT TOTAL							27.82		
001040	615000			ADVERTISING					
003141	HUB CITY SPOKES	99836	0	2022	8	INV P	632.04	053122	290972 CITY WIDE ADS & NOT
ACCOUNT TOTAL							632.04		
ORG 001040 TOTAL							659.86		
001080				HUMAN RESOURCES					
001080	636500			OFFICE EQUIPMENT	R&M				
004050	RICOH CORP	36275951	0	2022	8	INV P	185.85	053122	291050 HR COPIER MONTHLY C
004050	RICOH CORP	5064175708	0	2022	8	INV P	22.43	053122	291050 HR COPIER CONTRACT
004050	RICOH CORP	5064290328	0	2022	8	INV P	182.50	053122	291050 HR COPIER MONTHLY C
004050	RICOH CORP	5064515789	0	2022	8	INV P	127.95	053122	291050 HR COPIER CONTRACT
							518.73		
ACCOUNT TOTAL							518.73		
ORG 001080 TOTAL							518.73		
001081				LOSS CONTROL					
001081	570000			MTR VEHICLE REP.	PTS/SPL				
002413	CARQUEST AUTO PARTS	14758-10070	227563	2022	7	INV P	43.42	053122	290900 REPLACEMENT PARTS F
004514	UNIVERSITY TIRE & SE	INV195061	227893	2022	8	INV P	527.00	053122	291086 TIRE SERVICE UNIT #
ACCOUNT TOTAL							570.42		
001081	606000			TELEPHONE AND TELEGRAPH					
002160	AT&T MOBILITY	287273578351X050522	0	2022	8	INV P	96.20	053122	290881 MB2016-287/WIRELESS
ACCOUNT TOTAL							96.20		
ORG 001081 TOTAL							666.62		
001090				URBAN DEVELOPMT					
001090	511500			FOOD					
002709	EATON, ALVIN K (PETT PC 4/2022		0	2022	8	INV P	8.88	053122	290929 PETTYCASH 4/2022
ACCOUNT TOTAL							8.88		
001090	570000			MTR VEHICLE REP.	PTS/SPL				
003898	PHILLIPS CAR CARE CE 00432		227452	2022	8	INV P	667.50	053122	291033 REPLACE BEARINGS AN
ACCOUNT TOTAL							667.50		
001090	606000			TELEPHONE AND TELEGRAPH					
002160	AT&T MOBILITY	287273578351X050522	0	2022	8	INV P	257.88	053122	290881 MB2016-287/WIRELESS

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
ACCOUNT TOTAL						257.88				
001090	611000			TRAVEL EXPENSE						
003458	LOWREY, GINGER MADDO	9224 Travel Reimburs	0	2022	8	INV P	215.44	053122	290995	OT # 9224 Travel Re
ACCOUNT TOTAL						215.44				
001090	620000			PRINTING						
002796	FASTSIGNS OF HATTIES	2153-8642	227888	2022	8	INV P	524.00	053122	290939	PUBLIC HEARING YARD
ACCOUNT TOTAL						524.00				
001090	641000			OFFICE EQUIPMENT RENT						
004050	RICOH CORP	36582212	0	2022	8	INV P	232.90	053122	291050	COPIER PAYMENT June
ACCOUNT TOTAL						232.90				
ORG 001090 TOTAL						1,906.60				
INFO TECHNOLOGY										
001091	508000			COMPUTER SUPPLIES						
002709	EATON, ALVIN K (PETT PC 4/2022		0	2022	8	INV P	43.84	053122	290929	PETTYCASH 4/2022
ACCOUNT TOTAL						43.84				
001091	606000			TELEPHONE AND TELEGRAPH						
002160	AT&T MOBILITY	287273578351X050522	0	2022	8	INV P	159.17	053122	290881	MB2016-287/WIRELESS
002160	AT&T MOBILITY	287289913717X050522	0	2022	8	INV P	382.80	053122	290878	MB2016-287/WIRELESS
						541.97				
ACCOUNT TOTAL						541.97				
001091	636500			OFFICE EQUIPMENT R&M						
002158	AT&T	2668420010598	5/8 0	2022	8	INV P	6,790.00	053122	290876	INTERACT SUPPORT 5/
002158	AT&T	M2668420010598	4/8 0	2022	8	INV P	6,790.00	053122	290877	INTERACT SUPPORT 4
						13,580.00				
ACCOUNT TOTAL						13,580.00				
ORG 001091 TOTAL						14,165.81				
GEN.GOV'T.BLDG										
001092	544000			HORT./LANDSCAPING SPL.						
004547	VESELY'S NURSERY	00228011	228011	2022	8	INV P	730.00	053122	291087	PLANTS FOR CITY HAL
ACCOUNT TOTAL						730.00				
001092	630500			ELECTRICITY						
003700	MS POWER COMPANY	E2022 5.2.22	0	2022	8	INV P	1,505.73	053122	291016	MS POWER VARIOUS DE

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8											
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
					ACCOUNT TOTAL			1,505.73			
					ORG 001092 TOTAL			2,235.73			
001094 METRPLTN PLANG.											
001094	501000				OTHER EXPENDABLE OFF.SPL						
004328	STAPLES	8066230053		227862	2022 8 INV P	74.99	053122	291069	COMPUTER	FOOD-MEET	
					ACCOUNT TOTAL			74.99			
001094 511500					FOOD						
002709	EATON, ALVIN K (PETT PC 4/2022			0	2022 8 INV P	74.50	053122	290929	PETTYCASH 4/2022		
					ACCOUNT TOTAL			74.50			
001094 546000					MINOR EQUIPMENT						
002796	FASTSIGNS OF HATTIES 2153-8729			227886	2022 8 INV P	270.20	053122	290939	MPO SIGNS FOR PUBLI		
					ACCOUNT TOTAL			270.20			
001094 570000					MTR VEHICLE REP. PTS/SPL						
003476	MAACO COLLISION REPA 26879			227863	2022 8 INV P	475.58	053122	290997	VEHICLE 19114 MPO D		
					ACCOUNT TOTAL			475.58			
001094 604900					OTHER PROFESSIONAL SERV.						
002160	AT&T MOBILITY	287273578351X050522		0	2022 8 INV P	37.23	053122	290881	MB2016-287/WIRELESS		
					ACCOUNT TOTAL			37.23			
001094 615000					ADVERTISING						
003141	HUB CITY SPOKES	99836		0	2022 8 INV P	58.44	053122	290972	CITY WIDE ADS & NOT		
					ACCOUNT TOTAL			58.44			
001094 638400					MOTOR VEHICLE EQ. R&M						
003476	MAACO COLLISION REPA 26879			227863	2022 8 INV P	694.40	053122	290997	VEHICLE 19114 MPO D		
					ACCOUNT TOTAL			694.40			
					ORG 001094 TOTAL			1,685.34			
001095 G/G INS.OTH SER											
001095	602500				LEGAL						
003090	HICKS LAW FIRM, LLC	10468		0	2022 8 INV P	720.00	053122	290967	HATTIESBURG ELECTIO		
003090	HICKS LAW FIRM, LLC	10470		0	2022 8 INV P	3,024.40	053122	290967	CLUB EMPIRE		
								3,744.40			
047351 LOWREY & FORTNER PA 34774						0	2022 8 INV P	1,000.00	053122	290994 POLICE REVIEW BOARD	
					ACCOUNT TOTAL			4,744.40			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
001095	602700										
002856	FORREST	GENERAL HOSP	STATEMENT 4.2022		0	2022	7	INV P	5,355.00	053122	290945 EAP STATEMENT MAR-M
									5,355.00		
									ACCOUNT TOTAL		
001095	602701										
003576	MEDICAL	ANALYSIS-GHV	10797		0	2022	8	INV P	29,685.97	053122	291005 MONTHLY EMPLOYEE CL
									29,685.97		
									ACCOUNT TOTAL		
001095	604900										
002523	COMCAST	CABLEVISION	5.11.22		0	2022	8	INV P	303.35	053122	290918 COMCAST CITY HALL 5
003433	LOCAL IMPACT	ANALYTI	05132022-1		0	2022	8	INV P	3,500.00	053122	290993 DATA COLLECTION REP
003433	LOCAL IMPACT	ANALYTI	05242022-1		0	2022	8	INV P	20,000.00	053122	290993 INFRA 2022 GRANT AP
									23,500.00		
004694	ZAC FAIRLEY	APPRAISA	1091		0	2022	8	INV P	1,000.00	053122	291097 APPRAISAL REPORT FO
048743	COMBINED	BENEFITS	22		0	2022	8	INV P	1,620.42	053122	290917 2021 ACA FILINGS, M
									26,423.77		
									ACCOUNT TOTAL		
001095	606000										
002158	AT&T		L2022 5.13.22		0	2022	8	INV P	97.46	053122	290873 AT&T BLUE LIGHTS 60
									97.46		
									ACCOUNT TOTAL		
001095	607000										
003928	PITNEY BOWES		INV052022		0	2022	8	INV P	10,000.00	053122	291037 POSTAGE FOR PB CITY
									10,000.00		
									ACCOUNT TOTAL		
001095	625500										
004307	SOUTHGROUP	(HATTIESB	215174		0	2022	8	INV P	24,903.45	053122	291065 Comm Package additi
004307	SOUTHGROUP	(HATTIESB	215175		0	2022	8	INV P	6,331.00	053122	291065 COMM PROPERTY ADDIT
004307	SOUTHGROUP	(HATTIESB	215176		0	2022	8	INV P	3,776.27	053122	291065 COMM PROPERTY ADDIT
004307	SOUTHGROUP	(HATTIESB	215178		0	2022	8	INV P	4,239.00	053122	291065 Comm Property addit
004307	SOUTHGROUP	(HATTIESB	25179		0	2022	8	INV P	1,334.19	053122	291065 COMM PROPERTY ADDIT
									40,583.91		
004308	SOUTHGROUP	(HATTIESB	215329		0	2022	8	INV P	697.13	053122	291066 GENERAL LIABILTY RE
004308	SOUTHGROUP	(HATTIESB	215330		0	2022	8	INV P	911.63	053122	291066 COMM UMBRELLA RENEW
									1,608.76		
									ACCOUNT TOTAL		
									42,192.67		
001095	626000										
									BOILER MACHINERY		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
004307	SOUTHGROUP (HATTIESB	25180	0	2022	8	INV	P		1,184.00	053122	291065 BOILER & MACH ADDIT
ACCOUNT TOTAL									1,184.00		
001095	627000										
003710	MS STATE/SECRETARY O	NOTARY 4.2022	0	2022	7	INV	P		175.00	053122	291017 NOTARY APPLICATIONS
004307	SOUTHGROUP (HATTIESB	211362	0	2022	7	INV	P		175.00	053122	291065 CITY CLERK BOND REN
004308	SOUTHGROUP (HATTIESB	210854	0	2022	8	INV	P		1,081.00	053122	291066 RENEWAL-EMPLOYMENT
ACCOUNT TOTAL									1,431.00		
ORG 001095 TOTAL									121,114.27		
001100											
001100	511200										
047849	PUBLIC SAFETY	6074908	227158	2022	8	INV	P		570.28	053122	291045 GLOVES -CORONA VIRU
ACCOUNT TOTAL									570.28		
001100	535500										
002769	EXPRESS PRESS	45020	0	2022	8	INV	P		474.50	053122	290937 SHIRTS FOR RECORDS
ACCOUNT TOTAL									474.50		
001100	546000										
002049	ADAMS NURSERY	118255	227677	2022	8	INV	P		225.00	053122	290865 PINE STRAW-HPD
002069	AIR CONDITIONING PAR	44814	227814	2022	8	INV	P		140.61	053122	290867 THERMOSTAT FOR DETE
002764	EVIDENT INC	187082C	226472	2022	8	INV	P		272.64	053122	290936 SUPPLIES FOR EVIDEN
003152	HUGHES SUPPLY	S164515244..001	227419	2022	8	INV	P		67.69	053122	290974 TRANSFORMER FOR SHO
003818	O'REILLY AUTO PARTS	0943-401507	0	2022	8	INV	P		54.99	053122	291027 GARDEN HOSE
004256	SOLAR SUPPLY INC	3451858	227906	2022	8	INV	P		40.74	053122	291061 A/C PARTS FOR SERVI
004459	TRI-TECH INC	635488	225627	2022	8	INV	P		555.00	053122	291080 SEM COLLECTION DEVI
ACCOUNT TOTAL									1,356.67		
001100	559000										
004495	ULINE	149186331	228030	2022	8	INV	P		924.50	053122	291084 BOXES FOR EVIDENCE-
ACCOUNT TOTAL									924.50		
001100	570000										
002060	ADVANCE AUTO PARTS	5604130035992	225364	2022	8	INV	P		756.44	053122	290866 REPAIR PARTS FOR VA
002060	ADVANCE AUTO PARTS	5604209474249	227425	2022	8	INV	P		905.74	053122	290866 REPAIR PARTS FOR VA
002060	ADVANCE AUTO PARTS	5604211674706	227689	2022	8	INV	P		1,894.04	053122	290866 REPAIR PARTS FOR VA

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8														
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT		CHECK	DESCRIPTION				
002060	ADVANCE AUTO PARTS	5604213134138	227907	2022	8	INV P	2,158.84	053122	290866	REPAIR PARTS FOR VA				
002060	ADVANCE AUTO PARTS	5604214375265	228066	2022	8	INV P	2,279.19	053122	290866	REPAIR PARTS FOR VA				
002060	ADVANCE AUTO PARTS	5604214375275	228077	2022	8	INV P	1,685.93	053122	290866	REPAIR PARTS FOR VA				
							9,680.18							
002160	AT&T MOBILITY	287273861504X050822	0	2022	8	INV P	1,884.01	053122	290882	MB2016-287/GPS TRAC				
002160	AT&T MOBILITY	287308925627X050522	0	2022	8	INV P	4,720.00	053122	290880	MB2016-287/PD GEOTA				
							6,604.01							
002168	AUTO ZONE	0139123554	0	2022	8	INV P	675.14	053122	290885	REPAIR PARTS-8/26/1				
002342	BRUCE AUTO RECYCLING	506124	227993	2022	8	INV P	50.00	053122	290897	FUSE BOX-HPD				
003074	HELLFIGHTERS USA	70680	227792	2022	8	INV P	182.94	053122	290964	DERBY COVER & GASKE				
004514	UNIVERSITY TIRE & SE	INV195255	227965	2022	8	INV P	2,520.00	053122	291086	TIRES FOR STOCK-HPD				
ACCOUNT TOTAL							19,712.27							
001100	602700	MEDICAL												
003033	HATTIESBURG CLINIC P	8395811	0	2022	8	INV P	4,500.00	053122	290961	PSYCH EVALUATION FO				
ACCOUNT TOTAL							4,500.00							
001100	604900	OTHER PROFESSIONAL SERV.												
002610	D P S CRIME LAB	90117910	0	2022	8	INV P	420.00	053122	290924	ANALYTICAL FEES				
003466	LYON REFRIGERATION A	015805	0	2022	8	INV P	424.29	053122	290996	REPAIRS TO ICE MACH				
004008	RAYNER, JACK	5122022	0	2022	8	INV P	4,500.00	053122	291048	POLYGRAPH FOR RECRU				
047055	INTERPRETERS & TRANS	171291	0	2022	8	INV P	78.76	053122	290976	TELEPHONE INTERPRET				
047246	HERITAGE ENTER	CS2022-040	0	2022	8	INV P	306.02	053122	290966	HEADSHOT PHOTO FOR				
ACCOUNT TOTAL							5,729.07							
001100	606000	TELEPHONE AND TELEGRAPH												
002158	AT&T	0563149329001 4-5/22	0	2022	8	INV P	83.84	053122	290875	POLICE DISPATCH 4/2				
002158	AT&T	54549101030591 5/22	0	2022	8	INV P	186.72	053122	290874	5/22 POLICE DISPATCH				
002158	AT&T	L2022 5.8.22	0	2022	8	INV P	76.00	053122	290873	AT&T 601-M26-9404				
							346.56							
002160	AT&T MOBILITY	287273578351X050522	0	2022	8	INV P	2,114.43	053122	290881	MB2016-287/WIRELESS				
002160	AT&T MOBILITY	287289913717X050522	0	2022	8	INV P	7,215.12	053122	290878	MB2016-287/WIRELESS				
							9,329.55							
ACCOUNT TOTAL							9,676.11							

YEAR/PERIOD: 2022/7 TO 2022/8		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
001100	611000			TRAVEL EXPENSE					
004141	SEALY, PEGGY	9366 OT	0	2022	8	INV P	709.96 053122	291055	TRAVEL EXPENSE CHIE
047308	MATOS DAVID	9351 OT	0	2022	8	INV P	322.00 053122	291002	TRAVEL ADVANCE MATO
048774	KINSEY ROSS	9337 OT	0	2022	8	INV P	858.35 053122	290986	TRAVEL ADVANCE FOR
048829	GRAY, BRIDGET	9366 OT	0	2022	8	INV P	345.36 053122	290951	TRAVEL ADV. BRIDGET
ACCOUNT TOTAL							2,235.67		
001100	612000			FREIGHT					
002069	AIR CONDITIONING PAR	44814	227814	2022	8	INV P	45.00 053122	290867	THERMOSTAT FOR DETE
004459	TRI-TECH INC	635488	225627	2022	8	INV P	15.00 053122	291080	SEM COLLECTION DEVI
004495	ULINE	149186331	228030	2022	8	INV P	120.07 053122	291084	BOXES FOR EVIDENCE-
ACCOUNT TOTAL							180.07		
001100	630000			GAS					
004321	SPIRE	G2022 MAY 5 2022	0	2022	8	INV P	1,124.41 053122	291068	SPIRE 701 JAMES ST
004321	SPIRE	G2022 05.5.22	0	2022	8	INV P	178.81 053122	291068	SPIRE 300 KLONDYKE
004321	SPIRE	G2022 5.16.22	0	2022	8	INV P	77.59 053122	291068	SPIRE VARIOUS DEPT
004321	SPIRE	G2022 5.5.22	0	2022	8	INV P	68.26 053122	291068	SPIRE 1410 W PINE S
004321	SPIRE	G2022 5/5/22	0	2022	8	INV P	47.88 053122	291068	SPIRE 701 JAMES ST
							1,496.95		
ACCOUNT TOTAL							1,496.95		
001100	630500			ELECTRICITY					
003700	MS POWER COMPANY	E2022 5.2.22	0	2022	8	INV P	4,621.42 053122	291016	MS POWER VARIOUS DE
ACCOUNT TOTAL							4,621.42		
001100	638400			MOTOR VEHICLE EQ. R&M					
002035	AAMCO TRANSMISSION (I	144651	227299	2022	8	INV P	3,063.53 053122	290863	REPAIRS TO UNIT#193
002565	COURTESY MOTORS INC	299452	226357	2022	8	INV P	3,120.55 053122	290921	ADDITIONAL REPAIR T
003861	PATTERSON AUTO ELECT	81400	227789	2022	8	INV P	180.00 053122	291031	REPAIRS TO UNIT#171
ACCOUNT TOTAL							6,364.08		
001100	639800			TOW IN CHARGES					
003389	LARRY'S WRECKER SERV	9937	0	2022	8	INV P	65.00 053122	290990	TOWING OF UNIT#1676
ACCOUNT TOTAL							65.00		
001100	684500			REGISTRATION FEE/TUITION					

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
002521	COLUMBIA LAW ENFORCE	5.11.22			0	2022	8	INV P	500.00	053122	290916 BASIC SWAT TRAINING
003668	MS ASSN OF CHIEFS OF	33633			228091	2022	8	INV P	350.00	053122	291012 REG. FOR MS ASSOCIA
								ACCOUNT TOTAL	850.00		
						ORG 001100		TOTAL	58,756.59		
001131								JOINT P&F TRNG.			
001131	501000							OTHER EXPENDABLE OFF.SPL			
003921	PINE BELT TROPHY	7			0	2022	8	INV P	79.20	053122	291036 P/F RECRUIT GRADUAT
								ACCOUNT TOTAL	79.20		
001131	511500							FOOD			
004575	WALMART STORES INC	427382335			227712	2022	8	INV P	160.82	053122	291088 P/F REFRESHMENTS
								ACCOUNT TOTAL	160.82		
001131	535600							WEARING APPAREL-FIRE			
002879	GALL'S LLC	019909276			0	2022	8	INV P	256.80	053122	290946 P/F TRAINING ACADEM
002879	GALL'S LLC	021017289			227282	2022	8	INV P	52.00	053122	290946 P/F CLOTHING
									308.80		
048042	CHARLIE'S TROPHY	20194323			0	2022	8	INV P	120.00	053122	290904 P/F SHIRTS FOR ACAD
								ACCOUNT TOTAL	428.80		
001131	5462FR							MINOR EQUIPMENT-FIRE			
003723	MUNICIPAL EMERGENCY	IN1695872			226853	2022	8	INV P	3,817.15	053122	291020 P/F MINOR EQUIPMENT
								ACCOUNT TOTAL	3,817.15		
001131	6110FR							MINOR EQUIPMENT-FIRE			
003906	PIERCE, DEAN	9302			0	2022	8	INV P	184.00	053122	291034 P/F TRAVEL REIMBURS
								ACCOUNT TOTAL	184.00		
001131	6110PO							TRAVEL-POLICE			
048823	MITCHAM ERIC	9320			0	2022	8	INV P	306.00	053122	291008 P/F MEAL REIMB FOR
048824	MCCULLUM DABORICK	9321			0	2022	8	INV P	306.00	053122	291003 P/F MEAL REIMB FOR
								ACCOUNT TOTAL	612.00		
001131	612000							FREIGHT			
002879	GALL'S LLC	021017289			227282	2022	8	INV P	1.53	053122	290946 P/F CLOTHING
								ACCOUNT TOTAL	1.53		
001131	6845PO							REGISTRATION-POLICE			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8											
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION		
002170	AXON ENTERPRISE, INC	INUS074006	227960	2022	8	INV P	375.00 053122	290888	P/F REG FEE FOR TAS		
002521	COLUMBIA LAW ENFORCE	7	0	2022	8	INV P	500.00 053122	290916	P/F REG FEE FOR OFF		
ACCOUNT TOTAL							875.00				
ORG 001131 TOTAL							6,158.50				
FIRE DIVISION											
001160	510000	CLEANING/JANITORIAL SPLY									
002472	CINTAS FIRST AID J71	4118737790	0	2022	8	INV P	33.13 053122	290907	HFD JANITORIAL AND		
002472	CINTAS FIRST AID J71	4119320487	0	2022	8	INV P	120.71 053122	290907	HFD STATION 9 JANIT		
002472	CINTAS FIRST AID J71	4120106309	0	2022	8	INV P	34.31 053122	290907	HFD JANITORIAL AND		
							188.15				
002729	ELKINS WHOLESALE INC	483493-01	227825	2022	8	INV P	858.28 053122	290931	HFD JANITORIAL SUPP		
ACCOUNT TOTAL							1,046.43				
001160	535000	UNIFORMS, BADGES, ETC.									
002472	CINTAS FIRST AID J71	4119425578	0	2022	8	INV P	44.08 053122	290907	HFD JANITORIAL AND		
003588	MID SOUTH UNIFORM &	628757	0	2022	8	INV P	149.97 053122	291006	HFD CHIEF STEWART U		
004445	TOP NOTCH EMBROIDERY	1533	227111	2022	8	INV P	856.00 053122	291078	HFD UNIFORMS FOR IN		
ACCOUNT TOTAL							1,050.05				
001160	560000	BUILDING MATERIALS & SPLY									
002709	EATON, ALVIN K (PETT PC 4/2022		0	2022	8	INV P	5.65 053122	290929	PETTYCASH 4/2022		
ACCOUNT TOTAL							5.65				
001160	565000	PAINT AND PAINTING SPLY.									
004176	SHERWIN-WILLIAMS COM	6874-1	227774	2022	8	INV P	481.00 053122	291057	HFD HYDRANT PAINT F		
ACCOUNT TOTAL							481.00				
001160	570000	MTR VEHICLE REP. PTS/SPL									
002160	AT&T MOBILITY	287273861504X050822	0	2022	8	INV P	536.64 053122	290882	MB2016-287/GPS TRAC		
002194	BARDING GENERATOR &	6560	228019	2022	8	INV P	345.95 053122	290890	HFD UNIT #11353 DEL		
002733	EMERGENCY EQUIPMENT	469891	227824	2022	8	INV P	46.74 053122	290932	HFD UNIT # 11353 RE		
003034	HATTIESBURG HYDRAULI	94848	227934	2022	8	INV P	83.06 053122	290962	HFD UNIT # 18099 RE		
003388	LARD OIL COMPANY	1163412-IN	228107	2022	8	INV P	17.33 053122	290989	HFD WINDSHIELD WASH		
003388	LARD OIL COMPANY	159425R-DM	227821	2022	8	INV P	743.01 053122	290989	HFD BULK OIL FOR SH		
							760.34				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
004368	SUNBELT FIRE INC	334757	227823	2022	8	INV P	251.20	053122	291070	HFD UNIT # 18099 RE
004499	UNDERWOOD OUTDOOR PO	110658	227674	2022	8	INV P	81.66	053122	291085	HFD STATION 8 LAWN
004499	UNDERWOOD OUTDOOR PO	110848	227935	2022	8	INV P	78.14	053122	291085	HFD STATION 1 LAWN
							159.80			
048167	MUNN WILLIAM JUSTICE	006606	228075	2022	8	INV P	896.52	053122	291021	HFD TRUCK SERVICE S
ACCOUNT TOTAL							3,080.25			
001160	606000	TELEPHONE AND TELEGRAPH								
002160	AT&T MOBILITY	287273578351X050522	0	2022	8	INV P	213.14	053122	290881	MB2016-287/WIRELESS
002160	AT&T MOBILITY	287290217384X050522	0	2022	8	INV P	1,409.41	053122	290879	MB2016-287/WIRELESS
							1,622.55			
ACCOUNT TOTAL							1,622.55			
001160	612000	FREIGHT								
002733	EMERGENCY EQUIPMENT	469891	227824	2022	8	INV P	18.05	053122	290932	HFD UNIT # 11353 RE
ACCOUNT TOTAL							18.05			
001160	630000	GAS								
004321	SPIRE	G2022 5.5.22	0	2022	8	INV P	47.88	053122	291068	SPIRE 922 E HARDY S
004321	SPIRE	G2022 5.20.22	0	2022	8	INV P	164.26	053122	291068	SPIRE 104 LAMAR BL
004321	SPIRE	G2022 MAY 5 2022	0	2022	8	INV P	35.76	053122	291068	SPIRE 622 CORINNE S
							247.90			
ACCOUNT TOTAL							247.90			
001160	630500	ELECTRICITY								
003700	MS POWER COMPANY	E2022 5.2.22	0	2022	8	INV P	1,770.23	053122	291016	MS POWER VARIOUS DE
004282	SOUTHERN PINE ELECTR	E2022 5.17.22	0	2022	8	INV P	50.12	053122	291062	SOUTHERN PINE VARIO
ACCOUNT TOTAL							1,820.35			
001160	631500	WATER								
002146	ARNOLD LINE WATER AS	T2022-5/17/22	0	2022	8	INV P	12.00	053122	290872	ARNOLD LINE WATER-0
ACCOUNT TOTAL							12.00			
001160	635000	BUILDING R&M								
048672	E-Z GARAGE DOOR SERV	2021094	227902	2022	8	INV P	700.00	053122	290927	HFD STATION 1 BAY D
ACCOUNT TOTAL							700.00			
001160	636500	OFFICE EQUIPMENT R&M								

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8									
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
004050	RICOH CORP	36581799	0	2022	8	INV P	192.00 053122	291050	HFD FIRE ADMIN OFFI
ACCOUNT TOTAL							192.00		
001160	638400	MOTOR VEHICLE EQ. R&M							
048679	J AND J RILES, INC	3953	227248	2022	8	INV P	2,632.80 053122	290977	HFD UNIT # 20371 RE
048679	J AND J RILES, INC	3953-02	227903	2022	8	INV P	768.85 053122	290977	HFD UNIT # 20371 RE
							3,401.65		
ACCOUNT TOTAL							3,401.65		
001160	642500	CYLINDER RENT							
002071	AIRGAS USA LLC (NORD 9988012215		0	2022	8	INV P	42.18 053122	290868	HFD OXYGEN BOTTLE R
ACCOUNT TOTAL							42.18		
001160	643500	MOP-MAT-RAG RENT							
002472	CINTAS FIRST AID J71 4118738438		0	2022	8	INV P	37.36 053122	290907	HFD FIRE ADMIN OFFI
ACCOUNT TOTAL							37.36		
ORG 001160 TOTAL							13,757.42		
001180	501000	LAND DEVEL.ADM.							
003809	OFFICE DEPOT INC	2567995925	227533	2022	8	INV P	26.78 053122	291028	OFFICE SUPPLIES
004328	STAPLES	8066221039	227812	2022	8	INV P	339.24 053122	291069	OFFICE SUPPLIES FOR
ACCOUNT TOTAL							366.02		
001180	502000	MINOR OFFICE EQUIP/FURN.							
003809	OFFICE DEPOT INC	2567995925	227533	2022	8	INV P	422.54 053122	291028	OFFICE SUPPLIES
ACCOUNT TOTAL							422.54		
001180	535500	WEARING APPAREL							
003216	J M H GRAPHICS	34316	227809	2022	8	INV P	617.78 053122	290978	APPAREL FOR CODE EN
ACCOUNT TOTAL							617.78		
001180	570000	MTR VEHICLE REP. PTS/SPL							
002060	ADVANCE AUTO PARTS	0904927	227816	2022	8	INV P	24.76 053122	290866	UNIT # 18548 REPLAC
002166	AUTO ARMATURE SERVIC	27958	227757	2022	8	INV P	164.95 053122	290884	BATTERY FOR UNIT #
ACCOUNT TOTAL							189.71		
001180	601800	LOT CLEARING							
003718	MSP ENTERPRISES, LLC	051522-0	0	2022	8	INV P	3,174.40 053122	291019	MB: 2021-340 - LOT

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8									
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR TYP S		WARRANT	CHECK	DESCRIPTION	
				ACCOUNT TOTAL		3,174.40			
001180	602300								
002847	FORREST COUNTY CHANC	111	0	ABSTRACTING & RECORDING 2022 8 INV P		318.00	053122	290944	RECORDING FEES FOR
				ACCOUNT TOTAL		318.00			
001180	604900								
002160	AT&T MOBILITY	287273861504x050822	0	OTHER PROFESSIONAL SERV. 2022 8 INV P		204.30	053122	290882	MB2016-287/GPS TRAC
004075	RODCO, LLC	1803	0	2022 8 INV P		250.00	053122	291052	PLAN REVIEW FOR 43
				ACCOUNT TOTAL		454.30			
001180	606000								
002160	AT&T MOBILITY	287273578351x050522	0	TELEPHONE AND TELEGRAPH 2022 8 INV P		865.42	053122	290881	MB2016-287/WIRELESS
				ACCOUNT TOTAL		865.42			
001180	611000								
048782	BATES JAMES KEVIN	9333	0	TRAVEL EXPENSE 2022 8 INV P		697.04	053122	290891	9333OT TRAVEL ADVAN
				ACCOUNT TOTAL		697.04			
001180	638400								
004514	UNIVERSITY TIRE & SE	INV159415	227968	MOTOR VEHICLE EQ. R&M 2022 8 INV P		48.33	053122	291086	OIL CHANGE FOR UNIT
004514	UNIVERSITY TIRE & SE	INV194849	227858	2022 8 INV P		51.70	053122	291086	OIL CHANGE UNIT # 1
						100.03			
				ACCOUNT TOTAL		100.03			
001180	684000								
002279	BOAM	OT9333	0	DUES AND MEMBERSHIPS 2022 8 INV P		300.00	053122	290893	BOAM 2022 MEMBERSHI
				ACCOUNT TOTAL		300.00			
001180	684500								
002279	BOAM	01	0	REGISTRATION FEE/TUITION 2022 8 INV P		175.00	053122	290893	BOAM 22 SUMMER CONF
				ACCOUNT TOTAL		175.00			
				ORG 001180 TOTAL		7,680.24			
001190				P/S CONTRAC.SER					
001190	602700								
002960	GULF GUARANTY EMPLOY	220525151545	0	MEDICAL 2022 8 INV P		3,872.03	053122	290955	INMATE MEDICAL BILL
				ACCOUNT TOTAL		3,872.03			
001190	686500								
002734	EMERGENCY MANAGEMENT QE	6/30/22	0	EMERGENCY MGMT.CONTRIB. 2022 8 INV P		38,500.00	053122	290933	CONTR QE 6/30/22 PL

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8												
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
					ACCOUNT TOTAL			38,500.00				
					ORG 001190 TOTAL			42,372.03				
001191 TRAFFIC MAINT.												
001191	511000				HOUSEHOLD SUPPLIES							
003772	NEWELL PAPER COMPANY	4131964	227992	2022	8	INV	P	135.05	053122	291025	TRAFFIC TISSUE & LY	
					ACCOUNT TOTAL			135.05				
001191 546000 MINOR EQUIPMENT												
002905	GILLILANDS ELECTRONI	7891	0	2022	8	INV	P	2,237.50	053122	290949	CCT SERVICE-INSTALL	
					ACCOUNT TOTAL			2,237.50				
001191 554000 TRAFFIC CONTROL EQ. SPLY.												
003953	POWELL CONSTRUCTION	03335	227062	2022	8	INV	P	4,995.00	053122	291042	TRAFFIC SIGNAL REPA	
003953	POWELL CONSTRUCTION	3351	0	2022	8	INV	P	1,430.00	053122	291042	POWELL CONSTRUCTION	
003953	POWELL CONSTRUCTION	3354	0	2022	8	INV	P	1,223.00	053122	291042	POWELL CONSTRUCTION	
								7,648.00				
004412 TEMPLE INC inv0218736					226669	2022	8	INV	P	1,465.00	053122	291074 TRAFFIC RUGGEDCOM &
004412	TEMPLE INC	INV0218775	226662	2022	8	INV	P	1,520.00	053122	291074	TRAFFIC FIBER OPTIC	
								2,985.00				
					ACCOUNT TOTAL			10,633.00				
001191 554500 TRAFFIC SIGNS												
004316	SPEEDY PRINTING & SI	228034	228034	2022	8	INV	P	37.50	053122	291067	STREET MARKER	
004316	SPEEDY PRINTING & SI	30233	227848	2022	8	INV	P	990.00	053122	291067	TRAFFIC STREET MARK	
004316	SPEEDY PRINTING & SI	30301	228072	2022	8	INV	P	76.50	053122	291067	STREET MARKERS	
								1,104.00				
					ACCOUNT TOTAL			1,104.00				
001191 559000 OTHER OPERATING MATL/SPLY												
002215	BATTERIES PLUS BULBS	p51061847	227771	2022	8	INV	P	90.60	053122	290892	TRAFFIC BATTERIES	
					ACCOUNT TOTAL			90.60				
001191 565000 PAINT AND PAINTING SPLY.												
002795	FASTENAL COMPANY	MSHAT233694	227788	2022	8	INV	P	175.68	053122	290938	TRAFFIC MARKING PAI	
					ACCOUNT TOTAL			175.68				
001191 570000 MTR VEHICLE REP. PTS/SPL												
002168	AUTO ZONE	0139158663	228073	2022	8	INV	P	97.18	053122	290886	TRAFFIC UNIT 18603	

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8												
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
002413	CARQUEST	AUTO PARTS	14758-11366		227976	2022	8	INV P	95.99	053122	290900	TRAFFIC UNIT 14497
003746	NAPA	AUTO PARTS	5930-643007		227889	2022	8	INV P	323.04	053122	291022	TRAFFIC UNIT 11945
ACCOUNT TOTAL									516.21			
001191	599000				OTHER REPAIR/MAINT. SPL.							
002709	EATON,	ALVIN K (PETT	PC 4/2022		0	2022	8	INV P	19.24	053122	290929	PETTYCASH 4/2022
ACCOUNT TOTAL									19.24			
001191	606000				TELEPHONE AND TELEGRAPH							
002160	AT&T	MOBILITY	287273578351X050522		0	2022	8	INV P	70.97	053122	290881	MB2016-287/WIRELESS
ACCOUNT TOTAL									70.97			
001191	630000				GAS							
004321	SPIRE		G2022 5.5.22		0	2022	8	INV P	35.76	053122	291068	SPIRE 125 WALNUT ST
ACCOUNT TOTAL									35.76			
001191	643000				UNIFORM RENT							
002471	CINTAS	CORPORATION #	4119423568		0	2022	8	INV P	25.00	053122	290906	TRAFFIC SC/8200044
ACCOUNT TOTAL									25.00			
001191	643500				MOP-MAT-RAG RENT							
002471	CINTAS	CORPORATION #	4119423166		0	2022	8	INV P	7.70	053122	290906	TRAFFIC SC/8200044
002471	CINTAS	CORPORATION #	4120104052		0	2022	8	INV P	7.70	053122	290906	TRAFFIC SC/82000447
002471	CINTAS	CORPORATION #	4120104479		0	2022	8	INV P	61.50	053122	290905	TRAFFIC SC/8200044
									76.90			
ACCOUNT TOTAL									76.90			
ORG 001191 TOTAL									15,119.91			
001201	STREET DIV.											
001201	513000				CHEMICALS							
002443	CERTIFIED	LABORATORI	7779288		227694	2022	8	INV P	1,979.95	053122	290903	CHEMICALS FOR FUEL
ACCOUNT TOTAL									1,979.95			
001201	540000				ASPHALT & ASPHALT PROD.							
004586	WARREN	PAVING INC	62101		0	2022	8	INV P	250.84	053122	291091	USED ASPHALT
004586	WARREN	PAVING INC	62233		0	2022	8	INV P	126.12	053122	291091	USED ASPHALT
004586	WARREN	PAVING INC	62241		0	2022	8	INV P	230.40	053122	291091	USED ASPHALT
004586	WARREN	PAVING INC	62250		0	2022	8	INV P	289.59	053122	291091	USED ASPHALT
004586	WARREN	PAVING INC	62263		0	2022	8	INV P	369.21	053122	291091	USED ASPHALT
004586	WARREN	PAVING INC	62393		0	2022	8	INV P	293.55	053122	291091	USED ASPHALT
004586	WARREN	PAVING INC	62401		0	2022	8	INV P	355.00	053122	291091	USED ASPHALT
004586	WARREN	PAVING INC	62597		0	2022	8	INV P	272.58	053122	291091	USED ASPHALT

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8											
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
									2,187.29		
ACCOUNT TOTAL									2,187.29		
001201	559000				OTHER OPERATING MATL/SPLY						
003681	MS FIRE & SAFETY OF	78537	0	2022	8	INV	P	644.00	053122	291014	ANNUAL SERVICE FIRE
ACCOUNT TOTAL									644.00		
001201	565000				PAINT AND PAINTING SPLY.						
004176	SHERWIN-WILLIAMS COM	7342-8	227937	2022	8	INV	P	306.96	053122	291057	MARKING PAINT
ACCOUNT TOTAL									306.96		
001201	570000				MTR VEHICLE REP. PTS/SPL						
002160	AT&T MOBILITY	287273861504x050822	0	2022	8	INV	P	2,532.85	053122	290882	MB2016-287/GPS TRAC
002413	CARQUEST AUTO PARTS	14758-11218	227940	2022	8	INV	P	20.58	053122	290900	UNIT 16007 20 XTRAC
002413	CARQUEST AUTO PARTS	14758-11222	227947	2022	8	INV	P	44.72	053122	290900	UNIT 15964 A/C ACCU
									65.30		
002565	COURTESY MOTORS INC	539000	227978	2022	8	INV	P	303.39	053122	290921	UNIT 15964 CONTROL
004297	SOUTHERN TIRE MART (	2520093681	227990	2022	8	INV	P	3,614.00	053122	291063	TRAILER TIRES AND U
ACCOUNT TOTAL									6,515.54		
001201	604900				OTHER PROFESSIONAL SERV.						
048400	HUB CITY CONSTRUCTIO	2434	228086	2022	8	INV	P	2,600.00	053122	290971	REMOVE/ REPLACE WAT
ACCOUNT TOTAL									2,600.00		
001201	638700				AGRICULTURAL EQ. R&M						
002083	ALLBRITTON CHAIN SAW	80864	220982	2022	8	INV	P	124.95	053122	290869	WEED EATERS PARTS-3
ACCOUNT TOTAL									124.95		
001201	639800				TOW IN CHARGES						
003253	JOHNNY'S WRECKER SER	43309	0	2022	8	INV	P	400.00	053122	290981	TOW CHARGE/UNIT 139
ACCOUNT TOTAL									400.00		
001201	643000				UNIFORM RENT						
002471	CINTAS CORPORATION #	4119423345	0	2022	8	INV	P	58.07	053122	290906	UNIFORM SC 82000447
002471	CINTAS CORPORATION #	4119423412	0	2022	8	INV	P	44.38	053122	290906	UNIFORM SC 82000447
002471	CINTAS CORPORATION #	4119423451	0	2022	8	INV	P	124.97	053122	290905	UNIFORMS SC 8200044
002471	CINTAS CORPORATION #	4119423519	0	2022	8	INV	P	20.30	053122	290906	UNIFORMS SC 8200044
002471	CINTAS CORPORATION #	4119423632	0	2022	8	INV	P	66.50	053122	290905	UNIFORM SC 82000447
002471	CINTAS CORPORATION #	4120104200	0	2022	8	INV	P	44.38	053122	290906	UNIFORMS SC 8200044
002471	CINTAS CORPORATION #	4120104209	0	2022	8	INV	P	58.07	053122	290906	UNIFORMS SC 8200044

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8												
ACCOUNT/VENDOR			INVOICE		PO	YEAR/PR TYP S			WARRANT		CHECK	DESCRIPTION
002471	CINTAS CORPORATION #	4120104370			0	2022	8	INV P	20.30	053122	290906	UNIFORMS SC 8200044
002471	CINTAS CORPORATION #	4120104400			0	2022	8	INV P	146.37	053122	290905	UNIFORMS SC 4120104
002471	CINTAS CORPORATION #	4120104454			0	2022	8	INV P	60.63	053122	290905	UNIFORMS SC 8200044
									643.97			
ACCOUNT TOTAL									643.97			
ORG 001201 TOTAL									15,402.66			
STREET LIGHTS												
001202	630500				ELECTRICITY							
003700	MS POWER COMPANY	E2022	5.2.22		0	2022	8	INV P	3,290.37	053122	291016	MS POWER VARIOUS DE
003873	PEARL RIVER VALLEY E	2022	5.19.22		0	2022	8	INV P	16.76	053122	291032	PRVEPA OAKWOOD DR L
003873	PEARL RIVER VALLEY E	2022	5.5		0	2022	8	INV P	811.45	053122	291032	PRVEPA VARIOUS DEPT
003873	PEARL RIVER VALLEY E	2022	5.9.22		0	2022	8	INV P	484.55	053122	291032	PRVEPA WSBY/LAKEWO
									1,312.76			
004282	SOUTHERN PINE ELECTR	E2022	5.17.22		0	2022	8	INV P	66.65	053122	291062	SOUTHERN PINE VARIO
ACCOUNT TOTAL									4,669.78			
ORG 001202 TOTAL									4,669.78			
ENGR/PUBLIC SER												
001203	501000				OTHER EXPENDABLE OFF.SPL							
003772	NEWELL PAPER COMPANY	4131614			227924	2022	8	INV P	73.68	053122	291025	OFFICE SUPPLIES - E
003772	NEWELL PAPER COMPANY	4131767			227924	2022	8	INV P	40.18	053122	291025	OFFICE SUPPLIES - E
									113.86			
ACCOUNT TOTAL									113.86			
001203	570000				MTR VEHICLE REP. PTS/SPL							
002565	COURTESY MOTORS INC	538924			226306	2022	8	INV P	42.77	053122	290921	LIGHT REPLACEMENT O
ACCOUNT TOTAL									42.77			
ENGINEERING												
003764	NEEL-SCHAFFER INC	1077537-1078142			0	2022	8	INV P	7,852.35	053122	291024	MB 2011-4/307 HIGHW
003764	NEEL-SCHAFFER INC	1079029			0	2022	8	INV P	4,583.33	053122	291024	MB 2021-373 MS4 STO
									12,435.68			
004197	SHOWS DEARMAN & WAIT	22626			0	2022	8	INV P	1,987.50	053122	291058	MB 2012-1/34 BURKET
ACCOUNT TOTAL									14,423.18			
TELEPHONE AND TELEGRAPH												
001203	606000											
002160	AT&T MOBILITY	287273578351X050522			0	2022	8	INV P	213.40	053122	290881	MB2016-287/WIRELESS

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8												
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT		CHECK	DESCRIPTION		
002160	AT&T MOBILITY	287289913717X050522	0	2022	8	INV P		51.94	053122	290878	MB2016-287/WIRELESS	
								265.34				
				ACCOUNT TOTAL				265.34				
001203	607000			POSTAGE								
002798	FEDERAL EXPRESS	7-759-26028	0	2022	8	INV P		35.63	053122	290940	FEDERAL EXPRESS PAY	
002798	FEDERAL EXPRESS	7-767-48971	0	2022	8	INV P		46.48	053122	290940	FEDERAL EXPRESS PAY	
								82.11				
				ACCOUNT TOTAL				82.11				
001203	615000			ADVERTISING								
003141	HUB CITY SPOKES	99836	0	2022	8	INV P		53.60	053122	290972	CITY WIDE ADS & NOT	
003141	HUB CITY SPOKES	99872	0	2022	8	INV P		651.00	053122	290973	CITY WIDE ADS & NOT	
								704.60				
				ACCOUNT TOTAL				704.60				
001203	684000			DUES AND MEMBERSHIPS								
003680	MS ENGINEERING SOCIE	2022437	227156	2022	8	INV P		170.00	053122	291013	DUES FOR MS ENG SOC	
				ACCOUNT TOTAL				170.00				
				ORG 001203 TOTAL				15,801.86				
001204				SHOP DIVISION								
001204	599000			OTHER REPAIR/MAINT. SPL.								
002413	CARQUEST AUTO PARTS	14758-11082	227885	2022	8	INV P		21.00	053122	290900	CONNECTORS/PW SHOP	
				ACCOUNT TOTAL				21.00				
001204	643000			UNIFORM RENT								
002471	CINTAS CORPORATION #	4119423538	0	2022	8	INV P		59.11	053122	290906	UNIFORM RENTAL/PW S	
002471	CINTAS CORPORATION #	4120104385	0	2022	8	INV P		59.11	053122	290906	UNIFORM RENTAL/PW S	
								118.22				
				ACCOUNT TOTAL				118.22				
				ORG 001204 TOTAL				139.22				
001205				G O & F S DIV.								
001205	604900			OTHER PROFESSIONAL SERV.								
003681	MS FIRE & SAFETY OF	78765	0	2022	8	INV P		808.90	053122	291014	SERVICE AND CERTIFI	
				ACCOUNT TOTAL				808.90				
				ORG 001205 TOTAL				808.90				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
001206			DRAINAGE DIV.							
001206 606000			TELEPHONE AND TELEGRAPH							
002160	AT&T MOBILITY	287273578351X050522	0	2022	8	INV P	479.62	053122	290881	MB2016-287/WIRELESS
002160	AT&T MOBILITY	287290252011X050522	0	2022	8	INV P	1,517.55	053122	290883	MB2016-287/WIRELESS
							1,997.17			
ACCOUNT TOTAL							1,997.17			
ORG 001206 TOTAL							1,997.17			
001207			CONSTRUCTION							
001207 559000			OTHER OPERATING MATL/SPLY							
002714	ECONOMY SUPPLY CO	076372	228016	2022	8	INV P	118.00	053122	290930	PLASTIC WRAP/CONSTR
002901	GILKEY ELECTRIC SUPP	354543	227954	2022	8	INV P	44.42	053122	290948	SUPPLIES FOR ELECTR
002901	GILKEY ELECTRIC SUPP	356034	227954	2022	8	INV P	95.00	053122	290948	SUPPLIES FOR ELECTR
							139.42			
ACCOUNT TOTAL							257.42			
001207 570000			MTR VEHICLE REP. PTS/SPL							
002565	COURTESY MOTORS INC	538819	227953	2022	8	INV P	114.57	053122	290921	SWITCH ASY/CONST DE
ACCOUNT TOTAL							114.57			
001207 606000			TELEPHONE AND TELEGRAPH							
002160	AT&T MOBILITY	287273578351X050522	0	2022	8	INV P	121.94	053122	290881	MB2016-287/WIRELESS
ACCOUNT TOTAL							121.94			
001207 643000			UNIFORM RENT							
002471	CINTAS CORPORATION # 41020104177	0	2022	8	INV P	66.30	053122	290905	UNIFORM RENTAL/CONS	
002471	CINTAS CORPORATION # 4119423384	0	2022	8	INV P	66.30	053122	290905	UNIFORM RENTAL/CONS	
							132.60			
ACCOUNT TOTAL							132.60			
ORG 001207 TOTAL							626.53			
001220			SANITATION DIV.							
001220 513000			CHEMICALS							
004583	WARING OIL CO (GULFP 144207		227956	2022	8	INV P	854.70	053122	291090	DEF FOR SANITATION
ACCOUNT TOTAL							854.70			
001220 559000			OTHER OPERATING MATL/SPLY							
002709	EATON, ALVIN K (PETT PC 4/2022		0	2022	8	INV P	27.27	053122	290929	PETTYCASH 4/2022

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
004634	WHEELER'S JANITORIAL	9995				227910	2022	8	INV P	441.60	053122	291095 PAPER TOWELS/ ENZYM
									ACCOUNT TOTAL	468.87		
001220	570000								MTR VEHICLE REP. PTS/SPL			
004597	WATERS INTERNATIONAL	08P829827				227938	2022	8	INV P	37.44	053122	291094 FLEX TUBE SLEEVE FO
									ACCOUNT TOTAL	37.44		
001220	604900								OTHER PROFESSIONAL SERV.			
003681	MS FIRE & SAFETY OF	78523				0	2022	8	INV P	716.00	053122	291014 SANITATION ANNUAL S
									ACCOUNT TOTAL	716.00		
001220	612000								FREIGHT			
004011	RECYCLING PROMOTIONS	20223029				227166	2022	8	INV P	276.25	053122	291049 PROMOTIONAL ITEM /P
									ACCOUNT TOTAL	276.25		
001220	615001								ADVERTISING-RECYCLING			
004011	RECYCLING PROMOTIONS	20223029				227166	2022	8	INV P	1,594.16	053122	291049 PROMOTIONAL ITEM /P
004575	WALMART STORES INC	427350344				227706	2022	8	INV P	582.31	053122	291088 SUPPLIES FOR EARTH
									ACCOUNT TOTAL	2,176.47		
001220	638200								MINOR EQUIPMENT R&M			
004597	WATERS INTERNATIONAL	08P830461				228082	2022	8	INV P	43.10	053122	291094 UNIT 14406 CONNECTO
									ACCOUNT TOTAL	43.10		
001220	638400								MOTOR VEHICLE EQ. R&M			
003114	HOL-MAC CORPORATION	384850				227955	2022	8	INV P	398.73	053122	290968 UNIT 21387 PORT TUB
004120	SANSOM EQUIPMENT CO	P02961				228100	2022	8	INV P	646.88	053122	291054 REPAIR PARTS FOR SI
004297	SOUTHERN TIRE MART (	2520093547				227983	2022	8	INV P	2,864.00	053122	291063 TIRES FOR SANITATIO
004597	WATERS INTERNATIONAL	08P829772				227914	2022	8	INV P	347.10	053122	291094 UNIT 14406 VALVE KI
004597	WATERS INTERNATIONAL	08S828290				227915	2022	8	INV P	2,634.23	053122	291094 UNIT 14408 HVAC REP
										2,981.33		
									ACCOUNT TOTAL	6,890.94		
001220	639800								TOW IN CHARGES			
003253	JOHNNY'S WRECKER SER	43679				0	2022	8	INV P	550.00	053122	290981 TOW UNIT 20069 TO J
003253	JOHNNY'S WRECKER SER	43821				0	2022	8	INV P	450.00	053122	290981 TOW UNIT 19755 FROM
										1,000.00		
									ACCOUNT TOTAL	1,000.00		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
001220	643000										
											UNIFORM RENT
002471	CINTAS CORPORATION # 4119423191				0	2022	8	INV P	36.78	053122	290906 SC8200044758 SANIT.
002471	CINTAS CORPORATION # 4119423785				0	2022	8	INV P	254.47	053122	290905 SC8200044758 SANIT.
002471	CINTAS CORPORATION # 4120104048				0	2022	8	INV P	36.78	053122	290906 SC8200044758 SANITA
002471	CINTAS CORPORATION # 4120104723				0	2022	8	INV P	205.88	053122	290905 SC8200044758 SANITA
									533.91		
002472	CINTAS FIRST AID J71 5109698783				0	2022	8	INV P	157.32	053122	290907 GLOVES FOR SANITATI
									691.23		ACCOUNT TOTAL
001220	688000										
004591	WASTE MANAGEMENT OF 0013217-2526-7				0	2022	8	INV P	2,016.83	053122	291092 MB200-5/484 CUST. I
									2,016.83		ACCOUNT TOTAL
001220	688600										
002492	CLEMTS HARDWARE 129930				227897	2022	8	INV P	330.00	053122	290914 COOLERS FOR RIGHT W
003053	H'BURG COCA COLA BOT 19873223137				227891	2022	8	INV P	498.90	053122	290957 DRINKS FOR RIGHT WA
047043	PORTABLE TOILETS 91089				228010	2022	8	INV P	415.00	053122	291039 PORTABLE TOILET/HAN
									1,243.90		ACCOUNT TOTAL
									16,415.73		ORG 001220 TOTAL
001250											HEALTH DIVISION
001250	570000										MTR VEHICLE REP. PTS/SPL
002166	AUTO ARMATURE SERVIC 002120				228009	2022	8	INV P	259.95	053122	290884 UNIT 20051 HEALTH A
002166	AUTO ARMATURE SERVIC 28071				227939	2022	8	INV P	174.95	053122	290884 UNIT 15514 HEALTH T
002166	AUTO ARMATURE SERVIC 28113				227988	2022	8	INV P	199.95	053122	290884 UNIT 20051 MTPH7 BA
									634.85		
002169	AUTOMOTIVE GLASS SPE w250259				227973	2022	8	INV P	295.00	053122	290887 UNIT 15963 BACK WIN
002304	BRACKMAN MOWER WAREH 23108				227986	2022	8	INV P	218.02	053122	290895 UNIT 21655 HUSTLER
002413	CARQUEST AUTO PARTS 14758-11481				228018	2022	8	INV P	70.71	053122	290900 HEALTH DEPT UNIVERS
									1,218.58		ACCOUNT TOTAL
001250	575500										AGRICLTR REPAIR PTS/SPL
002083	ALLBRITTON CHAIN SAW 90401				228026	2022	8	INV P	2,390.60	053122	290869 GATORLINE SQUARE WE
002304	BRACKMAN MOWER WAREH 22596				227883	2022	8	INV P	688.16	053122	290895 PARTS/LAWN MOWER
003843	PARISH TRACTOR (HATT 02-0217716				227685	2022	8	INV P	1,507.22	053122	291030 REPAIR PARTS FOR UN

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8											
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
					ACCOUNT TOTAL			4,585.98			
001250	638700				AGRICULTURAL EQ. R&M						
002083	ALLBRITTON CHAIN SAW	12036	225827	2022	8	INV	P	77.84	053122	290869	REPAIR FOR LAWN MOW
					ACCOUNT TOTAL			77.84			
					ORG 001250 TOTAL			5,882.40			
					ANIMAL CONTROL						
001260	684000				DUES AND MEMBERSHIPS						
001260	NATL ANIMAL CONTROL	8125	0	2022	8	INV	P	150.00	053122	291023	2023 MEMBERSHIP REN
					ACCOUNT TOTAL			150.00			
					ORG 001260 TOTAL			150.00			
					ECONOMIC DEV.						
001402	682001				FCIPC/AREA DEV. PRTRNSHIP						
001402	CITY OF HATTIESBURG	QE 6/30/22 CONTRIB	0	2022	8	INV	P	58,750.00	053122	290913	COH CONTRIBUTION FO
					ACCOUNT TOTAL			58,750.00			
001402	715007				PUBLIC SAFETY COMPLEX						
047037	TAB PRODUCTS CO	16565	225949	2022	8	INV	P	84,994.38	053122	291073	LOCKERS FOR PUBLIC
					ACCOUNT TOTAL			84,994.38			
					ORG 001402 TOTAL			143,744.38			
					AIRPORT DIV.						
001551	565000				PAINT AND PAINTING SPLY.						
003037	HATTIESBURG PAINT &	W0246880	227900	2022	8	INV	P	1,356.86	053122	290963	PAINT SUPPLIES FOR
					ACCOUNT TOTAL			1,356.86			
					ORG 001551 TOTAL			1,356.86			
					CEMETERY DIV						
001553	510000				CLEANING/JANITORIAL SPLY						
001553	NEWELL PAPER COMPANY	4131296	227860	2022	8	INV	P	348.18	053122	291025	6750515-21340 K.C.
					ACCOUNT TOTAL			348.18			
001553	546000				MINOR EQUIPMENT						
002071	AIRGAS USA LLC (NORD 9988012212		0	2022	8	INV	P	77.40	053122	290868	WELDING CYLINDER RE
					ACCOUNT TOTAL			77.40			
					BUILDING MATERIALS & SPLY						
001553	560000										
002709	EATON, ALVIN K (PETT PC 4/2022		0	2022	8	INV	P	13.90	053122	290929	PETTYCASH 4/2022

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8									
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
ACCOUNT TOTAL							13.90		
001553	570000			MTR VEHICLE REP.	PTS/SPL				
002709	EATON, ALVIN K (PETT PC 4/2022		0	2022 8	INV P		15.41 053122	290929	PETTYCASH 4/2022
ACCOUNT TOTAL							15.41		
001553	575500			AGRICLTRL REPAIR	PTS/SPL				
004499	UNDERWOOD OUTDOOR PO 111820		228027	2022 8	INV P		659.80 053122	291085	12176-.105 TWST 3LB
ACCOUNT TOTAL							659.80		
001553	604900			OTHER PROFESSIONAL SERV.					
002160	AT&T MOBILITY	287273578351X050522	0	2022 8	INV P		179.91 053122	290881	MB2016-287/WIRELESS
002471	CINTAS CORPORATION # 5109751194		0	2022 8	INV P		287.04 053122	290905	4-SHELF FIRST AID C
003191	INTERFACE SECURITY S 20232671		0	2022 8	INV P		48.34 053122	290975	MB#2006-2/76-77
003634	MOLLY MAID	0622	0	2022 8	INV P		245.00 053122	291010	MB#2005-2/267-CLEAN
ACCOUNT TOTAL							760.29		
ORG 001553 TOTAL							1,874.98		
001560		PARKING OPER.							
001560	640200			PARKING GARAGE/LOT RENT					
003789	NORFOLK SOUTHERN COR 92610766		0	2022 8	INV P		2,291.90 053122	291026	LEASE RR PKG LOT MB
ACCOUNT TOTAL							2,291.90		
ORG 001560 TOTAL							2,291.90		
FUND 001 REVENUES				TOTAL:		840,544.65			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8											
ACCOUNT/VENDOR			INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
002300				PKS/REC-RECREATION MAINT. DIV.							
002300	510000				CLEANING/JANITORIAL SPLY						
002729	ELKINS WHOLESALE INC	483303		227711	2022	8	INV P	440.70	053122	290931 P&R GRNDS MAINT-JAN	
ACCOUNT TOTAL								440.70			
002300	525000				GAS AND OIL						
001002	CITY OF HATTIESBURG	4/22		0	2022	8	INV P	8,028.20	053122	290908 4/22 FUEL USAGE	
ACCOUNT TOTAL								8,028.20			
002300	551000				RECREATIONAL SUPPLIES						
003416	LIBERTY FLAG & SPECI	04220032		227466	2022	8	INV P	470.18	053122	290992 P&R GRNDS MAINT-FLA	
ACCOUNT TOTAL								470.18			
002300	560000				BUILDING MATERIALS & SPLY						
002714	ECONOMY SUPPLY CO	075983		227916	2022	8	INV P	58.33	053122	290930 P&R JC PARK-BRIDGE	
ACCOUNT TOTAL								58.33			
002300	560500				ELECTRICAL SUPPLIES						
002901	GILKEY ELECTRIC SUPP	355935		227918	2022	8	INV P	65.00	053122	290948 P&R TATUM PARK ELEC	
004256	SOLAR SUPPLY INC	3452143		227984	2022	8	INV P	16.80	053122	291061 P&R TATUM BB-A/C SU	
ACCOUNT TOTAL								81.80			
002300	561000				PLUMBING SUPPLIES						
003302	KEELING COMPANY (HAT	S4137051.001		227927	2022	8	INV P	734.59	053122	290984 P&R GRNDS-PLUMBING	
003302	KEELING COMPANY (HAT	S4138053.001		227927	2022	8	INV P	128.01	053122	290984 P&R GRNDS-PLUMBING	
003302	KEELING COMPANY (HAT	S4138259.001		227927	2022	8	INV P	130.49	053122	290984 P&R GRNDS-PLUMBING	
								993.09			
ACCOUNT TOTAL								993.09			
002300	604900				OTHER PROFESSIONAL SERV.						
003381	LANDARC CONSULTING G	06-1998		0	2022	8	INV P	9,730.00	053122	290988 MB 2021-321 BEAUTIF	
ACCOUNT TOTAL								9,730.00			
002300	606000				TELEPHONE AND TELEGRAPH						
002160	AT&T MOBILITY	287273578351X050522		0	2022	8	INV P	504.25	053122	290881 MB2016-287/WIRELESS	
ACCOUNT TOTAL								504.25			
002300	612000				FREIGHT						
003416	LIBERTY FLAG & SPECI	04220032		227466	2022	8	INV P	32.37	053122	290992 P&R GRNDS MAINT-FLA	
ACCOUNT TOTAL								32.37			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8										
ACCOUNT/VENDOR			INVOICE	PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
002300	630500				ELECTRICITY					
003700	MS POWER COMPANY	E2022 5.2.22	0	2022	8	INV	P	51.08	053122	291016 MS POWER VARIOUS DE
ACCOUNT TOTAL								51.08		
002300	635500				ELECTRICAL R&M					
002672	DOLEAC ELECTRIC CO I	H26253	0	2022	8	INV	P	210.63	053122	290925 P&R TATUM BB-LABOR
ACCOUNT TOTAL								210.63		
002300	699900				SERVICES NOT SPECIFIED					
003764	NEEL-SCHAFFER INC	1079134	0	2022	8	INV	P	1,216.26	053122	291024 MB 2011-4/307 KAMPE
ACCOUNT TOTAL								1,216.26		
002300	733500				AGRICULTURAL EQUIPMENT					
002304	BRACKMAN MOWER WAREH	22593	227830	2022	8	INV	P	958.00	053122	290895 P&R RECREATION MAIN
ACCOUNT TOTAL								958.00		
ORG 002300 TOTAL								22,774.89		
002315				PKS/REC-REC.ADMIN/COM.REL.						
002315	513000				CHEMICALS					
047471	SAMMY GRAHAM LLC	1976	227593	2022	8	INV	P	12,575.00	053122	291053 POOL CHEMICALS TWO
ACCOUNT TOTAL								12,575.00		
002315	525000				GAS AND OIL					
001002	CITY OF HATTIESBURG	4/22	0	2022	8	INV	P	206.10	053122	290908 4/22 FUEL USAGE
ACCOUNT TOTAL								206.10		
002315	551000				RECREATIONAL SUPPLIES					
003937	PLAY IT AGAIN SPORTS	000949	227892	2022	8	INV	P	690.00	053122	291038 BASEBALL EQUIPMENT
003937	PLAY IT AGAIN SPORTS	965	228047	2022	8	INV	P	1,176.00	053122	291038 CHAMPIONSHIP SHIRTS
								1,866.00		
ACCOUNT TOTAL								1,866.00		
002315	551001				RECREATIONAL SUPP-ARTS CENTER					
002049	ADAMS NURSERY	118247	227542	2022	8	INV	P	680.50	053122	290865 COMMUNITY GARDEN SU
004175	SHERWIN-WILLIAMS COM	4/22/22	227546	2022	8	INV	P	169.32	053122	291056 PAINT
ACCOUNT TOTAL								849.82		
002315	603400				OFFICIALS					
002911	GOLDEN, NICHOLAS D	5.20.22	0	2022	8	INV	P	275.00	053122	290950 HPR CONTRACT LABOR

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8												
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT		CHECK	DESCRIPTION		
002940	GREEN, CHARLES A	5.19.2022	0	2022	8	INV P	90.00	053122	290952	HPR	CONTRACT	LABOR
002976	HALL, MICHAEL	5.20.22	0	2022	8	INV P	100.00	053122	290959	HPR	CONTRACT	LABOR
003287	JORDAN, ALEX X	5.20.22	0	2022	8	INV P	50.00	053122	290983	HPR	CONTRACT	LABOR
003949	PORTER, JAMAL	5.19.2022	0	2022	8	INV P	270.00	053122	291040	HPR	CONTRACT	LABOR
003950	PORTER, ROMESHA	5.19.2022	0	2022	8	INV P	270.00	053122	291041	HPR	CONTRACT	LABOR
004221	SMITH, CARLTON L	5.20.22	0	2022	8	INV P	200.00	053122	291060	HPR	CONTRACT	LABOR
004416	TERRELL, WINSTON	5.20.22	0	2022	8	INV P	325.00	053122	291076	HPR	CONTRACT	LABOR
004432	THOMPSON, JESSE	5.20.22	0	2022	8	INV P	475.00	053122	291077	HPR	CONTRACT	LABOR
004460	TROTTER, COREY	5.20.22	0	2022	8	INV P	400.00	053122	291081	HPR	CONTRACT	LABOR
004462	TROTTER, WILLIE	5.20.22	0	2022	8	INV P	225.00	053122	291082	HPR	CONTRACT	LABOR
047595	MARTIN DERRICAS	5.20.22	0	2022	8	INV P	250.00	053122	291000	HPR	CONTRACT	LABOR
048584	SUTTON DIONTA T	5.20.22	0	2022	8	INV P	50.00	053122	291072	HPR	CONTRACT	LABOR
048589	SMITH JELISA K	5.20.22	0	2022	8	INV P	250.00	053122	291059	HPR	CONTRACT	LABOR
048590	CRAWFORD OTTO	5.20.22	0	2022	8	INV P	125.00	053122	290923	HPR	CONTRACT	LABOR
048729	PAIGE NICHOLAS F	5.20.22	0	2022	8	INV P	100.00	053122	291029	HPR	CONTRACT	LABOR
048772	LEE ANTHONY	5.20.22	0	2022	8	INV P	325.00	053122	290991	HPR	CONTRACT	LABOR
048783	HALL DEON L	5.20.22	0	2022	8	INV P	50.00	053122	290958	HPR	CONTRACT	LABOR
ACCOUNT TOTAL							3,830.00					
002315	604900			OTHER PROFESSIONAL SERV.								
002540	CONNER, TOBARRA	5.20.22	0	2022	8	INV P	100.00	053122	290919	HPR	CONTRACT	LABOR
002965	GUTHRIE, JONI S	5/20/22	0	2022	8	INV P	180.00	053122	290956	HPR	CONTRACT	LABOR
003313	KETTLEY, ANNETTE	5.20.22	0	2022	8	INV P	240.00	053122	290985	HPR	CONTRACT	LABOR
003508	MARTIN, MAGDALINE	5.20.22	0	2022	8	INV P	96.00	053122	291001	HPR	CONTRACT	LABOR
003958	POWELL, RANDY	5.19.2022	0	2022	8	INV P	90.00	053122	291043	HPR	CONTRACT	LABOR
003958	POWELL, RANDY	5.20.22	0	2022	8	INV P	630.00	053122	291043	HPR	CONTRACT	LABOR
							720.00					
004415	TERRELL, MICHAEL J	5.20.22	0	2022	8	INV P	190.00	053122	291075	HPR	CONTRACT	LABOR

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8											
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION		
047471	SAMMY GRAHAM LLC	5.12.22	227835	2022	8	INV P	4,000.00 053122	291053	PRESSURE WASHING		
048422	RAY NANCY REBEKAH	5.20.22	0	2022	8	INV P	150.00 053122	291047	HPR CONTRACT LABOR		
048784	MARTIN BENJAMIN L	5.20.22	0	2022	8	INV P	50.00 053122	290999	HPR CONTRACT LABOR		
ACCOUNT TOTAL							5,726.00				
002315	604919			OTH PROF SERV-ART CENTER							
047117	ABIGAIL L ALLEN	5.17.2022	0	2022	8	INV P	175.00 053122	290864	AFTER SCHOOL ART CL		
048656	HOLLEY REBECCA RUMBA	03212022	0	2022	8	INV P	150.00 053122	290969	LIVE MUSIC AT THE J		
048822	COX CHAD	05122022	0	2022	8	INV P	150.00 053122	290922	LIVE MUSIC AT THE J		
ACCOUNT TOTAL							475.00				
002315	630500			ELECTRICITY							
003700	MS POWER COMPANY	E2022 5.2.22	0	2022	8	INV P	1,074.84 053122	291016	MS POWER VARIOUS DE		
ACCOUNT TOTAL							1,074.84				
ORG 002315 TOTAL							26,602.76				
FUND 002 PARKS & RECREATION FUND						TOTAL:	49,377.65				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
009660				W&S O&M-CUSTOMER ACCT. DIV.							
009660	525000			GAS AND OIL							
001002	CITY OF HATTIESBURG	4/2022	FUND 9	0	2022	8	INV	P	1,190.71	053122	290910 TRF 4/22 FUEL USAGE
				ACCOUNT TOTAL					1,190.71		
009660	546000			MINOR EQUIPMENT							
002442	CENTRAL PIPE SUPPLY	S100295860.001		227969	2022	8	INV	P	84.00	053122	290902 MINOR EQUIPMENT WAT
				ACCOUNT TOTAL					84.00		
009660	604900			OTHER PROFESSIONAL SERV.							
002181	BADGER METER INC	80097868		0	2022	8	INV	P	1,700.23	053122	290889 M/B 2018-832 BEACON
003861	PATTERSON AUTO ELECT	81405		227887	2022	8	INV	P	2,891.53	053122	291031 REPAIR TO UNIT 2141
004594	WATER COMPANY OF AME	18		0	2022	8	INV	P	24,426.84	053122	291093 REVIEW OF UNBILLED
				ACCOUNT TOTAL					29,018.60		
009660	606000			TELEPHONE AND TELEGRAPH							
002160	AT&T MOBILITY	287273578351X050522		0	2022	8	INV	P	589.54	053122	290881 MB2016-287/WIRELESS
				ACCOUNT TOTAL					589.54		
009660	607000			POSTAGE							
047562	ENCO UTILITY	22423		0	2022	8	INV	P	2,872.02	053122	290935 MB 2020-835 RT 1 BI
047562	ENCO UTILITY	22523		0	2022	8	INV	P	3,434.23	053122	290935 PREPAID POSTAGE DEP
047562	ENCO UTILITY	22618		0	2022	8	INV	P	1,425.39	053122	290935 MB 2020-835 RT 2 BI
									7,731.64		
				ACCOUNT TOTAL					7,731.64		
009660	620000			PRINTING							
047562	ENCO UTILITY	22423		0	2022	8	INV	P	1,074.92	053122	290935 MB 2020-835 RT 1 BI
047562	ENCO UTILITY	22618		0	2022	8	INV	P	582.25	053122	290935 MB 2020-835 RT 2 BI
									1,657.17		
				ACCOUNT TOTAL					1,657.17		
009660	630000			GAS							
004321	SPIRE	G2022 5.16.22		0	2022	8	INV	P	35.76	053122	291068 SPIRE VARIOUS DEPT
				ACCOUNT TOTAL					35.76		
009660	638400			MOTOR VEHICLE EQ. R&M							
003861	PATTERSON AUTO ELECT	81342		225824	2022	8	INV	P	3,058.95	053122	291031 REPAIR TO UNIT 1935
				ACCOUNT TOTAL					3,058.95		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8												
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION	
009660	643000					UNIFORM RENT						
002471	CINTAS CORPORATION # 4118737519	0	2022	8	INV	P	97.35	053122	290905	S/C 8200044758	UNIF	
002471	CINTAS CORPORATION # 4119425172	0	2022	8	INV	P	75.19	053122	290905	S/C 8200044758	UNID	
002471	CINTAS CORPORATION # 4120105903	0	2022	8	INV	P	135.19	053122	290905	S/C 8200044758	UNIF	
							307.73					
ACCOUNT TOTAL							307.73					
ORG 009660 TOTAL							43,674.10					
009672	525000	W&S O&M-WATER TRANSMISSION DIV										
001002	CITY OF HATTIESBURG 4/2022 FUND 9	0	2022	8	INV	P	3,761.30	053122	290910	TRF 4/22 FUEL USAGE		
002709	EATON, ALVIN K (PETT PC 4/2022	0	2022	8	INV	P	24.51	053122	290929	PETTYCASH 4/2022		
ACCOUNT TOTAL							3,785.81					
009672	525700	DIESEL FUEL										
001002	CITY OF HATTIESBURG 4/2022 FUND 9	0	2022	8	INV	P	60.00	053122	290910	TRF 4/22 FUEL USAGE		
ACCOUNT TOTAL							60.00					
009672	540000	ASPHALT & ASPHALT PROD.										
004586	WARREN PAVING INC 61982	227701	2022	8	INV	P	803.73	053122	291091	CRUSHED CONCRETE (I		
004586	WARREN PAVING INC 62178	227701	2022	8	INV	P	866.13	053122	291091	CRUSHED CONCRETE (I		
							1,669.86					
ACCOUNT TOTAL							1,669.86					
009672	561000	PLUMBING SUPPLIES										
002442	CENTRAL PIPE SUPPLY S100288256-003	226975	2022	8	INV	P	717.75	053122	290902	WAREHOUSE STOCK FOR		
002442	CENTRAL PIPE SUPPLY S100293851-002	227618	2022	8	INV	P	322.92	053122	290902	BADGER M25 MCA ---		
							1,040.67					
004300	SOUTHERN WATERWORKS 90869	227851	2022	8	INV	P	1,293.14	053122	291064	WAREHOUSE STOCK FOR		
ACCOUNT TOTAL							2,333.81					
009672	570000	MTR VEHICLE REP. PTS/SPL										
002166	AUTO ARMATURE SERVIC 28155	228043	2022	8	INV	P	229.95	053122	290884	BATTERY FOR UNIT #		
002413	CARQUEST AUTO PARTS 14758-11041	227873	2022	8	INV	P	228.08	053122	290900	REPAIR PARTS FOR #		
002413	CARQUEST AUTO PARTS 14758-11505	228029	2022	8	INV	P	272.66	053122	290900	REPAIR PARTS FOR UN		
							500.74					
002700	EAGLE TIRE AND SERVI INV064285	227896	2022	8	INV	P	379.88	053122	290928	TIRES FOR UNIT # 20		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
					ACCOUNT TOTAL				1,110.57		
009672	636000					STREETS & STRUCTURES R&M					
003649	C J MORGAN INC	2022025	0	2022	8	INV	P		12,110.00	053122	290899 MB2020-179:WATER RE
003649	C J MORGAN INC	2022026	0	2022	8	INV	P		163,651.55	053122	290899 MB2020-179:WATER RE
									175,761.55		
					ACCOUNT TOTAL				175,761.55		
					ORG 009672 TOTAL				184,721.60		
009673	525000	W&S O&M-WATER PLANT DIVISION									
009673	525000	GAS AND OIL									
001002	CITY OF HATTIESBURG	4/2022 FUND 9	0	2022	8	INV	P		779.87	053122	290910 TRF 4/22 FUEL USAGE
					ACCOUNT TOTAL				779.87		
009673	545000	HAND TOOLS									
002413	CARQUEST AUTO PARTS	14758-11223	227950	2022	8	INV	P		23.99	053122	290900 RATCHET FOR WATER T
					ACCOUNT TOTAL				23.99		
009673	570000	MTR VEHICLE REP. PTS/SPL									
002160	AT&T MOBILITY	287273861504X050822	0	2022	8	INV	P		244.93	053122	290882 MB2016-287/GPS TRAC
002166	AUTO ARMATURE SERVIC	28081	227949	2022	8	INV	P		164.95	053122	290884 BATTERY FOR UNIT #
002413	CARQUEST AUTO PARTS	14758-11233	227952	2022	8	INV	P		100.66	053122	290900 REPAIR PARTS, AIR C
003034	HATTIESBURG HYDRAULI	94847	227945	2022	8	INV	P		238.15	053122	290962 REPAIRS TO UNIT # 1
003712	MS STATE/TAX COMM/TA	21787	0	2022	8	INV	P		12.00	053122	291018 TAX EXEMPT TAG UNIT
					ACCOUNT TOTAL				760.69		
009673	604900	OTHER PROFESSIONAL SERV.									
002288	BONNER ANALYTICAL TE	76805	0	2022	8	INV	P		2,098.08	053122	290894 NPDES MONITORING, L
002288	BONNER ANALYTICAL TE	76873	0	2022	8	INV	P		1,431.00	053122	290894 ROUTINE COLIFORM SA
									3,529.08		
002380	BYRD, WADE J.	BYRD052022	0	2022	8	INV	P		3,000.00	053122	290898 OPERATOR OF RECORD,
002955	GRINER DRILLING SERV	R-55243	226435	2022	8	INV	P		114,785.00	053122	290953 REPAIRS TO WELL #3
003614	MISSION COMMUNICATIO	1064014	0	2022	8	INV	P		2,540.40	053122	291007 ANNUAL SERVICE FOR
003614	MISSION COMMUNICATIO	1065006	0	2022	8	INV	P		2,851.20	053122	291007 ANNUAL CELL SERVICE
									5,391.60		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8											
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
048821	FISHERS	LANDSCAPING	CMEAD031422		0	2022	8	INV P	345.00 053122	290942	REPAIRS TO IRRIGATI
ACCOUNT TOTAL									127,050.68		
009673	630000					GAS					
004321	SPIRE		G2022 5.5.2022		0	2022	8	INV P	56.37 053122	291068	SPIRE 900 JAMES ST
ACCOUNT TOTAL									56.37		
009673	630500					ELECTRICITY					
003700	MS POWER COMPANY		E2022 5.2.22		0	2022	8	INV P	23,812.58 053122	291016	MS POWER VARIOUS DE
003873	PEARL RIVER VALLEY E		2022 5.5		0	2022	8	INV P	99.86 053122	291032	PRVEPA VARIOUS DEPT
ACCOUNT TOTAL									23,912.44		
009673	638300					GENERATOR R&M					
002672	DOLEAC ELECTRIC CO I	H26243			0	2022	8	INV P	1,068.58 053122	290925	MB2018-117:REPAIRS
002672	DOLEAC ELECTRIC CO I	H26245			0	2022	8	INV P	1,068.58 053122	290925	MB2018-117: REPAIRS
									2,137.16		
ACCOUNT TOTAL									2,137.16		
009673	638400					MOTOR VEHICLE EQ. R&M					
003034	HATTIESBURG HYDRAULI	94847			227945	2022	8	INV P	405.00 053122	290962	REPAIRS TO UNIT # 1
ACCOUNT TOTAL									405.00		
009673	643500					MOP-MAT-RAG RENT					
002471	CINTAS CORPORATION #	4119425315			0	2022	8	INV P	23.31 053122	290906	SC#8200044758- MOPS
002471	CINTAS CORPORATION #	4120106175			0	2022	8	INV P	23.31 053122	290906	SC#8200044758- MOPS
									46.62		
ACCOUNT TOTAL									46.62		
ORG 009673 TOTAL									155,172.82		
009676				W&S O&M-SEWER DIVISION							
009676	525000					GAS AND OIL					
001002	CITY OF HATTIESBURG	4/2022 FUND 9			0	2022	8	INV P	575.98 053122	290910	TRF 4/22 FUEL USAGE
ACCOUNT TOTAL									575.98		
009676	525700					DIESEL FUEL					
001002	CITY OF HATTIESBURG	4/2022 FUND 9			0	2022	8	INV P	671.11 053122	290910	TRF 4/22 FUEL USAGE
ACCOUNT TOTAL									671.11		
009676	559000					OTHER OPERATING MATL/SPLY					
003772	NEWELL PAPER COMPANY	4131433			227874	2022	8	INV P	167.61 053122	291025	TRASH BAGS FOR GROU

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
ACCOUNT TOTAL							167.61			
009676	561000			PLUMBING SUPPLIES						
002442	CENTRAL PIPE SUPPLY	S100285150-001	226782	2022	8	INV P	2,250.00	053122	290902	WATER METER LOCKING
ACCOUNT TOTAL							2,250.00			
009676	630500			ELECTRICITY						
003700	MS POWER COMPANY	E2022 5.2.22	0	2022	8	INV P	830.69	053122	291016	MS POWER VARIOUS DE
004282	SOUTHERN PINE ELECTR	E2022 5.17.22	0	2022	8	INV P	654.10	053122	291062	SOUTHERN PINE VARIO
004282	SOUTHERN PINE ELECTR	E2022 5.5.22	0	2022	8	INV P	1,317.22	053122	291062	SOUTHERN PINE ELECT
							1,971.32			
ACCOUNT TOTAL							2,802.01			
009676	636000			STREETS & STRUCTURES R&M						
004058	RJM MCQUEEN CONTRACT 2617		0	2022	8	INV P	6,461.60	053122	291051	MB2020-179:SEWER RE
004058	RJM MCQUEEN CONTRACT 2618		0	2022	8	INV P	1,585.00	053122	291051	MB2020-179:SEWER RE
004058	RJM MCQUEEN CONTRACT 2619		0	2022	8	INV P	2,350.00	053122	291051	MB2020-179: SEWER R
004058	RJM MCQUEEN CONTRACT 2620		0	2022	8	INV P	2,980.00	053122	291051	MB2020-179:SEWER RE
004058	RJM MCQUEEN CONTRACT 2621		0	2022	8	INV P	17,816.04	053122	291051	MB2020-179:SEWER RE
004058	RJM MCQUEEN CONTRACT 2622		0	2022	8	INV P	13,564.90	053122	291051	MB2020-179:SEWER RE
004058	RJM MCQUEEN CONTRACT 2623		0	2022	8	INV P	8,928.10	053122	291051	MB2020-179:SEWER RE
004058	RJM MCQUEEN CONTRACT 2624		0	2022	8	INV P	6,360.50	053122	291051	MB2020-179: SEWER R
004058	RJM MCQUEEN CONTRACT 2625		0	2022	8	INV P	146,653.83	053122	291051	MB2020-179:SEWER RE
							206,699.97			
ACCOUNT TOTAL							206,699.97			
009676	638600			CONSTRUCTION EQUIP R&M						
003843	PARISH TRACTOR (HATT 02-221398		228035	2022	8	INV P	31.60	053122	291030	REPAIR PARTS FOR #
ACCOUNT TOTAL							31.60			
009676	643000			UNIFORM RENT						
002471	CINTAS CORPORATION # 4119425866		0	2022	8	INV P	267.08	053122	290905	SC#8200044758- UNIF
002471	CINTAS CORPORATION # 4120106598		0	2022	8	INV P	267.08	053122	290905	SC#8200044758- UNIF
							534.16			
ACCOUNT TOTAL							534.16			
ORG 009676 TOTAL							213,732.44			
009677			W&S O&M-SEWER LAGOON DIV.							
009677	525000			GAS AND OIL						
001002	CITY OF HATTIESBURG	4/2022 FUND 9	0	2022	8	INV P	420.34	053122	290910	TRF 4/22 FUEL USAGE

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8													
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR		TYP	S	WARRANT		CHECK	DESCRIPTION	
				ACCOUNT TOTAL				420.34					
009677	525700			DIESEL FUEL									
001002	CITY OF HATTIESBURG	4/2022	FUND 9	0	2022	8	INV	P	432.24	053122	290910	TRF 4/22 FUEL USAGE	
				ACCOUNT TOTAL				432.24					
009677	630500			ELECTRICITY									
003700	MS POWER COMPANY	E2022	5.2.22	0	2022	8	INV	P	14,478.64	053122	291016	MS POWER VARIOUS DE	
003873	PEARL RIVER VALLEY E	2022	5.19.22	0	2022	8	INV	P	50.00	053122	291032	PRVEPA OAKWOOD DR L	
003873	PEARL RIVER VALLEY E	2022	5.5	0	2022	8	INV	P	33.91	053122	291032	PRVEPA VARIOUS DEPT	
												83.91	
				ACCOUNT TOTAL				14,562.55					
009677	638000			FIXED EQUIPMENT R&M									
003348	L & A CONTRACTING CO	483-213		0	2022	8	INV	P	51,201.45	053122	290987	MB2020-179: LAGOONS	
003348	L & A CONTRACTING CO	483-214		0	2022	8	INV	P	42,893.56	053122	290987	MB2016-64: LAGOONS	
												94,095.01	
				ACCOUNT TOTAL				94,095.01					
				ORG 009677		TOTAL		109,510.14					
FUND 009 WATER & SEWER OPERATION/MAINT.				TOTAL:				706,811.10					

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8											
ACCOUNT/VENDOR				INVOICE		PO	YEAR/PR	TYP S	WARRANT	CHECK	DESCRIPTION
019100						POL.FORFEITURES-POLICE DIV.					
019100 559200						OTHER OPER.MATLS-D.A.R.E.					
004446 TOSHIBA BUSINESS SOL 5401118						0	2022	8 INV P	261.48	053122	291079 MB#2018-164 COMMUNI
ACCOUNT TOTAL									261.48		
ORG 019100 TOTAL									261.48		
FUND 019 POLICE FORFEITURES FUND									TOTAL: 261.48		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8										
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
039551				AIRPORT IMPR.-AIRPORT DIV						
039551 729502				AIRPORT IMP-FAA						
002843	FORD ENGINEERING	SER 210206N	0	2022	8	INV	P	2,472.40	053122	290943 MB 2021-31 AIRPORT
002843	FORD ENGINEERING	SER 211116F	0	2022	8	INV	P	12,540.93	053122	290943 MB 2021-306 TAXIWAY
								15,013.33		
ACCOUNT TOTAL								15,013.33		
ORG 039551 TOTAL								15,013.33		
FUND 039 AIRPORT IMPROVEMENT FUND								TOTAL:	15,013.33	

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8												
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION			
072201 MUN.ROAD&BRIDGE-STREET DIV												
072201 601500 ENGINEERING												
003764	NEEL-SCHAFFER INC	1076759-1077055	0	2022	8	INV P	18,210.45	053122	291024	MB	2021-61	GORDON C
003764	NEEL-SCHAFFER INC	1079147	0	2022	8	INV P	1,457.96	053122	291024	MB	2011-4/307	4TH S
003764	NEEL-SCHAFFER INC	1079149	0	2022	8	INV P	3,314.85	053122	291024	MB	2011-4/307	40TH
							22,983.26					
ACCOUNT TOTAL							22,983.26					
072201 601700 APPRAISAL												
002512	COLLINS & NULL APPRA	4468	0	2022	8	INV P	2,675.00	053122	290915	MB	2021-409	GORDON
002512	COLLINS & NULL APPRA	4483	0	2022	8	INV P	2,675.00	053122	290915	MB	2021-409	GORDON
							5,350.00					
ACCOUNT TOTAL							5,350.00					
072201 602500 LEGAL												
003228	JACKSON, TULLOS & RO	6493	0	2022	8	INV P	1,120.00	053122	290979	MB	2021-400	GORDON
048828	JOHN B STEWART	GORDON CR COM 2022-1	0	2022	8	INV P	3,000.00	053122	290980	GORDON CREEK	COMMON	
ACCOUNT TOTAL							4,120.00					
072201 723025 CTRY.CLUB RD. INTERSECTN.												
048667	R & J CONSTRUCTION	COUNTRY CLUB RD #3	0	2022	8	INV P	217,189.45	053122	291046	MB	2021-172	COUNTRY
ACCOUNT TOTAL							217,189.45					
ORG 072201 TOTAL							249,642.71					
FUND 072 MUNICIPAL ROAD & BRIDGE							TOTAL:	249,642.71				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8									
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
073570	MASS TRANSIT-TRANSPORTATION								
073570	501000								
003809	OFFICE DEPOT INC	2563000438	227188	2022 8	INV	P	195.90	053122	291028 OFFICE SUPPLIES
ACCOUNT TOTAL							195.90		
073570	525000								
001002	CITY OF HATTIESBURG	4/22 FUND 73	0	2022 8	INV	P	2,142.90	053122	290909 4/2022 FUEL USAGE -
ACCOUNT TOTAL							2,142.90		
073570	525700								
001002	CITY OF HATTIESBURG	4/22 FUND 73	0	2022 8	INV	P	7,488.73	053122	290909 4/2022 FUEL USAGE -
ACCOUNT TOTAL							7,488.73		
073570	570000								
002413	CARQUEST AUTO PARTS	14758-9489	227344	2022 8	INV	P	143.59	053122	290900 SUPPLIES FOR ALL FO
ACCOUNT TOTAL							143.59		
073570	571001								
002413	CARQUEST AUTO PARTS	14758-9489	227344	2022 8	INV	P	850.87	053122	290900 SUPPLIES FOR ALL FO
002679	DOSSETT GMC CADILLAC	66205	226817	2022 8	INV	P	967.42	053122	290926 FRONT END MAKING NO
002739	EMPIRE TRUCK SALES(J RE006034969:01		227944	2022 8	INV	P	11,977.81	053122	290934 BUS #16234 ENGINE T
003034	HATTIESBURG HYDRAULI	92132	226961	2022 8	INV	P	141.12	053122	290962 HOSE BUSTED ON BUS
003861	PATTERSON AUTO ELECT	81394	227802	2022 8	INV	P	1,816.47	053122	291031 BUS REPAIR-UNIT 205
004597	WATERS INTERNATIONAL	08P828192	227557	2022 8	INV	P	37.57	053122	291094 REPLACE BUS #18571
048167	MUNN WILLIAM JUSTICE	1513	227929	2022 8	INV	P	4,369.00	053122	291021 PARTS - BUS #21126
ACCOUNT TOTAL							20,160.26		
073570	602000								
003764	NEEL-SCHAFFER INC	1079630	0	2022 8	INV	P	10,435.00	053122	291024 MB 2021-18-19 FINAL
ACCOUNT TOTAL							10,435.00		
073570	606000								
002160	AT&T MOBILITY	287273578351X050522	0	2022 8	INV	P	176.91	053122	290881 MB2016-287/WIRELESS
002160	AT&T MOBILITY	287273861504X050822	0	2022 8	INV	P	242.90	053122	290882 MB2016-287/GPS TRAC
							419.81		
ACCOUNT TOTAL							419.81		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
073570	612000	FREIGHT									
003630	MOBILITY SYSTEMS INC	8978	227620	2022	8	INV	P		25.00	053122	291009 BUS #20585 WHEEL CH
ACCOUNT TOTAL									25.00		
073570	638400	MOTOR VEHICLE EQ. R&M									
002169	AUTOMOTIVE GLASS SPE	W249682	227559	2022	8	INV	P		275.00	053122	290887 DOOR WINDOW GLASS F
ACCOUNT TOTAL									275.00		
073570	638501	BUS EQUIP R&M-FIXED ROUTE									
002169	AUTOMOTIVE GLASS SPE	I250173	228012	2022	8	INV	P		345.00	053122	290887 DOOR WINDOW SAFETY
002565	COURTESY MOTORS INC	296938	227478	2022	8	INV	P		1,906.97	053122	290921 BUS #19552 -IDLING
002565	COURTESY MOTORS INC	300284	227113	2022	8	INV	P		2,753.71	053122	290921 BUS #20585 FRONT SU
002565	COURTESY MOTORS INC	300749	226986	2022	8	INV	P		4,121.88	053122	290921 REPLACE HIGH PRESSU
002565	COURTESY MOTORS INC	303376	227517	2022	8	INV	P		3,243.64	053122	290921 VAN REPAIR G82262
									12,026.20		
002739	EMPIRE TRUCK SALES(J	RE006034969:01	227944	2022	8	INV	P		4,983.50	053122	290934 BUS #16234 ENGINE T
003630	MOBILITY SYSTEMS INC	8978	227620	2022	8	INV	P		851.00	053122	291009 BUS #20585 WHEEL CH
003861	PATTERSON AUTO ELECT	81394	227802	2022	8	INV	P		2,036.12	053122	291031 BUS REPAIR-UNIT 205
048167	MUNN WILLIAM JUSTICE	1194	226085	2022	8	INV	P		5,615.03	053122	291021 REPLACEMENT OF DPF
048167	MUNN WILLIAM JUSTICE	1314	226529	2022	8	INV	P		620.00	053122	291021 DIAGNOSED BUS #2058
									6,235.03		
ACCOUNT TOTAL									26,476.85		
073570	638502	BUS EQUIP R&M-PARATRANSIT									
004597	WATERS INTERNATIONAL	08S827888	227412	2022	8	INV	P		1,173.31	053122	291094 BUS #18572 LEAKING
ACCOUNT TOTAL									1,173.31		
073570	639800	TOW IN CHARGES									
003253	JOHNNY'S WRECKER SER	43395	227254	2022	8	INV	P		600.00	053122	290981 BUS 19535 TOWED TO
ACCOUNT TOTAL									600.00		
073570	643000	UNIFORM RENT									
002471	CINTAS CORPORATION #	4115306682	0	2022	8	INV	P		113.25	053122	290905 UNIFORM RENTAL
002471	CINTAS CORPORATION #	4116688561	0	2022	8	INV	P		175.91	053122	290905 UNIFORM RENTAL
002471	CINTAS CORPORATION #	4118053396	0	2022	8	INV	P		143.30	053122	290905 UNIFORM RENTAL
002471	CINTAS CORPORATION #	4118737816	0	2022	8	INV	P		121.69	053122	290905 UNIFORM RENTAL
002471	CINTAS CORPORATION #	4119425556	0	2022	8	INV	P		195.25	053122	290905 UNIFORM RENTAL
									749.40		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8								
ACCOUNT/VENDOR	INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
			ACCOUNT	TOTAL		749.40		
		ORG 073570	TOTAL			70,285.75		
FUND 073	MASS TRANSIT FUND		TOTAL:			70,285.75		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8													
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION			
075695 W&S CONSTR.-CAPITAL PROJECTS													
075695 722002 LONGLEAF HEIGHTS NORTH													
047349	HEMPHILL	CONST	HEMPHILL	33122-#13	0	2022	8	INV	P	451,770.22	053122	290965	MB# 2021-6-7 - ENG.
047349	HEMPHILL	CONST	HEMPHILL	43022-#14	0	2022	8	INV	P	174,972.35	053122	290965	MB 2021-6-7 - ENG.
										626,742.57			
ACCOUNT TOTAL										626,742.57			
ORG 075695 TOTAL										626,742.57			
FUND 075 WATER&SEWER CONSTRUCTION FUND										TOTAL:	626,742.57		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
077650				COMMUNITY CTR-ADMIN/GENERAL							
077650	510000			CLEANING/JANITORIAL SPLY							
003971	PRIDE SOLUTIONS, LLC	2022-0808		228108	2022	8	INV	P	480.00	053122	291044 JANITORIAL SUPPLIES
				ACCOUNT TOTAL					480.00		
077650	525000			GAS AND OIL							
001002	CITY OF HATTIESBURG	4/2022 FUND 77		0	2022	8	INV	P	181.45	053122	290911 TRF 4/22 FUEL USAGE
				ACCOUNT TOTAL					181.45		
077650	546000			MINOR EQUIPMENT							
002709	EATON, ALVIN K (PETT PC 4/2022			0	2022	8	INV	P	25.50	053122	290929 PETTYCASH 4/2022
003645	MOORE'S LOCK AND KEY	29114		0	2022	8	INV	P	185.00	053122	291011 KEY FOR UNIT 12045
				ACCOUNT TOTAL					210.50		
077650	559000			OTHER OPERATING MATL/SPLY							
004256	SOLAR SUPPLY INC	3452151		227985	2022	8	INV	P	1,849.07	053122	291061 MATERIAL TO REPAIR
				ACCOUNT TOTAL					1,849.07		
077650	560000			BUILDING MATERIALS & SPLY							
004256	SOLAR SUPPLY INC	3452153		227931	2022	8	INV	P	452.70	053122	291061 MATERIAL TO REPAIR
				ACCOUNT TOTAL					452.70		
077650	561000			PLUMBING SUPPLIES							
002802	FERGUSON ENTERPRISES	3280406		227905	2022	8	INV	P	145.00	053122	290941 MATERIAL TO REPAIR
				ACCOUNT TOTAL					145.00		
077650	606000			TELEPHONE AND TELEGRAPH							
002160	AT&T MOBILITY	287273578351X050522	0		2022	8	INV	P	60.97	053122	290881 MB2016-287/WIRELESS
				ACCOUNT TOTAL					60.97		
077650	630000			GAS							
004321	SPIRE	G2022 5.16.22	0		2022	8	INV	P	107.89	053122	291068 SPIRE VARIOUS DEPT
				ACCOUNT TOTAL					107.89		
077650	630500			ELECTRICITY							
003700	MS POWER COMPANY	E2022 5.2.22	0		2022	8	INV	P	2,369.94	053122	291016 MS POWER VARIOUS DE
				ACCOUNT TOTAL					2,369.94		
077650	635000			BUILDING R&M							
047194	TYCO INTEGRATED SECU	37216449	0		2022	8	INV	P	620.55	053122	291083 RECURRING SERVICE 0

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8								
ACCOUNT/VENDOR	INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
			ACCOUNT	TOTAL		620.55		
		ORG 077650	TOTAL			6,478.07		
FUND 077	COMMUNITY CENTERS'	FUND	TOTAL:			6,478.07		

YEAR/PERIOD: 2022/7 TO 2022/8		INVOICE		PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
082285	CDBG-ENTITLEMENTS									
082285	525000	GAS AND OIL								
001002	CITY OF HATTIESBURG	TRF 4/22	FUND 82	0	2022	8	INV P	140.58	053122	290912 TRF 4/22 FUEL USAGE
ACCOUNT TOTAL								140.58		
082285	604999	OTHER								
002709	EATON, ALVIN K (PETT	PC 4/2022		0	2022	8	INV P	1.75	053122	290929 PETTYCASH 4/2022
ACCOUNT TOTAL								1.75		
082285	611000	TRAVEL EXPENSE								
002709	EATON, ALVIN K (PETT	PC 4/2022		0	2022	8	INV P	45.12	053122	290929 PETTYCASH 4/2022
ACCOUNT TOTAL								45.12		
082285	615000	ADVERTISING								
003141	HUB CITY SPOKES	99836		0	2022	8	INV P	57.56	053122	290972 CITY WIDE ADS & NOT
ACCOUNT TOTAL								57.56		
082285	684000	DUES AND MEMBERSHIPS								
003710	MS STATE/SECRETARY O	NP1		0	2022	8	INV P	104.00	053122	291017 APPLICATION FOR NOT
ACCOUNT TOTAL								104.00		
ORG 082285 TOTAL								349.01		
FUND 082 COMMUNITY DEVELOP. BLOCK GRANT								TOTAL:	349.01	

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8									
ACCOUNT/VENDOR	INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
086300								SPEC SALES TAX/RECREATION MAIN	
086300	729506							HBURG AMERICAN ARTS CENTER	
003543	MCELHANEY PLUMBING I	292235	227926	2022	8 INV P	65.19	053122	291004	HOSE BIBS & PARTS -
					ACCOUNT TOTAL	65.19			
086300	7295PR							CAPITAL PROJECTS	
047471	SAMMY GRAHAM LLC	0106	227246	2022	8 INV P	40,000.00	053122	291053	2-QUOTE JOOK MUSIC
048592	SUNBELT RENTALS, INC	125702155-0001	227660	2022	8 INV P	434.05	053122	291071	THAMES ELEMENTARY D
					ACCOUNT TOTAL	40,434.05			
					ORG 086300 TOTAL	40,499.24			
FUND 086 SPEC SALES TAX P&R/UNIV IMPROV						TOTAL:	40,499.24		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8												
ACCOUNT/VENDOR			INVOICE			PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
087601 INDUSTRIAL PK-G.O.ACQUISITIONS												
087601 602001 ECONOMIC DEVELOPMENT CONSULTIN												
002143 AREA DEVELOPMENT		PAR QE	6/30/22	CONTRIB	0	2022	8	INV	P	117,500.00	053122	290871 COH & FORREST CTY C
ACCOUNT TOTAL										117,500.00		
ORG 087601 TOTAL										117,500.00		
FUND 087 INDUSTRIAL PARK DEVELOPMENT										TOTAL: 117,500.00		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2022/7 TO 2022/8		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
088603											
088603	710022										
002957	GROVER BROS RESTAURA	23664			223538	2022	8	INV P	36,904.00	053122	290954 2-QUOTE FOOD SERVIC
002996	HANCO CORP	HPSC #39			0	2022	8	INV P	659,282.42	053122	290960 MB 2019-45 PUBLIC S
003772	NEWELL PAPER COMPANY	4126681			226269	2022	8	INV P	16,843.97	053122	291025 HPSC RESTROOM ACCES
003772	NEWELL PAPER COMPANY	4130499			227526	2022	8	INV P	329.20	053122	291025 PUBLIC SAFETY COMPL
									17,173.17		
047037	TAB PRODUCTS CO	INV000015191			0	2022	8	INV P	3,100.00	053122	291073 PUBLIC SAFETY COMPL
									ACCOUNT TOTAL		
									716,459.59		
088603	729501										
002512	COLLINS & NULL APPRA	4470			0	2022	8	INV P	1,237.50	053122	290915 MB 2021-349 HALL AV
002512	COLLINS & NULL APPRA	4484			0	2022	8	INV P	2,475.00	053122	290915 MB 0201-349 HALL AV
									3,712.50		
003228	JACKSON, TULLOS & RO	6492			0	2022	8	INV P	660.00	053122	290979 MB 2021-229 HALL AV
003228	JACKSON, TULLOS & RO	6650			0	2022	8	INV P	1,560.00	053122	290979 MB 2021-229 HALL AV
									2,220.00		
003764	NEEL-SCHAFFER INC	1079139			0	2022	8	INV P	9,757.66	053122	291024 MB 2019-332 HALL AV
003764	NEEL-SCHAFFER INC	1079141			0	2022	8	INV P	52,619.59	053122	291024 MB 2021-160 HALL AV
003764	NEEL-SCHAFFER INC	1079142			0	2022	8	INV P	726.00	053122	291024 MB 2021-160 HALL AV
									63,103.25		
048828	JOHN B STEWART	HALL AVENUE 2022-1			0	2022	8	INV P	11,500.00	053122	290980 HALL AVENUE OVERPAS
									ACCOUNT TOTAL		
									80,535.75		
					ORG 088603			TOTAL	796,995.34		
									FUND 088 PUBLIC SAFETY/REC CONSTRUCTION TOTAL:		
									796,995.34		

** END OF REPORT - Generated by Jacqueline Thorne **