

# **City of Hattiesburg, MS**

*200 Forrest St.  
P.O. Box 1898  
Hattiesburg, MS 39401*



## **Meeting Agenda - Final**

**Monday, April 16, 2018**

**4:00 PM**

**Council Chambers**

**City Council - Appeal Public Hearing**

1.        [2018-379](#)        Hold public hearing for appeal filed by Jeff Sims and Ashley Robinson, Owners, to appeal the Planning Commission's recommendation for the petition filed by Ashley Robinson, Owner, and Jeff Sims, Owner to establish the zoning classification for certain properties (see attached memo for property parcels) located in the Mandalay Villas at Greystone subdivision at the intersection of J. Ed Turner Drive and Topanga Trail in Ward 1 to Section 4.5.4, R-1B (Single-Family Residential) District. Hattiesburg Planning Commission recommended to Deny on March 7, 2018.

**Attachments:**        [Appeal - Mandalay Villas R-1B Zoning denial](#)  
                                 [March HPC Minutes](#)  
                                 [Letter to City Council 4-9-2018](#)





# City of Hattiesburg, MS

200 Forrest St.  
P.O. Box 1898  
Hattiesburg, MS 39401

## Master

**File Number: 2018-379**

**File ID:** 2018-379

**Type:** Regular Agenda Item

**Status:** Agenda Ready

**Version:** 1

**Reference:**

**In Control:** City Council

**Requester:** Ginger Lowrey

**File Created:** 04/09/2018

**Brief Title:** Hold Appeal Hearing - Mandalay Villas at Greystone  
subdivision - establish zoning as R-1B, Ward 1

**Final Action:**

**Minute Book Number:** MB2018-91-95

**Title:** Hold public hearing for appeal filed by Jeff Sims and Ashley Robinson, Owners, to appeal the Planning Commission's recommendation for the petition filed by Ashley Robinson, Owner, and Jeff Sims, Owner to establish the zoning classification for certain properties (see attached memo for property parcels) located in the Mandalay Villas at Greystone subdivision at the intersection of J. Ed Turner Drive and Topanga Trail in Ward 1 to Section 4.5.4, R-1B (Single-Family Residential) District. Hattiesburg Planning Commission recommended to Deny on March 7, 2018.

### Notes:

**Agenda Date:** 04/16/2018

### Indexes:

**Agenda Number:** 1.

### Sponsors:

**Enactment Date:**

**Attachments:** Appeal - Mandalay Villas R-1B Zoning denial, March  
HPC Minutes, Letter to City Council 4-9-2018

**Enactment Number:**

**Contact:**

**Meeting Date:** 04/16/2018

**Drafter:**

**Effective Date:**

## History of Legislative File

| Ver-<br>sion: | Acting Body:                            | Date:      | Action: | Sent To: | Due Date: | Return<br>Date: | Result: |
|---------------|-----------------------------------------|------------|---------|----------|-----------|-----------------|---------|
| 1             | City Council - Appeal<br>Public Hearing | 04/16/2018 |         |          |           |                 |         |

**Action Text:** Ms. Maddox provided a PowerPoint overview.

Appellants Jeff Sims and Ashley Robinson appeared before the Council on behalf of the development at Mandalay Villas at Graystone. Mr. Robinson said this project has been ongoing for about a year and a half, and that the property was acquired as an undeveloped property and taxes were paid on it last year; he said he and Mr. Sims took the development to reclaim it and to bring new homes to the area. He presented a PowerPoint that included images of Augusta Court, Knight's Landing and other residential developments, and discussed the quality, square footage, appraisal value and sale price of the homes their company builds.

Mr. Sims stated that the basis for the zoning request is that it most closely matches the original plat; he said it was originally platted in Lamar County and was subsequently annexed, and that the plat was accepted by the City in about 2006. He said R-1B closely matches the existing lot size of the plat that was accepted and that R-1B zoning would mean that all the lots will be conforming. He said that R-1A zoning would result in 48 of the 49 lots being non-conforming, which he said seems inconsistent with the plat accepted by the city.

Mr. Robinson said that R-1A zoning was for property developed in the 1970s and that the City of Hattiesburg has not platted or planned an R-1A development in more than 30 years; he stated that residential subdivision developments in the Country Club area are either R-1B or R-1C. He said they requested R-1B zoning because 48 of the 49 lots conform to the plat that was planned at Lamar County, accepted by Lamar County and then annexed by the City of Hattiesburg; he said an R-1A zoning will make 43 of the 49 lots non-conforming (sic). Mr. Robinson said the lots can be approved administratively as R-1A.

Mr. Robinson stated that since 1998, developments in the Hattiesburg Country Club area have been R-1B, including two developed lots directly across from the Country Club and four that are available now; R-1C, which he described as a less restrictive standard, including the Villages, the Woodlands and Classic Woods, all still in current development; and R2, which he said includes recent approval for Shadow Ridge Draw Club's plans for a multi-family or single-family residential, 4,500-square-foot minimum development. He said R-1B most closely resembles [the plat] as it was legally adopted and platted. Mr. Robinson stated that the City has not platted an R1A subdivision in the Hattiesburg Country Club area at all since the 1970s; rather, he said, the City has annexed R-1A subdivisions that were planned and platted at Lamar County.

Mr. Robinson stated that Mandalay Villas at Graystone's request for R-1B zoning is consistent with what is already in the area. He said the City of Hattiesburg has not required any other residential subdivision developer to construct to R-1A standards since the 1970s.

He said Mandalay Villas at Graystone includes 49 legally platted lots located on J. Ed Turner, platted and approved by Lamar County in 2007 and annexed by the City in 2008. He said the lots were platted and drawn with five-foot setbacks, 25 feet in the front and 20 feet in the rear. He displayed a copy of the plat. He said if R-1A zoning is imposed, 43 of the 49 platted and legally adopted lots will become non-conforming and will require administration approval; he said six of the 49 platted and legally adopted lots will require further review by the Planning Commission and approval again by the City Council.

Mr. Robinson said if R-1A zoning is imposed, a setback variance will allow them to build larger homes; without a setback variance, he said, they will be restricted to building smaller homes. Mr. Robinson said they are building 1,700-square-foot homes that sell for \$250,000 and do not want to build smaller homes. Also, he said there is not a market demand for smaller homes. He displayed a copy of plans for a smaller home that he said R-1A zoning would necessitate they build, and said that it is 1,232 square feet.

He said R-1B zoning will mean that one of the 49 platted and legal lots will become non-conforming and said that it can be administratively approved. He said that side setbacks allow the opportunity to develop the plat as it was designed and legally adopted and as it was legally annexed and approved by the City of Hattiesburg.

Mr. Robinson showed images of current proposed homes and said they are the highest in the market. He said Mandalay Villas is most consistent with the zoning in place, and that R-1B zoning is consistent with all other developments in the Hattiesburg Country Club area and allows them to develop the plat as it was designed and legally accepted.

Council President Carroll called on opponents to the zoning request.

Attorney Seth Hunter appeared before the Council representing Wes and Kelsey Hester of 85 J. Ed Turner Road. Mr. Hunter asked that the electronic copy of the records he submitted be made part of the record. He displayed a copy of the full plat as filed in Lamar County and then provided a timeline. He said the Augusta Court plat was approved February 5, 2007 by the Lamar County Board of Supervisors and that the Mandalay Villas plat was filed and approved July 2, 2007 by the Lamar County Board of Supervisors. He said on January 7, 2008, the original developers filed to abandon and vacate both the plats and did abandon and vacate them that day. Mr. Hunter said the plats do not exist any more and were never approved by the City. He stated that this area was annexed into the City on October 21, 2008, without the plats existing, and referred to the plats as a legal fiction.

Mr. Hunter said there is nothing that says the City has to approve the R-1B [zoning]; he said there are no lots there and that the primary zoning [in the area] is R-1A. He said the developers pointed out some of the less restrictive R-1C and R-1B [zoning] and said that the City has not zoned any R-1A developments in 30 years. However, Mr. Hunter said, that is not true. He stated that the 100-lot Preserve Subdivision was approved as R-1A in May 2012; that unclassified property on J. Ed Turner Road was zoned A-1 in May 2013; that unclassified property on J. Ed Turner was zoned A-2 in July of 2014; that four unclassified parcels on J. Ed Turner Road were zoned A-2 in December 2014, January 2015 and October 2015; and that approximately 30-40 lots at Augusta Court were zoned R-1A in February 2016.

He said [City] zoning in the last 30 years has been R-1A, A-1 or A-2. He said the Village and Alex Lane were R-1C zoning and were already zoned when the city annexed [that area] in 2008, but that everything the City has zoned since then has been R-1A, A-1 or A-2.

Mr. Hunter said that the Mandalay Villas plats do not exist, but that he still wanted to address the matter of non-conforming lots. He referred to City Code Section 2.4.3, which regulates vacant lots, and said the Mandalay Villas lots are non-conforming and that Code Section 2.4.3.3 requires that non-conforming adjoining lots with a common owner be combined so that they do conform.

He said that the City's Comprehensive Plan addresses vacant land, and that the neighborhood in question is considered Neighborhood Conservation District 2, which he said provides that it should be zoned as a low-density area with standard setbacks. He said the developers are asking for R-1B zoning but with setback variances also. He said the Comprehensive Plan sets forth that if development occurs in a low-density area, there need to be standard setbacks, which he said are provided in R-1A zoning.

Mr. Hunter said the Comprehensive Plan also states that rural residential agricultural property, when annexed, should transition from very low density to large estate residences or suburban residential development. He said all the lots on J. Ed Turner that were supposed to be the Village at Graystone have been purchased by the developers and made estate lots. He said Augusta Courts is R-1A, and that nothing towards Jackson Road is zoned right now. Mr. Hunter said that if the city considers any zoning, it should not be R-1B, but R-1A, which he said is the zoning for everything else in that area.

Mr. Hunter said there is a lot of green space and that his clients would like it to remain that way; he said that if 49 houses are put on 13 acres, there will be no green space. Also, he said there will be infrastructure issues. He said his clients have a septic tank that the City must pump out every three days, as there is no sewer on J. Ed Turner Road. He said the City needs to provide necessary services to the citizens who already live on J. Ed Turner Road before accepting 49 new houses. He said also that his clients received notice in January from Southern Pine Electric about the potential for rolling blackouts because the company cannot provide power to all residents when there are

power strains. .

Mr. Hunter cited crime statistics for 2014-2018 in Acadia Oaks, a nearby high-density neighborhood in Lamar County, and said there are occurrences there of petit larceny, auto burglaries, grand larceny, auto theft, burglary, domestic violence and simple assault; he said J. Ed Turner does not have crime presently and that the City will be stretched to provide police and fire services to an additional 49 houses. Also, he said in 2008 when this area was annexed, the Code of Ordinances required that within five years the city provide water, sewer and lighting on J. Ed Turner. He said that has not happened, and asked that the City consider this before granting R-1B zoning. Mr. Hunter also said that the character of the neighborhood is primarily R-1A, as 333 lots are zoned R-1A; he suggested that if the lots are zoned, they should be zoned R-1A or a higher restriction, rather than the less restrictive R-1B zoning.

Council President Carroll invited others in opposition to speak.

Brent Brevard said that he bought a five-acre lot on J. Ed Turner Road next to the Augusta Courts subdivision. He was complimentary of the home being built next to his property, but said it would bother him to have a development nearby on smaller lots as there is not a guarantee on the size or spacing of homes. He said he would like to see the zoning stay the same.

Council President Carroll asked that others in opposition wait to speak until Citizens' Forum, as the scheduled time had elapsed.

Council President Carroll called on Mr. Robinson and Mr. Sims for rebuttal.

Mr. Robinson said that all recent 1-A developments, including the Preserve and Augusta Court, were platted in Lamar County and annexed into the City of Hattiesburg.

He said that the City Attorney told him that the Mandalay Villas plat is a legal plat, and that it is in the system and has been taxed that way since 2007.

Mr. Robinson and Mr. Sims addressed the gravity sewer system at Mandalay Villas and said it is separate infrastructure from the other parcels on J. Ed Turner.

Mr. Robinson said their goal is to build a bigger house. He said R-1A zoning with ten-foot setbacks will force them to build a smaller house. He said their market is 1,800 square feet at \$250,000, and that they want to be good neighbors and are working to do the right thing. He said with 12 houses at \$250,000, this project involves about \$12 million in construction and will increase the tax base.

Mr. Sims said that his understanding is that the power issue that was brought up is a grid-wide problem and not specific to this area. Also, he said he cannot speak to the crime issue at Acadia Oaks, but that this is a vastly different type of construction.

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## **Text of Legislative File 2018-379**

### **Title**

Hold public hearing for appeal filed by Jeff Sims and Ashley Robinson, Owners, to appeal the Planning Commission's recommendation for the petition filed by Ashley Robinson, Owner, and Jeff Sims, Owner to establish the zoning classification for certain properties (see attached memo for property parcels) located in the Mandalay Villas at Greystone subdivision at the intersection of J. Ed Turner Drive and Topanga Trail in Ward 1 to Section 4.5.4, R-1B (Single-Family Residential) District. Hattiesburg Planning Commission recommended to Deny on March 7, 2018.

### **Summary**

Hold Appeal Hearing - Mandalay Villas at Greystone subdivision - establish zoning as R-1B, Ward 1.

**Budget Information**

**Expenditure Type**

**Purchasing Item**

**Publication Information**



Send to:  
Andrew Ellard, Director of Urban Development  
Dept. of Urban Development  
P.O. Box 1898  
Hattiesburg, MS 39403  
601.545.4599 or fax 601.545.1962

**REQUEST TO APPEAL PLANNING COMMISSION OR BOARD OF ADJUSTMENTS  
RECOMMENDATION**

|                                                                          |                                                                                                                                    |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Today's Date:                                                            | March 15, 2018                                                                                                                     |
| Planning Commission or Board of Adjustment Date:                         | March 7, 2018<br>(Appeals must be made within ten consecutive days of the recommendation)                                          |
| Name of Property Owner/Petitioner:                                       | Jeff Sims and Ashley Robinson                                                                                                      |
| Name of Person Requesting Appeal Hearing:                                | Jeff Sims                                                                                                                          |
| Mailing Address of Person Requesting Appeal Hearing:                     | 109 Safari Way Hattiesburg, MS 39402                                                                                               |
| Address of Petitioned Property:                                          | The properties located in the Mandalay Villas at Greystone Subdivision at the intersection of J. Ed Turner Road and Topanga Trail. |
| Petitioner's Request of the Planning Commission or Board of Adjustments: | Planning Commission Agenda Item G - Hattiesburg Planning Commission March 7, 2018: Establish R-1B zoning for subject property.     |
| Planning Commission or Board of Adjustment's Recommendation:             | Approve <input type="checkbox"/> or Deny <input checked="" type="checkbox"/>                                                       |

I/We hereby APPEAL the Planning Commission or Board of Adjustment's Recommendation for the above reference petition and request to hold a Public Hearing before the Hattiesburg City Council.

Jeff Sims  
Appellant (print)

Jeff Sims  
Appellant (signature)

**FILED RECEIVED**  
MAR 15 2018

MAR 16 2018

BY Carol A. [Signature]  
CITY CLERK  
DEPUTY CLERK

**MINUTES OF THE  
REGULAR MEETING OF THE  
HATTIESBURG PLANNING COMMISSION  
March 7, 2018**

The Hattiesburg Planning Commission did meet in a regular session on March 7, 2018 at 1:00 p.m. at the Jackie Dole Community Center, 220 West Front Street, Hattiesburg, Mississippi. Dick Conville, Chairman, presided over the meeting. A quorum was indicated and the attendance was as follows:

**Commissioners Present:**     Dick Conville, Chairman  
                                         Amy Hinton, Vice-Chairman  
                                         Mark Miller, Secretary  
                                         Paul Sims  
                                         Kenneth Waites  
                                         James Hughes  
                                         Rebekah Ray  
                                         Jessie Wilson

**Commissioners Absent:**     Judy Corts  
                                         Sandra Thompson

**Also Present:**                 Ginger Maddox Lowrey, AICP, Planning Division Manager  
                                         Andrew Ellard, Director of Urban Development  
                                         Lamar Rutland, Director of Engineering  
                                         Stephen Guthrie, Planning Division  
                                         Steven Mitchell, Building Official

Chairman Conville declared the meeting of the Hattiesburg Planning Commission open and in session at 1:04 P.M.

**INVOCATION**

Chairman Conville held a moment of silence in remembrance of Parkland, FL.

**AGENDA REVIEW**

There came the matter of the March 2018 Agenda. Ginger Lowrey requested Item F. be withdrawn from the agenda. A request was made by Chairman Conville for a motion to approve the March 2018 Agenda as amended. A motion was made to approve the March 2018 Agenda by Commissioner Hinton and seconded by Commissioner Ray.

**Commissioners voting aye:** Dick Conville, Chairman  
                                         Amy Hinton  
                                         Mark Miller  
                                         Paul Sims  
                                         Kenneth Waites  
                                         James Hughes  
                                         Rebekah Ray  
                                         Jessie Wilson

**Commissioners voting nay:** None

**MINUTES REVIEW**

There came the matter of the February 7, 2018, minutes. A request was made by

Chairman Conville for a motion to approve the February 7, 2018, minutes. A motion was made by Commissioner Waites to approve the minutes and seconded by Commissioner Hinton.

**Commissioners voting aye:** Dick Conville, Chairman  
Amy Hinton  
Mark Miller  
Paul Sims  
Kenneth Waites  
James Hughes  
Rebekah Ray  
Jessie Wilson

**Commissioners voting nay:** None

**REPORTS**

**BUILDING REPORT**

There came the matter of the Building Inspection Report. Steve Mitchell provided a building report for February 2018.

**PLANNING REPORT**

There came the matter of the Planning Report by Ginger Maddox Lowrey, AICP, Planning Division Manager. Mrs. Lowrey reported that Mr. Isaiah Easterling resigned effective Tuesday, March 6, 2018. On February 20, 2018 the City Council reviewed the following Hattiesburg Planning Commission recommendations and voted as follows: The City Council removed from the table Anthony Wansley’s petition to rezone 208 McInnis Spring Road. The City Council denied the petition (HPC denial upheld). The City Council approved the petition to change the zoning of 1200 Edwards St from I-1 to B-3 (HPC approval upheld). The City Council approved the preliminary plat for condominiums located at 3000 Hardy St (HPC approval upheld).

**CHAIRMAN’S REPORT**

There came the matter of the Chairman’s Report. No report was submitted

**PUBLIC HEARING – PLANNING COMMISSION**

Chairman Conville declared the Public Hearing for the Planning Commission open at 1:12 P.M. and read the rules and procedures of the hearing. Planning Division Manager, Ginger M. Lowrey, recused herself from Item A.

**There came the matter of Item A (Rezone),** filed by Shawn Lowrey, Owner, as required in the Land Development Code, Ord. No. 3209, to change the zoning classification for a certain property located at 221 Market Street (Parcel 2-029J-10-359.00, PPIN 15650, Ward 4) from Section 4.5.12, B-5 (Regional Business) District to Section 4.5.11, B-4 (Downtown Business) District.

|                             | Name          | Address         | City/State      |
|-----------------------------|---------------|-----------------|-----------------|
| <b><u>Presented by:</u></b> | Shawn Lowrey  | 138 E Front St. | Hattiesburg, MS |
|                             | - Owner       |                 |                 |
| <b><u>Proponents:</u></b>   | Andrea Saffle | 409 Walnut      | Hattiesburg, MS |



- HHDA  
**Opponents:** None

Chairman Conville declared the Public Hearing closed and the Business Meeting open to vote on the request. Commissioner Miller made a motion to Approve the request for rezoning with the following basis: There is a material change in the circumstances and conditions of the neighborhood and areas surrounding the petitioned property and there is a public need for the change in question, based on the comprehensive plan. The motion was seconded by Commissioner Hinton.

**Commissioners voting aye** Dick Conville, Chairman  
Amy Hinton  
Mark Miller  
Paul Sims  
Kenneth Waites  
James Hughes  
Rebekah Ray  
Jessie Wilson

**Commissioners voting nay:** None

Planning Division Manager, Ginger M. Lowrey, returned to the public hearing.

**There came the matter of Item B (Alley Closure),** filed by Jeffrey Green, Applicant, Christopher Davis, Contractor, Mark A. Jordan, Consultant, as required in the Land Development Code, Ord. No. 3209, to close and vacate a portion of the undeveloped alley running east and west between Cherry Street, Cedar Street, Tuscan Avenue, and Magnolia Avenue, which is located directly between PPIN 13639 and PPIN 13639.

|                             | Name              | Address            | City/State |
|-----------------------------|-------------------|--------------------|------------|
| <b><u>Presented by:</u></b> | Christopher Davis | 41 Weatherford Ave | Mobile, AL |
|                             | - Contractor      |                    |            |
| <b><u>Proponents:</u></b>   | None              |                    |            |
| <b><u>Opponents:</u></b>    | None              |                    |            |

Chairman Conville declared the Public Hearing closed and the Business Meeting open to vote on the request. Commissioner Hinton made a motion to approve the request. The motion was seconded by Commissioner Miller.

**Commissioners voting aye:** Dick Conville, Chairman  
Amy Hinton  
Mark Miller  
Paul Sims  
Kenneth Waites  
James Hughes  
Rebekah Ray  
Jessie Wilson

**Commissioners voting nay:** None

**There came the matter of Item C (Rezone),** filed by Nicolas Robinson, Owner, as required in the Land Development Code, Ord. No. 3209, to change the zoning classification for a certain property located at 1226 Ida Avenue (Parcel 2-038K-21-066.00; 27396, 2-038K-21-064;

27395, 2-038K-21-065; 4177, Ward 5) from Section 4.5.6, R-2 (Two-Family Residential) District to Section 4.5.10, B-3 (Community Business) District.

|                             | Name                                 | Address                | City/State      |
|-----------------------------|--------------------------------------|------------------------|-----------------|
| <b><u>Presented by:</u></b> | Nicolas Robinson                     | 124 Meadow Park Lane   | Hattiesburg, MS |
|                             | - Owner                              |                        |                 |
| <b><u>Proponents:</u></b>   | None                                 |                        |                 |
| <b><u>Opponents:</u></b>    | Jim Harrell, Sr.                     | 308 William Carey Pkwy | Hattiesburg, MS |
|                             | Irby Drake, Jr.                      | 211 Dossett Ave        | Hattiesburg, MS |
|                             | - Timberton Park Neighborhood Assoc. |                        |                 |
|                             | Scott Pfaff                          | 26 Poplar Drive        | Hattiesburg, MS |
|                             | Vermell Jackson                      | 801 M L King           | Hattiesburg, MS |
|                             | Scott Hummel                         | 710 William Carey Pkwy | Hattiesburg, MS |
|                             | - WCU                                |                        |                 |
|                             | Capt. Stacey Connelly                | 5670 Hwy 49 S.         | Hattiesburg, MS |
|                             | - Salvation Army                     |                        |                 |
|                             | Tim Slade                            | 710 William Carey Pkwy | Hattiesburg, MS |
|                             | - WCU                                |                        |                 |

Chairman Conville declared the Public Hearing closed and the Business Meeting open to vote on the request. Commissioner Miller made a motion to Deny the request for rezoning with the following basis: There is not a material change in the circumstances and conditions of the neighborhood and areas surrounding the petitioned property and there is not a public need for the change in question, based on the comprehensive plan. The motion was seconded by Commissioner Ray.

**Commissioners voting aye:** Dick Conville, Chairman  
Amy Hinton  
Mark Miller  
Paul Sims  
Kenneth Waites  
James Hughes  
Rebekah Ray  
Jessie Wilson

**Commissioners voting nay:** None

**There came the matter of Item D (Establish Zoning),** filed by Joel Ford, Engineer, on behalf of Jeff Sims, Owner, as required in the Land Development Code, Ord. No. 3209, to establish the zoning classification for a certain property located on Jackson Road, South of the Longleaf Trace (Parcel 052B-03-004.105, PPIN 33787, Ward 1) as Section 4.5.10, B-3 (Community Business) District.

|                             | Name                                        | Address                | City/State        |
|-----------------------------|---------------------------------------------|------------------------|-------------------|
| <b><u>Presented by:</u></b> | Joel Ford                                   | 2010 Oak Grove Rd      | Hattiesburg, MS   |
|                             | - Engineer                                  |                        |                   |
|                             | Ashley Robinson                             | 15 Murphy Rd           | Hattiesburg, MS   |
| <b><u>Proponents:</u></b>   | Donovan Scruggs                             | 317 Pine Drive         | Ocean Springs, MS |
| <b><u>Opponents:</u></b>    | Seth Hunter                                 | c/o 85 J. Ed Turner Rd | Hattiesburg, MS   |
|                             | - Attorney representing Wes & Kelsey Hester |                        |                   |
|                             | Carl Nicolson                               | 13 Medinah Dr          | Hattiesburg, MS   |
|                             | John Eye                                    | 123 J. Ed Turner Drive | Hattiesburg, MS   |
|                             | Jim Gallaspy                                | 129 Fair Lake Drive    | Hattiesburg, MS   |

|                 |                       |                 |
|-----------------|-----------------------|-----------------|
| Eric Weill      | 71 J. Ed Turner Drive | Hattiesburg, MS |
| David Gustafson | 6 Augusta Ct. West    | Hattiesburg, MS |

Chairman Conville declared the Public Hearing closed and the Business Meeting open to vote on the request. Commissioner Waites made a motion to postpone the vote for further justification for B-3 zoning next to residential use. The motion was seconded by Commissioner Hughes. The motion failed.

**Commissioners voting aye:** James Hughes  
Rebekah Ray  
Kenneth Waites

**Commissioners voting nay:** Dick Conville, Chairman  
Amy Hinton  
Mark Miller  
Paul Sims  
Jessie Wilson

Commissioner Miller made a motion to Deny the request for rezoning with the following basis: There is not a material change in the circumstances and conditions of the neighborhood and areas surrounding the petitioned property and there is not a public need for the change in question, based on the comprehensive plan; There is substantial opposition from the Neighborhood and public and outstanding questions were raised regarding plans, traffic, and infrastructure. The motion was seconded by Commissioner Sims. The motion failed.

**Commissioners voting aye:** James Hughes  
Paul Sims  
Jessie Wilson

**Commissioners voting nay:** Dick Conville, Chairman  
Amy Hinton  
Mark Miller  
Rebekah Ray  
Kenneth Waites

Commissioner Waites made a motion to Table the request for rezoning because there is substantial opposition from the neighborhood and public and outstanding questions were raised regarding plans, traffic, and infrastructure. The motion was seconded by Commissioner Miller.

**Commissioners voting aye:** Dick Conville, Chairman  
Amy Hinton  
Mark Miller  
Paul Sims  
Kenneth Waites  
James Hughes  
Rebekah Ray  
Jessie Wilson

**Commissioners voting nay:** None

**There came the matter of Item E (Conditional Use),** filed by Joel Ford, Engineer, on behalf of Jeff Sims, Owner, as required in the Land Development Code, Ord. No. 3209, to request a Conditional Use as “Dwelling, Mixed Use”, Section 5.4, for a certain property located on Jackson Road, South of the Longleaf Trace (Parcel 052B-03-004.105, PPIN 33787, Ward 1)

pending establishment of zoning.

|                             | Name                                        | Address                | City/State        |
|-----------------------------|---------------------------------------------|------------------------|-------------------|
| <b><u>Presented by:</u></b> | Joel Ford                                   | 2010 Oak Grove Rd      | Hattiesburg, MS   |
|                             | - Engineer                                  |                        |                   |
| <b><u>Proponents:</u></b>   | Ashley Robinson                             | 15 Murphy Rd           | Hattiesburg, MS   |
|                             | Donovan Scruggs                             | 317 Pine Drive         | Ocean Springs, MS |
| <b><u>Opponents:</u></b>    | Seth Hunter                                 | c/o 85 J. Ed Turner Rd | Hattiesburg, MS   |
|                             | - Attorney representing Wes & Kelsey Hester |                        |                   |
|                             | Carl Nicolson                               | 13 Medinah Dr          | Hattiesburg, MS   |
|                             | John Eye                                    | 123 J. Ed Turner Drive | Hattiesburg, MS   |
|                             | Jim Gallaspy                                | 129 Fair Lake Drive    | Hattiesburg, MS   |
|                             | Eric Weill                                  | 71 J. Ed Turner Drive  | Hattiesburg, MS   |
|                             | David Gustafson                             | 6 Augusta Ct. West     | Hattiesburg, MS   |

Commissioner Waites made a motion to Table the request because there is substantial opposition from the neighborhood and public and outstanding questions were raised regarding plans, traffic, and infrastructure. The motion was seconded by Commissioner Miller.

**Commissioners voting aye:** Dick Conville, Chairman  
Amy Hinton  
Mark Miller  
Paul Sims  
Kenneth Waites  
James Hughes  
Rebekah Ray  
Jessie Wilson

**Commissioners voting nay:** None

**There came the matter of Item G (Establish Zoning),** filed by Ashley Robinson, Owner, and Jeff Sims, Owner as required in the Land Development Code, Ord. No. 3209, to establish the zoning classification for certain properties located in the Mandalay Villas at Greystone subdivision at the intersection of J. Ed Turner Drive and Topanga Trail (052B-03-004.046; 31719, 052B-03-004.047; 31720, 052B-03-004.048; 31721, 052B-03-004.049; 31722, 052B-03-004.050; 31723, 052B-03-004.051; 31724, 052B-03-004.052; 31725, 052B-03-004.053; 31726, 052B-03-004.054; 31727,052B-03-004.055; 31728, 052B-03-004.056; 31729, 052B-03-004.057; 31730, 052B-03-004.058; 31731, 052B-03-004.059; 31732, 052B-03-004.060; 31733, 052B-03-004.061; 31734, 052B-03-004.062; 31735, 052B-03-004.063; 31736, 052B-03-004.064; 31737, 052B-03-004.066; 31739, 052B-03-004.067; 31740, 052B-03-004.068; 31741, 052B-03-004.069; 31742, 052B-03-004.070; 31743, 052B-03-004.071; 31744, 052B-03-004.072; 31745, 052B-03-004.073; 31746, 052B-03-004.074; 31747, 052B-03-004.076; 31749, 052B-03-004.077; 31750, 052B-03-004.078; 31751, 052B-03-004.079; 31752, 052B-03-004.080; 31753, 052B-03-004.082; 31755, 052B-03-004.083; 31756, 052B-03-004.084; 31757, 052B-03-004.085; 31758, 052B-03-004.086; 31759, 052B-03-004.087; 31760, 052B-03-004.088; 31761, 052B-03-004.089; 31762, 052B-03-004.090; 31763, 052B-03-004.091; 31764, 052B-03-004.092; 31765, 052B-03-004.093; 31766, 052B-03-004.094; 31767, 052B-03-004.095; 31768, 052B-03-004.096; 31769, 052B-03-004.097; 31770, 052B-03-004.075; 31748, 052B-03-004.065; 31738 Ward 1) to Section 4.5.4, R-1B (Single-Family Residential) District.

|                             | Name                                                      | Address                | City/State        |
|-----------------------------|-----------------------------------------------------------|------------------------|-------------------|
| <b><u>Presented by:</u></b> | Donovan Scruggs                                           | 317 Pine Drive         | Ocean Springs, MS |
|                             | - Representative                                          |                        |                   |
|                             | Ashley Robinson                                           | 15 Murphy Rd           | Hattiesburg, MS   |
|                             | - Owner                                                   |                        |                   |
| <b><u>Proponents:</u></b>   | Troy Gardner                                              | 140 Mayfair Drive      | Hattiesburg, MS   |
| -                           | - Engineer                                                |                        |                   |
| <b><u>Opponents:</u></b>    | Seth Hunter                                               | 4085 J. Ed Turner Rd   | Hattiesburg, MS   |
|                             | - Attorney representing Wesley Kelsey Hester & Larry Gunn |                        |                   |
|                             | John Eye                                                  | 123 J. Ed Turner Drive | Hattiesburg, MS   |
|                             | Eric Weill                                                | 71 J. Ed Turner Drive  | Hattiesburg, MS   |
|                             | Ray Sims Jr.                                              | 142 Seventeen Place    | Hattiesburg, MS   |
|                             | Carl Nicolson                                             | 13 Medinah Dr          | Hattiesburg, MS   |
|                             | David Gustafson                                           | 6 Augusta Ct. West     | Hattiesburg, MS   |
|                             |                                                           |                        |                   |

Chairman Conville declared the Public Hearing closed and the Business Meeting open to vote on the request. Commissioner Miller made a motion to Deny the request to establish a zoning district as R-1B (Single-Family Residential) District. The motion was seconded by Commissioner Sims.

**Commissioners voting aye:** Amy Hinton  
Mark Miller  
Paul Sims  
Kenneth Waites  
James Hughes  
Rebekah Ray

**Commissioners voting nay:** Dick Conville, Chairman

**Commissioners absent:** Jessie Wilson

**BUSINESS MEETING**

There being no further business, the meeting was adjourned at 4:40 PM. Commissioner Hinton made a motion to adjourn the meeting. The motion was seconded at Commissioner Miller.

\_\_\_\_\_  
Dick Conville, Chairman

\_\_\_\_\_  
Ginger Maddox Lowrey, AICP, CFM, Planning Division Manager

April 9, 2018

**Hattiesburg City Council**

Via: Email to Hattiesburg Planning Department

**Re: Mandalay Villas, an existing development located in the city of Hattiesburg on J. Ed. Turner Rd.**

On December 9, 2016, Safari Timberlands, LLC and Ashley Robinson Builders, LLC purchased a 14.14 acre property with the intentions of creating an upscale residential development. This property, consisting of 49 lots known as Mandalay Villas, was originally platted and filed in Lamar County, MS in July 2007. It was subsequently annexed as a platted subdivision by the city of Hattiesburg on November 10, 2007. Taxes have been paid to the city on 49 individual lots and not as a 14.14 acre parcel. This property was annexed, yet not zoned at the time of annexation. It has yet to be zoned.

It is our desire to have this property zoned R1B. We have presented our recommendations to the Planning Commission who denied R1B. We are appealing the Planning Commission's recommendation to deny R1B zoning.

R1B conforms most closely to the original plat and is consistent with surrounding neighborhoods. Zoning this property R1B would make 48 of the 49 lots conforming. Directly across from and adjacent to the Hattiesburg Country Club are neighborhoods zoned R-1B, R-1C, and R-3.

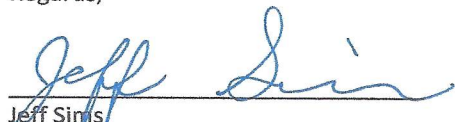
|      |                                               |
|------|-----------------------------------------------|
| R-1B | 8 Lots, Classic Drive at Country Club Ln      |
| R-1C | The Villages, Classic Wood, and The Woodlands |
| R-3  | Bob White Trl at Classic Drive                |

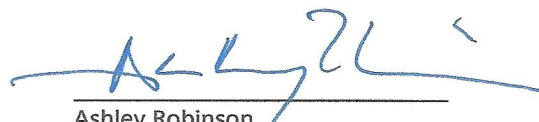
Several neighboring landowners expressed a preference for R1A zoning. However, an R1A zoning would make 49 of the 49 lots non-conforming. Though non-conforming, they would still be legal in a platted subdivision that was annexed and accepted by the City of Hattiesburg. Code 2.4.3.1i allows that if a lot is within 20% of the minimum size standard for a zoning requirement, it can be approved administratively by the Planning Department. Forty-three (43) of the forty-nine (49) lots could be administratively approved. The other six would require a variance from the Board of Adjustments to be buildable.

We would like to build the largest quality homes possible on these legally existing platted lots. The largest, most attractive homes can be built on these lots with R1B zoning and 5 foot side setbacks. R1A standards would limit us to the construction of a smaller and less attractive home.

If this Council finds that an R1B zoning is inappropriate, we could accept an R1A zoning with the understanding that we will need a variance from the Board of Adjustments reducing the side setbacks of each lot from 10 feet to 5 feet, in order to build larger homes that better fit the neighboring developments.

Regards,

  
Jeff Sims  
Safari Timberlands, LLC

  
Ashley Robinson  
Ashley Robinson Builders, LLC

# **City of Hattiesburg, MS**

*200 Forrest St.  
P.O. Box 1898  
Hattiesburg, MS 39401*



## **Meeting Agenda - Final**

**Monday, April 16, 2018**

**4:00 PM**

**Council Chambers**

**City Council - Public Hearing, Unsafe Properties**

1.        [2018-369](#)        Hold Public Hearing on Monday April 16, 2018 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.

**Attachments:**

[Public Hearing memo 04-16-18](#)

[1. 701 Eufala Ave.](#)

[2. 213 W. 7th St.](#)

[3. Corner of Camp & S. 20th Ave.](#)

[4. 1305 Rebecca Ave.](#)

[5. 901 Fairley St.](#)





# City of Hattiesburg, MS

200 Forrest St.  
P.O. Box 1898  
Hattiesburg, MS 39401

## Master

**File Number: 2018-369**

**File ID:** 2018-369

**Type:** Regular Agenda Item

**Status:** Agenda Ready

**Version:** 1

**Reference:**

**In Control:** City Council

**Requester:** Chris Price

**File Created:** 04/06/2018

**Brief Title:** Hold Public Hearing, Unsafe Properties, 04/16/2018.

**Final Action:**

**Minute Book Number:** MB2018-89-90

**Title:** Hold Public Hearing on Monday April 16, 2018 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.

### Notes:

**Agenda Date:** 04/16/2018

### Indexes:

**Agenda Number:** 1.

### Sponsors:

**Enactment Date:**

**Attachments:** Public Hearing memo 04-16-18, 1. 701 Eufala Ave., 2. 213 W. 7th St., 3. Corner of Camp & S. 20th Ave., 4. 1305 Rebecca Ave., 5. 901 Fairley St.

**Enactment Number:**

### Contact:

**Meeting Date:** 04/16/2018

**Drafter:** Ashley Fortenberry

**Effective Date:**

## History of Legislative File

| Ver-<br>sion: | Acting Body:                                           | Date:      | Action: | Sent To: | Due Date: | Return<br>Date: | Result: |
|---------------|--------------------------------------------------------|------------|---------|----------|-----------|-----------------|---------|
| 1             | City Council - Public<br>Hearing, Unsafe<br>Properties | 04/16/2018 |         |          |           |                 |         |

**Action Text:** Code Enforcement Manager Chris Price presented the properties to be considered. Mr. Price recommended that the Council adopt resolutions determining the properties are in such a state of uncleanness so as to be a menace to the health and safety of the community, providing a specified period of time to remove the violations, and declaring the City's intent to take action to clear the violations and charge the cost plus penalty against the property if the violations are not resolved in the specified period of time.

Myron Evans, 285 Morrell Circle, appeared before the Council regarding Case # 5, the property at 901 Fairley Street. Mr. Evans said he intends to keep the building and that it has been in his family since the 1930s; he said his aunt owned the property when Hurricane Katrina hit, and that she had Alzheimer's, had no insurance and lost the property. He said he was in the military, serving in Afghanistan, but contacted the purchaser and was able to buy the property back. He said he came to Hattiesburg from Texas in 2015 to meet with Code Enforcement and was directed then to draw up a plan to repair the gable and clean up the property; he said he drew up the plan, gave it to [Code Enforcement] and then was sent to the permit department. Mr. Evans said he [applied for a permit] and returned to Texas, and several months later received word that [the permit was denied] because the property had been re-zoned and he could no longer put an apartment complex there. Mr. Evans said that a planning department staff member told him he could apply for a variance, but that it would not be approved.

He said he returned to Texas and was deployed to Iran. Mr. Evans stated that he subsequently returned to Hattiesburg, and that [Mark] Jordan, then the Code Enforcement Manager, said that either [Mr. Evans] or the City needed to demolish the building. Mr. Evans said that in the following months, he thought about it and decided that he wants to restore the building. He said he and his wife have rehabbed four homes in the neighborhood and have people living in them.

Council member Delgado said she would like to see [the building] restored and asked if it would be a duplex or four-plex; Mr. Evans said that it is a four-plex and confirmed that as the original use of the structure.

Council member Delgado stated that she would like to see Mr. Evans file to request a variance; Ms. Lowrey said that a variance may not be appropriate but that she would be glad to [discuss] conditional use and other options with Mr. Evans.

Mr. Price suggested that the Council adopt the resolution and keep it in place as Mr. Evans develops a plan of action; he stated that there may be safety issues related to the structure. Council member Delgado said that she wants the building to be safe, but that the process for a variance or conditional use is time-consuming. She also said that she is not certain it would be fair to have the resolution in place as Mr. Evans goes through the process.

Mr. Ellard said the matter can be deferred for 60-90 days, and that [the planning division] can assist Mr. Evans with his application.

Council President Carroll asked if this property will be removed [from the list of properties for which resolutions are considered]; Mr. Ellard responded in the affirmative.

Council Vice President Dryden asked that Mr. Evans be given specific steps to be taken and a timeline; Council member Delgado suggested that planning be involved because of the timeline.

There were no other questions from the Council.

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## **Text of Legislative File 2018-369**

### **Title**

Hold Public Hearing on Monday April 16, 2018 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.

**Summary**

Hold Public Hearing, Unsafe Properties, 04/16/2018.

**Budget Information**

**Expenditure Type**

**Purchasing Item**

**Publication Information**



**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***

## **MEMORANDUM**

**TO:** Mayor and City Council

**FROM:** Chris Price, Code Enforcement Manager

**DATE:** April 2, 2018

**RE:** Hold Public Hearing

Hold Public Hearing on Monday April 16, 2018 to determine if the following 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 provisions of MS Code 1972, Section 21-19-11.

| <b>Address</b>                                    | <b>PPIN #</b> | <b>Ward</b> | <b>Violations</b>            |
|---------------------------------------------------|---------------|-------------|------------------------------|
| 1. 701 Eufala Ave.                                | 15156         | 5           | AB, DB, OGL, DM              |
| 2. 213 W. 7 <sup>TH</sup> St.                     | 20013         | 2           | DB, US, OGL, T&L, DM         |
| 3. Corner of Camp<br>and S. 20 <sup>th</sup> Ave. | 2-028P-08-087 | 4           | OGL                          |
| 4. 1305 Rebecca Ave.                              | 22475         | 2           | DS, VS, OGL, T&L, HT, DM     |
| 5. 901 Fairley St.                                | 25860         | 2           | DS, VS, OS, OGL, T&L, GL, PT |

Trash & Litter=T&L  
Vacant Structure=VS  
Dangerous Structure=DS  
Overgrown Lot=OGL  
Open Storage=OS  
Protective Treatment=PT  
Accessory Structure=AS  
Unsafe Structure=US  
Abandoned Vehicle=AV  
Interior Structure=IS  
Exterior Structure=ES  
Electrical=EL  
Responsibility (Water)=RW  
Hazardous Tree=HT  
Glazing=GL  
PID=Premise Id  
X's2=2 Structures  
Structure Built in Right of Way= SBROW  
Demo=DM



## Case History For

701 Eufala Ave.

**Ward:** 5

**Action Center:** 4-18-005906

**Date:** February 23, 2018

**PPIN:** 15156

**Owners:** Anita Faye Mack

**Violations:** Dangerous Structure, Dilapidated Building, Vacant Structure, and Overgrown Lot

**Case History:** This property is in an abandoned and dilapidated state which has continued for several years. Code Enforcement seeks a Council Resolution in an effort to correct the violations.

**Inspector:**

Tywan Kidd

601-554-1007

**Case # 1**

**NOTICE OF HEARING BEFORE THE CITY COUNCIL OF THE CITY OF  
HATTIESBURG, MISSISSIPPI TO CONDEMN DILAPIDATED BUILDING (S)  
AND/OR TO CLEAR ALL CODE VIOLATIONS**

TO: Anita Faye Mack 701 EuFala Ave. HATTIESBURG, MS 39401; On Point LLC, address unknown and all unknown persons claiming any right, title or interest in or to the hereinafter described property.

PLEASE TAKE NOTICE PURSUANT TO §21-19-11 of the Mississippi Code of 1972, as annotated and amended, the City Council of the City of Hattiesburg will hold a public hearing at 4:00p.m. On April 16, 2018 in the Council room of the City Hall, Hattiesburg, MS to determine whether or not the hereinafter-described property is in such a state of uncleanness to be a menace to the public health and safety of the community. You have a right to file an answer and to appear at said hearing in person or otherwise and to offer your defense, if any. If, at such hearing, the City Council shall adjudicate the property in its then condition to be a menace to the health and safety of the community, the City of Hattiesburg shall, if the owner will not do so himself, proceed to have the land cleared pursuant to the aforesaid statute. The City of Hattiesburg may then adjudicate the costs plus penalty of cleaning said property and the costs may become assessment against the property, which shall be a lien against said property all as provided by statute, to wit:

PARCEL: 2-038A-15-161, 701 EuFala Ave. HATTIESBURG, MS 39401 and better described as Lot Eight (8) in Block Three (3) of the H. I. Ferguson Subdivision of Block Ten (10) of the James E. Arledge Survey or Addition to the City of Hattiesburg, Mississippi as per map or plat thereof on file in the Office of the Chancery Clerk of Forrest County, Mississippi; together with all improvements and appurtenances there unto belonging.

Publication: March 29, 2018



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Sent To Anita Fayl Mack  
 Street and Apt. No., or PO Box No. 701 EuFala Ave  
 City, State, ZIP+4® Hattiesburg, MS 39401

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Postmark Here  
 MAR 26 2011

**701 EuFala Ave**

**PPIN: 15156**



## Case History For

213 W. 7<sup>th</sup> St.

**Ward:** 2

**Action Center:** 02-18-005822

**Date:** February 25, 2018

**PPIN:** 20013

**Owners:** Lisa Mass and Phillip Landrum

**Violations:** Dilapidated Building, Overgrown Lot, Vacant Structure, and Unsafe Conditions

**Case History:** This property is in an abandoned and dilapidated state which has continued for several years. Code Enforcement seeks a Council Resolution in an effort to correct the violations.

**Inspector:**

Tracie Russell

601-554-1011

**Case # 2**



NOTICE OF HEARING BEFORE THE CITY COUNCIL OF THE CITY OF HATTIESBURG, MISSISSIPPI TO  
CONDEMN DILAPIDATED BUILDING (S) AND/OR TO CLEAR ALL CODE VIOLATIONS

TO: Phillip Landrum 213, W. 7th St. HATTIESBURG, MS 39401; Dennett Hills INC., address unknown;  
Merritt INC., address unknown and all unknown persons claiming any right, title or interest in or to the  
hereinafter described property.

PLEASE TAKE NOTICE PURSUANT TO §21-19-11 of the Mississippi Code of 1972, as  
annotated and amended, the City Council of the City of Hattiesburg will hold a public hearing at  
4:00p.m. On April 16, 2018 in the Council room of the City Hall, Hattiesburg, MS to determine whether  
or not the hereinafter-described property is in such a state of uncleanness to be a menace to the public  
health and safety of the community. You have a right to file an answer and to appear at said hearing in  
person or otherwise and to offer your defense, if any. If, at such hearing, the City Council shall  
adjudicate the property in its then condition to be a menace to the health and safety of the community,  
the City of Hattiesburg shall, if the owner will not do so himself, proceed to have the land cleared  
pursuant to the aforesaid statute. The City of Hattiesburg may then adjudicate the costs plus penalty of  
cleaning said property and the costs may become assessment against the property, which shall be a lien  
against said property all as provided by statute, to wit:

PARCEL: 2-029F-04-111, 213 W. 7th ST. HATTIESBURG, MS 39401 Part of Lot 3 in Block 1 of the Love and  
St. John Subdivision of Lot 7 Block 171 of the Crittenden Survey of the City of Hattiesburg, and described  
as follows, to-wit:

Begin at the West corner of the intersection of Phillips Street with West 7th Street and run 100 feet  
West along 7th Street to a Point of Beginning; thence run at right angles South 187.5 feet parallel to  
Phillips Street, thence run West 57 feet, thence North 187.5 feet; thence run 57 feet East along West 7th  
Street to the Point of Beginning.

Publication: March 29, 2018

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PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

213 W. 7<sup>th</sup> St.

PPIN: 20013



### Case History For

Corner of Camp St & S. 20<sup>th</sup> Ave

**Ward:** 4

**Action Center:** 10-17-005732

**Date:** October 5, 2017

**PPIN:** 16256

**Owners:** SKL Investments

**Violations:** Overgrown Lot

**Case History:** This property is in an abandoned and dilapidated state which has continued for several years. Code Enforcement seeks a Council Resolution in an effort to correct the violations.

**Inspector:**

Tracie Russell

601-554-1011

**Case # 3**

**NOTICE OF HEARING BEFORE THE CITY COUNCIL OF THE CITY OF  
HATTIESBURG, MISSISSIPPI TO CLEAR ALL CODE VIOLATIONS**

TO: Paul and Alison William, 300 S 21<sup>st</sup> Ave. HATTIESBURG, MS 39401 and SKL Investments P.O. Box 7 Lauderdale, MS 39335 and all unknown persons claiming any right, title or interest in or to the hereinafter described property.

PLEASE TAKE NOTICE PURSUANT TO §21-19-11 of the Mississippi Code of 1972, as annotated and amended, the City Council of the City of Hattiesburg will hold a public hearing at 4:00p.m. On April 16, 2018 in the Council room of the City Hall, Hattiesburg, MS to determine whether or not the hereinafter-described property is in such a state of uncleanness to be a menace to the public health and safety of the community. You have a right to file an answer and to appear at said hearing in person or otherwise and to offer your defense, if any. If, at such hearing, the City Council shall adjudicate the property in its then condition to be a menace to the health and safety of the community, the City of Hattiesburg shall, if the owner will not do so himself, proceed to have the land cleared pursuant to the aforesaid statute. The City of Hattiesburg may then adjudicate the costs plus penalty of cleaning said property and the costs may become assessment against the property, which shall be a lien against said property all as provided by statute, to wit:

PARCEL: 2-028P-08-087, Corner of Camp and S 20<sup>th</sup> Ave. HATTIESBURG, MS 39401 and better described as Lot 1-7, Block 4 Hattiesburg Heights 3<sup>rd</sup> Survey, and Forrest County, MS.

Publication: March 29, 2018



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| PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions                       |                                                      |

Corner of Camp & S. 20<sup>th</sup> Ave  
PPIN: 16256



### **Case History For**

1305 Rebecca Ave.

**Ward: 2**

**Action Center: 05-17-005641**

**Date: May 25, 2017**

**PPIN: 22475**

**Owners:** Ed Marsh and Lois Marsh

**Violations:** Dilapidated Building, Vacant Structure, Overgrown Lot and Weeds, Trash and Litter, Hazardous Tree

**Case History:** This property is in an abandoned and dilapidated state which has continued for several years. Code Enforcement seeks a Council Resolution in an effort to correct the violations.

**Inspector:**

Karnella Myers

601-554-1009

**Case # 4**

**NOTICE OF HEARING BEFORE THE CITY COUNCIL OF THE CITY OF  
HATTIESBURG, MISSISSIPPI TO CONDEMN DILAPIDATED BUILDING (S)  
AND/OR TO CLEAR ALL CODE VIOLATIONS**

TO: Ed Marsh and Lois Marsh 1305 Rebecca Ave. HATTIESBURG, MS 39401 and all unknown persons claiming any right, title or interest in or to the hereinafter described property.

PLEASE TAKE NOTICE PURSUANT TO §21-19-11 of the Mississippi Code of 1972, as annotated and amended, the City Council of the City of Hattiesburg will hold a public hearing at 4:00p.m. On April 16, 2018 in the Council room of the City Hall, Hattiesburg, MS to determine whether or not the hereinafter-described property is in such a state of uncleanness to be a menace to the public health and safety of the community. You have a right to file an answer and to appear at said hearing in person or otherwise and to offer your defense, if any. If, at such hearing, the City Council shall adjudicate the property in its then condition to be a menace to the health and safety of the community, the City of Hattiesburg shall, if the owner will not do so himself, proceed to have the land cleared pursuant to the aforesaid statute. The City of Hattiesburg may then adjudicate the costs plus penalty of cleaning said property and the costs may become assessment against the property, which shall be a lien against said property all as provided by statute, to wit:

PARCEL: 2-030M-11-220, 1305 Rebecca Ave. HATTIESBURG, MS 39401 and better described as Lot Three (3), Block Fourteen (14), of the OMEGA SUBDIVISION of the City of Hattiesburg, Forrest County, Mississippi as per map or plat thereof on file in the Office of the Chancery Clerk of Forrest County, Mississippi.

Publication: March 29, 2018



7017 0190 0000 5162 6038

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Ed Marsh & Lois Marsh

Street and Apt. No., or P.O. Box No.

1305 Rebecca Ave

City, State, ZIP+4®

Hattiesburg, MS 39401

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

1305 Rebecca Ave  
PPIN: 22475



### **Case History For**

901 Fairley St.

**Ward: 2**

**Action Center: 06-17-005648**

**Date: May 31, 2017**

**PPIN: 25860**

**Owners: Myron Evans**

**Violations:** Dilapidated Building, Vacant Structure, Overgrown Lot and Weeds, Trash and Litter

**Case History:** This property is in an abandoned and dilapidated state which has continued for several years. Code Enforcement seeks a Council Resolution in an effort to correct the violations.

**Inspector:**

Karnella Myers

601-554-1009

**Case # 5**

**NOTICE OF HEARING BEFORE THE CITY COUNCIL OF THE CITY OF  
HATTIESBURG, MISSISSIPPI TO CONDEMN DILAPIDATED BUILDING (S)  
AND/OR TO CLEAR ALL CODE VIOLATIONS**

TO: Myron Evans, 285 Morrell Circle HATTIESBURG, MS 39402 and all unknown persons claiming any right, title or interest in or to the hereinafter described property.

PLEASE TAKE NOTICE PURSUANT TO §21-19-11 of the Mississippi Code of 1972, as annotated and amended, the City Council of the City of Hattiesburg will hold a public hearing at 4:00p.m. On April 16, 2018 in the Council room of the City Hall, Hattiesburg, MS to determine whether or not the hereinafter-described property is in such a state of uncleanness to be a menace to the public health and safety of the community. You have a right to file an answer and to appear at said hearing in person or otherwise and to offer your defense, if any. If, at such hearing, the City Council shall adjudicate the property in its then condition to be a menace to the health and safety of the community, the City of Hattiesburg shall, if the owner will not do so himself, proceed to have the land cleared pursuant to the aforesaid statute. The City of Hattiesburg may then adjudicate the costs plus penalty of cleaning said property and the costs may become assessment against the property, which shall be a lien against said property all as provided by statute, to wit:

PARCEL: 2-029H-03-017, 901 Fairley St. HATTIESBURG, MS 39401 and better described as Beginning at the Northwest corner of the northeast quarter of the southeast quarter of section 3, township 4 north, range 13 west, in the City of Hattiesburg, Forrest County, Mississippi and run South 3131 feet and thence east 25 feet to and for a point of beginning, from said point of beginning feet, thence East 170 feet, thence south 60 said point of beginning feet, thence East 170 feet, thence south 60 feet, thence west 170 feet, and thence north 60 feet to the point of beginning.

Publication: March 29, 2018

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| <input type="checkbox"/> Return Receipt (electronic)         | \$ | _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery  | \$ | _____ |
| <input type="checkbox"/> Adult Signature Required            | \$ | _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ | _____ |

Postage

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Total Postage and Fees

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Sent To

Mynon Evans

Street and Apt. No., or PO Box No.

285 Morrell Circle

City, State, ZIP+4®

Jacksonburg, MS 39402

Postmark  
Here

MAY 27 2011

2807

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7017 0190 0000 5162 6069

901 Fairley St.  
PPIN: 25860

# **City of Hattiesburg, MS**

*200 Forrest St.  
P.O. Box 1898  
Hattiesburg, MS 39401*



## **Meeting Agenda - Final**

**Monday, April 16, 2018**

**4:00 PM**

**for the April 17, 2018 agenda**

**Council Chambers**

**City Council - Amendments to the Agenda**



**Remove Policy Agenda Item V. - 3 at the request of the Administration.**

**Add Policy Agenda Item V. - 17 at the request of the Administration as follows:**

- V.-17**     [2018-376](#)     Acknowledge receipt of and accept Appraisal Review Report for a portion of Parcel PPIN 35075 located in Lamar County for the J. Ed Turner Multi-Use Path Corridor project; Approve Establishment of Just Compensation and declare Appraised Value of \$23,500 to be Fair Market Value pursuant to MS Code 43-37-3 and other applicable statutes; Authorize offer to owner for Fair Market Value of \$23,500; Authorize issuance of manual check in payment upon acceptance of offer.

**Attachments:**     [Just Compensation Offer- revised](#)  
[Establishment of Just Comp Offer- executed](#)  
[Stan Black - PPIN 35075 - Combined Appr. Rev. and Appr](#)  
[FC15-220 ALTA New ROW Survey 2017-11-01](#)

**And, Add Routine Agenda Items VI. - 12 and VI. - 13 at the request of the Administration as follows:**

- VI.-12**     [2018-401](#)     Acknowledge receipt of request filed by Utpal Patel, Owner, to appeal the Planning Commission's recommendation for the petition filed by by Utpal Patel, Owner to change the zoning classification for a certain property located at 208 North 38th Avenue (Parcel 2-028L-07-144.01, PPIN 41562, Ward 1) from Section 4.5.9, B-2 (Neighborhood Business) District to Section 4.5.10, B-3 (Community Business) District; Hattiesburg Planning Commission recommended to Deny on April 4, 2018; Set a public hearing before City Council on May 21, 2018 at 4:00 p.m. and authorize publication of Public Notice setting an Appeal Public Hearing.

**Attachments:**     [Appeal - 208 N 38th Ave](#)

- VI.-13**     [2018-383](#)     Acknowledge no bids were received at the bid opening April 5, 2018 for the 28th Avenue Bridge Replacement project; Authorize re-advertisement for bids for same project.

**Attachments:**     [11204 no bid letter](#)  
[S. 28th Ave Bridge - No bids, Re-advertisement](#)  
[11204 construction plans signed 2018-02-12-Rebid](#)  
[11204 Specs Review Set 2018\\_04\\_09-Rebid](#)  
[executed 11204 no bid letter for 28th Ave. Bridge Replacement project](#)



# City of Hattiesburg, MS

200 Forrest St.  
P.O. Box 1898  
Hattiesburg, MS 39401

## Master

**File Number: 2018-376**

**File ID:** 2018-376

**Type:** Regular Agenda Item

**Status:** Approved

**Version:** 1

**Reference:**

**In Control:** City Council

**Requester:** Lamar Rutland

**File Created:** 04/09/2018

**Brief Title:** Accept Appraisal Review Report, establish Fair Market Value and authorize issuance of offer for Lamar Co. Parcel PPIN 35075 for the J. Ed Turner Multi-Use Path project.

**Final Action:** 04/17/2018

**Minute Book Number:** MB2018-107

**Title:**

Acknowledge receipt of and accept Appraisal Review Report for a portion of Parcel PPIN 35075 located in Lamar County for the J. Ed Turner Multi-Use Path Corridor project; Approve Establishment of Just Compensation and declare Appraised Value of \$23,500 to be Fair Market Value pursuant to MS Code 43-37-3 and other applicable statutes; Authorize offer to owner for Fair Market Value of \$23,500; Authorize issuance of manual check in payment upon acceptance of offer.

**Notes:**

**Agenda Date:** 04/17/2018

**Indexes:**

**Agenda Number:** V.-17

**Sponsors:**

**Enactment Date:**

**Attachments:** Just Compensation Offer- revised, Establishment of Just Comp Offer- executed, Stan Black - PPIN 35075 - Combined Appr. Rev. and Appr., FC15-220\_ALTA\_New\_ROW Survey\_2017-11-01

**Enactment Number:**

**Contact:**

**Meeting Date:** 04/17/2018

**Drafter:** Sharon Waits

**Effective Date:**

### History of Legislative File

| Ver-<br>sion: | Acting Body:                            | Date:      | Action:     | Sent To: | Due Date: | Return<br>Date: | Result: |
|---------------|-----------------------------------------|------------|-------------|----------|-----------|-----------------|---------|
| 1             | City Council - Amendments to the Agenda | 04/16/2018 |             |          |           |                 |         |
| 1             | City Council                            | 04/17/2018 | Acknowledge |          |           |                 | Pass    |

**Action Text:** A MOTION was made by Council Member George and seconded by Council Vice President Dryden to Acknowledge receipt of Establishment of Just Compensation and Appraisal Review Report for a portion of Parcel PPIN 35075 located in Lamar County for the J. Ed Turner Multi-Use Path Corridor project; Authorize offer to owner for established just compensation of \$23,500; Authorize issue of manual check upon acceptance of offer.

Council member George thanked the Forrest County Board of Supervisors and Supervisor Chris Bowen in particular for partnering with the City.

Following discussion, the Motion received the affirmative vote of the Council as follows:

Yeas: 5 - George, Delgado, Carroll, Dryden and Brown

Nays: 0

Yea: 5    Council Member George  
             Council Member Delgado  
             Council President Carroll  
             Council Vice President Dryden  
             Council Member Brown

---

## **Text of Legislative File 2018-376**

### **Title**

Acknowledge receipt of and accept Appraisal Review Report for a portion of Parcel PPIN 35075 located in Lamar County for the J. Ed Turner Multi-Use Path Corridor project; Approve Establishment of Just Compensation and declare Appraised Value of \$23,500 to be Fair Market Value pursuant to MS Code 43-37-3 and other applicable statutes; Authorize offer to owner for Fair Market Value of \$23,500; Authorize issuance of manual check in payment upon acceptance of offer.

### **Summary**

Accept Appraisal Review Report, establish Fair Market Value and authorize issuance of offer for Lamar Co. Parcel PPIN 35075 for the J. Ed Turner Multi-Use Path project.

### **Budget Information**

072201.7210



## Establishment of Just Compensation Offer

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

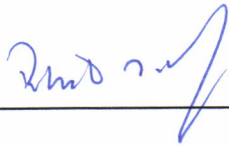
*"Establishment and offer of just compensation. Before the initiation of negotiations, the Agency shall establish an amount which it believes is just compensation for the real property. The amount shall not be less than the approved appraisal of the market value of the property, taking into account the 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:** Stan Black  
**Parcel No:** PPIN 35075  
**Project No:** Sidewalk – J Ed Turner Drive  
**County:** Lamar

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, *Robert Jackson*, Project Attorney, 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 \$23,500.

Signed



Date 2-28-18

### 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.

## Establishment of Just Compensation Offer

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

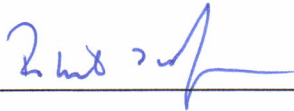
*"Establishment and offer of just compensation.* Before the initiation of negotiations, the Agency shall establish an amount which it believes is just compensation for the real property. The amount shall not be less than the approved appraisal of the market value of the property, taking into account 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:** Stan Black  
**Parcel No:** PPIN 35075  
**Project No:** Sidewalk – J Ed Turner Drive  
**County:** Lamar

Under the authority conveyed to me by the Lamar County Board of Supervisors, and based on the recommended appraisal for the above-named property, which is inclusive of all compensable interests, I, *Robert Jackson*, Project Attorney, 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 \$23,500.

Signed



Date

2/28/18

### 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.

# APPRAISAL REVIEW REPORT

|                                        |                                              |
|----------------------------------------|----------------------------------------------|
| <b>Parcel Number(s)</b>                | PPIN 35075                                   |
| <b>Owner</b>                           | Stan Black                                   |
| <b>Vacant / Occupied / Leased</b>      | Vacant                                       |
| <b>County</b>                          | Lamar                                        |
| <b>Project Number</b>                  | Sidewalk - J Ed Turner Drive                 |
| <b>FAP Number</b>                      | NA                                           |
| <b>Project Description</b>             | Jed Turner Drive; Multi-Use<br>Path Corridor |
| <b>Effective Date of Review Report</b> | 02/22/2018                                   |
| <b>Review Report Date</b>              | 02/22/2018                                   |
| <b>Review Report Requested for</b>     | Original Appraisal                           |

**Prepared For**



**City of Hattiesburg  
C/O Rob Jackson, Attorney at Law  
P.O. Box 15517  
Hattiesburg, MS 39404**

**This Appraisal Review Report Was Prepared By**

John B. "Jeb" Stewart, SR/WA  
Certified General Real Estate Appraiser #231  
P.O. Box 804; 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:                                              | Stan Black                   |
| Parcel No:                                          | PPIN 35075                   |
| Project No:                                         | Sidewalk - J Ed Turner Drive |
| County:                                             | Lamar                        |

### 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. There are no other intended users.

### 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. There are no other intended uses.

### 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: 02/07/2018

Report Date: 02/13/2018

Appraisal By: Jonathon Null, MAI; GA-799

Other Appraisals By:

Date:

Remainder:

Uneconomic Remnant

☐ Yes

☒ No

### Estate Appraised and Under Review

☒

Fee

Area of Whole Tract

**25.94 Acres**

☐

Easement

Area of Remaining Tract

**24.06 Acres**

☐

Other

Area to be Acquired

**1.88 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 35075

Project No. Sidewalk - J Ed Turner Drive

Review Appraisal Report (Revised: January 2018)

| <b>Purpose of the Review Report</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <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> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>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 City of Hattiesburg, 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.</p> |                                                                                                                                                                                                                                                                                      |

| <b>Scope of Work of the Review Report</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <i>(State the nature, extent, and detail of the review process)</i> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <p>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 City of Hattiesburg, 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:</p> <ul style="list-style-type: none"> <li>(a) When necessary for credible assignment results in the review of analyses, opinions and conclusions, the reviewer must: <ul style="list-style-type: none"> <li>(i) develop an opinion as to whether the analyses are appropriate within the context of the requirements applicable to that work.</li> <li>(ii) develop an opinion as to whether the opinions and conclusions are credible within the context of the requirements applicable to that work; and</li> <li>(iii) develop the reasons for any disagreement.</li> </ul> </li> <li>(b) When necessary for credible assignment results in the review of a report, the reviewer must: <ul style="list-style-type: none"> <li>(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</li> <li>(ii) develop the reasons for any disagreement.</li> </ul> </li> <li>(c) When the assignment includes the reviewer developing his or her own opinion of value or review opinion, the following apply: <ul style="list-style-type: none"> <li>(i) The requirements of STANDARDS 1, 5, 7, and 9 apply to the reviewer's opinion of value for the property that is the subject of the appraisal review assignment.</li> <li>(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.</li> </ul> </li> </ul> |                                                                     |

| <b>Additions or Changes to the<br/>Scope of Work and<br/>Comments <i>(If necessary)</i></b> | <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) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The effective date of this appraisal review report is 2/22/2018; the most recent date of inspection of the property and related comparable sales.</p> <p>The appraisal under review has been developed in compliance with USPAP Standard Rule 1 and reported in compliance with Standard Rule 2-2(a) as a Appraisal Report. The appraiser has invoked USPAP's Jurisdictional Exception provision in regards to Standard Rules 1-3(a), 1-4(f), 2-2(a)(v), 2-2(a)(viii). 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"). A 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 a Appraisal Report.</p> |                                                                                                                                                                                                     |

| Ownership Interest Appraised in the Report Under Review |  |
|---------------------------------------------------------|--|
| Fee Simple                                              |  |

| Summary of Approaches     |              |             |            |
|---------------------------|--------------|-------------|------------|
|                           | Before Value | After Value | Difference |
| Sales Comparison Approach | \$324,250    | \$300,750   | \$23,500   |
| Cost Approach             |              |             |            |
| Income Approach           |              |             |            |

| Description of the Property Under Review                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (Size - Before, After and Acquisition; Improvements; Location of acquisition; etc..) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <p>The subject property is a suburban tract of vacant property consisting of 25.94± acres located along the south side of Jed Turner Drive within the city limits of Hattiesburg, Lamar County, MS. The property is more specifically described as being within the NE ¼ NW ¼ and the NW ¼ NW ¼ of Section 2, T4N, R14W, Lamar County, MS.</p> <p>The property is rectangular in shape with 900 feet of width or frontage along J Ed Turner Drive with an average length of 1,250 lf more or less. Also, along the southern boundary exist a rails to trails; a paved recreational trail. The subject property is within the city limits of Hattiesburg and would normally subscribe to city zoning codes. However, it was reported that as of 2-9-18 the property hasn't been zoned. However, any proposed use would have to be approved by the zoning department at which time a zoning class would be assigned. I am of the opinion the property would most likely be zoned or restricted in use to the surrounding/adjoining uses or residential development.</p> <p>The topography is gently rolling covered in various types of timber. Reportedly, a portion of the property is within a cut or gully creating a ditch or drain bisecting the property. The majority of the property is located outside the flood hazard area being within zone x, 500 year flood zone, with approximately 10% being within a designated flood hazard area along the before mentioned drain or ditch that bisects the property. This area is shown as being within zone AE, 100 year flood zone. Please refer to the illustration on page 36 of the appraisal report for a visual aid. Within the Larger Parcel Discussion, the appraiser recognized the total property represented the LP.</p> <p>The subject property is most likely encumbered by typical utility easements along the road frontage. Typical utilities are available along the roadways include water, electricity, and telephone and do not adversely affect the</p> |                                                                                      |



property. As the property is located in the city, all city services are available to the subject site to include public sewer; public water; telephone, etc. as well as police and fire protection.

Within the highest and best use discussion, the appraiser discussed the various uses that would be physically possible; legally permissible; financially feasible; and the most maximally productive use. The appraiser discussed each in detail and determined that the highest and best use would be for residential development. This use is the predominant use in the immediate area.

The acquisition area consists of 1.88 acres±. The acquisition area is located along the eastern property line with a width of 58 feet more or less and a length of 1,354 feet more or less. As previously reported, the property is lightly timbered with some timber within the area to be acquired. The acquisition area will be acquired in fee simple.

In the after condition, the property will consist of 24.06 acres more or less. The property will retain similar access and other characteristics in the after condition as in the before condition. The appraiser considered damages; however, none were indicated. The same highest and best use was determined in the after condition as the before.

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 rationale for the reviewer's opinion and conclusions.</i> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The Jurisdictional Exception Rule has been invoked and explained. It is this reviewer's understanding that this does not affect the development of the report and Departure from USPAP Standards Rule 1 has not occurred due to this.</p> <p>The appraiser contacted the property owner whom accompanied the appraiser on the property inspection. A ROW Acquisition Guide and other materials related to the acquisition area were provided to him subsequent to the meeting via email.</p> <p>Within the appraisal, the appraiser considered all three approaches to value; however, it was determined the only approach deemed appropriate was the Sales Comparison Approach as adequate sales were available for the property and "land only" was being valued. MDOT allows for use of only the SCA where adequate data exists and LPA's follow MDOT policy. Additionally, there is limited rental information for similar properties. Therefore, the Income Approach would not be considered applicable. The Cost Approach was not utilized as "land only" was being valued.</p> <p>In the valuation of the subject's site containing 25.94± acres, the appraiser analyzed six (6) land sales ranging in size from 4.99 acres to as large as 22.0 acres. These sales had a value range from a low of \$10,925 per acre to as high as \$17,034 per acre. It is noted; one of the sales is the sale and resale of a property. Therefore, only five (5) sales were adjusted within a "grid." The additional sale was utilized for a paired sales analysis for an indicated adjustment for market conditions otherwise referred to as a time adjustment.</p> <p>The adjusted range of unit values as indicated by the comparable sales analyzed ranged from a low of \$11,112 per acre to as high as \$13,538 per acre. The appraiser discussed the various differences noted within the adjustments as well as the fact the subject property is a significantly larger than most of the sales analyzed. Most emphasis was placed on the sales along J Ed Turner Drive with these having an adjusted range of value from a low of \$11,396 per acre to as high as \$12,520 per acre. The upper end of the adjusted values of the sales in close proximity along the same roadway was adopted or \$12,500 per acre. The indicated before value of the subject's 25.94 acres is then <u>\$324,250</u>. This value was inclusive of any timber value as the sales were similar in this regards and the highest and best use is for residential development.</p> <p>In the valuation of the remainder, the same unit value was adopted as in the before condition or \$12,500 per acre for the remainder consisting of 24.06 acres for an indicated after value of <u>\$300,750</u>.</p> <p>The difference or estimated Just Compensation of the fee acquisition is then <u>\$23,500</u>.</p> |                                                                                                                                                                              |

| <b>Conclusion</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <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> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>As this is a partial acquisition from a property consisting of "land only," the appraiser completed a total before and after value of the subject property's site. The appraiser has properly applied the Sales Comparison Approach for the valuation of the subject in both the before and after condition. The Income and Cost Approaches were determined not to be applicable as "land only" was being valued and ample sales data exists.</p> <p>The value opinion stated in the report under review was 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 acquisitions. The valuation techniques were acceptable and well supported.</p> <p>I concur with the appraiser's conclusion in regards to valuation of the total property in the before and after condition.</p> <p>The estimated due compensations is then <b>\$23,500</b>.</p> |                                                                                                                                                                                                                                                                                                                                                                 |

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 \$23,500 and is Recommended as the basis for the establishment of the amount believed to be just compensation.

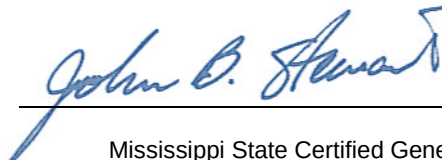
The Recommended estimate of just compensation includes the following amounts compensable under State Law but not eligible for Federal reimbursements: (if none, state "none") None

#### Recommended Distribution of Final Estimate of Value

| Parcel                                                   | Land     | Improvements | Damages | Total    |
|----------------------------------------------------------|----------|--------------|---------|----------|
| PPIN 35075                                               | \$23,500 | \$0          | \$0     | \$23,500 |
|                                                          |          |              |         |          |
|                                                          |          |              |         |          |
|                                                          |          |              |         |          |
|                                                          |          |              |         |          |
| <b>Total: Twenty Three Thousand Five Hundred Dollars</b> |          |              |         |          |

Date  
02/22/2018

Review Appraiser

  
 Mississippi State 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 <b>are no</b> additional assumptions and limiting conditions applicable to this review appraisal. |
|                                                                                                         |

## Certification 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 cited 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 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;

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;

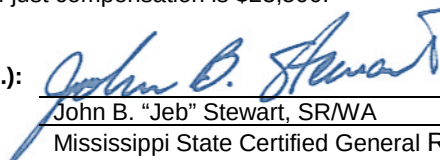
John B. Stewart, is state certified by the State of Mississippi as a General Real Estate Appraiser, License No.231, and as of the date of this report, has completed the continuing education program required to maintain that license.

Based upon my independent review of the attached appraisal report and the exercise of my professional judgment, the recommended estimate of just compensation is \$23,500.

**Review Appraiser (sig.):**

(print name)

(license)



John B. "Jeb" Stewart, SR/WA

Mississippi State Certified General Real Estate  
Appraiser #231

**Date:** 02/15/2018

**Parcel No.** PPIN 35075

**Project No.** Sidewalk - J Ed Turner Drive

Review Appraisal Report (Revised: January 2018)

## **REAL ESTATE APPRAISAL OF**

+/-25.94 Acres,  
Located along J Ed Turner Drive,  
Hattiesburg, Lamar County, MS, 39402



**As of**  
February 7<sup>th</sup>, 2018

**Prepared For**  
The City of Hattiesburg  
c/o Rob Jackson

**Prepared by**



---

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



February 13<sup>th</sup>, 2018

The City of Hattiesburg  
c/o Rob Jackson

Re: Real Estate Appraisal  
+/-25.94 Acres located along Jed Turner Drive, Hattiesburg, Lamar County, MS.  
39402

Dear Mr. Jackson,

At your request and authorization, I have completed a summary real estate appraisal of the above referenced property. The property has been inspected, and an investigation of the current real estate market has been completed. All property rights were appraised, the purpose of which was to arrive at an estimate of Market Value of the fee simple estate, to determine the just compensation due for a right of way acquisition. Based on the inspection of the property and the investigation and analyses undertaken, I have formed the opinion that as of February 7<sup>th</sup>, 2018, and subject to the limiting conditions set forth in this report, the just compensation due is:

**BEFORE AND AFTER VALUES:**

|                                          |             |                 |
|------------------------------------------|-------------|-----------------|
| Value Before                             | 25.94 acres | \$324,250       |
| After Value                              | 24.06 acres | \$300,750       |
| <b>Difference/ Just Compensation due</b> |             | <b>\$23,500</b> |

Additionally, this value estimate is subject to the limiting conditions, certification, and assumptions contained in the following report. This appraisal report is intended to conform with, and is subject to, the Code of Professional Ethics and Standards of Professional Practice of the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice. We certify that we are competent to complete this assignment. The following report is a detailed summary of the data and analysis used in arriving at our conclusion.

Respectfully submitted,

Jonathon Null, MAI  
State Licensed Certified General  
Real Estate Appraiser, GA-799

### **APPRAISER'S CERTIFICATION STATEMENT**

We certify that, to the best of our knowledge and belief:

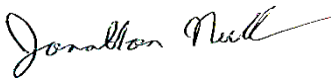
- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions and conclusions are limited only by the reported assumptions, limiting conditions, and legal instructions, and are the personal, impartial, and unbiased professional analyses, opinions and conclusions of the appraiser.
- We have no present or prospective future interest in the property that is the subject of this report, and have no personal interest with respect to the parties involved.
- We have no bias with respect to the property that is the subject of this report, or to the parties involved with this assignment.
- Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice (USPAP)*.
- We certify sufficient competence to appraise this property through education and experience, in addition to the internal resources of the appraisal firm.
- The appraiser(s) have not performed any prior services regarding the subject within the previous three years of the appraisal date.
- Jonathon Null has made an inspection of the subject property.



- The reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- As of the date of this report, Jonathon Null, MAI, has completed the continuing education program for Designated Members of the Appraisal Institute.
- As of the date of this report, we have completed the Standards and Ethics Education Requirements for Practicing Affiliates of the Appraisal Institute.

#### BEFORE AND AFTER VALUES:

|                                          |             |                 |
|------------------------------------------|-------------|-----------------|
| Value Before                             | 25.94 acres | \$324,250       |
| After Value                              | 24.06 acres | \$300,750       |
| <b>Difference/ Just Compensation due</b> |             | <b>\$23,500</b> |



Jonathon Null, MAI  
 Certified General Real Estate Appraiser  
 #799

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**USPAP CHECKLIST**

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## Narrative Appraisal Report

Owner(s): Stan Black Address: P.O. Box 1936  
 Phone: 601-853-4242 Madison, MS 39130

Occupant(s): \_\_\_\_\_ Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_

|                   |                                         |                                  |                    |
|-------------------|-----------------------------------------|----------------------------------|--------------------|
| Estate Appraised: | <input checked="" type="checkbox"/> Fee | Area of Whole Tract              | <u>25.94 acres</u> |
|                   | <input type="checkbox"/> Easement       | Area of Remaining Tract          | <u>24.06 acres</u> |
|                   | <input type="checkbox"/> Other          | Area in Acquisition              | <u>1.88 acres</u>  |
|                   |                                         | Area to be Acquired for Easement | <u>none</u>        |

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.

## Property Owner Contact Record

Subject Property Inspection Dates: 02/07/18

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. Jonathon Null met with Mr. Stan Black on the property on 02/07/18. Mr Black was aware of the project, and was understanding. He requested some construction details, which were emailed to him later in the day.

|                                                                                                             |  |         |  |
|-------------------------------------------------------------------------------------------------------------|--|---------|--|
| <b>Contact Comments</b>                                                                                     |  |         |  |
| Is the Property being Leased or Rented? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |  |         |  |
| Lessor:                                                                                                     |  | Lessee: |  |
| Terms of Lease:                                                                                             |  |         |  |

Appraiser:  
(signature)

*Jonathon Null*

Date: 02/13/18

(print name)  
(license type)

Jonathon Null  
State Licensed Certified General Real Estate Appraiser  
# GA-799

## Summary of Facts and Findings

|                                                        |                        |
|--------------------------------------------------------|------------------------|
| <b>Project No.</b> Sidewalk Project – J ED turner Road | <b>PPIN No.</b> 035075 |
|--------------------------------------------------------|------------------------|

|                                                                                                       |                                                                |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| <b>Property Owner:</b> Stan Black<br><b>Address:</b> P.O. Box 1936<br><b>Phone:</b> Madison, MS 39130 | <b>Leasehold (Tenants)</b><br><b>Address:</b><br><b>Phone:</b> |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|

|                                                  |                                                                                                                            |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Identification of the Property Appraised:</b> | <i>Brief description of property identification, such as Section, Township, Range, Lot and Block, Street Address, etc.</i> |
| <b>Estate Appraised:</b>                         | <i>(Fee, Easement, Other)</i>                                                                                              |
| Fee Simple                                       |                                                                                                                            |

|                                              |             |
|----------------------------------------------|-------------|
| <b>Size of the Whole Tract (Before):</b>     | 25.94 acres |
| <b>Size of the Remaining Parcel (After):</b> | 24.06 acres |
| <b>Size of the Area to be Acquired:</b>      | 1.88 acres  |

|                                                                                |                                                                                                                                                             |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Highest and Best Use Before (Whole Tract):</b>                              | Residential                                                                                                                                                 |
| <b>Highest and Best Use After (Whole Tract):</b>                               | Residential                                                                                                                                                 |
| <b>Size of the Larger Parcel(s)</b> <i>(If different from the Whole Tract)</i> | 25.94 acres                                                                                                                                                 |
| <b>Highest and Best Use of the Larger Parcel(s)</b>                            |                                                                                                                                                             |
| <b>Unit Value of the Land (Before)</b>                                         | \$12,500/acre                                                                                                                                               |
| <b>Unit Value of the Land and Improvements (Before)</b>                        | N/A                                                                                                                                                         |
| <b>Unit Value of the Land (After)</b>                                          | \$12,500/acre                                                                                                                                               |
| <b>Unit Value of the Land and Improvements (After)</b>                         |                                                                                                                                                             |
| <b>Improvements:</b>                                                           | <i>(Briefly describe the improvements, such as, single family house, shed, barn, etc.)(List any personal property not covered in the appraisal report.)</i> |
| None                                                                           |                                                                                                                                                             |

|                            |                  |
|----------------------------|------------------|
| <b>Total Before Value:</b> | <b>\$324,250</b> |
| <b>Total After Value:</b>  | <b>\$300,750</b> |
| <b>Just Compensation:</b>  | <b>\$23,500</b>  |

| <b>Allocation of Compensation for All interest:</b> <i>(List all interest such as Q interest, Temporary Easements, Warranty Deeds, etc.)</i> |             |                     |                |              |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------|----------------|--------------|
| <b>Parcel No.</b>                                                                                                                            | <b>Land</b> | <b>Improvements</b> | <b>Damages</b> | <b>Total</b> |
| Stan Black                                                                                                                                   | \$23,500    |                     |                | \$23,500     |
|                                                                                                                                              |             |                     |                |              |

|                                         |          |
|-----------------------------------------|----------|
| <b>Effective Date of the Appraisal:</b> | 02/07/18 |
| <b>Date of Report:</b>                  | 02/13/18 |
|                                         |          |

**GENERAL**

**Subject:** The subject property is +/-25.94 acres located along the south side of Jed Turner Drive, in Lamar County, MS.

**Owner:** Stan Black

**Legal Description:** A parcel of land located in the NE ¼ of the NW 1/4 and in the NW ¼ of the NW of Section 2, Township 4 North, Range 14 West, Lamar County, Mississippi and being more particularly described as follows.

Commence at the Northeast Corner of the NW 1/4 of Section 2; thence run South 89 degrees 53 minutes 40 seconds West along the north line of Section 2 for 1262.78 feet to and for the Point of Beginning; thence continue South 89 degrees 53 minutes 40 seconds West along the north line of Section 2 for 911.67 feet; thence run South for 1125.81 feet to the point on the north-right-way line of Long Leaf Trace (Rails to Trails); thence run South 76 degrees 04 minutes 36 seconds East along said north-right-way for 939.26 feet; thence run North for 1353.50 feet back to the Point of Beginning.  
Said parcel contains 25.94 acres more or less.

**Date of Report:** February 13<sup>th</sup>, 2018

**Intended Use:** 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, damages to the remaining property, if any, and such curative costs as are permitted by the Laws of the State of Mississippi, 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.

- Client/Intended User(s):** The City of Hattiesburg has requested an appraisal of the property described in this report. The intended user of this appraisal report is the City of Hattiesburg.
- Sale History:** The property was most recently conveyed from LL Trace LLC to Stan Black in 2012. Mr. Black stated that he was a member of LL Trace LLC, and this was not an arm's length transaction.
- Timber:** The subject property consists of various aged pine timber. Any merchantable timber value was included in this appraisal. The included sales all had existing timber stands, so no additional value for timber was included .
- Zoning:** The property is located inside the city limits of Hattiesburg, in Lamar County, but not zoned.

#### **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*)

## Limiting Conditions and Assumptions

Acceptance of and/or use of this report constitutes acceptance of the following limiting conditions and assumptions; these can only be modified by written documents executed by both parties.

This appraisal is to be used only for the purpose stated herein. While distribution of this appraisal in its entirety is at the discretion of the client, individual sections shall not be distributed; this report is intended to be used in whole and not in part.

No part of this appraisal, its value estimates or the identity of the firm or the appraiser(s) may be communicated to the public through advertising, public relations, media sales, or other media.

All files, work papers and documents developed in connection with this assignment are the property of Collins & Null Appraisals, Inc.. Information, estimates and opinions are verified where possible, but cannot be guaranteed. Plans provided are intended to assist the client in visualizing the property; no other use of these plans is intended or permitted.

No hidden or unapparent conditions of the property, subsoil or structure, which would make the property more or less valuable, were discovered by the appraiser(s) or made known to the appraiser(s). No responsibility is assumed for such conditions or engineering necessary to discover them. Unless otherwise stated, this appraisal assumes there is no existence of hazardous materials or conditions, in any form, on or near the subject property.

Unless otherwise stated in this report, the existence of hazardous substances, including without limitation asbestos, polychlorinated biphenyl, petroleum leakage, or agricultural chemicals, which may or may not be present on the property, was not called to the attention of the appraiser nor did the appraiser become aware of such during the appraiser's inspection. The appraiser has no knowledge of the existence of such materials on or in the property unless otherwise stated. The appraiser, however, is not qualified to test for such substances. The presence of such hazardous substances may affect the value of the property. The value opinion developed herein is predicated on the assumption that no such hazardous substances exist on or in the property or in such proximity thereto, which would cause a loss in value. No responsibility is assumed for any such hazardous substances, nor for any expertise or knowledge required to discover them.

Unless stated herein, the property is assumed to be outside of areas where flood hazard insurance is mandatory. Maps used by public and private agencies to determine these areas are limited with respect to accuracy. Due diligence has been exercised in interpreting these maps, but no responsibility is assumed for misinterpretation.

Good title, free of liens, encumbrances and special assessments is assumed. No responsibility is assumed for matters of a legal nature.

Necessary licenses, permits, consents, legislative or administrative authority from any local, state or Federal government or private entity are assumed to be in place or reasonably obtainable.



It is assumed there are no zoning violations, encroachments, easements or other restrictions which would affect the subject property, unless otherwise stated.

The appraiser(s) are not required to give testimony in Court in connection with this appraisal. If the appraisers are subpoenaed pursuant to a court order, the client agrees to pay the appraiser(s) Collins & Null Appraisals, Inc.'s regular per diem rate plus expenses.

Appraisals are based on the data available at the time the assignment is completed. Amendments/modifications to appraisals based on new information made available after the appraisal was completed will be made, as soon as reasonably possible, for an additional fee.

**Americans with Disabilities Act (ADA) of 1990**

A civil rights act passed by Congress guaranteeing individuals with disabilities equal opportunity in public accommodations, employment, transportation, government services, and telecommunications. Statutory deadlines become effective on various dates between 1990 and 1997. Collins & Null Appraisals, Inc. has not made a determination regarding the subject's ADA compliance or non-compliance. **Non-compliance could have a negative impact on value, however this has not been considered or analyzed in this appraisal.**

**Assessment:**

| Parcel Number                  | Land Value | Improvements | Total Value | Assessed | Taxes |
|--------------------------------|------------|--------------|-------------|----------|-------|
| 051D-02-001.003<br>PPIN# 35075 | \$5,450    | \$0          | \$5,450     | \$818    | 2017  |

Lamar County Mississippi

 Powered by:  
Delta Computer Systems, Inc.

## Property Link

### LAMAR COUNTY, MS

Current Date 2/ 9/2018

 Tax Year 2017  
 Records Last Updated 2/ 8/2018

| PROPERTY DETAIL                  |                           |                       |                         |
|----------------------------------|---------------------------|-----------------------|-------------------------|
| OWNER                            | BLACK STAN<br>PO BOX 1936 | ACRES : 25.94         |                         |
|                                  |                           | LAND VALUE : 5450     |                         |
|                                  |                           | IMPROVEMENTS : **NA** |                         |
|                                  | MADISON MS 39130          | TOTAL VALUE: 5450     |                         |
|                                  |                           | ASSESSED : 818        |                         |
| PARCEL                           | 051D-02-001.003           |                       |                         |
| ADDRESS                          | J ED TURNER DR            |                       |                         |
| TAX INFORMATION                  |                           |                       |                         |
| YEAR 2017                        | TAX DUE                   | PAID                  | BALANCE                 |
| COUNTY                           | 45.40                     | 45.40                 | 0.00                    |
| CITY                             | 43.66                     | 43.66                 | 0.00                    |
| SCHOOL                           | 52.34                     | 52.34                 | 0.00                    |
| TOTAL                            | 141.40                    | 141.40                | 0.00                    |
| LAST PAYMENT DATE 12 / 13 / 2017 |                           |                       |                         |
| MISCELLANEOUS INFORMATION        |                           |                       |                         |
| EXEMPT CODE                      |                           | LEGAL                 | PT N 1/2 OF NW 1/4      |
| HOMESTEAD CODE                   | None                      |                       | B 022F P 484 02/28/2012 |
| TAX DISTRICT                     | 0616                      |                       |                         |
| PPIN                             | 035075                    |                       |                         |
| SECTION                          | 02                        |                       |                         |
| TOWNSHIP                         | 04N                       |                       |                         |
| RANGE                            | 14W                       |                       |                         |
| Book 022F                        | Page 484                  |                       |                         |

[PURCHASE COUNTY TAX SALE FILES](#)

| TAX SALES HISTORY, FOR UNPAID TAXES |                               |                  |                              |
|-------------------------------------|-------------------------------|------------------|------------------------------|
| Year                                | Sold To                       | Redeemed Date/By |                              |
| 2014                                | CENTRAL PROPERTIES BMO HARRIS | 6/30/2016        | BULLDOG CONSTRUCTION COMPANY |


  
[View Appraisal](#)

  
[View Map](#)
[Back](#)

## ***Property Rights Appraised***

The property rights appraised in this report consist of fee simple, and, as applicable and appropriate, easement, leased fee, and leasehold interest(s).

**“Fee Simple Estate”** is defined by *The Dictionary of Real Estate Appraisal*, 4<sup>th</sup> Edition, copyright 2002, page 113, by the American Institute of Real Estate Appraisers as being:

“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.”

**“Easement”** is defined in *The Dictionary of Real Estate Appraisal*, copyright 2002, 4<sup>th</sup> Edition, page 90, by the American Institute of Real Estate Appraisers as being:

“An interest in real property that conveys use, but not ownership, of a portion of an owner’s property.”

**“Leased Fee Interest”** is defined in *The Dictionary of Real Estate Appraisal*, copyright 2002, 4<sup>th</sup> Edition, page 161, by the American Institute of Real Estate Appraisers as being:

“An ownership interest held by a landlord with the right of use and occupancy conveyed by lease to others. The rights of the lessor (the leased fee owner) and the lessee are specified by contract terms contained within the lease”.

**“Leasehold Interest”** is defined in *The Dictionary of Real Estate Appraisal*, copyright 2002, 4<sup>th</sup> Edition, page 162, by the American Institute of Real Estate Appraisers as being:

“The interest held by the lessee (the tenant or renter) through a lease transferring the rights of use and occupancy for a stated term under certain conditions”.

**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 “opinion of just compensation”.

## ***Extraordinary Assumptions and Hypothetical Conditions***

Standard Rule 1-2(g) and (h) and Standard Rule 2-2 (a)(viii) and (b)(viii) 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.

The *Uniform Appraisal Standards for Federal Land Acquisitions*, Section D-3, Page 80, further states that:

“An extraordinary assumption may be used in an assignment only if:

1. it is required to properly develop credible opinions and conclusions;
2. the appraiser has a reasonable basis for the extraordinary assumption;
3. use of the extraordinary assumption results in credible analysis; and
4. the appraiser complies with disclosure requirements set forth in USPAP for extraordinary assumptions.”

“A hypothetical condition may be used in an assignment only if :

1. use of the hypothetical condition is clearly required for legal purposes, for purposes of reasonable analysis, or for purposes of comparison;
2. use of the hypothetical condition results in a credible analysis;
3. the appraiser complies with the disclosure requirements set forth in USPAP for hypothetical conditions, and
4. the hypothetical condition is provided to the appraiser in writing by the client or an authorized representative of the client.”

USPAP defines extraordinary assumption as “an assumption, directly related to a specific assignment, which, if found to be false, could alter the appraiser’s opinions or conclusions. “ An extraordinary assumption presumes as fact otherwise uncertain information about physical, legal, or economic characteristics 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.

USPAP defines hypothetical condition as “that which is contrary to what exists but is supposed for the purpose of analysis.” A hypothetical condition assumes conditions contrary to known facts about physical, legal, or economic characteristics 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:**

I have assumed that the sidewalk will be built according to the provided plans and drawings.

**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.**

|  |
|--|
|  |
|--|

**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 sales activity in Hattiesburg, Lamar County, Mississippi, as well as other parts of the state. The Sales Comparison approach to value was used to derive the land values. 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 were 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 restrictions, 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.

f) This appraisal report is an estimate of market value of the property, assuming quality materials, workmanship and properly functioning equipment and mechanics of the building. It does not serve as a home or building inspection, structural inspection, environmental or pest inspection. In preparing this report, the appraiser is not acting as a home or building inspector, engineer, surveyor, or pest inspector. In performing the limited inspection of this property, areas that were readily accessible were visually observed and the review is superficial only. This inspection is not technically exhaustive and does not offer warranties or guarantees of any kind.



It is advised to have the structure inspected by an inspector or other suitable professional that offers such warranted or guaranteed inspection of the structural, environmental aspects, or other areas of concern.

### **EXTENT OF INSPECTION**

The subject property and neighborhood have been inspected and its characteristics and trends in development observed. Jonathon Null inspected the property on February 7<sup>th</sup>, 2018. During the site visit, the property was viewed from J Ed Turner Road and from the interior portions. There is limited interior access to the property, with only game trails and a minor woods road found.

An inspection of the southern boundary from the paved Rails to Trails Pathway was done on 2/9/2018.

### **APPRAISAL HISTORY**

Collins and Null Appraisals, Inc. has not appraised the subject property in the previous three years.

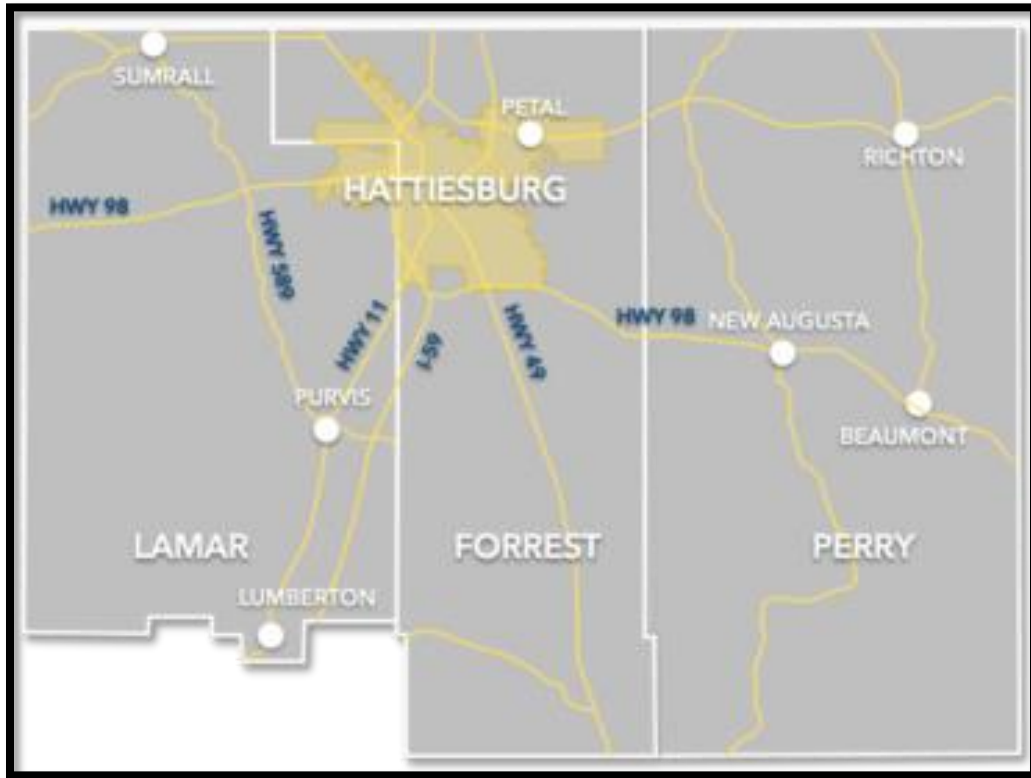
### **COMPETENCY & EXPERTISE**

We have recently appraised several raw land and commercial tracts in Forrest and Lamar Counties, in the last twelve months. Our office is located in Hattiesburg and we frequently work and travel in Forrest County. Our experience in the region includes appraisals of vacant land, residential subdivisions, offices, commercial, warehouses and industrial properties. Therefore, through prior appraisal history, current research and knowledge, and based on our inspections of the property and surrounding area, we certify that we are competent to appraise the subject property.

## AREA ANALYSIS

### LOCATION:

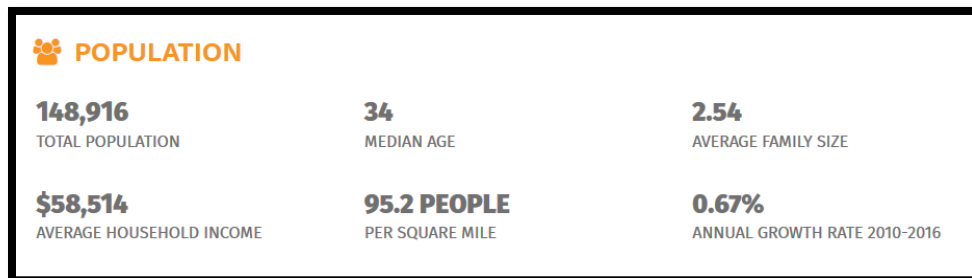
Hattiesburg is centrally located to several major markets, thus its nickname the “Hub City.” These markets include:

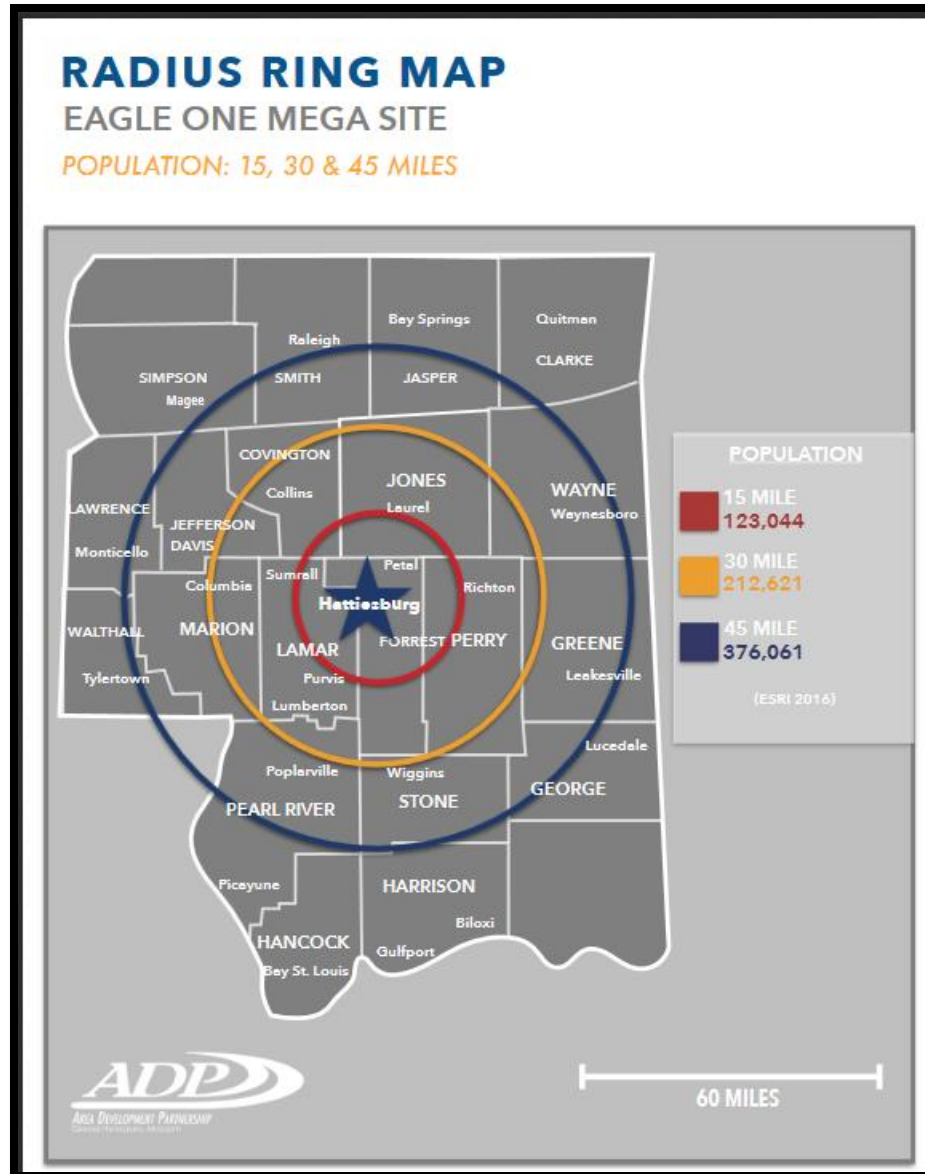


### POPULATION:

The following statistics are available from the US Census Bureau. Historical population statistics for the area are summarized as follows:

The chart exhibits the trend in population for the region from 1990 to 2010(2006 for Forrest and Lamar Counties). The Hattiesburg MSA has seen above average growth since 1990.





**CLIMATE:**

The average elevation is 170 feet above sea level.

|                                         |                     |
|-----------------------------------------|---------------------|
| <b>Average Temperature (Fahrenheit)</b> | <b>48 Degrees</b>   |
| <b>Average High (Fahrenheit)</b>        | <b>73 Degrees</b>   |
| <b>Average Low (Fahrenheit)</b>         | <b>18 Degrees</b>   |
| <b>Average Humidity (percent)</b>       | <b>Annually 74%</b> |
| <b>Average Precipitation (inch)</b>     | <b>Annually 60"</b> |

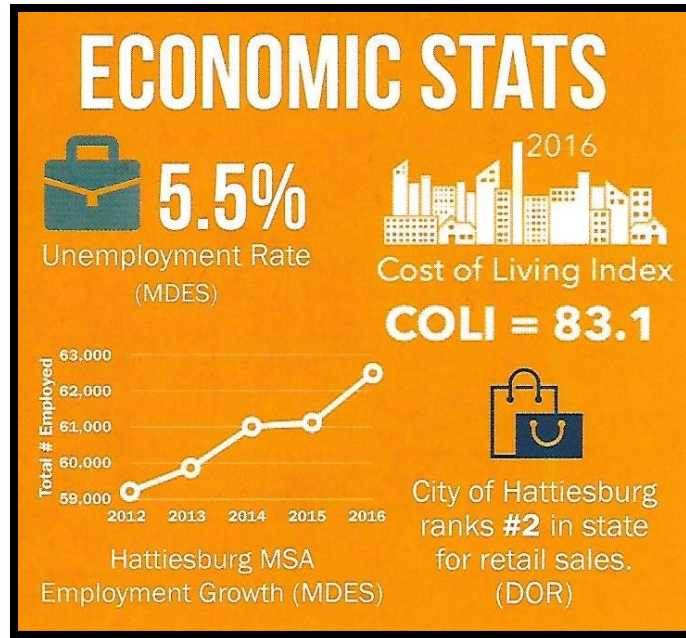
**BUSINESS AND INDUSTRY:**

There are approximately 92 manufacturing firms in the county, employing 5,300 workers. Hattiesburg has a fully-developed industrial park with 325 available spaces.

The agriculture income for the county averages \$20 million annually. Forestry is the county's largest agri-business, producing about \$8 million in sales. Tables of the largest manufactures and employers are shown below.

|  <b>TOP EMPLOYERS</b> |                       |
|--------------------------------------------------------------------------------------------------------|-----------------------|
| <b>MANUFACTURING/DISTRIBUTION EMPLOYERS</b>                                                            |                       |
| <b>EMPLOYER</b>                                                                                        | <b># OF EMPLOYEES</b> |
| Mar-jac Poultry                                                                                        | 861                   |
| Channel Control Merchants                                                                              | 688                   |
| Kohler Engines                                                                                         | 400                   |
| Georgia Pacific, Leaf River Cellulose                                                                  | 300                   |
| Hood Industries – Beaumont                                                                             | 200                   |
| Johnson Controls Company                                                                               | 200                   |
| Mississippi Tank                                                                                       | 192                   |
| Borden                                                                                                 | 175                   |
| Select Product Group                                                                                   | 148                   |
| Stion                                                                                                  | 125                   |
| Hattiesburg Coca-Cola                                                                                  | 125                   |
| Resinall                                                                                               | 115                   |
| Western Container                                                                                      | 114                   |

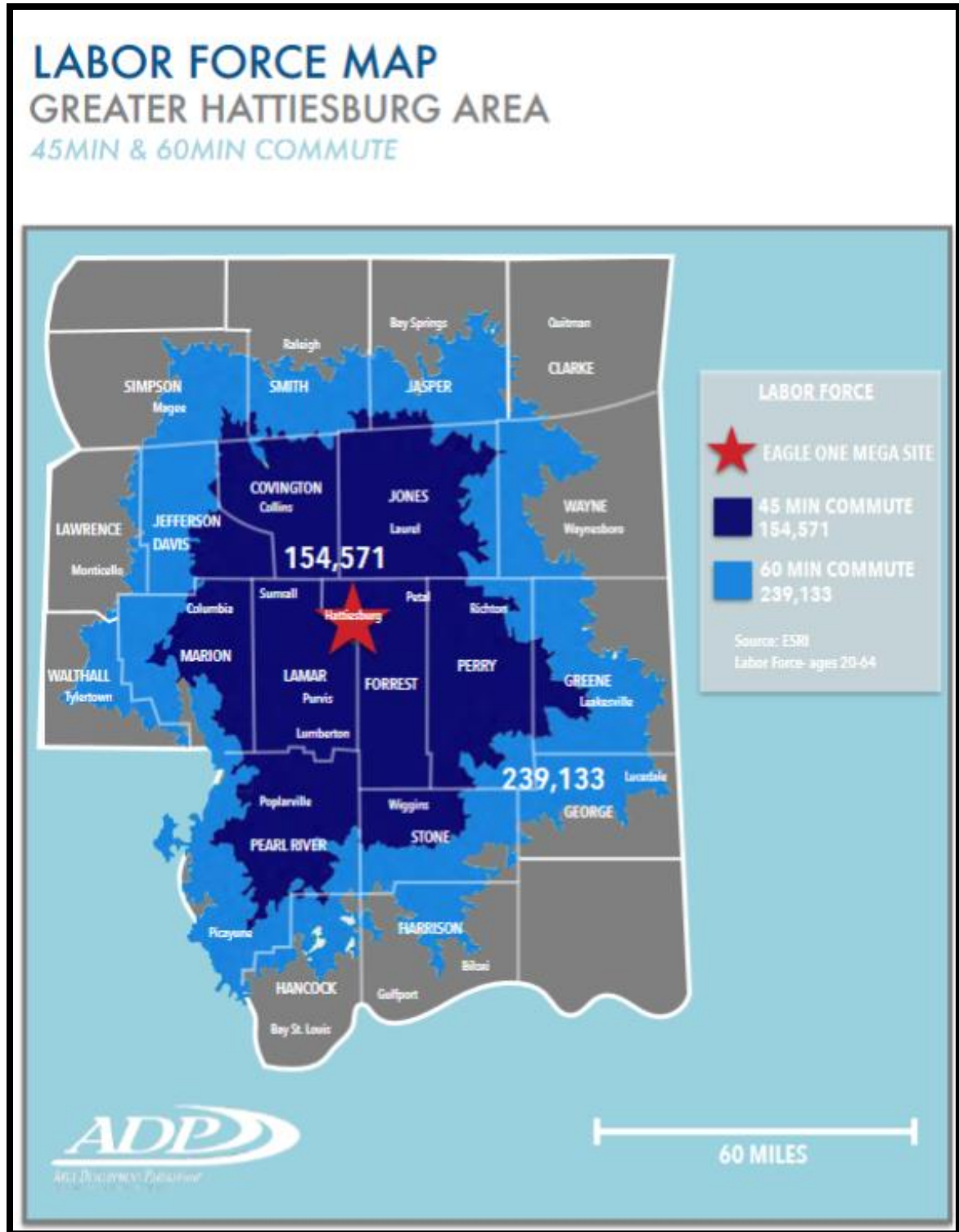
| <b>SERVICE EMPLOYERS</b>                       |                       |
|------------------------------------------------|-----------------------|
| <b>EMPLOYER</b>                                | <b># OF EMPLOYEES</b> |
| Forrest General Hospital                       | 3151                  |
| University of Southern Mississippi             | 2300                  |
| Hattiesburg Clinic                             | 2218                  |
| Camp Shelby                                    | 2200                  |
| Lamar County School District                   | 1300                  |
| Merit Health Wesley                            | 1222                  |
| General Dynamics Information Technology (GDIT) | 1000+                 |
| Hattiesburg Public School                      | 750                   |
| City of Hattiesburg                            | 717                   |
| Petal School District                          | 535                   |
| South Mississippi EPA                          | 400                   |
| William Carey University                       | 370                   |
| Regions Bank                                   | 329                   |



### ECONOMIC BASE

Hattiesburg, also known as the “Hub City,” is within 100 miles of the state capital, Jackson, as well as the Gulf Coast, New Orleans, LA, and Mobile, AL. The greater Hattiesburg area is the educational, retail, military, and medical center for more than a quarter of a million people throughout southeast Mississippi. Hattiesburg MSA is the site of numerous small and several large corporations. The largest employers in terms of total employment in Hattiesburg MSA are summarized in the chart below.

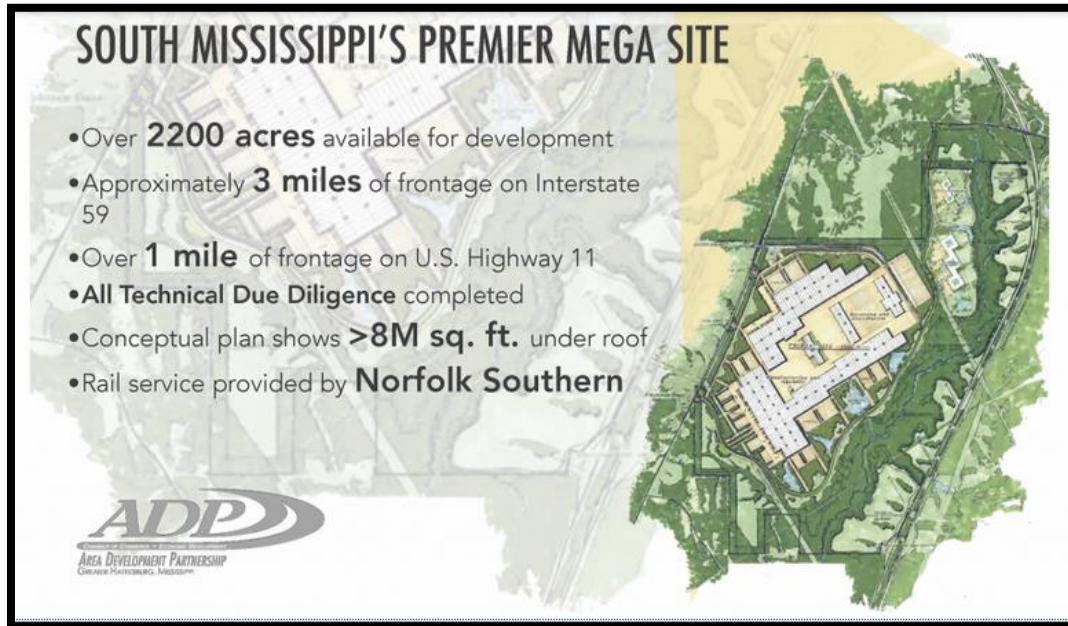






## GROWTH

The ADP (Area Development Partnership) has recently secured options on a 2,222-acre mega-site. This large industrial site is the first of its kind in South Mississippi. The site has 2.8 miles of frontage along I-59 and 1.2 miles of frontage along Hwy 11. Hattiesburg has recently been named one of the 50 fastest growing metro areas in America. This new site provides for an increased growth in business development and employment.



## ANNOUNCED PROJECTS

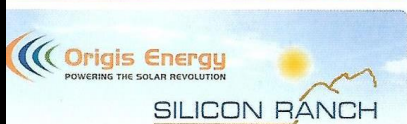
**\$280+**  
Million  
in capital investment



**1,100+**  
full-time jobs



Investing **\$120M** &  
creating **260 jobs**



**\$200M**

in green solar energy  
under construction

## ECONOMIC DEVELOPMENT

### NEW AND EXPANDING BUSINESSES ANNOUNCED IN 2016

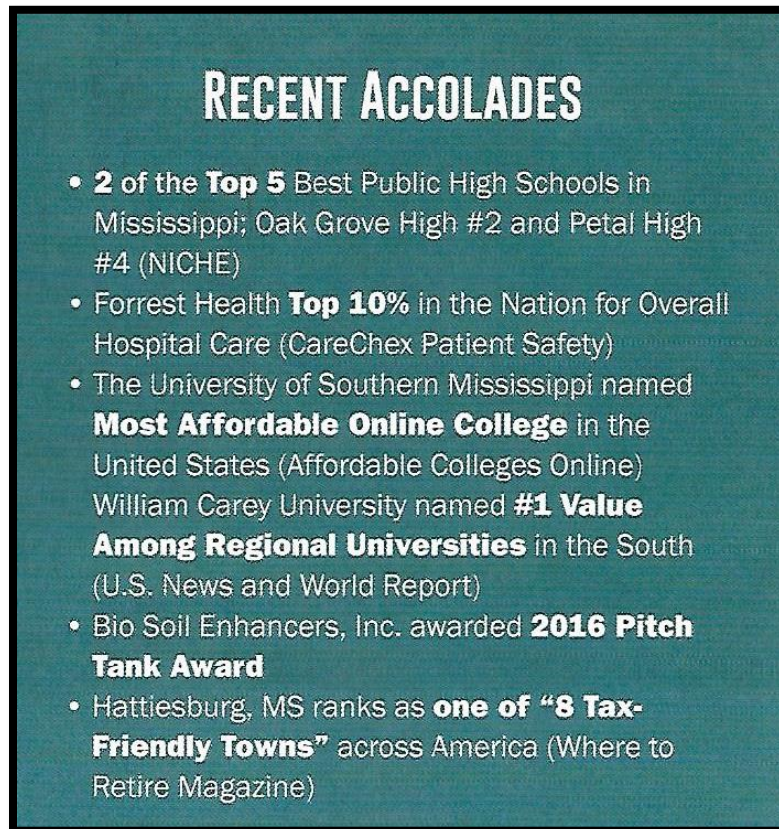
| Company                                 | Investment              | Jobs         |
|-----------------------------------------|-------------------------|--------------|
| Mar-Jac Poultry                         | \$36,915,000.00         | 100          |
| District at Midtown                     | \$34,000,000.00         | 290          |
| Forrest General Hospital                | \$34,000,000.00         | 151          |
| The University of Southern Mississippi  | \$26,800,000.00         |              |
| Camp Shelby                             | \$22,300,000.00         |              |
| The Met Apartments*                     | \$18,000,000.00         |              |
| SPG                                     | \$15,000,000.00         | 25           |
| Lone Star Gas*                          | \$13,000,000.00         |              |
| William Carey University                | \$8,600,000.00          | 19           |
| Enterprise Gas Products*                | \$8,000,000.00          |              |
| Hattiesburg Clinic                      | \$7,873,000.00          | 58           |
| Wis-Pak                                 | \$5,200,000.00          |              |
| Johnson Controls                        | \$4,136,000.00          | 12           |
| Kohler                                  | \$3,903,865.00          |              |
| Channel Control Merchants               | \$3,706,181.00          | 170          |
| Green Bay Converting                    | \$3,551,910.29          |              |
| Magnolia State Bank                     | \$3,500,000.00          | 4            |
| Planet Fitness*                         | \$3,361,598.00          |              |
| Cavender's Western Outfitter*           | \$3,243,500.00          | 12           |
| Eagle Flatts*                           | \$3,131,897.91          |              |
| Western Container Corp.                 | \$2,326,429.00          |              |
| Merit Health Wesley                     | \$2,300,000.00          | 45           |
| Baker and Graham Dental Clinic          | \$1,996,900.00          | 2            |
| The Summit Shopping Center              | \$1,800,000.00          |              |
| Southern Grand Theatres Hattiesburg 18* | \$1,600,000.00          |              |
| Lil' Butcher Shoppe                     | \$1,415,000.00          |              |
| Mississippi Tank Company                | \$1,293,649.83          |              |
| Panera Bread                            | \$1,233,207.00          |              |
| The Shoppes at Park Crest*              | \$1,230,000.00          |              |
| Zaxby's (Petal)*                        | \$1,227,000.00          |              |
| Hibatchi Express / Insomnia Cookies     | \$1,100,000.00          | 20           |
| Dandy Dan's (Smith Petroleum Co., Inc.) | \$1,015,278.00          |              |
| Zaxby's (Hattiesburg)*                  | \$1,006,718.00          |              |
| Weyerhaeuser                            | \$1,000,000.00          |              |
| Dollar General Store (Hattiesburg)*     | \$822,100.00            |              |
| Up/Down Trampoline Park*                | \$820,000.00            |              |
| Dollar General Store (Petal)*           | \$700,000.00            |              |
| CycleBar                                | \$520,000.00            | 10           |
| Oxiten                                  |                         | 15           |
| SaviLinX                                |                         | 200          |
| <b>Total</b>                            | <b>\$281,629,234.03</b> | <b>1,133</b> |

\*dollar amounts are from building permit figures only



**EDUCATION:**

The Hattiesburg area has 22 public schools. The Hattiesburg Area Education Foundation provides private funding and special programs to most of these schools to enhance the fundamental curriculum. The business community takes an active role in augmenting the school system through the Adopt-A-School program.



Hattiesburg is home to the University of Southern Mississippi with an enrollment of more than 12,000 students and William Carey College with an enrollment of about 2,000 students. U.S.M. has recently opened a new \$19 million Polymer Science Research Facility that is paralleled by no other in the United States. Jones County Junior College and Pearl River Community College are both within easy driving distance.

# HIGHER EDUCATION









| INSTITUTION                        | ENROLLMENT | ANNUAL GRADUATES |
|------------------------------------|------------|------------------|
| University of Southern Mississippi | 13,115     | 3,351            |
| William Carey University           | 4,415      | 1,180            |
| Pearl River Community College      | 4,755      | 880              |
| Jones County Junior College        | 4,592      | 1,071            |
| TOTAL                              | 26,627     | 6,482            |

**GOVERNMENT:**

Hattiesburg has a mayor/council type of government. Forrest County has a five-member board of supervisors.

**COMMUNICATIONS:**

**Newspaper** - *Hattiesburg American* (daily) and *Advertiser News* (weekly) is two papers serving Hattiesburg.

**Radio Station** - Hattiesburg has ten AM/FM stations.

**Television** - There are two local TV stations and one cable TV Company serving the Hattiesburg area.

**LAW ENFORCEMENT AND  
EMERGENCY SERVICES:**

Hattiesburg has a force of 90 officers in the city and 33 in the county. The fire department includes 96 firefighters located at 7 stations.

**MEDICAL SERVICES:**

Hattiesburg serves as the medical hub of South Mississippi, with two hospitals with 704 beds, the largest multi-specialty clinic in the state, a full service regional reference laboratory, 230 doctors and 43 dentists.

**UTILITIES:**

The Dixie Electric Power Association, Mississippi Power Company, Pearl River Valley Electric Power Association, South Mississippi Electric Power Association and the Southern Pine Electric Power Association provide electricity to the greater Hattiesburg area. Hattiesburg's water needs are provided by the City of Hattiesburg, which has a capacity of 16 million g.p.d. Willmut Gas and Oil Company, fuels oil and LP gas are available from local sources.

## **CLUBS AND ORGANIZATIONS:**

Hattiesburg has local groups of most national civic groups. A complete list of these organizations is available through the Hattiesburg Area Chamber of Commerce.

## **TRANSPORTATION:**

**Highways** - Interstate Highway 59, U.S. Highways 49, 98 and 11, and State Highway 42 serve Hattiesburg.

**Airports** - Pine Belt Airport is for commercial use and has 6,500 foot runway. Bobby Chain Municipal Airport, noncommercial, has a 6,250 foot runway.

**Railroads** - Hattiesburg is served by Amtrak, Midsouth Rail, Illinois Central Gulf and Norfolk Southern.

**Motor Freight Carriers** - Serving Hattiesburg is 17 truck lines and 15 local terminals.

**Bus Service** - Greyhound/Trailways Bus lines provide passenger and package service.

## **PARKS AND RECREATION:**

Kemper Park and Zoo, Pep's Point Water Park, Camp Shelby War Museum, Hattiesburg Historical Society, Paul B. Johnson State Park, seven local golf courses;

U.S.M. - Natural Science Museum and Woods Art Gallery; Checker Hall of Fame; and William Carey College - Lucille Parker Gallery.

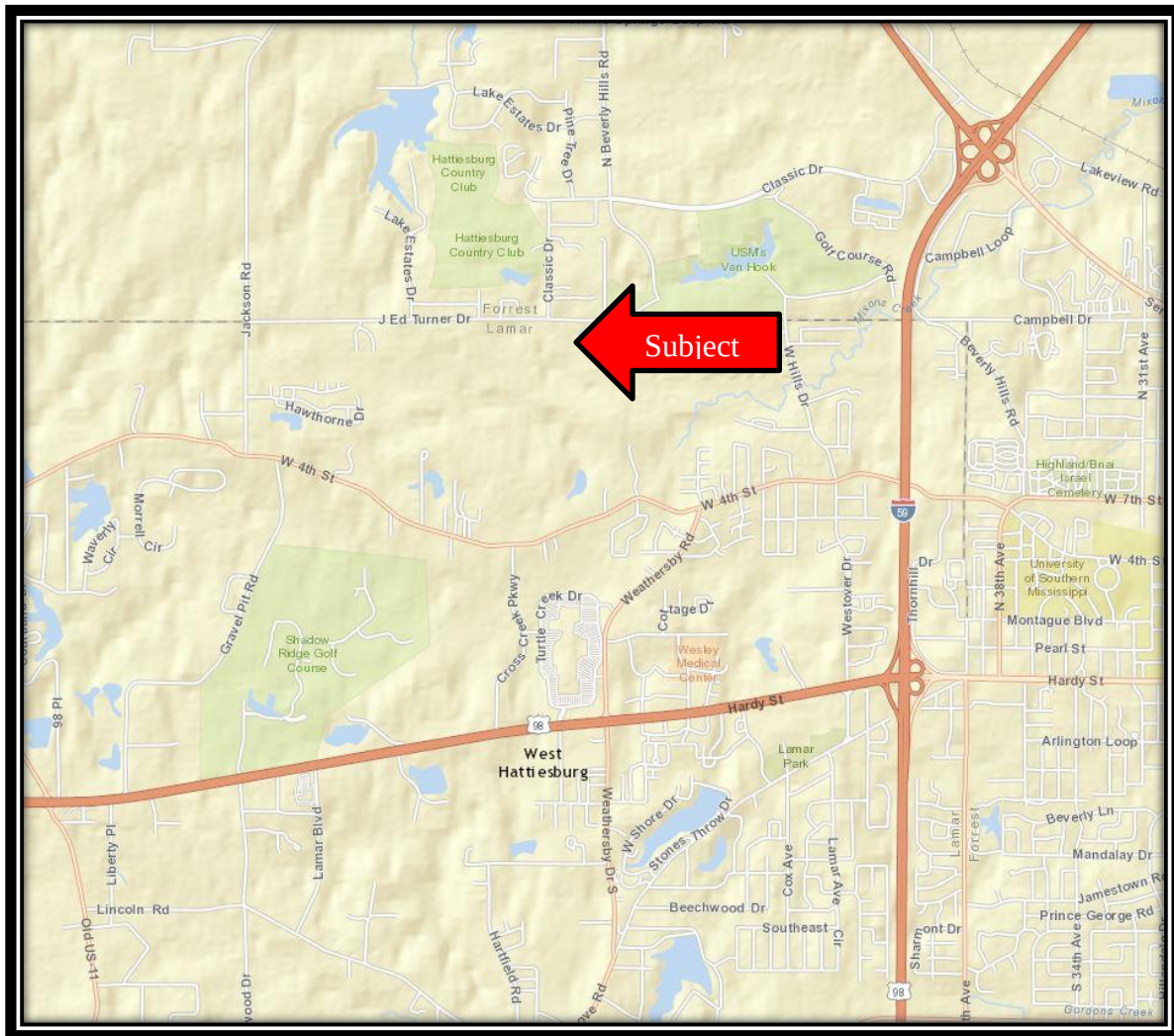
## NEIGHBORHOOD ANALYSIS

The subject is located on the south side of J. Ed Turner Road, east of Jackson Road. This is primarily a rural residential area, however there has been substantial growth west of Hattiesburg in recent years. Lamar County acquired new R.O.W. that widened 4<sup>th</sup> Street, expanded Jackson road, and built a new Lamar County Elementary school, which opened up in 2013. This new school, along with the new road, has improved the outlook for the area. The property has good access off of J Ed Turner Road, and has quick access to Highway 98.

Furthermore, the Longleaf Trace- Rails to Trails parkway runs through the area, which provides a recreational opportunities for hiking, biking and walking. This multi-used trail is a heavily used trail, and provides additional recreational opportunities in the area.

The proposed sidewalk for this project will link up the Long Leaf tract (rails to trails) to the sidewalk along Classic Drive.

## Location Map





## Site Description

### 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, acquisition map and other reliable sources, including a physical inspection of the site. (A survey and description of the total subject property has been provided to the appraiser and is included in this report.)

**Present Use of Site:** Vacant Residential land

### Legal Description of the Total Ownership:.

**Location:** The property is located along the Southern side of J Ed Turner road.

**Dimensions/Area/Shape:** The property contains a 25.94 acre rectangular parcel.

**Frontage/Access:** The site has +/-900' of frontage on J Ed Turner Drive. Additionally, the property has +/- 875' of frontage on the Rail to Trails paved recreation trail, located on the southern border.

**Topography:** The site is gently rolling timberland, with no significant drops. However, there is an old railroad cut that runs across the property, which creates a small gully/ drain. This cut appears to be part of the flood zone area that cuts across the property.

**Flood Plain and Drainage Data:** According to the FEMA Flood Map Number 28085C0085D, dated March 2<sup>nd</sup>, 2010, a portion of the site lies within a designated flood zone. This flood zone bisects the property, and is about 10% of the entire 25.94 acres.

**Use Restrictions:** The property is located inside the city limits of Hattiesburg, but has yet to be zoned. This zoning classification was confirmed with the zoning department on 02-09-18.

**Site Improvements:** None

**Off-Site Public Improvements:** A two lane Paved road lies along the northern border, a paved walking trail lies along the southern border.

**Adjacent Land Uses:** The property is bordered by residential tracts and vacant land on all sides.

**Easements/Encumbrances:** There is a gas pipeline that runs along J Ed Turner drive near the northern border. This gas pipeline appears to lie in the present right of way.

**Utilities:**

| <b>Utility Service</b>    | <b>Supplier</b>                         | <b>Utility Service</b> | <b>Supplier</b>     |
|---------------------------|-----------------------------------------|------------------------|---------------------|
| <b>Electricity</b>        | Mississippi Power                       | <b>Sewer</b>           | City of Hattiesburg |
| <b>Gas</b>                | Willmut                                 | <b>Water</b>           | City of Hattiesburg |
| <b>Garbage Collection</b> | City of Hattiesburg                     |                        |                     |
| <b>Comments:</b>          | <i>Additional narrative, as needed.</i> |                        |                     |

## **Site Description — Area of Acquisition**

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**Acquisition area:** In the before condition, the site is 25.94 acres, more or less. In the after condition, the property will be 24.06 acres, following the acquisition of 1.88 acres along the eastern border. This 1.88 acres will be purchased in fee simple ownership.

### **Breakdown of Acquisition Area:**

#### **1.88 acres**

The area to be acquired is 1.88 acres, located on the eastern border of the property. This area is a lightly timbered, wooded area. The timber on the entire 25.94 acres is consistent, with no major differences in size or age.

The proposed acquisition area is +/- 58' wide with a length of 1354', for a total size of 1.88 acres.

**Improvements in R.O.W.:** None

#### **Remaining property**

Following the acquisition of 1.88 acres on the eastern border of the property, approximately 24.06 acres will remain. The city of Hattiesburg intends on installing a 10' wide sidewalk within the acquired 1.88 acres. The proposed project will not change or affect the overall highest and best use of the property.

## ***Items of Real Property Appraised***

25.94 acres located along J Ed Turner Drive

## ***Items of Personal Property Not Appraised***

N/A



## Flood Map

### National Flood Hazard Layer FIRMette



#### Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

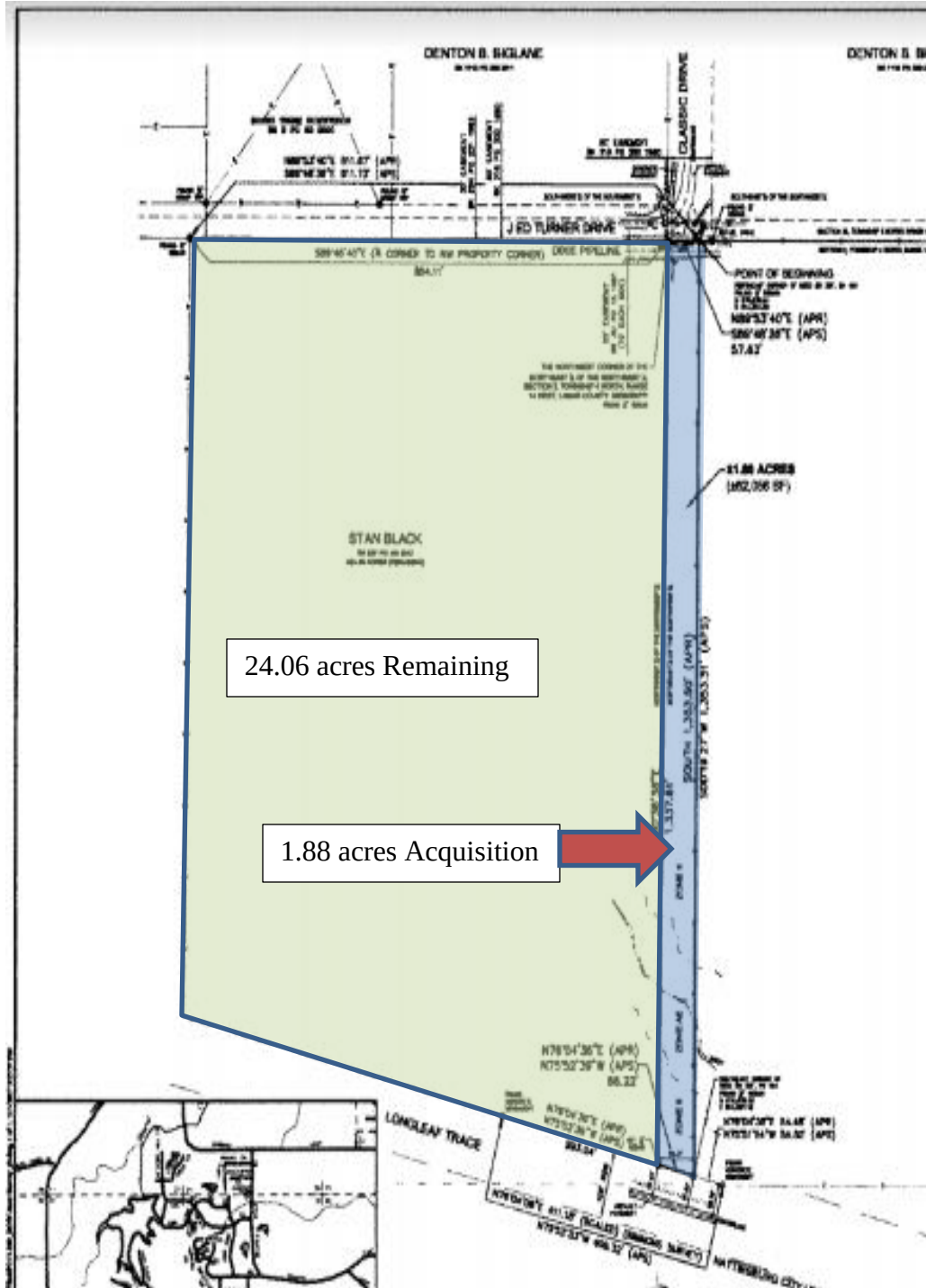
|                             |                                                                                                                                                                   |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SPECIAL FLOOD HAZARD AREAS  | Without Base Flood Elevation (BFE)<br>Zone A, V, AE9                                                                                                              |
|                             | With BFE or Depth<br>Regulatory Floodway Zone AE, AO, AH, VE, AR                                                                                                  |
| OTHER AREAS OF FLOOD HAZARD | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X |
|                             | Future Conditions 1% Annual Chance Flood Hazard Zone X                                                                                                            |
|                             | Area with Reduced Flood Risk due to Levee. See Notes. Zone X                                                                                                      |
|                             | Area with Flood Risk due to Levee Zone D                                                                                                                          |
| OTHER AREAS                 | No SCREEN Area of Minimal Flood Hazard Zone X                                                                                                                     |
|                             | Effective LOMRS                                                                                                                                                   |
| GENERAL STRUCTURES          | Area of Undetermined Flood Hazard Zone D                                                                                                                          |
|                             | Channel, Culvert, or Storm Sewer                                                                                                                                  |
| OTHER FEATURES              | Levee, Dike, or Floodwall                                                                                                                                         |
|                             | Cross Sections with 1% Annual Chance Water Surface Elevation                                                                                                      |
| MAP PANELS                  | Coastal Transect                                                                                                                                                  |
|                             | Base Flood Elevation Line (BFE)                                                                                                                                   |
|                             | Limit of Study                                                                                                                                                    |
|                             | Jurisdiction Boundary                                                                                                                                             |
|                             | Coastal Transect Baseline                                                                                                                                         |
|                             | Profile Baseline                                                                                                                                                  |
|                             | Hydrographic Feature                                                                                                                                              |
|                             | Digital Data Available                                                                                                                                            |
|                             | No Digital Data Available                                                                                                                                         |
|                             | Unmapped                                                                                                                                                          |

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards.

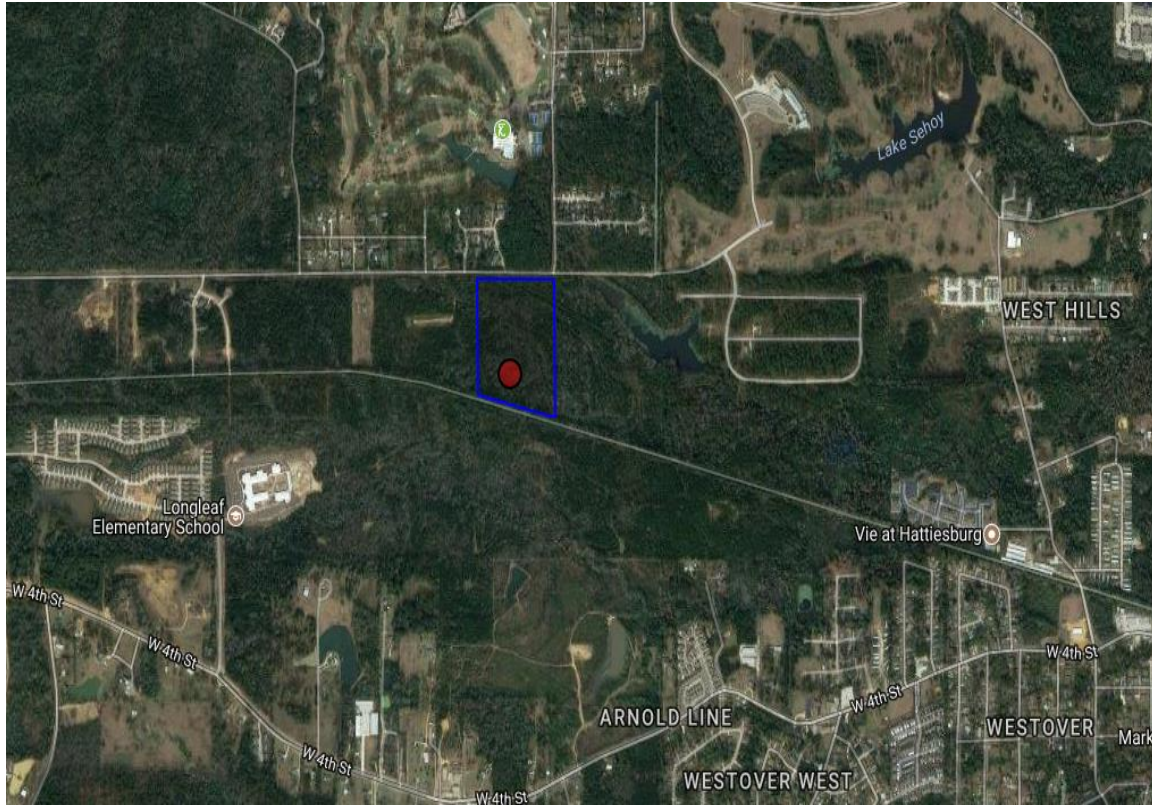
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/8/2018 at 1:39:39 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

## Right of Way acquisition map



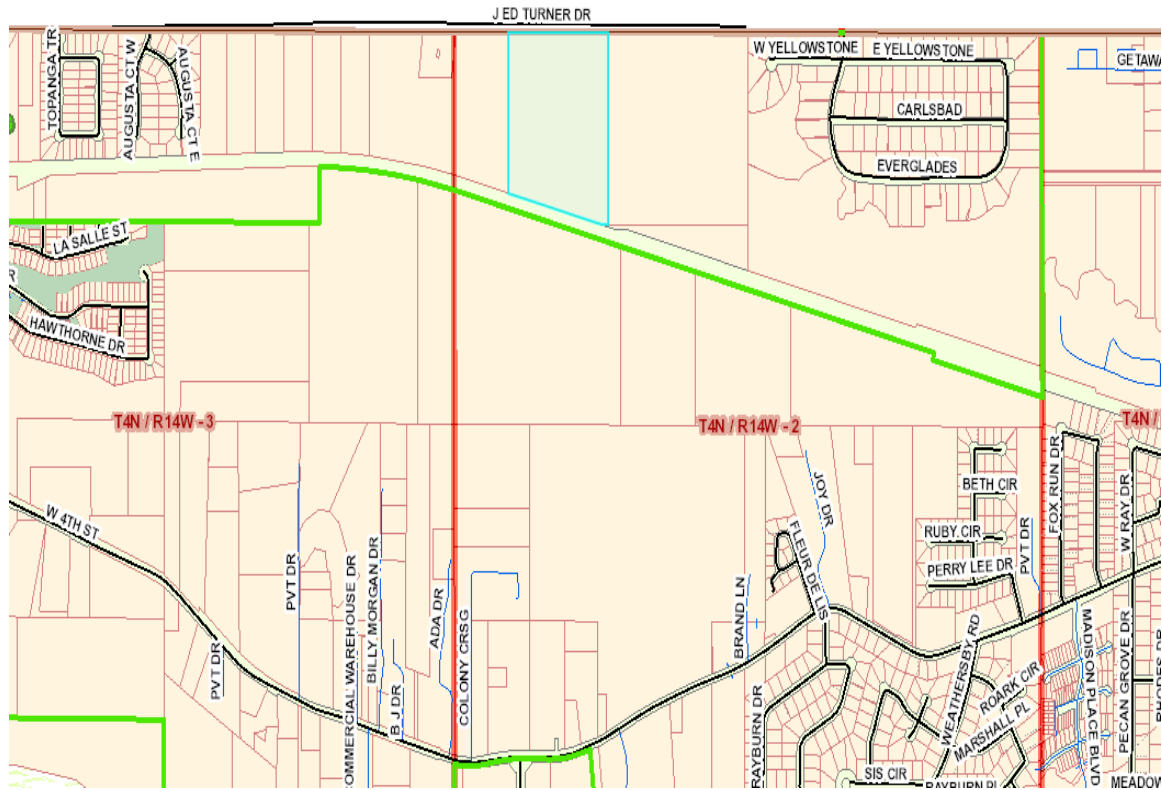
## AERIAL PHOTO



***\*Approximate property boundaries shown in blue. This map should be used for visualization purposes only.***



## Tax Map



### **Americans with Disabilities Act**

Please reference the Limiting Conditions and Assumptions section of this report on page 12.

### **Hazardous Substances**

Please reference the Limiting Conditions and Assumptions section of this report on page 12.

## ***Subject Photographs***



Looking east along J Ed Turner Drive with the property to the right



Looking west from the northern property line with J Ed Turner drive to the right





J Ed Turner road and the subject tract





Wooded area of the 1.88 acre acquisition along the eastern border





Wooded area within the 1.88 acre acquisition



Looking west at the intersection of J Ed Turner and Classic Drive, with the acquisition area identified with an arrow





Rails to Trail along the southern border. The subject is to the left of the paved trail





Flagging showing the terminus of the proposed sidewalk with Rails to Trails





Looking west along Rails to Trails, subject to the right

## 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 MDOT
- 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 entire 25.94 acres is contiguous, has unity of ownership, and has a consistent highest and best use. The entire property was considered to have a highest and best use of residential development. |            |

### Declaration of the Larger Parcel (if different from the Whole Tract)

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) |
|--------------------------|-----------------------------|
|                          |                             |



## Highest and Best Use Analysis

<sup>1</sup>**Highest and best use** is defined in *The Dictionary of Real Estate Appraisal, Fourth Edition*, Copyright 2002, page 135, compiled by the Appraisal Institute as:

*“The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity”.*

The reasonable and probable use that will support the highest property value, as defined, as of the date of the appraisal. 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**

#### **Physically possible**

The site is 25.94 acres, more or less, and would be suitable for a variety of uses. The site is large enough to support a variety of uses such as residential, multifamily, commercial or retail uses.

#### **Legally Permissible**

The site is located in the City of Hattiesburg, although is un-zoned. On February 9<sup>th</sup>, 2018, I spoke with the Hattiesburg zoning department in regards to the zoning classification. The zoning department stated that although the property is un-zoned, any proposed use or project would

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<sup>1</sup> The phrase “highest and best use areas” or “uses” is from wording utilized by the Mississippi Supreme Court in its published eminent domain decisions. Reference of these phrases by the Court has been historically utilized in a manner equivalent to the phrase “Larger Parcel”. For additional information, please refer to the “Terms and Definitions” section of this appraisal report.

have to be approved by the zoning department. At that time, the zoning would be clarified, and a zoning class would be assigned.

The property is also legally restricted by a flood zone designation on +/- 10% of the site. Building restrictions may apply in this area.

### **Financially feasible**

The most financially feasible and maximally productive use of the site would be for some sort of residential or residential use.

J Ed Turner Drive is a 2 laned paved road connecting the Hattiesburg Country Club and surrounding neighborhoods with the Jackson Road area. This area is dominated by residential neighborhoods, and vacant land tracts. The traffic along J Ed Turner Drive is not significant enough to justify a commercial use or retail use.

The only financially feasible uses of the property would be for residential, residential subdivision, or timberland growth.

### **Maximally productive**

The maximally productive use of the site would be for some sort of residential homesite or residential subdivision. This use conforms with the surrounding properties, and due to the demand for single family housing in the Lamar County school district, this use appears reasonable. This use would outpace the value as a timberland type property, and no other alternative use would be financially feasible. Overall, all things considered, the maximally productive, and highest and best use of the property would be for Residential uses.

## 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.)
- 5.

| Ownership History                                                                                                                                                                                           |              |            |               |           |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|---------------|-----------|-------|
| Property Transactions during the last five years to Date:                                                                                                                                                   |              |            |               |           |       |
| Date                                                                                                                                                                                                        | Grantor      | Grantee    | Consideration | Book/Page | Ver.  |
| 02/28/2012                                                                                                                                                                                                  | LL Trace LLC | Stan Black |               | 22F/484   | Owner |
|                                                                                                                                                                                                             |              |            |               |           |       |
|                                                                                                                                                                                                             |              |            |               |           |       |
|                                                                                                                                                                                                             |              |            |               |           |       |
|                                                                                                                                                                                                             |              |            |               |           |       |
| <b>Explanation:</b> The last conveyance was in 2012, between LL Trace LLC and Stan Black. The owner stated that he was a partner of LL Trace LLC, and the most recent conveyance would not be arm's length. |              |            |               |           |       |

| Tax Information                      |                  |                   |         |
|--------------------------------------|------------------|-------------------|---------|
| Tax Parcel I.D. Number               | 051-D-02-001.003 | True Value – Land | \$5,450 |
|                                      | PPIN 35075       | True Value –      | \$0     |
|                                      |                  | Improvements      |         |
| Special Assessments                  |                  |                   |         |
| *Note: The 2017 taxes have been paid |                  |                   |         |

## 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

☐ **Cost Approach**

☐ **Income Approach**

☒ **Sales Comparison Approach**

| Reason(s) for excluding any of the usual approaches to value                                                                                                               |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| The site is a vacant tract of land, with no improvements. Therefore, only the sales approach would apply. The income and cost approach were considered, but not performed. |  |

**COMPARABLE LAND SALES SUMMARY TABLE**

| <b>No.</b> | <b>Location</b>         | <b>Sale Date</b> | <b>Price</b> | <b>Size in Acres</b> | <b>Price/<br/>Acre</b> |
|------------|-------------------------|------------------|--------------|----------------------|------------------------|
| 1.         | 131 J ED Turner Drive   | 02/12/2015       | \$74,000     | 5.000                | \$14,800               |
| 2.         | Lot 3 J Ed Turner Drive | 02/13/2017       | \$85,000     | 4.990                | \$17,034               |
| 3.         | 3237 Oak Grove Rd       | 09/28/2016       | \$150,000    | 10.000               | \$15,000               |
| 4.         | 3237 Oak Grove Rd       | 12/08/2017       | \$180,000    | 14.579               | \$12,347               |
| 5.         | Lincoln Rd              | 03/07/2016       | \$218,500    | 20.000               | \$10,925               |
| 6.         | 3237 Oak Grove RD       | 11/28/2016       | \$285,000    | 22.000               | \$12,955               |

### Land Sale No. 1





**Property Identification**

|                      |                                                                         |
|----------------------|-------------------------------------------------------------------------|
| <b>Record ID</b>     | 6748                                                                    |
| <b>Property Type</b> | Undeveloped Land, Residential Single Family                             |
| <b>Property Name</b> | Land                                                                    |
| <b>Address</b>       | 131 J ED Turner Drive , Hattiesburg, Lamar County,<br>Mississippi 30402 |
| <b>Location</b>      | Northwest of Hattiesburg                                                |
| <b>Tax ID</b>        | 052A-03-004.050 or PPIN 036351                                          |
| <b>User 1</b>        | Section: 03                                                             |
| <b>User 2</b>        | Township: 04N                                                           |
| <b>User 3</b>        | Range: 14W                                                              |
| <b>Market Type</b>   | Residential Land                                                        |

**Sale Data**

|                        |                                                                                                                              |
|------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Grantor</b>         | LL Trace, LLC                                                                                                                |
| <b>Grantee</b>         | Brent D. Brevard                                                                                                             |
| <b>Sale Date</b>       | February 12, 2015                                                                                                            |
| <b>Deed Book/Page</b>  | B-024G P-446                                                                                                                 |
| <b>Property Rights</b> | Fee simple                                                                                                                   |
| <b>Marketing Time</b>  | 588 days                                                                                                                     |
| <b>Financing</b>       | Cash                                                                                                                         |
| <b>Verification</b>    | Confirmed by RE/Max Real Estate Partners. (sale broker) by JN;<br>601-606-8700, February 08, 2018; Judy Corts , 601-606-8700 |

|                        |          |
|------------------------|----------|
| <b>Sale Price</b>      | \$74,000 |
| <b>Cash Equivalent</b> | \$74,000 |

|                       |          |
|-----------------------|----------|
| <b>Adjusted Price</b> | \$74,000 |
|-----------------------|----------|

**Land Data**

|                    |                                                              |
|--------------------|--------------------------------------------------------------|
| <b>Zoning</b>      | Residential                                                  |
| <b>Topography</b>  | Gentle rolling                                               |
| <b>Utilities</b>   | Electricity, gas, telephone, cable TV but no sewer included. |
| <b>Shape</b>       | Rectangular                                                  |
| <b>Landscaping</b> | Wooded                                                       |
| <b>Flood Info</b>  | Panel - 28035C0085D. Eff 03/02/2010                          |
| <b>User 5</b>      | Not located in flood zone.                                   |

**Land Size Information**

|                        |                           |
|------------------------|---------------------------|
| <b>Gross Land Size</b> | 5.000 Acres or 217,800 SF |
|------------------------|---------------------------|

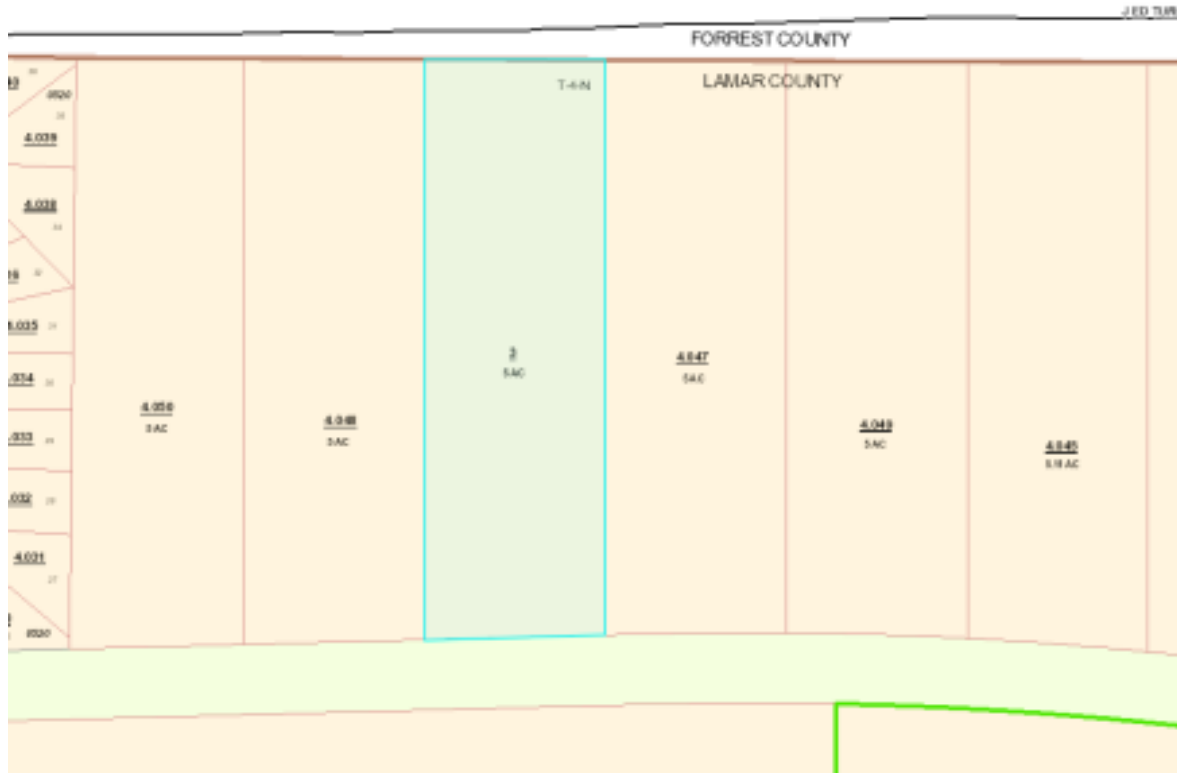
**Indicators**

|                              |                                      |
|------------------------------|--------------------------------------|
| <b>Sale Price/Gross Acre</b> | \$14,800 Actual or \$14,800 Adjusted |
| <b>Sale Price/Gross SF</b>   | \$0.34 Actual or \$0.34 Adjusted     |

**Remarks**

This property is located in Lamar County on the back side of Greystone. This site is a residential site. Conveniently located next to Longleaf Trace. Oak Grove District. City of Hattiesburg service. Taxes to be determined. It was on market for 588 days. Listed for \$89,000 and sold for 74,000.

## Land Sale No. 2



**Land Sale No. 2 (Cont.)****Property Identification**

|                      |                                                                           |
|----------------------|---------------------------------------------------------------------------|
| <b>Record ID</b>     | 6742                                                                      |
| <b>Property Type</b> | Commercial Land, Vacant Land                                              |
| <b>Property Name</b> | Residential Land at Lamar County                                          |
| <b>Address</b>       | Lot 3 J Ed Turner Drive , Hattiesburg, Lamar County,<br>Mississippi 39402 |
| <b>Location</b>      | Hattiesburg Northwest                                                     |
| <b>Tax ID</b>        | 052A-03-003.000 or PPIN 008881                                            |
| <b>User 1</b>        | Section: 03                                                               |
| <b>User 2</b>        | Township: 04N                                                             |
| <b>User 3</b>        | Range: 14W                                                                |
| <b>Market Type</b>   | Residential                                                               |

**Sale Data**

|                        |                                                                                                        |
|------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Grantor</b>         | Keith Daniel Bohman and wife, Summer Lee Bohman                                                        |
| <b>Grantee</b>         | John Eye and wife, Krista Eye                                                                          |
| <b>Sale Date</b>       | February 13, 2017                                                                                      |
| <b>Deed Book/Page</b>  | B-0241 P-391                                                                                           |
| <b>Property Rights</b> | Fee simple                                                                                             |
| <b>Verification</b>    | Confirmed by JN with Summer Lee Bohman. ; 419-450-4731 ,<br>Keith Daniel Bohman (Owner) , 419-450-4731 |
| <b>Sale Price</b>      | \$85,000                                                                                               |
| <b>Cash Equivalent</b> | \$85,000                                                                                               |
| <b>Adjusted Price</b>  | \$85,000                                                                                               |

**Land Data**

|                    |                                             |
|--------------------|---------------------------------------------|
| <b>Topography</b>  | Gentle Rolling                              |
| <b>Utilities</b>   | City electric, gas, water, cable TV on site |
| <b>Shape</b>       | Rectangular                                 |
| <b>Landscaping</b> | Wooded                                      |
| <b>Flood Info</b>  | Panel - 28035C0085D. Eff 3/2/2010           |
| <b>User 5</b>      | Area of minimal flood hazard.               |

**Land Size Information**

|                        |                           |
|------------------------|---------------------------|
| <b>Gross Land Size</b> | 4.990 Acres or 217,364 SF |
|------------------------|---------------------------|

**Indicators**

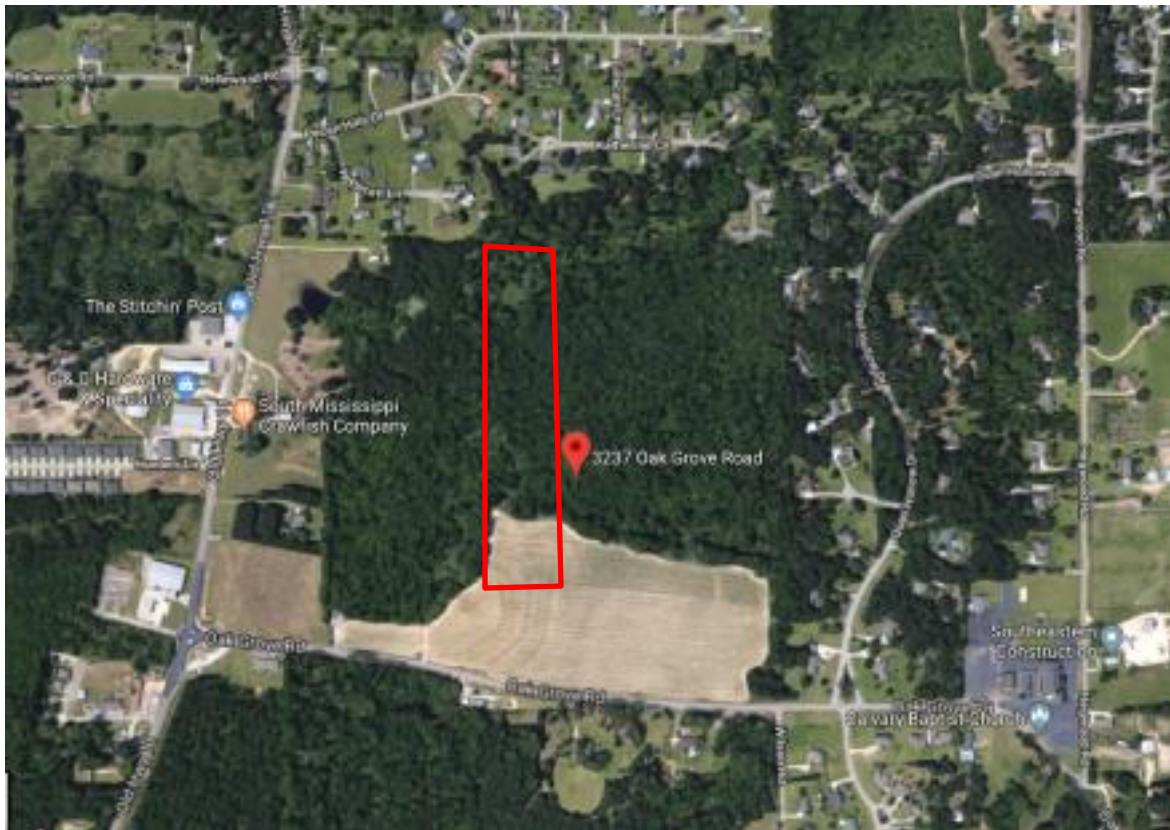
|                              |                                      |
|------------------------------|--------------------------------------|
| <b>Sale Price/Gross Acre</b> | \$17,034 Actual or \$17,034 Adjusted |
| <b>Sale Price/Gross SF</b>   | \$0.39 Actual or \$0.39 Adjusted     |

**Remarks**

4.99 acres located on J Ed Turner Drive, also fronting on Rails to Trails. The property sold in 03/15 for \$76,900 per MLS #93410. The property resold 2 years later for \$85,000 (+10.50%)

Legal Description: A part of the NW 1/4 of the NW 1/4 of Section 3, Township 4 North, Range 14 West, County of Lamar, State of Mississippi, being more particular described as commencing at the NE corner of said Section 3; thence run South for 0.89 feet to a point on the South right of way line of J Ed Turner Drive; thence run South 89, 59'05" West along said South right of way line 1030.96 feet; thence run South 88,29'19" West along said South right of way line for 515.66 feet to the point of Beginning; thence continue South 88,29'19" West along said South right of way line for 257.76 feet; thence run south for 844.71 feet to a point on the north right of way line of Longleaf Trace (Rails to Trails); thence run North 88,07'46" East along said North right of way line for 257.88 feet; thence run north for 843.09 feet back to the Point of Beginning, comprising 4.99 acres more or less; together with all improvements thereon and appurtenances thereunto belonging.

### Land Sale No. 3



#### Property Identification

|                      |                                                                    |
|----------------------|--------------------------------------------------------------------|
| <b>Record ID</b>     | 6721                                                               |
| <b>Property Type</b> | Residential Land, Undeveloped Land                                 |
| <b>Property Name</b> | Residential Land                                                   |
| <b>Address</b>       | 3237 Oak Grove Rd, Hattiesburg, Lamar County, Mississippi<br>39402 |
| <b>User 2</b>        | 3413                                                               |
| <b>User 3</b>        | 21-04N-14W                                                         |

#### Sale Data

|                           |                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------|
| <b>Grantor</b>            | Pamela Shae Byrd Barnes                                                             |
| <b>Grantee</b>            | Westhaven Developments LLC                                                          |
| <b>Sale Date</b>          | December 08, 2017                                                                   |
| <b>Deed Book/Page</b>     | 26-J/319                                                                            |
| <b>Property Rights</b>    | Fee Simple                                                                          |
| <b>Marketing Time</b>     | 141 Days                                                                            |
| <b>Conditions of Sale</b> | Arm's Length                                                                        |
| <b>Financing</b>          | Cash to seller                                                                      |
| <b>Verification</b>       | JN confirmed with the buyer & selling agent; Kathy Palmer<br>(Agent) , 601-255-5131 |



|                        |           |
|------------------------|-----------|
| <b>Sale Price</b>      | \$180,000 |
| <b>Cash Equivalent</b> | \$180,000 |
| <b>Adjusted Price</b>  | \$180,000 |

**Land Data**

|                   |                              |
|-------------------|------------------------------|
| <b>Zoning</b>     | Residential                  |
| <b>Topography</b> | Level, gentle rolling, open. |

|                    |                                                 |
|--------------------|-------------------------------------------------|
| <b>Utilities</b>   | Water supplier: Lamar. Electricity/Pearl River. |
| <b>Landscaping</b> | Wooded                                          |
| <b>Flood Info</b>  | Not located in a designated flood zone          |
| <b>User 5</b>      | Panel - 28073C0145E.                            |
| <b>User 6</b>      | Eff 03/02/2010                                  |
| <b>User 7</b>      | No                                              |

**Land Size Information**

|                        |                            |
|------------------------|----------------------------|
| <b>Gross Land Size</b> | 14.579 Acres or 635,061 SF |
|------------------------|----------------------------|

**Indicators**

|                              |          |
|------------------------------|----------|
| <b>Sale Price/Gross Acre</b> | \$12,347 |
| <b>Sale Price/Gross SF</b>   | \$0.28   |

**Remarks**

Vacant residential land on Oak grove road near Old Hwy 11. Purchased for the development of a single family residential subdivision, Westhaven Phase II

**Land Sale No. 4****Property Identification**

|                           |                                                                                  |
|---------------------------|----------------------------------------------------------------------------------|
| <b>Record ID</b>          | 6312                                                                             |
| <b>Property Type</b>      | Residential Land                                                                 |
| <b>Property Name</b>      | Residential Land                                                                 |
| <b>Address</b>            | Lincoln Rd, Hattiesburg, Lamar County, Mississippi 39402                         |
| <b>Location</b>           | S of Lincoln Road, E of Hegwood (Adjacent to Lapapillon S/D)                     |
| <b>Tax ID</b>             | 055G-15-017.000                                                                  |
| <b>User 1</b>             | 100581-Flex MLS                                                                  |
| <b>User 2</b>             | 012541                                                                           |
| <b>User 3</b>             | 15-04N-14W                                                                       |
| <b>Grantor</b>            | Karen Rupp                                                                       |
| <b>Grantee</b>            | John Kamino                                                                      |
| <b>Sale Date</b>          | March 07, 2016                                                                   |
| <b>Deed Book/Page</b>     | 25A/331                                                                          |
| <b>Property Rights</b>    | Fee Simple                                                                       |
| <b>Marketing Time</b>     | 163 Days                                                                         |
| <b>Conditions of Sale</b> | Arm's Length                                                                     |
| <b>Financing</b>          | Cash to seller                                                                   |
| <b>Verification</b>       | Confirmed with Michael Anderson (Selling Agent) by Zac Fairley; October 04, 2017 |

|                        |           |
|------------------------|-----------|
| <b>Sale Price</b>      | \$218,500 |
| <b>Cash Equivalent</b> | \$218,500 |

**Land Data**

|                   |                                        |
|-------------------|----------------------------------------|
| <b>Topography</b> | Level; Wooded                          |
| <b>Utilities</b>  | None                                   |
| <b>Shape</b>      | Irregular                              |
| <b>Flood Info</b> | Not located in a designated flood zone |

**Land Size Information**

|                        |                            |
|------------------------|----------------------------|
| <b>Gross Land Size</b> | 20.000 Acres or 871,200 SF |
|------------------------|----------------------------|

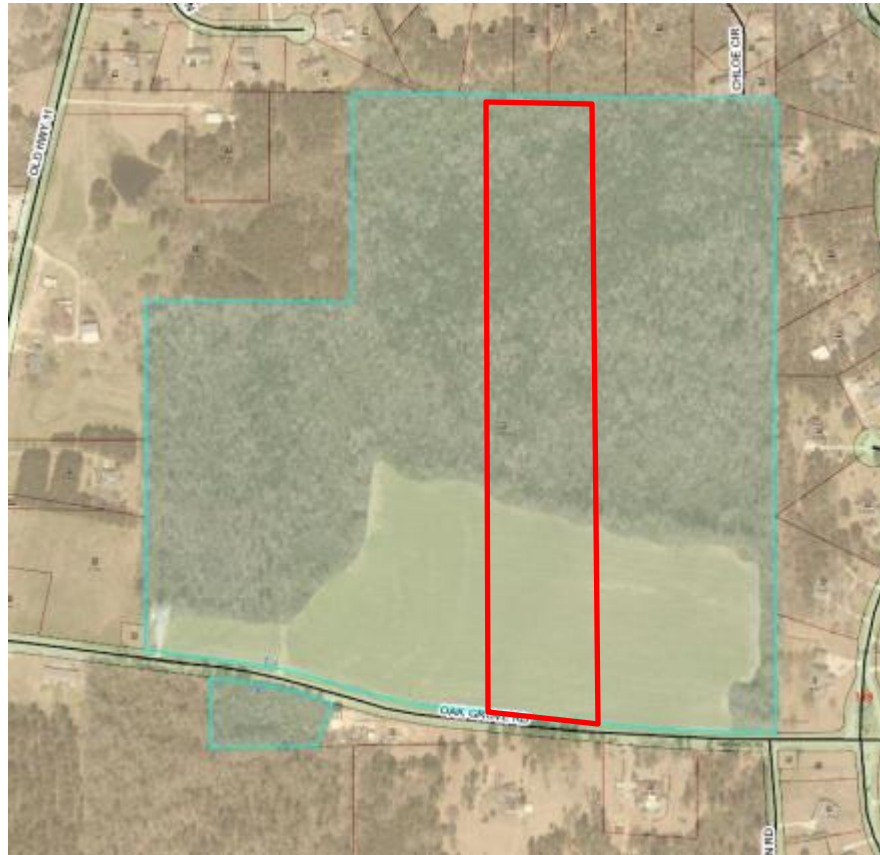
**Indicators**

|                              |          |
|------------------------------|----------|
| <b>Sale Price/Gross Acre</b> | \$10,925 |
|------------------------------|----------|

**Remarks**

Property is located south of Lincoln Road and east of Hegwood Road. At the time of sale the property was landlocked and did not have legal access. The selling agent stated, an ingress/egress easement was granted across an adjacent property after purchase. The property is wooded in nature with gently rolling topography. The selling agent stated the property was purchased for a residential estate tract.

### Land Sale No. 5



**Land Sale No. 5 (Cont.)****Property Identification**

|                      |                                                                    |
|----------------------|--------------------------------------------------------------------|
| <b>Record ID</b>     | 6439                                                               |
| <b>Property Type</b> | Residential Land                                                   |
| <b>Property Name</b> | Oak Grove Rd-Proposed Subdivision                                  |
| <b>Address</b>       | 3237 Oak Grove RD, Hattiesburg, Lamar County, Mississippi<br>39402 |
| <b>Location</b>      | Across from the lamar county water tower                           |
| <b>Tax ID</b>        | 055P-21-015.000 or PPIN 003413                                     |
| <b>User 1</b>        | Section: 21                                                        |
| <b>User 2</b>        | Township: 04N                                                      |
| <b>User 3</b>        | Range: 14W                                                         |

**Sale Data**

|                           |                                                                                                        |
|---------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Grantor</b>            | Barnes Pamela Shae                                                                                     |
| <b>Sale Date</b>          | November 28, 2016                                                                                      |
| <b>Deed Book/Page</b>     | B-024E P-665                                                                                           |
| <b>Property Rights</b>    | Fee Simple                                                                                             |
| <b>Marketing Time</b>     | 52 Days                                                                                                |
| <b>Conditions of Sale</b> | Arm's Length                                                                                           |
| <b>Financing</b>          | Cash to seller                                                                                         |
| <b>Verification</b>       | Sold by Century 21 Alliance with Agent-Jeff Palmer.; 601-255-5131 , Jeff Palmer (agent) , 601-297-4400 |

|                        |           |
|------------------------|-----------|
| <b>Sale Price</b>      | \$285,000 |
| <b>Cash Equivalent</b> | \$285,000 |
| <b>Adjusted Price</b>  | \$285,000 |

**Land Data**

|                   |                                                      |
|-------------------|------------------------------------------------------|
| <b>Zoning</b>     | R-E (Residential Estate)                             |
| <b>Topography</b> | Mostly Level; Gently Rolling; Partially Wooded; Open |

|                   |                                        |
|-------------------|----------------------------------------|
| <b>Utilities</b>  | All typical                            |
| <b>Shape</b>      | Rectangular                            |
| <b>Fencing</b>    | None                                   |
| <b>Flood Info</b> | Not located in a designated flood zone |
| <b>User 5</b>     | Panel-28073C0145E                      |
| <b>User 6</b>     | 03/02/2010                             |

|               |    |
|---------------|----|
| <b>User 7</b> | No |
|---------------|----|

**Land Size Information**

|                        |                                             |
|------------------------|---------------------------------------------|
| <b>Gross Land Size</b> | 22.000 Acres or 958,320 SF                  |
| <b>Front Footage</b>   | 600 ft Total Frontage: 600 ft Oak Grove Rd; |

**Indicators**

|                              |                                      |
|------------------------------|--------------------------------------|
| <b>Sale Price/Gross Acre</b> | \$12,955 Actual or \$12,955 Adjusted |
| <b>Sale Price/Gross SF</b>   | \$0.30 Actual or \$0.30 Adjusted     |
| <b>Sale Price/Front Foot</b> | \$475 Actual or \$475 Adjusted       |

**Remarks**

This is a 22 acres parcel subdivided off from a larger 78 acres parcel. Is a prime Oak Grove location on Oak Grove Road.

Phase I of Westhaven subdivision developed on the property

### Comparable Sales Map





## Analysis Grid

The above sales have been analyzed and compared with the subject property. We have considered adjustments in the areas of:

- Property Rights Sold
- Financing
- Conditions of Sale
- Market Trends
- Location
- Physical Characteristics

On the following page is a sales comparison grid displaying the subject property, the comparables and the adjustments applied.

| Land Sales Summary and Adjustment Grid |                 |                     |                   |                      |                    |  |
|----------------------------------------|-----------------|---------------------|-------------------|----------------------|--------------------|--|
| Subject                                | Comparable 1    | Comparable 2        | Comparable 3      | Comparable 4         | Comparable 5       |  |
| Location:                              | 131 J ED Turner | Lot 3 J Ed Turner   | 3237 Oak Grove Rd | Lincoln Rd           | 3237 Oak Grove RD  |  |
| Submarket:                             | Northwest of    | Hattiesbur          | Northwest         | S of Lincoln Road, E | Across from the    |  |
| O.R. Book/Page:                        | B-024G P-446    | B-0241 P-391        | 26-J/319          | 25A/331              | B-024E P-665       |  |
| Seller:                                | LL Trace, LLC   | Keith Daniel Bohman | Pamela shae Byrd  | Karen Rupp           | Barnes Pamela Shae |  |
| Buyer:                                 | Brent D. Bevard | John Eye and wife,  | Westhaven         | John Kamino          |                    |  |
| Date of Sale:                          | February-15     | February-17         | December-17       | March-16             | November-16        |  |
| Sale Price:                            | \$74,000        | \$85,000            | \$180,000         | \$218,500            | \$285,000          |  |
| Adjusted Sale Price:                   | \$74,000        | \$85,000            | \$180,000         | \$218,500            | \$285,000          |  |
| Site Size (Acres):                     | 5.00            | 4.99                | 14.58             | 20.00                | 22.00              |  |
| Unadjusted Price/acres                 | \$14,800        | \$17,034            | \$12,347          | \$10,925             | \$12,955           |  |
| Adjustments                            |                 |                     |                   |                      |                    |  |
| Rights Transferred:                    | Fee Simple      | Fee Simple          | Fee Simple        | Fee Simple           | Fee Simple         |  |
| Financial Considerations:              | Market          | Market              | Market            | Market               | Market             |  |
| Conditions of Sale:                    | Arm's Length    | Arm's Length        | Arm's Length      | Arm's Length         | Arm's Length       |  |
|                                        | 0%              |                     |                   |                      |                    |  |
| Market Conditions - Time:              | Stable          | Stable              | Stable            | Stable               | Stable             |  |
|                                        | 10%             | 5%                  | 0%                | 10%                  | 10%                |  |
| Time Adjusted Cash Equiv. Price/SF:    | \$16,280        | \$17,886            | \$12,347          | \$12,018             | \$14,250           |  |
| Location:                              | Superior        | Superior            | Superior          | Superior             | Superior           |  |
|                                        | 0%              | 0%                  | 0%                | 0%                   | 0%                 |  |
| Site Size (Gross Acres):               | 5.00            | 4.99                | 14.58             | 20.00                | 22.00              |  |
|                                        | -25%            | -25%                | -5%               | 0%                   | 0%                 |  |
| Zoning:                                | Similar         | Similar             | Similar           | Similar              | R-E (Residential   |  |
|                                        | 0%              | 0%                  | 0%                | 0%                   | 0%                 |  |
| Utilities:                             | Similar         | Similar             | Similar           | Similar              | Similar            |  |
|                                        | 0               | 0                   | 0                 | 0                    | 0                  |  |
| Topography                             | Superior        | Superior            | Superior          | Inferior access      | Superior           |  |
|                                        | -5%             | -5%                 | -5%               | 10%                  | -5%                |  |
| Net Adjustments:                       | -30%            | -30%                | -10%              | 10%                  | -5%                |  |
| Adjusted Price/SF:                     | \$11,396        | \$12,520            | \$11,112          | \$13,219             | \$13,538           |  |

## **ADJUSTMENTS**

**Location:** All of the sales are located in the Oak Grove School district, and all of the sales were considered generally similar in overall location. No significant location adjustments were applied.

**Size:** the subject is 25.94 acres, which is significantly larger than several of the sales. There have been a variety of 5 acre sales along J Ed Turner Drive, which had unit values ranging from \$14,800 to \$17,034 per acre. Typically speaking, as lot size decreases, the unit value increases. Therefore, it is reasonable to include a size adjustment to sales 1 through 3.

Furthermore, I investigated all small acreage sales (3-8 acres) in the Oak Grove area, compared to larger acreage sales (15-35 acres). The smaller acreage sales averaged \$12,532 per acre, with the larger sales averaging \$7,331/acre. Based on these sales alone, a size adjustment of 41% is indicated.

Based on the data in the region ranging from 10 to 41 %, an adjustment of 25 % was applied to the sales. This discount would also cover any discounting for subdivision into 5 acre lots.

**Market Conditions:** The overall residential market has been slowly improving since the significant economic slowdown from 2009-2010. There is increased speculation building, several new residential developments, and an increase in home values.

More particularly, sale 2 sold for \$76,900 in March of 2015, and again in February 2017 for \$85,000. This indicates a +/- 10% increase in value over 2 years. A 5% per year adjustment was applied to the land sales.

### **Topography**

The subject has a large rail road cut/ gulley running across the middle, as well as some area in a flood zone. The sales were adjusted down for superior topography.

## **PARCEL A VALUATION**

After all adjustments, the sales had unit values ranging from \$11,112 to \$13,538 per acre.

Several of the sales are located along J Ed Turner Drive, and are very similar in all respects, except for size. These sales sold for \$14,800 and \$17,886 per acre prior to any adjustments. However, these sales are +/- 20% the size of the subject, which is much larger at 25.94 acres. Additionally, the subject has a portion located in a flood zone. Overall, these two sales were considered superior, and the subject would have a unit value lower than these sales.

Furthermore, I included several other larger acreage sales in Lamar County for further support. These sales had unit values ranging from \$11,112 to \$13,538 per acre after adjustments. This per acre range is reasonable considering the adjustments to sales 1 and 2.

The adjacent property (east) is listed on the local MLS system for \$149,500 (MLS#110416), for 10 acres, or \$14,950/acre. This property is nearly identical to the subject, except for size.

In conclusion, the sales had adjusted values ranging from \$11,112 to \$13,538 per acre, with the sales along J Ed Turner Drive ranging from \$11,396 to \$12,520 per acre.

After considering all of the sales and their adjustments, a unit value of \$12,500 was selected for the property in the before condition.

## **TIMBER**

It was noted that located within the 1.88 acres is an established timber stand, that may or may not have some pre-merchantable timber value. However, all of the selected sales have an established timber stand, so the adopted unit value of \$12,500 per acre would include any contributory timber value.

## **SUMMARY OF BEFORE VALUE**

25.94 acres x \$12,500/acre = \$324,250

**AFTER VALUE**

In the after condition, the property will lose 1.88 acres of land along the eastern border. The remaining property will continue to have access from J Ed Turner Drive, will continue to have access to the Long Leaf Trace, and will have the same highest and best use. The same set of sales were considered in the after condition, and the same unit value of \$12,500 was adopted for the after condition.

**DAMAGES**

None concluded

**SUMMARY OF****AFTER VALUE**

24.06 acres x \$12,500/acre = \$300,750

## Final Reconciliation of Value

|                                  | Before    | After     | Difference |
|----------------------------------|-----------|-----------|------------|
| <b>Sales Comparison Approach</b> | \$324,250 | \$300,750 | \$23,500   |

|                                                                                                                                                                                                |                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reconciliation</b>                                                                                                                                                                          | <i>Explain the appropriateness of the approaches, the accuracy of the data and calculations, and the quantity and quality of the data presented relative to the scope of the assignment and the specific appraisal problem.</i> |
| The sales comparison approach indicated a before value of \$324,250, and a after value of \$300,750, with a just compensation of \$23,500. This approach was the only valid approach to value. |                                                                                                                                                                                                                                 |

The difference between the Fair Market Value of the whole tract and the remainder is

**\$23,500**

as of 02/07/18, and is my opinion of just compensation, for the acquisition of the real property rights described in this appraisal report.

## **Addenda**



## Glossary

This glossary contains the definitions of common words and phrases, used throughout the appraisal industry, as applied within this document. Please refer to the publications listed in the **Works Cited** section below for more information.

### Works Cited:

- Appraisal Institute. *The Appraisal of Real Estate*. 13<sup>th</sup> ed. Chicago: Appraisal Institute, 2008. Print.
- Appraisal Institute. *The Dictionary of Real Estate Appraisal*. 5<sup>th</sup> ed. 2010. Print.

### Effective Date

1. The date on which the analyses, opinion, and advice in an appraisal, review, or consulting service apply.
2. In a lease document, the date upon which the lease goes into effect. (Dictionary, 5th Edition)

### Exposure Time

1. The time a property remains on the market.
2. The estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal; a retrospective estimate based on an analysis of past events assuming a competitive and open market. (Dictionary, 5th Edition)

### Extraordinary Assumption

An assumption, directly related to a specific assignment, which, if found to be false, could alter the appraiser's opinions or conclusions. Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal, or economic characteristics 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. (USPAP, 2010-2011 ed.) (Dictionary, 5th Edition)

### Fee Simple Estate

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. (Dictionary, 5th Edition)

### Highest & Best Use

The reasonably probable and legal use of vacant land or an improved property that is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity. Alternatively, the probable use of land or improved property—specific with respect to the user and timing of the use—that is adequately supported and results in the highest present value. (Dictionary, 5th Edition)

### Highest and Best Use of Land or a Site as Though Vacant

Among all reasonable, alternative uses, the use that yields the highest present land value, after payments are made for labor, capital, and coordination. The use of a property based on the assumption that the parcel of land is vacant or can be

made vacant by demolishing any improvements. (Dictionary, 5th Edition)

### **Highest and Best Use of Property as Improved**

The use that should be made of a property as it exists. An existing improvement should be renovated or retained as is so long as it continues to contribute to the total market value of the property, or until the return from a new improvement would more than offset the cost of demolishing the existing building and constructing a new one. (Dictionary, 5th Edition)

### **Hypothetical Condition**

That which is contrary to what exists but is supposed for the purpose of analysis. Hypothetical conditions assume conditions contrary to known facts about physical, legal, or economic characteristics 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. (Dictionary, 5th Edition)

### **Leased Fee Interest**

A freehold (ownership interest) where the possessory interest has been granted to another party by creation of a contractual landlord-tenant relationship (i.e., a lease). (Dictionary, 5th Edition)

### **Market Area**

The area associated with a subject property that contains its direct competition. (Dictionary, 5th Edition)

### **Market Value**

The major focus of most real property appraisal assignments. Both economic and legal definitions of market value have been developed and refined.

1. The most widely accepted components of market value are incorporated in the following definition: The most probable price that the specified property interest should sell for in a competitive market after a reasonable exposure time, as of a specified date, in cash, or in terms equivalent to cash, under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, for self-interest, and assuming that neither is under duress.

2. Market value is described in the Uniform Standards of Professional Appraisal Practice (USPAP) as follows: A type of value, stated as an opinion, that presumes the transfer of a property (i.e., a right of ownership or a bundle of such rights), as of a certain date, under specific conditions set forth in the definition of the term identified by the appraiser as applicable in an appraisal. (USPAP, 2010-2011 ed.) USPAP also requires that certain items be included in every appraisal report. Among these items, the following are directly related to the definition of market value:

- Identification of the specific property rights to be appraised.
- Statement of the effective date of the value opinion.
- Specification as to whether cash, terms equivalent to cash, or other precisely described financing terms are

assumed as the basis of the appraisal.

- If the appraisal is conditioned upon financing or other terms, specification as to whether the financing or terms are at, below, or above market interest rates and/or contain unusual conditions or incentives. The terms of above—or below—market interest rates and/or other special incentives must be clearly set forth; their contribution to, or negative influence on, value must be described and estimated; and the market data supporting the opinion of value must be described and explained.

3. The following definition of market value is used by agencies that regulate federally insured financial institutions in the United States: The most probable price that a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and the seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- Buyer and seller are typically motivated;
- Both parties are well informed or well advised,

and acting in what they consider their best interests;

- A reasonable time is allowed for exposure in the open market;
- Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale. (12 C.F.R. Part 34.42(g); 55 Federal Register 34696, August 24, 1990, as amended at 57 Federal Register 12202, April 9, 1992; 59 Federal Register 29499, June 7, 1994)

4. The International Valuation Standards Council defines market value for the purpose of international standards as follows: The estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion. (International Valuation Standards, 8th ed., 2007)

5. Market value is the amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would

have sold on the effective date of the appraisal, after a reasonable exposure of time on the open competitive market, from a willing and reasonably knowledgeable seller to a willing and reasonably knowledgeable buyer, with neither acting under any compulsion to buy or sell, giving due consideration to all available economic uses of the property at the time of the appraisal. (Uniform Standards for Federal Land Acquisitions) (Dictionary, 5th Edition)

### **Marketing Time**

An opinion of the amount of time it might take to sell a real or personal property interest at the concluded market value level during the period immediately after the effective date of the appraisal. Marketing time differs from exposure time, which is always presumed to precede the effective date of an appraisal. (Advisory Opinion 7 of the Standards Board of The Appraisal Foundation and Statement on Appraisal Standards No. 6, "Reasonable Exposure Time in Real Property and Personal Property Market Value Opinions" address the determination of reasonable exposure and marketing time). (Dictionary, 5th Edition)

### **Scope of Work**

The type and extent of research and analyses in an assignment. (Dictionary, 5th Edition)

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FILED

2012 FEB 28 AM 11 07

WAYNE SMITH  
CHANCERY CLERK

**Prepared by:**

Stephen G. Younger, Esq.  
850 East River Place, Suite 302  
Jackson, MS 39202  
Tel. No. (601) 353-1571  
MSB #6671

**Return to:**

✓ Stephen G. Younger, Esq.  
850 East River Place, Suite 302  
Jackson, MS 39202  
Tel. No. (601) 353-1571

**Indexing instructions:**

NE ¼ NW ¼ and NW ¼ NW ¼ Sec. 2, T4N, R14W  
Lamar County, Mississippi

**Grantor:**

P.O. Box 16866  
Jackson, MS 39236  
Tel. No. 601-205-8503

**Grantee:**

P.O. Box 1956  
Madison, MS 39130  
Tel. No. 601-853-4242

**WARRANTY DEED**

FOR AND IN CONSIDERATION of the sum of Ten and No/100 Dollars (\$10.00), cash in hand paid and other good legal, and valuable considerations, the receipt and sufficiency of which is hereby acknowledged, the undersigned LL TRACE, LLC, a Mississippi Limited Liability Company, does hereby sell, convey and warrant unto STAN BLACK the following described land and property situated in Lamar County, Mississippi, to wit:

**See Exhibit attached hereto and incorporated herein for all purposes.**

The 2012 taxes shall be assumed by Grantee herein.

This conveyance is subject to any and all easements, rights of way, covenants, restrictions or conditions of record or in use on subject property.

WITNESS the signatures of the company by its Members, on this the 2nd day of FEBRUARY 2012.

**LL TRACE, LLC**

By: Stan A. Hall  
STAN A. HALL, Member

Sam H. Hall  
SAM H. HALL, Member

Brett C. Matthews  
BRETT, C. MATTHEWS, Member

**STAN BLACK, Member**

**L. CARR McCLAIN, Member**

STATE OF MISSISSIPPI  
COUNTY OF Furness

PERSONALLY appeared before me, the undersigned authority in and for the jurisdiction aforesaid, Stan A. Hall, who acknowledged to me that he is a Member of LL Trace, LLC, a Mississippi Limited Liability Company, and that he signed and delivered the above and foregoing instrument of writing on behalf of the company on the day and year therein mentioned after first being authorized to do so.

GIVEN under my hand and seal, this the 2nd day of Feb 2012.

Dandra M. Meyer  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_





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This conveyance is subject to any and all easements, rights of way, covenants, restrictions or conditions of record or in use on subject property.

WITNESS the signatures of the company by its Members, on this the 2<sup>nd</sup> day of February 2012.

**LL TRACE, LLC**

By: \_\_\_\_\_  
**STAN A. HALL, Member**

\_\_\_\_\_  
**SAM H. HALL, Member**

\_\_\_\_\_  
**BRETT C. MATTHEWS, Member**

\_\_\_\_\_  
**STAN BLACK, Member**

L. Carr McClain  
**L. CARR McCLAIN, Member**

STATE OF MISSISSIPPI  
COUNTY OF \_\_\_\_\_

PERSONALLY appeared before me, the undersigned authority in and for the jurisdiction aforesaid, Stan A. Hall, who acknowledged to me that he is a Member of LL Trace, LLC, a Mississippi Limited Liability Company, and that he signed and delivered the above and foregoing instrument of writing on behalf of the company on the day and year therein mentioned after first being authorized to do so.

GIVEN under my hand and seal, this the \_\_\_\_\_ day of \_\_\_\_\_ 2012.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:  
\_\_\_\_\_

STATE OF MISSISSIPPI  
COUNTY OF Madison

PERSONALLY appeared before me, the undersigned authority in and for the jurisdiction aforesaid, Stan Black, who acknowledged to me that he is a Member of LL Trace, LLC, a Mississippi Limited Liability Company, and that he signed and delivered the above and foregoing instrument of writing on behalf of the company on the day and year therein mentioned after first being authorized to do so.

GIVEN under my hand and seal, this the 2<sup>nd</sup> day of February 2012.

Steve Younger  
NOTARY PUBLIC



STATE OF MISSISSIPPI  
COUNTY OF Forrest

PERSONALLY appeared before me, the undersigned authority in and for the jurisdiction aforesaid, L. Carr McClain, who acknowledged to me that he is a Member of LL Trace, LLC, a Mississippi Limited Liability Company, and that he signed and delivered the above and foregoing instrument of writing on behalf of the company on the day and year therein mentioned after first being authorized to do so.

GIVEN under my hand and seal, this the 2<sup>nd</sup> day of February 2012.

Teresa C. Brannan  
NOTARY PUBLIC

My Commission Expires:

2-4-2013



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STATE OF MISSISSIPPI  
COUNTY OF Forrest

PERSONALLY appeared before me, the undersigned authority in and for the jurisdiction aforesaid, Sam H. Hall, who acknowledged to me that he is a Member of LL Trace, LLC, a Mississippi Limited Liability Company, and that he signed and delivered the above and foregoing instrument of writing on behalf of the company on the day and year therein mentioned after first being authorized to do so.

GIVEN under my hand and seal, this the 2nd day of Feb 2012.

Tambra M. Guyre  
NOTARY PUBLIC

My Commission Expires:

\_\_\_\_\_



STATE OF MISSISSIPPI  
COUNTY OF Madison

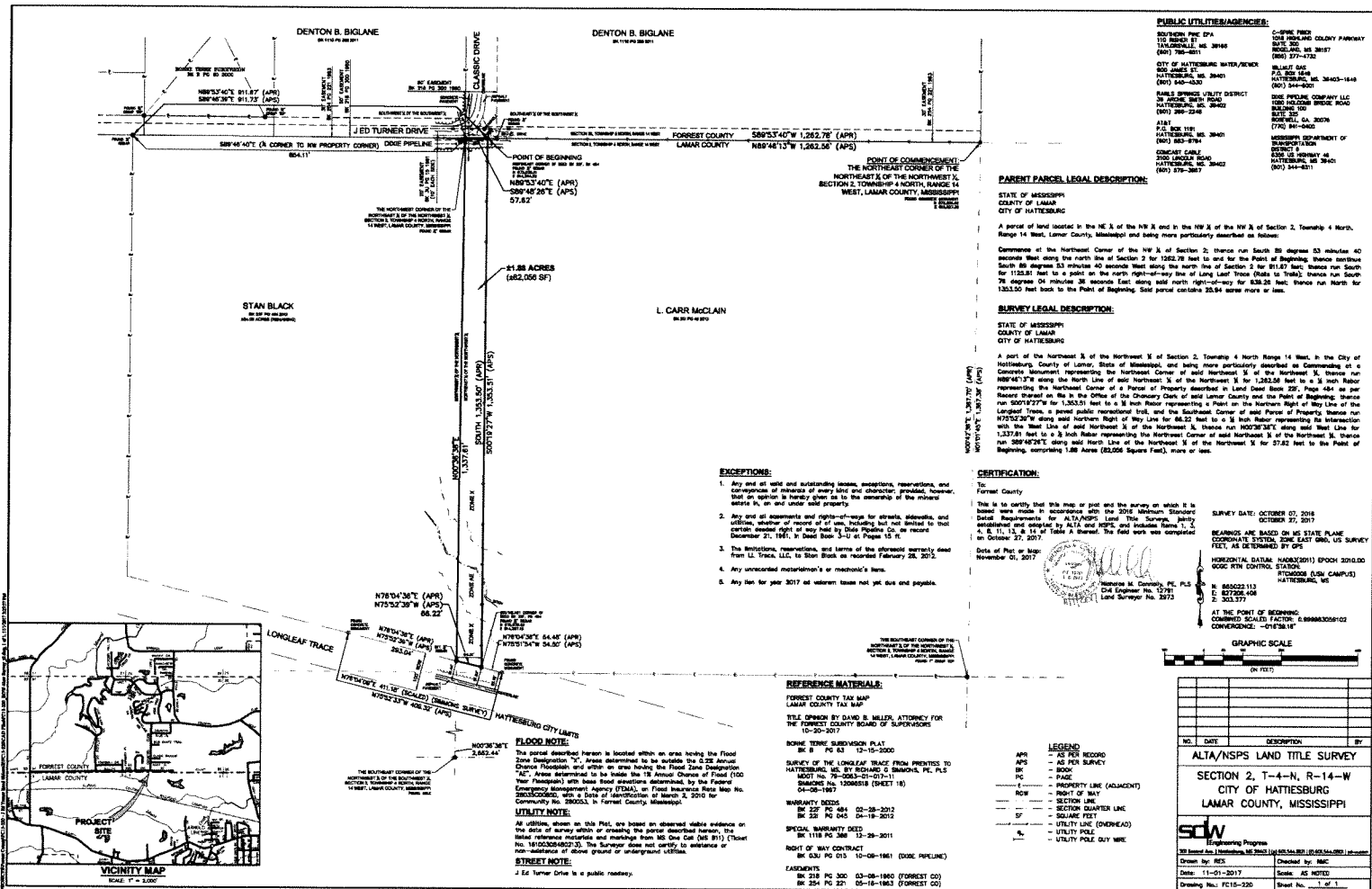
PERSONALLY appeared before me, the undersigned authority in and for the jurisdiction aforesaid, Brett C. Matthews, who acknowledged to me that he is a Member of LL Trace, LLC, a Mississippi Limited Liability Company, and that he signed and delivered the above and foregoing instrument of writing on behalf of the company on the day and year therein mentioned after first being authorized to do so.

GIVEN under my hand and seal, this the 2nd day of February 2012.

Steve Younger  
NOTARY PUBLIC

My Commission Expires:







# Property Link

## LAMAR COUNTY, MS

Current Date 2/ 8/2018

Tax Year 2017  
Records Last Updated 2/ 7/2018**PROPERTY DETAIL**

**OWNER** BLACK STAN  
PO BOX 1936  
  
MADISON MS 39130

**ACRES** : 25.94  
**LAND VALUE** : 5450  
**IMPROVEMENTS** : \*\*NA\*\*  
**TOTAL VALUE**: 5450  
**ASSESSED** : 818

**PARCEL** 051D-02-001.003  
**ADDRESS** J ED TURNER DR

**TAX INFORMATION**

| YEAR 2017    | TAX DUE       | PAID          | BALANCE     |
|--------------|---------------|---------------|-------------|
| COUNTY       | 45.40         | 45.40         | 0.00        |
| CITY         | 43.66         | 43.66         | 0.00        |
| SCHOOL       | 52.34         | 52.34         | 0.00        |
| <b>TOTAL</b> | <b>141.40</b> | <b>141.40</b> | <b>0.00</b> |

**LAST PAYMENT DATE** 12 / 13 / 2017**MISCELLANEOUS INFORMATION**

|                       |        |                                 |
|-----------------------|--------|---------------------------------|
| <b>EXEMPT CODE</b>    |        | <b>LEGAL</b> PT N 1/2 OF NW 1/4 |
| <b>HOMESTEAD CODE</b> | None   | B 022F P 484 02/28/2012         |
| <b>TAX DISTRICT</b>   | 0616   |                                 |
| <b>PPIN</b>           | 035075 |                                 |
| <b>SECTION</b>        | 02     |                                 |
| <b>TOWNSHIP</b>       | 04N    |                                 |
| <b>RANGE</b>          | 14W    |                                 |

Book 022F Page 484

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

| <u>Year</u> | <u>Sold To</u>                   | <u>Redeemed Date/By</u>                   |
|-------------|----------------------------------|-------------------------------------------|
| 2014        | CENTRAL PROPERTIES/BMO<br>HARRIS | 6/30/2016 BULLDOG CONSTRUCTION<br>COMPANY |

[View Appraisal](#)[View Map](#)[Back](#)



# Property Appraisal Link

## LAMAR COUNTY, MS

Current Date 2/ 8/2018

Tax Year 2017

PARCEL 051D-02-001.003

**APPRAISAL INQUIRY**

ALT PARCEL NUMBER 105 0200000 00202

PPIN 035075

SKETCH 1

OWNER NAME

BLACK STAN

PO BOX 1936

MADISON MS39130

PROPERTY ADDRESS

J ED TURNER DR

PROPERTY IS VACANT (Y/N) Y

FIELD WORK BY DATE: //

CLASSED BY DATE: //

REVIEWED BY DATE: //

REALTOR CODE

**LEGAL DESCRIPTION**

1

PT N 1/2 OF NW 1/4

Section 02 Township 04N Range 14W

Book 022F Page 484 Type Date 2/28/2012

**LOT INFORMATION**

LOT CODE LOT SIZE LOT VALUE

| CODE | FRONT FT | DEPTH | PRICE | DEPTH TABLE | DEPTH % | ADJ. % | DESCRIPTION | ADJ PRICE | APPRAISED | CLASS |
|------|----------|-------|-------|-------------|---------|--------|-------------|-----------|-----------|-------|
|------|----------|-------|-------|-------------|---------|--------|-------------|-----------|-----------|-------|

\*\*\* NO LOT INFO \*\*\*

**ACRE INFORMATION**

| ACRES | TYPE | QUAL | CLASS | PRICE | CODE | UNCULTIVATED | CODE | PRICE | ADJ. % | DESCRIPTION | APPRAISED | MARKET |
|-------|------|------|-------|-------|------|--------------|------|-------|--------|-------------|-----------|--------|
|-------|------|------|-------|-------|------|--------------|------|-------|--------|-------------|-----------|--------|

|      |   |   |   |  |  |   |  |        |      |  |      |      |
|------|---|---|---|--|--|---|--|--------|------|--|------|------|
| 4.50 | A | 2 | 1 |  |  | U |  | 287.00 | 1.00 |  | 1290 | 8415 |
|------|---|---|---|--|--|---|--|--------|------|--|------|------|

|       |   |   |   |  |  |   |  |        |      |  |      |       |
|-------|---|---|---|--|--|---|--|--------|------|--|------|-------|
| 21.44 | B | 2 | 1 |  |  | U |  | 194.00 | 1.00 |  | 4160 | 40093 |
|-------|---|---|---|--|--|---|--|--------|------|--|------|-------|

ACREAGE VALUE

5450

OVERALL VALUE

5450

LAND USE CODE CLASS 1

LAND USE CODE CLASS 2 9220 NONRESERVED FORESTS

**BUILDING DESCRIPTIONS**

| NUMBER | CODE | BUILDING DESCRIPTION | VALUE | ELIGIBLE CLASS 1 |
|--------|------|----------------------|-------|------------------|
|--------|------|----------------------|-------|------------------|

\*\*\* NO BUILDING INFO \*\*\*

TOTAL PARCEL VALUE 5450



# LEGAL DESCRIPTION

## Parcel 2 (Stan Black)

A parcel of land located in the NE 1/4 of the NW 1/4 and in the NW 1/4 of the NW 1/4 of Section 2, Township 4 North, Range 14 West, Lamar County, Mississippi and being more particularly described as follows:

Commence at the Northeast Corner of the NW 1/4 of Section 2; thence run South 89 degrees 53 minutes 40 seconds West along the north line of Section 2 for 1262.78 feet to and for the Point of Beginning; thence continue South 89 degrees 53 minutes 40 seconds West along the north line of Section 2 for 911.67 feet; thence run South for 1125.81 feet to a point on the north right-of-way line of Long Leaf Trace (Rails to Trails); thence run South 76 degrees 04 minutes 36 seconds East along said north right-of-way for 939.26 feet; thence run North for 1353.50 feet back to the Point of Beginning.  
Said parcel contains 25.94 acres more or less.

CERTIFICATE OF FILING AND RECORDING  
STATE OF MISSISSIPPI • LAMAR COUNTY  
WAYNE SMITH • CHANCERY CLERK  
INDEXED LD BOOK 22-F PAGE 484  
RECORDED Shirley ABSTRACTED Blaine D.C.



## ***QUALIFICATIONS OF THOMAS JONATHON NULL***

### **Professional Designations & Affiliations**

- ◆ State Certified General Real Estate Appraiser in the State of Mississippi,(GA-799)
- ◆ Designated Member of the Appraisal Institute

### **Related Job Experience**

Collins Appraisal Group      March 2003- Present

**Appraiser** - site inspections, report preparation, and analysis of commercial, timberland, and right-of-way projects.

OSCA Inc./ BJ Services      May 1998-March 2003

**Stimulation engineer**- Oil service company. Multitasking, tri-lingual, international and domestic experience.

### **Academic Background**

High School Diploma Meridian High School- Meridian, MS - 1993

BS in Geology Mississippi State University – 1998

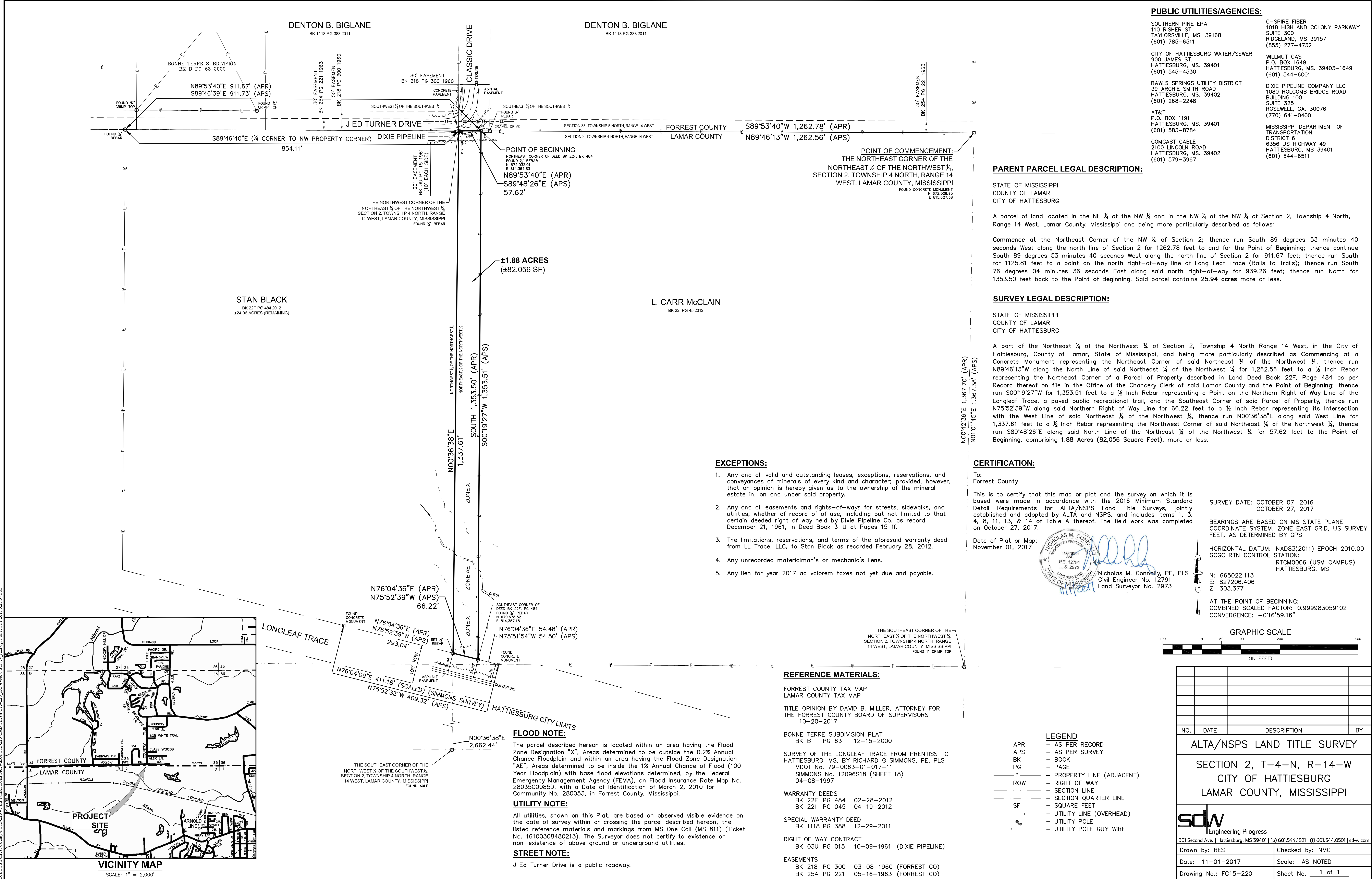
### **Professional Education**

|              |                                                      |                      |            |
|--------------|------------------------------------------------------|----------------------|------------|
| Course (110) | Appraisal Principles Course                          | Appraisal Institute  | 2003       |
| Course (120) | Appraisal Procedures Course                          | Appraisal Institute  | 2003       |
| Course (310) | Basic Income Capitalization                          | Appraisal Institute  | 2003       |
| Course (510) | Advanced Income Capitalization                       | Appraisal Institute  | 2003       |
|              | Uniform Standards of Professional Appraisal Practice | Lincoln Graduate     | 2003       |
| Course (200) | International Right of Way Assoc                     | IRWA                 | 2003       |
|              | Conservation Easement Seminar                        | Tara Wildlife Center | 2003       |
| Course (410) | The Appraisal of Partial Acquisitions                | IRWA                 | 2004       |
| Course (801) | Land Titles                                          | IRWA                 | May 2005   |
| Course (901) | Engineering Plan and Development                     | IRWA                 | May 2005   |
|              | Yellow Book Seminar                                  | Appraisal Institute  | 2006       |
|              | Conservation Easement Seminar                        | Tara Wildlife Center | 2006       |
| Course (520) | General Market Analysis and Highest and Best Use     | Appraisal Institute  | 2006       |
|              | Wetland Symposium                                    |                      | 2007       |
| Course (550) | Advanced Applications                                | Appraisal Institute  | Nov. 2007  |
| Course (540) | Report writing and valuation analysis                |                      | April 2007 |
|              | National USPAP                                       |                      | 2008       |
|              | Advanced Sales Comparison & Cost Approaches          |                      | 2008       |
|              | Business Practice and Ethics                         |                      | 2008       |
| Course (530) | Advanced Sales and Cost Approach                     | Appraisal Institute  | 2008       |
|              | Appraising Distressed Commercial Real Estate         |                      | 2009       |

|                                                              |                     |      |
|--------------------------------------------------------------|---------------------|------|
| Introduction to Conservation Easement Valuation              |                     | 2010 |
| Oil Spills and Property Values                               |                     | 2010 |
| Attacking an Defending an Appraisal                          |                     |      |
| In Litigation                                                | Appraisal Institute | 2011 |
| 7 Hour National USPAP                                        | Appraisal Institute | 2011 |
| The Impact of Dodd-Frank on Appraisers                       |                     |      |
| and Their bank clients                                       | Appraisal Institute | 2012 |
| General Demonstration Report Writing                         | Appraisal Institute | 2012 |
| 7 Hour National USPAP                                        | Appraisal Institute | 2014 |
| R.E. Finance Statistics Valuation Modeling                   | Appraisal Institute | 2014 |
| 105 The Uniform Act – Executive Summary                      |                     | IRWA |
| USPAP                                                        | Appraisal Institute | 2015 |
| Rates and Ratios                                             | Appraisal Institute | 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 |



G:\PROJECTS\Forrest County\FC15-220\CAD Files\FC15-220\_ROW-New Survey\_24Aug\_1 of 1 (11/20/17 3:25:37 PM)







# City of Hattiesburg, MS

200 Forrest St.  
P.O. Box 1898  
Hattiesburg, MS 39401

## Master

**File Number: 2018-401**

**File ID:** 2018-401

**Type:** Regular Agenda Item

**Status:** Agenda Ready

**Version:** 1

**Reference:**

**In Control:** City Council

**Requester:** Ginger Lowrey

**File Created:** 04/16/2018

**Brief Title:** Acknowledge receipt of appeal and Set Appeal  
Hearing for 4 p.m. May 21, 2018, for 208 North 38th  
Avenue - Rezone to B-3

**Final Action:**

**Minute Book Number:** MB2018-109

**Title:** Acknowledge receipt of request filed by Utpal Patel, Owner, to appeal the Planning Commission's recommendation for the petition filed by by Utpal Patel, Owner to change the zoning classification for a certain property located at 208 North 38th Avenue (Parcel 2-028L-07-144.01, PPIN 41562, Ward 1) from Section 4.5.9, B-2 (Neighborhood Business) District to Section 4.5.10, B-3 (Community Business) District; Hattiesburg Planning Commission recommended to Deny on April 4, 2018; Set a public hearing before City Council on May 21, 2018 at 4:00 p.m. and authorize publication of Public Notice setting an Appeal Public Hearing.

### Notes:

**Agenda Date:** 04/17/2018

### Indexes:

**Agenda Number:** VI.-12

### Sponsors:

**Enactment Date:**

**Attachments:** Appeal - 208 N 38th Ave

**Enactment Number:**

### Contact:

**Meeting Date:** 04/17/2018

**Drafter:** Ginger Lowrey

**Effective Date:**

## History of Legislative File

| Ver-<br>sion: | Acting Body:                                  | Date:      | Action: | Sent To: | Due Date: | Return<br>Date: | Result: |
|---------------|-----------------------------------------------|------------|---------|----------|-----------|-----------------|---------|
| 1             | City Council -<br>Amendments to the<br>Agenda | 04/16/2018 |         |          |           |                 |         |
| 1             | City Council                                  | 04/17/2018 |         |          |           |                 |         |

## Text of Legislative File 2018-401

### Title

Acknowledge receipt of request filed by Utpal Patel, Owner, to appeal the Planning Commission's recommendation for the petition filed by by Utpal Patel, Owner to change the zoning classification for a certain property located at 208 North 38th Avenue (Parcel 2-028L-07-144.01, PPIN 41562, Ward 1)

from Section 4.5.9, B-2 (Neighborhood Business) District to Section 4.5.10, B-3 (Community Business) District; Hattiesburg Planning Commission recommended to Deny on April 4, 2018; Set a public hearing before City Council on May 21, 2018 at 4:00 p.m. and authorize publication of Public Notice setting an Appeal Public Hearing.

### **Summary**

Acknowledge receipt of appeal and Set Appeal Hearing for 4 p.m. May 21, 2018, for 208 North 38th Avenue - Rezone to B-3.

### **Budget Information**

### **Expenditure Type**

### **Purchasing Item**

### **Publication Information**

Public Notice to set hearing to publish in HubCity Spokes on May 3, 2018 (18 days prior May 21, 2018 hearing).



Send to:  
Andrew Ellard, Director of Urban Development  
Dept. of Urban Development  
P.O. Box 1898  
Hattiesburg, MS 39403  
601.545.4599 or fax 601.545.1962

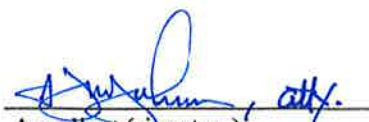
**REQUEST TO APPEAL PLANNING COMMISSION OR BOARD OF ADJUSTMENTS  
RECOMMENDATION**

|                                                                                                                                                                                                                                                                |                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Today's Date:                                                                                                                                                                                                                                                  | 4/13/18                                     |
| Planning Commission or Board of Adjustment Date:                                                                                                                                                                                                               | 4/4/18                                      |
| (Appeals must be made within ten consecutive days of the recommendation)                                                                                                                                                                                       |                                             |
| Name of Property Owner/Petitioner:                                                                                                                                                                                                                             | Utpal Patel                                 |
| Name of Person Requesting Appeal Hearing:                                                                                                                                                                                                                      | S. Joel Johnson, Attorney for Utpal Patel   |
| Mailing Address of Person Requesting Appeal Hearing:                                                                                                                                                                                                           | PO Box 17738 Hattiesburg, MS 39404          |
| Address of Petitioned Property:                                                                                                                                                                                                                                | 208 North 38th Avenue Hattiesburg, MS 39401 |
| Petitioner's Request of the Planning Commission or Board of Adjustments: to change zoning classification for a certain property located at 208 North 38th Avenue (Parcel 2-0286-07-144.01, PPIN 41562, Ward 1) from section 4.5.9, B-2 (Neighborhood business) |                                             |
| Planning Commission or Board of Adjustment's Recommendation:<br>Approve <input type="checkbox"/> or Deny <input checked="" type="checkbox"/>                                                                                                                   |                                             |

District to Section 4.5.10, B-3 (Community Business) District

I/We hereby APPEAL the Planning Commission or Board of Adjustment's Recommendation for the above reference petition and request to hold a Public Hearing before the Hattiesburg City Council.

Utpal Patel  
Appellant (print)

  
Appellant (signature)





# City of Hattiesburg, MS

200 Forrest St.  
P.O. Box 1898  
Hattiesburg, MS 39401

## Master

**File Number: 2018-383**

**File ID:** 2018-383

**Type:** Regular Agenda Item

**Status:** Agenda Ready

**Version:** 1

**Reference:**

**In Control:** City Council

**Requester:** Lamar Rutland

**File Created:** 04/09/2018

**Brief Title:** Acknowledge no bids were received at the bid opening April 5, 2018 for the 28th Avenue Bridge Replacement project; Authorize re-advertisement for bids for same project.

**Final Action:**

**Minute Book Number:** MB2018-109

**Title:**

Acknowledge no bids were received at the bid opening April 5, 2018 for the 28th Avenue Bridge Replacement project; Authorize re-advertisement for bids for same project.

**Notes:**

**Agenda Date:** 04/17/2018

**Indexes:**

**Agenda Number:** VI.-13

**Sponsors:**

**Enactment Date:**

**Attachments:** 11204 no bid letter, S. 28th Ave Bridge - No bids, Re-advertisement, 11204 construction plans signed 2018-02-12-Rebid, 11204\_Specs\_Review Set\_2018\_04\_09-Rebid, executed 11204 no bid letter for 28th Ave. Bridge Replacement project

**Enactment Number:**

**Contact:**

**Meeting Date:** 04/17/2018

**Drafter:** Sharon Waits

**Effective Date:**

## History of Legislative File

| Ver-<br>sion: | Acting Body:                            | Date:      | Action: | Sent To: | Due Date: | Return<br>Date: | Result: |
|---------------|-----------------------------------------|------------|---------|----------|-----------|-----------------|---------|
| 1             | City Council - Amendments to the Agenda | 04/16/2018 |         |          |           |                 |         |
| 1             | City Council                            | 04/17/2018 |         |          |           |                 |         |

## Text of Legislative File 2018-383

### Title

Acknowledge no bids were received at the bid opening April 5, 2018 for the 28th Avenue Bridge Replacement project; Authorize re-advertisement for bids for same project.

### **Summary**

Acknowledge no bids were received at the bid opening April 5, 2018 for the 28th Avenue Bridge Replacement project; Authorize re-advertisement for bids for same project.

### **Budget Information**

### **Expenditure Type**

### **Purchasing Item**

### **Publication Information**



Engineering Progress

April 16, 2018

City of Hattiesburg  
Post Office Box 1898  
Hattiesburg MS 39403-1898

Attn: Lamar Rutland, P.E.

RE: South 28<sup>th</sup> Avenue Bridge Replacement - Bridge #SA18-157  
City of Hattiesburg

Dear Mr. Rutland:

During the bid opening for the above referenced project on April 5, 2018 we received **no bids**.

At this time we recommend that you re-advertise and re-bid the project.

If you have any questions or we can be of further assistance please do not hesitate to call me at (601) 544-1821.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read 'Nick Connolly', with a stylized flourish at the end.

Nicholas M. Connolly, P.E., P.L.S.  
Vice President

## 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 **May 31, 2018** in City Council Chambers at City Hall, 200 Forrest Street, Hattiesburg, MS 39401, and then at said location will open and read aloud bids received for furnishing the City's requirements for the following:

**BID OPENING TIME: 10:00 a.m.**  
**DATE of BID OPENING: May 31, 2018**  
**SOUTH 28TH AVENUE**  
**BRIDGE REPLACEMENT**  
**BRIDGE #SA18-157**  
**CITY of HATTIESBURG**

Official bid documents can be downloaded from Central Bidding at [www.centralbidding.com](http://www.centralbidding.com). Electronic bids can be submitted at [www.centralbidding.com](http://www.centralbidding.com). For any questions relating to the electronic bidding process, please call Central Bidding at 225-810-4814. 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 OPENING TIME: 10:00 a.m.**  
**DATE of BID OPENING: May 31, 2018**  
**SOUTH 28TH AVENUE**  
**BRIDGE REPLACEMENT**  
**BRIDGE #SA18-157**  
**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; the Council reserves the right to reject any or all proposals received and to waive informalities.

PUBLISHED by Order of the Council on the 17<sup>th</sup> day of April, 2018

CITY OF HATTIESBURG, MISSISSIPPI

BY: \_\_\_\_\_

Kermas Eaton, City Clerk

Publish on April 26, 2018 and May 3, 2018  
City of Hattiesburg  
Return PROOF to SDW, Inc.  
301 Second Avenue  
Hattiesburg, MS 39401



PUBLIC UTILITIES

**CABLE**  
COMCAST  
2100 LINCOLN RD  
HATTIESBURG, MS 39402  
(601) 264-1188

**POWER**  
MISSISSIPPI POWER COMPANY  
6356 U.S. HIGHWAY 49  
HATTIESBURG, MS 39401  
(601) 544-6511

**TELEPHONE**  
AT&T  
P.O. BOX 1191  
HATTIESBURG, MS 39401  
(601) 545-6424

**GAS**  
WILMUT GAS  
P.O. BOX 1649  
HATTIESBURG, MS 39403  
(601) 544-6001

**SEWER**  
CITY OF HATTIESBURG  
WATER & SEWER DEPT.  
900 JAMES ST  
HATTIESBURG, MS 39403  
(601) 545-4530

**WATER**  
CITY OF HATTIESBURG  
WATER & SEWER DEPT.  
900 JAMES ST  
HATTIESBURG, MS 39403  
(601) 545-4530

**TRAFFIC**  
CITY OF HATTIESBURG  
TRAFFIC DEPT.  
125 WALNUT ST  
HATTIESBURG, MS 39401  
(601) 545-4626

CONSTRUCTION PLANS

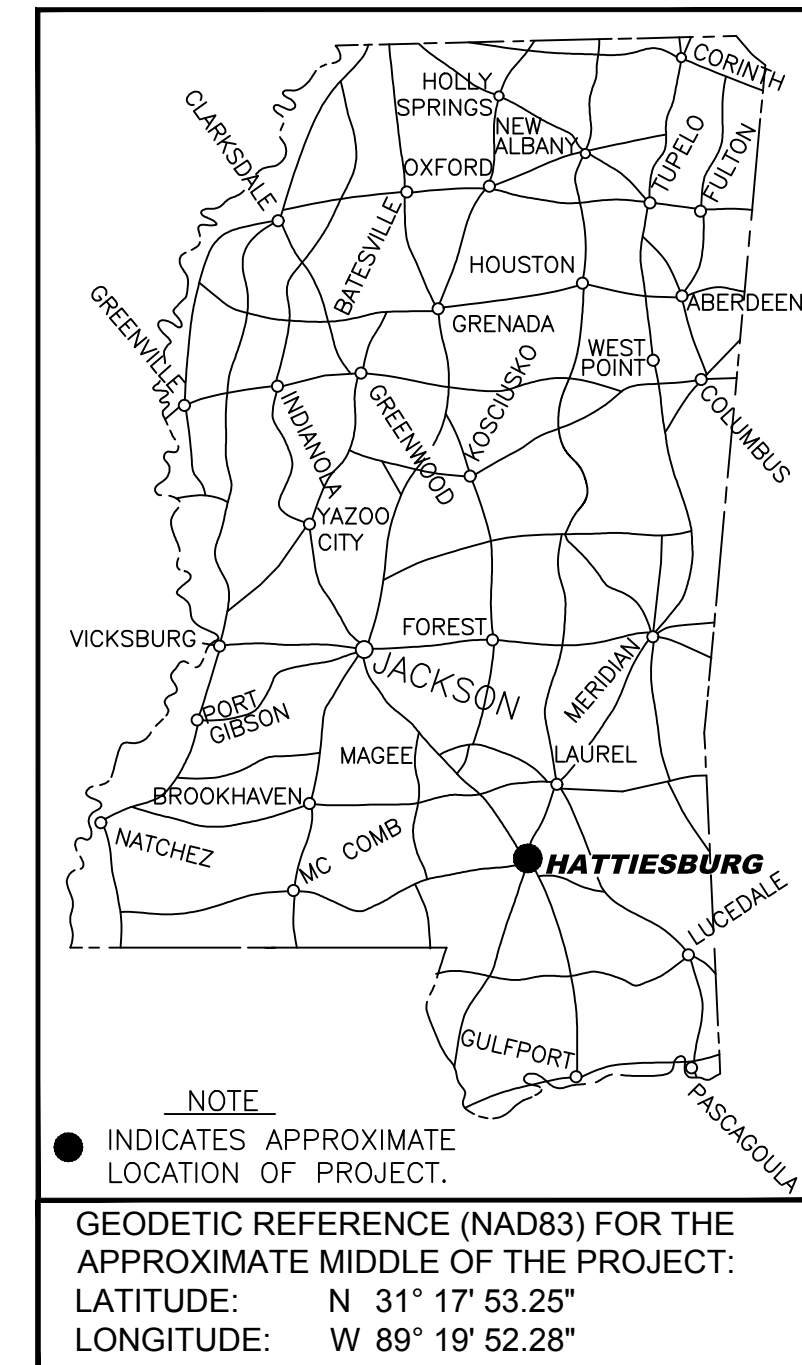
FOR

SOUTH 28th AVENUE  
BRIDGE REPLACEMENT

Bridge # SA18-157

FOR THE

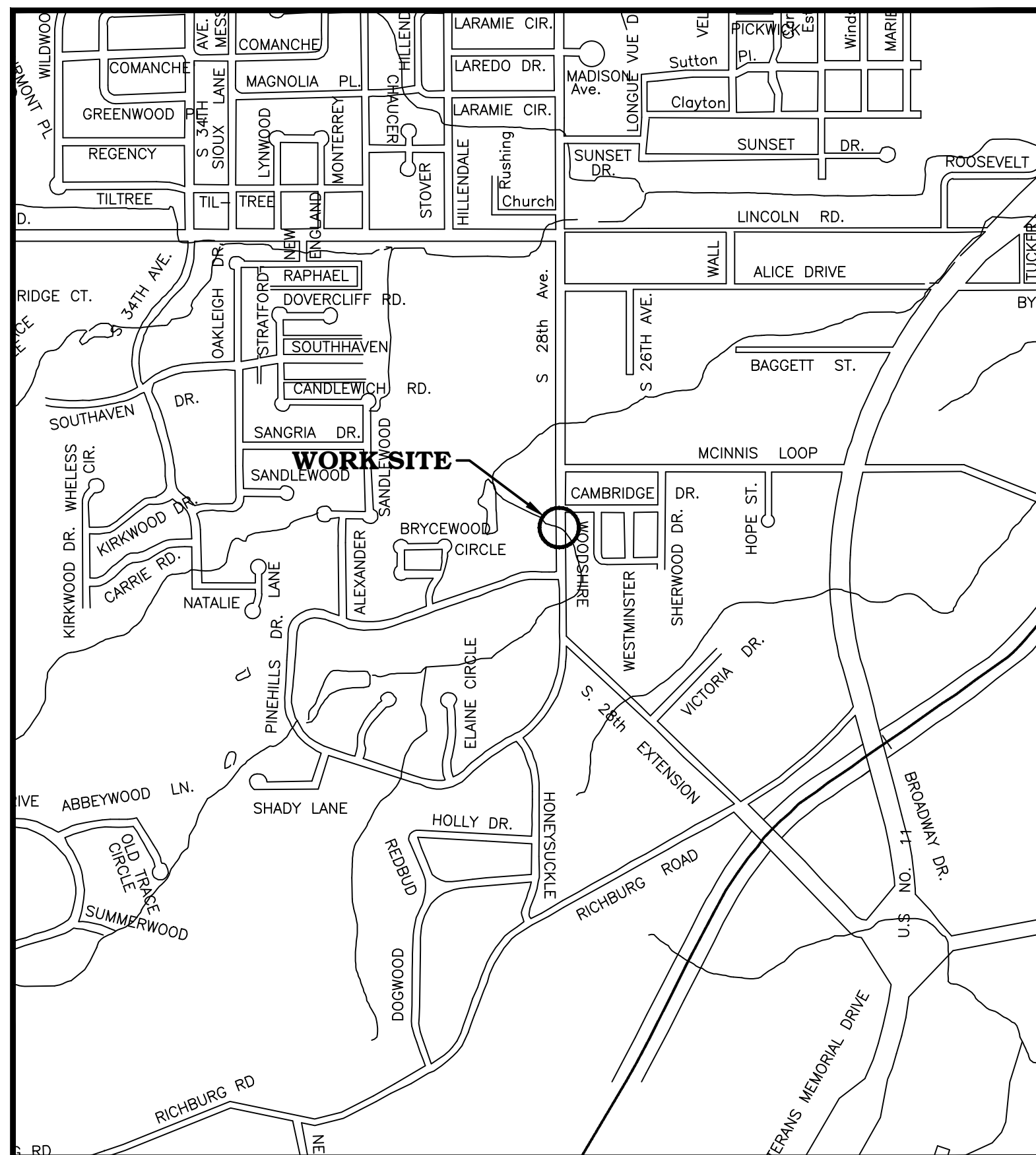
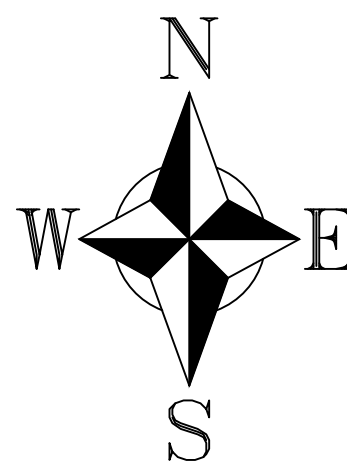
CITY OF HATTIESBURG  
FORREST COUNTY, MISSISSIPPI



SEE SHEET No. 2 FOR DETAIL SHEET INDEX



Know what's below.  
Call before you dig.



SPECIAL UTILITY NOTES:

- UTILITY LOCATION REQUESTS WERE SUBMITTED TO MISSISSIPPI 811 (FORMERLY MISSISSIPPI ONE CALL) DURING THE FIELD DATA COLLECTION PHASE FOR THE DESIGN OF THIS PROJECT. ALL UTILITIES THAT LOCATED DURING THE FIELD DATA COLLECTION ARE SHOWN ON THESE PLANS. ALL CONFLICTS WITH EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION SHALL BE COORDINATED WITH THE UTILITY OWNER, THE ENGINEER AND THE PROJECT OWNER PRIOR TO INSTALLATION OF THE PROPOSED WATER SYSTEM. (NO SEPARATE PAY FOR COORDINATION)
- THE CONTRACTOR SHALL DOCUMENT THE EXISTENCE OF ANY MISSING AND/OR OVERLAPPING UNDERGROUND UTILITIES AND STORM DRAINAGE NOT SHOWN ON THESE CONSTRUCTION DRAWINGS.

| MISSISSIPPI 811 TICKETS |             |
|-------------------------|-------------|
| TICKET No.              | DESCRIPTION |
|                         |             |

FEBRUARY 2018



|     |      |             |    |
|-----|------|-------------|----|
|     |      |             |    |
|     |      |             |    |
|     |      |             |    |
|     |      |             |    |
|     |      |             |    |
|     |      |             |    |
| NO. | DATE | DESCRIPTION | BY |

MAYOR  
Toby Barker

COUNCIL PERSONS  
Carter Carroll, President  
Mary Dryden, Vice President  
Jeffery George  
Deborah Denard Delgado  
Nicholas Brown

DIRECTOR OF ENGINEERING  
Lamar Rutland, PE

PREPARED BY:

sdw  
Engineering Progress  
301 Second Ave. | Hattiesburg, MS 39401 | (p) 601.544.1821 | (f) 601.544.0501 | sd-w.com

Working No. 01  
Sheet No. 1  
Drawing No.: 11204



C:\PROJECTS\Hattiesburg\_City\011204 - South 28th Avenue Bridge Replacement\11204 C3D\CAD Files\11204 cover and notes.dwg, 02, 2/12/2018 9:46:25 AM

DESCRIPTION OF SHEET

REV. DATE

WK. NO.

SHEET NO.

GENERAL NOTES:

TITLE SHEET (1)

01

DETAILED INDEX AND GENERAL NOTES SHEET (1)

02

TYPICAL SECTION SHEET (1)

03

QUANTITY SHEET (1)

04

ESTIMATED QUANTITY SHEET (1)

05

PLAN PROFILE SHEETS (1)

STA. 7+00 - STA. 13+00

06

SPECIAL DESIGN SHEETS (5)

BOX CULVERT DETAIL

07

BOX BEND DETAIL

08

RIPRAP DETAIL

09

TRAFFIC CONTROL PLAN

10

VEGETATION SCHEDULE

11

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

SDTCP-10

12

ROADWAY DESIGN STANDARDS (10)

PAVEMENT MARKING DETAILS FOR 2 & 4-LANE DIVIDED ROADWAYS

(12-01-99)

PM-1

120

EROSION CONTROL

EC-1

140

TYPICAL TEMPORARY EROSION CONTROL MEASURES (SILT FENCE, HAY BALES & BRUSH BARRIER)

TEC-1

142

DETAILS OF DITCH TREATMENT

DT-1

145

RIGHT OF WAY MARKERS

RW-1

270

PIPE CULVERT INSTALLATION

PI-1

300

BRANCH CONNECTIONS

BC-1

305

TYPE I MEDIAN INLET (24" PIPE & UNDER)

(3-01-02)

MI-1

306

DETAILS OF GRATES FOR MEDIAN INLETS

IG-1

314

FLARED END SECTION FOR CONCRETE PIPE

FE-1

328

BOX BRIDGE STANDARDS (9)

BASIC CULVERT DRAWING, BARRELL JOINT LOCATIONS, NORMAL AND SKEWED CULVERTS, GROUP I DIAGRAMS

IBJL-1

7005

WINGS WITH 3:1 SLOPE FOR BASIC CULVERT DRAWING, DOUBLE CELL, 0° SKEW DETAILS, HEIGHTS 6 - 12 FT., SPANS 12 - 40 FT., SHT. 1 OF 1

IWD-3W

7136

WINGS WITH 3:1 SLOPE FOR BASIC CULVERT DRAWING, DOUBLE CELL, 0° SKEW DETAILS, HEIGHT 6 FT., SPANS 12 - 32 FT., SHT. 1 OF 2

IWD-4

7137

WINGS WITH 3:1 SLOPE FOR BASIC CULVERT DRAWING, DOUBLE CELL, 0° SKEW DETAILS, HEIGHT 6 FT., SPANS 12 - 32 FT., SHT. 2 OF 2

IWD-4

7138

WINGS WITH 3:1 SLOPE FOR BASIC CULVERT DRAWING, DOUBLE CELL, 15° SKEW DETAILS, HEIGHTS 6 - 12 FT., SPANS 12 - 40 FT., SHT. 1 OF 2

IWD-3W-15

7158

WINGS WITH 3:1 SLOPE FOR BASIC CULVERT DRAWING, DOUBLE CELL, 15° SKEW DETAILS, HEIGHTS 6 - 12 FT., SPANS 12 - 40 FT., SHT. 2 OF 2

IWD-3W-15

7159

WINGS WITH 3:1 SLOPE FOR BASIC CULVERT DRAWING, DOUBLE CELL, 15° SKEW DETAILS, HEIGHT 6 FT., SPANS 12 - 32 FT., SHT. 1 OF 3

IBDM-4W

7160

WINGS WITH 3:1 SLOPE FOR BASIC CULVERT DRAWING, DOUBLE CELL, 15° SKEW DETAILS, HEIGHT 6 FT., SPANS 12 - 32 FT., SHT. 2 OF 3

IBDM-4W

7161

WINGS WITH 3:1 SLOPE FOR BASIC CULVERT DRAWING, DOUBLE CELL, 15° SKEW DETAILS, HEIGHT 6 FT., SPANS 12 - 32 FT., SHT. 3 OF 3

ISK-15-4W

7162

TOTAL SHEETS

31

1. ALL TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (LATEST EDITION).
2. ALL EXISTING STREET SIGNAGE CONFLICTING WITH CONSTRUCTION SHALL BE REMOVED DURING CONSTRUCTION, REPLACED AFTER CONSTRUCTION AND SHALL BE CONSIDERED PART OF MAINTENANCE OF TRAFFIC. (NOT A SEPARATE PAY ITEM)
3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF ALL EXISTING TOPOGRAPHIC DATA, LOCATION AND PROTECTION OF ALL EXISTING UTILITIES WITHIN THE WORK AREA AND ALL OTHER SITE CONDITIONS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ALL UTILITIES SHALL BE RELOCATED BY THE UTILITY OWNERS, WHERE CONFLICT WITH CONSTRUCTION OCCURS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE UTILITY OWNER.
5. EXISTING PIPES TO REMAIN IN PLACE WITHIN THE CONSTRUCTION LIMITS SHALL BE CLEANED OF ALL FOREIGN MATERIAL PRIOR TO FINAL ACCEPTANCE (NOT A SEPARATE PAY ITEM).
6. 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.
7. THE CONTRACTOR SHALL VERIFY AND/OR REESTABLISH ALL CENTERLINES AS DEFINED ON THESE PLANS AND SPECIFICATIONS.
8. THE LOCATION AND SPACING OF SIGNS SHOWN ON THE CONSTRUCTION SIGNING PLAN ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.
9. ALL WATER VALVE BOXES AND MANHOLE TOPS SHALL BE ADJUSTED TO MATCH FINISH GRADE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING AS STIPULATED IN THE SPECIFICATIONS. CONTROL COORDINATE SYSTEM AVAILABLE THROUGH THE ENGINEER.
11. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE ANY EXISTING STRUCTURES, PAVEMENTS OR ANY OTHER SITE COMPONENTS NOT DESIGNATED FOR DEMOLITION AND REMOVAL. ANY SUCH ITEMS DAMAGED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
12. THE CONTRACTOR SHALL REMOVE EXISTING PAVEMENTS, STRUCTURES, SOIL AND OTHER ITEMS AS INDICATED ON THE PLANS AND AS REQUIRED FOR PROJECT CONSTRUCTION AND SHALL BE DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.
13. TESTING SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE PERFORMED BY A TESTING LABORATORY THAT IS MDOT CERTIFIED AND APPROVED BY THE ENGINEER. (NOT A SEPARATE PAY ITEM)
14. PRIOR TO COMMENCING CONSTRUCTION THE CONTRACTOR SHALL STRIP AND STOCKPILE ALL TOPSOIL WITHIN THE PROJECT LIMITS. THE STRIPPED AND STOCKPILED TOPSOIL SHALL BE USED TO PLATE THE FINISHED SLOPES PRIOR TO THE ESTABLISHMENT OF VEGETATION. (NOT A SEPARATE PAY ITEM).
15. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION." (PAY ITEM NUMBERS SHALL BE AS DEFINED IN THE PROPOSAL.)
16. CONTRACTOR SHALL COORDINATE WITH BUSINESS OWNERS ALONG PROJECT TO INSURE INGRESS AND EGRESS TO THESE BUSINESSES AT ALL TIMES.
17. PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL APPLY HERBICIDE TO ALL VEGETATION LOCATED ON PAVEMENT, CURB, AND SIDEWALK AREAS WITHIN THE PROJECT LIMITS. (NOT A SEPARATE PAY ITEM)
18. PRIOR TO COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL VEGETATION, SOIL AND DEBRIS FROM PAVEMENT, CURB AND SIDEWALK AREAS WITHIN THE PROJECT LIMITS. (NOT A SEPARATE PAY ITEM)
19. HOT MIX ASPHALT PAVEMENT SHALL BE COMPACTED WITH A STATIC ROLLER.

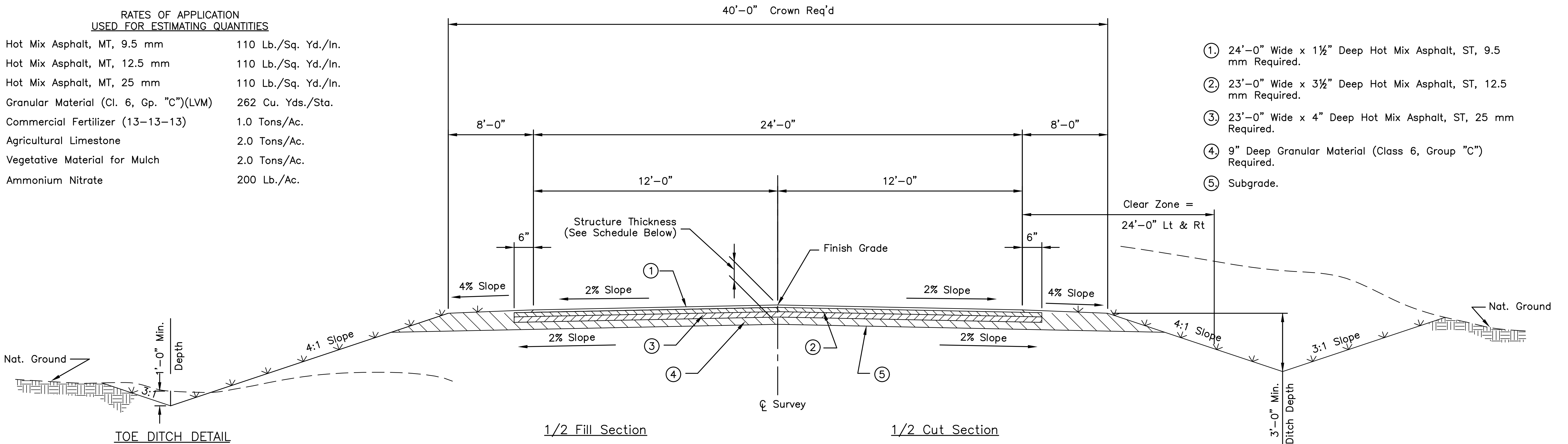


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|                                                                                                                                                                                                                                                                                                                                                                                       |      |                 |    |
| NO.                                                                                                                                                                                                                                                                                                                                                                                   | DATE | DESCRIPTION     | BY |
| VICINITY MAP & NOTES                                                                                                                                                                                                                                                                                                                                                                  |      |                 |    |
| SOUTH 28TH AVENUE<br>BRIDGE REPLACEMENT<br>CITY OF HATTIESBURG                                                                                                                                                                                                                                                                                                                        |      |                 |    |
| <div><div><div><div><div>SD</div><div>&amp;W</div></div><div>SHOWS, DEARMAN &amp; WAITS, INC.</div><div>CONSULTING ENGINEERS</div></div><div><div>HATTIESBURG, MISSISSIPPI, 39403-1711</div><div>201 SECOND AVENUE</div><div>HATTIESBURG, MISSISSIPPI, 39401</div><div>HTTP://WWW.SD-W.COM</div></div><div><div>P: (601) 544-1821</div><div>F: (601) 544-0501</div></div></div></div> |      |                 |    |
| Drawn by: NMC                                                                                                                                                                                                                                                                                                                                                                         |      | Checked by: NMC |    |
| Date: 1-28-14                                                                                                                                                                                                                                                                                                                                                                         |      | Scale: AS NOTED |    |
| Drawing No.: 11204                                                                                                                                                                                                                                                                                                                                                                    |      | Sheet No. 02    |    |



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| RATES OF APPLICATION<br>USED FOR ESTIMATING QUANTITIES |                     |
|--------------------------------------------------------|---------------------|
| Hot Mix Asphalt, MT, 9.5 mm                            | 110 Lb./Sq. Yd./In. |
| Hot Mix Asphalt, MT, 12.5 mm                           | 110 Lb./Sq. Yd./In. |
| Hot Mix Asphalt, MT, 25 mm                             | 110 Lb./Sq. Yd./In. |
| Granular Material (Cl. 6, Gp. "C")(LVM)                | 262 Cu. Yds./Sta.   |
| Commercial Fertilizer (13-13-13)                       | 1.0 Tons/Ac.        |
| Agricultural Limestone                                 | 2.0 Tons/Ac.        |
| Vegetative Material for Mulch                          | 2.0 Tons/Ac.        |
| Ammonium Nitrate                                       | 200 Lb./Ac.         |



- ①. 24'-0" Wide x 1½" Deep Hot Mix Asphalt, ST, 9.5 mm Required.
- ②. 23'-0" Wide x 3½" Deep Hot Mix Asphalt, ST, 12.5 mm Required.
- ③. 23'-0" Wide x 4" Deep Hot Mix Asphalt, ST, 25 mm Required.
- ④. 9" Deep Granular Material (Class 6, Group "C") Required.
- ⑤. Subgrade.

### TYPICAL GRADE, DRAIN, BASE & PAVE SECTION

STA. 9+00.00 TO STA. 10+25.00  
N.T.S.

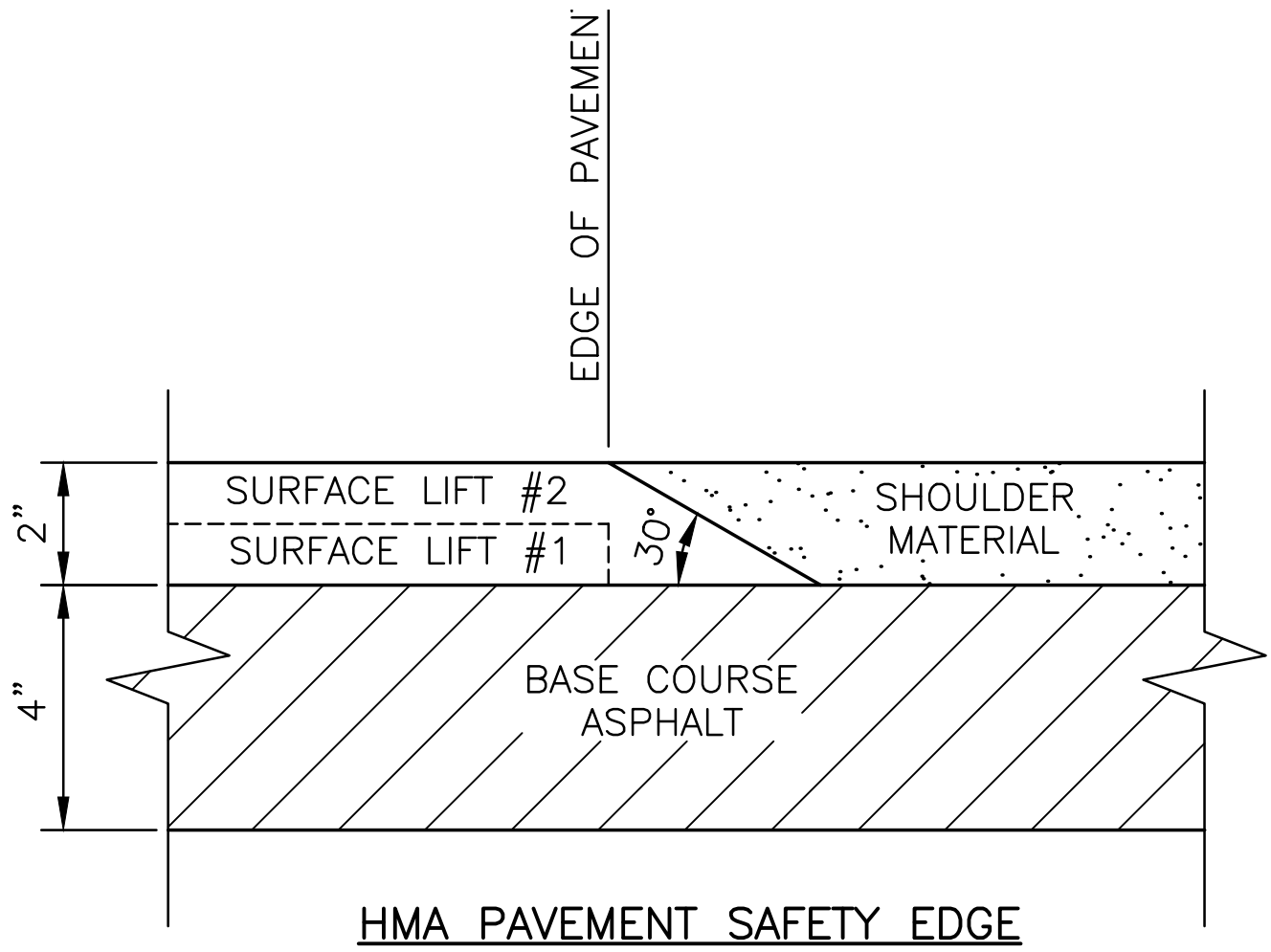
### GENERAL NOTES

Erosion Control Measures To Be Applied On Indicated Area  
(**vvvv**) As Per Seasonal Limitations.

Before Final Acceptance, The Entire Right-Of-Way Shall Be  
Mowed By The Contractor At No Cost To The Project.

HMA Pavement Safety Edge is Required Per Notice to Bidders  
Number 15.

### FLEXIBLE PAVEMENT DESIGN



| DATA FOR PAVEMENT DETERMINATION |         | REQUIRED STRUCTURE NUMBER |          |
|---------------------------------|---------|---------------------------|----------|
| (2014) ADT = 10,000             | Current | 2022                      | 2034     |
| (2022) ADT = 11,104             | n Year  | ADL 356                   | ADL 388  |
| (2034) ADT = 13,000             | Design  | CBR 5                     | CBR 5    |
| DHV = 1,950                     |         | SSV 3.72                  | SSV 3.72 |
| D = 50 % of DHV                 |         | PT 2.5                    | PT 2.5   |
| T = 10 % of DHV                 |         |                           |          |
| T (Total) = 10 % of ADT         |         |                           |          |
| 18k (Rigid) = 0 /1000           |         | SN 4.019                  | SN 4.683 |
| 18k (Flex) = 675 /1000          |         |                           |          |
| CBR = 5                         |         |                           |          |

| SCHEDULE OF BASE STRUCTURE THICKNESS |                              |                          |                                  |                                 |                      |      |                               |      |                                 |      |                                |      |                   |      |
|--------------------------------------|------------------------------|--------------------------|----------------------------------|---------------------------------|----------------------|------|-------------------------------|------|---------------------------------|------|--------------------------------|------|-------------------|------|
| STATION<br>TO<br>STATION             | ESTIMATED<br>SUBGRADE<br>CBR | SOIL<br>SUPPORT<br>VALUE | AVERAGE<br>DAILY<br>LANE LOADING | STRUCTURE<br>NUMBER<br>REQUIRED | SUBBASE<br>THICKNESS |      | HMA, ST<br>25 mm<br>THICKNESS |      | HMA, ST<br>12.5 mm<br>THICKNESS |      | HMA, ST<br>9.5 mm<br>THICKNESS |      | TOTAL<br>PROVIDED |      |
|                                      |                              |                          |                                  |                                 | IN                   | SN   | IN                            | SN   | IN                              | SN   | IN                             | SN   | IN                | SN   |
|                                      |                              |                          |                                  |                                 |                      |      |                               |      |                                 |      |                                |      |                   |      |
| BOP – EOP                            | 5                            | 3.72                     | 356                              | 4.019                           | 9.0                  | 0.90 | 4.0                           | 1.36 | 3.5                             | 1.19 | 1.5                            | 0.66 | 18.0              | 4.11 |
|                                      |                              |                          |                                  |                                 |                      |      |                               |      |                                 |      |                                |      |                   |      |
|                                      |                              |                          |                                  |                                 |                      |      |                               |      |                                 |      |                                |      |                   |      |

NOTE: SUBGRADE CBR IS ESTIMATED ONLY. A SUBGRADE SOIL PROFILE WILL BE PREPARED AND THE CBR AND THE  
REQUIRED BASE STRUCTURE THICKNESS DETERMINED AFTER GRADING AND BEFORE PLACING BASE MATERIAL.

|                                                                                                                                |      |                 |    |
|--------------------------------------------------------------------------------------------------------------------------------|------|-----------------|----|
|                                                                                                                                |      |                 |    |
|                                                                                                                                |      |                 |    |
|                                                                                                                                |      |                 |    |
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|                                                                                                                                |      |                 |    |
|                                                                                                                                |      |                 |    |
| NO.                                                                                                                            | DATE | DESCRIPTION     | BY |
| TYPICAL SECTION                                                                                                                |      |                 |    |
| SOUTH 28th AVENUE<br>BRIDGE REPLACEMENT<br>CITY OF HATTIESBURG                                                                 |      |                 |    |
| <b>sdw</b><br>Engineering Progress<br>301 Second Ave.   Hattiesburg, MS 39401   (p) 601.544.1821   (f) 601.544.0501   sd-w.com |      |                 |    |
| Drawn by: NMC                                                                                                                  |      | Checked by: NMC |    |
| Date: 02-19-2014                                                                                                               |      | Scale: AS NOTED |    |
| Drawing No.: 11204                                                                                                             |      | Sheet No. 03    |    |



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| SUMMARY OF QUANTITIES |                                                             |          |             |       |
|-----------------------|-------------------------------------------------------------|----------|-------------|-------|
| PAY ITEM NO           | PAY ITEM                                                    | UNIT     | PRELIMINARY | FINAL |
|                       |                                                             |          |             |       |
|                       | ROADWAY ITEMS                                               |          |             |       |
| 201-A                 | Clearing and Grubbing                                       | Lump Sum | Lump Sum    |       |
| 202-B                 | Removal of Asphalt, All Depths                              | Sq. Yd.  | 333         |       |
| 203-A                 | Unclassified Excavation, FM                                 | Cu. Yd.  | 760         |       |
| 203-E                 | Borrow Excavation, LVM, Class 9                             | Cu. Yd.  | 294         |       |
| 304-A                 | Granular Material, LVM, Class 6, Group "C"                  | Cu. Yd.  | 328         |       |
| 403-A                 | Hot Mix Asphalt, ST, 9.5 mm Mixture                         | Ton      | 28          |       |
| 403-A                 | Hot Mix Asphalt, ST, 12.5 mm Mixture                        | Ton      | 67          |       |
| 403-A                 | Hot Mix Asphalt, ST, 25 mm Mixture                          | Ton      | 76          |       |
| 601-B                 | Class "B" Structural Concrete, Minor Structures             | Cu. Yd.  | 0.87        |       |
| 602-A                 | Reinforcing Steel                                           | Lb.      | 60          |       |
| 603-CA                | 18" Reinforced Concrete Pipe, Class III                     | Lin. Ft. | 16          |       |
| 603-CB                | 18" Reinforced Concrete End Section                         | Each     | 1           |       |
| 603-CE                | 18" x 11" Concrete Arch Pipe, Class AIII                    | Lin. Ft. | 16          |       |
| 603-SB                | 18" Branch Connection To Box Wingwall                       | Each     | 1           |       |
| 603-SB                | 18"x11" Branch Connection To Box                            | Each     | 1           |       |
| 604-B                 | Gratings                                                    | Lb.      | 250         |       |
| 613-D                 | Adjustment of Manholes                                      | Each     | 1           |       |
| 617-A                 | Right of Way Markers (Type II)                              | Each     | 9           |       |
| 618-A                 | Maintenance of Traffic                                      | Lump Sum | Lump Sum    |       |
| 618-B                 | Additional Construction Signs                               | Sq. Ft.  | 0.0         |       |
| 620-A                 | Mobilization                                                | Lump Sum | Lump Sum    |       |
| 626-C                 | 6" Thermoplastic Edge Stripe, Continuous White, 60 mils     | Mile     | 0.024       |       |
| 626-E                 | 6" Thermoplastic Traffic Stripe, Continuous Yellow, 90 mils | Lin. Ft. | 250         |       |
| 627-D                 | Two-Way Yellow Reflective Raised Markers                    | Each     | 4           |       |
|                       |                                                             |          |             |       |
|                       |                                                             |          |             |       |
|                       | EROSION CONTROL ITEMS                                       |          |             |       |
| 213-A                 | Agricultural Limestone                                      | Ton      | 0.8         |       |
| 213-B                 | Commercial Fertilizer, 13-13-13                             | Ton      | 0.4         |       |
| 213-D                 | Ammonium Nitrate                                            | Ton      | 0.04        |       |
| 214-A                 | Seeding                                                     | Acre     | 0.4         |       |
| 215-A                 | Vegetative Materials for Mulch                              | Ton      | 0.8         |       |
| 216-A                 | Solid Sodding                                               | Sq. Yd.  | 200         |       |
| 234-A                 | Temporary Silt Fence                                        | Lin. Ft. | 1,000       |       |
| 237-A                 | Wattles, 20"                                                | Lin. Ft. | 200         |       |
| 815-B                 | Grouted Riprap                                              | Sq. Yd.  | 555         |       |
| 815-E                 | Geotextile Under Riprap, Type V, AOS 0.21-0.43              | Sq. Yd.  | 555         |       |
|                       |                                                             |          |             |       |
|                       | BOX BRIDGE ITEMS                                            |          |             |       |
| 804-B                 | Box Bridge Concrete, Class "BB"                             | Cu. Yd.  | 337.80      |       |
| 805-A                 | Reinforcement                                               | Lb.      | 60,610      |       |
|                       |                                                             |          |             |       |
|                       |                                                             |          |             |       |
|                       |                                                             |          |             |       |
|                       |                                                             |          |             |       |
|                       |                                                             |          |             |       |
|                       |                                                             |          |             |       |
|                       |                                                             |          |             |       |

**NOTES:** Temporary Silt Fence Includes 1000 Lin. Ft. Estimated to be Used at the Direction of the Engineer.  
Wattles Includes 200 Lin. Ft. Estimated to be Used at the Direction of the Engineer.  
Cementitious Material Exposure to Sulfates is Negligible.

|                                                                                                                                                             |      |                 |    |
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|                                                                                                                                                             |      |                 |    |
|                                                                                                                                                             |      |                 |    |
| NO.                                                                                                                                                         | DATE | DESCRIPTION     | BY |
| SUMMARY OF QUANTITIES SHEET                                                                                                                                 |      |                 |    |
| SOUTH 28th AVENUE<br>BRIDGE REPLACEMENT<br>CITY OF HATTIESBURG                                                                                              |      |                 |    |
| <div><div>sdw</div><div>Engineering Progress</div><div>301 Second Ave.   Hattiesburg, MS 39401   (p) 601.544.1821   (f) 601.544.0501   sd-w.com</div></div> |      |                 |    |
| Drawn by: NMC                                                                                                                                               |      | Checked by: NMC |    |
| Date: 02-19-2014                                                                                                                                            |      | Scale: AS NOTED |    |
| Drawing No.: 11204                                                                                                                                          |      | Sheet No. 04    |    |



## SUMMARY OF HYDRAULIC DESIGN DATA

[illegible]

\* HEADWATER ELEVATION VALUES SHOWN ON THESE PLANS ARE THEORETICAL AND MAY VARY FROM ACTUAL CONDITIONS.

## ESTIMATED ASPHALT AND GRANULAR MATERIAL SCHEDULE

| ESTIMATED ASPHALT AND GRANULAR MATERIAL SCHEDULE |                   |                          |         |                             |         |                            |         |
|--------------------------------------------------|-------------------|--------------------------|---------|-----------------------------|---------|----------------------------|---------|
| Area                                             | Granular Material | 4" - 25 mm Hot Mix Asph. |         | 3½" - 12.5 mm Hot Mix Asph. |         | 1½" - 9.5 mm Hot Mix Asph. |         |
|                                                  |                   | Cu. Yd.                  | Sq. Yd. | Ton                         | Sq. Yd. | Ton                        | Sq. Yd. |
|                                                  |                   |                          |         |                             |         |                            |         |
| Roadway                                          | 328               | 347.2                    | 76.4    | 347.2                       | 66.8    | 333.3                      | 27.5    |
| Intersections                                    |                   |                          |         |                             |         |                            |         |
| Ramps (0)                                        |                   |                          |         |                             |         |                            |         |
| Extra Area                                       |                   |                          |         |                             |         |                            |         |
|                                                  |                   |                          |         |                             |         |                            |         |
|                                                  |                   |                          |         |                             |         |                            |         |
|                                                  |                   |                          |         |                             |         |                            |         |
|                                                  |                   |                          |         |                             |         |                            |         |
| Total                                            | 328               | 347.2                    | 76.4    | 347.2                       | 66.8    | 333.3                      | 27.5    |

## BOX BRIDGE SCHEDULE

| BOX BRIDGE SCHEDULE |         |                 |            |                                                  |        |                     |        |       |      |      |      |                                                                              |
|---------------------|---------|-----------------|------------|--------------------------------------------------|--------|---------------------|--------|-------|------|------|------|------------------------------------------------------------------------------|
| SH. NO.             | STATION | LENGTH ALONG CL | SIZE       | STATE STANDARDS                                  | LENGTH | CLASS "BB" CONCRETE | REINF. | "T1"  | "T2" | "V1" | "V2" | REMARKS                                                                      |
| 06                  | 9+56.24 | 26.53           | Dbl 12'x6' | 7005,7136,7137,7138,7158,<br>7159,7160,7161,7162 | 101.00 | 337.80              | 60,610 | 1'-2" | 11½" | 9"   | 9"   | WINGS W/ 3:1 SLOPE; 15° LT FWD SKEW;<br>64° BEND; 1 15° WING & 1 NORMAL WING |
|                     |         |                 |            |                                                  |        |                     |        |       |      |      |      |                                                                              |
|                     |         |                 |            |                                                  |        |                     |        |       |      |      |      |                                                                              |
|                     |         |                 |            |                                                  |        |                     |        |       |      |      |      |                                                                              |
| UNITS               |         | FEET            | FEET       |                                                  | FEET   | CU. YD.             | LBS.   |       |      |      |      |                                                                              |

PORTLAND CEMENT EXPOSURE TO SOLUBLE SULFATES IS NEGLIGIBLE.

## PIPE SCHEDULE

[illegible]

NOTE: TOE WALLS ARE NOT REQUIRED ON THE UPSTREAM OR DOWNSTREAM ENDS OF ALL PIPES.

|                                                                                                                      |      |                             |    |
|----------------------------------------------------------------------------------------------------------------------|------|-----------------------------|----|
|                                                                                                                      |      |                             |    |
|                                                                                                                      |      |                             |    |
|                                                                                                                      |      |                             |    |
|                                                                                                                      |      |                             |    |
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|                                                                                                                      |      |                             |    |
|                                                                                                                      |      |                             |    |
| NO.                                                                                                                  | DATE | DESCRIPTION                 | BY |
| ESTIMATED QUANTITY SHEET                                                                                             |      |                             |    |
| SOUTH 28th AVENUE<br>BRIDGE REPLACEMENT<br>CITY OF HATTIESBURG                                                       |      |                             |    |
| <br><b>Engineering Progress</b> |      |                             |    |
| 301 Second Ave.   Hattiesburg, MS 39401   (p) 601.544.1821   (f) 601.544.0501   sd-w.com                             |      |                             |    |
| Drawn by: NMC                                                                                                        |      | Checked by: NMC             |    |
| Date: 02-19-2014                                                                                                     |      | Scale: AS NOTED             |    |
| Drawing No.: 11204                                                                                                   |      | Sheet No. <u>    05    </u> |    |



- UTILITY OWNERS
- Power — Mississippi Power Company, Hattiesburg, Mississippi
- Water — City of Hattiesburg, Hattiesburg, Mississippi [545-4540]
- Sewer — City of Hattiesburg, Hattiesburg, Mississippi [545-4540]
- Telephone — AT&T, Hattiesburg, Mississippi
- Gas — Willmut Gas Company, 301 S Main St. Hattiesburg, Mississippi [544-6001]

GENERAL NOTES

Existing Utilities Conflicting With Proposed Construction To Be Adjusted By Others In Accordance With Section II - 2 - 8 Of The S.O.P.

Elevations Based On MEAN SEA LEVEL Datum.

Elevations Referenced to Top of City of Hattiesburg Manhole # F-352, Located at the Intersection of Cambridge Drive and South 28th Avenue. Elev. 232.53

Drainage Areas Taken From USGS Topographic Maps.

HYDRAULIC DESIGN

< 25 Acres — Rational Method

> 25 Acres — "Flood Characteristics Of Mississippi Streams" 1991.

DESIGN DATA

Current ADT (2014) = 10,000 VPD

Design Speed = 45 MPH

SHRINKAGE FACTORS

Granular Material (Class 6, Group C) = 1.50

Unclassified Excavation = 1.50

Borrow Excavation = 1.50

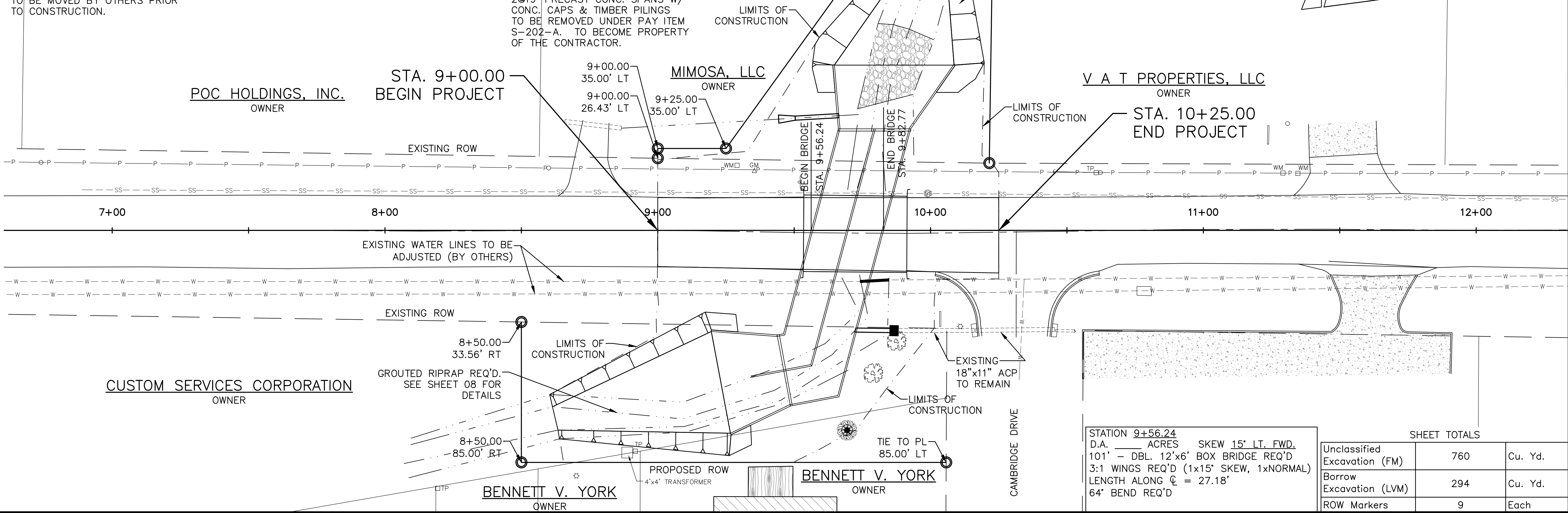
NOTES:

THE MANHOLE AT STA. 10+00 IS TO BE ADJUSTED BY THE CONTRACTOR. (PAY ITEM 613-D)

THE WATERLINES ON THE EAST SIDE OF THE EXISTING BRIDGE IS TO BE MOVED BY OTHERS PRIOR TO CONSTRUCTION.

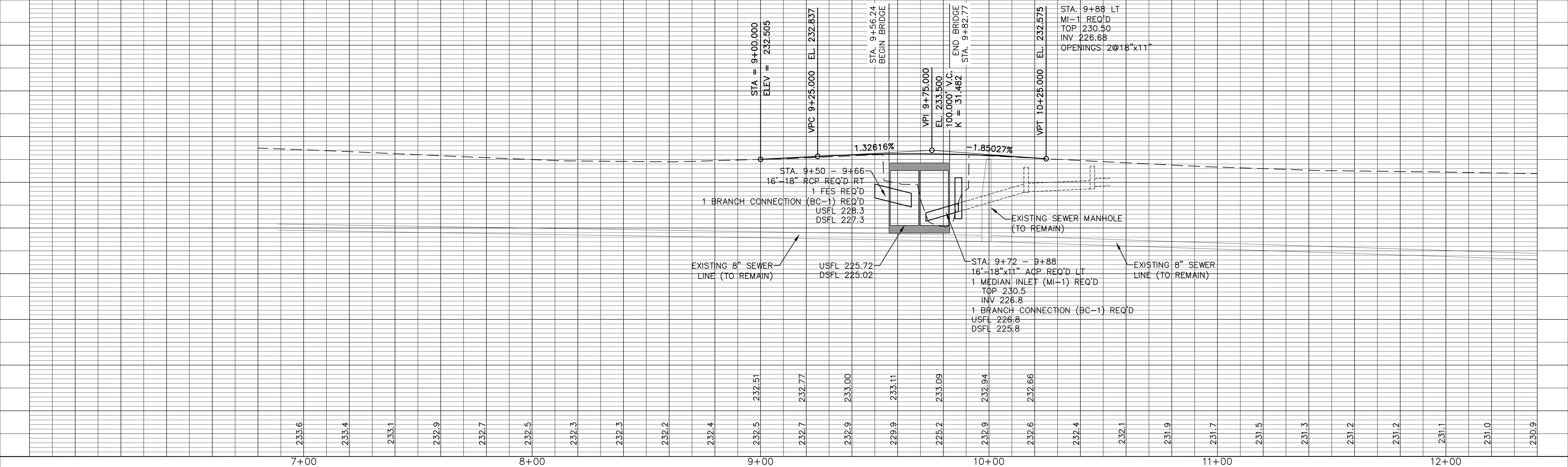
|      |                  |           |
|------|------------------|-----------|
| B.M. | ELEVATION        | 231.65    |
| 73.2 | NAIL IN 24" PINE |           |
| Ft.  | RT               | STA. 9+69 |

STA. 9+53  
EXISTING BRIDGE:  
2019' PRECAST CONC. SPANS W/  
CONC. CAPS & TIMBER PILINGS  
TO BE REMOVED UNDER PAY ITEM  
S-202-A. TO BECOME PROPERTY  
OF THE CONTRACTOR.



|                                        |                   |  |
|----------------------------------------|-------------------|--|
| STATION 9+56.24                        |                   |  |
| D.A. — ACRES                           | SKEW 15' LT. FWD. |  |
| 101' — DBL. 12'x6' BOX BRIDGE REQ'D    |                   |  |
| 3:1 WINGS REQ'D (1x15' SKEW, 1xNORMAL) |                   |  |
| LENGTH ALONG C = 27.18'                |                   |  |
| 64' BEND REQ'D                         |                   |  |

| SHEET TOTALS                 |     |         |
|------------------------------|-----|---------|
| Unclassified Excavation (FM) | 760 | Cu. Yd. |
| Borrow Excavation (LVM)      | 294 | Cu. Yd. |
| ROW Markers                  | 9   | Each    |

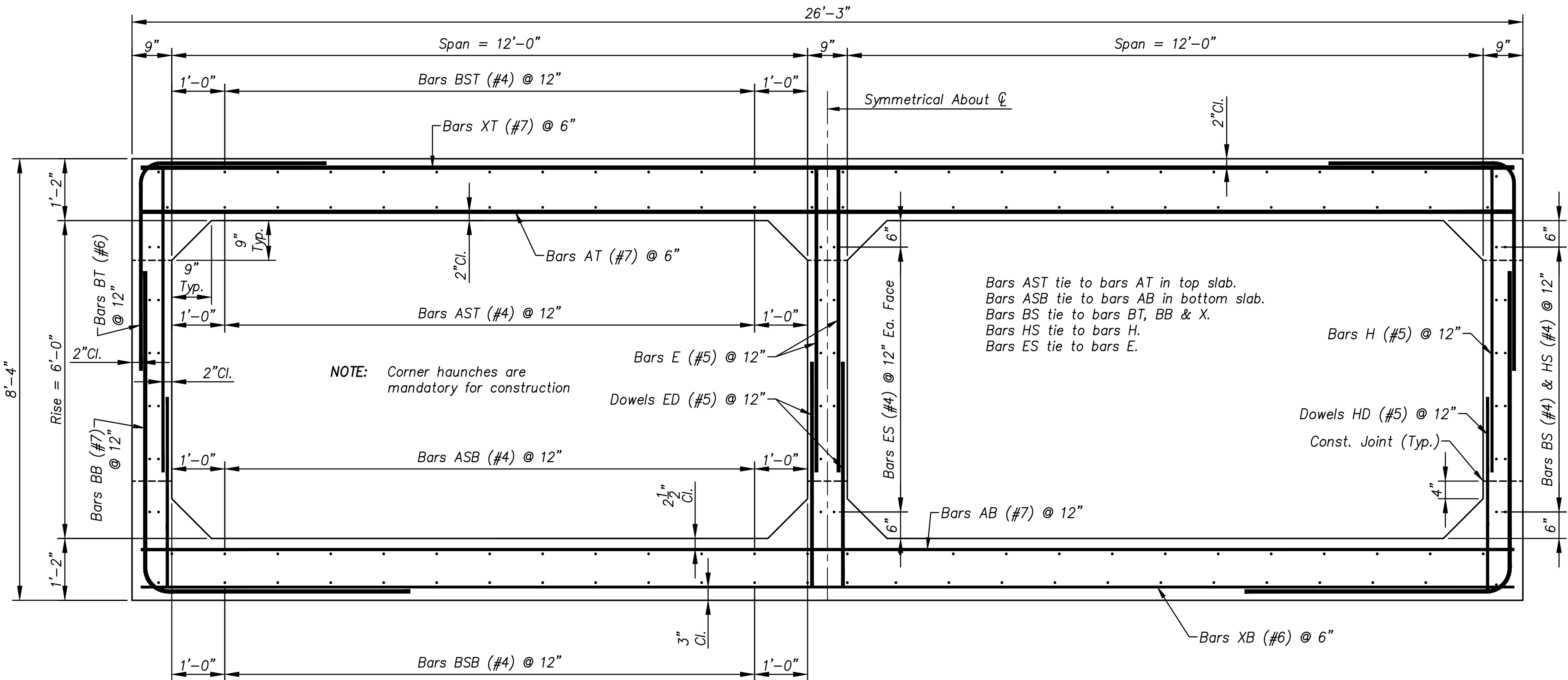


|      |          |    |             |                                                                                                                                                                                                          |                 |
|------|----------|----|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
|      |          |    | DRAWN BY:   | <br>Engineering Progress<br>301 Second Ave., Hattiesburg, MS 39401   (p) 601.544.1821   (f) 601.544.0501   sd-w.com | DRAWING NO.     |
|      |          |    | DATE:       |                                                                                                                                                                                                          | SHEET <u>06</u> |
|      |          |    | CHECKED BY: |                                                                                                                                                                                                          |                 |
| DATE | REVISION | BY | SCALE:      |                                                                                                                                                                                                          |                 |

301 Second Ave. | Hattiesburg, MS 39401 | (p) 601.544.1821 | (f) 601.544.0501 | sd-w.com

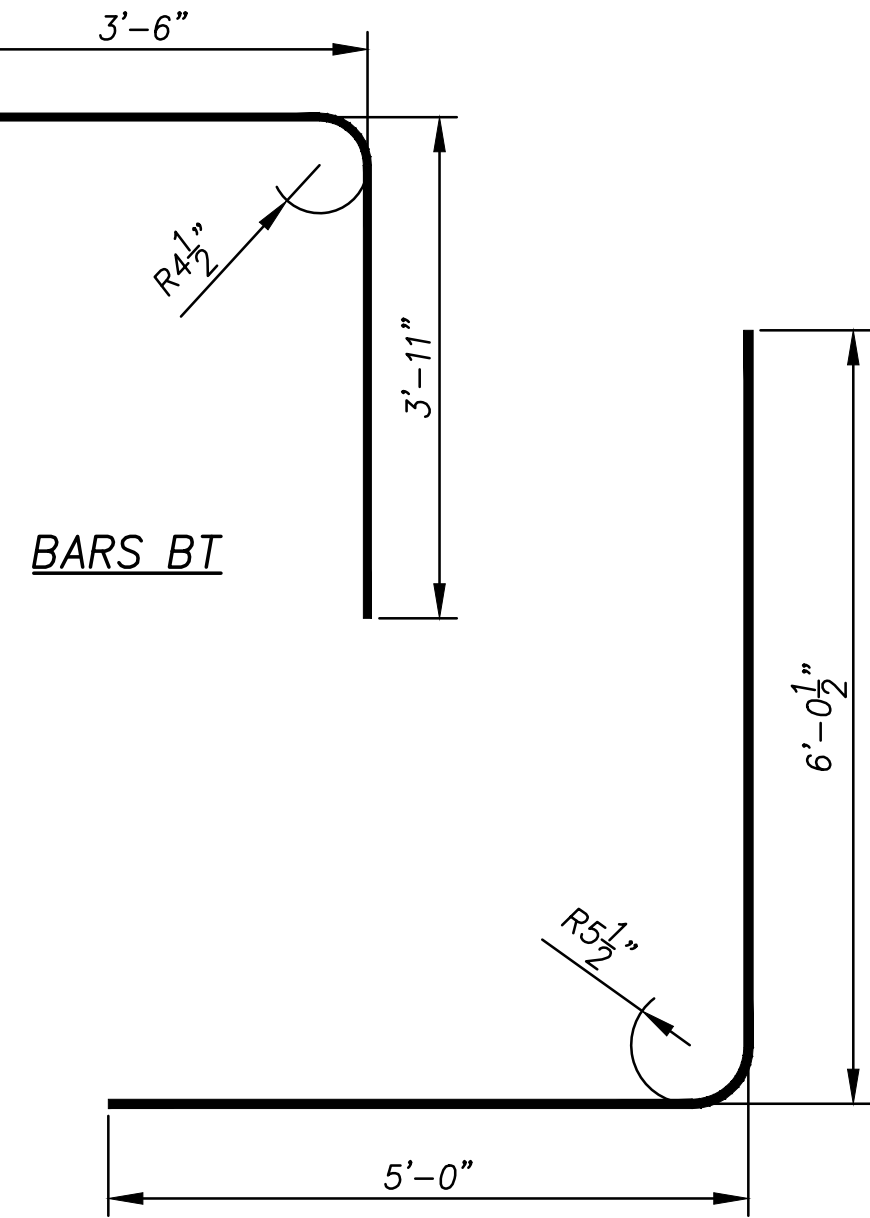


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CROSS SECTION

| BAR LENGTHS |         |
|-------------|---------|
| MARK        | LENGTH  |
| AB          | 25'-11" |
| AT          | 25'-11" |
| E           | 5'-9"   |
| ED          | 4'-3"   |
| H           | 5'-9"   |
| HD          | 4'-3"   |
| XB          | 25'-11" |
| XT          | 25'-11" |



BAR BENDING DETAILS

NOTE: For reinforcing required in parapet & wingwalls to be placed prior to barrel construction, see basic drawings IWD-3W & IWD-6-3W.

**GENERAL NOTES:**  
Specifications: Mississippi Standard Specifications for Road and Bridge Construction, 2017 Edition.  
No change of plans will be permitted expect by written approval of the Engineer. Minor changes in detail of design or construction procedure may be authorized by the Engineer's Project Representative provided such changes will not be cause for contract price adjustment.  
All concrete shall be class "B".  
Expansion joint material shall be bituminous fiber type unless otherwise noted.  
All exposed edges shall be chamfered 3/4".  
Bar bending details shall be in accordance with Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI 315R-94).  
Reinforcement order lists and required placing plans shall be furnished in accordance with section 805 of the Mississippi Standard Specifications.  
Partial submittals are not acceptable.  
Horizontal construction joints may be placed only at the locations shown and concrete shall be allowed to set a minimum of 2 hours before continuing pour.  
Reinforcing steel shall be placed in accordance with cross sections and shall be adequately supported from the forms.  
All bars shall be accurately spaced and securely wired at each intersection before placing concrete. of the reinforcing steel.  
All dimensions shall be verified in the field prior to fabrication.  
Finish concrete per section 804.03.19.6.2 of the specifications.  
Reinforcing steel shall be ASTM A615, grade 60 unless otherwise noted.  
Work for which no pay item is provided in the proposal will not be paid for directly and compensation therefor will be included in the prices and payments for bid items.  
Concrete in collars shall be allowed to set a minimum of 24 hours before continuing pour.

| REBAR TABLE |             |
|-------------|-------------|
| SIZE        | SPLICE (FT) |
| #4          | 1'-5"       |
| #5          | 1'-9"       |
| #6          | 2'-1"       |
| #7          | 2'-8"       |
| #8          | 3'-5"       |
| #9          | 4'-4"       |
| #10         | 5'-6"       |
| #11         | 6'-9"       |

**SPECIAL PROVISIONS REQUIRED:**  
Concrete bridges and structures . . . . . No. 907-804

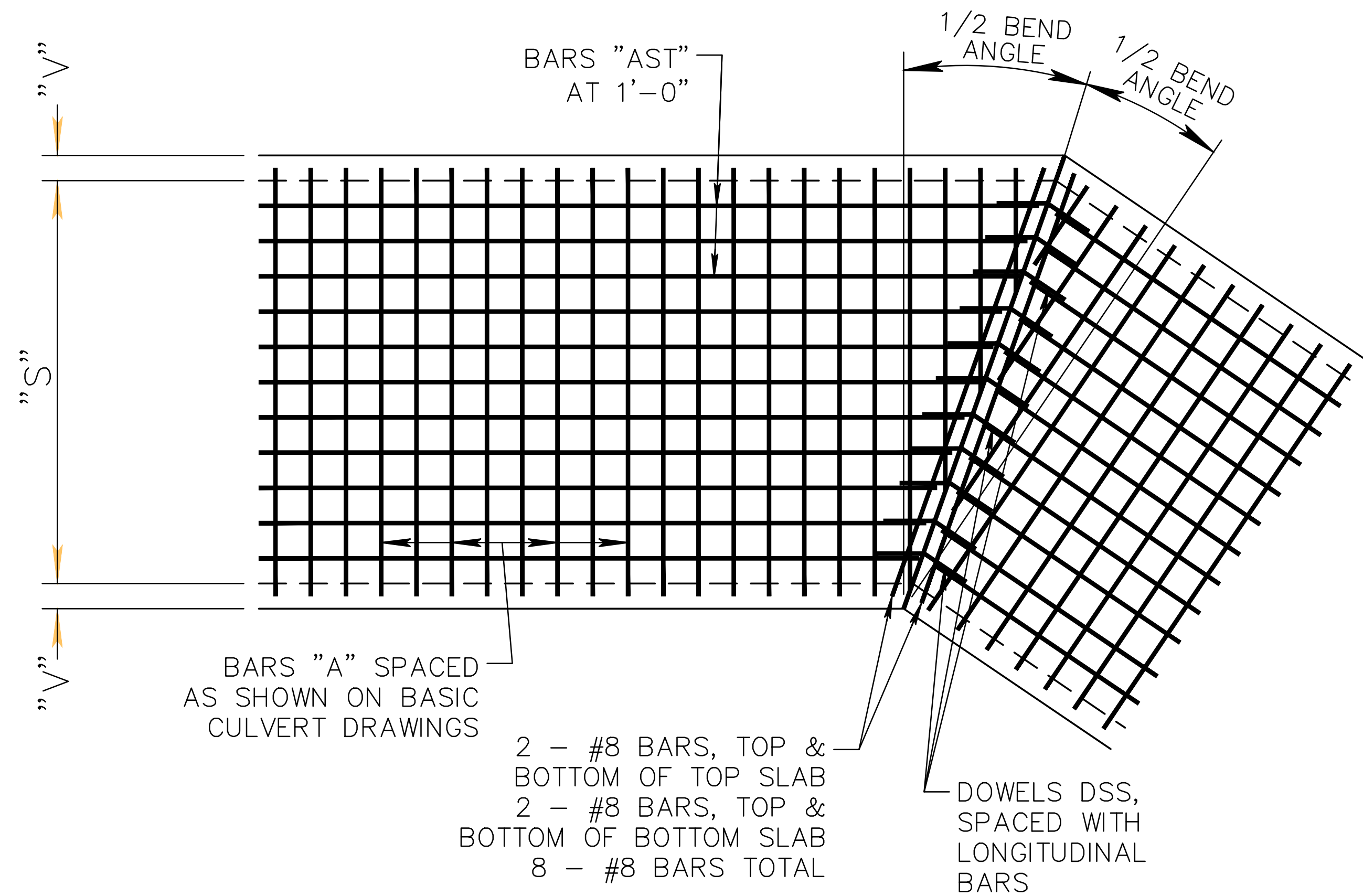
**DESIGN DATA:**  
Specifications. . . . . A.A.S.H.T.O., 2010 LRFD  
Loading. . . . . HL-93  
Box bridge concrete. . . . . Class "B" (3,500 p.s.i.)  
Equivalent fluid pressure. . . 45 lbs. per cu. ft.

| EST. QUANTITIES PER LIN. FT. BARREL |                       |
|-------------------------------------|-----------------------|
| CONCRETE CU. YD.                    | REINFORCING STEEL LBS |
| 2.8519                              | 544.030               |

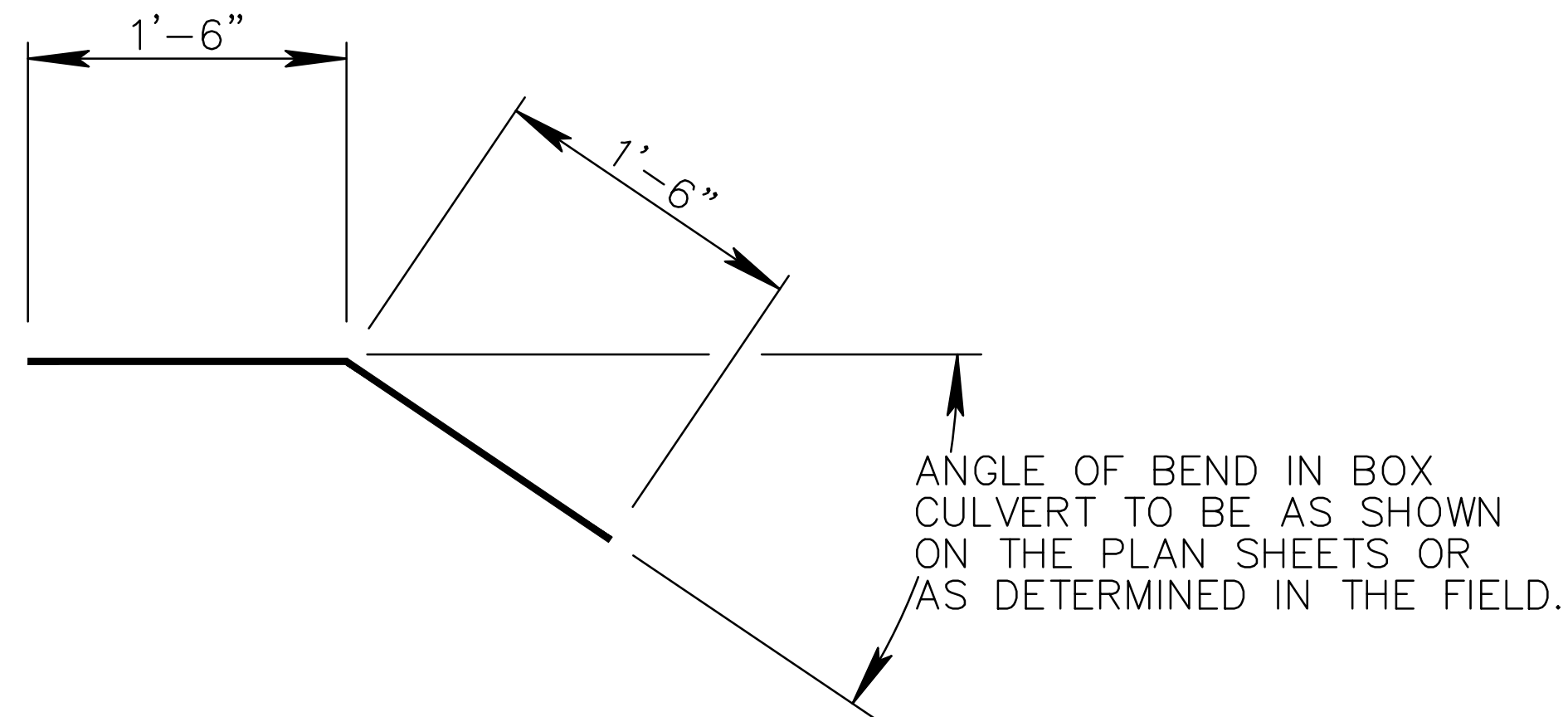
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|                                                                                                                                |      |                 |    |
| NO.                                                                                                                            | DATE | DESCRIPTION     | BY |
| BOX BRIDGE DETAILS                                                                                                             |      |                 |    |
| SOUTH 28TH AVENUE<br>BRIDGE REPLACEMENT<br>CITY OF HATTIESBURG                                                                 |      |                 |    |
| <b>sdw</b><br>Engineering Progress<br>301 Second Ave.   Hattiesburg, MS 39401   (p) 601.544.1821   (f) 601.544.0501   sd-w.com |      |                 |    |
| Drawn by: NMC                                                                                                                  |      | Checked by: NMC |    |
| Date: 2-12-2018                                                                                                                |      | Scale: AS NOTED |    |
| Drawing No.: 11204                                                                                                             |      | Sheet No. 07    |    |



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PLAN OF BARREL  
SHOWING CONCRETE DIMENSIONS  
AND REINFORCING IN TOP SLAB.  
(BOTTOM SLAB IS SIMILAR)



DETAIL OF DOWELS DSS - #4

| SHEET NO. | STATION | SIZE        | ANGLE OF BEND | *NO. OF DOWELS DSS-#4 | NO. & LENGTH OF #8 BARS | EST. REINF. STEEL (LBS) |
|-----------|---------|-------------|---------------|-----------------------|-------------------------|-------------------------|
| 6         | 9+56.24 | DBL. 12'x6' | 64°           | 76                    | 8 x 25'-11"             | 706                     |
|           |         |             |               |                       |                         |                         |
|           |         |             |               |                       |                         |                         |
|           |         |             |               |                       |                         |                         |
|           |         |             |               |                       |                         |                         |
|           |         |             |               |                       |                         |                         |

- \* SINGLE CELL  
NO. OF DOWELS DSS = NO. OF BARS AST + BARS ASB + BARS BS
- \* DOUBLE CELL  
NO. OF DOWELS DSS = NO. OF BARS AST + BARS ASB + BARS BS + BARS ES

GENERAL NOTES

- THIS DRAWING IS SUPPLEMENTARY TO THE BASIC CULVERT DRAWINGS OF THE M.D.O.T. STANDARD DRAWING SERIES IBS AND IBD.
- THE ANGLE OF BEND IN THE BOX CULVERT SHALL BE CHECKED IN THE FIELD BEFORE ORDERING REINFORCING STEEL
- THIS DRAWING IS FOR A SINGLE CELL CULVERT. DOUBLE CELL STRUCTURES ARE SIMILAR.

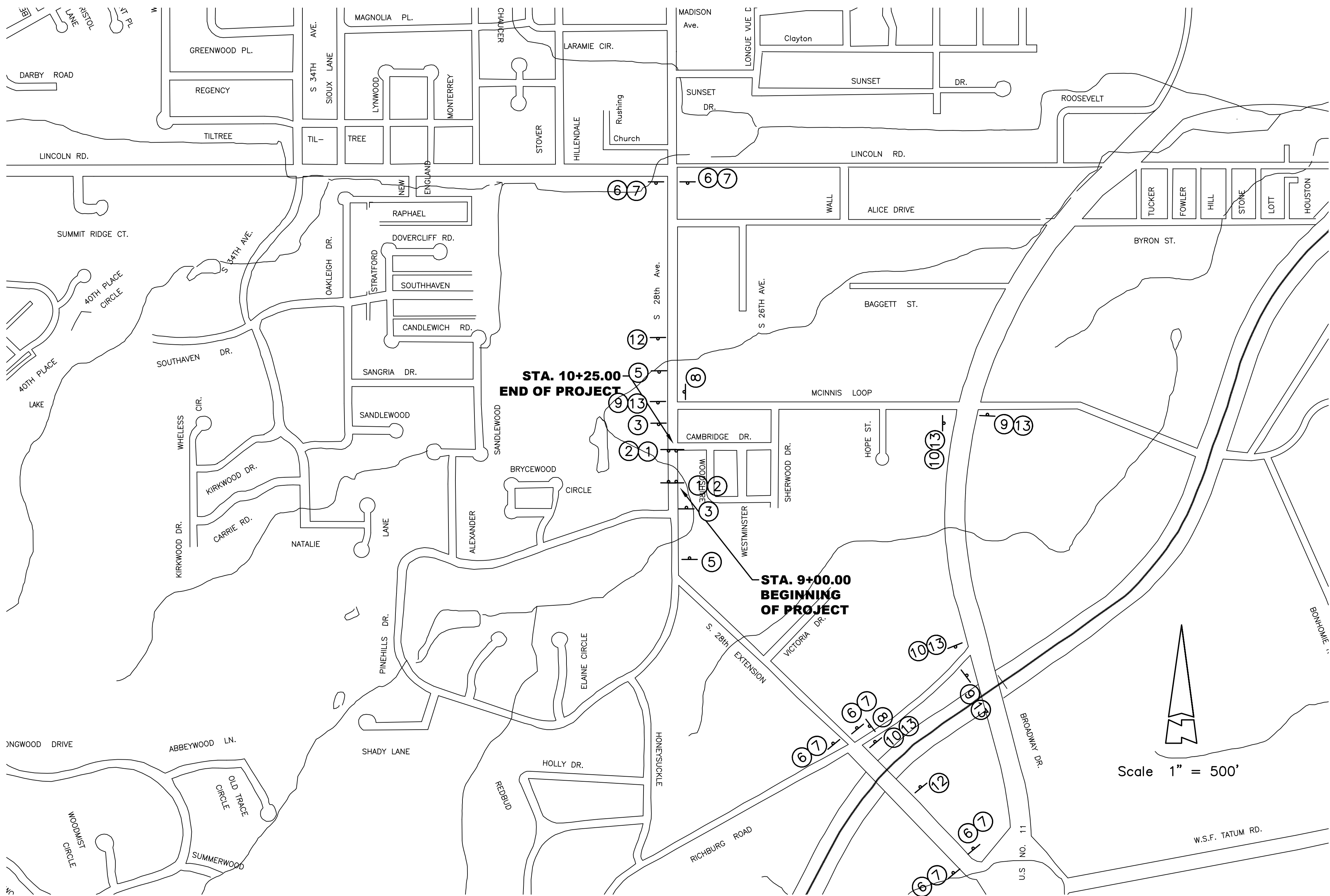
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|                                                                                                                                |      |                 |    |
| NO.                                                                                                                            | DATE | DESCRIPTION     | BY |
| BOX BEND DETAIL                                                                                                                |      |                 |    |
| SOUTH 28th AVENUE<br>BRIDGE REPLACEMENT<br>CITY OF HATTIESBURG                                                                 |      |                 |    |
| <b>sdw</b><br>Engineering Progress<br>301 Second Ave.   Hattiesburg, MS 39401   (p) 601.544.1821   (f) 601.544.0501   sd-w.com |      |                 |    |
| Drawn by: NMC                                                                                                                  |      | Checked by: NMC |    |
| Date: 02-19-2014                                                                                                               |      | Scale: AS NOTED |    |
| Drawing No.: 11204                                                                                                             |      | Sheet No. 08    |    |



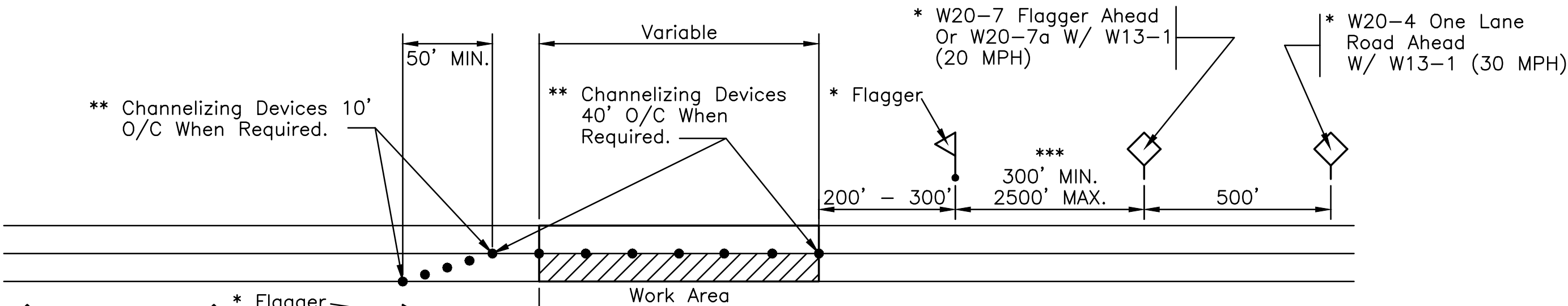




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TRAFFIC CONTROL PLAN



\* W20-4 One Lane Road Ahead W/ W13-1 (30 MPH)

\* W20-7 Flagger Ahead Or W20-7a W/ W13-1 (20 MPH)

**ONE LANE CLOSURE DETAIL**  
(All Signs Shall Be Mounted On Portable Stands)

\* To Move With Work Operation  
\*\* Channelizing Devices Shall Be A Minimum Height Of 24"  
\*\*\* 500' For Stationary Work Sites.

**TRAFFIC SIGNS**

EXISTING TRAFFIC SIGNS SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL PROJECT IS COMPLETE AND PERMANENT SIGNS ARE INSTALLED UNLESS THE EXISTING SIGNS INTERFERE WITH AND/OR CONFLICT WITH CONSTRUCTION SIGNS. IF ANY EXISTING TRAFFIC SIGNS WITHIN THE PROJECT LIMITS ARE IN CONFLICT WITH THE PROJECT CONSTRUCTION, THEY SHALL BE RELOCATED SO AS TO SERVE THEIR ORIGINAL PURPOSE.

\* SUPPLEMENTAL PLATE TO HAVE MINIMUM 4" HIGH LETTERS - BLACK ON ORANGE

| SIGN SCHEDULE |             |                                 |
|---------------|-------------|---------------------------------|
| SIGN          | DESCRIPTION |                                 |
| 1             | TYPE III    | BARRICADE ACROSS ENTIRE ROADWAY |
| 2             | R11-2a      | ROAD CLOSED                     |
| 3             | W20-3       | ROAD CLOSED 200 FT              |
| 4             | W20-3       | ROAD CLOSED 400 FT              |
| 5             | W20-3       | ROAD CLOSED 600 FT              |
| 6             | R11-4       | ROAD CLOSED TO THRU TRAFFIC     |
| 7             | TYPE III    | BARRICADE (6' WIDE) (WING TYPE) |
| 8             | M4-8a       | END DETOUR                      |
| 9             | M4-9L       | SMALL DETOUR ARROW SIGN         |
| 10            | M4-9R       | SMALL DETOUR ARROW SIGN         |
| 11            | W20-1       | ROAD WORK AHEAD SIGN            |
| 12            | W20-2       | ADVANCE DETOUR SIGN 500 FT      |
| 13            |             | SUPPLEMENTAL ROAD NAME PLATE*   |
|               |             |                                 |
|               |             |                                 |
|               |             |                                 |

**CONSTRUCTION NOTES:**

1. AFTER ALL CONSTRUCTION IS COMPLETE BUT PRIOR TO STRIPING, THE ENTIRE PROJECT SHALL BE OPENED TO ALL TRAFFIC.
2. WHENEVER PAVEMENT CONSTRUCTION HAS PROGRESSED SUFFICIENTLY TO PERMIT TRAFFIC MOVEMENT THAT IS UNRESTRICTED BY CHANNELIZING OR OTHER TRAFFIC CONTROL METHODS, TEMPORARY RAISED PAVEMENT MARKERS SHALL BE INSTALLED PER S-619.08. THE CONTRACTOR SHALL REPLACE RAISED PAVEMENT MARKERS AS NECESSARY. IF MORE THAN ONE BITUMINOUS LIFT IS REQUIRED, THE TEMPORARY RAISED PAVEMENT MARKERS SHALL BE INSTALLED AND MAINTAINED IN A LIKE MANNER AFTER EACH LIFT. THE TEMPORARY RAISED PAVEMENT MARKERS SHALL BE INSTALLED PRIOR TO THE APPLICATION OF THE SEAL COAT. THIS WORK IS NOT A SEPARATE PAY ITEM BUT WILL BE CONSIDERED INCLUDED IN THE LUMP SUM PAYMENT FOR PAY ITEM NO. S-618-A, 'MAINTENANCE OF TRAFFIC'.
3. PRIOR TO OPENING THE PROJECT TO TRAFFIC, R4-1 'DO NOT PASS' OR R4-2 'PASS WITH CARE' SIGNS SHALL BE INSTALLED ON THE RIGHT HAND SIDE OF THE ROAD AT THE B.O.P. AND THE E.O.P. AND THE BEGINNING AND THE END OF THE NO-PASSING ZONES AND W14-3 SIGNS ON THE LEFT HAND SIDE OF THE ROADWAY IN ACCORDANCE WITH THE PERMANENT STRIPING SCHEDULE IN THE PLANS. THIS WORK IS NOT A SEPARATE PAY ITEM BUT WILL BE CONSIDERED INCLUDED IN THE LUMP SUM PAYMENT FOR PAY ITEM NO. S-618-A, 'MAINTENANCE OF TRAFFIC'.

**DURING STRIPING OPERATIONS:**

4. A SHADOW VEHICLE SHALL BE POSITIONED APPROXIMATELY 300 FEET IN FRONT OF AND BEHIND PAINTING OPERATIONS.
5. THE SHADOW VEHICLE SHALL CARRY A SIGN 'ROADWAY STRIPING AHEAD, BOTTOM OF SIGN SHALL BE A MINIMUM OF SIX (6) FEET ABOVE PAVEMENT.
6. A FLASHING YELLOW LIGHT SHALL BE INSTALLED ABOVE TOP OF WARNING SIGNS.
7. A FLASHING YELLOW LIGHT SHALL BE INSTALLED ON ALL VEHICLES USED IN THE MARKING OPERATIONS.

**GENERAL NOTES:**

1. CONTRACTOR SHALL INSTALL TRAFFIC CONTROL DEVICES SUCH AS CONES, DRUMS, FLASHERS, BARRICADES, SIGNS, ETC., TO SAFELY CHANNEL OR DIRECT TRAFFIC. WHEN NECESSARY, FLAGGERS SHALL BE USED IN CONJUNCTION WITH TRAFFIC CONTROL DEVICES (FLAGGER AHEAD SIGN REQUIRED IN ADVANCE OF FLAGGERS EXCEPT DURING BRIEF PERIODS OR EMERGENCY SITUATIONS.)
2. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED WHENEVER NECESSARY, REMAIN IN PLACE ONLY AS LONG AS THEY ARE NEEDED, AND REMOVED IMMEDIATELY THEREAFTER.
3. PAY FOR INSTALLATION, MAINTENANCE AND REMOVAL OF TRAFFIC CONTROL DEVICES WILL BE MADE UNDER PAY ITEM NOS. S-618-A AND S-618-B.
4. TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES', LATEST EDITION.
5. THESE ARE MINIMUM REQUIREMENTS AND IN NO WAY RELIEVE THE CONTRACTOR OF HIS OBLIGATION TO MAINTAIN TRAFFIC IN A SAFE MANNER.
6. SEE STANDARD DRAWINGS 259 AND SA-TSP-1 FOR CORRECT PLACEMENT AND INSTALLATION OF BARRICADES AND SIGNS.
7. CONTRACTOR SHALL INSTALL ADVANCE WARNING SIGNS SUCH AS WATCH FOR TRUCKS, TRUCKS TURNING, TRUCKS CROSSING, ETC., AND PLACE FLAGGERS AS DIRECTED BY THE COUNTY ENGINEER ALONG PUBLIC ROADS ON EACH SIDE OF BORROW PIT ENTRANCE OR CROSSING OF PUBLIC ROADS.
8. SEE SPECIAL PROVISION NO. 901-S-618-1 FOR ADDITIONAL CONTRACT REQUIREMENTS.

|                                                                                                                                                       |      |                 |    |
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| NO.                                                                                                                                                   | DATE | DESCRIPTION     | BY |
| TRAFFIC CONTROL PLAN                                                                                                                                  |      |                 |    |
| SOUTH 28TH AVENUE<br>BRIDGE REPLACEMENT<br>CITY OF HATTIESBURG                                                                                        |      |                 |    |
|  <b>SHOWS, DEARMAN &amp; WAITS, INC.</b><br>CONSULTING ENGINEERS |      |                 |    |
| HATTIESBURG, MISSISSIPPI, 39403-1711<br>201 SECOND AVENUE<br>HATTIESBURG, MISSISSIPPI, 39401<br>P: (601) 544-1821<br>F: (601) 544-0501                |      |                 |    |
| Drawn by: NMC                                                                                                                                         |      | Checked by: NMC |    |
| Date: 1-28-14                                                                                                                                         |      | Scale: AS NOTED |    |
| Drawing No.: 11204                                                                                                                                    |      | Sheet No.: 09   |    |



| VEGETATION SCHEDULE |  |
|---------------------|--|
|---------------------|--|

| EROSION CONTROL ITEMS           |                                   | SEASONAL APPLICATIONS - DATES & RATES |                        |                      |                            | REQUIREMENTS                                                                                          |
|---------------------------------|-----------------------------------|---------------------------------------|------------------------|----------------------|----------------------------|-------------------------------------------------------------------------------------------------------|
|                                 |                                   | SPRING & SUMMER                       |                        | FALL & WINTER        |                            |                                                                                                       |
| PAY ITEM NO.                    | ITEMS                             | RATES                                 | DATES                  | RATES                | DATES                      |                                                                                                       |
| 211-B001                        | TOPSOIL FOR SLOPE TREATMENT (LVM) | 4" THICK                              | MARCH 1 TO SEPTEMBER 1 | 4" THINK             | SEPTEMBER 1 TO MARCH 1     | TOPSOIL REQUIRED ON SLOPES DETERMINED BY THE ENGINEER DURING CONSTRUCTION                             |
| 212-B001                        | STANDARD GROUND PREPARATION       | PER SQ. FT.                           | MARCH 1 TO SEPTEMBER 1 | PER SQ. FT.          | SEPTEMBER 1 TO MARCH 1     | GROUND PREPARATION REQUIRED ON AREAS TO RECEIVE SOLID SODDING OR SEEDING, AS APPLICABLE               |
| 907-213-A001                    | AGRICULTURAL LIMESTONE            | 3 TONS / ACRE                         | MARCH 1 TO SEPTEMBER 1 | 3 TONS / ACRE        | SEPTEMBER 1 TO MARCH 1     | LIMESTONE SHALL BE MECHANICALLY SPREAD UNIFORMLY AND INCORPORATED INTO THE SOIL PRIOR TO PLANTING     |
| 213-B001                        | COMBINATION FERTILIZER (13-13-13) | 1000 LBS / ACRE                       | MARCH 1 TO SEPTEMBER 1 | 1000 LBS / ACRE      | SEPTEMBER 1 TO MARCH 1     | FERTILIZER SHALL BE MECHANICALLY SPREAD UNIFORMLY AND INCORPORATED INTO THE SOIL PRIOR TO PLANTING    |
| 213-C001                        | SUPER PHOSPHATE                   | 0.5 TON / ACRE (EST)                  | MARCH 1 TO SEPTEMBER 1 |                      |                            | SUPER PHOSPHATE (FOR BID ITEM PURPOSES)                                                               |
| 214-A002                        | SEEDING (BERMUDA GRASS)           | 20 LBS / ACRE                         | MARCH 1 TO SEPTEMBER 1 | 20 LBS / ACRE        | SEPTEMBER 1 TO MARCH 1     | SEED REQUIRED ON DISTURBED AREAS. UNHULLED SEED MAY BE REQUIRED DURING THE DORMANT SEASON AS DIRECTED |
| 214-A003                        | SEEDING (TALL FESCUE)             |                                       |                        | 15 LBS / ACRE        | AUGUST 15 TO MARCH 15      | SEED REQUIRED IN DISTURBED AREAS                                                                      |
| 214-A004                        | SEEDING (CRIMSON CLOVER)          |                                       |                        | 20 LBS / ACRE        | AUGUST 15 TO MARCH 15      | SEED REQUIRED ON DISTURBED AREA                                                                       |
|                                 |                                   |                                       |                        |                      |                            |                                                                                                       |
| 215-A001                        | VEGETATIVE MATERIAL FOR MULCH     | 2 TONS / ACRE (EST)                   | MARCH 1 TO SEPTEMBER 1 | 2 TONS / ACRE (EST)  | SEPTEMBER 1 TO MARCH 1     | THE ENGINEER WILL DESIGNATE THE RATES OF APPLICABLE (SEE SUBSECTION 215-03.3)                         |
| 216-A001                        | SOLID SODDING                     | PER SQ. YD.                           | MARCH 1 TO SEPTEMBER 1 | PER SQ. YD.          | SEPTEMBER 1 TO MARCH 1     | SOLID SOD REQUIRED ON AREAS SPECIFIED IN THE CONTRACT OR BY THE ENGINEER                              |
| 219-A001                        | WATERING                          | 20 GAL / S.Y. (EST)                   | MARCH 1 TO SEPTEMBER 1 | 20 GAL. / S.Y. (EST) | SEPTEMBER 1 TO MARCH 1     | TO BE USED AS DIRECTED IN THE PLANTING AND ESTABLISHING OF SOLID SOD                                  |
| 220-A001                        | INSECT PEST CONTROL               | PER ACRE                              |                        | PER ACRE             |                            | SEE SECTION 220                                                                                       |
|                                 |                                   |                                       |                        |                      |                            |                                                                                                       |
| TEMPORARY EROSION CONTROL ITEMS |                                   |                                       |                        |                      |                            |                                                                                                       |
|                                 |                                   |                                       |                        |                      |                            |                                                                                                       |
| 212-A001                        | LIGHT GROUND PREPARATION          | PER SQ. YD.                           |                        | PER SQ. YD.          |                            | APPROXIMATELY HALF SQ.YD.. STANDARD GROUND PREPARATION                                                |
| 213-B001                        | COMBINATION FERTILIZER (13-13-13) | 0.25 TONS/ ACRE                       |                        | 0.25 TONS/ ACRE      |                            | QUANTITY BASED ON LIGHT GROUND PREPARATION                                                            |
| 214-A013                        | SEEDING (BROWN TOP MILLET)        | 20 LBS / ACRE                         | APRIL 1 TO AUGUST 31   |                      |                            | QUANTITY BASED ON LIGHT GROUND PREPARATION                                                            |
| 214-A017                        | SEEDING (RYE GRASS)               |                                       |                        | 25 LBS / ACRE        | SEPTEMBER 1 TO MARCH 31    | QUANTITY BASED ON LIGHT GROUND PREPARATION                                                            |
| 214-A015                        | SEEDING (OATS)                    |                                       |                        | 90 LBS / ACRE        | SEPTEMBER 1 TO DECEMBER 15 | QUANTITY BASED ON LIGHT GROUND PREPARATION                                                            |
| 215-A001                        | VEGETATIVE MATERIAL FOR MULCH     | 1 TON / ACRE (EST)                    |                        | 1 TON / ACRE (EST)   |                            | QUANTITY BASED ON LIGHT GROUND PREPARATION                                                            |
|                                 |                                   |                                       |                        |                      |                            |                                                                                                       |

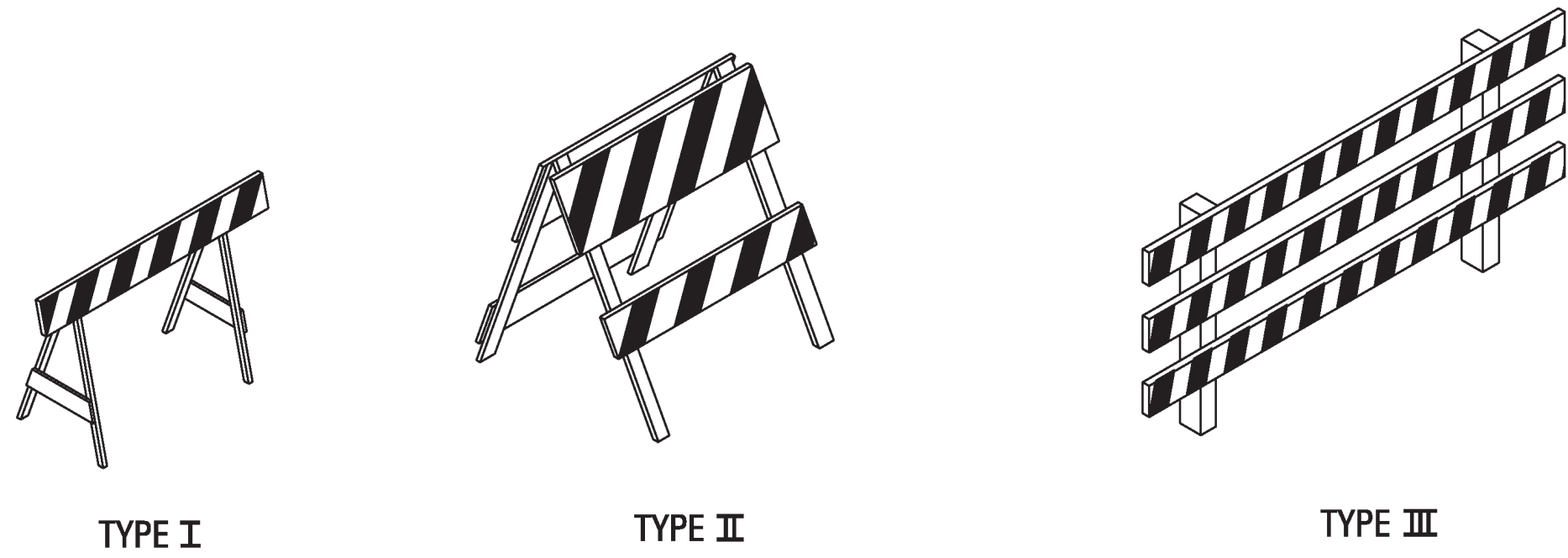
- ① ALL AREAS THAT HAVE BEEN VEGETATED, UNDER THIS CONTRACT, FOR AT LEAST (60) SIXTY DAYS, SHALL RECEIVE ADDITIONAL APPLICATION(S) OF FERTILIZER(S) OF THE TYPE(S) AND RATE(S) OF APPLICATION AS DETERMINED BY SOIL TEST OR AS DIRECTED DURING THE GROWING SEASONS THE CONTRACT IS IN FORCE. GROUND PREPARATION WILL NOT BE REQUIRED FOR THE ADDITIONAL APPLICATIONS.
- ② PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 100% OF THE ACREAGE WILL BE SEEDED.
- ③ PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 50% OF THE ACREAGE WILL BE SEEDED.
- ④ QUANTITY ESTIMATED ON THE BASIS THAT 50% OF THE ACREAGE VEGETATED MAY REQUIRED TREATMENT.
- ⑤ THIS ITEM MAY BE OMITTED ON AREAS SELECTED BY THE ENGINEER.
- ⑥ BAHIA GRASS WILL NOT BE PERMITTED AS A MULCH MATERIAL.
- ⑦ PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 75% OF THE ACREAGE SEEDED MAY REQUIRE TOPSOIL.

### TEMPORARY EROSION CONTROL ITEMS REQUIRED FOR DETOURS

| <u>ITEM</u>                       | <u>RATE</u>  | <u>SEASONAL LIMITATIONS</u> |
|-----------------------------------|--------------|-----------------------------|
| STANDARD GROUND PREPARATION       | ---          | ---                         |
| COMBINATION FERTILIZER (13-13-13) | 500 LBS/ACRE | ---                         |
| SEEDING (BERMUDA GRASS)           | 10 LBS/ACRE  | ---                         |
| SEEDING (TALL FESCUE)             | 20 LBS/ACRE  | AUGUST 15 TO MARCH 15       |
| VEGETATIVE MATERIAL FOR MULCH     | 2 LBS/ACRE   | ---                         |

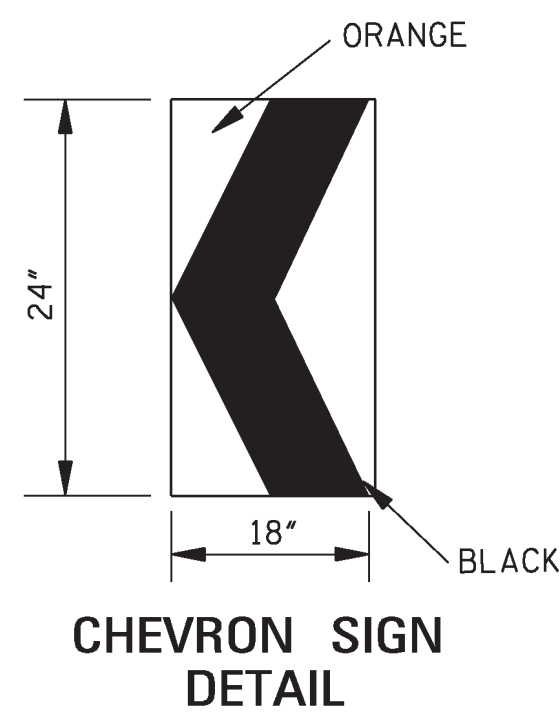
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|                                                                                                               |      |                     |    |
| NO.                                                                                                           | DATE | DESCRIPTION         | BY |
| VEGETATION SCHEDULE                                                                                           |      |                     |    |
| SOUTH 28TH AVENUE<br>BRIDGE REPLACEMENT<br>CITY OF HATTIESBURG                                                |      |                     |    |
| <br>Engineering Progress |      |                     |    |
| 301 Second Ave.,   Hattiesburg, MS 39401   (p) 601.544.1821   (f) 601.544.0501   sd-w.com                     |      |                     |    |
| Drawn by: RES                                                                                                 |      | Checked by: NMC     |    |
| Date: 2-28-2014                                                                                               |      | Scale: NOT TO SCALE |    |
| Drawing No.: 11204                                                                                            |      | Sheet No. 11        |    |





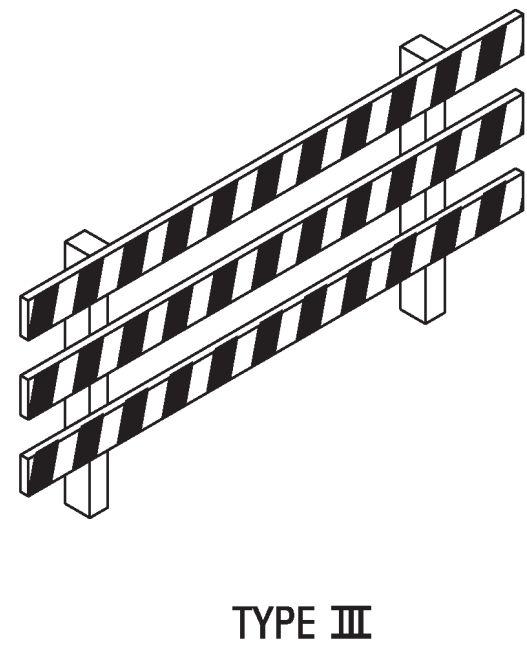
### STANDARD BARRICADES

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.

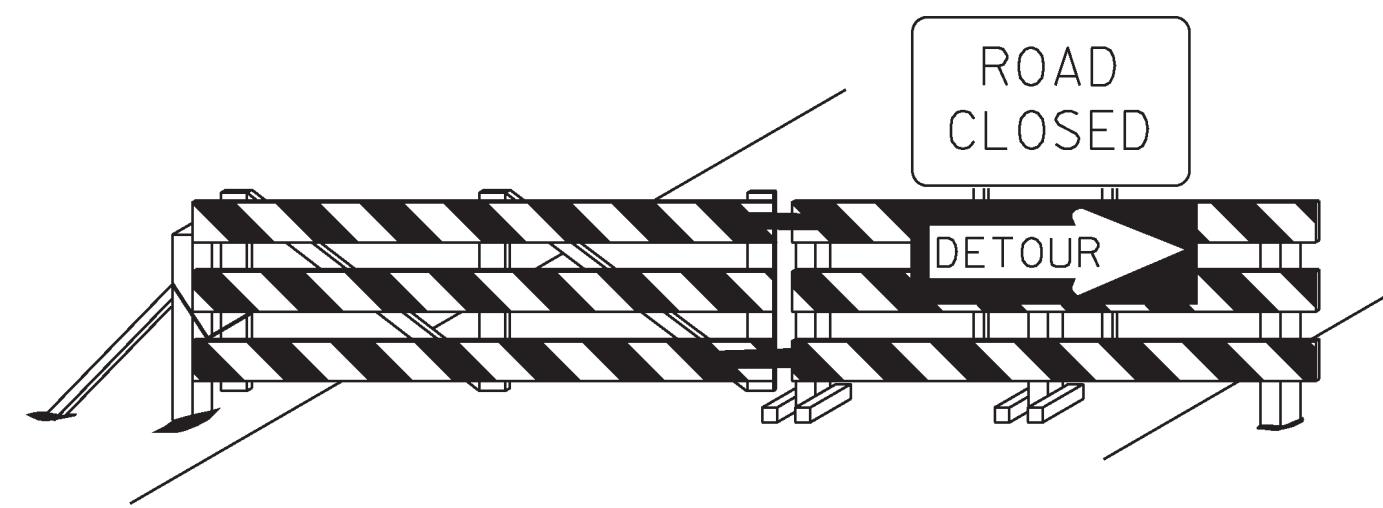


CHEVRON SIGN  
DETAIL

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 III



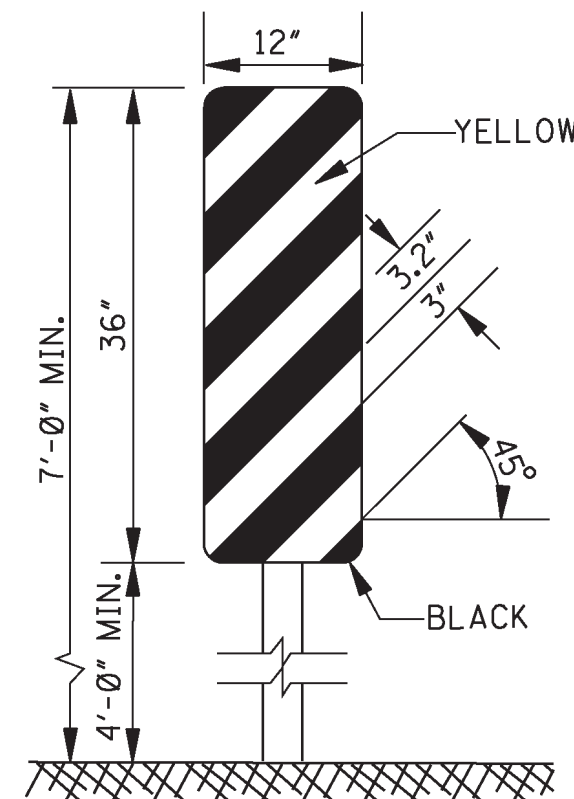
BARRICADE CLOSING A ROAD

### 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<br>6 IF FACING TRAFFIC IN TWO DIRECTIONS |
| TYPE OF FRAME                      | LIGHT                  | LIGHT "A" FRAME        | POST OR SKID                                                                  |

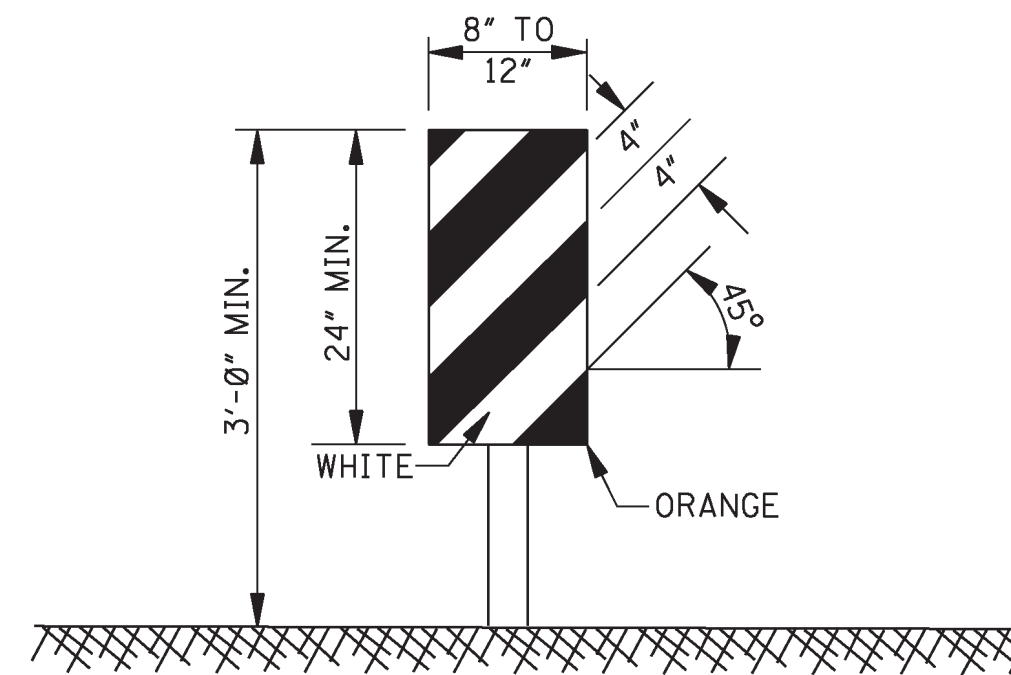
\* 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

\*\* 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in<sup>2</sup> OF REFLECTIVE AREA FACING TRAFFIC.



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.

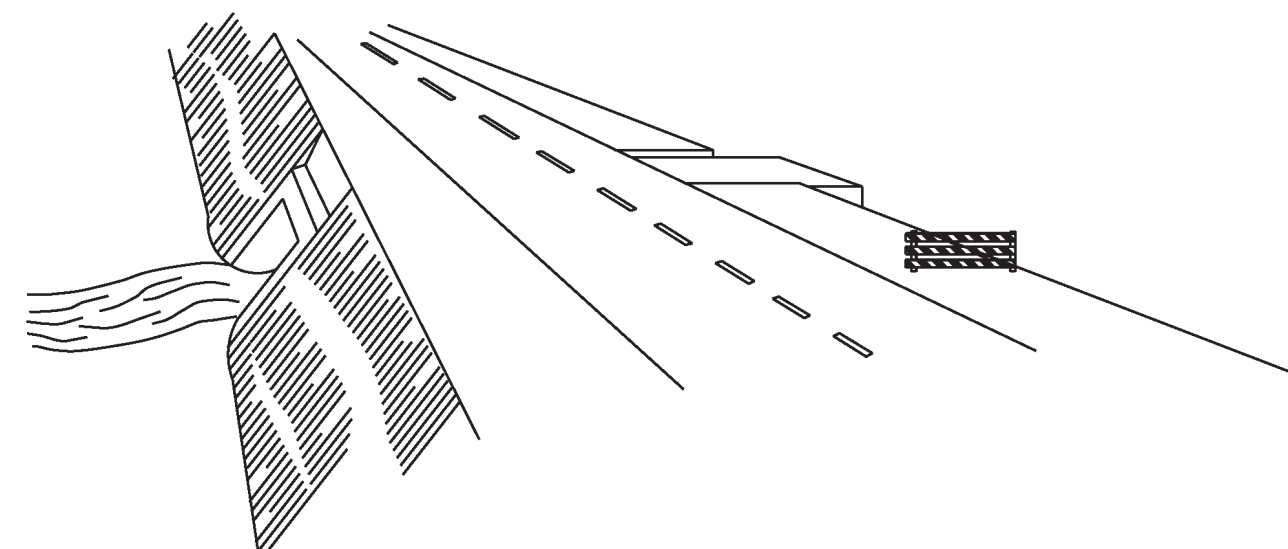
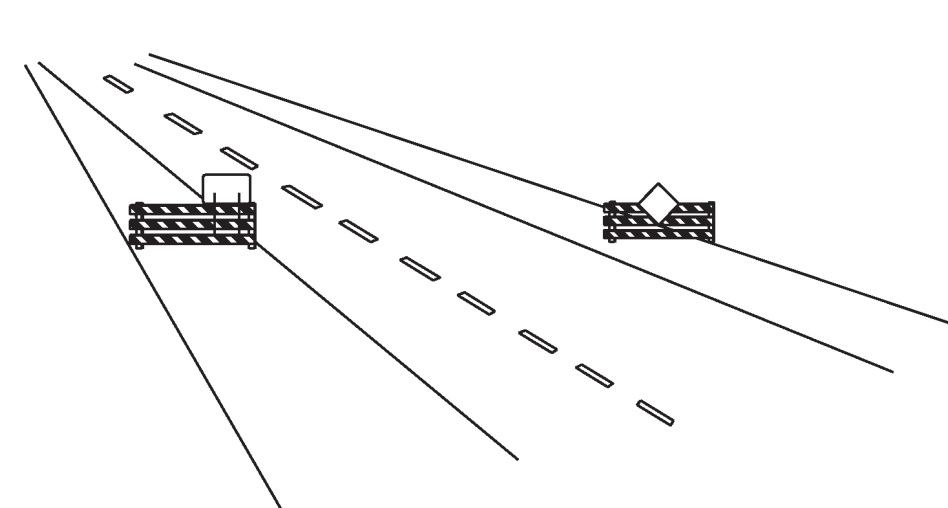


VERTICAL PANEL

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 in<sup>2</sup> OF RETROREFLECTIVE AREA FACING TRAFFIC.
4. FOR TWO-WAY TRAFFIC OPERATIONS, BACK-TO-BACK PANELS SHALL BE USED.

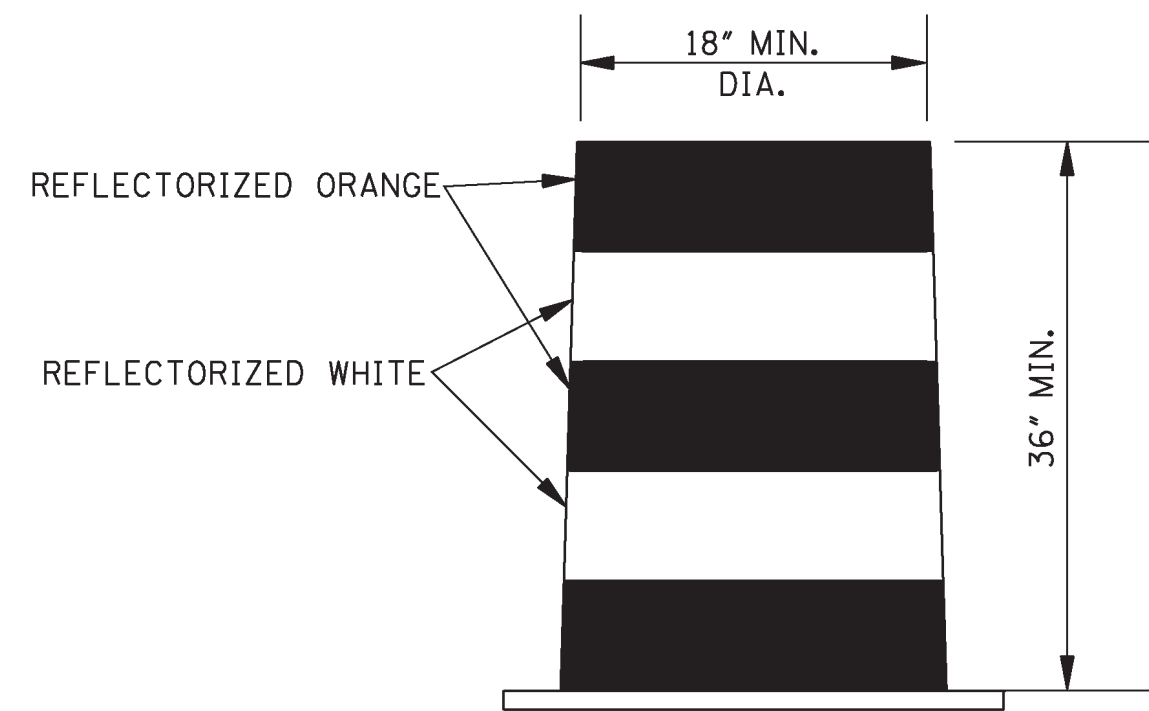
#### GENERAL NOTES:

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.

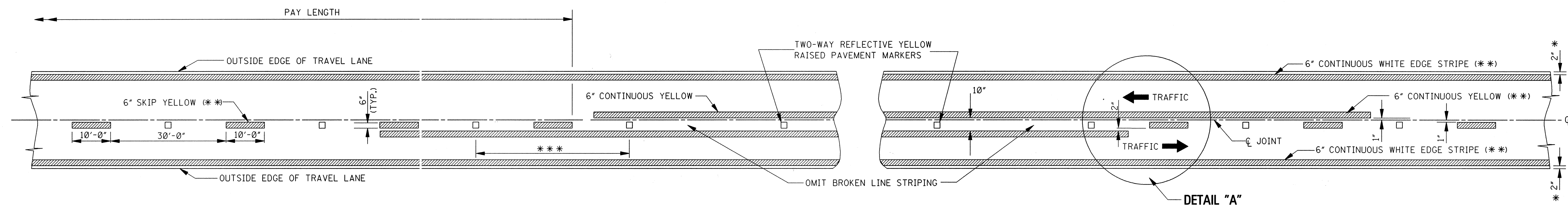


### PLASTIC DRUM STRIPING DETAIL

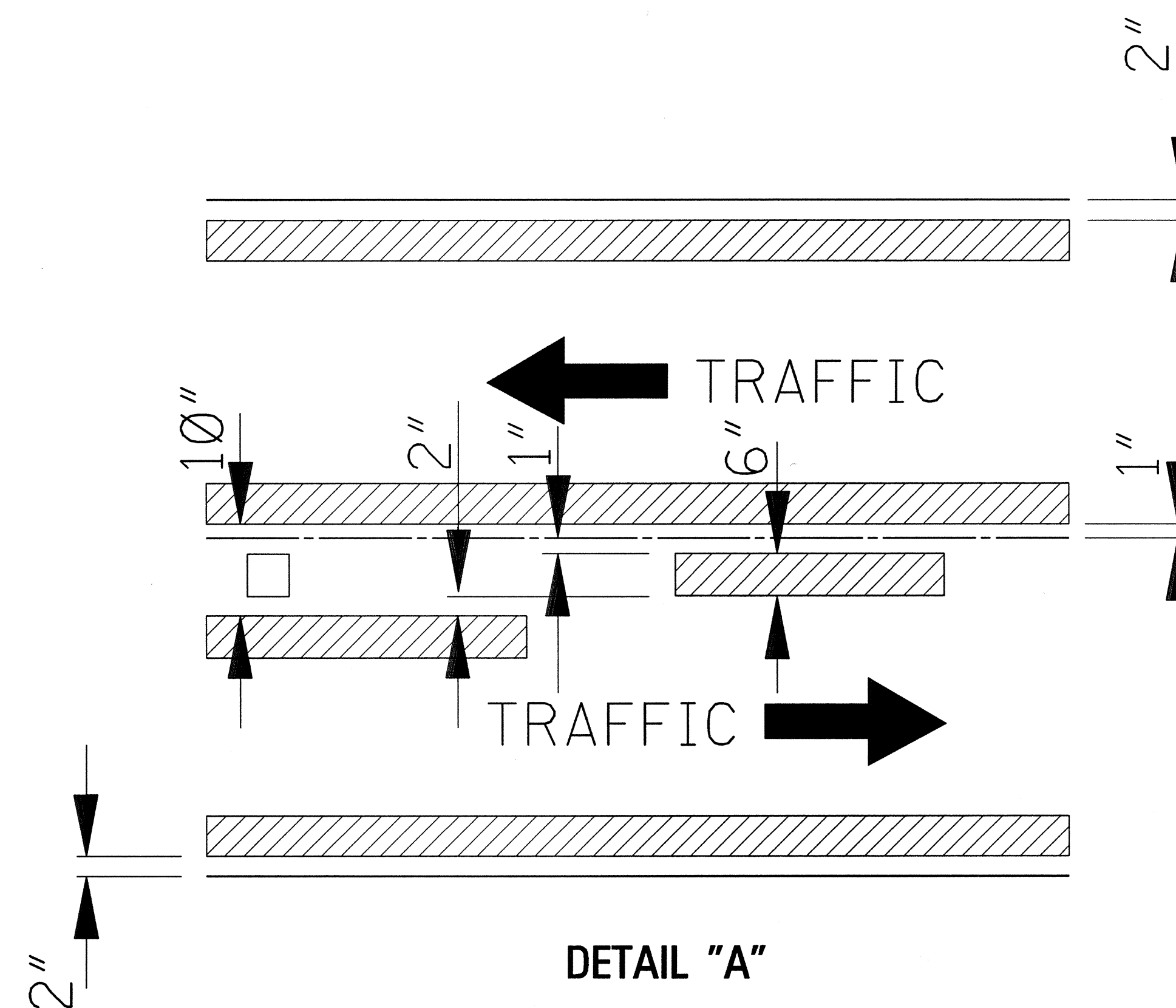
1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) REFLECTORIZED, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 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.

|  |  |  |  |  |             |                                          |               |
|--|--|--|--|--|-------------|------------------------------------------|---------------|
|  |  |  |  |  | BY          | MISSISSIPPI DEPARTMENT OF TRANSPORTATION |               |
|  |  |  |  |  | REVISION    |                                          |               |
|  |  |  |  |  | DATE        | FILENAME: SDTCP-10_06012012.DGN          |               |
|  |  |  |  |  | DESIGN TEAM | CHECKED                                  | DATE 6/1/2012 |
|  |  |  |  |  |             | WORKING NUMBER                           | SDTCP-10      |
|  |  |  |  |  |             | SHEET NUMBER                             | 12            |





TWO-WAY TRAFFIC  
(ASPHALT OR CONCRETE PAVEMENT)



DETAIL "A"

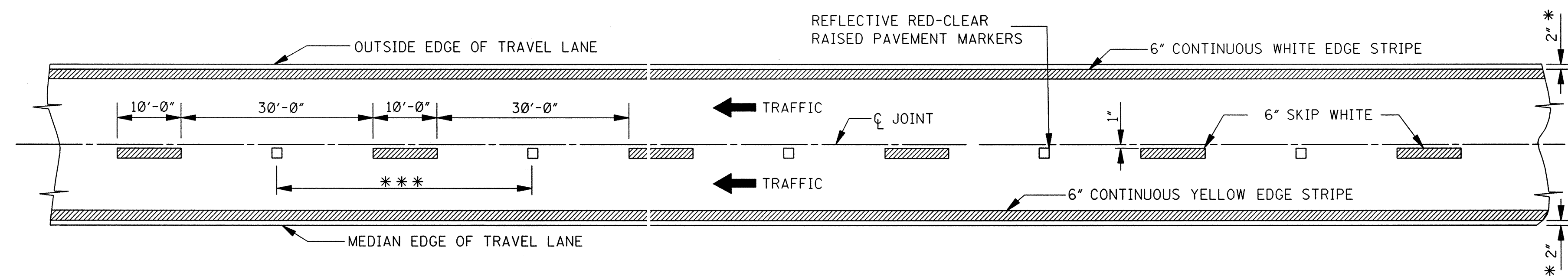
GENERAL NOTES:

- \* 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS.
- \*\* 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR PLASTIC AS INDICATED IN PAY ITEMS).
- \*\*\* 3. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:

|                    | URBAN AREA<br>(ft-in) | RURAL AREA<br>(ft-in) |
|--------------------|-----------------------|-----------------------|
| TANGENT SECTIONS   | 40'-0"                | 80'-0"                |
| HORIZONTAL CURVES  | 40'-0"                | 40'-0"                |
| INTERCHANGE LIMITS | 40'-0"                | + 40'-0"              |

† NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.

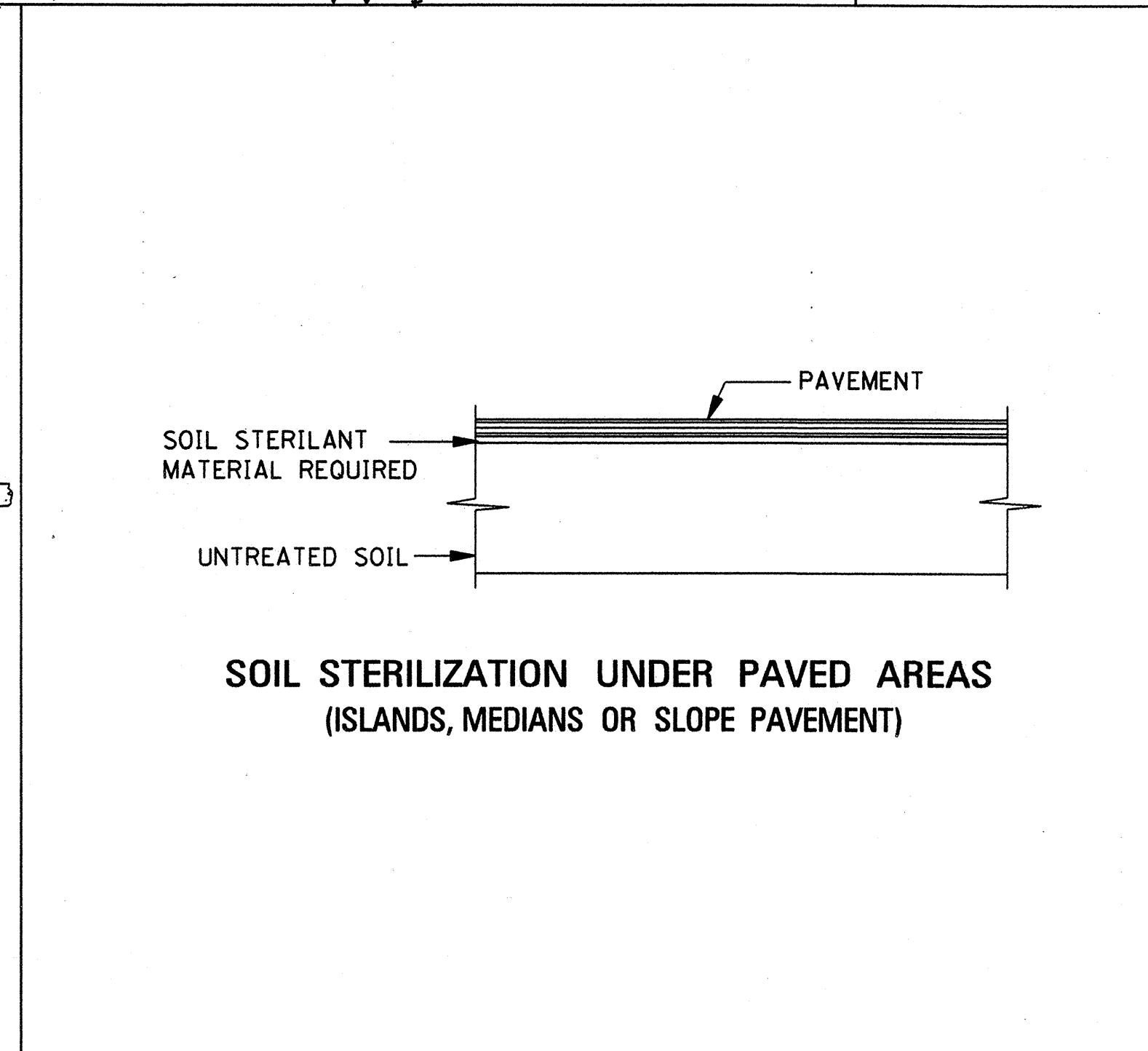
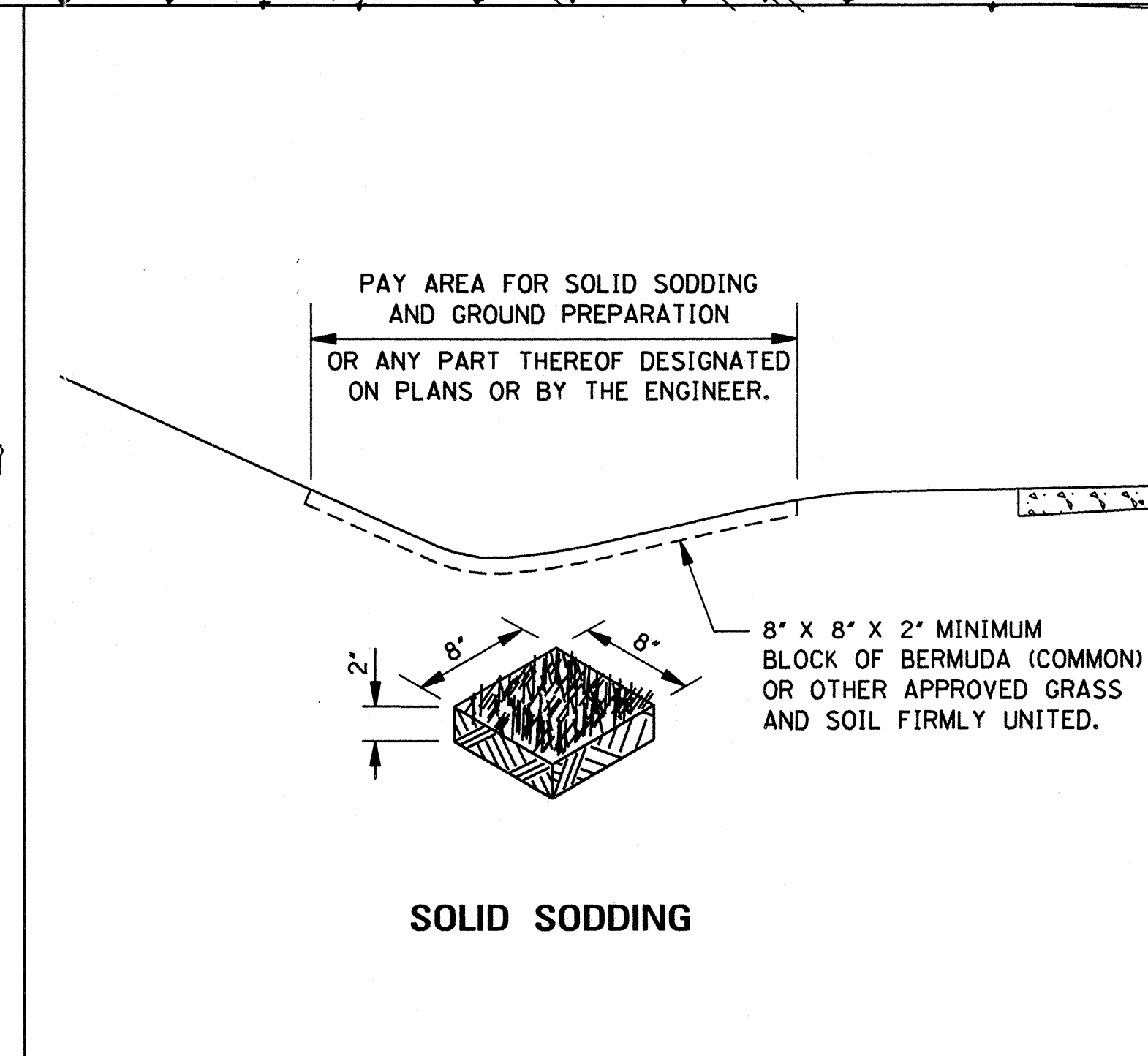
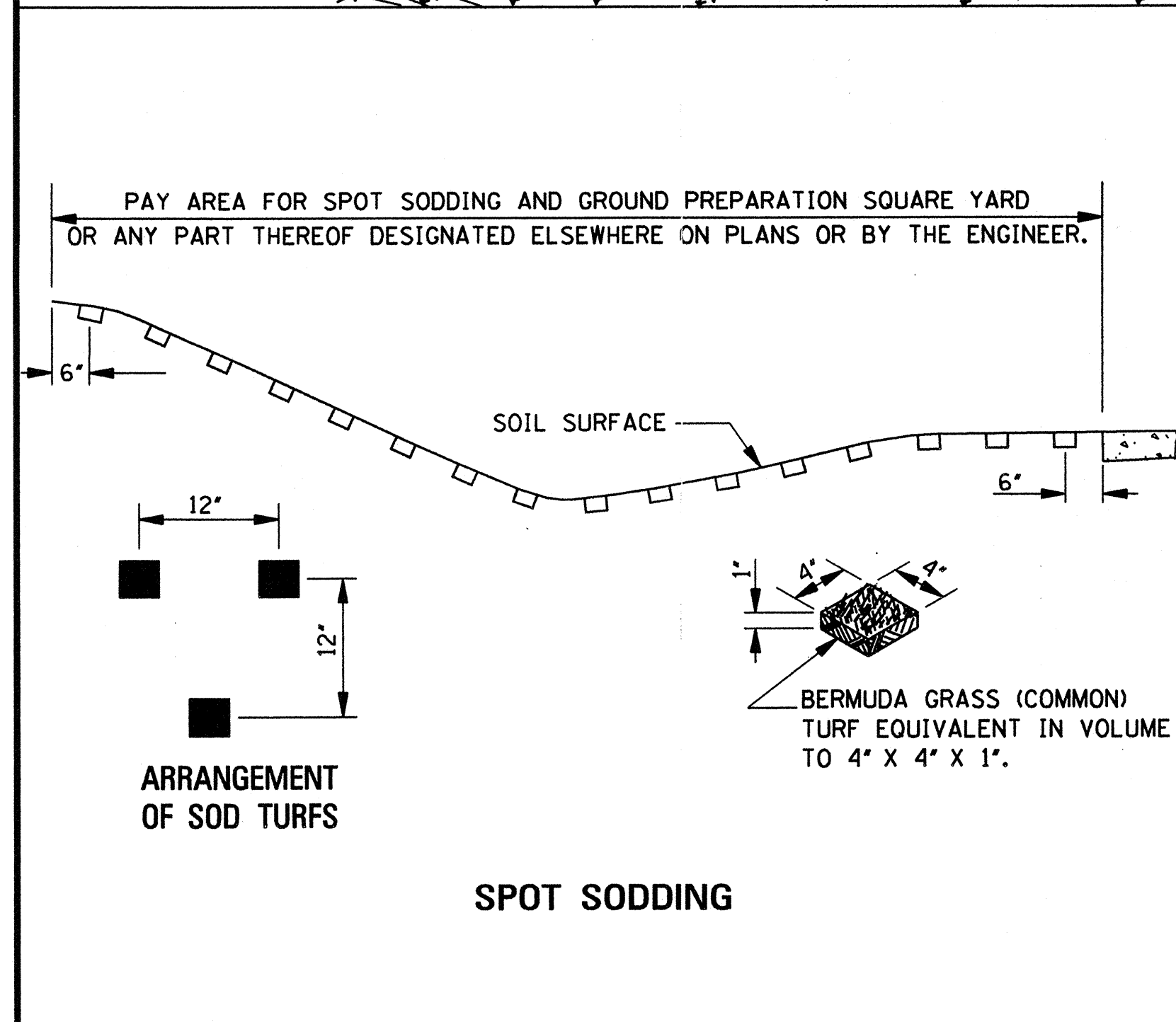
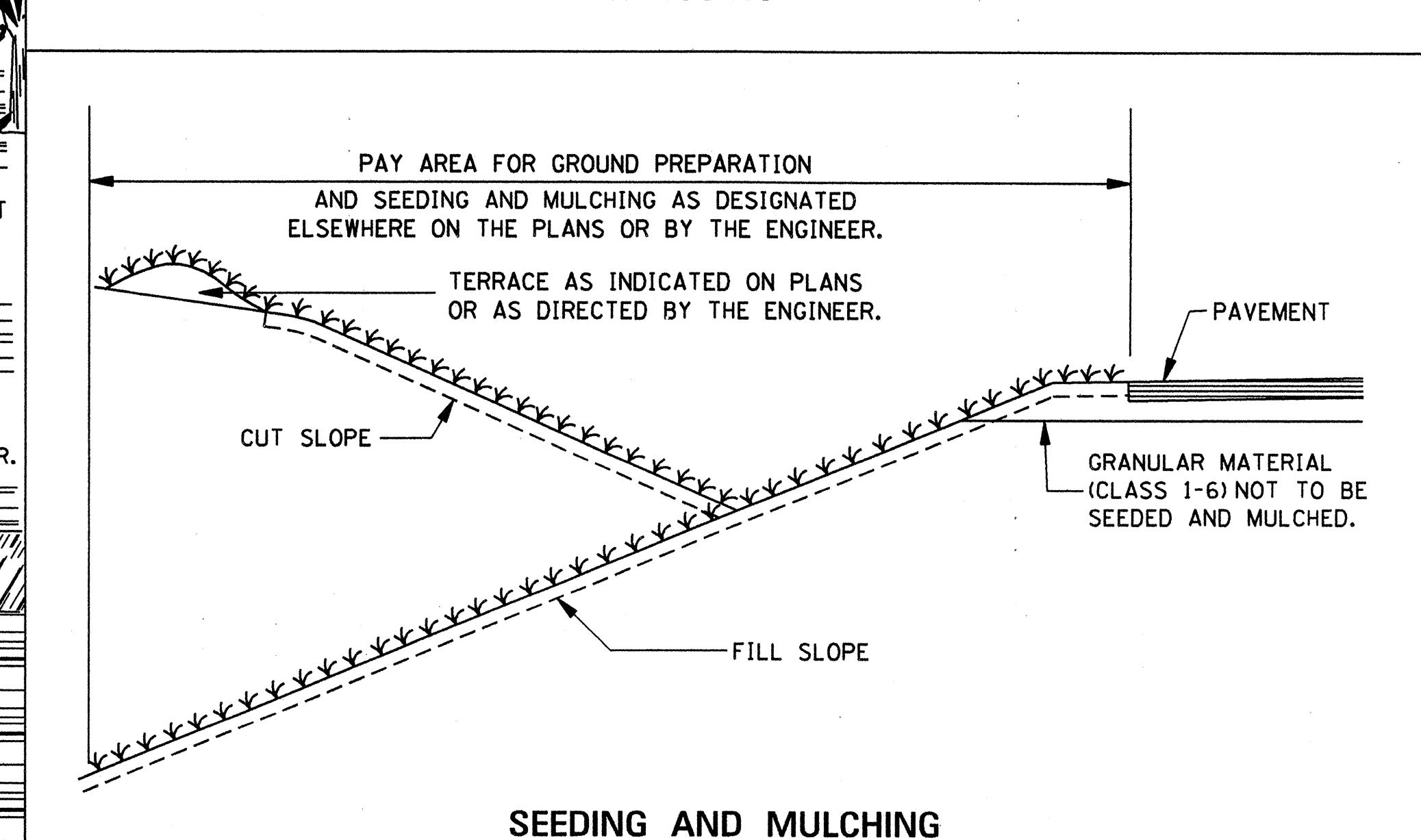
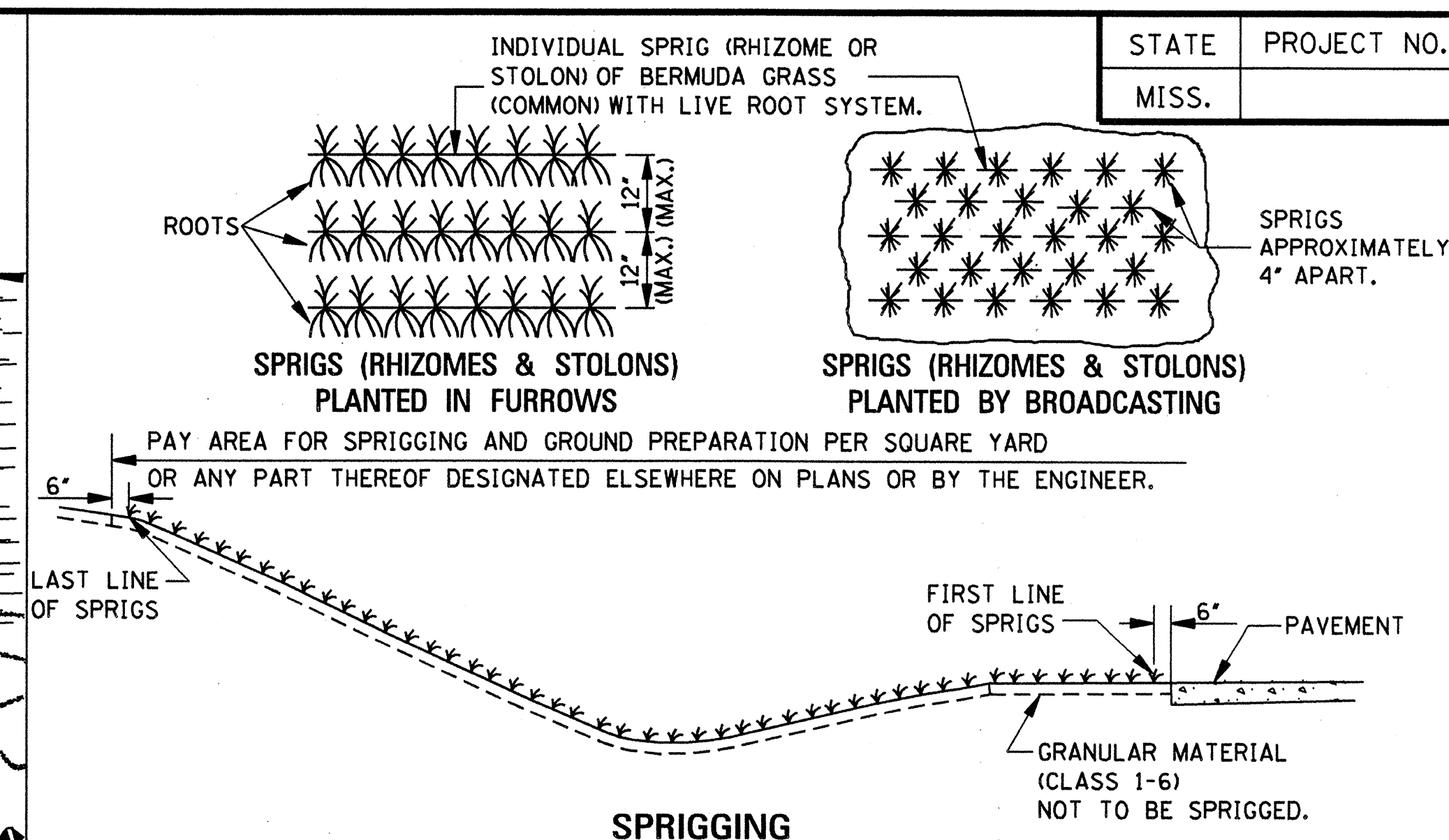
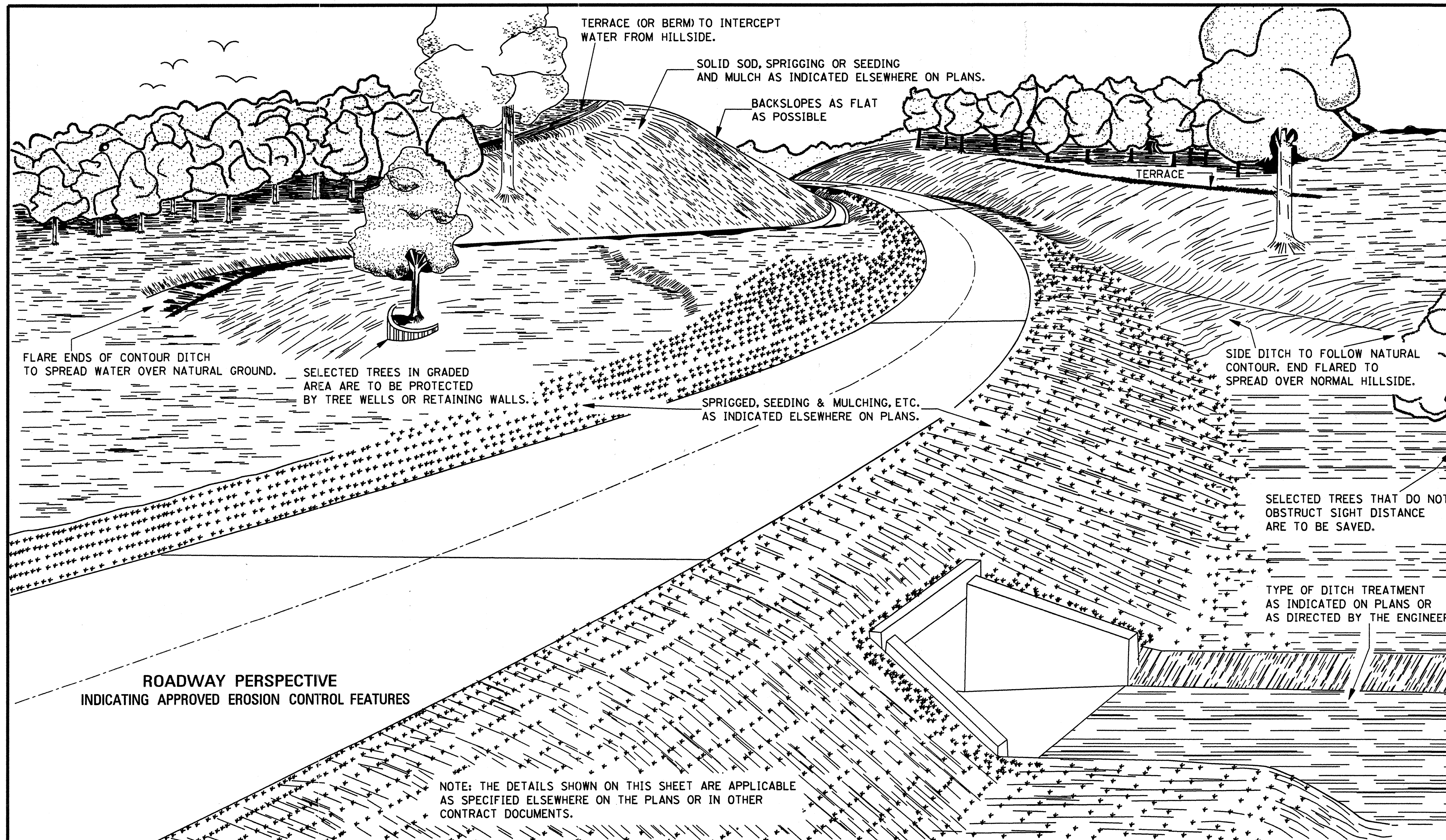
- 4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."



4-LANE: WITH ONE-WAY TRAFFIC

|                                                                                      |  |
|--------------------------------------------------------------------------------------|--|
| MISSISSIPPI DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION<br>STANDARD PLAN |  |
| <b>PAVEMENT MARKING<br/>DETAILS FOR<br/>2-LANE AND 4-LANE<br/>DIVIDED HIGHWAYS</b>   |  |
| WORKING NUMBER<br>PM-1                                                               |  |
| SHEET NUMBER<br>120                                                                  |  |
| ISSUE DATE: OCTOBER 1, 1998                                                          |  |





GENERAL NOTE:

1. LONGITUDINAL AND TRANSVERSE MEASUREMENTS FOR THE PAY AREA SHALL BE TAKEN ALONG THE SLOPES.

|          |                                          |
|----------|------------------------------------------|
| BY       | MISSISSIPPI DEPARTMENT OF TRANSPORTATION |
| REVISION | ROADWAY DESIGN DIVISION                  |
| DATE     | STANDARD PLAN                            |

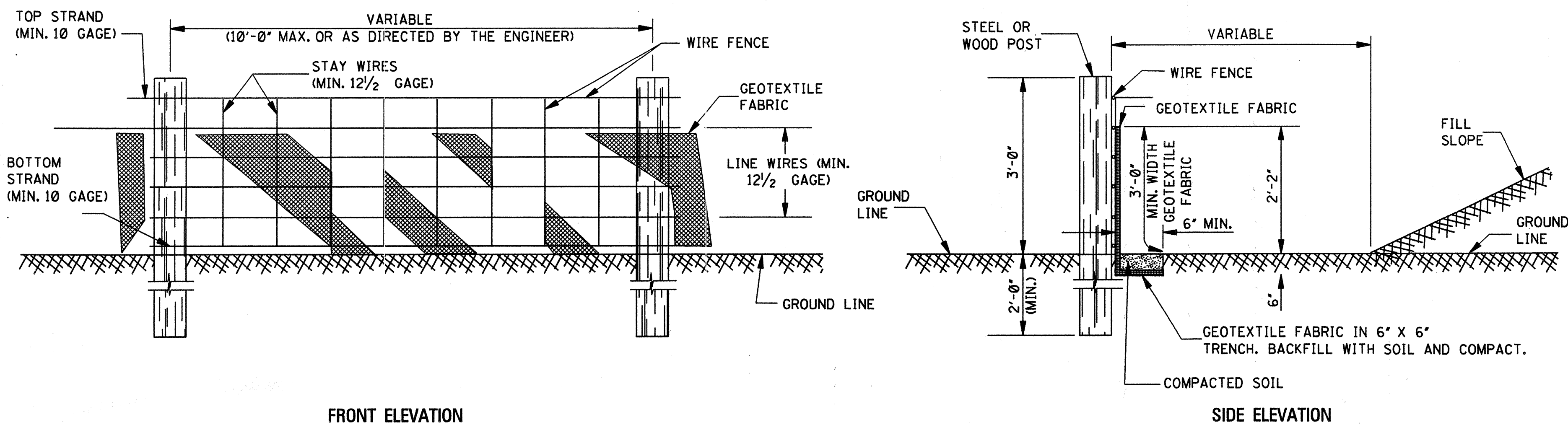
**EROSION CONTROL**

WORKING NUMBER EC-1

SHEET NUMBER 140

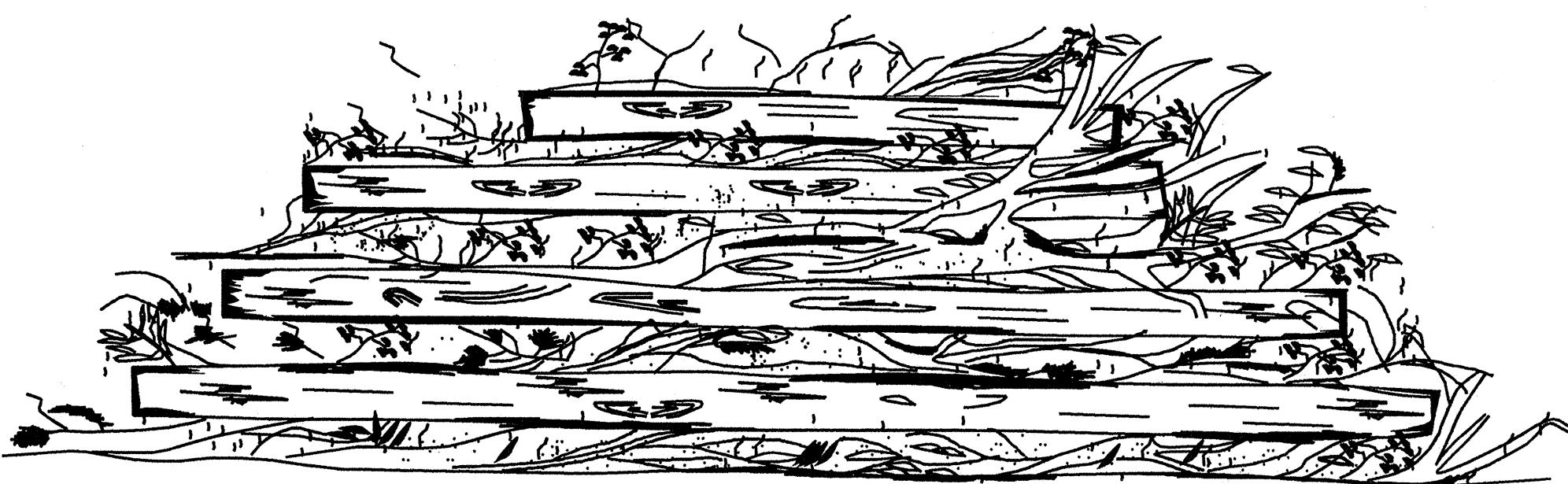
ISSUE DATE: OCTOBER 1, 1998



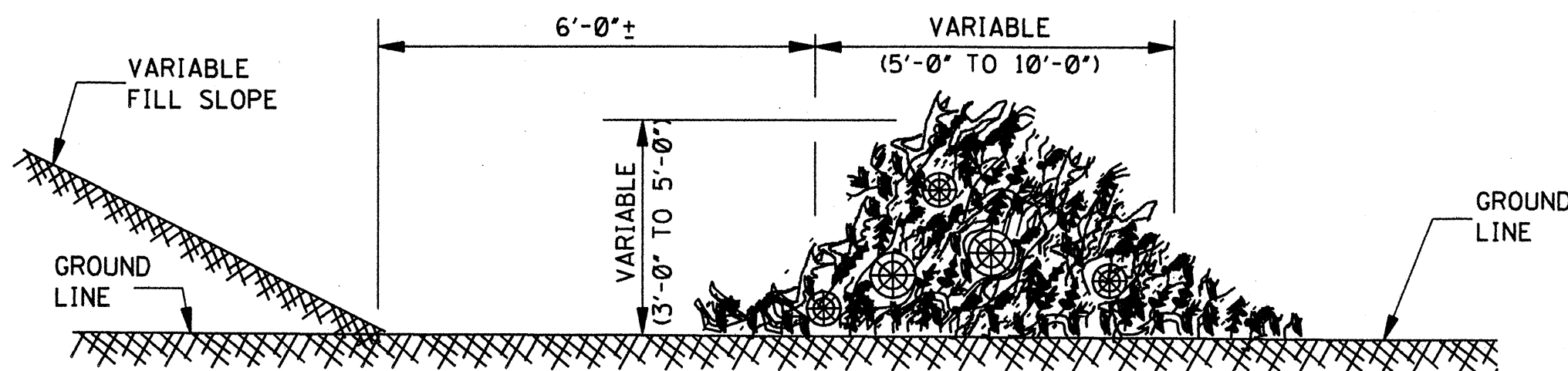


### TEMPORARY SILT FENCE

- NOTES:
1. WIRE SHALL BE MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
  2. GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE FASTENED ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.
  3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND OF THE SELF-FASTENER ANGLE STEEL TYPE. WOOD POST SHALL BE A MINIMUM OF 5'-0" IN HEIGHT AND 3" OR MORE IN DIAMETER. WIRE FENCE SHALL BE FASTENED TO WOODEN POST WITH NOT LESS THAN 9 GAGE WIRE STAPLES 1' LONG.
  4. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATIONS MAY BE USED WITHOUT WIRE FENCE.



FRONT ELEVATION



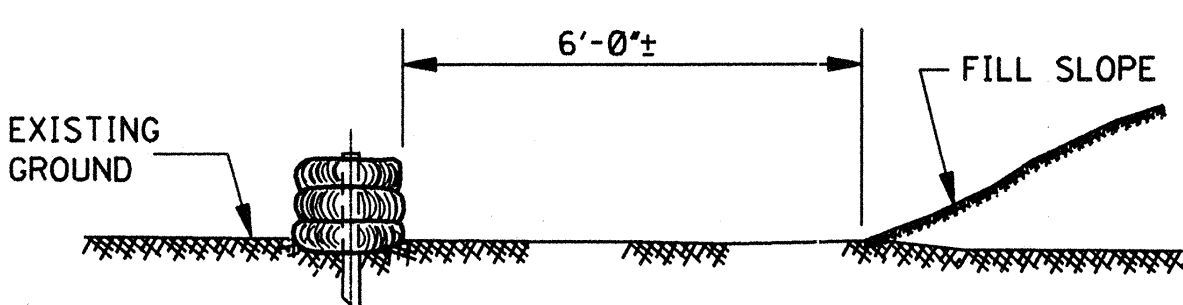
SIDE ELEVATION

### TEMPORARY BRUSH BARRIER

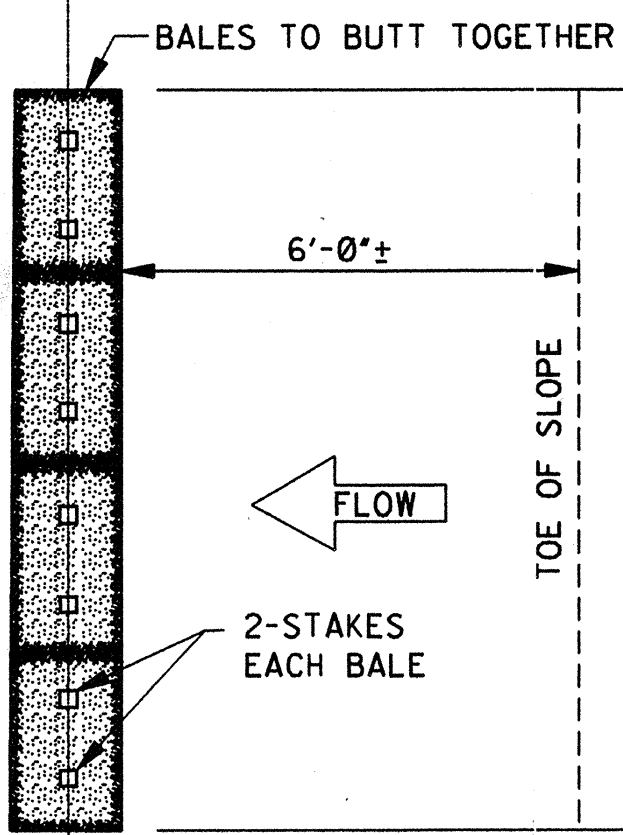
- NOTES:
1. BRUSH BARRIER TO BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
  2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TOP TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
  3. TO ALLOW WATER TO FLOW THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.

#### GENERAL NOTES:

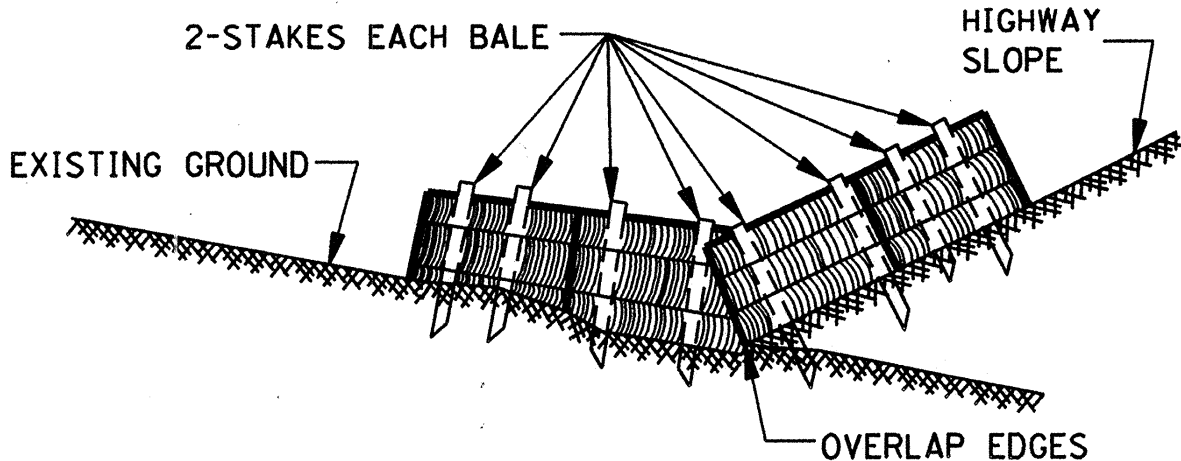
1. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES NECESSARY TO CONTROL SILTATION.
2. TEMPORARY BRUSH BARRIERS SHALL BE USED AS REQUIRED BUT WILL NOT BE MEASURED FOR SEPARATE PAYMENT.
3. THE USE OF TEMPORARY EROSION CONTROL MEASURES OTHER THAN TEMPORARY BRUSH BARRIERS WILL ONLY BE REQUIRED AND MEASURED FOR SEPARATE PAYMENT WHEN APPROPRIATE PAY ITEM(S) IS INCLUDED IN THE BID SCHEDULE OF THE PROPOSAL.



ELEVATION

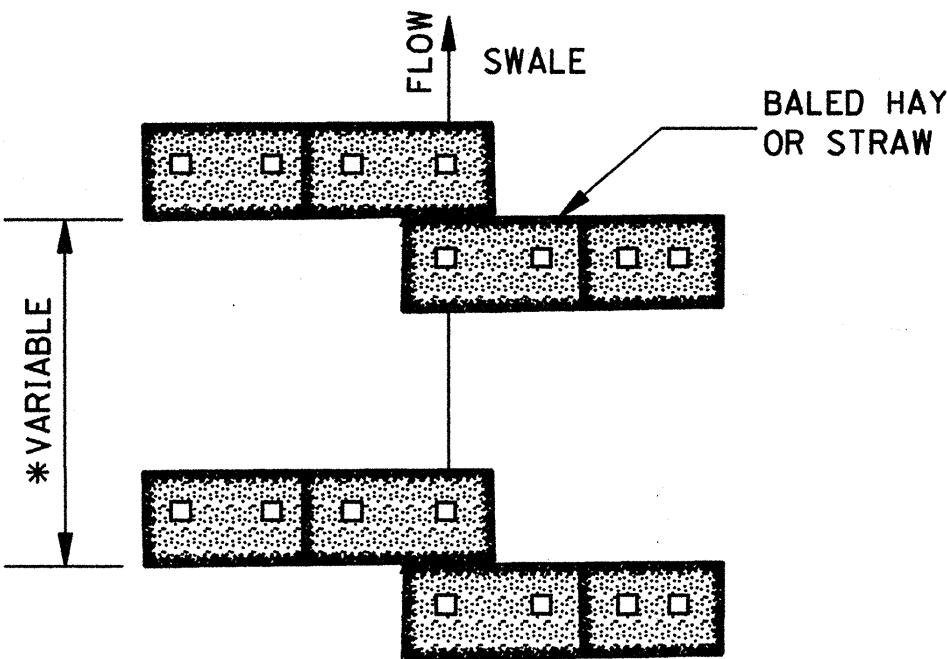


PLAN



ELEVATION

NOTE: SIMILAR TREATMENT TO BE USED IN DITCHES.

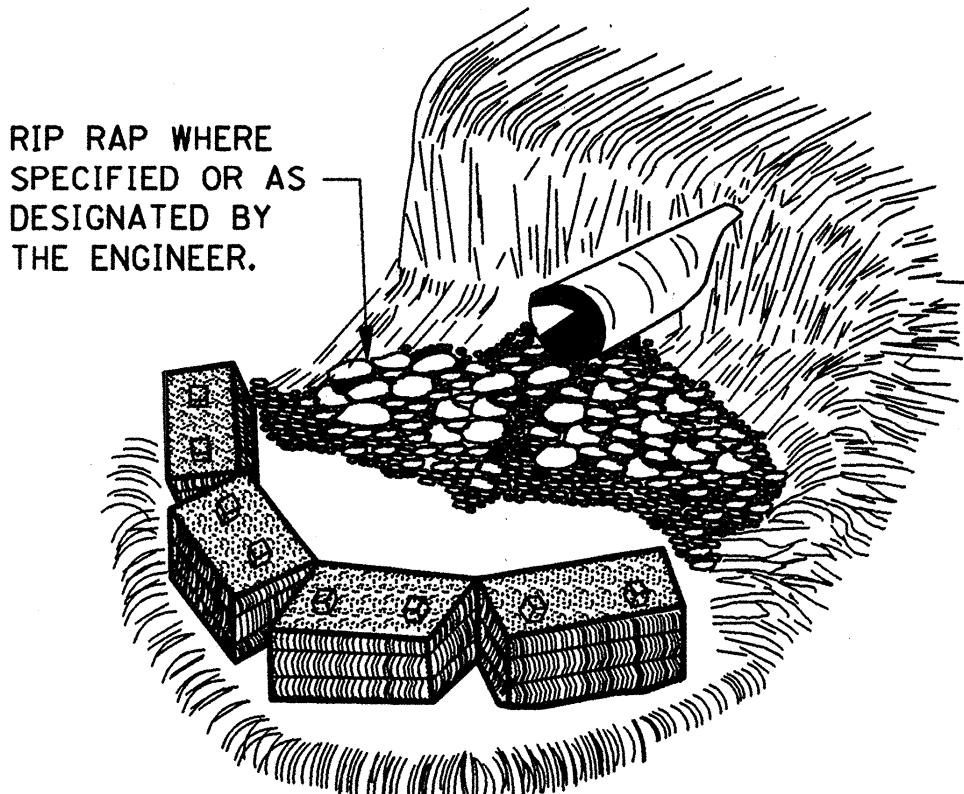


PLAN

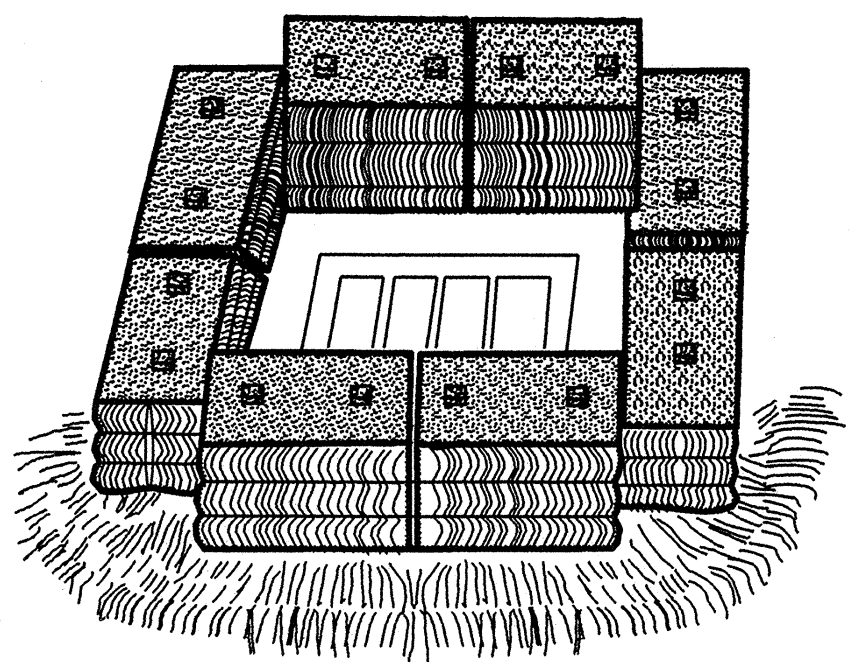
| FALL OF DITCH (%) | DISTANCE* (ft) |
|-------------------|----------------|
| 0 - 1             | 100'           |
| 1 - 2             | 50'            |
| >2                | 25'            |

### TEMPORARY EROSION CHECKS USING HAY OR STRAW BALES

NOTE: EMBED ALL BALES 3" MINIMUM INTO GROUND AND STAKE (2" X 2" X 36") SECURELY.



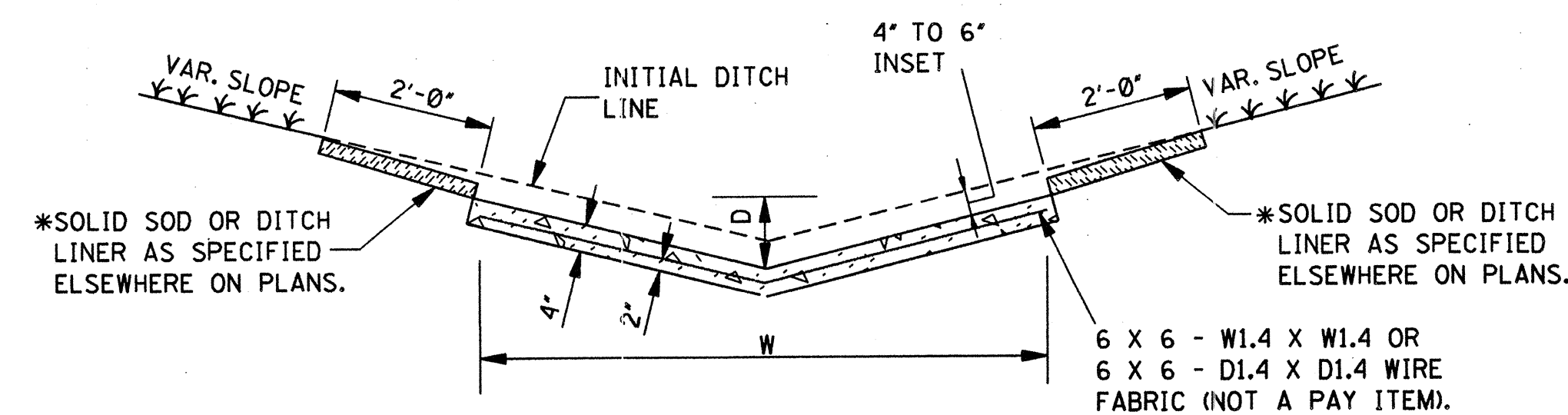
CULVERT



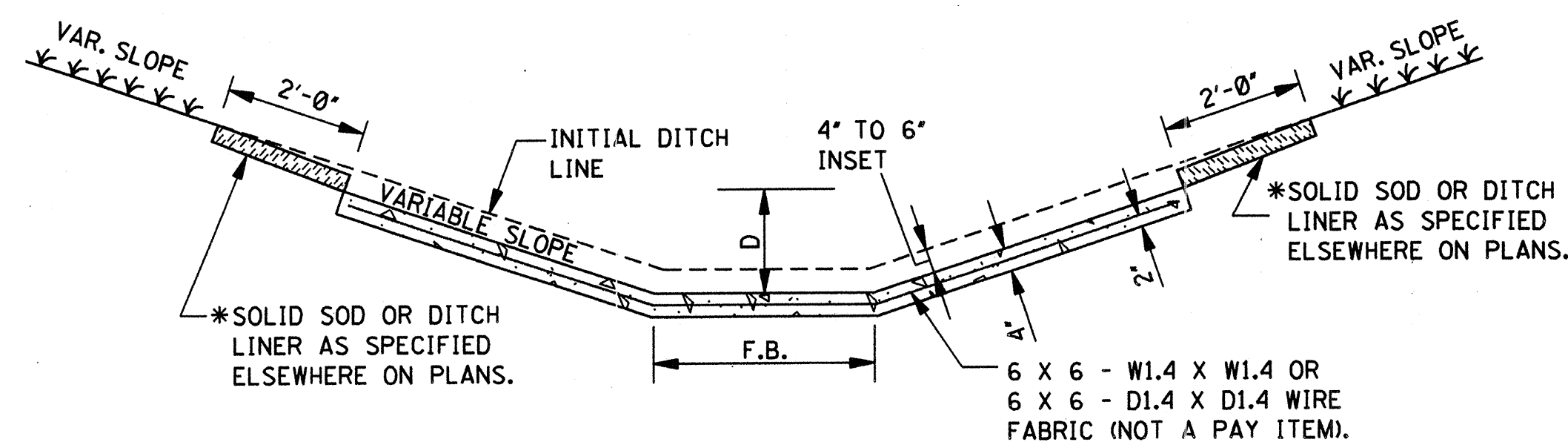
DROP INLET

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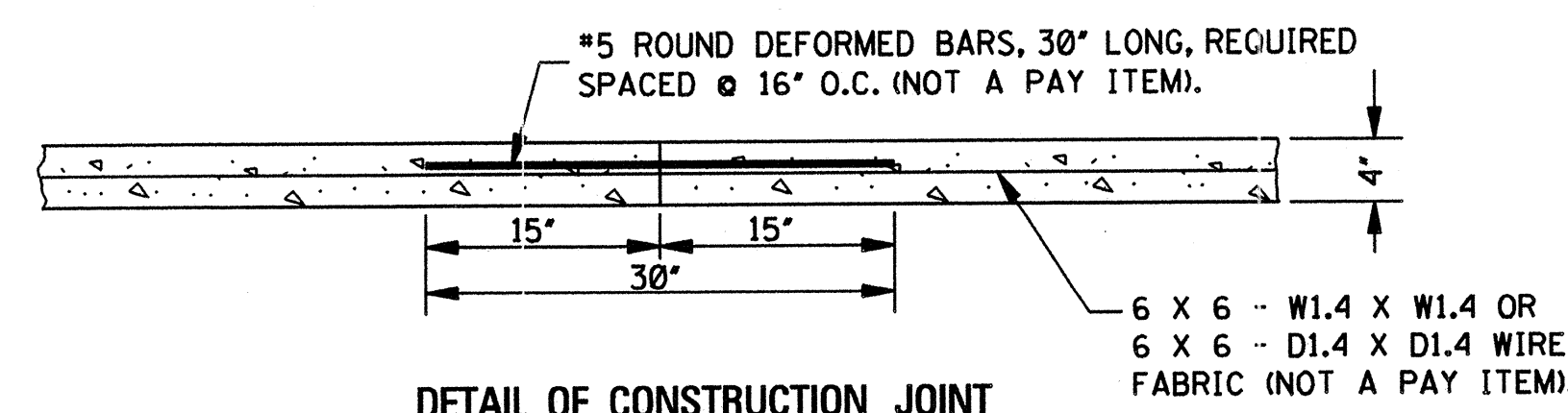




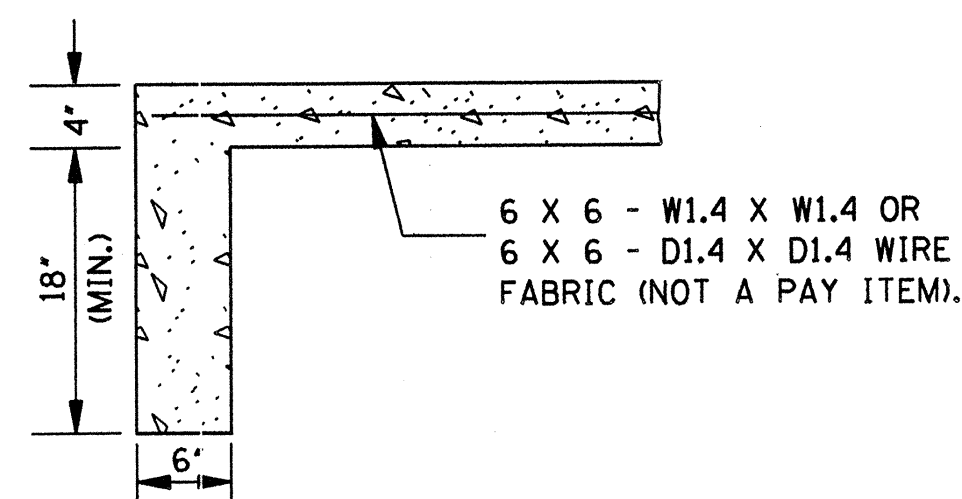
V-TYPE SECTION



FLAT BOTTOM SECTION



DETAIL OF CONSTRUCTION JOINT



DETAIL OF TOE WALL

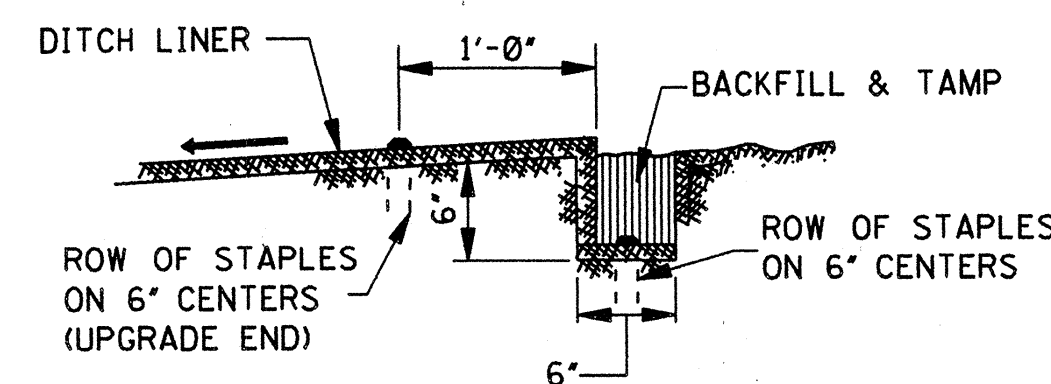
NOTE: TOE WALL REQUIRED UPSTREAM AND DOWNSTREAM.

#### CONCRETE PAVED DITCH

##### NOTES:

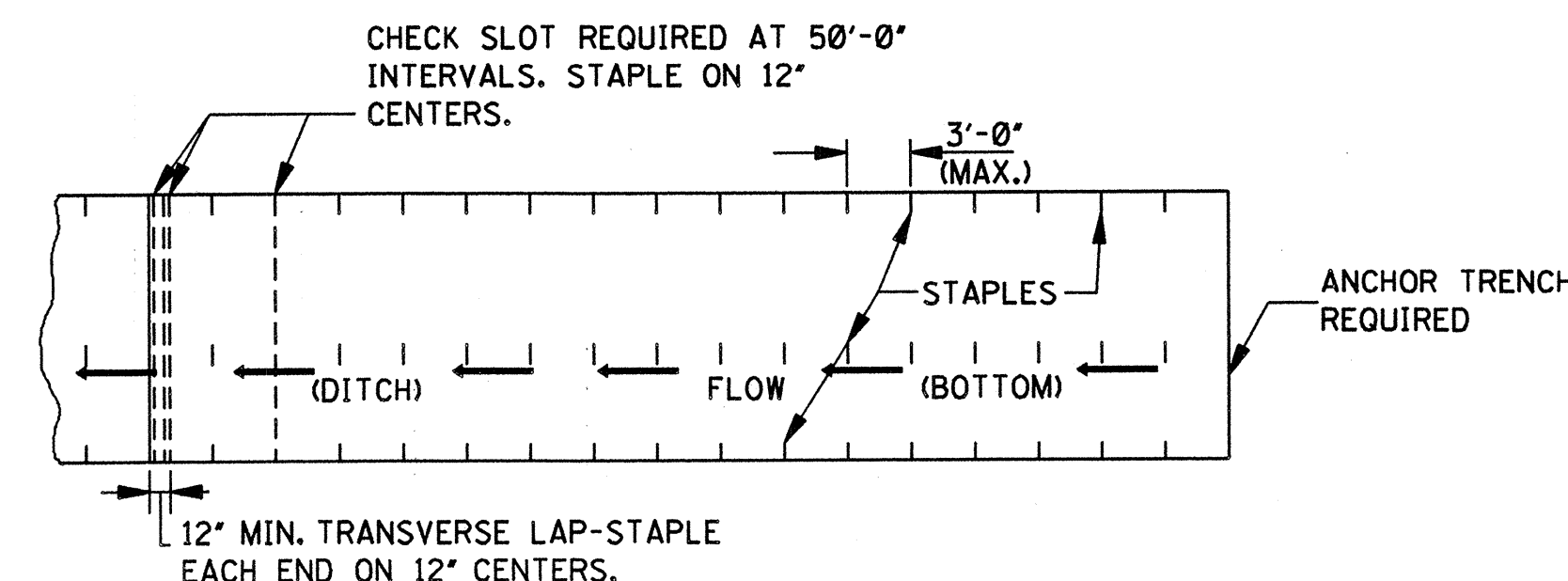
1. CONCRETE PAVED DITCHES SHALL BE GROOVED AT 20'-0" INTERVALS. THE GROOVES SHALL BE CUT TO A DEPTH OF NOT LESS THAN 1".
2. DIMENSIONS D & W ARE AS FOLLOWS:  
D(MINIMUM) = 6"  
D(NOMINAL) = 9"  
W(MINIMUM) = 24"
3. CHAIR SUPPORTS FOR THE WIRE MESH WILL NOT BE REQUIRED. HOWEVER, THE CONTRACTOR SHALL PLACE THE WIRE MESH IN A SATISFACTORY AND WORKMANLIKE MANNER TO ENSURE THAT THE FINAL POSITION IS REASONABLY NEAR THE POSITION INDICATED.

\*4. CENTER ROW OF STAPLES MAY BE OMITTED ON DITCH LINER.

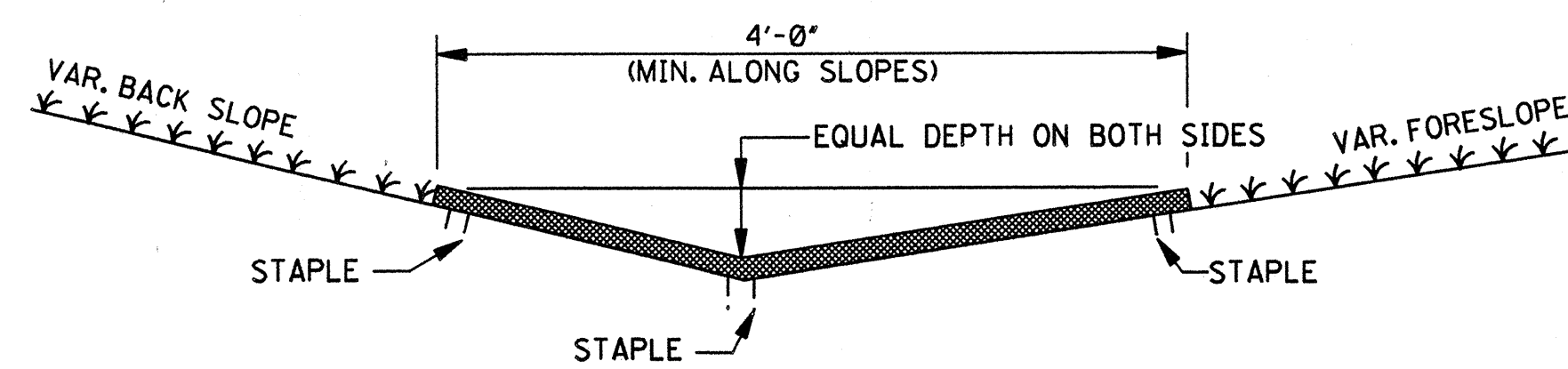


#### ANCHOR TRENCH DETAIL

NOTE: ANCHOR TRENCH REQUIRED AT THE BEGINNING AND ENDING OF EACH AREA TO BE COVERED, EXCEPT DOWNSTREAM END ADJOINING A STRUCTURE.



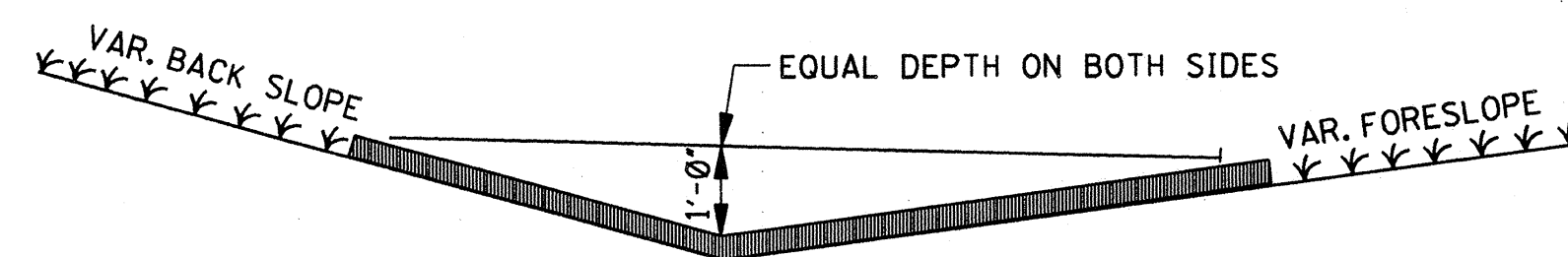
PLAN



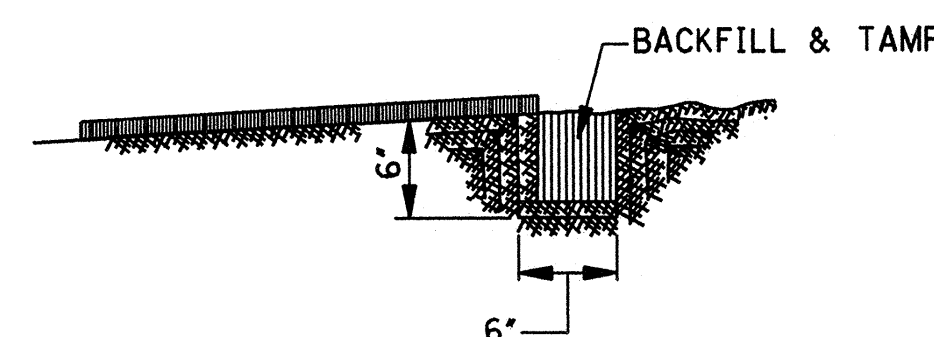
SECTION

#### DITCH LINER TREATMENT (EXCELSIOR BLANKET, JUTE MESH OR EROSION CONTROL FABRIC)

NOTE: DITCHES TREATED WITH DITCH LINER WILL BE VEGETATED PRIOR TO TREATMENT, UNLESS OTHERWISE INDICATED.



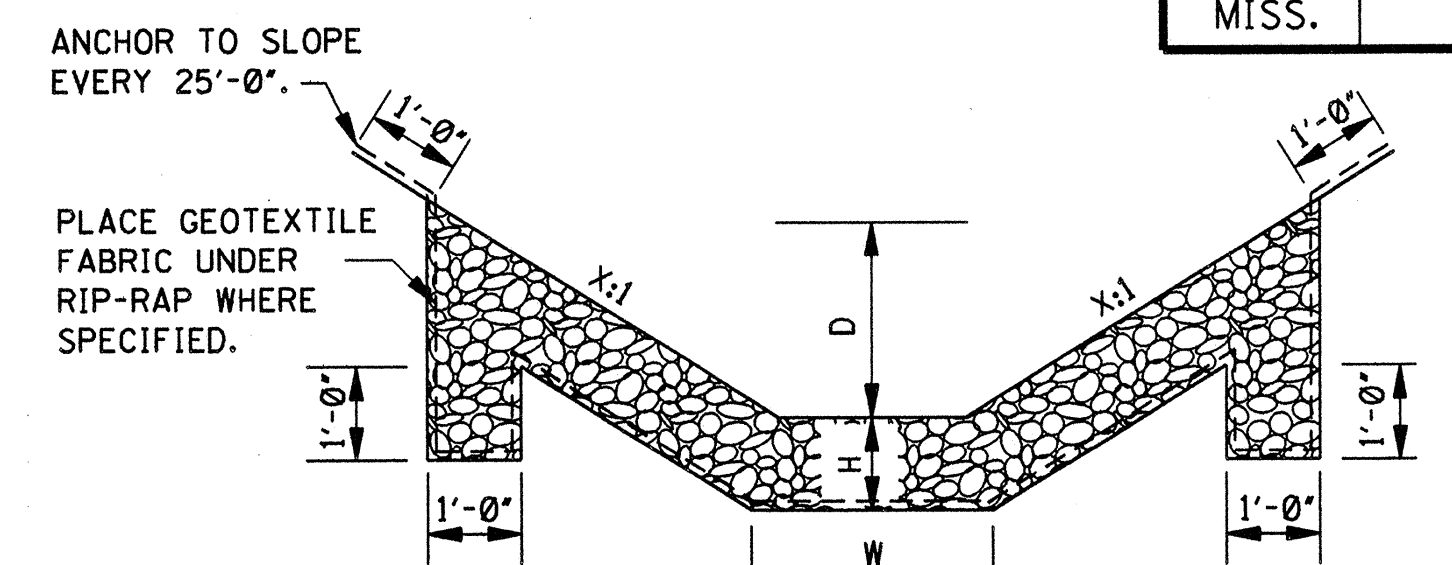
SECTION



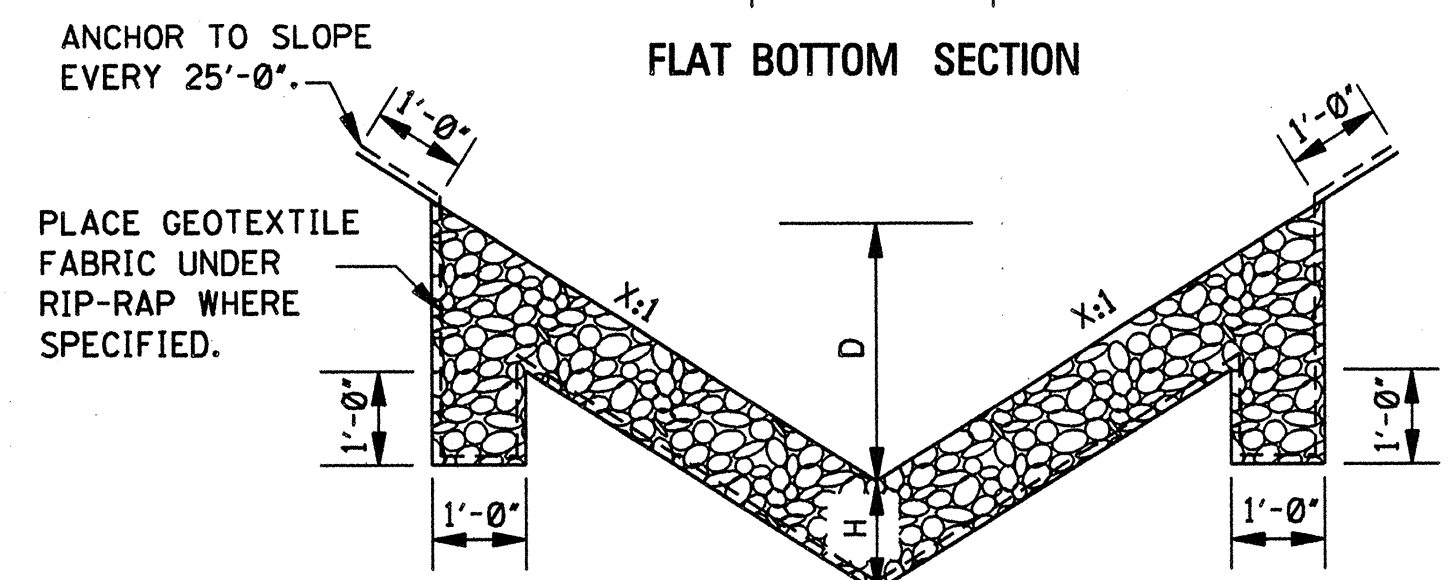
SLOT DETAIL

#### BITUMINOUS TREATED ROVING

NOTE: UPGRADE AND DOWNGRADE ENDS OF THE BITUMINOUS TREATED ROVING SHALL BE BURIED IN A 6" MINIMUM VERTICAL SLOT AND THE SOIL TAMPED FIRMLY AGAINST IT.



FLAT BOTTOM SECTION

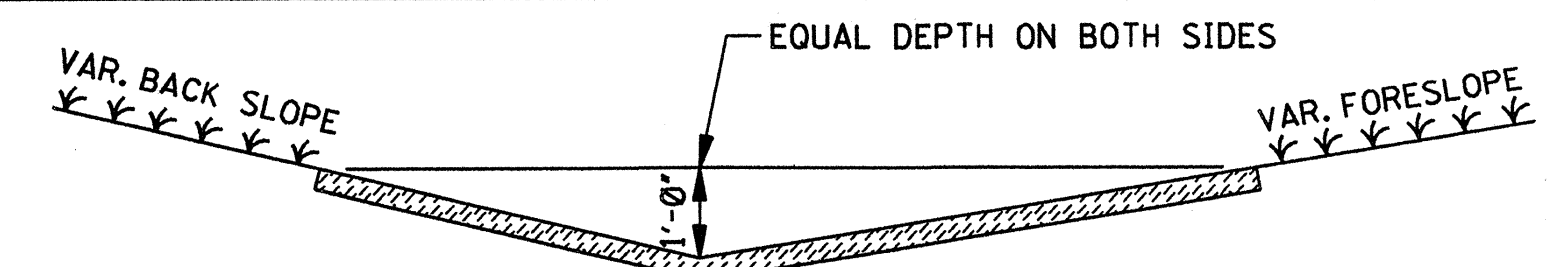


V-TYPE SECTION  
RIP-RAP TREATMENT

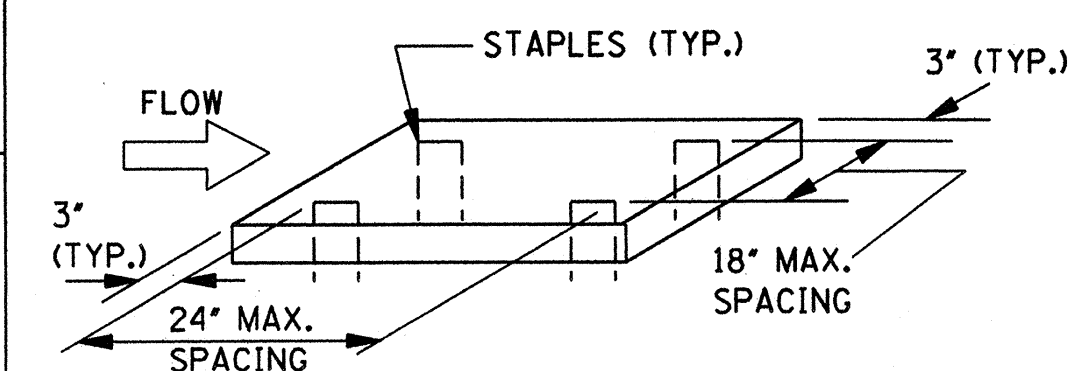
##### NOTES:

1. DIMENSIONS D, W AND X ARE VARIABLE AND ARE SHOWN ELSEWHERE ON THE PLANS.
2. THE RIP-RAP SIZE AND MINIMUM DEPTH "H" FOR RIP-RAP TREATMENT ARE AS FOLLOWS.

| RIP-RAP SIZE & MINIMUM DEPTH "H" |              |
|----------------------------------|--------------|
| H                                | RIP-RAP SIZE |
| (in)                             | (lbs)        |
| 12"                              | 100          |
| 18"                              | 300          |



#### SOLID SOD TREATMENT



NOTE: SOLID SOD (STRIPS OR BLOCKS) ARE TO BE STAPLED, PINNED, PEGGED OR STAKED AT THE FOUR CORNERS OR AT THE MAXIMUM SPECIFIED SPACING.

##### GENERAL NOTE:

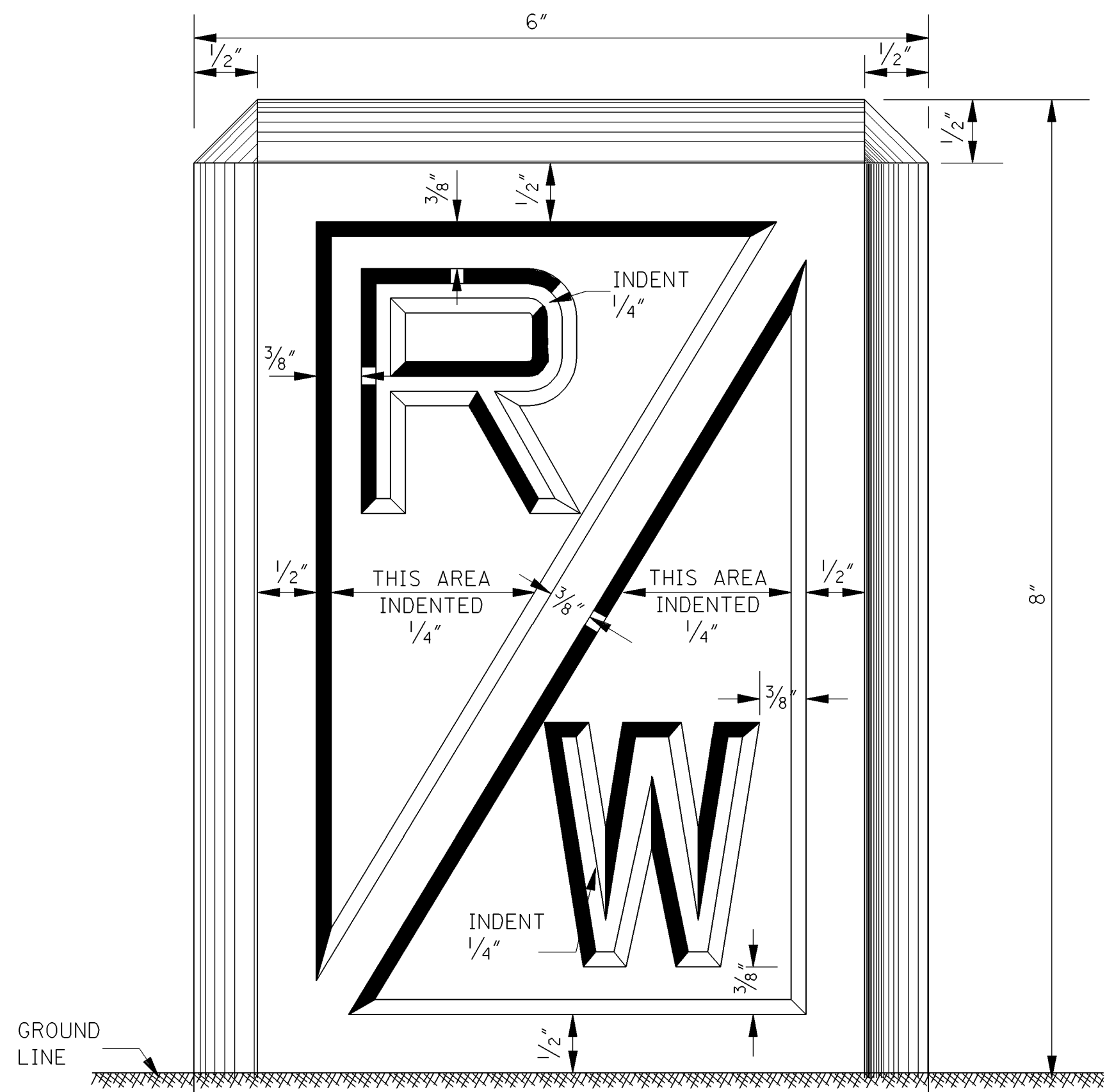
1. FOR LOCATION OF APPROPRIATE DITCH TREATMENTS, SEE PLAN SHEETS AS DENOTED BY THE FOLLOWING LEGEND OR AS DIRECTED BY THE ENGINEER:

- DITCH LINER
- BITUMINOUS TREATED ROVING
- SOLID SOD
- CONCRETE PAVED DITCH
- RIP-RAP

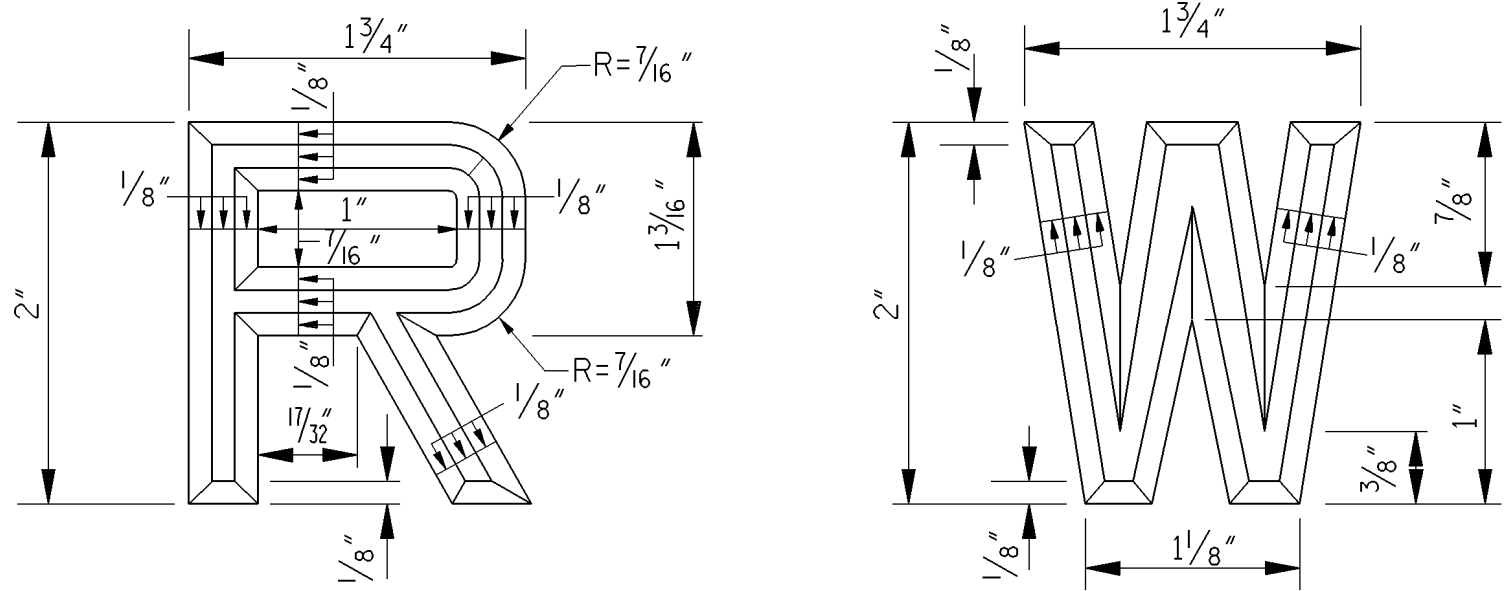
|                                                                                      |                             |
|--------------------------------------------------------------------------------------|-----------------------------|
| MISSISSIPPI DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION<br>STANDARD PLAN |                             |
| <b>DETAILS OF TYPICAL<br/>DITCH TREATMENTS</b>                                       |                             |
| BY                                                                                   | REVISION                    |
| DATE                                                                                 | ISSUE DATE: OCTOBER 1, 1998 |
| WORKING NUMBER<br>DT-1                                                               | SHEET NUMBER<br>145         |



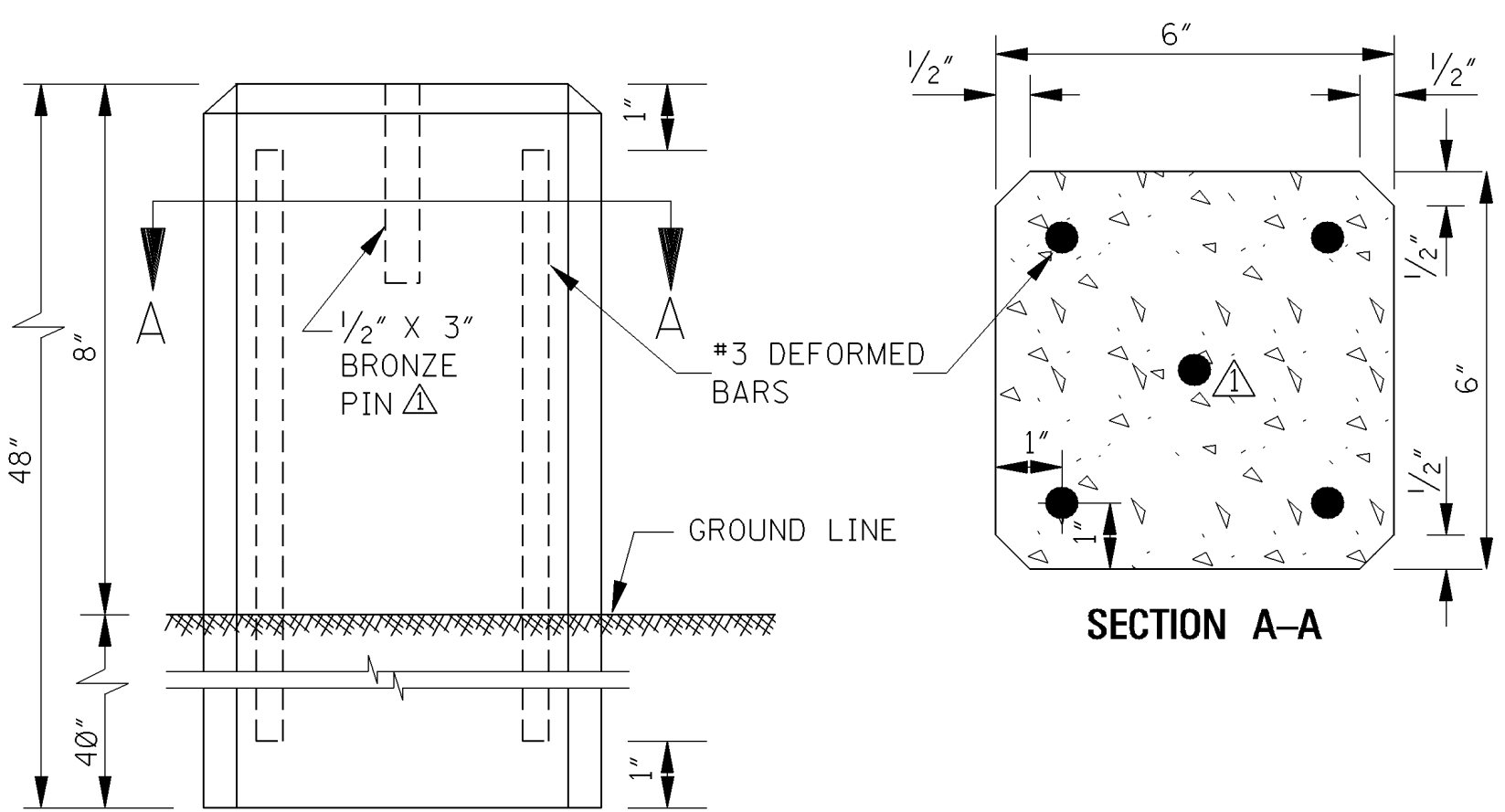
TYPE I MARKER  
(ALTERNATE NO. 1)



FACE OF MARKER



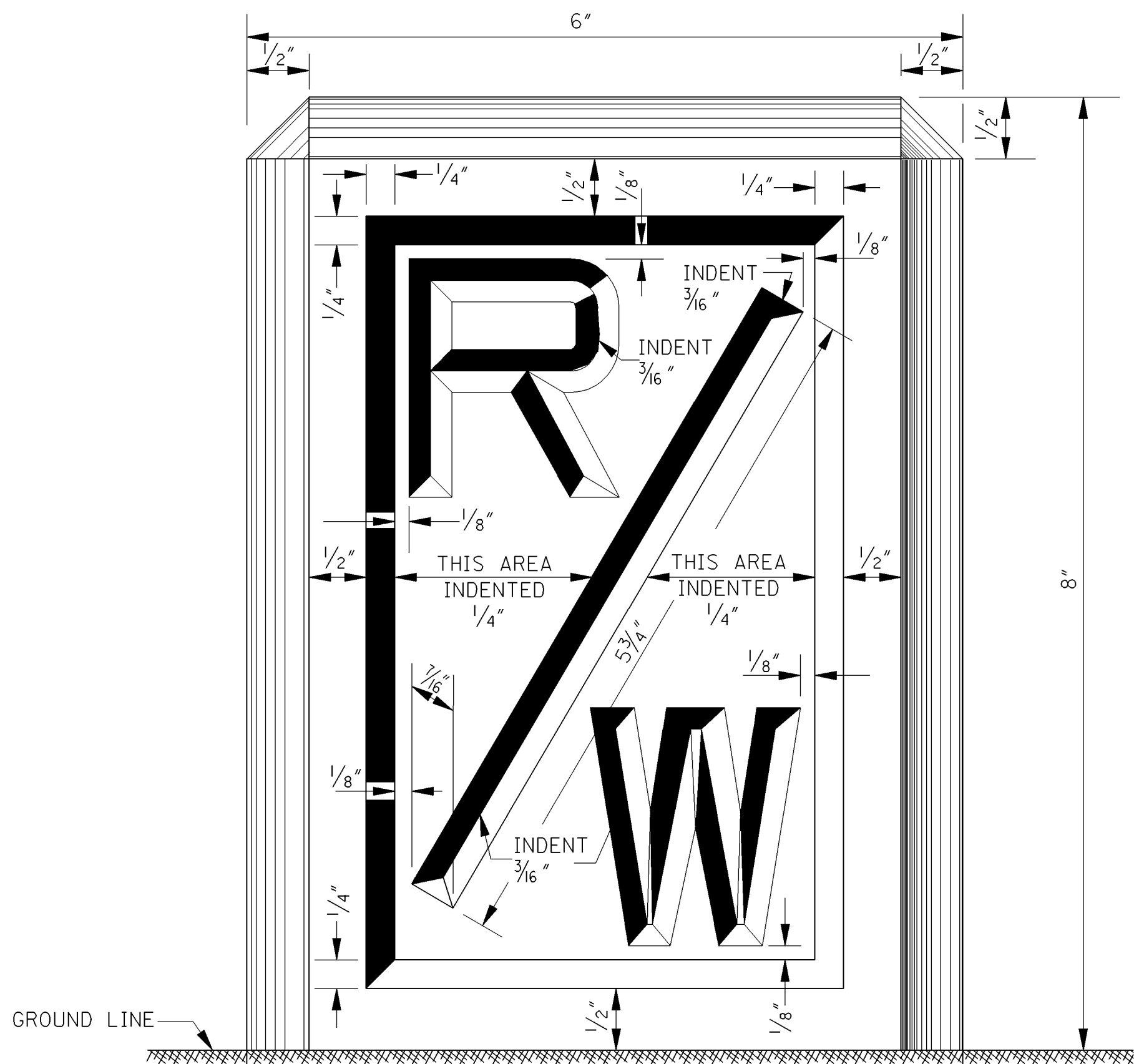
DETAIL OF LETTERS



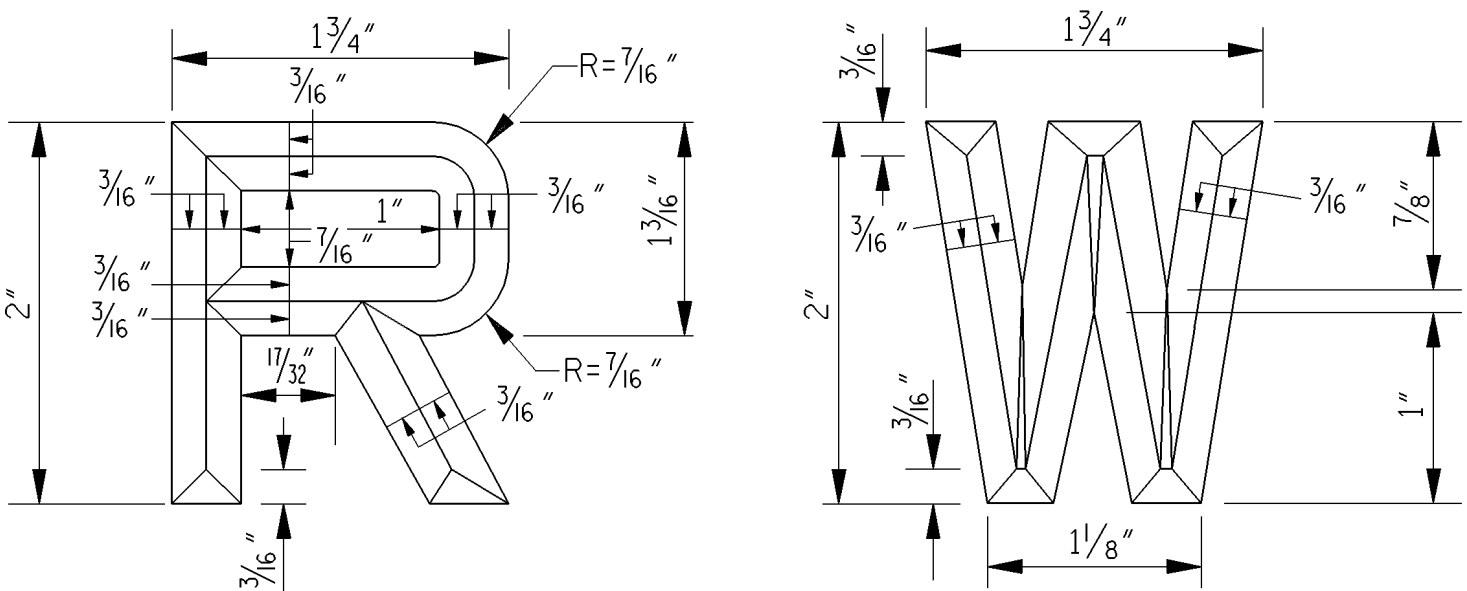
ELEVATION

REINFORCING AND INSTALLATION DETAILS

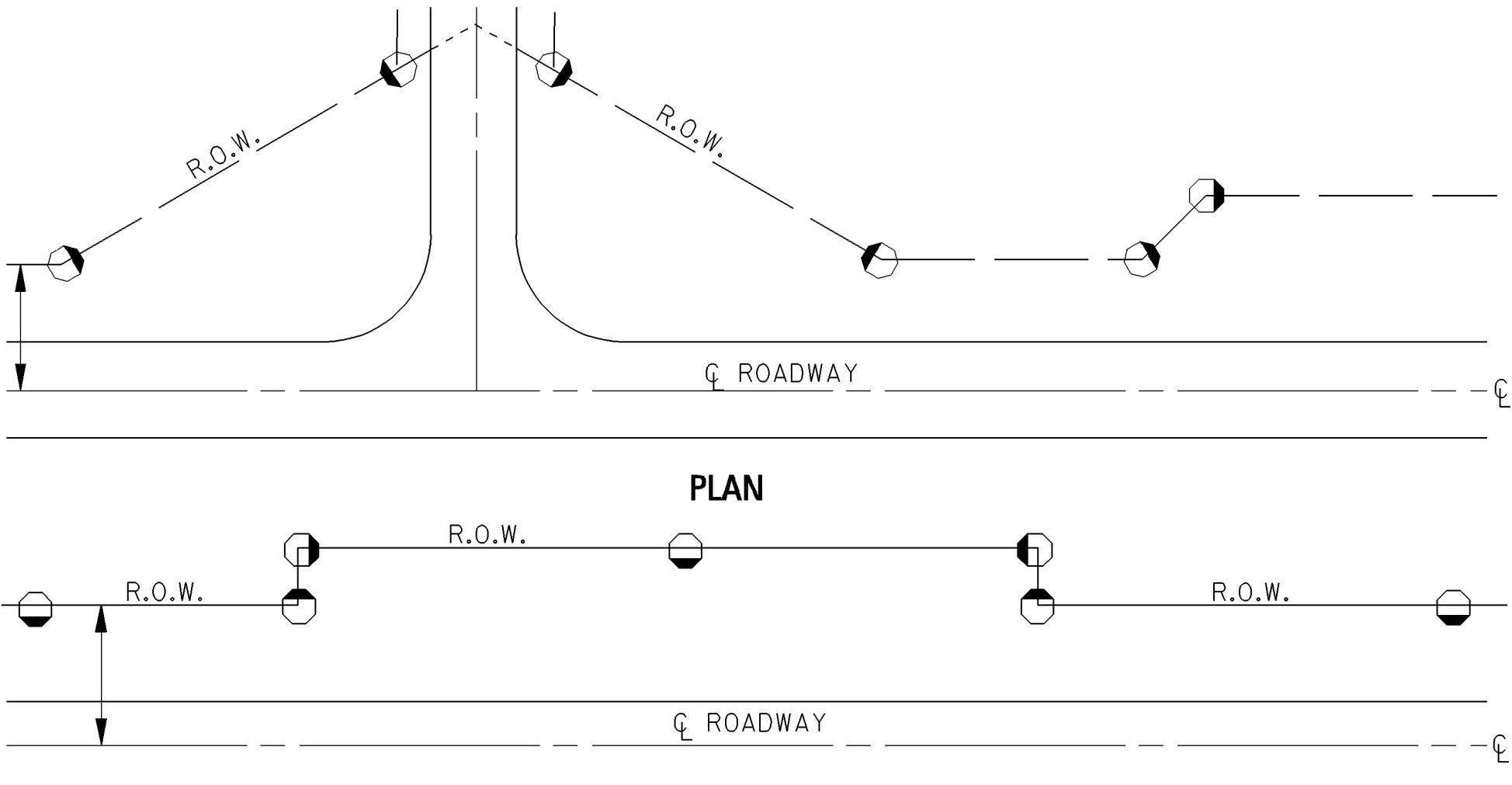
TYPE I MARKER  
(ALTERNATE NO. 2)



FACE OF MARKER



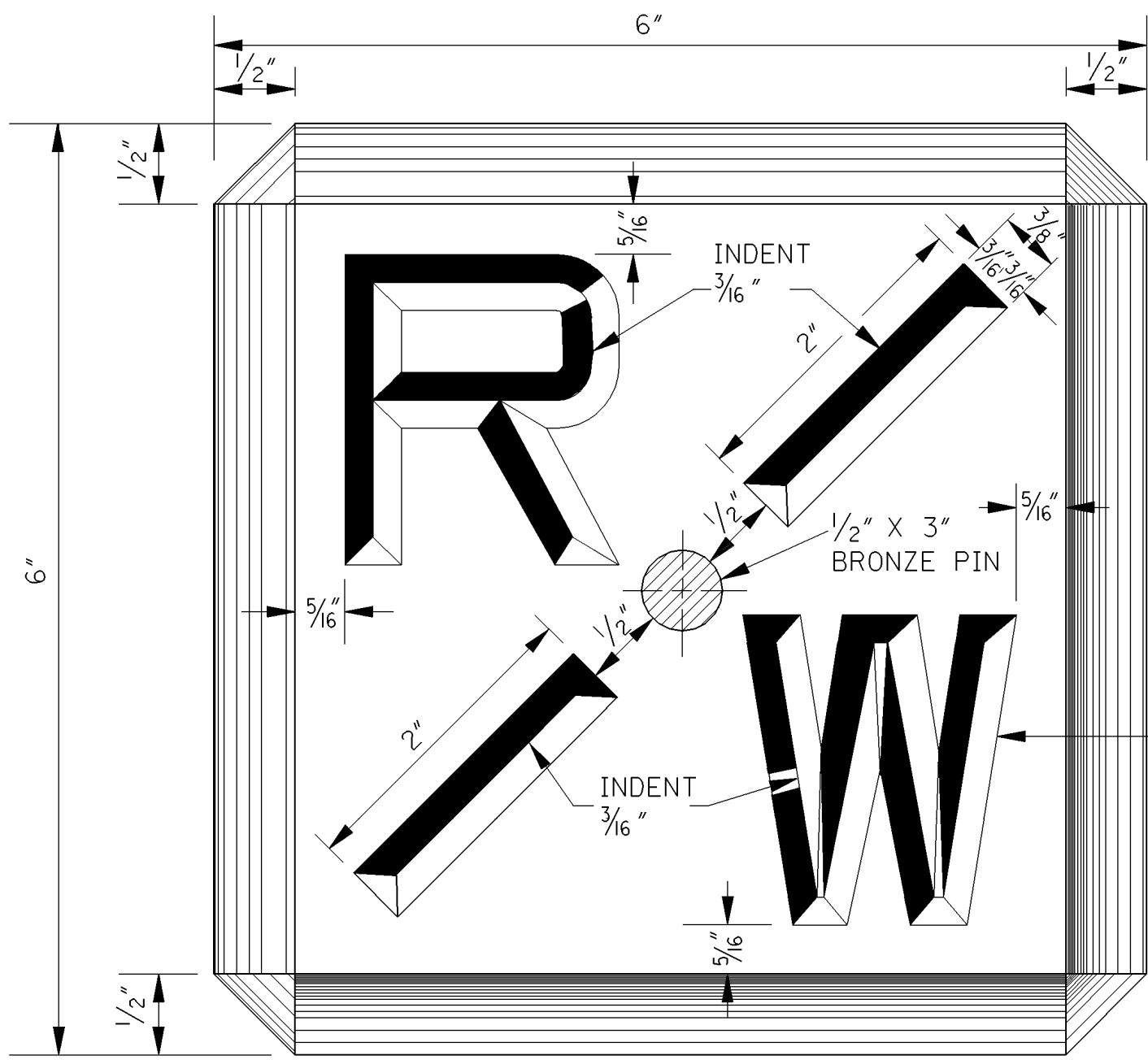
DETAIL OF LETTERS



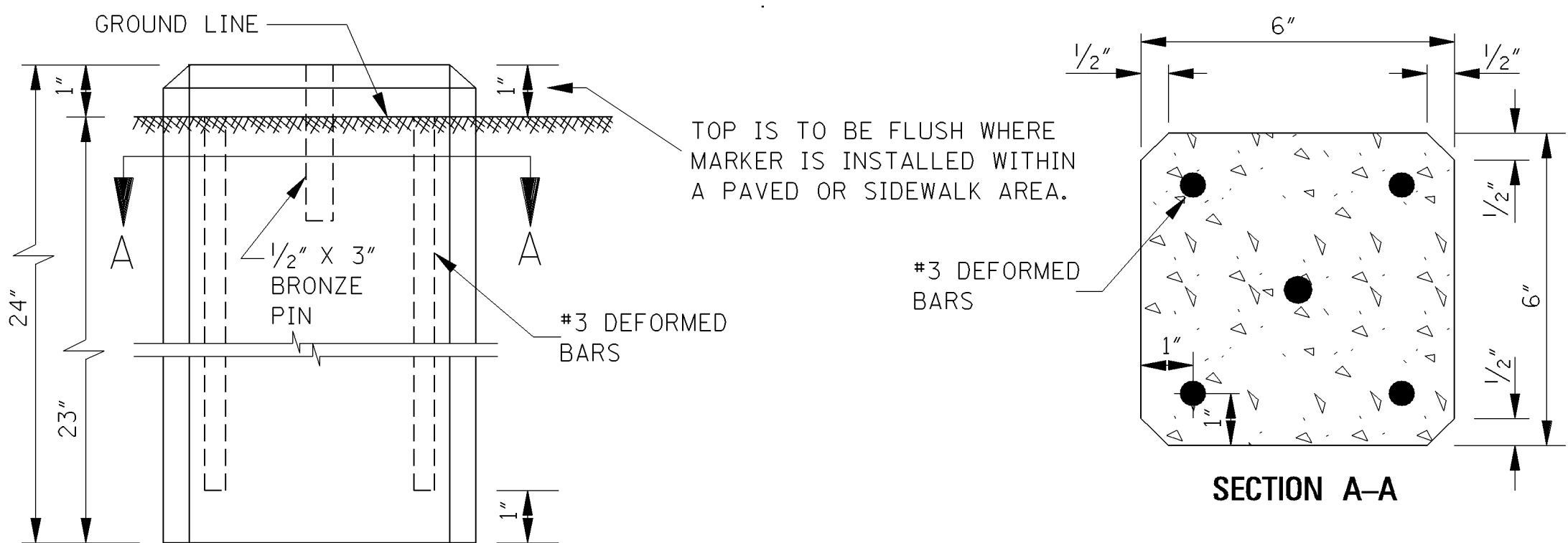
PLAN

MARKER ARRANGEMENT FOR ADDITIONAL RIGHT-OF-WAY

TYPE II MARKER  
(FLUSH TYPE FOR USE IN BUILT-UP AREAS)

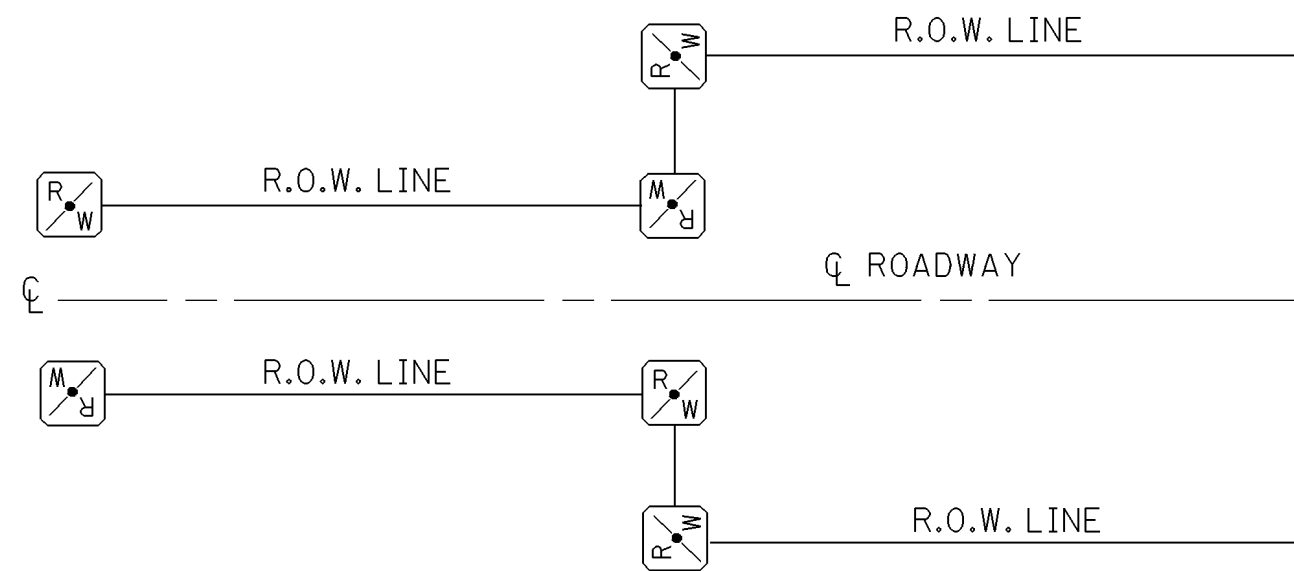


TOP OF MARKER



ELEVATION

REINFORCING AND INSTALLATION DETAILS



PLAN

MARKER ARRANGEMENT FOR ADDITIONAL RIGHT-OF-WAY

GENERAL NOTES:

1. THE CONCRETE SHALL HAVE A MINIMUM CEMENT CONTENT OF 470 LBS OF CEMENT PER CUBIC YARD OF CONCRETE.
2. THE MARKERS SHALL BE PLACED AS INDICATED ELSEWHERE ON PLANS.

|           |  |                                                                                      |  |
|-----------|--|--------------------------------------------------------------------------------------|--|
| S.W.R. BY |  | MISSISSIPPI DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION<br>STANDARD PLAN |  |
| DATE      |  | ISSUE DATE: OCTOBER 1, 1998                                                          |  |
| 3-01-02   |  | ADDED BRONZE PIN                                                                     |  |
| REVISION  |  | WORKING NUMBER<br>RW-1                                                               |  |
|           |  | SHEET NUMBER<br>270                                                                  |  |

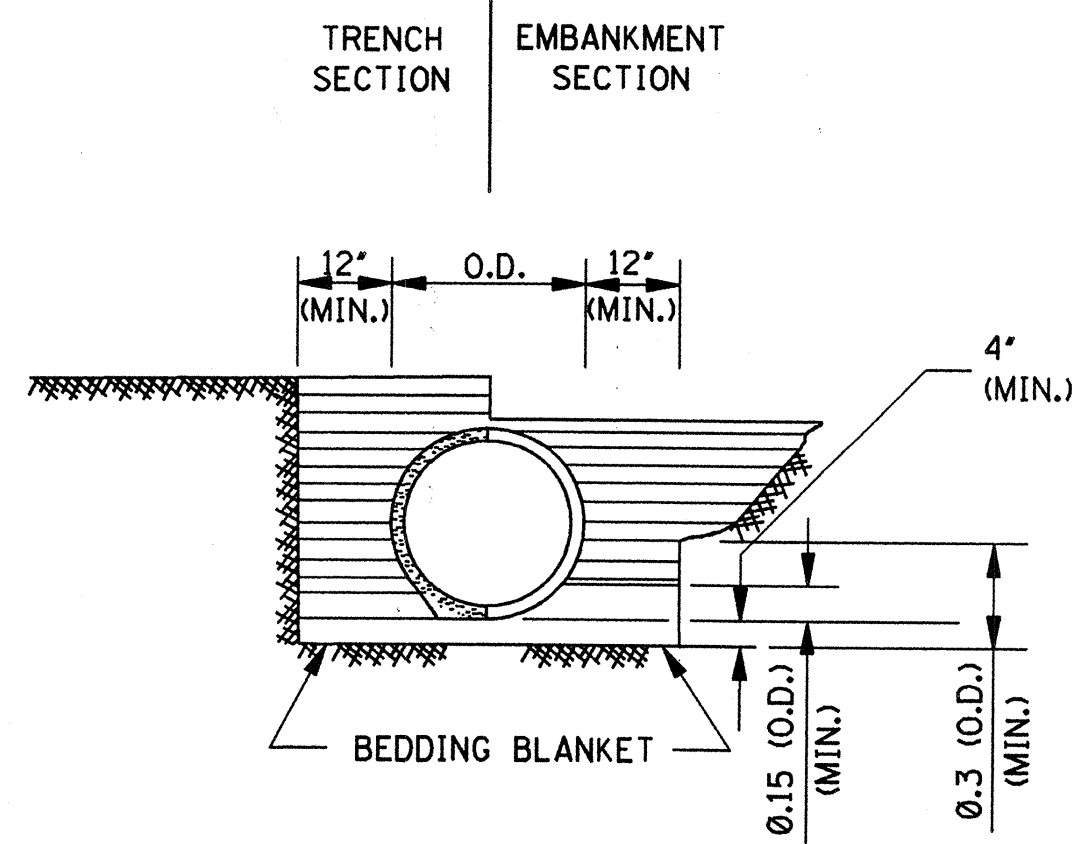




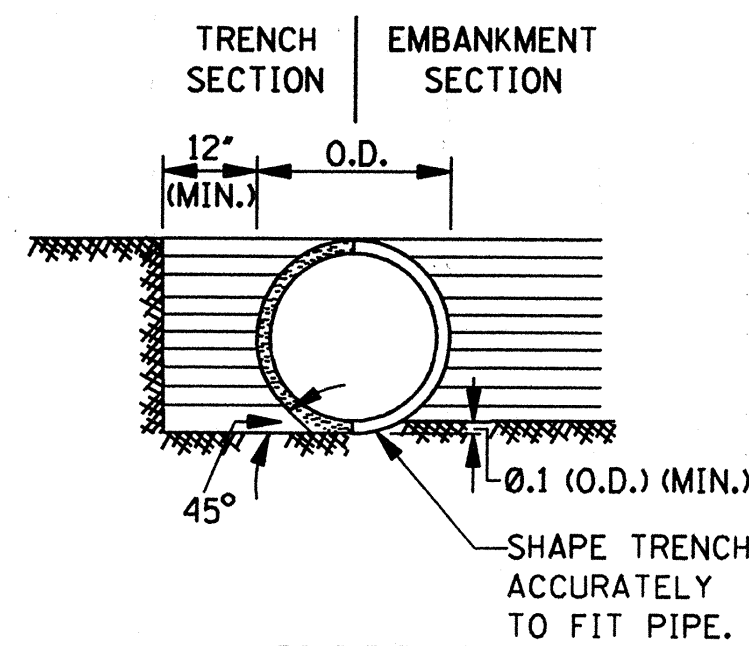
|       |             |
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| STATE | PROJECT NO. |
| MISS. |             |

| CORRUGATED STEEL AND ALUMINUM PIPE (ROUND)<br>H-20 LOADING |                                                                    |                                                                        |                                       |                                       |                                       |                                      |
|------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--------------------------------------|
| PIPE<br>DIAMETER<br>(in)                                   | MINIMUM COVER<br>FROM TOP OF<br>PIPE TO TOP<br>OF SUBGRADE<br>(in) | MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft†)                            |                                       |                                       |                                       |                                      |
|                                                            |                                                                    | SHEET THICKNESS (in)                                                   |                                       |                                       |                                       |                                      |
|                                                            |                                                                    | 0.064 STEEL<br>0.060 ALUM.<br>16 GAGE                                  | 0.079 STEEL<br>0.075 ALUM.<br>14 GAGE | 0.109 STEEL<br>0.105 ALUM.<br>12 GAGE | 0.138 STEEL<br>0.135 ALUM.<br>10 GAGE | 0.168 STEEL<br>0.164 ALUM.<br>8 GAGE |
|                                                            |                                                                    | 3' X 1' OR 5' X 1'<br>CORRUGATED STEEL /<br>RIVETED, WELDED OR HELICAL |                                       |                                       |                                       |                                      |
| 12"                                                        | 12"                                                                | 84' / - / 45'                                                          | 91' / - / 45'                         | - / - / 78'                           | - / - / 81'                           | - / - / 84'                          |
| 15"                                                        | 12"                                                                | 67' / - / -                                                            | 73' / - / -                           | - / - / -                             | - / - / -                             | - / - / -                            |
| 18"                                                        | 12"                                                                | 56' / - / 30'                                                          | 61' / - / 30'                         | - / - / 52'                           | - / - / 54'                           | - / - / 56'                          |
| 24"                                                        | 12"                                                                | 42' / - / 22'                                                          | 46' / - / 22'                         | 59' / - / 39'                         | - / - / 41'                           | - / - / 42'                          |
| 30"                                                        | 12"                                                                | 34' / - / 18'                                                          | 36' / - / 18'                         | 47' / - / 31'                         | - / - / 32'                           | - / - / 34'                          |
| 36"                                                        | 12"                                                                | 28' / 48' / 15'                                                        | 30' / 60' / 15'                       | 39' / 78' / 26'                       | 41' / 89' / 27'                       | - / 101' / 28'                       |
| 42"                                                        | 12"                                                                | 31' / 41' / -                                                          | 43' / 51' / 26'                       | 46' / 64' / 43'                       | 48' / 71' / 43'                       | 50' / 79' / 44'                      |
| 48"                                                        | 12"                                                                | 27' / 36' / -                                                          | 37' / 45' / -                         | 45' / 57' / 40'                       | 46' / 61' / 41'                       | 47' / 66' / 43'                      |
| 54"                                                        | 12"                                                                | - / 32' / -                                                            | 33' / 40' / -                         | 43' / 52' / 35'                       | 44' / 55' / 37'                       | 45' / 59' / 38'                      |
| 60"                                                        | 12"                                                                | - / 29' / -                                                            | - / 36' / -                           | 43' / 49' / -                         | 43' / 51' / 33'                       | 44' / 54' / 34'                      |
| 66"                                                        | 12"                                                                | - / 26' / -                                                            | - / 33' / -                           | 42' / 47' / -                         | 43' / 49' / 30'                       | 43' / 51' / 31'                      |
| 72"                                                        | 12"                                                                | - / 24' / -                                                            | - / 30' / -                           | - / 44' / -                           | 41' / 47' / -                         | 43' / 49' / 29'                      |
| 78"                                                        | 12"                                                                | - / 22' / -                                                            | - / 28' / -                           | - / 41' / -                           | - / 46' / -                           | 39' / 47' / -                        |
| 84"                                                        | 12"                                                                | - / 21' / -                                                            | - / 26' / -                           | - / 38' / -                           | - / 45' / -                           | 35' / 46' / -                        |
| 90"                                                        | 12"                                                                | - / 19' / -                                                            | - / 24' / -                           | - / 35' / -                           | - / 43' / -                           | - / 45' / -                          |
| 96"                                                        | 12"                                                                | - / 18' / -                                                            | - / 22' / -                           | - / 33' / -                           | - / 40' / -                           | - / 44' / -                          |
| 102"                                                       | 24"                                                                | - / 17' / -                                                            | - / 21' / -                           | - / 31' / -                           | - / 38' / -                           | - / 42' / -                          |
| 108"                                                       | 24"                                                                | - / - / -                                                              | - / 20' / -                           | - / 30' / -                           | - / 35' / -                           | - / 39' / -                          |
| 114"                                                       | 24"                                                                | - / - / -                                                              | - / 19' / -                           | - / 28' / -                           | - / 34' / -                           | - / 37' / -                          |
| 120"                                                       | 24"                                                                | - / - / -                                                              | - / - / -                             | - / 27' / -                           | - / 32' / -                           | - / 35' / -                          |

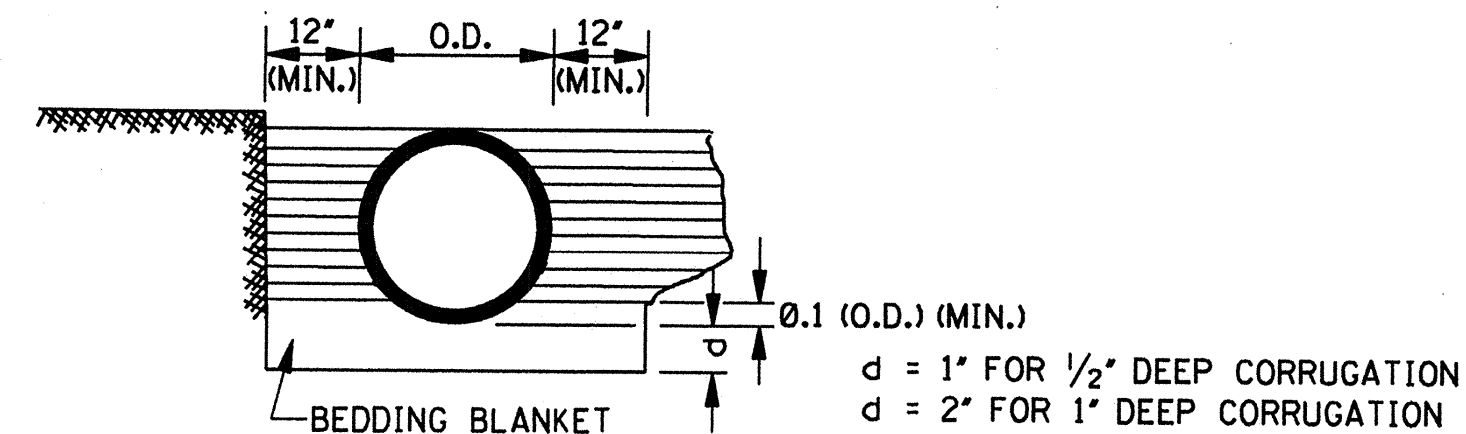
NOTE: THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR 1/2", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS (AASHTO M 36M/M 36 & AASHTO M 196M/M 196).



CLASS B



CLASS C



CLASS C MODIFIED

| MAXIMUM HEIGHT OF FILL<br>OVER REINFORCED CONCRETE PIPE |                     |                      |                      |
|---------------------------------------------------------|---------------------|----------------------|----------------------|
| CLASS<br>OF PIPE                                        | TYPE OF<br>BACKFILL | MAXIMUM COVER (ft†)  |                      |
|                                                         |                     | CLASS "C"<br>BEDDING | CLASS "B"<br>BEDDING |
| III                                                     | NORMAL              | 16'                  | -                    |
| IV                                                      | NORMAL              | 23'                  | 28'                  |
| V                                                       | NORMAL              | 30'                  | 36'                  |
| IV                                                      | IMPERFECT           | -                    | 90'                  |
| V                                                       | IMPERFECT           | -                    | 115'                 |

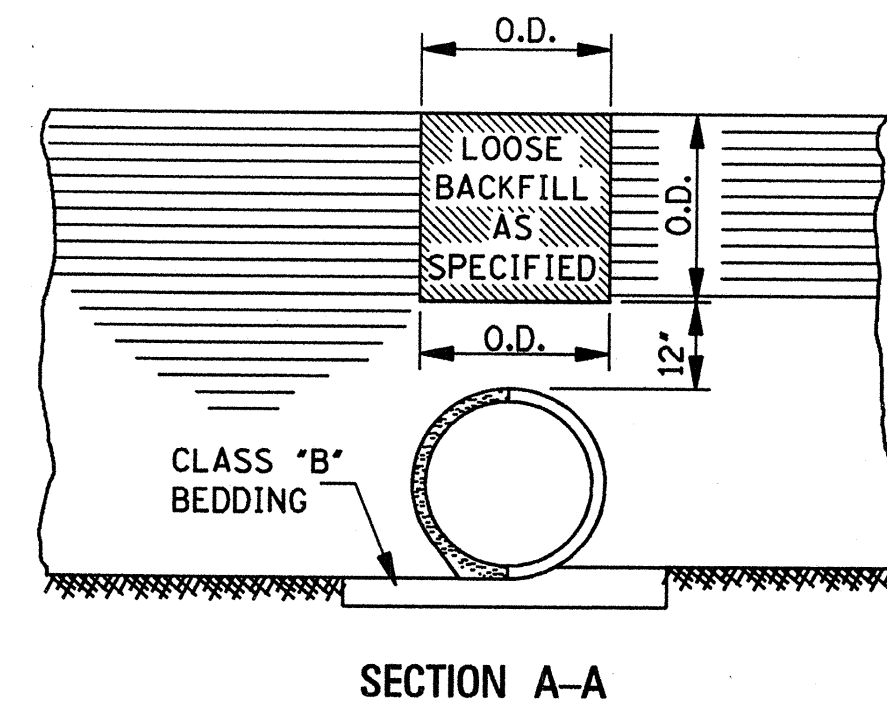
NOTE: CLASS OF PIPE AND BEDDING TO BE CONSISTENT THROUGHOUT THE PIPE LENGTH.

| MAXIMUM HEIGHT OF FILL OVER CLASS 2<br>NONREINFORCED CONCRETE PIPE,<br>PERFORATED AND/OR PLAIN,<br>FOR UNDERDRAINS |                                  |                  |              |                                                          |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------|--------------|----------------------------------------------------------|
| PIPE<br>SIZE<br>(in)                                                                                               | MAXIMUM COVER (ft†)              |                  |              |                                                          |
|                                                                                                                    | BEDDING CLASS "C"/CLASS "B"      |                  |              | PROJECTING<br>POSITIVE<br>p = 0.7; R <sub>sd</sub> = 0.7 |
|                                                                                                                    | TRENCH<br>B <sub>d</sub><br>(in) | SAND &<br>GRAVEL | DAMP<br>CLAY |                                                          |
| 4"                                                                                                                 | 2.00'                            | *                | *            | 34' / 42'                                                |
| 6"                                                                                                                 | 2.00'                            | *                | *            | 25' / 30'                                                |
| 8"                                                                                                                 | 2.25'                            | *                | 16' / *      | 19' / 24'                                                |
| 10"                                                                                                                | 2.50'                            | *                | 12' / 20'    | 16' / 19'                                                |
| 12"                                                                                                                | 2.75'                            | *                | 12' / 18'    | 14' / 17'                                                |

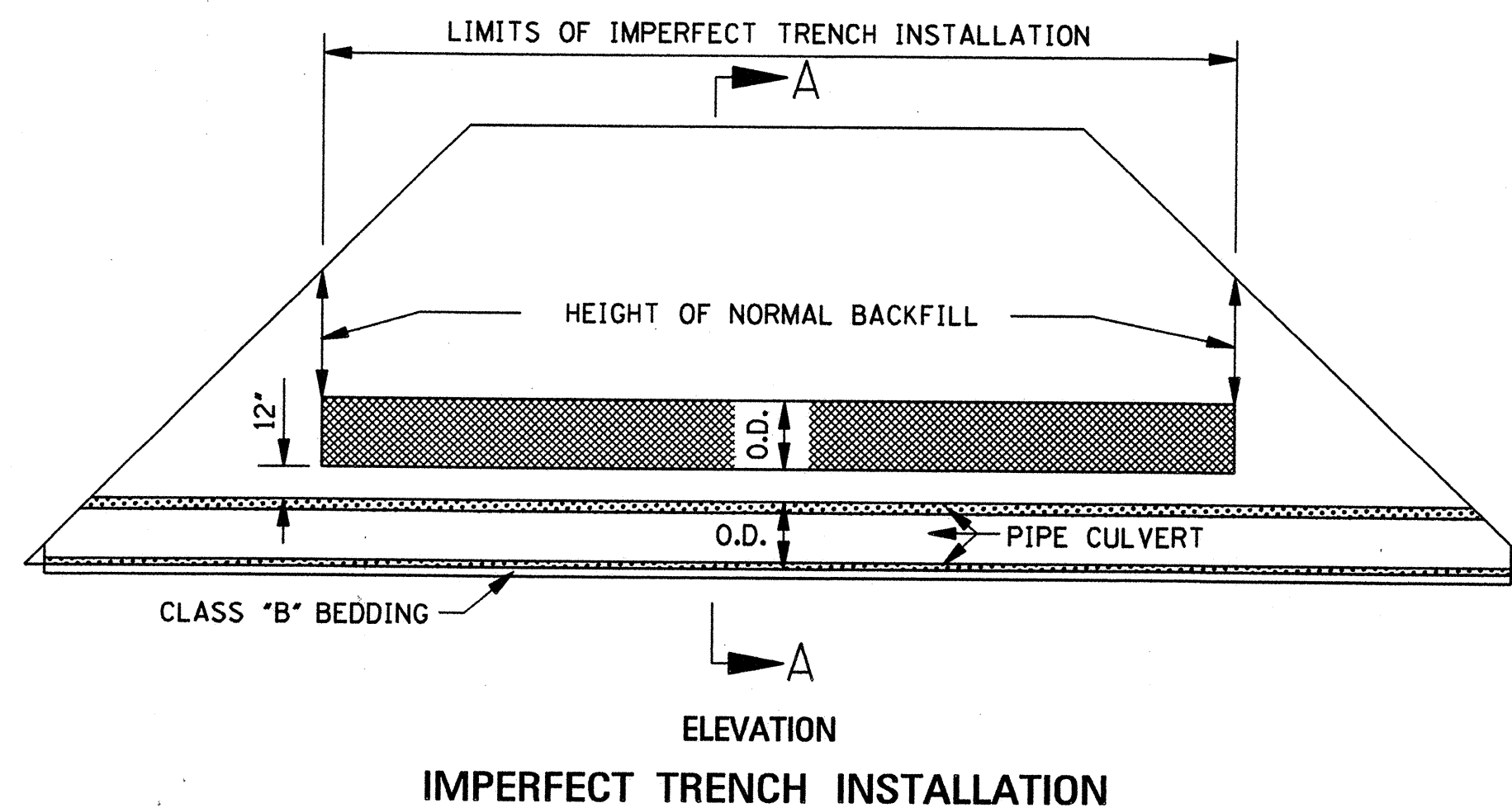
- NOTES:  
 \* 1. INDICATES NO LIMIT OF FILL HEIGHT (130 lbs/ft<sup>2</sup>).  
 2. TRENCH WIDTH (B<sub>d</sub>) NO GREATER THAN 16" PLUS O.D.  
 3. FACTOR OF SAFETY IS 1.25 ON MINIMUM ULTIMATE STRENGTH.  
 4. MINIMUM COVER FOR HIGHWAY LOADS IS 18".  
 5. PERFORATED PIPE SHALL BE TYPE 1.

| CORRUGATED METAL PIPE ARCHES H-20 LOADING |                                            |                                     |                                                                                                  |                                                              |                                                                                                                           |                                                 |                                                                                                                           |
|-------------------------------------------|--------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| EQUIV.<br>DIAMETER<br>(in)                | PIPE<br>DIMENSION<br>(SPAN X RISE)<br>(in) | MINIMUM<br>CORNER<br>RADIUS<br>(in) | MINIMUM COVER<br>FROM TOP OF<br>PIPE TO TOP OF<br>SUBGRADE FOR<br>2 tons/ft <sup>2</sup><br>(in) | STEEL                                                        |                                                                                                                           | ALUMINUM                                        |                                                                                                                           |
|                                           |                                            |                                     |                                                                                                  | MINIMUM<br>THICKNESS<br>REQUIRED<br>(in)                     | MAXIMUM FILL HEIGHT<br>ABOVE TOP OF PIPE (ft†)<br>FOR THE FOLLOWING<br>CORNER BEARING PRESSURE<br>(tons/ft <sup>2</sup> ) | MINIMUM<br>THICKNESS<br>REQUIRED<br>(in)        | MAXIMUM FILL HEIGHT<br>ABOVE TOP OF PIPE (ft†)<br>FOR THE FOLLOWING<br>CORNER BEARING PRESSURE<br>(tons/ft <sup>2</sup> ) |
|                                           |                                            |                                     |                                                                                                  |                                                              |                                                                                                                           |                                                 |                                                                                                                           |
|                                           |                                            |                                     |                                                                                                  | 2 1/2" X 1/2" CORRUGATION<br>RIVETED, WELDED OR HELICAL      | 2 tons/ft <sup>2</sup> † 3 tons/ft <sup>2</sup>                                                                           | 2 1/2" X 1/2" CORRUGATION<br>RIVETED OR HELICAL | 2 tons/ft <sup>2</sup> † 3 tons/ft <sup>2</sup>                                                                           |
| 15"                                       | 17" X 13"                                  | 3"                                  | 18"                                                                                              | 0.064"                                                       | 13'                                                                                                                       | 0.060"                                          | 15'+                                                                                                                      |
| 18"                                       | 21" X 15"                                  | 3"                                  | 18"                                                                                              | 0.064"                                                       | 12'                                                                                                                       | 0.060"                                          | 14'                                                                                                                       |
| 24"                                       | 28" X 20"                                  | 3"                                  | 18"                                                                                              | 0.064"                                                       | 10'                                                                                                                       | 0.060"                                          | 10'                                                                                                                       |
| 30"                                       | 35" X 24"                                  | 3"                                  | 18"                                                                                              | 0.079"                                                       | 9'                                                                                                                        | 0.060"                                          | 9'                                                                                                                        |
| 36"                                       | 42" X 29"                                  | 3 1/2"                              | 18"                                                                                              | 0.079"                                                       | 9'                                                                                                                        | 0.075"                                          | 9'                                                                                                                        |
| 42"                                       | 49" X 33"                                  | 4"                                  | 18"                                                                                              | 0.079"                                                       | 8'                                                                                                                        | 0.105"                                          | 8'                                                                                                                        |
| 48"                                       | 57" X 38"                                  | 5"                                  | 18"                                                                                              | 0.109"                                                       | 8'                                                                                                                        | 0.135"                                          | 8'                                                                                                                        |
| 54"                                       | 64" X 43"                                  | 6"                                  | 18"                                                                                              | 0.109"                                                       | 8'                                                                                                                        | 0.135"                                          | 8'                                                                                                                        |
| 60"                                       | 71" X 47"                                  | 7"                                  | 18"                                                                                              | 0.138"                                                       | 8'                                                                                                                        | 0.164"                                          | 8'                                                                                                                        |
| 66"                                       | 77" X 52"                                  | 8"                                  | 18"                                                                                              | 0.168"                                                       | 8'                                                                                                                        |                                                 | 12'                                                                                                                       |
| 72"                                       | 83" X 57"                                  | 9"                                  | 18"                                                                                              | 0.168"                                                       | 9'                                                                                                                        |                                                 | 13'                                                                                                                       |
|                                           |                                            |                                     |                                                                                                  | 5" X 1' OR 3" X 1' CORRUGATION<br>RIVETED, WELDED OR HELICAL |                                                                                                                           |                                                 |                                                                                                                           |
| 36"                                       | 40" X 31"                                  | 5"                                  | 18"                                                                                              | 0.079"                                                       | 12'                                                                                                                       |                                                 | 15'+                                                                                                                      |
| 42"                                       | 46" X 36"                                  | 6"                                  | 18"                                                                                              | 0.079"                                                       | 12'                                                                                                                       |                                                 | 15'+                                                                                                                      |
| 48"                                       | 53" X 41"                                  | 7"                                  | 18"                                                                                              | 0.079"                                                       | 12'                                                                                                                       |                                                 | 15'+                                                                                                                      |
| 54"                                       | 60" X 46"                                  | 8"                                  | 18"                                                                                              | 0.079"                                                       | 12'                                                                                                                       |                                                 | 15'+                                                                                                                      |
| 60"                                       | 66" X 51"                                  | 9"                                  | 18"                                                                                              | 0.079"                                                       | 12'                                                                                                                       |                                                 | 15'+                                                                                                                      |
| 66"                                       | 73" X 55"                                  | 12"                                 | 18"                                                                                              | 0.079"                                                       | 15'+                                                                                                                      |                                                 | -                                                                                                                         |
| 72"                                       | 81" X 59"                                  | 14"                                 | 18"                                                                                              | 0.079"                                                       | 15'                                                                                                                       |                                                 | -                                                                                                                         |
| 78"                                       | 87" X 63"                                  | 14"                                 | 18"                                                                                              | 0.079"                                                       | 14'                                                                                                                       |                                                 | 15'+                                                                                                                      |
| 84"                                       | 95" X 67"                                  | 16"                                 | 18"                                                                                              | 0.109"                                                       | 13'                                                                                                                       |                                                 | 15'+                                                                                                                      |
| 90"                                       | 103" X 71"                                 | 16"                                 | 24"                                                                                              | 0.109"                                                       | 12'                                                                                                                       |                                                 | 15'+                                                                                                                      |
| 96"                                       | 112" X 75"                                 | 18"                                 | 24"                                                                                              | 0.109"                                                       | 11'                                                                                                                       |                                                 | 15'+                                                                                                                      |

- NOTES:  
 1. THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR 1/2", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS. (AASHTO M 36M/M 36 & AASHTO M 196M/M 196).  
 † 2. BEARING PRESSURES EXCEEDING 2 tons/ft<sup>2</sup> REQUIRED FOR GIVEN FILL HEIGHT SHALL HAVE FOUNDATION MATERIALS INVESTIGATED TO DETERMINE BEARING CAPACITY.



SECTION A-A

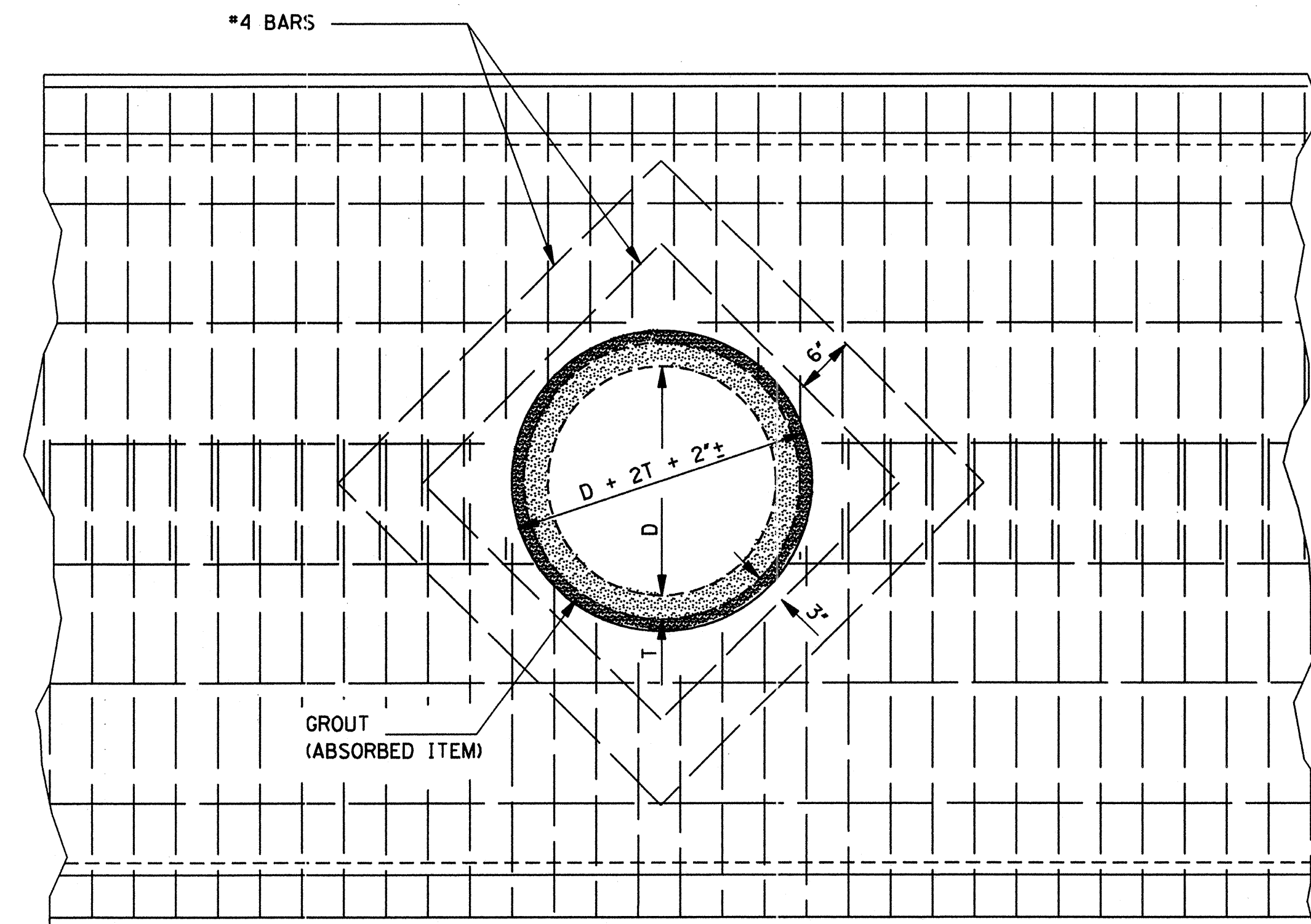


GENERAL NOTES:

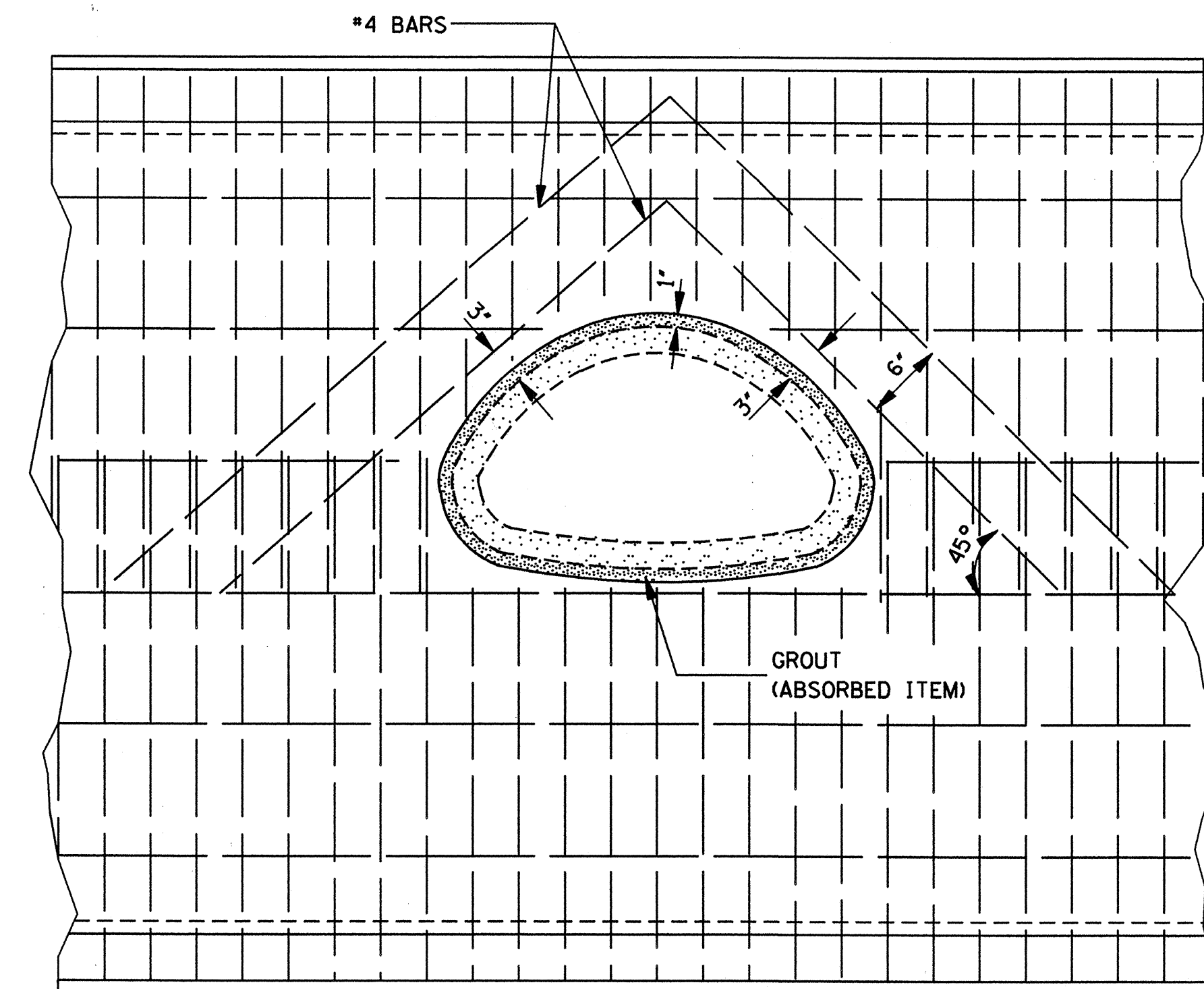
1. MINIMUM SPACING BETWEEN MULTIPLE LINES OF PARALLEL PIPE SHALL BE THE DISTANCE REQUIRED FOR INSTALLING THE ADJACENT FLARED END SECTIONS OR AS SHOWN ON THE HEADWALL DRAWINGS FOR CONDUITS REQUIRING HEADWALLS.
2. UNLESS OTHERWISE INDICATED, THE TOP OF THE PIPE SHALL BE BELOW THE TOP OF THE SUBGRADE, AND A MINIMUM OF 12" OF COVER OVER THE TOP OF THE PIPE SHALL BE MAINTAINED BETWEEN THE SHOULDER LINES.
3. WHERE PRE-BED PIPE IS INSTALLED, FLARED END SECTIONS FROM OTHER MANUFACTURERS MAY BE JOINED TO PRE-BED PIPE PROVIDED A CONCRETE COLLAR IS PLACED AT THE CONTRACTORS EXPENSE AND A DEFORMATION TO THE PIPE'S FLOWLINE IS NOT EVIDENT ON FINAL PLACEMENT.

|                                                                                      |                             |                                                                                                                                        |
|--------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| MISSISSIPPI DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION<br>STANDARD PLAN |                             | <br>WORKING NUMBER<br>PI-1<br>SHEET NUMBER<br>300 |
| DATE                                                                                 | ISSUE DATE: OCTOBER 1, 1998 |                                                                                                                                        |





ELEVATION SHOWING CIRCULAR PIPE  
STUBBED INTO BOX CULVERT BARREL OR WING-WALL



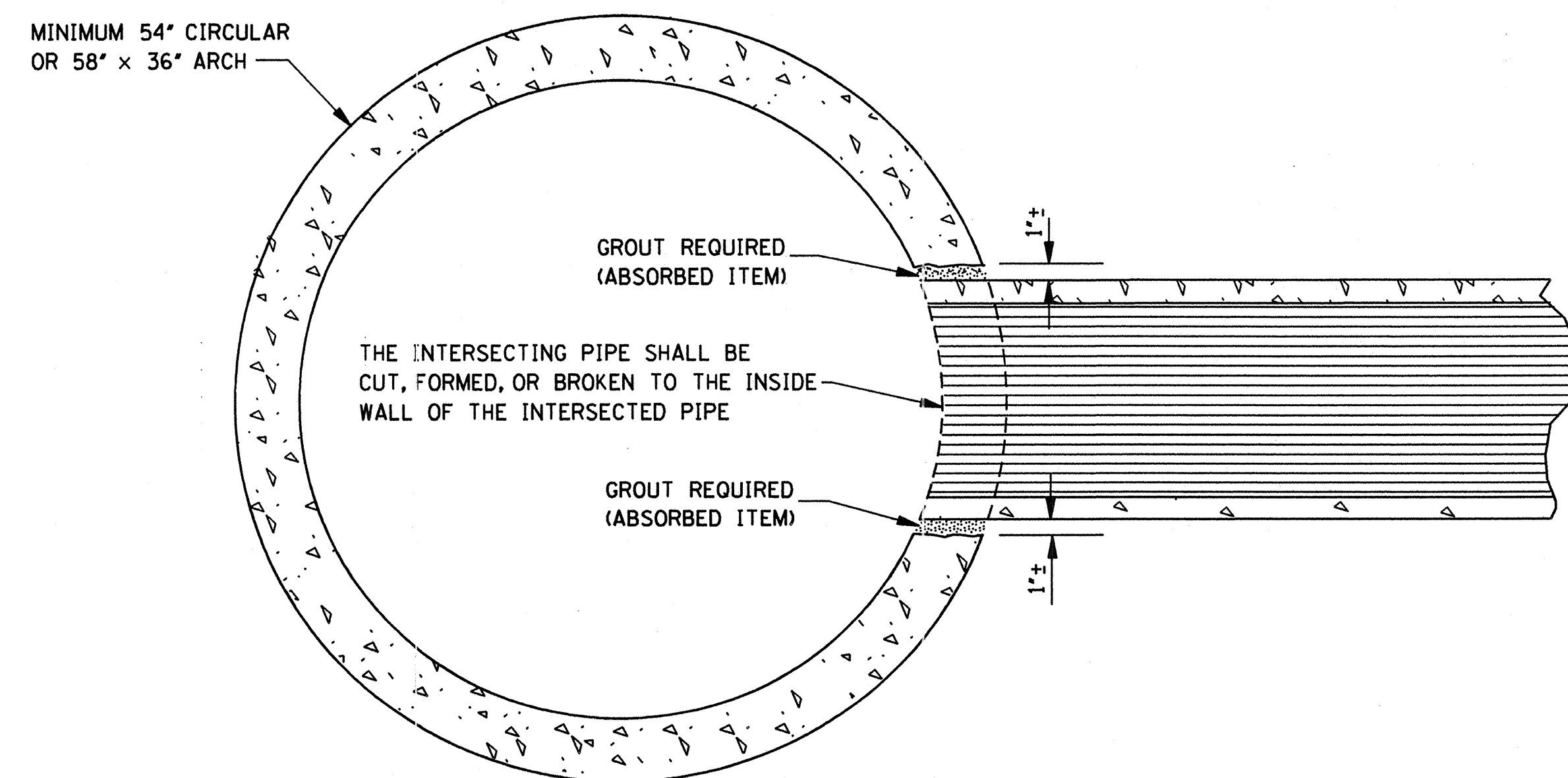
ELEVATION SHOWING ARCH PIPE STUBBED  
INTO BOX CULVERT BARREL OR WING-WALL

| 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"     |
|           | 2           | 5'-5"     |
|           | 1           | 6'-3"     |

- NOTE:
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.

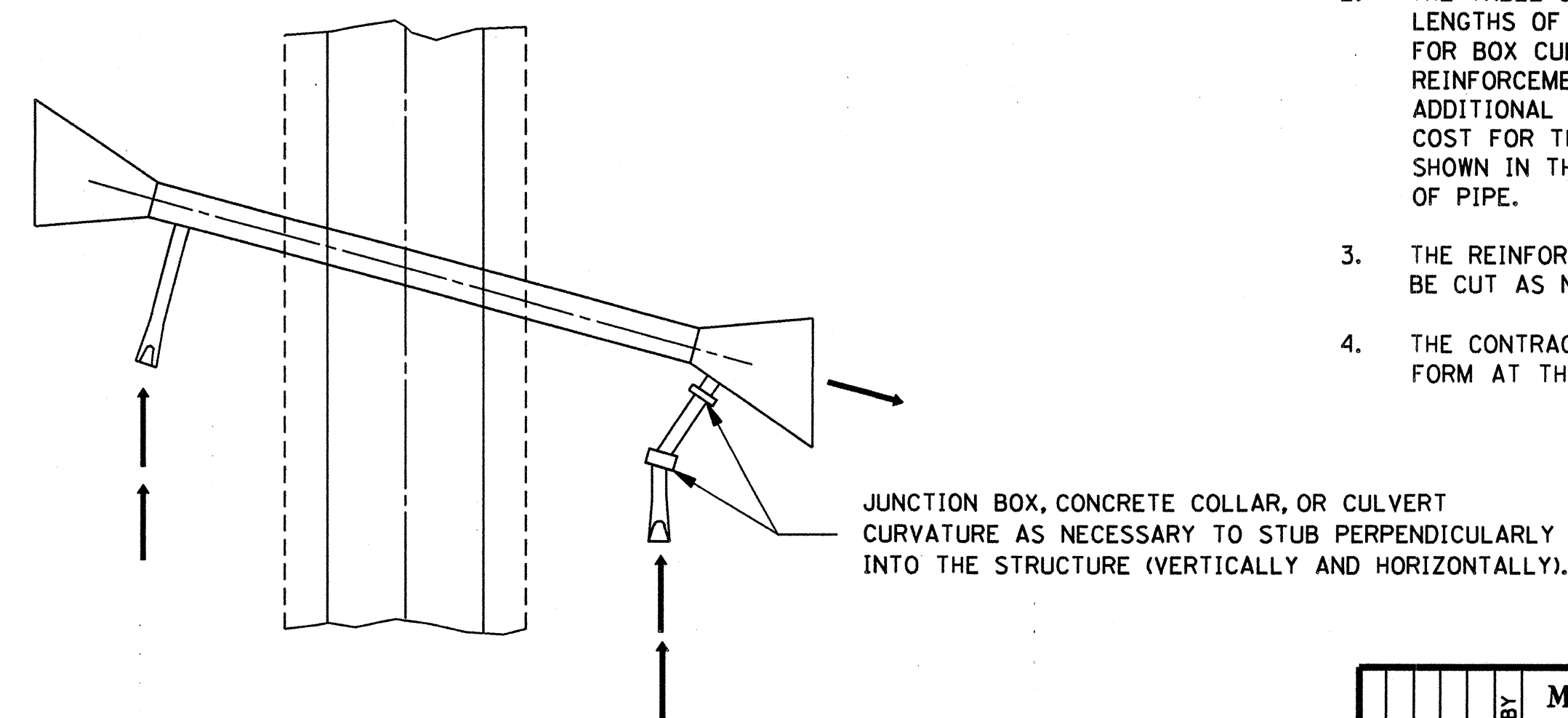
GENERAL NOTES:

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

|                                                                                      |                     |
|--------------------------------------------------------------------------------------|---------------------|
| MISSISSIPPI DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION<br>STANDARD PLAN |                     |
| <b>BRANCH CONNECTIONS</b>                                                            |                     |
| WORKING NUMBER<br>BC-1                                                               | SHEET NUMBER<br>305 |
| ISSUE DATE: OCTOBER 1, 1998                                                          |                     |

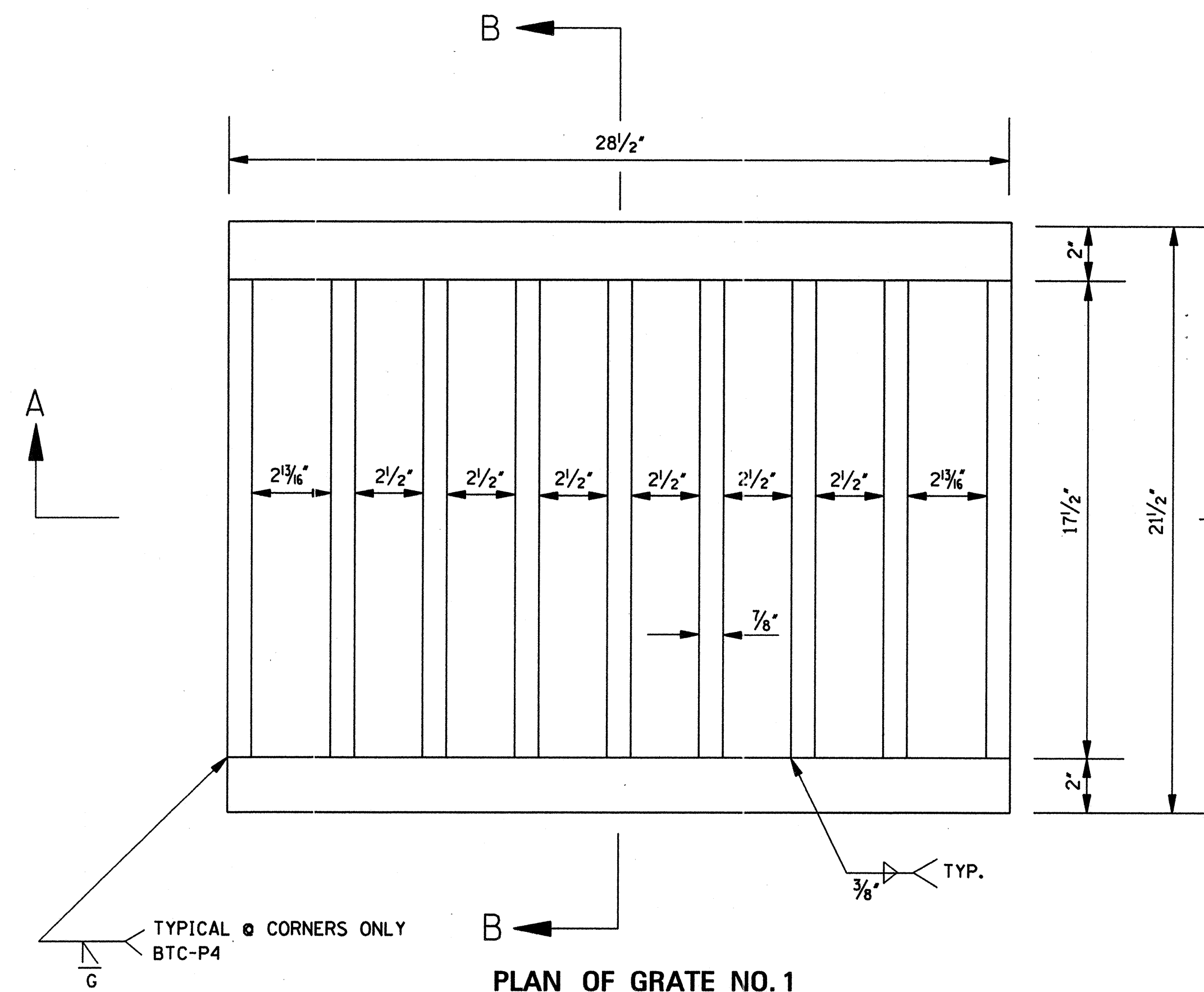




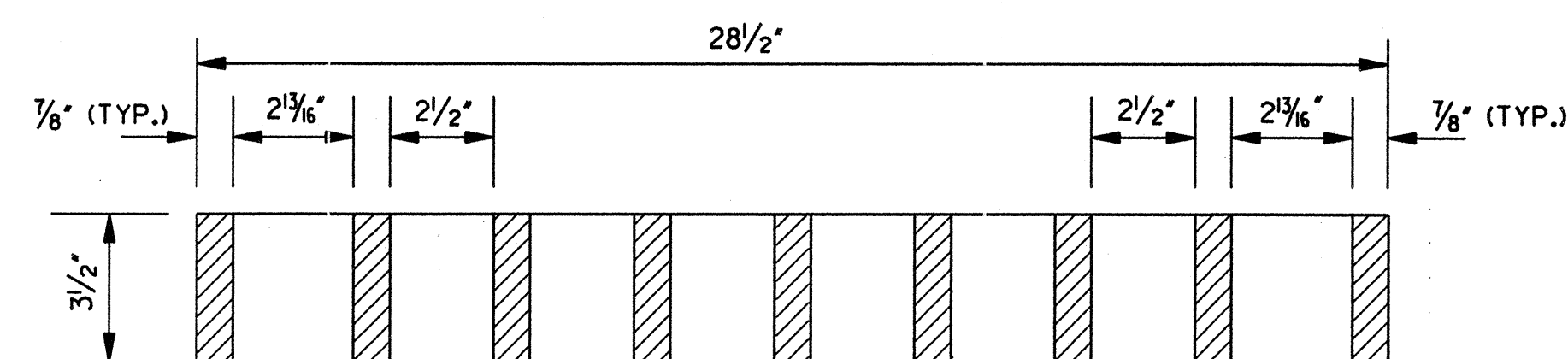


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|-------|-------------|
| STATE | PROJECT NO. |
| MISS. |             |

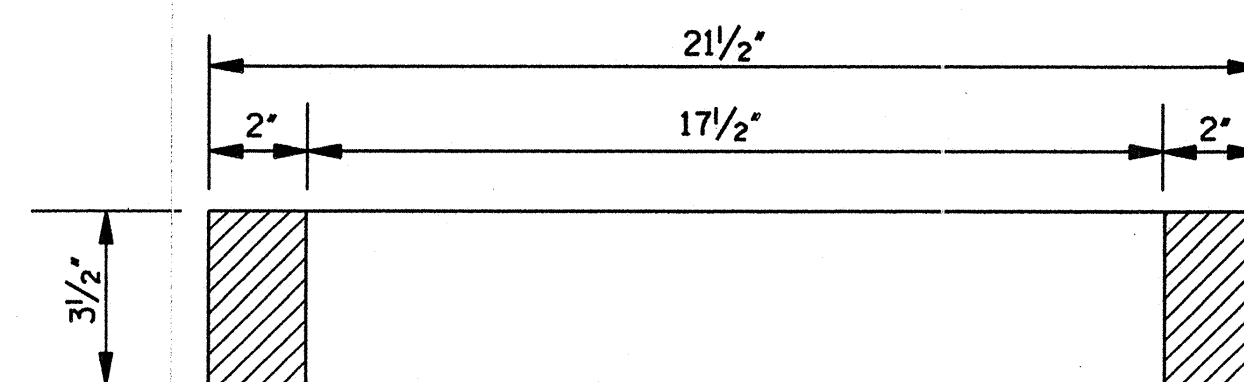
GRATE NO. 1



PLAN OF GRATE NO. 1

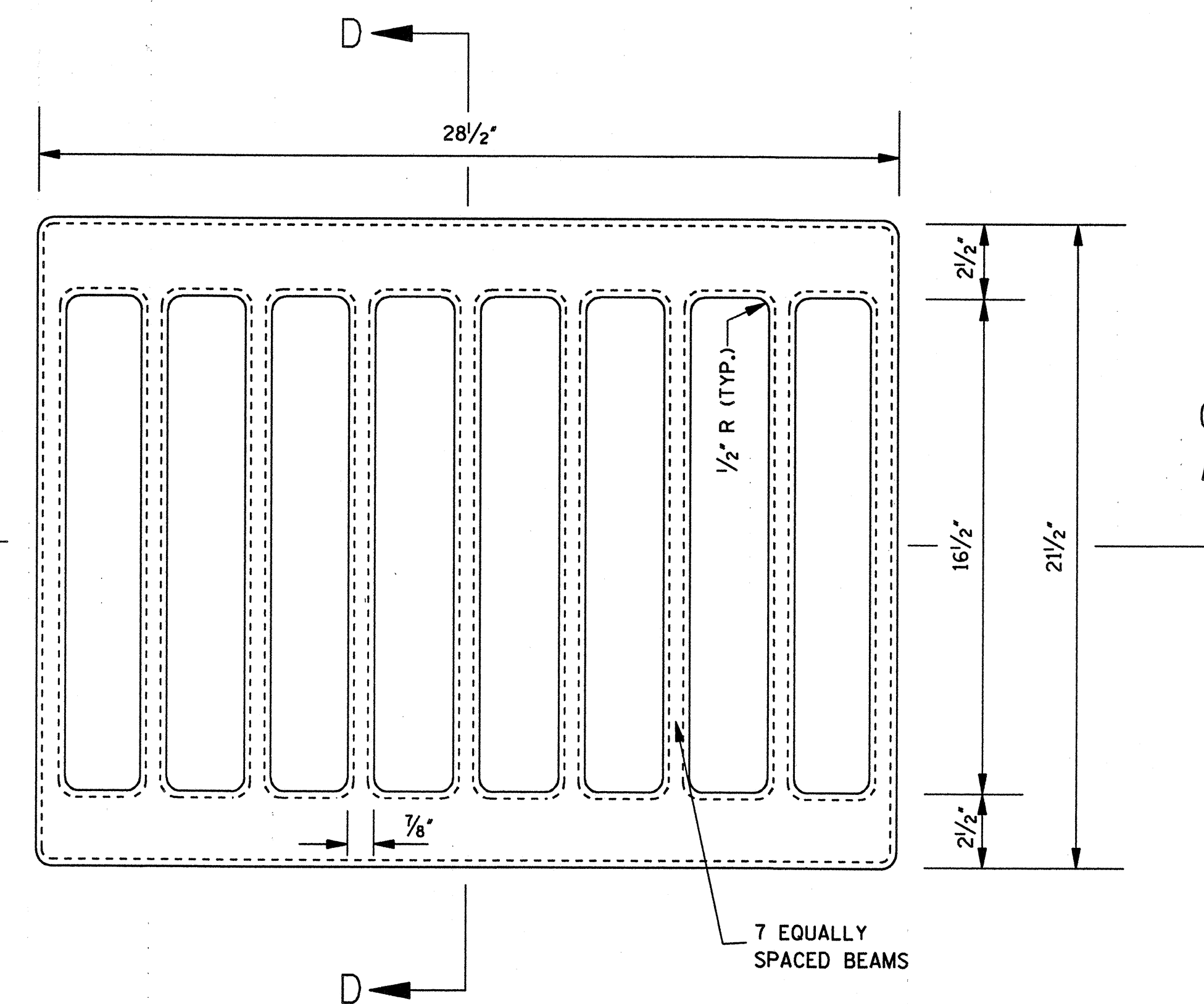


SECTION A-A

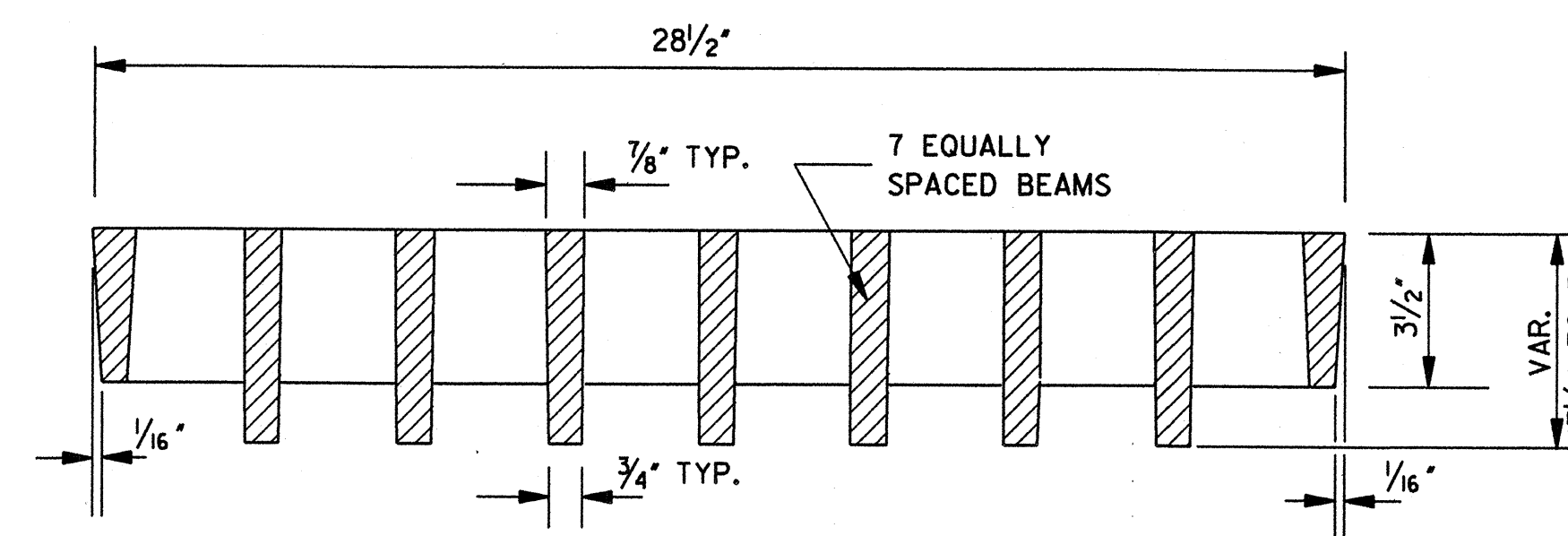


SECTION B-B

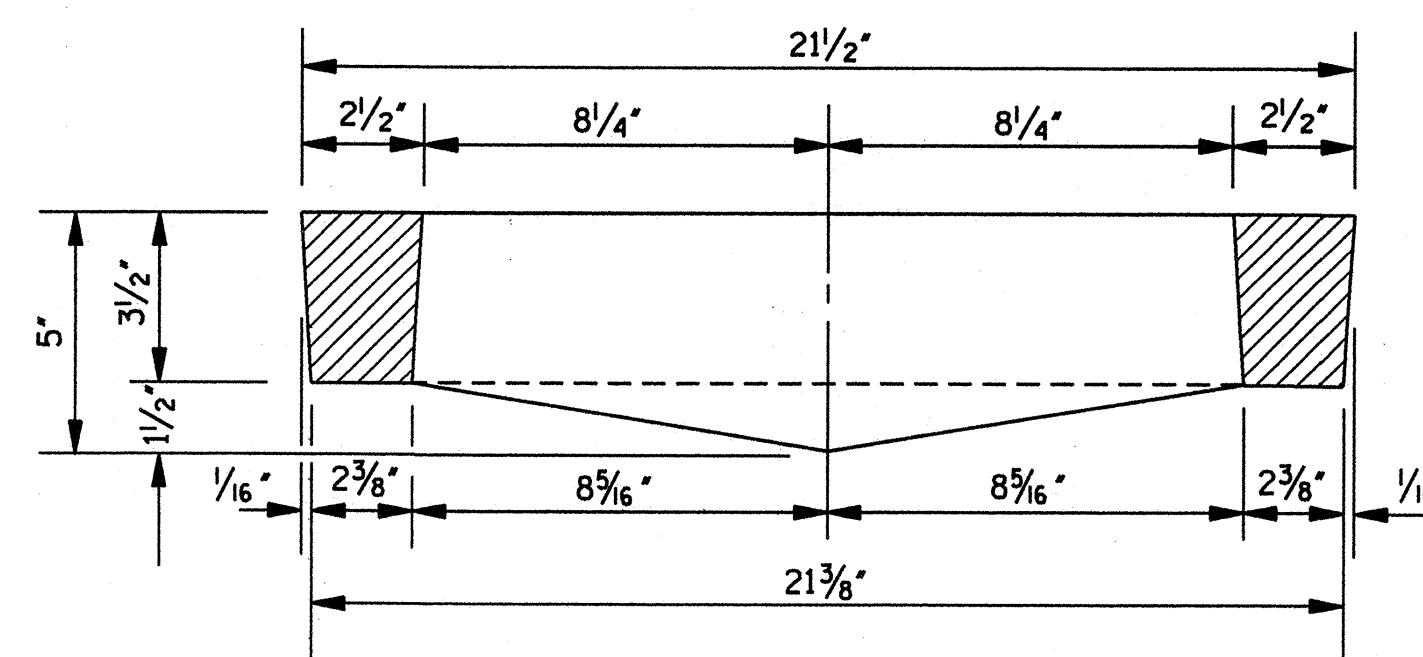
GRATE NO. 2



PLAN OF GRATE NO. 2



SECTION C-C



SECTION D-D

GENERAL NOTES:

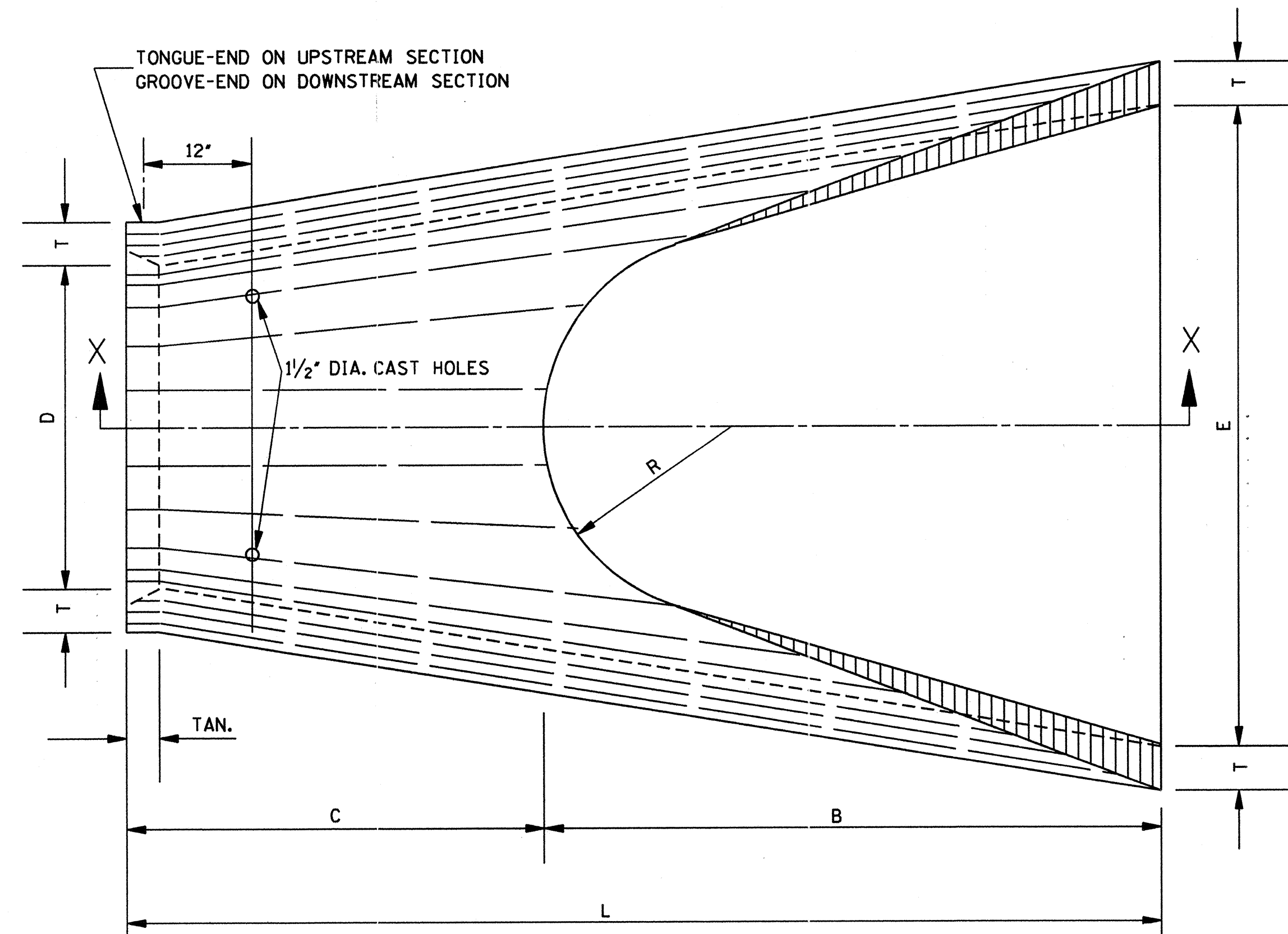
1. BASIS OF PAYMENT WILL BE 250 lbs OF GRATING FOR EITHER GRATE.
2. GRATE NO.1  
THE GRATE MAY BE WELDED STEEL (ASTM A 588) OR STEEL CASTING (AASHTO M 192, CLASS 90). STEEL CASTING SHALL BE GALVANIZED (AASHTO M 111).
3. GRATE NO.2  
THE GRATE SHALL BE DUCTILE IRON (ASTM A 536, GRADE 80-55-06).

|                                                                                      |             |                 |  |
|--------------------------------------------------------------------------------------|-------------|-----------------|--|
| MISSISSIPPI DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION<br>STANDARD PLAN |             |                 |  |
| <b>DETAILS OF GRATES<br/>FOR MEDIAN INLETS</b>                                       |             |                 |  |
| WORKING NUMBER<br>IG-1                                                               |             |                 |  |
| SHEET NUMBER<br>314                                                                  |             |                 |  |
| DATE                                                                                 | ISSUE DATE: | OCTOBER 1, 1998 |  |

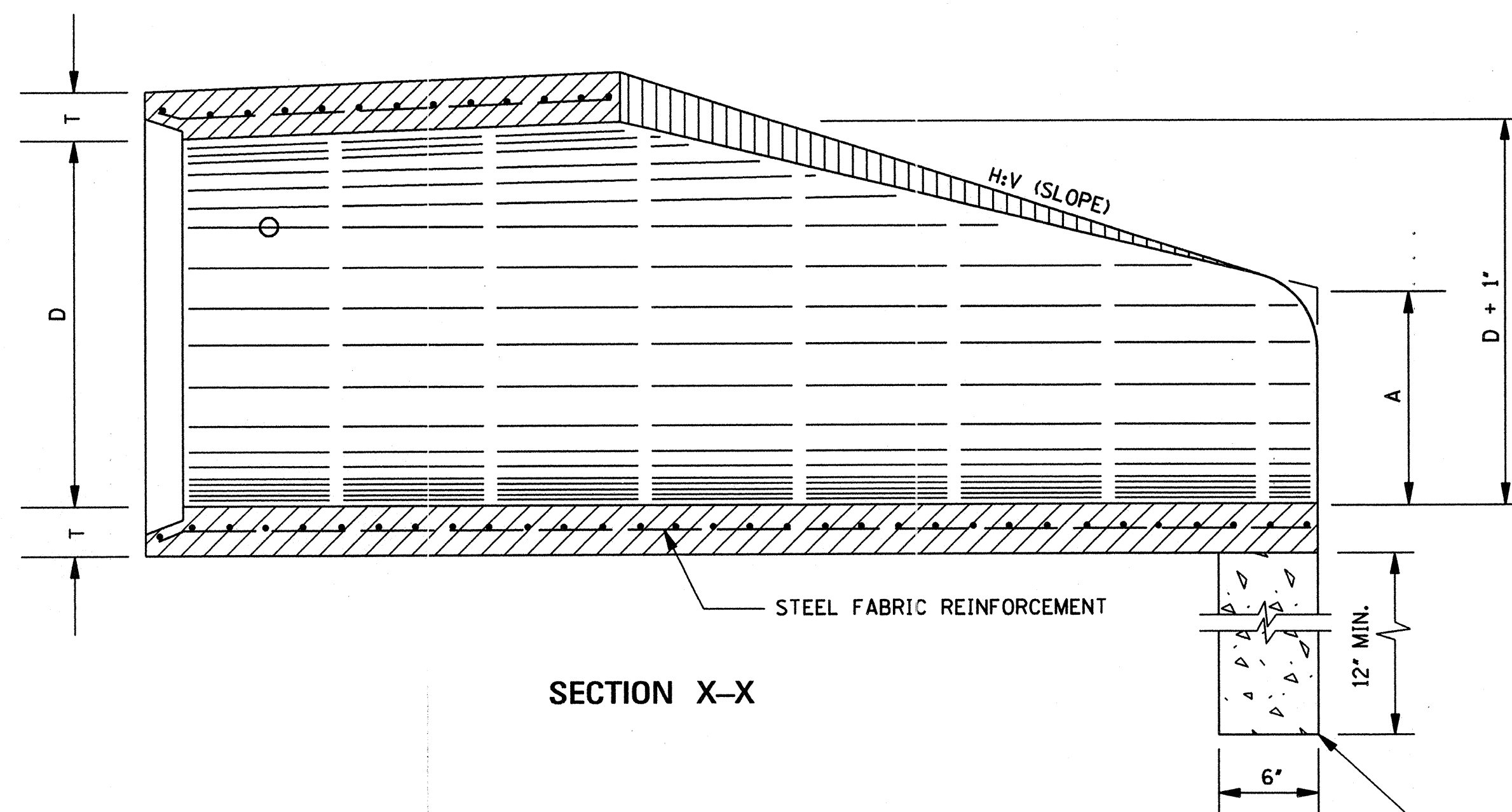


## BELL AND SPIGOT END OPTION

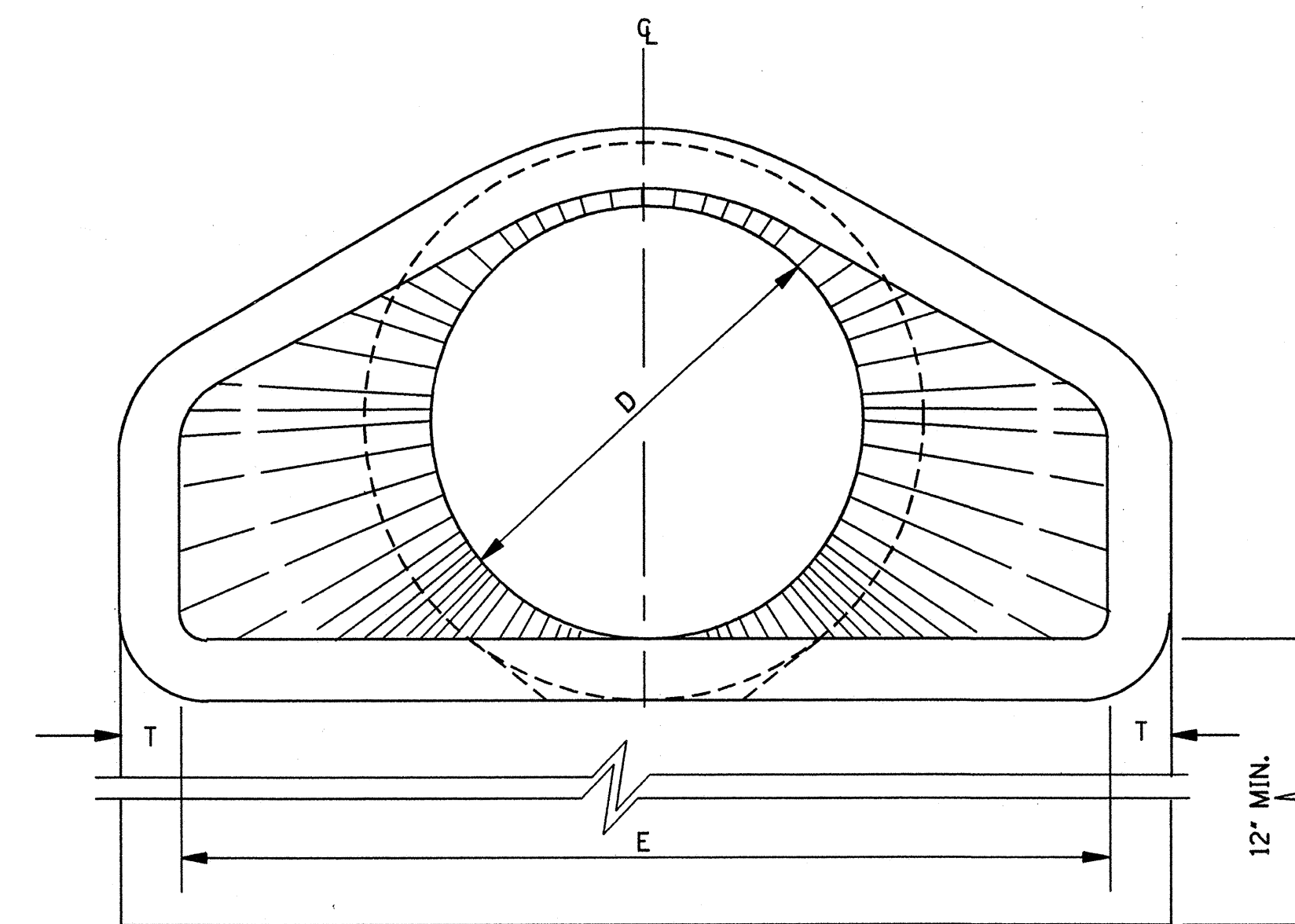
NOTE: BELL-END ON DOWNSTREAM SECTION  
SPIGOT-END ON UPSTREAM SECTION.



PLAN OF DOWNSTREAM END



SECTION X-X



END ELEVATION

TOE WALL REQUIRED ON ALL DOWNSTREAM FLARED END SECTIONS. TOE WALL AT UPSTREAM END WILL BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER. TO BE PAID FOR AS CLASS "B" STRUCTURAL CONCRETE - MINOR STRUCTURES.

| TABLE OF DIMENSIONS |        |     |        |       |        |       |       |
|---------------------|--------|-----|--------|-------|--------|-------|-------|
| D                   | T      | H:V | A      | B     | C      | E     | L     |
| 15"                 | 2 1/4" | 3:1 | 6"     | 2'-3" | 4'-1"  | 2'-8" | 6'-1" |
| 18"                 | 2 1/2" | 3:1 | 9"     | 2'-3" | 3'-10" | 3'-0" | 6'-1" |
| 24"                 | 3"     | 3:1 | 10"    | 3'-8" | 2'-6"  | 4'-0" | 6'-2" |
| 30"                 | 3 1/2" | 3:1 | 1'-0"  | 4'-6" | 1'-8"  | 5'-0" | 6'-2" |
| 36"                 | 4"     | 3:1 | 1'-3"  | 5'-3" | 2'-11" | 6'-0" | 8'-2" |
| 42"                 | 4 1/2" | 3:1 | 1'-9"  | 5'-3" | 2'-11" | 6'-6" | 8'-2" |
| 48"                 | 5"     | 3:1 | 2'-0"  | 6'-0" | 2'-2"  | 7'-0" | 8'-2" |
| 54"                 | 5 1/2" | 3:1 | 2'-4"  | 6'-6" | 1'-10" | 7'-6" | 8'-4" |
| * 60"               | 6"     | 3:1 | 2'-10" | 6'-6" | 1'-10" | 8'-0" | 8'-4" |
| * 66"               | 6 1/2" | 3:1 | 3'-4"  | 6'-6" | 1'-10" | 8'-6" | 8'-4" |
| * 72"               | 7"     | 3:1 | 3'-10" | 6'-6" | 1'-10" | 9'-0" | 8'-4" |

\* NOTE: SEE GENERAL NOTE 2.

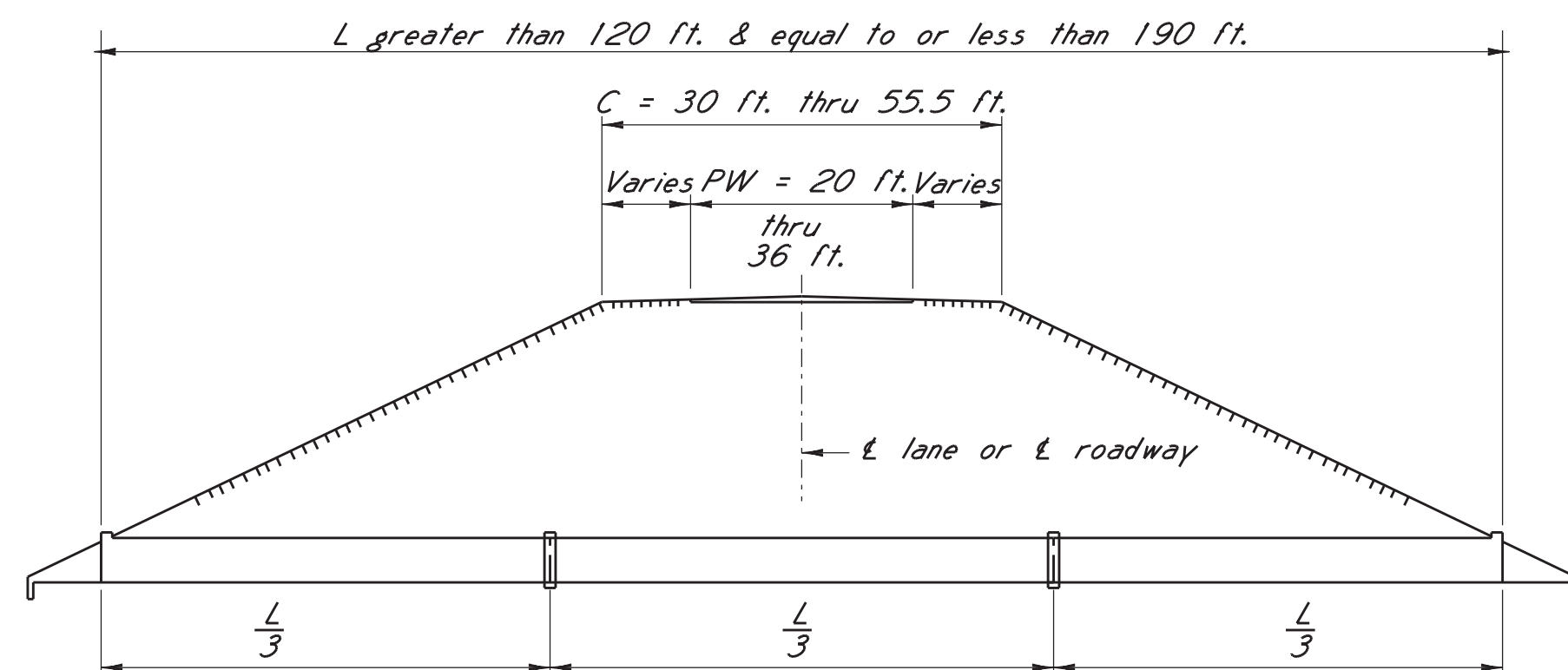
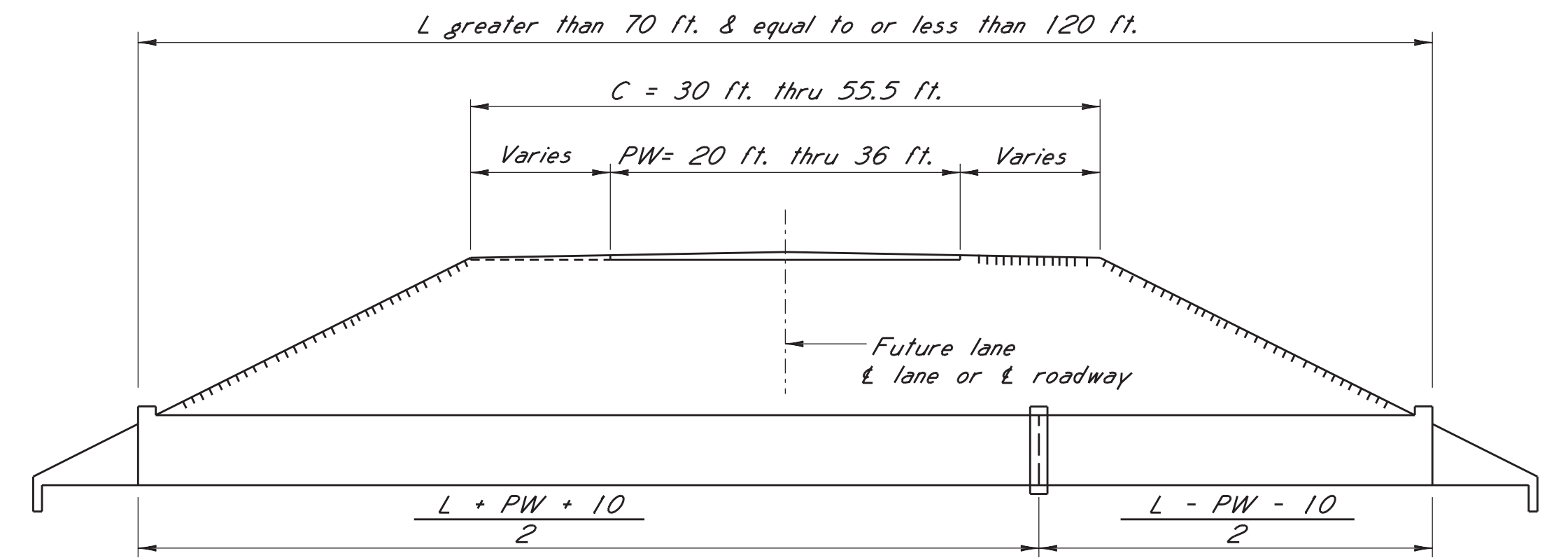
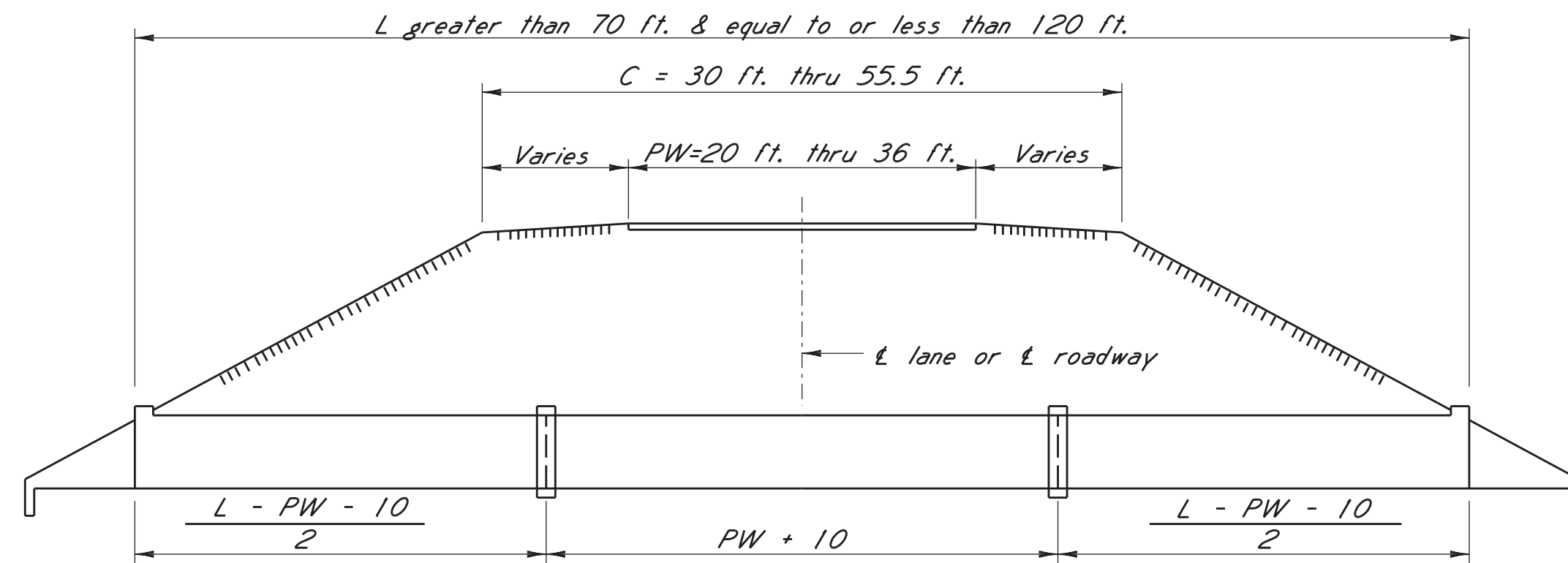
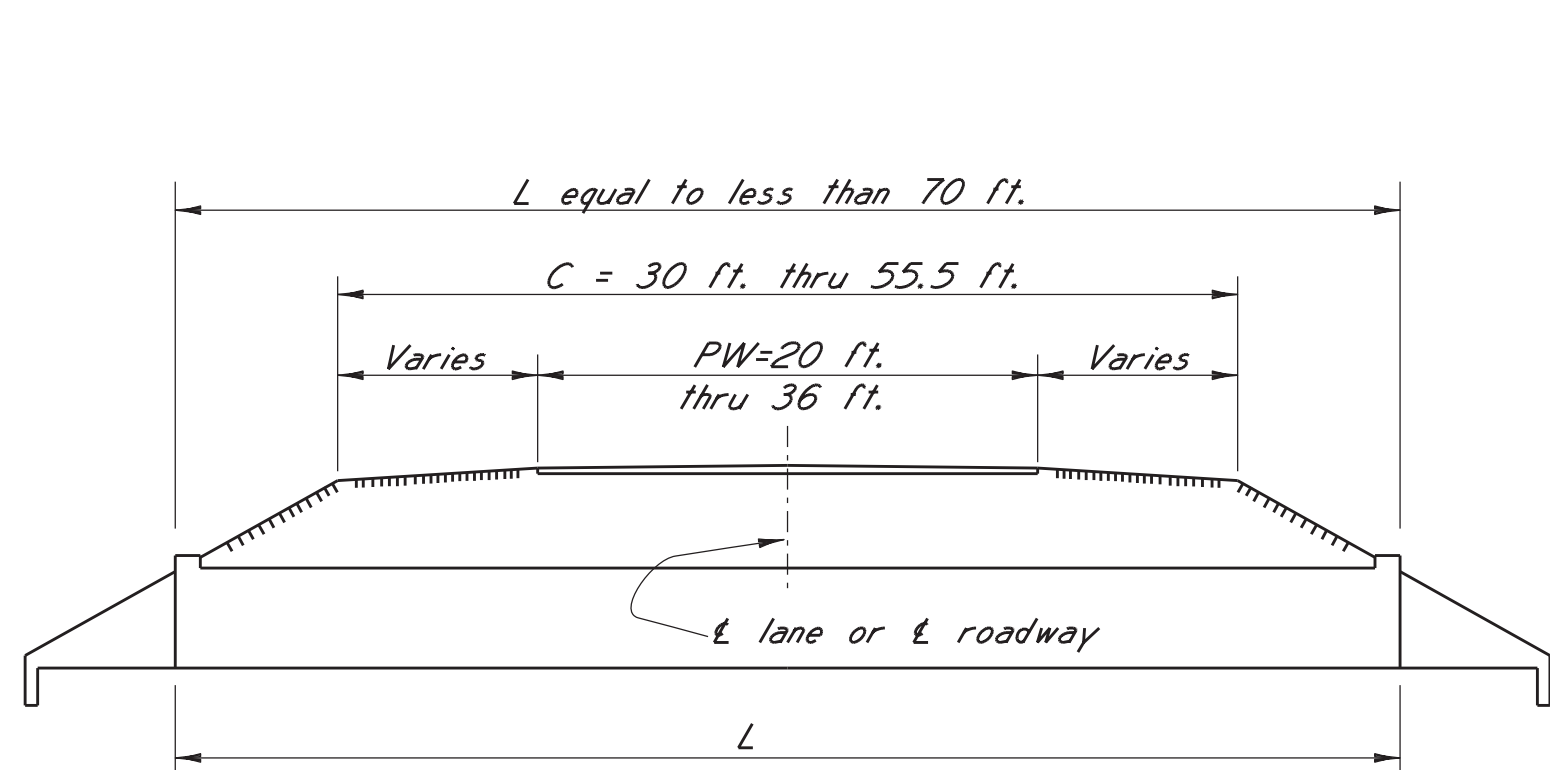
| TOE WALL CONC. QUANTITY (yd <sup>3</sup> ) |
|--------------------------------------------|
| 0.056                                      |
| 0.063                                      |
| 0.083                                      |
| 0.102                                      |
| 0.123                                      |
| 0.134                                      |
| 0.145                                      |
| 0.156                                      |
| 0.167                                      |
| 0.177                                      |
| 0.188                                      |

### GENERAL NOTES:

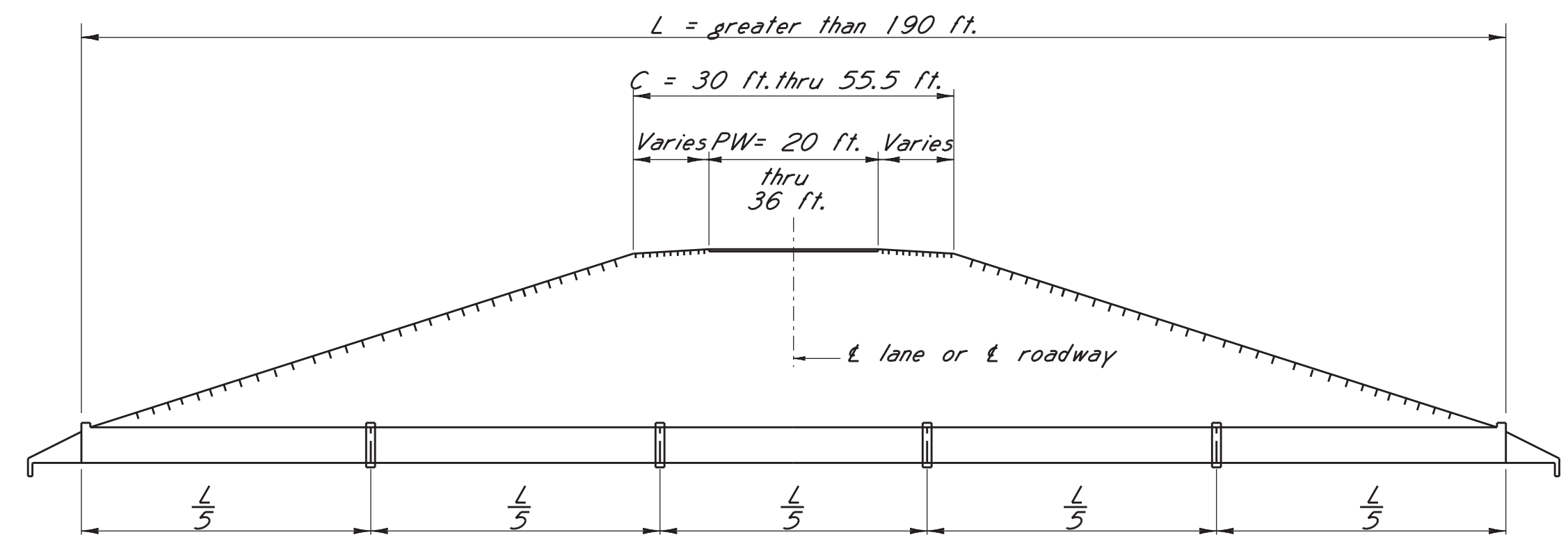
- REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M 170, TABLE 2, WALL B.
- 2 - 1 1/2" DIA. CAST HOLES REQUIRED AS SHOWN TO ACCOMMODATE 2 - 1" DIA. TIE BOLTS, USED IN TIEING SECTION TO PIPE CULVERT.
- LENGTH (L) OF A BELL-END OPTION MAY VARY BY A NOMINAL EXTENSION ON THE BELL END.
- FLARED END SECTIONS ARE NOT TO BE USED INSIDE THE CLEAR ZONE.
- ALL SIZES OF FLARED END SECTIONS FOR CIRCULAR CONCRETE PIPE MAY BE FURNISHED WITH EITHER BELL AND SPIGOT OR TONGUE AND GROOVE ENDS.

|                                                                                      |                             |                                                                                                                                        |
|--------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| MISSISSIPPI DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION<br>STANDARD PLAN |                             | <br>WORKING NUMBER<br>FE-1<br>SHEET NUMBER<br>328 |
| DATE                                                                                 | ISSUE DATE: OCTOBER 1, 1998 |                                                                                                                                        |





NOTE: These collar locations are for culverts constructed normal to  $\perp$  roadway and shall be adjusted for skew per details in group IV.

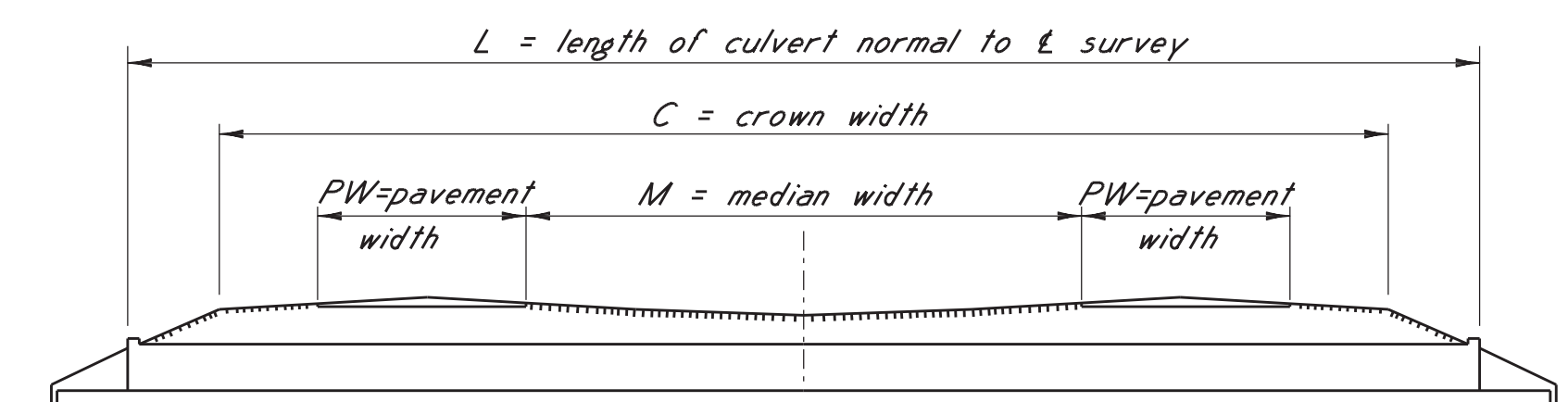


#### SIDE ELEVATION OF CULVERTS CONSTRUCTED NORMAL TO $\perp$ ROADWAY

Showing collar locations

#### GENERAL NOTES:

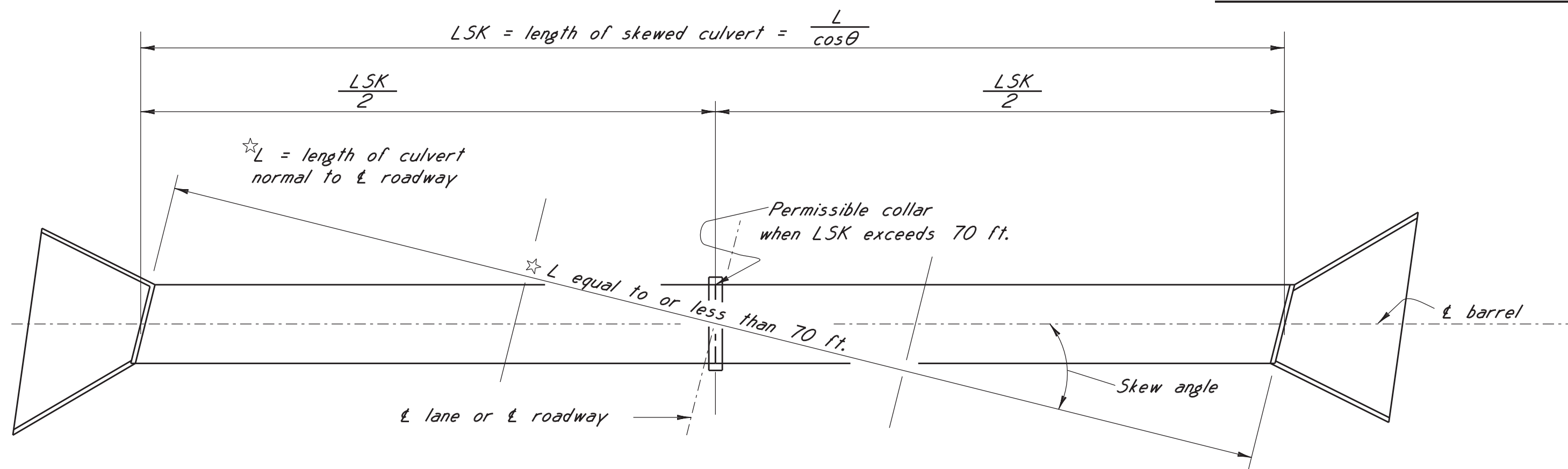
This drawing shows collar locations for box culverts constructed normal to  $\perp$  of roadway and general details necessary to locate collars for culverts on 15, 30 and 45° skews. The diagrams on this sheet show collar locations for culverts under variable amounts of cover, crown width and side slopes. Collars shall be placed only at locations shown unless otherwise stated. Collars shall not be located closer than 5 ft. outside pavement for cover of 8 ft. or less except in cases where median is less than 10 ft. where cover exceeds 8 ft., collars may be located without regard to pavement edge. Collar locations per group IV, if required, shall have reinforcement continuous thru collar and shall be placed only at locations indicated. General requirements of basic culvert drawings shall apply except as specifically modified hereon.



#### SIDE ELEVATION OF CULVERTS CONSTRUCTED NORMAL TO $\perp$ SURVEY

Showing variable for diagrams in group I.

\* NOTE: Group I : 2 or 3 - 10 ft. thru 12 ft. traffic lanes  
or 2 - 12 ft. (present) & 1 - 12 ft. (future) traffic lanes



#### DIAGRAM "A"

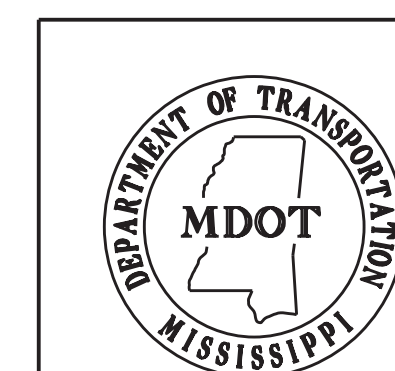
##### PLAN OF SKEWED CULVERT

Typical for diagram "A" group I and skewed 15° right forward  
(No collars required)  
Note : LSK = 1.03528(L) for 15° skew.

#### GROUP IV DIAGRAMS

##### TYPICAL DIAGRAMS FOR SKEWED CULVERTS

Application of diagrams:  
The following diagrams show the general application of joint location diagrams in groups I, II & III to skewed culverts. Location of barrel joints for skewed culverts is determined as follows:  
1. With LSK (length of skewed culvert along  $\perp$  barrel) given and number of joints and length of barrel sections required, multiply LSK by the cosine of the skew angle  $\theta$  to obtain L (length of culvert normal to  $\perp$  roadway).  
2. Enter group I, II or III (determined by roadway cross section) with L to determine the number of joints and length of each barrel section for a culvert constructed normal to  $\perp$  roadway.  
3. Divide each length of section by the cosine of the skew angle  $\theta$  to determine the length of each barrel section along  $\perp$  barrel.  
4. Place the barrel joints (type per basic dwg.) at these locations, if the length of any section exceeds 70 ft. and a construction joint is desired (to reduce yardage of pour) place a construction joint in center of section.



| BY   | REVISIONS | MISSISSIPPI DEPARTMENT OF TRANSPORTATION |  |
|------|-----------|------------------------------------------|--|
|      |           | BASIC CULVERT DRAWING                    |  |
| DATE | DESIGNER  | COLLAR LOCATIONS                         |  |
|      |           | NORMAL AND SKEWED CULVERTS               |  |
| DATE | CHECKER   | GROUP I DIAGRAMS*                        |  |
|      |           | SHT. 1 OF 3                              |  |
| DATE | DETAILED  | WORKING NUMBER                           |  |
|      |           | IBJL-1                                   |  |
| DATE | DIRECTOR  | SHEET NUMBER                             |  |
|      |           | 7005                                     |  |







| HEADWALL DIMENSIONS      |       |             |            |            |      |      |       |       |       |        |                |                |                |                |                |
|--------------------------|-------|-------------|------------|------------|------|------|-------|-------|-------|--------|----------------|----------------|----------------|----------------|----------------|
| CULVERT<br>HEIGHT<br>"H" | "J"   | "LW"        | "R"        | "Z"        | "Rd" | "Rw" | "Rt"  | "Rh"  | "W1"  | "BDL"  | "Y"            |                |                |                |                |
|                          |       |             |            |            |      |      |       |       |       |        | CLEAR SPAN     |                |                |                |                |
|                          |       |             |            |            |      |      |       |       |       |        | 6'             | 8'             | 10'            | 12'            | 14'            |
| 6'-0"                    | 5'-9" | 18'-4 5/16" | 0'-3 1/16" | 17'-6 1/8" | 11"  | 9"   | 3'-0" | 2'-0" | 0'-6" | 11'-0" | 24'-6 1/8" +V2 | 28'-6 1/8" +V2 | 32'-6 1/8" +V2 | 36'-6 1/8" +V2 | 40'-6 1/8" +V2 |

NOTE: Total headwall quantities include wingwalls, apron, wingwall footings and parapet.

| AREA<br>OF<br>OPENING<br>sq. ft. | SIZE<br>OF<br>CULVERT<br>ft. x ft.<br>"S" x "H" | ESTIMATED QUANTITIES |           |           |         |    |            |                  |                      |                  |                      |                  |                      |                  |                      |
|----------------------------------|-------------------------------------------------|----------------------|-----------|-----------|---------|----|------------|------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|----------------------|
|                                  |                                                 | Cover                | T1        | T2        | V1      | V2 | W          | TOTAL HEADWALL   |                      | BRUSH DEFLECTOR  |                      | 1 AUX. SLAB "W"  |                      | 1 SQUARE COLLAR  |                      |
|                                  |                                                 |                      |           |           |         |    |            | CONC.<br>cu. yd. | REINF.<br>STEEL lbs. | CONC.<br>cu. yd. | REINF.<br>STEEL lbs. | CONC.<br>cu. yd. | REINF.<br>STEEL lbs. | CONC.<br>cu. yd. | REINF.<br>STEEL lbs. |
| 72                               | 6x6                                             | 5'-0"                | 9"        | 9"        | 9"      | 9" | 1'-4"      | 16.6851          | 2093.870             | 1.2133           | 169.798              | 0.7366           | 44.422               | 1.9375           | 740.689              |
|                                  |                                                 | 10'-0"               | 9"        | 9"        | 9"      | 9" | 1'-4"      | 16.6851          | 2093.870             | 1.2133           | 169.798              | 0.7366           | 44.422               | 1.9375           | 740.689              |
|                                  |                                                 | 15'-0"               | 9"        | 9"        | 9"      | 9" | 1'-4"      | 16.6851          | 2093.870             | 1.2133           | 169.798              | 0.7366           | 44.422               | 1.9375           | 740.689              |
|                                  |                                                 | 20'-0"               | 9"        | 10 1/2"   | 9"      | 9" | 1'-4"      | 16.7544          | 2093.870             | 1.2133           | 169.798              | 0.7366           | 44.422               | 1.9479           | 743.850              |
|                                  |                                                 | 25'-0"               | 10 1/2"   | 1'-0"     | 9"      | 9" | 1'-5 1/2"  | 16.9520          | 2105.097             | 1.2133           | 169.882              | 0.7366           | 44.422               | 1.9688           | 750.173              |
|                                  |                                                 | 30'-0"               | 11 1/2"   | 1'-1"     | 9"      | 9" | 1'-6 1/2"  | 17.0838          | 2112.581             | 1.2133           | 169.938              | 0.7366           | 44.422               | 1.9826           | 754.388              |
| 96                               | 8x6                                             | 5'-0"                | 9"        | 9 1/2"    | 9"      | 9" | 1'-4"      | 18.2623          | 2221.680             | 1.2133           | 169.798              | 0.9342           | 56.001               | 2.2743           | 872.715              |
|                                  |                                                 | 10'-0"               | 9"        | 11"       | 9"      | 9" | 1'-4"      | 18.3502          | 2221.680             | 1.2133           | 169.798              | 0.9342           | 56.001               | 2.2847           | 876.398              |
|                                  |                                                 | 15'-0"               | 11"       | 1'-1"     | 9"      | 9" | 1'-6"      | 18.6384          | 2237.540             | 1.2133           | 169.910              | 0.9342           | 56.001               | 2.3125           | 886.219              |
|                                  |                                                 | 20'-0"               | 1'-0"     | 1'-2"     | 9"      | 9" | 1'-7"      | 18.7825          | 2245.470             | 1.2133           | 169.965              | 0.9342           | 56.001               | 2.3264           | 891.129              |
|                                  |                                                 | 25'-0"               | 1'-2"     | 1'-4"     | 9"      | 9" | 1'-9"      | 19.0707          | 2261.330             | 1.2133           | 170.077              | 0.9342           | 56.001               | 2.3542           | 900.950              |
|                                  |                                                 | 30'-0"               | 1'-4"     | 1'-5 1/2" | 9"      | 9" | 1'-11"     | 19.3296          | 2277.190             | 1.2133           | 170.188              | 0.9342           | 56.001               | 2.3785           | 909.543              |
| 120                              | 10x6                                            | 5'-0"                | 9"        | 10"       | 9"      | 9" | 1'-4"      | 19.8519          | 2349.491             | 1.2133           | 169.798              | 1.1317           | 67.579               | 2.6111           | 1005.089             |
|                                  |                                                 | 10'-0"               | 10"       | 1'-0 1/2" | 9"      | 9" | 1'-5"      | 20.1147          | 2357.866             | 1.2133           | 169.854              | 1.1317           | 67.579               | 2.6354           | 1014.899             |
|                                  |                                                 | 15'-0"               | 1'-1"     | 1'-3 1/2" | 9"      | 9" | 1'-8"      | 20.5840          | 2382.992             | 1.2133           | 170.021              | 1.1317           | 67.579               | 2.6771           | 1031.716             |
|                                  |                                                 | 20'-0"               | 1'-4"     | 1'-6"     | 9"      | 9" | 1'-11"     | 21.0179          | 2408.118             | 1.2133           | 170.188              | 1.1317           | 67.579               | 2.7153           | 1047.132             |
|                                  |                                                 | 25'-0"               | 11 1/2"   | 1'-0 1/2" | 9"      | 9" | 1'-6 1/2"  | 20.2430          | 2370.429             | 1.2133           | 169.938              | 1.1317           | 67.579               | 2.6458           | 1019.103             |
|                                  |                                                 | 30'-0"               | 1'-0"     | 1'-1 1/2" | 9"      | 9" | 1'-7"      | 20.3567          | 2374.617             | 1.2133           | 169.965              | 1.1317           | 67.579               | 2.6563           | 1023.308             |
| 144                              | 12x6                                            | 5'-0"                | 10 1/2"   | 11 1/2"   | 9"      | 9" | 1'-5 1/2"  | 21.6654          | 2490.533             | 1.2133           | 169.882              | 1.3292           | 79.158               | 2.9653           | 1145.687             |
|                                  |                                                 | 10'-0"               | 1'-0"     | 1'-1 1/2" | 9"      | 9" | 1'-7"      | 21.9602          | 2503.764             | 1.2133           | 169.965              | 1.3292           | 79.158               | 2.9896           | 1156.714             |
|                                  |                                                 | 15'-0"               | 1'-2 1/2" | 1'-5 1/2" | 9"      | 9" | 1'-9 1/2"  | 22.5071          | 2525.815             | 1.2133           | 170.105              | 1.3292           | 79.158               | 3.0347           | 1177.192             |
|                                  |                                                 | 20'-0"               | 1'-0 1/2" | 1'-1"     | 9"      | 9" | 1'-7 1/2"  | 21.9614          | 2508.174             | 1.2133           | 169.993              | 1.3292           | 79.158               | 2.9896           | 1156.714             |
|                                  |                                                 | 25'-0"               | 1'-1"     | 1'-2"     | 9"      | 9" | 1'-8"      | 22.0874          | 2512.584             | 1.2133           | 170.021              | 1.3292           | 79.158               | 3.0000           | 1161.439             |
|                                  |                                                 | 30'-0"               | 1'-2"     | 1'-3 1/2" | 9"      | 9" | 1'-9"      | 22.2978          | 2521.405             | 1.2133           | 170.077              | 1.3292           | 79.158               | 3.0174           | 1169.316             |
| 168                              | 14x6                                            | 5'-0"                | 11 1/2"   | 1'-0 1/2" | 9"      | 9" | 1'-6 1/2"  | 23.4254          | 2628.277             | 1.2133           | 169.938              | 1.5267           | 90.737               | 3.3125           | 1284.873             |
|                                  |                                                 | 10'-0"               | 1'-1 1/2" | 1'-3"     | 9 1/2"  | 9" | 1'-8 1/2"  | 23.8366          | 2646.809             | 1.2133           | 170.049              | 1.5309           | 90.848               | 3.3507           | 1302.113             |
|                                  |                                                 | 15'-0"               | 1'-0"     | 1'-1"     | 10 1/2" | 9" | 1'-7"      | 23.5178          | 2632.910             | 1.2133           | 169.965              | 1.5391           | 91.071               | 3.3403           | 1292.868             |
|                                  |                                                 | 20'-0"               | 1'-3"     | 1'-3"     | 9"      | 9" | 1'-10"     | 23.9638          | 2660.708             | 1.2133           | 170.132              | 1.5267           | 90.737               | 3.3542           | 1305.862             |
|                                  |                                                 | 25'-0"               | 1'-3"     | 1'-4 1/2" | 10"     | 9" | 1'-10"     | 24.1104          | 2660.708             | 1.2133           | 170.132              | 1.5350           | 90.959               | 3.3785           | 1314.107             |
|                                  |                                                 | 30'-0"               | 1'-4"     | 1'-6"     | 10"     | 9" | 1'-11"     | 24.3403          | 2669.974             | 1.2133           | 170.188              | 1.5350           | 90.959               | 3.3958           | 1322.852             |
| 192                              | 16x6                                            | 5'-0"                | 1'-1"     | 1'-1 1/2" | 10"     | 9" | 1'-8"      | 25.2543          | 2843.482             | 1.2133           | 170.021              | 1.7325           | 102.538              | 3.6771           | 1430.370             |
|                                  |                                                 | 10'-0"               | 1'-3 1/2" | 1'-4 1/2" | 10 1/2" | 9" | 1'-10 1/2" | 25.7954          | 2867.760             | 1.2133           | 170.160              | 1.7366           | 102.649              | 3.7222           | 1453.021             |
|                                  |                                                 | 15'-0"               | 1'-2"     | 1'-3"     | 9"      | 9" | 1'-9"      | 25.5003          | 2853.193             | 1.2133           | 170.077              | 1.7243           | 102.315              | 3.6806           | 1436.986             |
|                                  |                                                 | 20'-0"               | 1'-4 1/2" | 1'-4 1/2" | 9"      | 9" | 1'-11 1/2" | 25.8761          | 2877.471             | 1.2133           | 170.216              | 1.7243           | 102.315              | 3.7083           | 1452.370             |
|                                  |                                                 | 25'-0"               | 1'-5 1/2" | 1'-6 1/2" | 9"      | 9" | 2'-0 1/2"  | 26.1775          | 2887.183             | 1.2133           | 170.272              | 1.7243           | 102.315              | 3.7292           | 1463.907             |
|                                  |                                                 | 30'-0"               | 1'-7 1/2" | 1'-8 1/2" | 9"      | 9" | 2'-2 1/2"  | 26.5644          | 2906.605             | 1.2133           | 170.383              | 1.7243           | 102.315              | 3.7569           | 1479.290             |

GENERAL NOTES:

Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2004.  
All concrete shall be Class "B".  
Concrete surfaces shall be finished in accordance with Sub-Section 804.03.19.6.2  
Expansion joint material shall be bituminous fiber type unless otherwise noted.  
All exposed corners shall be chamfered 3/4".  
Reinforcing steel shall be placed 2" clear minimum from the surface of the concrete unless otherwise noted, and all reinforcing shall be adequately supported from the forms.  
All bars shall be accurately spaced and securely wired at each intersection before placing concrete.  
Bar bending details shall be in accordance with "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI 315R-94).  
Reinforcement order lists and required placing plans shall be furnished in accordance with Section 805 of the Mississippi Standard Specifications. Partial submittals are not acceptable.  
Reinforcing steel shall be ASTM A615, Grade 60, unless otherwise noted.  
Horizontal construction joints shall be placed only at the locations shown, and the concrete shall be allowed to set a minimum period of two hours before continuing the pour.  
Auxiliary slabs "W" and vertical construction joints at the wings shall be placed in all culverts regardless of length.  
The quantities shown will be used as a basis for final payment unless this drawing is modified.



|  |  |  |  |  |    |                                          |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|----|------------------------------------------|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  | BY | MISSISSIPPI DEPARTMENT OF TRANSPORTATION |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | WINGS WITH 3:1 SLOPE FOR                 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | BASIC CULVERT DRAWING                    |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | DOUBLE CELL                              |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | 0° SKEW DETAILS                          |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | HEIGHT 6 FT.                             |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | SPANS 12-32 FT.                          |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | SHT. 1 OF 2                              |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | WORKING NUMBER                           |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | IWD-6-3W                                 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | SHEET NUMBER                             |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |    | 7137                                     |  |  |  |  |  |  |  |  |  |

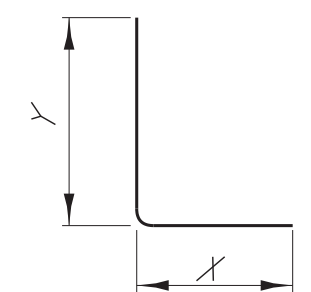
DESIGNER William K. McBeath, P.E.  
ISSUE DATE 01/01/2015  
CHECKER B. Keith Carr, P.E.  
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER PE  
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD PE.



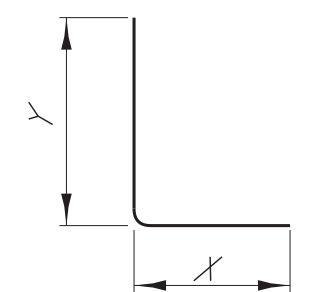
| HEIGHT = 6 FT.                                                |      |              |    |     |     |     |     |  |            |             |                  |  |
|---------------------------------------------------------------|------|--------------|----|-----|-----|-----|-----|--|------------|-------------|------------------|--|
| BAR LISTS FOR WINGS, FOOTING, PARAPET, APRON & AUXILIARY SLAB |      |              |    |     |     |     |     |  |            |             |                  |  |
| BAR                                                           | SIZE | NO. REQUIRED |    |     |     |     |     |  | DIM.<br>X  | DIM.<br>Y   | LENGTH           |  |
|                                                               |      | SPAN         |    |     |     |     |     |  |            |             |                  |  |
|                                                               |      | 6'           | 8' | 10' | 12' | 14' | 16' |  |            |             |                  |  |
| T1                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+5'-5"      |  |
| T2                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+6'-1 1/2"  |  |
| T3                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+6'-10"     |  |
| T4                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+7'-6"      |  |
| T5                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+8'-2 1/2"  |  |
| T6                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+8'-11"     |  |
| T7                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+9'-7"      |  |
| T8                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+10'-3 1/2" |  |
| T9                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+11'-0"     |  |
| T10                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+11'-8"     |  |
| T11                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+12'-4 1/2" |  |
| T12                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+13'-1"     |  |
| T13                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+13'-9"     |  |
| T14                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+14'-5 1/2" |  |
| T15                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+15'-2"     |  |
| T16                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+15'-10"    |  |
| T17                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+16'-6 1/2" |  |
| T18                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             | 25+V2+17'-3"     |  |
| T19                                                           | #4   | 3            | 3  | 3   | 3   | 3   | 3   |  |            |             | 25+V2+12'-6"     |  |
| V1                                                            | #4   | 18           | 22 | 26  | 30  | 34  | 38  |  | 17'-2"     | 1'-8"       | 18'-10"          |  |
| V2                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  | 16'-0 1/2" | 1'-8"       | 17'-8 1/2"       |  |
| V3                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  | 13'-3 1/2" | 1'-8"       | 14'-11 1/2"      |  |
| V4                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  | 10'-6 1/2" | 1'-8"       | 12'-2 1/2"       |  |
| V5                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  | 7'-9 1/2"  | 1'-8"       | 9'-5 1/2"        |  |
| V6                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  | 4'-9"      |             | 4'-9"            |  |
| FT1                                                           | #5   | 38           | 38 | 38  | 38  | 38  | 38  |  |            |             | 5'-5"            |  |
| FT2                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            |             | 2'-6 1/2"        |  |
| FL                                                            | #4   | 14           | 14 | 14  | 14  | 14  | 14  |  |            |             | 18'-0 1/2"       |  |
| W1                                                            | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+5'-1"     | W+5'-1"          |  |
| W2                                                            | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+4'-9 1/2" | W+4'-9 1/2"      |  |
| W3                                                            | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+4'-6"     | W+4'-6"          |  |
| W4                                                            | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+4'-2 1/2" | W+4'-2 1/2"      |  |
| W5                                                            | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+3'-11"    | W+3'-11"         |  |
| W6                                                            | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+3'-7 1/2" | W+3'-7 1/2"      |  |
| W7                                                            | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+3'-4"     | W+3'-4"          |  |
| W8                                                            | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+3'-0 1/2" | W+3'-0 1/2"      |  |
| W9                                                            | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+2'-8 1/2" | W+2'-8 1/2"      |  |
| W10                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+2'-5"     | W+2'-5"          |  |
| W11                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+2'-1 1/2" | W+2'-1 1/2"      |  |
| W12                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+1'-10"    | W+1'-10"         |  |
| W13                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+1'-6 1/2" | W+1'-6 1/2"      |  |
| W14                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  | 1'-6"      | W+2'-3"     | W+3'-9"          |  |
| W15                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  | 1'-6"      | W+1'-11"    | W+3'-5"          |  |
| W16                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  | 1'-6"      | W+1'-7 1/2" | W+3'-1 1/2"      |  |
| W17                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  | 1'-6"      | W+1'-4"     | W+2'-10"         |  |
| W18                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  | 1'-6"      | W+1'-0 1/2" | W+2'-6 1/2"      |  |
| W19                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  | 1'-6"      | W+0'-9"     | W+2'-3"          |  |
| W20                                                           | #5   | 2            | 2  | 2   | 2   | 2   | 2   |  | 1'-6"      | W+0'-5 1/2" | W+1'-11 1/2"     |  |
| R1                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+5'-1"     | W+5'-1"          |  |
| R2                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+4'-9 1/2" | W+4'-9 1/2"      |  |
| R3                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+4'-6"     | W+4'-6"          |  |
| R4                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+4'-2 1/2" | W+4'-2 1/2"      |  |
| R5                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+3'-11"    | W+3'-11"         |  |
| R6                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+3'-7 1/2" | W+3'-7 1/2"      |  |
| R7                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+3'-4"     | W+3'-4"          |  |
| R8                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+3'-0 1/2" | W+3'-0 1/2"      |  |
| R9                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+2'-8 1/2" | W+2'-8 1/2"      |  |
| R10                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+2'-5"     | W+2'-5"          |  |
| R11                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+2'-1 1/2" | W+2'-1 1/2"      |  |
| R12                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+1'-10"    | W+1'-10"         |  |
| R13                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+1'-6 1/2" | W+1'-6 1/2"      |  |
| R14                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |            | W+1'-3"     | W+1'-3"          |  |
| R15                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  | 1'-6"      | W+1'-11"    | W+3'-5"          |  |
| R16                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  | 1'-6"      | W+1'-7 1/2" | W+3'-1 1/2"      |  |

| HEIGHT = 6 FT.                                                |      |              |    |     |     |     |     |  |  |           |           |                 |
|---------------------------------------------------------------|------|--------------|----|-----|-----|-----|-----|--|--|-----------|-----------|-----------------|
| BAR LISTS FOR WINGS, FOOTING, PARAPET, APRON & AUXILIARY SLAB |      |              |    |     |     |     |     |  |  |           |           |                 |
| BAR                                                           | SIZE | NO. REQUIRED |    |     |     |     |     |  |  | DIM.<br>X | DIM.<br>Y | LENGTH          |
|                                                               |      | SPAN         |    |     |     |     |     |  |  |           |           |                 |
|                                                               |      | 6'           | 8' | 10' | 12' | 14' | 16' |  |  |           |           |                 |
| R17                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |  | 1'-6"     | W+1'-4"   | W+2'-10"        |
| R18                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |  | 1'-6"     | W+1'-0 ½" | W+2'-6 ½"       |
| R19                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |  | 1'-6"     | W+0'-9"   | W+2'-3"         |
| R20                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |  | 1'-6"     | W+0'-5 ½" | W+1'-11 ½"      |
| Y1                                                            | #4   | 4            | 4  | 4   | 4   | 4   | 4   |  |  |           |           | 4'-7"           |
| Y2                                                            | #4   | 4            | 4  | 4   | 4   | 4   | 4   |  |  |           |           | 7'-9 ½"         |
| Y3                                                            | #4   | 4            | 4  | 4   | 4   | 4   | 4   |  |  |           |           | 10'-11 ½"       |
| Y4                                                            | #4   | 4            | 4  | 4   | 4   | 4   | 4   |  |  |           |           | 14'-2"          |
| Y5                                                            | #4   | 4            | 4  | 4   | 4   | 4   | 4   |  |  |           |           | 17'-4 ½"        |
| Y6                                                            | #4   | 8            | 8  | 8   | 8   | 8   | 12  |  |  |           |           | 18'-0 ½"        |
| F                                                             | #4   | 4            | 4  | 4   | 4   | 4   | 4   |  |  |           |           | 18'-10 ½"       |
| N                                                             | #4   | 16           | 20 | 24  | 28  | 32  | 36  |  |  | 1'-8"     | 0'-4"     | 2'-4"           |
| M                                                             | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |  |           |           | 25+2V1+V2+0'-4" |
| K                                                             | #4   | 15           | 19 | 23  | 27  | 31  | 35  |  |  | 0'-6"     | T1+6"     | 2T1+2'-6"       |
| L                                                             | #4   | 4            | 4  | 4   | 4   | 4   | 4   |  |  |           |           | 25+V2+1'-1"     |
| O                                                             | #7   | 16           | 16 | 16  | 16  | 16  | 18  |  |  | 2'-10 ½"  | 2'-10 ½"  | 5'-9"           |
| OS                                                            | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |  |           |           | 6'-0"+T1        |
| DW                                                            | #5   | 26           | 26 | 26  | 26  | 26  | 26  |  |  | 1'-6"     | 2'-9"     | 4'-3"           |
| DR                                                            | #4   | 28           | 28 | 28  | 28  | 28  | 28  |  |  | 1'-6"     | 2'-5"     | 3'-11"          |

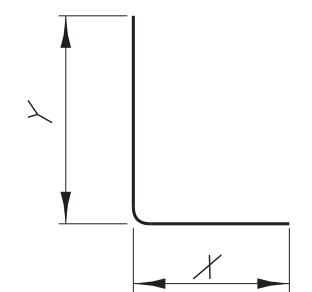
| BAR LISTS FOR UPSTREAM BRUSH DEFLECTOR |      |              |           |             |             |
|----------------------------------------|------|--------------|-----------|-------------|-------------|
| BAR                                    | SIZE | NO.<br>REQ'D | DIM.<br>X | DIM.<br>Y   | LENGTH      |
| D                                      | *7   | 5            |           |             | 5'-4"       |
| DS                                     | *4   | 1            |           |             | 6'-0"+T1    |
| J1                                     | *5   | 1            |           | W1+5'-1 ½"  | W1+5'-1 ½"  |
| J2                                     | *5   | 1            |           | W1+4'-8"    | W1+4'-8"    |
| J3                                     | *5   | 1            |           | W1+4'-2"    | W1+4'-2"    |
| J4                                     | *5   | 1            |           | W1+3'-8"    | W1+3'-8"    |
| J5                                     | *5   | 1            |           | W1+3'-2 ½"  | W1+3'-2 ½"  |
| J6                                     | *5   | 1            |           | W1+2'-8 ½"  | W1+2'-8 ½"  |
| J7                                     | *5   | 1            | 1'-0"     | W1+2'-11 ½" | W1+3'-11 ½" |
| J8                                     | *5   | 1            | 1'-0"     | W1+2'-6"    | W1+3'-6"    |
| J9                                     | *5   | 1            | 1'-0"     | W1+2'-0"    | W1+3'-0"    |
| J10                                    | *5   | 1            | 1'-0"     | W1+1'-6 ½"  | W1+2'-6 ½"  |
| J11                                    | *5   | 1            | 1'-0"     | W1+1'-0 ½"  | W1+2'-0 ½"  |
| J12                                    | *5   | 1            | 1'-0"     | W1+0'-6 ½"  | W1+1'-6 ½"  |
| YD1                                    | *5   | 1            |           |             | 2'-3 ½"     |
| YD2                                    | *5   | 1            |           |             | 4'-3 ½"     |
| YD3                                    | *5   | 1            |           |             | 6'-3 ½"     |
| YD4                                    | *5   | 1            |           |             | 8'-3 ½"     |
| YD5                                    | *5   | 1            |           |             | 10'-3 ½"    |
| DJ                                     | *5   | 6            | 1'-0"     | 2'-6"       | 3'-6"       |
| FD                                     | *4   | 1            |           |             | 11'-11"     |



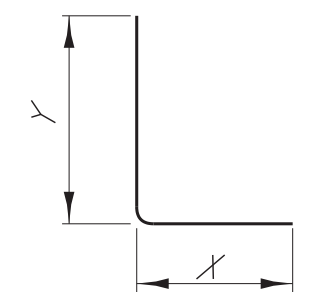
BARS In - #5



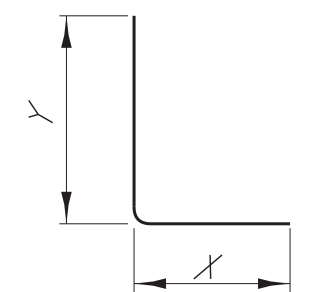
BARS DJ - #5



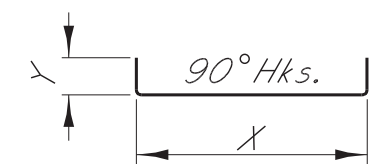
BARS DR - #4



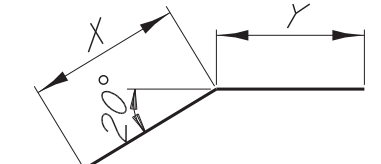
BARS DW - #5



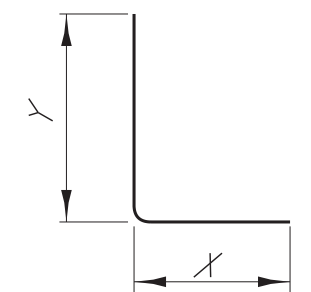
BARS  $R_n$  - #4



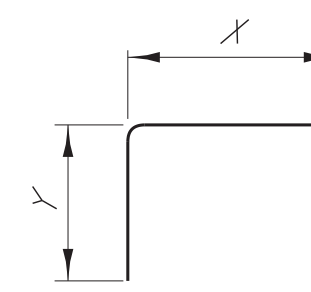
BARS N - #4



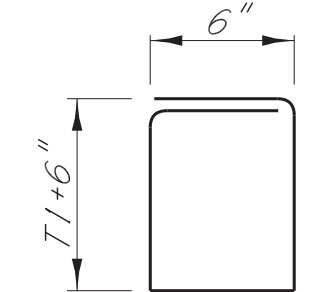
DOWELS Q - #7



BARS  $W_n$  - #5



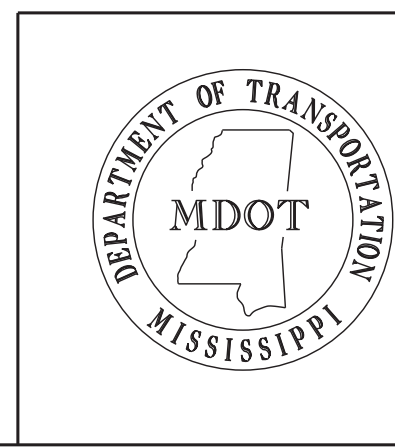
BARS  $V_n$  - #4



BARS K - #4

### BAR BENDING DETAILS

Dimensions are out to out

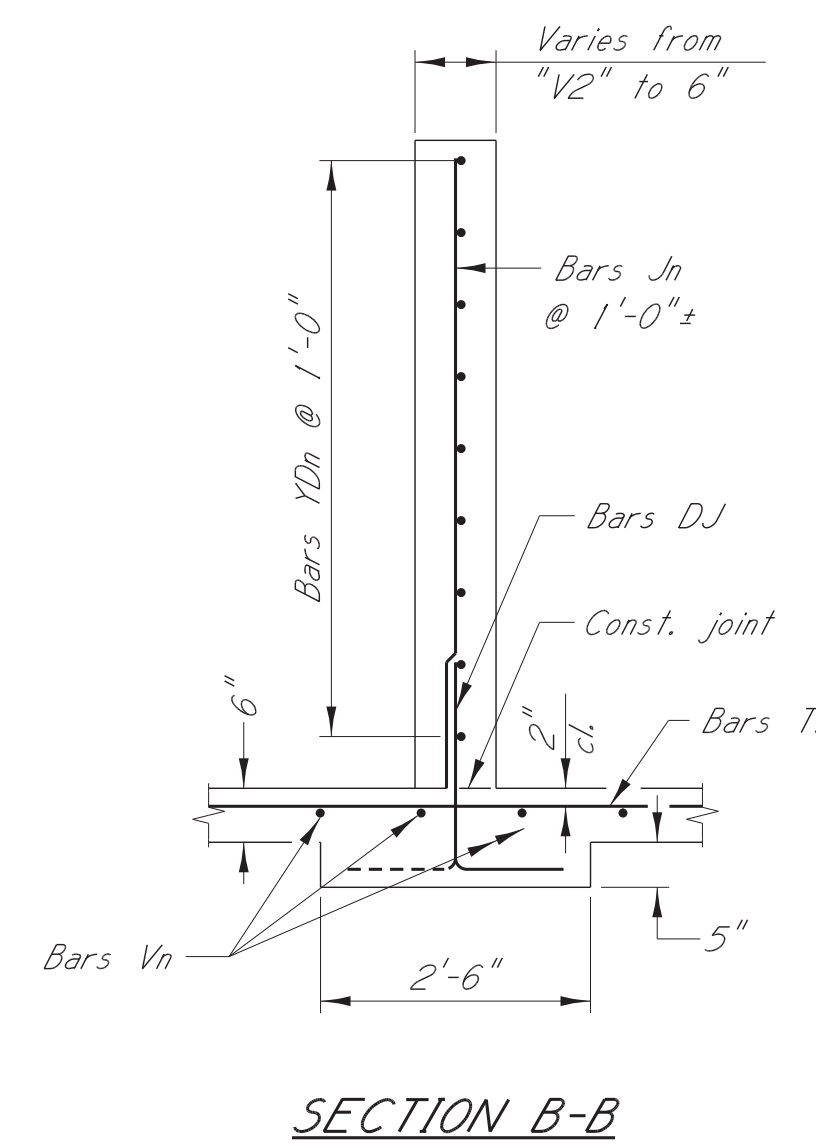
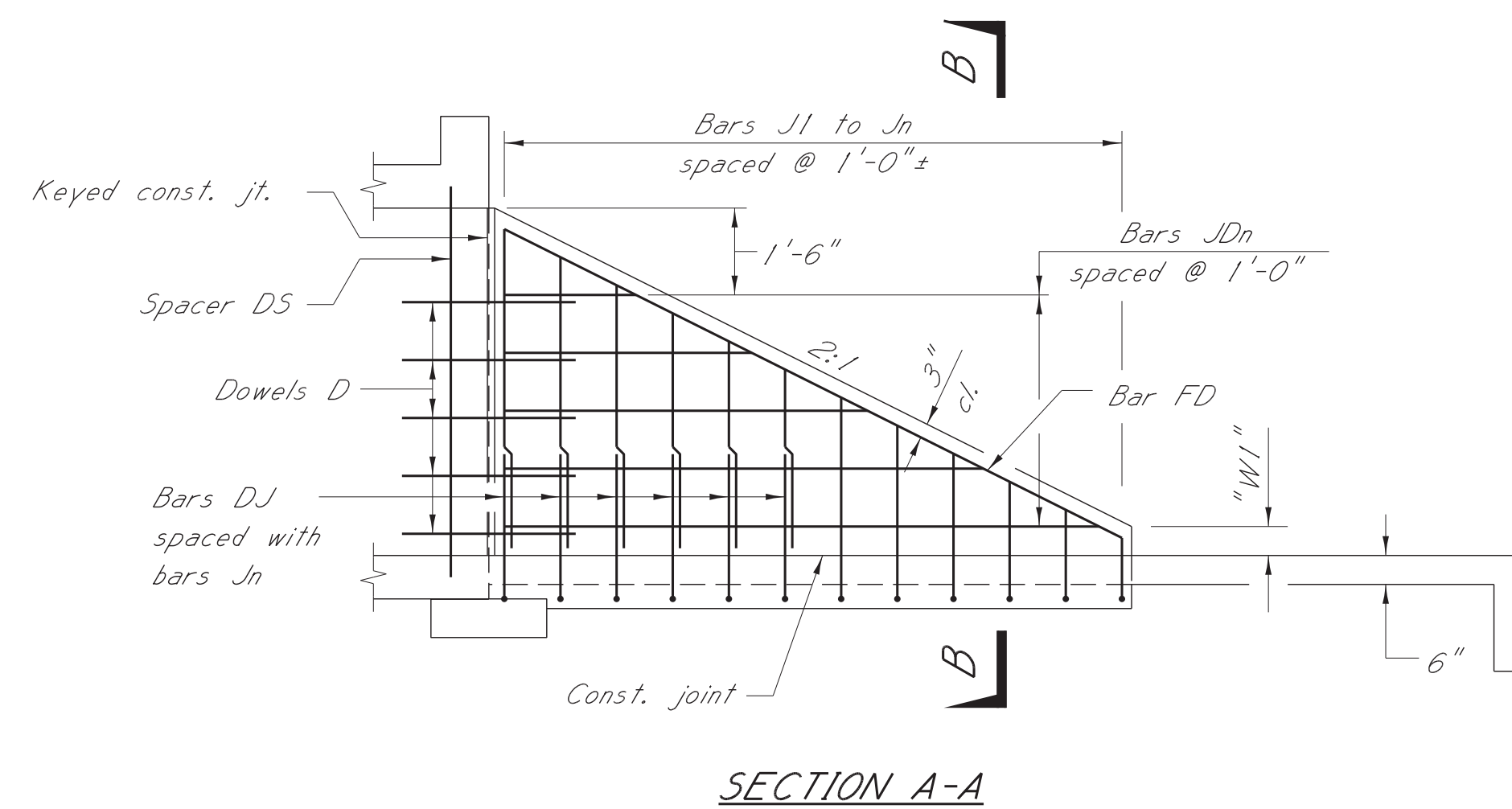
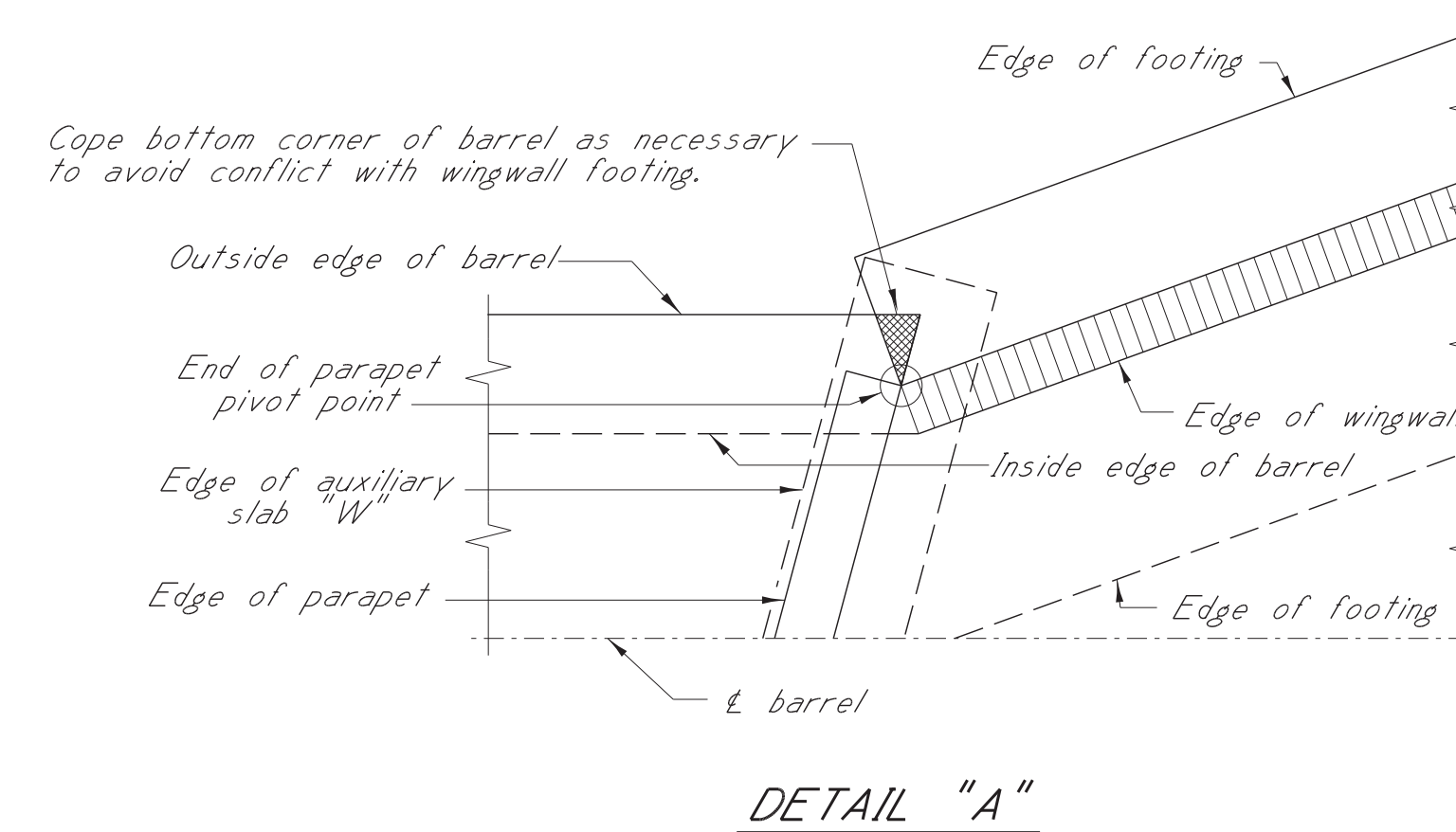
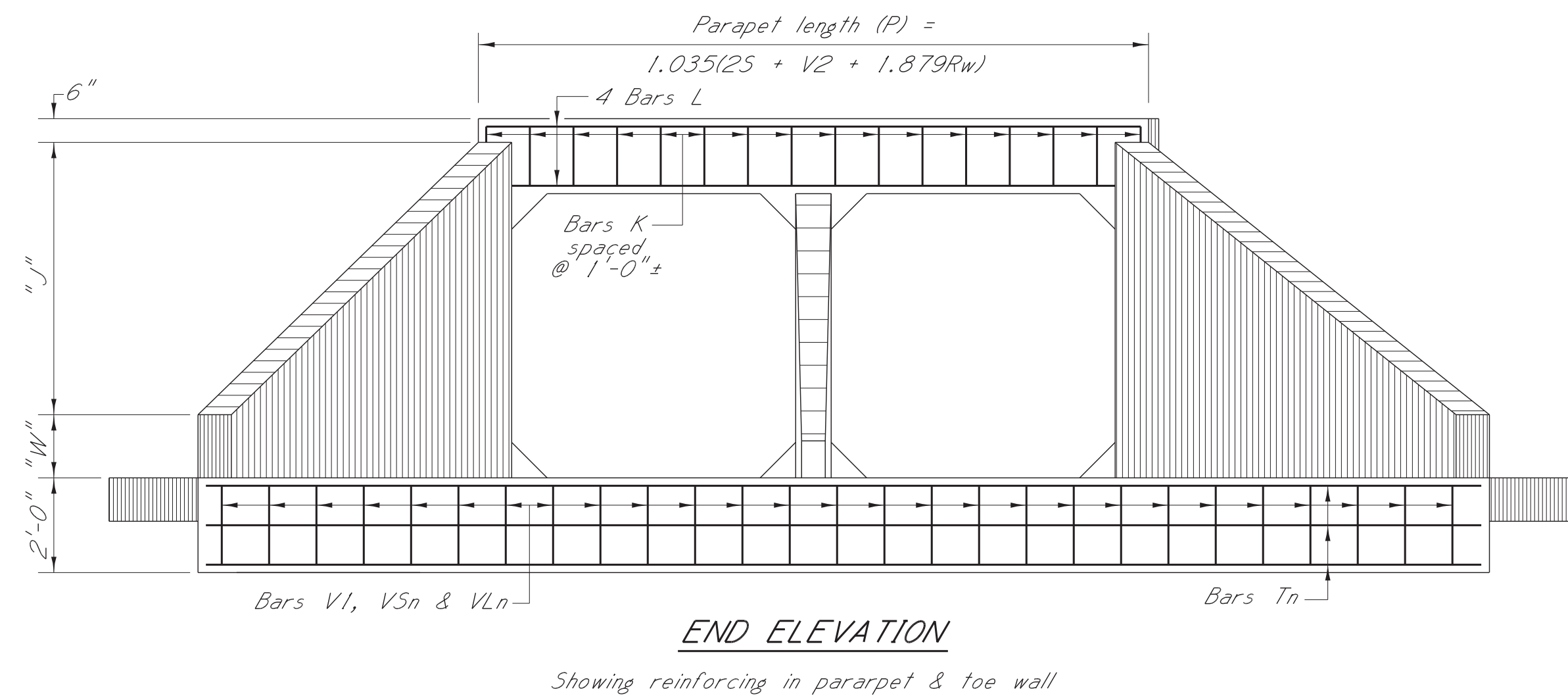


|  |  |  |  |      |                                                                                                                                                   |                                                                                                                                 |           |  |                                                                    |                |              |
|--|--|--|--|------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------|--|--------------------------------------------------------------------|----------------|--------------|
|  |  |  |  |      | BY                                                                                                                                                | MISSISSIPPI DEPARTMENT OF TRANSPORTATION<br>WINGS WITH 3:1 SLOPE FOR<br>BASIC CULVERT DRAWING<br>DOUBLE CELL<br>0° SKEW DETAILS |           |  |                                                                    |                |              |
|  |  |  |  |      | REVISIONS                                                                                                                                         |                                                                                                                                 |           |  |                                                                    |                |              |
|  |  |  |  |      |                                                                                                                                                   | HEIGHT                                                                                                                          | 6 FT.     |  |                                                                    | SHT. 2 OF 2    |              |
|  |  |  |  |      |                                                                                                                                                   | SPANS                                                                                                                           | 12-32 FT. |  |                                                                    | WORKING NUMBER |              |
|  |  |  |  |      |                                                                                                                                                   |                                                                                                                                 |           |  |                                                                    |                | IWD-6-3W     |
|  |  |  |  | DATE | DESIGNER <u>William K. McBeath, P.E.</u><br><u>DETAILER Wesley Phillips, E.I.T.</u>                                                               |                                                                                                                                 |           |  | CHECKER <u>B. Keith Carr, P.E.</u><br><u>ISSUE DATE 01/31/2015</u> |                | SHEET NUMBER |
|  |  |  |  | DATE | DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER PE.<br>DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD PE. |                                                                                                                                 |           |  |                                                                    |                | 7138         |



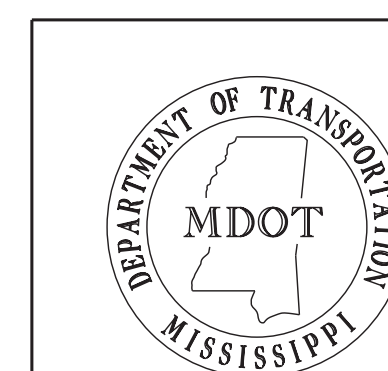






**SPECIAL PROVISIONS REQUIRED:**  
Concrete bridges and structures . . . . . No. 907-804

**DESIGN DATA:**  
Specifications. . . . . A.A.S.H.T.O., LRFD 2012.  
Loading. . . . . HL-93.  
Concrete. . . . . Class "B" (3,500 p.s.i.)



|  |  |  |  |  |    |                                          |           |
|--|--|--|--|--|----|------------------------------------------|-----------|
|  |  |  |  |  | BY | MISSISSIPPI DEPARTMENT OF TRANSPORTATION |           |
|  |  |  |  |  |    | WINGS WITH 3:1 SLOPE FOR                 |           |
|  |  |  |  |  |    | BASIC CULVERT DRAWING                    |           |
|  |  |  |  |  |    | DOUBLE CELL                              |           |
|  |  |  |  |  |    | 15° SKEW DETAILS                         |           |
|  |  |  |  |  |    | HEIGHTS                                  | 6-12 FT.  |
|  |  |  |  |  |    | SPANS                                    | 12-40 FT. |
|  |  |  |  |  |    | SHT. 2 OF 2                              |           |
|  |  |  |  |  |    | WORKING NUMBER                           |           |
|  |  |  |  |  |    | IWD-3W-15                                |           |
|  |  |  |  |  |    | SHEET NUMBER                             |           |
|  |  |  |  |  |    | 7159                                     |           |





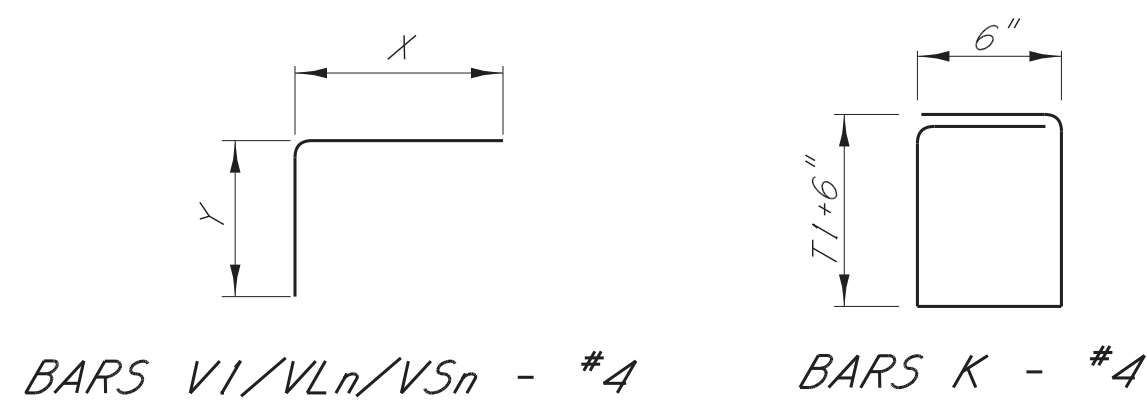
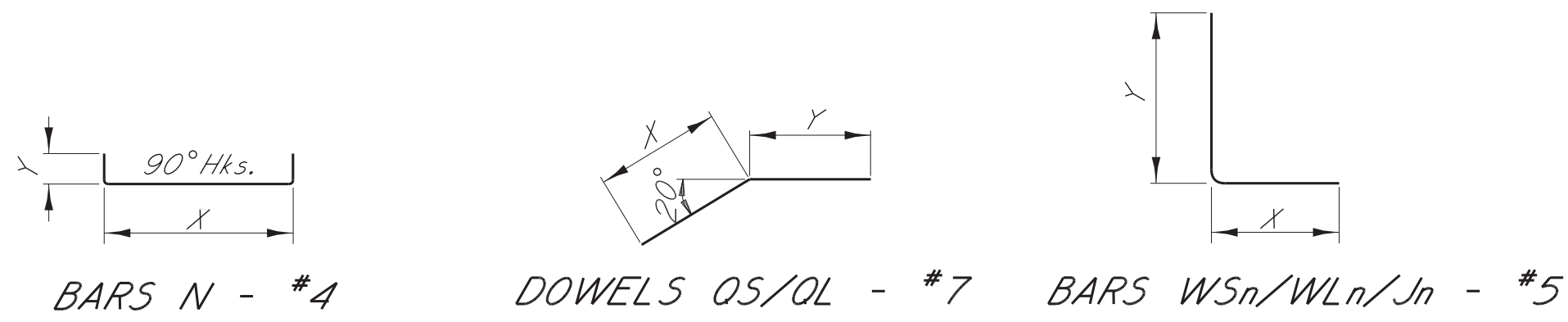
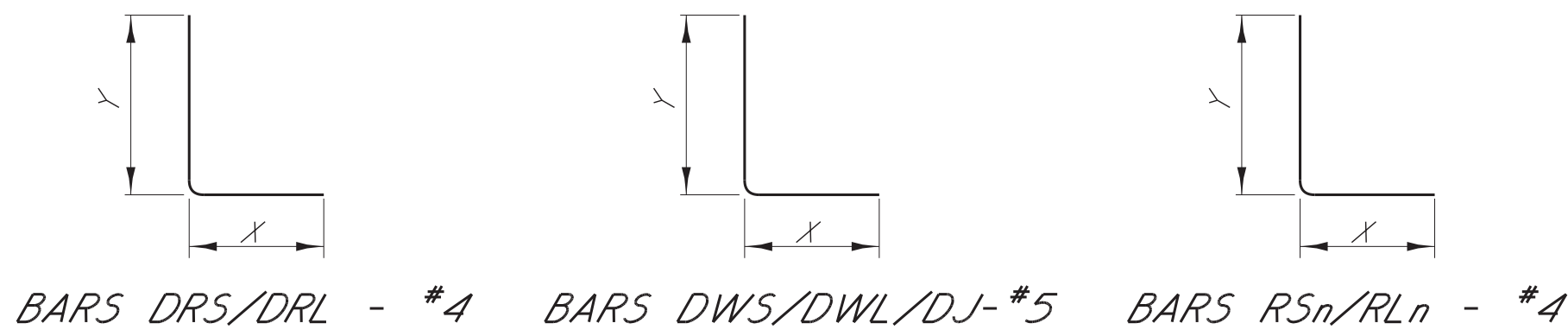


| HEIGHT = 6 FT.                                                |      |              |    |     |     |     |     |  |            |             |           |                         |  |  |
|---------------------------------------------------------------|------|--------------|----|-----|-----|-----|-----|--|------------|-------------|-----------|-------------------------|--|--|
| BAR LISTS FOR WINGS, FOOTING, PARAPET, APRON & AUXILIARY SLAB |      |              |    |     |     |     |     |  |            |             |           |                         |  |  |
| BAR                                                           | SIZE | NO. REQUIRED |    |     |     |     |     |  |            | DIM.<br>X   | DIM.<br>Y | LENGTH                  |  |  |
|                                                               |      | SPAN         |    |     |     |     |     |  |            |             |           |                         |  |  |
|                                                               |      | 6'           | 8' | 10' | 12' | 14' | 16' |  |            |             |           |                         |  |  |
| T1                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+5'-8"      |  |  |
| T2                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+6'-5 1/2"  |  |  |
| T3                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+7'-2 1/2"  |  |  |
| T4                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+8'-0"      |  |  |
| T5                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+8'-9 1/2"  |  |  |
| T6                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+9'-7"      |  |  |
| T7                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+10'-4 1/2" |  |  |
| T8                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+11'-2"     |  |  |
| T9                                                            | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+11'-11"    |  |  |
| T10                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+12'-8 1/2" |  |  |
| T11                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+13'-6"     |  |  |
| T12                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+14'-3 1/2" |  |  |
| T13                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+15'-1"     |  |  |
| T14                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+15'-10"    |  |  |
| T15                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+16'-7 1/2" |  |  |
| T16                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+17'-5"     |  |  |
| T17                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1.035(25+V2)+18'-2 1/2" |  |  |
| T18                                                           | #4   | 3            | 3  | 3   | 3   | 3   | 3   |  |            |             |           | 1.035(25+V2)+14'-6 1/2" |  |  |
| V1                                                            | #4   | 18           | 22 | 26  | 30  | 34  | 38  |  | 17'-6"     | 1'-8"       |           | 19'-2"                  |  |  |
| VL1                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 17'-0 1/2" | 1'-8"       |           | 18'-8 1/2"              |  |  |
| VL2                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 14'-7"     | 1'-8"       |           | 16'-3"                  |  |  |
| VL3                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 12'-1"     | 1'-8"       |           | 13'-9"                  |  |  |
| VL4                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 9'-7 1/2"  | 1'-8"       |           | 11'-3 1/2"              |  |  |
| VL5                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 7'-1 1/2"  | 1'-8"       |           | 8'-9 1/2"               |  |  |
| VL6                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 4'-6"      |             |           | 4'-6"                   |  |  |
| VL7                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-4 1/2"  |             |           | 1'-4 1/2"               |  |  |
| VS1                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 15'-9"     | 1'-8"       |           | 17'-5"                  |  |  |
| VS2                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 12'-9"     | 1'-8"       |           | 14'-5"                  |  |  |
| VS3                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 9'-8 1/2"  | 1'-8"       |           | 11'-4 1/2"              |  |  |
| VS4                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 6'-8 1/2"  | 1'-8"       |           | 8'-4 1/2"               |  |  |
| VS5                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 3'-7 1/2"  |             |           | 3'-7 1/2"               |  |  |
| FTL1                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 2'-1 1/2"               |  |  |
| FTL2                                                          | #5   | 19           | 19 | 19  | 19  | 19  | 19  |  |            |             |           | 5'-5"                   |  |  |
| FTL3                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 4'-7"                   |  |  |
| FTL4                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 3'-2 1/2"               |  |  |
| FTL5                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 2'-5"                   |  |  |
| FLL                                                           | #4   | 7            | 7  | 7   | 7   | 7   | 7   |  |            |             |           | 20'-8"                  |  |  |
| FTS1                                                          | #5   | 17           | 17 | 17  | 17  | 17  | 17  |  |            |             |           | 5'-5"                   |  |  |
| FTS2                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            |             |           | 1'-10"                  |  |  |
| FL5                                                           | #4   | 7            | 7  | 7   | 7   | 7   | 7   |  |            |             |           | 17'-0"                  |  |  |
| WS1                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+5'-1"     |           | W+5'-1"                 |  |  |
| WS2                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+4'-9"     |           | W+4'-9"                 |  |  |
| WS3                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+4'-5"     |           | W+4'-5"                 |  |  |
| WS4                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+4'-1"     |           | W+4'-1"                 |  |  |
| WS5                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+3'-9 1/2" |           | W+3'-9 1/2"             |  |  |
| WS6                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+3'-5 1/2" |           | W+3'-5 1/2"             |  |  |
| WS7                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+3'-1 1/2" |           | W+3'-1 1/2"             |  |  |
| WS8                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+2'-9 1/2" |           | W+2'-9 1/2"             |  |  |
| WS9                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+2'-5 1/2" |           | W+2'-5 1/2"             |  |  |
| WS10                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+2'-1 1/2" |           | W+2'-1 1/2"             |  |  |
| WS11                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+1'-9 1/2" |           | W+1'-9 1/2"             |  |  |
| WS12                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+1'-5 1/2" |           | W+1'-5 1/2"             |  |  |
| WS13                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6"      | W+2'-1 1/2" |           | W+3'-7 1/2"             |  |  |
| WS14                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6"      | W+1'-9 1/2" |           | W+3'-3 1/2"             |  |  |
| WS15                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6"      | W+1'-5 1/2" |           | W+2'-11 1/2"            |  |  |
| WS16                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6"      | W+1'-1 1/2" |           | W+2'-7 1/2"             |  |  |
| WS17                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6"      | W+0'-9 1/2" |           | W+2'-3 1/2"             |  |  |
| WS18                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6"      | W+0'-5 1/2" |           | W+1'-11 1/2"            |  |  |
| DWS                                                           | #5   | 12           | 12 | 12  | 12  | 12  | 12  |  | 1'-6"      | 2'-9"       |           | 4'-3"                   |  |  |
| WL1                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+5'-1 1/2" |           | W+5'-1 1/2"             |  |  |
| WL2                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+4'-10"    |           | W+4'-10"                |  |  |
| WL3                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+4'-7"     |           | W+4'-7"                 |  |  |
| WL4                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+4'-3 1/2" |           | W+4'-3 1/2"             |  |  |
| WL5                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |            | W+4'-0 1/2" |           | W+4'-0 1/2"             |  |  |

| HEIGHT = 6 FT.                                                |      |              |    |     |     |     |     |  |       |           |            |            |  |  |
|---------------------------------------------------------------|------|--------------|----|-----|-----|-----|-----|--|-------|-----------|------------|------------|--|--|
| BAR LISTS FOR WINGS, FOOTING, PARAPET, APRON & AUXILIARY SLAB |      |              |    |     |     |     |     |  |       |           |            |            |  |  |
| BAR                                                           | SIZE | NO. REQUIRED |    |     |     |     |     |  |       | DIM.<br>X | DIM.<br>Y  | LENGTH     |  |  |
|                                                               |      | SPAN         |    |     |     |     |     |  |       |           |            |            |  |  |
|                                                               |      | 6'           | 8' | 10' | 12' | 14' | 16' |  |       |           |            |            |  |  |
| WL6                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+3'-9"    | W+3'-9"    |  |  |
| WL7                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+3'-6"    | W+3'-6"    |  |  |
| WL8                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+3'-2 ½"  | W+3'-2 ½"  |  |  |
| WL9                                                           | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-11 ½" | W+2'-11 ½" |  |  |
| WL10                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-8"    | W+2'-8"    |  |  |
| WL11                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-5"    | W+2'-5"    |  |  |
| WL12                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-2"    | W+2'-2"    |  |  |
| WL13                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+1'-10 ½" | W+1'-10 ½" |  |  |
| WL14                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+1'-7 ½"  | W+1'-7 ½"  |  |  |
| WL15                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+2'-4"    | W+3'-10"   |  |  |
| WL16                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+2'-0 ½"  | W+3'-6 ½"  |  |  |
| WL17                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-9 ½"  | W+3'-3 ½"  |  |  |
| WL18                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-6"    | W+3'-0"    |  |  |
| WL19                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-3"    | W+2'-9"    |  |  |
| WL20                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-0"    | W+2'-6"    |  |  |
| WL21                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+0'-8 ½"  | W+2'-2 ½"  |  |  |
| WL22                                                          | #5   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+0'-5 ½"  | W+1'-11 ½" |  |  |
| DWL                                                           | #5   | 14           | 14 | 14  | 14  | 14  | 14  |  | 1'-6" |           | 2'-9"      | 4'-3"      |  |  |
| RS1                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+5'-1"    | W+5'-1"    |  |  |
| RS2                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+4'-9"    | W+4'-9"    |  |  |
| RS3                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+4'-5"    | W+4'-5"    |  |  |
| RS4                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+4'-1"    | W+4'-1"    |  |  |
| RS5                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+3'-9 ½"  | W+3'-9 ½"  |  |  |
| RS6                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+3'-5 ½"  | W+3'-5 ½"  |  |  |
| RS7                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+3'-1 ½"  | W+3'-1 ½"  |  |  |
| RS8                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-9 ½"  | W+2'-9 ½"  |  |  |
| RS9                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-5 ½"  | W+2'-5 ½"  |  |  |
| RS10                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-1 ½"  | W+2'-1 ½"  |  |  |
| RS11                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+1'-9 ½"  | W+1'-9 ½"  |  |  |
| RS12                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+1'-5 ½"  | W+1'-5 ½"  |  |  |
| RS13                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+1'-1 ½"  | W+1'-1 ½"  |  |  |
| RS14                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-9 ½"  | W+3'-3 ½"  |  |  |
| RS15                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-5 ½"  | W+2'-11 ½" |  |  |
| RS16                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-1 ½"  | W+2'-7 ½"  |  |  |
| RS17                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+0'-9 ½"  | W+2'-3 ½"  |  |  |
| RS18                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+0'-5 ½"  | W+1'-11 ½" |  |  |
| DPS                                                           | #4   | 13           | 13 | 13  | 13  | 13  | 13  |  | 1'-6" |           | 2'-5"      | 3'-11"     |  |  |
| RL1                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+5'-1 ½"  | W+5'-1 ½"  |  |  |
| RL2                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+4'-10"   | W+4'-10"   |  |  |
| RL3                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+4'-7"    | W+4'-7"    |  |  |
| RL4                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+4'-3 ½"  | W+4'-3 ½"  |  |  |
| RL5                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+4'-0 ½"  | W+4'-0 ½"  |  |  |
| RL6                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+3'-9"    | W+3'-9"    |  |  |
| RL7                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+3'-6"    | W+3'-6"    |  |  |
| RL8                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+3'-2 ½"  | W+3'-2 ½"  |  |  |
| RL9                                                           | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-11 ½" | W+2'-11 ½" |  |  |
| RL10                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-8"    | W+2'-8"    |  |  |
| RL11                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-5"    | W+2'-5"    |  |  |
| RL12                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+2'-2"    | W+2'-2"    |  |  |
| RL13                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+1'-10 ½" | W+1'-10 ½" |  |  |
| RL14                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+1'-7 ½"  | W+1'-7 ½"  |  |  |
| RL15                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  |       |           | W+1'-4"    | W+1'-4"    |  |  |
| RL16                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+2'-0 ½"  | W+3'-6 ½"  |  |  |
| RL17                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-9 ½"  | W+3'-3 ½"  |  |  |
| RL18                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-6"    | W+3'-0"    |  |  |
| RL19                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-3"    | W+2'-9"    |  |  |
| RL20                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+1'-0"    | W+2'-6"    |  |  |
| RL21                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+0'-8 ½"  | W+2'-2 ½"  |  |  |
| RL22                                                          | #4   | 1            | 1  | 1   | 1   | 1   | 1   |  | 1'-6" |           | W+0'-5 ½"  | W+1'-11 ½" |  |  |
| DRL                                                           | #4   | 15           | 5  | 15  | 15  | 15  | 15  |  | 1'-6" |           | 2'-5"      | 3'-11"     |  |  |
| YS1                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |       |           |            | 4'-3 ½"    |  |  |
| YS2                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |       |           |            | 7'-4"      |  |  |
| YS3                                                           | #4   | 2            | 2  | 2   | 2   | 2   | 2   |  |       |           |            | 10'-4"     |  |  |



| BAR LISTS FOR UPSTREAM BRUSH DEFLECTOR |      |              |           |             |             |
|----------------------------------------|------|--------------|-----------|-------------|-------------|
| BAR                                    | SIZE | NO.<br>REQ'D | DIM.<br>X | DIM.<br>Y   | LENGTH      |
| D                                      | #7   | 5            |           |             | 5'-6"       |
| D5                                     | #4   | 1            |           |             | 6'-0" + T1  |
| J1                                     | #5   | 1            |           | W1+5'-1 ½"  | W1+5'-1 ½"  |
| J2                                     | #5   | 1            |           | W1+4'-8"    | W1+4'-8"    |
| J3                                     | #5   | 1            |           | W1+4'-2"    | W1+4'-2"    |
| J4                                     | #5   | 1            |           | W1+3'-8"    | W1+3'-8"    |
| J5                                     | #5   | 1            |           | W1+3'-2 ½"  | W1+3'-2 ½"  |
| J6                                     | #5   | 1            |           | W1+2'-8 ½"  | W1+2'-8 ½"  |
| J7                                     | #5   | 1            | 1'-0"     | W1+2'-11 ½" | W1+3'-11 ½" |
| J8                                     | #5   | 1            | 1'-0"     | W1+2'-6"    | W1+3'-6"    |
| J9                                     | #5   | 1            | 1'-0"     | W1+2'-0"    | W1+3'-0"    |
| J10                                    | #5   | 1            | 1'-0"     | W1+1'-6 ½"  | W1+2'-6 ½"  |
| J11                                    | #5   | 1            | 1'-0"     | W1+1'-0 ½"  | W1+2'-0 ½"  |
| J12                                    | #5   | 1            | 1'-0"     | W1+0'-6 ½"  | W1+1'-6 ½"  |
| DJ                                     | #5   | 6            | 1'-0"     | 2'-6"       | 3'-6"       |
| YD1                                    | #5   | 1            |           |             | 2'-3 ½"     |
| YD2                                    | #5   | 1            |           |             | 4'-3 ½"     |
| YD3                                    | #5   | 1            |           |             | 6'-3 ½"     |
| YD4                                    | #5   | 1            |           |             | 8'-3 ½"     |
| YD5                                    | #5   | 1            |           |             | 10'-3 ½"    |
| FD                                     | #4   | 1            |           |             | 11'-11"     |



BAR BENDING DETAILS  
Dimensions are out to out



|  |  |  |  |           |                                                                                                                                                  |                          |
|--|--|--|--|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|  |  |  |  | BY        | MISSISSIPPI DEPARTMENT OF TRANSPORTATION                                                                                                         |                          |
|  |  |  |  | REVISIONS | WINGS WITH 3:1 SLOPE FOR<br>BASIC CULVERT DRAWING<br>DOUBLE CELL<br>15° SKEW DETAILS                                                             |                          |
|  |  |  |  |           | HEIGHT 6 FT. SHT. 3 OF 3                                                                                                                         |                          |
|  |  |  |  |           | SPANS 12-32 FT. <span style="float: right;">WORKING NUMBER<br/>IWD-6-3W-15</span>                                                                |                          |
|  |  |  |  | DATE      | DESIGNER <u>William K. McBeath, P.E.</u> CHECKER <u>B. Keith Carr, P.E.</u><br>DRAFTER <u>Wesley Phillips, EIT</u> ISSUE DATE <u>01/01/2015</u>  | SHEET NUMBER<br><br>7162 |
|  |  |  |  |           | DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER PE<br>DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD PE. |                          |



Engineering Progress

**SPECIFICATIONS AND CONTRACT DOCUMENTS**

**FOR**

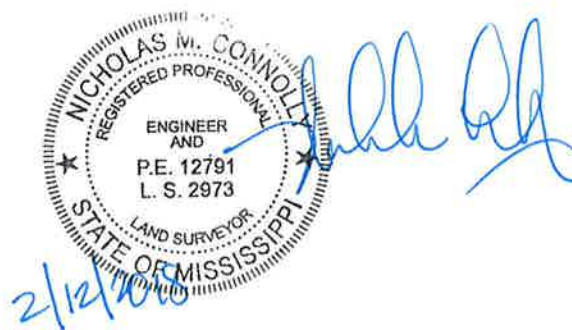
**SOUTH 28<sup>TH</sup> AVENUE BRIDGE REPLACEMENT**

**BRIDGE #SA18-157**

**FOR THE**

**CITY OF HATTIESBURG**

**FEBRUARY, 2018**



**PREPARED BY:**

**SHOWS, DEARMAN & WAITS, INC.  
CONSULTING ENGINEERS**



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## 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 May 31, 2018 in the City Clerk's Office in the City Hall of said City and then at said location opened and read aloud for furnishing the City's requirements for the following:

BID OPENING TIME: 10:00 a.m.  
DATE of BID OPENING: May 31, 2018  
SOUTH 28TH AVENUE  
BRIDGE REPLACEMENT  
BRIDGE #SA18-157  
CITY of HATTIESBURG

Official bid documents can be downloaded from Central Bidding at [www.centralbidding.com](http://www.centralbidding.com). Electronic bids can be submitted at [www.centralbidding.com](http://www.centralbidding.com). For any questions relating to the electronic bidding process, please call Central Bidding at 225-810-4814. 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 OPENING TIME: 10:00 a.m.  
DATE of BID OPENING: May 31, 2018  
SOUTH 28TH AVENUE  
BRIDGE REPLACEMENT  
BRIDGE #SA18-157  
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 16th day of April, 2018

CITY OF HATTIESBURG, MISSISSIPPI

BY: \_\_\_\_\_  
Kermas Eaton, City Clerk

Publish on April 26, 2018 and May 3, 2018  
City of Hattiesburg  
Return PROOF to SDW, Inc.  
301 Second Avenue  
Hattiesburg, MS 39401



# INSTRUCTIONS TO BIDDERS

---

- 1.0 Bids will be received by CITY of HATTIESBURG, MS herein called the "OWNER," at City Clerk's office at the City Hall until 10:00 a.m. on May 31, 2018, and then at said office publicly opened and read aloud.
- 2.0 Each sealed envelope containing a bid in excess of fifty thousand dollars (\$50,000) must be plainly marked on the outside as: "BID for SOUTH 28TH AVENUE BRIDGE REPLACEMENT, BRIDGE #SA18-157, HATTIESBURG, MISSISSIPPI"
- 2.1 **Sealed Bids Hand Delivered**  
The outside of the sealed bid envelope must bear the name of the bidder, bidder's complete address, "Certificate of Responsibility Number," and the name of the project for which the bid is submitted.
- 2.2 **Sealed Bids Mailed**  
The outside of the sealed bid envelope must bear the name of the bidder, bidder's complete address, "Certificate of Responsibility Number," and the name of the project for which the bid is submitted.
- The sealed bid envelope (containing the bid) must then be enclosed in a carrier envelope addressed to the OWNER.
- 2.3 No bid will be opened, considered, or accepted unless the above stated information is given as specified.
- 3.0 When required by the OWNER, sufficient evidence must be submitted that said "Certificate of Responsibility" has been issued and is in effect at the time of receiving bids.
- 4.0 All bids must be made on the required bid form (enclosed). All spaces, including blank spaces, for bid prices must be completed in ink or typewritten and the bid form must be fully completed and executed when submitted. Only one copy of the bid form is required.
- 5.0 The contract will be awarded on the basis of the low base bid or low combination of base bid and those alternatives which produce a total within available funds. The OWNER reserves the right to waive irregularities and to reject any or all bids. The OWNER reserves the right to award to a bidder other than the low bidder when, in the OWNER'S judgment, it is in his best interest to do so. Three such reasons may be, but are not limited to: (1) bidder being in arrears on existing contracts; (2) bidder being in litigation with the OWNER; (3) bidder having defaulted on a previous contract. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. 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.
- 6.0 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 contract documents, 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.

- 7.0 If any person contemplating the submission of a bid for the proposed contract is in doubt as to the true meaning of any part of the plans, specifications, or other proposed contract documents, submit a written request for an interpretation thereof to:

Shows, Dearman & Waits, Inc.  
Consulting Engineers  
301 2nd Ave  
Hattiesburg MS 39401

- 7.1 The written request for clarification must be received at least ten (10) days prior to the date fixed for opening of bids.
- 7.2 Any interpretation of the contract documents will be made by the "ADDENDA" duly issued to each person receiving a set of such documents not later than forty-eight (48) hours prior to the time of opening of bids, excluding weekends and legal holidays.
- 7.3 The OWNER will not be responsible for explanations or interpretations of proposed documents, except as issued in accordance herewith.
- 8.0 The OWNER shall provide to bidders prior to bidding all information that is pertinent to, delineates, and describes the land owned as well as rights-of-way acquired or to be acquired.
- 9.0 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 contractor from fulfilling any of the conditions of the "Contract Agreement."
- 10.0 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 all the said bonds except the bonds from the three (3) lowest responsive, responsible bidders. When the "Contract Agreement" is executed, the said bonds of the two remaining unsuccessful bidders will be returned. The "Bid Bond" of the successful bidder will be retained until the "Payment Bond," "Performance Bond," and "Certificates of Insurance" have been executed and approved, after which the "Bid Bond" will be returned to the successful bidder. A certified check may be used in lieu of a "Bid Bond."
- 11.0 A "Payment Bond," and "Performance Bond," each in the amount of one hundred percent (100%) of the contract price along with an owner-approved corporate surety that is listed on the US Treasury Department's most current list (Circular 570, as amended) will be required for the faithful performance of the contract.
- 12.0 Attorneys-in-fact who sign the "Bid Bond," "Payment Bond," and "Performance Bond" must file with each said bond a certified and effective-dated copy of their "Power of Attorney."
- 13.0 The party to whom the contract is awarded will be required to execute the "Contract

Agreement" and obtain and submit the "Performance Bond," "Payment Bond," and "Certificate of Insurance" within ten (10) calendar days from the date when "Notice of Award" is delivered to the bidder. The "Notice of Award" shall be accompanied by the required "Contract Agreement" and said bond forms. In case of failure of the bidder to execute and submit the "Contract Agreement," "Performance Bond," "Payment Bond," and "Certificate of Insurance," the OWNER may - at his option - determine the bidder in default, in which case the "Bid Bond" accompanying the proposal shall become the property of the OWNER.

- 14.0 The OWNER within ten (10) calendar days of receipt of acceptable "Performance Bond," "Payment Bond," Certificate of Insurance," and "Contract Agreement" signed by the party to whom the "Contract Agreement" was awarded, shall sign the "Contract Agreement" and return to such party an executed duplicate of the "Contract Agreement" and issue a "Notice to Proceed." Should the OWNER not execute the "Contract Agreement" within such stated period, the bidder may by written notice withdraw his signed "Contract Agreement" without further liability on the part of either party. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER. Should there be reason(s) the "Notice to Proceed" cannot be issued within such stated 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 ten (10) calendar day period or within the period mutually agreed upon between OWNER and contractor, the contractor may terminate the "Contract Agreement" without further liability on the part of either party.
- 15.0 The OWNER may make such investigations as he 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 Agreement" and to complete the work contemplated therein.
- 16.0 A conditional (to qualify) bid will not be accepted.
- 17.0 Award will be made to the lowest responsible, responsive bidder. (See herein paragraph 5.0.)
- 18.0 All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the stated project shall apply to the "Contract Agreement" throughout.
- 19.0 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.
- 20.0 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 set forth in the supplemental "General Conditions."
- 21.0 Non-Resident Contractor  
When a non-resident contractor submits a bid for a Mississippi public project, he shall attach thereto a copy of his resident state's current law pertaining to such state's treatment of non-resident contractors as required by House Bill Number 850, Chapter Number 527,



Laws of 200588.

**22.0 Telegraphic Modifications**

Any bidder may modify his bid by telegraphic communication at any time, provided such communication is received prior to the scheduled bid opening. Written confirmation must be received within two (2) days after the scheduled bid opening or no consideration will be given the telegraphic modifications.

**23.0 Resident Labor Used on Public Works**

Each bidder must inform himself of the requirements and provisions of Sections 31-5-17, 31-5-2005 and 31-5-21 of the Mississippi Code of 200572, which require the use of Mississippi resident labor on this public works project.

**24.0 The BIDDER shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when required to do so by the OWNER.**

**25.0 The ENGINEER is SHOWS, DEARMAN & WAITS, INC. The address of the ENGINEER is 301 2nd Avenue, HATTIESBURG, MISSISSIPPI.**

**26.0 Official bid documents can be downloaded from Central Bidding at [www.centralbidding.com](http://www.centralbidding.com). Electronic bids can be submitted at [www.centralbidding.com](http://www.centralbidding.com). For any questions relating to the electronic bidding process, please call Central Bidding at 225-810-4814.**

## PROPOSAL FORM

---

I(we) agree to begin work within ten (10) calendar days after the issuance of the "Notice to Proceed" and to complete the work within 100 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. It is further understood and agreed that the Owner may increase or decrease the quantities listed in the proposal to an extent equivalent to thirty percent (30%) of the bid price (in dollars) 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 seven (7) 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,

\_\_\_\_\_  
Name of Firm or Bidder

by: \_\_\_\_\_

\_\_\_\_\_  
Address



**SOUTH 28TH AVENUE BRIDGE REPLACEMENT****CITY of HATTIESBURG**

| ITEM NO.             | DESCRIPTION                                     | UNIT     | QUANTITY | UNIT PRICE | EXTENSION |
|----------------------|-------------------------------------------------|----------|----------|------------|-----------|
| <b>ROADWAY ITEMS</b> |                                                 |          |          |            |           |
| 201-A                | Clearing and Grubbing                           | Lump Sum | Lump Sum |            |           |
| 202-B                | Removal of Asphalt, All Depths                  | Sq. Yd.  | 333      |            |           |
| 203-A                | Unclassified Excavation, FM                     | Cu. Yd.  | 760      |            |           |
| 203-E                | Borrow Excavation, LVM, Class 9                 | Cu. Yd.  | 294      |            |           |
| 304-A                | Granular Material, LVM, Class 6, Group "C"      | Cu. Yd.  | 328      |            |           |
| 403-A                | Hot Mix Asphalt, ST, 9.5 mm Mixture             | Ton      | 28       |            |           |
| 403-A                | Hot Mix Asphalt, ST, 12.5 mm Mixture            | Ton      | 67       |            |           |
| 403-A                | Hot Mix Asphalt, ST, 25 mm Mixture              | Ton      | 76       |            |           |
| 601-B                | Class "B" Structural Concrete, Minor Structures | Cu. Yd.  | 0.87     |            |           |
| 602-A                | Reinforcing Steel                               | Lb.      | 60       |            |           |
| 603-CA               | 18" Reinforced Concrete Pipe, Class III         | Lin. Ft. | 16       |            |           |
| 603-CB               | 18" Reinforced Concrete End Section             | Each     | 1        |            |           |
| 603-CE               | 18" x 11" Concrete Arch Pipe, Class AIII        | Lin. Ft. | 16       |            |           |
| 603-SB               | 18" Branch Connection To Box Wingwall           | Each     | 1        |            |           |
| 603-SB               | 18"x11" Branch Connection To Box                | Each     | 1        |            |           |
| 604-B                | Gratings                                        | Lb.      | 250      |            |           |
| 613-D                | Adjustment of Manholes                          | Each     | 1        |            |           |
| 617-A                | Right of Way Markers (Type II)                  | Each     | 9        |            |           |
| 618-A                | Maintenance of Traffic                          | Lump Sum | Lump Sum |            |           |
| 618-B                | Additional Construction Signs                   | Sq. Ft.  | 0.0      |            |           |
| 620-A                | Mobilization                                    | Lump Sum | Lump Sum |            |           |

|                                |                                                             |          |        |  |  |
|--------------------------------|-------------------------------------------------------------|----------|--------|--|--|
| 626-C                          | 6" Thermoplastic Edge Stripe, Continuous White, 60 mils     | Mile     | 0.024  |  |  |
| 626-E                          | 6" Thermoplastic Traffic Stripe, Continuous Yellow, 90 mils | Lin. Ft. | 250    |  |  |
| 627-D                          | Two-Way Yellow Reflective Raised Markers                    | Each     | 4      |  |  |
| SUBTOTAL ROADWAY ITEMS         |                                                             |          |        |  |  |
| <b>EROSION CONTROL ITEMS</b>   |                                                             |          |        |  |  |
| 213-A                          | Agricultural Limestone                                      | Ton      | 0.8    |  |  |
| 213-B                          | Commercial Fertilizer, 13-13-13                             | Ton      | 0.4    |  |  |
| 213-D                          | Ammonium Nitrate                                            | Ton      | 0.04   |  |  |
| 214-A                          | Seeding                                                     | Acre     | 0.4    |  |  |
| 215-A                          | Vegetative Materials for Mulch                              | Ton      | 0.8    |  |  |
| 216-A                          | Solid Sodding                                               | Sq. Yd.  | 200    |  |  |
| 234-A                          | Temporary Silt Fence                                        | Lin. Ft. | 1,000  |  |  |
| 237-A                          | Wattles, 20"                                                | Lin. Ft. | 200    |  |  |
| 815-B                          | Grouted Riprap                                              | Sq. Yd.  | 555    |  |  |
| 815-E                          | Geotextile Under Riprap, Type V, AOS 0.21-0.43              | Sq. Yd.  | 555    |  |  |
| SUBTOTAL EROSION CONTROL ITEMS |                                                             |          |        |  |  |
| <b>BOX BRIDGE ITEMS</b>        |                                                             |          |        |  |  |
| 804-B                          | Box Bridge Concrete, Class "BB"                             | Cu. Yd.  | 337.80 |  |  |
| 805-A                          | Reinforcement                                               | Lb.      | 61,316 |  |  |
| SUBTOTAL BOX BRIDGE ITEMS      |                                                             |          |        |  |  |
| TOTAL BID                      |                                                             |          |        |  |  |

**Note:** All other items of work are to be absorbed.

## BID BOND

---

KNOWN ALL MEN BY THESE PRESENTS: that we, the undersigned,  
\_\_\_\_\_, as 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) of the bid amount for payment of which, well and truly to be made, we hereby jointly  
and severally bind ourselves, successors, and assigns.

Signed, this \_\_\_\_\_ day of \_\_\_\_\_, 201\_.

The condition of the above obligation is such that whereas the PRINCIPAL has submitted to the City of Hattiesburg a certain bid, attached hereto and hereby made a part hereof, to enter into a contract in writing for the SOUTH 28TH AVENUE BRIDGE REPLACEMENT, CITY OF HATTIESBURG project.

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 all 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 first set forth above.

(Seal)

\_\_\_\_\_(L.S.)  
PRINCIPAL

(Seal)

\_\_\_\_\_  
SURETY

by: \_\_\_\_\_

**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.

# CONTRACT AGREEMENT

---

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 201\_\_\_\_, by and between the City of Hattiesburg, hereinafter called "OWNER" and \_\_\_\_\_, doing business as (an individual,) or (a partnership,) or (a corporation) hereinafter called "CONTRACTOR,"

WITNESSETH: that for and in consideration of the payments and agreements hereinafter mentioned:

## ARTICLE I

### 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:

SOUTH 28TH AVENUE  
BRIDGE REPLACEMENT  
CITY of HATTIESBURG

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 II

### 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 III

### 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 Two Hundred Dollars (\$200.00) 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 liquidated damages may be granted as provided for in the Specifications.

## ARTICLE IV

### 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 (10<sup>th</sup>) 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 V

### 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 the 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 from 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 VI

### 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 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 VII

### 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 SOUTH 28TH AVENUE BRIDGE REPLACEMENT, City of Hattiesburg, MS.
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" within fifteen (15) calendar days 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 of \_\_\_\_\_ or 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        |
| Performance Bond        | Drawings                        |
| Addenda: No. ____.      | Dated: _____, 20__              |
| No. ____.               | Dated: _____, 20__              |
| No. ____.               | Dated: _____, 20__              |



No. \_\_\_\_\_. Dated: \_\_\_\_\_, 20\_\_\_\_

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.

(Owner's Seal)

OWNER:

City of Hattiesburg \_\_\_\_\_

(Owner's Seal)

Authorized by: \_\_\_\_\_

(Printed Name & Title)

ATTEST \_\_\_\_\_

CONTRACTOR:

\_\_\_\_\_  
\_\_\_\_\_

(Contractor's Seal)

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 BOND

KNOWN ALL MEN BY THESE PRESENTS: that

|                                                      |                               |
|------------------------------------------------------|-------------------------------|
| _____<br>Contractor                                  | _____<br>Contractor's Address |
| a<br>_____<br>(Corporation, Partnership, Individual) | _____<br>City/State/Zip       |

hereinafter called "PRINCIPAL," and

|                 |                           |
|-----------------|---------------------------|
| _____<br>SURETY | _____<br>SURETY's Address |
|                 | _____<br>City/State/Zip   |

hereinafter called "SURETY," are held and firmly bound unto

|                                       |                          |
|---------------------------------------|--------------------------|
| _____<br>City of Hattiesburg<br>OWNER | _____<br>OWNER's Address |
|                                       | _____<br>City/State/Zip  |

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 \_\_\_\_\_, 201\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

**SOUTH 28TH AVENUE BRIDGE REPLACEMENT, City of Hattiesburg, MS**

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 in such contract, and any authorized extension or modification thereof, including all amounts due to 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 PRINCIPAL shall abridge the right of any beneficiary hereunder whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in \_\_\_\_\_ counterparts, each  
(Number)  
one of which shall be deemed an original. Said PRINCIPAL and SURETY have hereunto set their hands and seals at \_\_\_\_\_ this the \_\_\_\_ day of \_\_\_\_\_, 201\_\_.

(PRINCIPAL's Seal)

ATTEST by:

\_\_\_\_\_

PRINCIPAL

\_\_\_\_\_  
Name

\_\_\_\_\_  
Authorized Representative  
Executing for PRINCIPAL

\_\_\_\_\_  
(PRINCIPAL) Secretary;  
Witness as to PRINCIPAL

\_\_\_\_\_  
Title

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State/Zip



*Payment Bond (continued)*

(SURETY's Seal)

**ATTEST by:**

\_\_\_\_\_

\_\_\_\_\_ SURETY

\_\_\_\_\_ Name

\_\_\_\_\_ Authorized Person Executing  
For SURETY

\_\_\_\_\_ Title

\_\_\_\_\_ Title

\_\_\_\_\_ Witness as to SURETY

\_\_\_\_\_ Address

\_\_\_\_\_ City/State/Zip

**NOTE:** Date of bond must not be prior to the date of the contract agreement. If PRINCIPAL is a partnership, all partners should execute the bond.

**IMPORTANT NOTE:** SURETY companies executing bonds must appear on the US Treasury Department's most current list (Circular C570, as amended) and be authorized to transact business in the state where the project is located.



## PERFORMANCE BOND

KNOWN ALL MEN BY THESE PRESENTS: that

|                                                                 |                               |
|-----------------------------------------------------------------|-------------------------------|
| _____<br>Contractor                                             | _____<br>Contractor's Address |
| <sup>a</sup><br>_____<br>(Corporation, Partnership, Individual) | _____<br>City/State/Zip       |

hereinafter called "PRINCIPAL," and

|                 |                           |
|-----------------|---------------------------|
| _____<br>SURETY | _____<br>SURETY's Address |
|                 | _____<br>City/State/Zip   |

hereinafter called "SURETY," are held and firmly bound unto

|                                       |                          |
|---------------------------------------|--------------------------|
| _____<br>City of Hattiesburg<br>OWNER | _____<br>OWNER's Address |
|                                       | _____<br>City/State/Zip  |

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 \_\_\_\_\_, 201\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

**SOUTH 28TH AVENUE BRIDGE REPLACEMENT, City of Hattiesburg, MS**

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 PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages that 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, 27-67-1, 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 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 PRINCIPAL shall abridge the right of any beneficiary hereunder whose claim may be unsatisfied.

**IN WITNESS WHEREOF**, this instrument is executed in \_\_\_\_\_ counterparts, each  
(Number)  
one of which shall be deemed an original. Said PRINCIPAL and SURETY have hereunto set their hands and seals at \_\_\_\_\_ this the \_\_\_\_ day of \_\_\_\_\_, 201\_.

(PRINCIPAL's Seal)

**ATTEST by:**

|                                                   |                                              |
|---------------------------------------------------|----------------------------------------------|
| _____                                             | _____                                        |
|                                                   | PRINCIPAL                                    |
| _____                                             | _____                                        |
| Name                                              | Authorized Person Executing<br>for PRINCIPAL |
| _____                                             | _____                                        |
| (PRINCIPAL) Secretary;<br>Witness as to PRINCIPAL | Title                                        |
| _____                                             |                                              |
| Address                                           |                                              |
| _____                                             |                                              |
| City/State/Zip                                    |                                              |



(SURETY's Seal)

**ATTEST by:**

\_\_\_\_\_

\_\_\_\_\_

Name

\_\_\_\_\_

Title

\_\_\_\_\_

Witness as to SURETY

\_\_\_\_\_

Address

\_\_\_\_\_

City/State/Zip

\_\_\_\_\_

SURETY

\_\_\_\_\_

Authorized Person Executing  
For SURETY

\_\_\_\_\_

Title

**NOTE:** Date of bond must not be prior to the date of the contract agreement. If PRINCIPAL is a partnership, all partners should execute the bond.

**IMPORTANT NOTE:** SURETY companies executing bonds must appear on the US Treasury Department's most current list (Circular C570, as amended) and be authorized to transact business in the state where the project is located.



## NOTICE OF AWARD

---

TO:

Project Description: SOUTH 28TH AVENUE BRIDGE REPLACEMENT  
City of Hattiesburg, MS

The owner has considered the bid submitted by you for the above described work in response to his/its "Advertisement for Bids" dated \_\_\_\_\_, and "Instructions to Bidders." You are hereby notified that your bid has been accepted for items in the amount of \_\_\_\_\_.

You are required by the "Instructions to Bidders" to execute the "Contract Agreement" and furnish the required contractor's "Payment and Performance Bond" and certificates of insurance within ten (10) calendar days from the date of this Notice to you. (See "Contract Documents.")

If you fail to execute said "Contract Agreement" and to furnish said bonds and certificates within ten (10) days from the date of this Notice, said owner will be entitled to consider all your rights arising out of the owner's acceptance of your bid as abandoned. The owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this "Notice of Award" to the owner.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 201\_.

CITY OF HATTIESBURG

Owner

by: \_\_\_\_\_

Authorized Representative

MAYOR

Title

---

### ACCEPTANCE of NOTICE

Receipt of the above "Notice of Award" is acknowledged by: \_\_\_\_\_  
*Contractor Authorized Signee*

This the \_\_\_\_\_ day of \_\_\_\_\_, 201\_ \_\_\_\_\_  
*Print Name*

\_\_\_\_\_  
*Title*

301 Second Ave. | Hattiesburg, MS 39401 | (p) 601.544.1821 | (f) 601.544.0501 | sd-w.com



**NOTICE TO PROCEED**

---

TO:

Project Description: SOUTH 28TH AVENUE BRIDGE REPLACEMENT  
City of Hattiesburg, MS

In accordance with the "Contract Agreement" dated \_\_\_\_\_, 20\_\_:

- 1) You are hereby notified to commence stated project work on or before  
\_\_\_\_\_, 20\_\_.
- 2) You are to complete the stated project work within 90 consecutive calendar days thereafter.
- 3) The date of completion of all stated project work is therefore \_\_\_\_\_, 20\_\_.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 201\_\_.

CITY OF HATTIESBURG  
Owner

by: \_\_\_\_\_  
Authorized Representative

MAYOR  
Title

---

**ACCEPTANCE of NOTICE**

Receipt of the above "Notice to Proceed" is acknowledged by: \_\_\_\_\_  
*Contractor Authorized Signee*

This the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ \_\_\_\_\_  
*Print Name*

\_\_\_\_\_  
*Title*

# GENERAL CONDITIONS

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## 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 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 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.
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.
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. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.
37. *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.
38. *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.
39. *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.
40. *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.
41. *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.
42. *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.
43. *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.
44. *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.
45. *Successful Bidder*—The Bidder submitting a responsive Bid to whom Owner makes an award.
46. *Supplementary Conditions*—That part of the Contract Documents which amends or supplements these General Conditions.

47. *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 Subcontractor.
48. *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.
49. *Unit Price Work*—Work to be paid for on the basis of unit prices.
50. *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.
51. *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 words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated 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 information in the Contract Documents and with the design concept of the 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 that 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; Designation of Authorized Representatives*

- 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.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

## 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 reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated 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, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, 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 discovers, or has actual knowledge of, 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 (a) any applicable Law or Regulation, (b) any standard, specification, manual, or code, or (c) any instruction of any Supplier, then 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 had actual knowledge 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, or code, or the instruction of any Supplier (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 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 its consultants, including electronic media editions; or
  2. reuse any 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 adaptation by Engineer.
- B. The prohibitions 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. Unless otherwise stated in the Supplementary Conditions, the data furnished by Owner or Engineer to Contractor, or by 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 known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and
  - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the 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 officers, directors, members, partners, employees, agents, consultants, or subcontractors 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 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, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall 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 provided by others; 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: The Supplementary Conditions identify those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at the Site.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the 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 officers, directors, members, partners, employees, agents, consultants, or subcontractors 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. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 4.06.E.
- 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 written notice to Contractor: (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, members, 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, members, 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 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 or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.
- 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 and loss payee 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 and loss payee 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.
- C. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.
- E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

#### 5.04 *Contractor's Insurance*

- A. Contractor shall purchase and maintain such 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, be written on an occurrence basis, include as additional insureds (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, members, 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 contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
  4. 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);
  5. 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
  6. include completed operations coverage:
    - a. Such insurance shall remain in effect for two years after final payment.
    - b. 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, members, 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 a loss payee;
  2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, 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 that 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 loss payee to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such equipment breakdown 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, members, 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 a loss payee.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this 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 loss payee 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 this 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 as loss payees (and the officers, directors, members, 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 loss payees

thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, members, 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 as loss payees (and the officers, directors, members, 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, members, 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, members, 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 loss payees, 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.

#### 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; and
      - 3) it has a proven record of performance and availability of responsive service.
    - 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 if 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 by 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 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 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; and
    - 4) 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 a Change Order in the case of a substitute and 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 so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable 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 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 a loss payee 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, Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or loss payees (and the officers, directors, members, 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, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors 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 specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 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, members, 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. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. 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. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. 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 Drawings or Specifications or to the acts or omissions of Owner or Engineer 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).

- F. 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 accepted 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:*
    - 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:
    - a. 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;
    - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
    - c. determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
    - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
  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 Drawings 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 officers, directors, members, partners, employees, agents, consultants, and subcontractors 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, members, 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 officers, directors, members, partners, employees, agents, consultants, or subcontractors 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, members, 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 through 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, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and 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 such work; provided, however, that Contractor may cut or alter others' 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 wrongful actions or inactions.

- C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful 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 with respect to 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 relating to existing surface or subsurface structures at the Site.

### 8.06 *Insurance*

- A. Owner's responsibilities, if any, with 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 with 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. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents.

### 8.12 *Compliance with Safety Program*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed pursuant to Paragraph 6.13.D.

## 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.

### 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 believes 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.

#### 9.10 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant to Paragraph 6.13.D.

### 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.D.

### 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 the provisions of any bond require notice to be given to a surety 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), 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 Times 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 not include any of the costs itemized in Paragraph 11.01.B, and shall include only the following items:
  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 on the Work. 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, as 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, express and courier services, 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.
- 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 to 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 Paragraphs 12.01.C.2.a and 12.01.C.2.b 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 their officers, directors, members, partners, employees, agents, consultants, or subcontractors 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. 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, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's 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 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, Contractor shall, if requested by Engineer, uncover such Work 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 written 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 for 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 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, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and 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. 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 remedies the reasons for such action.
  - 3. Upon a subsequent determination 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 and subject to interest as provided in the Agreement.

#### 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 remove its property and 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, Owner, and Engineer will follow the procedures of Paragraph 14.04.A through D 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.6;
  - 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 might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, 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 repeated 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 the 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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### SC-4.02 Subsurface and Physical Conditions

SC-4.02 Add the following new paragraphs immediately after Paragraph 4.02.B:

- C. The following reports of explorations and tests of subsurface conditions at or contiguous to the Site are known to Owner:
  - 1. None
- D. The following drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) are known to Owner:
  - 1. City of Hattiesburg Water System drawings (Project 1245).
  - 2. City of Hattiesburg Sewer System drawings (Project F01-278)
    - a. None of the contents of such drawings is "technical data" on which Contractor may rely.
- E. The reports and drawings identified above are not part of the Contract Documents, but the "technical data" contained therein upon which Contractor may rely, as expressly identified and established above, are incorporated in the Contract Documents by reference. Contractor is not entitled to rely upon any other information and data known to or identified by Owner or Engineer.
- F. Copies of reports and drawings identified in SC-4.02.C and SC-4.02.D that are not included with the Bidding Documents may be examined at the City of Hattiesburg Engineering Department during regular business hours.

### SC-4.06 Hazardous Environmental Conditions

SC-4.06 Delete Paragraphs 4.06.A and 4.06.B in their entirety and insert the following:

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.
- B. Not Used.

### SC-5.04 Contractor's Liability Insurance

SC-5.04 Add the following new paragraph immediately after Paragraph 5.04.B:

- C. The limits of liability for the insurance required by Paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:
  - 1. Workers' Compensation, and related coverages under Paragraphs 5.04.A.1 and A.2 of the General Conditions:
    - a. State: Statutory
    - b. Applicable Federal (e.g., Longshoreman's): Statutory
    - c. Employer's Liability: \$100,000



2. Contractor's General Liability under Paragraphs 5.04.A.3 through A.6 of the General Conditions which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody and control of Contractor:
  - a. General Aggregate \$1,000,000
  - b. Personal and Advertising Injury \$500,000
  - c. Each Occurrence (Bodily Injury and Property Damage) \$500,000
  - d. Property Damage liability insurance will provide Explosion, Collapse, and Under-ground coverages where applicable.
3. Automobile Liability under Paragraph 5.04.A.6 of the General Conditions:
  - a. Bodily Injury:
 

|               |                    |
|---------------|--------------------|
| Each person   | <u>\$500,000</u>   |
| Each Accident | <u>\$1,000,000</u> |
  - b. Property Damage:
 

|               |                  |
|---------------|------------------|
| Each Accident | <u>\$500,000</u> |
|---------------|------------------|
4. The Contractual Liability coverage required by Paragraph 5.04.B.4 of the General Conditions shall provide coverage for not less than the following amounts:
  - a. Bodily Injury:
 

|               |                    |
|---------------|--------------------|
| Each person   | <u>\$500,000</u>   |
| Each Accident | <u>\$1,000,000</u> |
  - b. Property Damage:
 

|                  |                    |
|------------------|--------------------|
| Each Accident    | <u>\$500,000</u>   |
| Annual Aggregate | <u>\$1,000,000</u> |

#### **SC-6.06 Concerning Subcontractors, Suppliers, and Others**

SC-6.06 Add a new paragraph immediately after Paragraph 6.06.G:

- H. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor or Supplier.

#### **SC-9.03 Project Representative**

SC-9.03 Add the following new paragraphs immediately after Paragraph 9.03.A:

- B. The Resident Project Representative (RPR) will be Engineer's employee or agent at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions. RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall be through or with the full knowledge and approval of Contractor. The RPR shall:
  1. *Schedules:* Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.

2. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
3. *Liaison:*
  - a. Serve as Engineer's liaison with Contractor, working principally through Contractor's authorized representative, assist in providing information regarding the intent of the 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.
4. *Interpretation of Contract Documents:* Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
5. *Shop Drawings and Samples:*
  - a. Record date of receipt of Samples and approved Shop Drawings.
  - b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
6. *Modifications:* Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
7. *Review of Work and Rejection of Defective Work:*
  - a. Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
  - b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
8. *Inspections, Tests, and System Startups:*
  - a. 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.
  - b. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
9. *Records:*
  - a. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
  - b. Maintain records for use in preparing Project documentation.

10. 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. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Hazardous Environmental Condition.
11. *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.
12. *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 Specifications 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.

13. Completion:

- a. Participate in a Substantial Completion inspection, assist in the determination of Substantial Completion and the preparation of lists of items to be completed or corrected.
- b. Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied.
- c. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.

C. The RPR shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
3. Undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's superintendent.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents.
5. Advise on, issue directions regarding, or assume control over 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.

## MEASUREMENT AND PAYMENT

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Measurement and Payment for all bid items shall be in accordance with the Mississippi Standard Specifications for Road and Bridge Construction, 2017 edition.

# **SPECIAL INSTRUCTIONS**

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## **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 cleanup 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".

## **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.

## 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.

# TECHNICAL SPECIFICATIONS

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## **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 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 Measurement and Payment section 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.

## ADVERTISEMENT FOR BIDS

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NOTICE is hereby given that the City Clerk of the City of Hattiesburg, MISSISSIPPI, will receive sealed bids until **10:00 A.M.** on **May 31, 2018** in City Council Chambers at City Hall, 200 Forrest Street, Hattiesburg, MS 39401, and then at said location will open and read aloud bids received for furnishing the City's requirements for the following:

**BID OPENING TIME: 10:00 a.m.**  
**DATE of BID OPENING: May 31, 2018**  
**SOUTH 28TH AVENUE**  
**BRIDGE REPLACEMENT**  
**BRIDGE #SA18-157**  
**CITY of HATTIESBURG**

Official bid documents can be downloaded from Central Bidding at [www.centralbidding.com](http://www.centralbidding.com). Electronic bids can be submitted at [www.centralbidding.com](http://www.centralbidding.com). For any questions relating to the electronic bidding process, please call Central Bidding at 225-810-4814. 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 OPENING TIME: 10:00 a.m.**  
**DATE of BID OPENING: May 31, 2018**  
**SOUTH 28TH AVENUE**  
**BRIDGE REPLACEMENT**  
**BRIDGE #SA18-157**  
**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; the Council reserves the right to reject any or all proposals received and to waive informalities.

PUBLISHED by Order of the Council on the 17<sup>th</sup> day of April, 2018

CITY OF HATTIESBURG, MISSISSIPPI

BY: 

Kermas Eaton, City Clerk

Publish on April 26, 2018 and May 3, 2018  
City of Hattiesburg  
Return PROOF to SDW, Inc.  
301 Second Avenue  
Hattiesburg, MS 39401



# **City of Hattiesburg, MS**

*200 Forrest St.  
P.O. Box 1898  
Hattiesburg, MS 39401*



## **Meeting Agenda - Draft**

**Monday, April 16, 2018**

**4:00 PM**

**Council Chambers**

**City Council - Agenda Review**



1. Agenda Review.
2. Citizens' Forum.