



**Tuesday, December 20, 2022
5:00 PM**

**City Council
Tuesday Meeting Agenda**

**Council Chambers
200 Forrest Street**

Call to Order

Call to Prayer and Pledge of Allegiance

Presentation Agenda

POLICY AGENDA

1. **2022-955** Approve the minutes for the December 5 & 6, 2022 meetings of the City Council.

2. **2022-934** Adopt an Ordinance for the petition filed by William Carey University, Grant Guthrie, and Ben Burnett, to change the zoning classification for unimproved properties located at the intersection of Vernon Street and Magnolia Avenue from R-1A: Single-Family Residential, and R-2: Two-Family Residential to R-3: Multi-Family Residential PPIN's: 13555, 13556, 13557, 13558, 13692, 13684, 13685, 13705, Forrest County, Ward 5). The Planning Commission recommended to Approve on December 7, 2022.

3. **2022-948** Adopt an Ordinance for the petition filed by Michael Kent Myatt, Joel Ford, to close and vacate a portion of an undeveloped street known as "Hill Street", which is located north of the intersection of Bouie St and Old Highway 42 between 5566 Old Highway 42 and 5560 Old Highway 42 (Ward 2). The Planning Commission recommended to Approve on December 7, 2022.

4. **2022-951** Approve or Deny a petition filed by Michael Kent Myatt, Joel Ford, to request a conditional use for "gravel outdoor storage space" in a B-3 Zone for a property located at 5566 Old Highway 42 (PPIN 15065 Forrest County, Ward 2). The Planning Commission recommended to Approve on December 7, 2022 with the condition that landscaped screening be added as shown on the presented site plan on the south side of the open storage area.

5. **2022-936** Approve or Deny a petition filed by Michael Kent Myatt, Joel Ford, to request a variance from "Maximum outdoor equipment storage space of 50%" to exceed the allowable amount to "64%" for a variance of 14% for a certain property located at

5566 Old Highway 42 (PPIN 15065 Forrest County, Ward 2). The Board of Adjustment recommended to Approve on December 7, 2022.

6. **2022-935** Approve or Deny a petition filed by Trace 4th Street, LLC., to request a conditional use for “restaurant, without drive-through” in a B-2 Zone (Neighborhood Business District) for a certain property located at 1001 Main St (PPIN's 18818, 18817 Forrest County, Ward 2). The Planning Commission recommended to Approve on December 7, 2022 with the condition that the dumpster location as shown on site plan presented to the Planning Commission (in front setback) be permitted.

7. **2022-949** Approve or Deny a petition filed by Estacado Interests, LLC, , to request a variance from "Billboards 1000 lineal feet... from any other off-premise sign” and instead allow for a distance of “690 feet” from an off-premise sign for a variance of 310 feet and to vary from the required side setback of “15 feet” and instead allow for “0 feet” for a variance of 15 feet for a proposed billboard and to vary from – Pole Sign “Minimum 150’ frontage on any premises freestanding sign” and instead allow for a minimum of “120 feet” frontage for a variance of 30 feet for a proposed on-premise pole sign for the property located at 5032 Hardy St (PPIN 18460, Lamar County, Ward 3). The Board of Adjustment recommended to Approve on December 7, 2022 with the condition the freestanding sign is a monument sign to be more appropriate for the scale of the property size.

8. **2022-940** Adopt an Order to approve the sale of a personal service weapon to retired police Officer Tommy Cook pursuant to Mississippi Code Annotated 45-9-31.

9. **2022-956** Approve Agreement between the City of Hattiesburg and Southern Pines Animal Shelter for animal shelter management and services for a term beginning October 1, 2022, through September 30, 2023 and authorize the Mayor to execute in duplicate.

10. **2022-931** Approve Contractor and Owner Agreement(s) for the Emergency Roof Repair Initiative for an amount not to exceed \$15,000 per project according to the Emergency Roof Repair Initiative Manual and authorize the Mayor to execute in triplicate.

11. **2022-939** Approve Agreement between the City of Hattiesburg and Kids Hub Child Advocacy Center to provide juvenile forensic services as needed to the Hattiesburg Police Department and authorize the Mayor to execute the same.

12. **2022-943** Approve Memorandum of Agreement between the City of Hattiesburg and Mississippi National Guard related to projects at Bobby Chain Municipal Airport and authorize e Mayor to execute the same.

13. **2022-941** Approve purchase of property located at PPIN # 19211, parcel # 2-0290-10-021.00 in the amount of \$175,000.00 and the execution of all necessary documents at closing and authorize issuance of manual check for the same

14. **2022-945** Approve Lighting Agreement with Mississippi Power Company for additional lighting on Bowling Street for a monthly cost of \$3.95, and authorize the Mayor to execute the same.

15. **2022-946** Acknowledge receipt of final closing documents for the Friendship Park Lighting Project, authorize payment of final pay application, and authorize final acceptance of the project.

16. **2022-947** Acknowledge bids received November 17, 2022 for the Jaycee Park Parking Improvements Project and accept the bid from J. W. Chain Contractors, Inc. in the amount of \$1,049,620.17; Authorize the mayor to execute contracts when prepared.

17. **2022-953** Acknowledge bids received December 1, 2022 for the Jaycee Park Improvements Project and accept the bid from Phoenix Construction, LLC in the amount of \$734,750.00, which includes the base bid and add alternate #1; Authorize the mayor to execute contracts when prepared.

18. **2022-942** Acknowledge the receipt of grant from the Mississippi Arts Commission in the amount of \$219,240.00 for renovations of the theatre space at 825 N. Main Street and authorize execution of all necessary grant agreement documents.

19. **2022-957** Acknowledge bids received on November 17, 2022, for the Hall Avenue West Phase II-Roadway Project and accept the bid from R & J Construction, Inc., in the amount of \$24,292,480.68; authorize the Mayor to execute contracts and any other necessary documents as related to the project upon concurrence from Mississippi Department of Transportation.

ROUTINE AGENDA

1. **2022-944** Acknowledge receipt of three fully executed and recorded deeds from the University of Southern Mississippi for Street Purposes, Permanent Drainage Easement and Utility Easement for property located on Classic Drive and more fully described in the attached deeds.

2. **2022-928** Acknowledge receipt of the Privilege Tax License monthly report for November 2022.

3. **2022-929** Acknowledge proof of publications for Hub City Spokes for the month of November, 2022.

4. **2022-932** Acknowledge receipt of the Quitclaim Deed for 1213 Putnam Street from Benita Conner.
5. **2022-930** Approve and authorize issuance of manual checks for CDBG/HOME Program Claims per attached Memorandum. {CDBG Entitlement/HOME}
6. **2022-937** Approve specifications and authorize publication of one (1) New 2022 or newer bucket truck/rear mounted aerial unit for the Urban Forestry Division, Parks & Recreation Department for the City of Hattiesburg.
7. **2022-954** Approve Plans and Specifications for the Midtown Green project and authorize advertisement for bids.
8. **2022-952** Approve Plans and Specifications for the Front Street Parklet Project and authorize advertisement for bids.
9. **2022-933** Approve the sale of grave spaces, per attached Memo's, Receipts, and Deeds.
10. **2022-938** Approve claims docket for the period ending December 16, 2022.

In Memoriam:

- Ms. Pauline Stevens
- Dr. Benjamin Waddle
- Ms. Aimee Goss

Meeting Adjourn



Memorandum

To: Mayor Toby Barker and Members of City Council
From:
cc:
Date: Tuesday, December 20, 2022
Re: Approve the minutes for the December 5 & 6, 2022 meetings of the City Council.
File Number: 2022-955
Minute Book #

Summary

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

Recommendation Statement

I recommend approval of the minutes.

Please place this on the December 20, 2022 City Council meeting for consideration.

Published Agenda



**Monday, December 5, 2022
4:00 PM**

**City Council
Monday Meeting Agenda**

**Council Chambers
200 Forrest Street**

Call to Order

Agenda Adjustments - Add #3 to Work Session

3. **2022-925** Master Plan for Longleaf Village in the Avenues, presented by Orion Planning.

Agenda Review

Citizens' Forum

Work Session

1. **2022-923** Potential Investment Opportunities, presented by Lindsey Rea of Raymond James.
2. **2022-924** Shootings in Hattiesburg during the last year, requested by Councilwoman Deborah Delgado

Meeting Recess

Call to Order

BE IT REMEMBERED that the **Agenda Review meeting of the Hattiesburg City Council was held at 4:00 p.m. Monday, December 5, 2022**, in Council Chambers at City Hall; same being from an adjourned meeting held on November 22, 2022.

Those present included Mayor Toby Barker and members of the City Council Jeffrey George, Ward 1; Deborah Delgado, Ward 2; Carter Carroll, Ward 3; Dave Ware, Ward 4; and Nicholas Brown, Ward 5. Others in attendance included Director of Administration/City Clerk, Kermas Eaton; City Attorney, Randy Pope; Clerk of Council, Ronda S. Kennedy; Deputy Clerk of Council, Lisa Luu Jolly; City staff members; media; and the public.

Council President George Called the meeting to order.

Mayor Barker recognized the following Academy Police Department Graduates for completing their CIT Specialized Mental Health Training:

- Benjamin Buckhalter
- Qu'Sheba Henderson
- Mason Iaconangelo
- Domanick McSwain
- Marvin Ross
- Willie Sims
- John Super

The Clerk of Council read aloud adjustments to the agenda.

Agenda Adjustments - Add #3 to Work Session

3. **2022-925** Master Plan for Longleaf Village in the Avenues, presented by Orion Planning.

Attachments: Hattiesburg LVA Council and PC

Agenda Review

Council President George proceeded with the Agenda Review.

Following discussion of agenda items, Council President George closed the Agenda Review.

Citizens' Forum

Council Vice President Ware proceeded with the Citizens' Forum.

He stated the procedures and invited members of the public to speak.

The following citizens addressed the Council:

- Dan Buyers, 1108 N. Main Street
- Raylawni Branch, 853 N. Main Street
- Eric Boney, 923 N. Main Street
- Sheri Boney, 923 N. Main Street
- Angela Duncan, 105 Columbia Street
- James Duncan, 105 Columbia Street
- Rev. Arthur L. Siggers
- Irene Williams-Jones, 301 J D Randolph Street

There were no other citizens present who wished to address the Council.

Council Vice President Ware closed the Citizen Forum.

Work Session

Council President George proceeded with the Work Session, which included:

1. **2022-923** Potential Investment Opportunities, presented by Lindsey Rea of Raymond James.

 Attachments: Potential Earnings Data Sheet
2. **2022-924** Shootings in Hattiesburg during the last year, requested by Councilwoman Deborah Delgado

Council member Delgado asked for the following citizens to come speak regarding the shootings in Hattiesburg.

- Annette Cole
- Douglas Lofton, 1006 Elizabeth Ave.
- Pastor Johniel Henry, St. Paul United Methodist Church
- Ron Hancock, 112 N. Main Street
- Chad Edmondson
- Andrea Saffle
- Ms. Hendricks

3. **2022-925** Master Plan for Longleaf Village in the Avenues, presented by Orion Planning.

Attachments: Hattiesburg LVA Council and PC

Bert Kuyrkendall, AICP, PE of Orion Planning & Design presented a power point presentation of the Master Plan for Longleaf Village in the Avenues.

Council member Brown left the room at 6:08 p.m. and returned at 6:13 p.m.

Council President George left the room at 6:13 p.m. and returned at 6:15 p.m.

Meeting Recess

Council President George declared the **meeting recessed at 6:32 p.m., this 5th day of December, 2022**, by unanimous consent, until the 6th day of December, 2022.

ATTEST:

APPROVE:

Clerk of Council

Council President

ATTEST AND CERTIFY:

APPROVE:

City Clerk

Mayor

Published Agenda



**Tuesday, December 6, 2022
5:00 PM**

**City Council
Tuesday Meeting Agenda**

**Council Chambers
200 Forrest Street**

Call to Order

Call to Prayer and Pledge of Allegiance

Presentation Agenda

POLICY AGENDA

1. **2022-922** Approve the minutes for the November 21 & 22, 2022 meetings of the City Council.
2. **2022-902** Adopt a Resolution declaring equipment surplus (per attached list) and authorize the disposal of said equipment; authorize the removal of said equipment from the city inventory of the Hattiesburg Police Department.
3. **2022-913** Adopt a Resolution authorizing Requisition No. 89 from the Project Fund Construction Account in connection with a certain loan agreement dated August 18, 2016, by and between the Mississippi Development Bank and the City of Hattiesburg.
4. **2022-911** Approve a Professional Services Agreement with Shows, Dearman and Waits, Inc. for engineering services related to the Heatherwood Area Infrastructure Improvements Project and authorize the Mayor to execute in duplicate.
5. **2022-909** Approve Lighting Agreement with Mississippi Power for changes to lighting on Country Club Road, J.C. Killingsworth Road, Francis Street and Florence Street for a monthly savings of \$14.14 and authorize the Mayor to execute the same.
6. **2022-919** Approve Lighting Agreement with Mississippi Power for changes to lighting on Old Highway 42 from Highway 49 to Leaf River for a monthly increase of \$51.15 and authorize the Mayor to execute the same.
7. **2022-917** Approve Contractor and Owner Agreement(s) for the Emergency Roof Repair Initiative for an amount not to exceed \$15,000 per project according to the Emergency Roof Repair Initiative Manual and authorize the Mayor to execute in triplicate.
8. **2022-918** Approve Amended HOME Grant Agreement between Breakthrough Community Services, Inc. and the City of Hattiesburg for the rehabilitation of a home at 104 Donald Street as an affordable housing unit, utilizing HOME CHDO Set-aside funds in an amount not to exceed \$60,000 and authorize the Mayor to execute in triplicate.
9. **2022-910** Acknowledge bids received November 1, 2022 in response to a reverse auction for buses and authorize acceptance of the low bid of \$144,000.00 per bus from Transportation South for seven (7) buses at a total cost of \$1,008,000.00 and authorize the Mayor to execute any documents required for the transaction.

ROUTINE AGENDA

1. **2022-920** Ratification of agreement between the City of Hattiesburg and Southern Mississippi Planning and Development (SMPDD) to serve as host agency partner in the Senior Community Service Employment Program.
2. **2022-900** Acknowledge the setting of a public comment period by the Hattiesburg-Petal-Forrest-Lamar MPO for the proposed amendments to the FY 2023-2026 Transportation Improvement Plan (TIP).
3. **2022-906** Acknowledge Receipt of the Two Quote Docket.
4. **2022-907** Acknowledge receipt of term bids for Demolition Services on November 18, 2022 and award bid to MSP Enterprises as the contractor for the term of January 1, 2023 through December 31, 2023.
5. **2022-908** Acknowledge receipt of term bids for Lot Clearing/Grass Cutting Services on November 18, 2022 and award bid to MSP Enterprises as the contractor for the term of January 1, 2023 through December 31, 2023.
6. **2022-921** Acknowledge receipt of the audit for Pine Belt Regional Solid Waste Management Authority for the fiscal years ending June 30, 2022 and 2021.
7. **2022-916** Authorize publication of Notice to Bidders for Municipal Depositories for a (2) two year period beginning January 1 ,2023 through December 31, 2024.
8. **2022-915** Approve and authorize issuance of manual checks for CDBG/HOME Program Claims per attached Memorandum. {CDBG Entitlement/HOME}

- | | | |
|-----|-----------------|--|
| 9. | 2022-905 | Approve the sale of grave spaces, per attached Memo's, Receipts and Deeds. |
| 10. | 2022-914 | Approve claims docket for the period ending November 30, 2022. |

In Memoriam:

- Ms. Mary K. Morgan
- Mr. David Walker
- Mr. Leon Wade Ashmore
- Mr. Jamaal Lateef Murray
- Senator Billy C. Hudson
- Mr. Latrez Jordan
- Mr. John Clayton

Meeting Adjourn

Call to Order

BE IT REMEMBERED that the **regular meeting of the Hattiesburg City Council was held at 5:00 p.m. Tuesday, December 6, 2022**, in Council Chambers at City Hall; same being from a recessed meeting held on December 5, 2022.

Those present included Mayor Toby Barker and members of the City Council Jeffrey George, Ward 1; Deborah Delgado, Ward 2; Carter Carroll, Ward 3; Dave Ware, Ward 4; and Nicholas Brown, Ward 5. Others in attendance included Director of Administration/City Clerk, Kermas Eaton; City Attorney, Randy Pope; Clerk of Council, Ronda S. Kennedy; Deputy Clerk of Council, Lisa Luu Jolly; City staff members; media; and the public.

Council President George Called the meeting to order.

Call to Prayer and Pledge of Allegiance

The prayer was given by Pastor Quincy Easterling of Beautiful Zion Missionary Baptist Church.

The Pledge of Allegiance was led by City Engineer, Lamar Rutland.

Presentation Agenda

The PRESENTATION AGENDA came before the Council.

Mayor Barker announced that the City's Municipal Court had their 8th behavioral court graduation with 13 graduates and a total of 52 graduates since 2018. The Mayor thanked Judge Wes Curry and Khadijah Muhammad for running the program.

The Mayor and members of the City Council thanked Lamar Rutland and Gingery Lowery for their years of service to the City.

There were no other presentations at this time.

THE MATTER OF THE AGENDA ORDER came before the Council.

POLICY AGENDA

The POLICY AGENDA came before the Council.

1. **2022-922** Approve the minutes for the November 21 & 22, 2022 meetings of the City Council.

Attachments: 11-21-2022 AR. Mins
 11-22-2022 Mins.

A MOTION was made by Council Member Carroll and seconded by Council Member Brown to Approve the minutes for the November 21 & 22, 2022 meetings of the City Council.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

2. **2022-902** Adopt a Resolution declaring equipment surplus (per attached list) and authorize the disposal of said equipment; authorize the removal of said equipment from the city inventory of the Hattiesburg Police Department.

Attachments: Memo-surplus vehicles

A MOTION was made by Council Member Carroll and seconded by Council Member Delgado to Adopt a Resolution (#2022-144) declaring equipment surplus (per attached list) and authorize the disposal of said equipment; authorize the removal of said equipment from the city inventory of the Hattiesburg Police Department.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

3. **2022-913** Adopt a Resolution authorizing Requisition No. 89 from the Project Fund Construction Account in connection with a certain loan agreement dated August 18, 2016, by and between the Mississippi Development Bank and the City of Hattiesburg.

Attachments: 2016 Bond Resolution No. 89

A MOTION was made by Council Member Carroll and seconded by Council Member Brown to Adopt a Resolution (#2022-145) authorizing Requisition No. 89 from the Project Fund Construction Account in connection with a certain loan agreement dated August 18, 2016, by and between the Mississippi Development Bank and the City of Hattiesburg.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

4. **2022-911** Approve a Professional Services Agreement with Shows, Dearman and Waits, Inc. for engineering services related to the Heatherwood Area Infrastructure Improvements Project and authorize the Mayor to execute in duplicate.

Attachments: 12234 - Standard Form Agreement between Owner and Engineer

A MOTION was made by Council Member Carroll and seconded by Council Member Delgado to Approve a Professional Services Agreement with Shows, Dearman and Waits, Inc. for engineering services related to the Heatherwood Area Infrastructure Improvements Project and authorize the Mayor to execute in duplicate.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

5. **2022-909** Approve Lighting Agreement with Mississippi Power for changes to lighting on Country Club Road, J.C. Killingsworth Road, Francis Street and Florence Street for a monthly savings of \$14.14 and authorize the Mayor to execute the same.

Attachments: MS Power-Country Club Rd, killingsworth etal

A MOTION was made by Council Member Brown and seconded by Council Member Carroll to Approve Lighting Agreement with Mississippi Power for changes to lighting on Country Club Road, J.C. Killingsworth Road, Francis Street and Florence Street for a monthly savings of \$14.14 and authorize the Mayor to execute the same.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

6. **2022-919** Approve Lighting Agreement with Mississippi Power for changes to lighting on Old Highway 42 from Highway 49 to Leaf River for a monthly increase of \$51.15 and authorize the Mayor to execute the same.

Attachments: MS Power-Old Hwy 42 from Hwy 49 to Leaf River

A MOTION was made by Council Member Brown and seconded by Council Member Carroll to Approve Lighting Agreement with Mississippi Power for changes to lighting on Old Highway 42 from Highway 49 to Leaf River for a monthly increase of \$51.15 and authorize the Mayor to execute the same.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

7. **2022-917** Approve Contractor and Owner Agreement(s) for the Emergency Roof Repair Initiative for an amount not to exceed \$15,000 per project according to the Emergency Roof Repair Initiative Manual and authorize the Mayor to execute in triplicate.

Attachments: Roof Agreement_1301 Bernard St_12062022

A MOTION was made by Council Member Carroll and seconded by Council Member Brown to Approve Contractor and Owner Agreement(s) for the Emergency Roof Repair Initiative for an amount not to exceed \$15,000 per project according to the Emergency Roof Repair Initiative Manual and authorize the Mayor to execute in triplicate.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

8. **2022-918** Approve Amended HOME Grant Agreement between Breakthrough Community Services, Inc. and the City of Hattiesburg for the rehabilitation of a home at 104 Donald Street as an affordable housing unit, utilizing HOME CHDO Set-aside funds in an amount not to exceed \$60,000 and authorize the Mayor to execute in triplicate.

Attachments: Amendment Extension_3 - (BCS)_104 Donald

A MOTION was made by Council Member Carroll and seconded by Council Member Delgado to Approve Amended HOME Grant Agreement between Breakthrough Community Services, Inc. and the City of Hattiesburg for

the rehabilitation of a home at 104 Donald Street as an affordable housing unit, utilizing HOME CHDO Set-aside funds in an amount not to exceed \$60,000 and authorize the Mayor to execute in triplicate.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

9.

2022-910

Acknowledge bids received November 1, 2022 in response to a reverse auction for buses and authorize acceptance of the low bid of \$144,000.00 per bus from Transportation South for seven (7) buses at a total cost of \$1,008,000.00 and authorize the Mayor to execute any documents required for the transaction.

Attachments: [Hattiesburg Bus Bid Tabulation](#)
[Bid Documents- City of Hattiesburg Passenger Buses](#)
[Signed Addendum 1- Hattiesburg Transit buses](#)
[Signed Addendum 2- Hattiesburg Buses](#)
[Addendum 3- Hattiesburg Buses](#)
[Addendum 4- Hattiesburg Buses](#)

A MOTION was made by Council Member Carroll and seconded by Council Member Brown to Acknowledge bids received November 1, 2022 in response to a reverse auction for buses and authorize acceptance of the low bid of \$144,000.00 per bus from Transportation South for seven (7) buses at a total cost of \$1,008,000.00 and authorize the Mayor to execute any documents required for the transaction.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

ROUTINE AGENDA

THE ROUTINE AGENDA came before the Council.

A MOTION was made by Council Member Carroll and seconded by Council Vice President Ware to approve the Routine Agenda.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

1.

2022-920

Ratification of agreement between the City of Hattiesburg and Southern Mississippi Planning and Development (SMPDD) to serve as host agency partner in the Senior Community Service Employment Program.

Attachments: [SMPDD-Host agency agreement](#)

2.

2022-900

Acknowledge the setting of a public comment period by the Hattiesburg-Petal-Forrest-Lamar MPO for the proposed amendments to the FY 2023-2026 Transportation Improvement Plan (TIP).

Attachments: [PUBLIC NOTICE - TIP Amendment Public Comment Period \(002\)](#)

3.

2022-906

Acknowledge Receipt of the Two Quote Docket.

Attachments: [12-06-UAB Docket](#)

4. **2022-907** Acknowledge receipt of term bids for Demolition Services on November 18, 2022 and award bid to MSP Enterprises as the contractor for the term of January 1, 2023 through December 31, 2023.

 Attachments: Receipt of Term Bids for Code Enforcement Demolitions 2023
 MSP Enterprises - 2023 Contractor for Demolitions
5. **2022-908** Acknowledge receipt of term bids for Lot Clearing/Grass Cutting Services on November 18, 2022 and award bid to MSP Enterprises as the contractor for the term of January 1, 2023 through December 31, 2023.

 Attachments: Receipt of Term Bids for Code Enforcement for Lot Clearings 2023
 MSP Enterprises - 2023 Contractor for Lot Clearings
6. **2022-921** Acknowledge receipt of the audit for Pine Belt Regional Solid Waste Management Authority for the fiscal years ending June 30, 2022 and 2021.

 Attachments: PBRSWMA 2022-2021 Audit
7. **2022-916** Authorize publication of Notice to Bidders for Municipal Depositories for a (2) two-year period beginning January 1 ,2023 through December 31, 2024.

 Attachments: depositories 2yr 2324
 Depositories Designation 2324
 Depositories code 2324
8. **2022-915** Approve and authorize issuance of manual checks for CDBG/HOME Program Claims per attached Memorandum. {CDBG Entitlement/HOME}

 Attachments: Manual Check Memo 12062022
 Starter Homes of MS_128 E 7th_12062022
 Starter Homes of MS_300 Lewis Street_12062022
 Starter Homes of MS_17 Collins Dr_12062022
 Starter Homes of MS_607 Cypress Av_12062022
9. **2022-905** Approve the sale of grave spaces, per attached Memo's, Receipts and Deeds.

 Attachments: Memo's (12-06-2022)
 Receipts (12-06-2022)
 Deeds (12-06-2022)
10. **2022-914** Approve claims docket for the period ending November 30, 2022.

 Attachments: DOCKET 22.11.30
 11.30.22 DT

Council Member Delgado read aloud a statement:

"Following the Work Session on Shootings in Hattiesburg, and especially hearing from residents of the different communities that have suffered these events in recent times, we, as a city, are on notice that our communities are dangerous and in need of increased police presence immediately. We are, further, on notice that the North Main Neighborhood Association area (which has had numerous shootings over the past year or so), the East Jerusalem area, the West 4th, West 5th and West 6th Street neighborhoods are in need of increased police presence, not to mention the Dabbs Street community where we lost a child a while back.

This is not an indictment of the City and the Hattiesburg Police Department. It is, instead, a plea for attention to and protection of at-risk areas of our city.

If citizens of many of these communities tell us that they daily hear gunshots, then we know

where the problems are: the problems are in those very communities.

Until we develop a plan to protect our families as a joint effort between neighborhoods and our police department, increased presence is a must.

I would ask that in whatever plan is ultimately adopted, there must be a witness protection feature. We do not get the cooperation of potential witnesses because they do not feel protected in the first place and are hesitant to rely on law enforcement to keep them safe if they cooperate.”

Executive Session

A MOTION was made by Council Vice President Ware for the Council to enter closed session to determine the need to enter Executive Session at 5:16 p.m.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

Council President George asked for the Chambers to be cleared at this time.

A MOTION was made by Council Vice President Ware and seconded by Council Member Carroll to enter Executive Session to discuss strategy or negotiations with respect potential litigation, since to have an open meeting on this would have a detrimental effect on the litigating position of the City, in accordance with Mississippi Code Section 25-41-7 (b) at 5:17 p.m.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

The City Attorney stepped out into the hall and announced that the Council has gone into Executive Session to discuss strategy or negotiations with respect to potential litigation.

Those present for the Executive Session were Mayor Toby Barker; Council members Jeffrey George, Deborah Delgado, Carter Carroll, Dave Ware and Nicholas Brown; Director of Administration/City Clerk, Kermas Eaton; City Attorney, Randy Pope; Chief Administrative Officer, Ann Jones; Interim Chief Financial Officer, Malcolm Berch; City Engineer, Lamar Rutland; Director of Urban Development, Wiley Quinn; Director of the Water Department, Alan Howe; Chief Communications Officer, Samantha McCain; Clerk of Council, Ronda S. Kennedy; Deputy Clerk of Council, Lisa Luu Jolly; and Attorney Keith Turner and Betty Ruth Fox of Watkins & Eager law firm.

A MOTION was made by Council Vice President Ware and seconded by Council Member Carroll exit Executive Session and re-open the meeting to the public at 5:27 p.m.

There being no discussion, the Motion received the affirmative vote of the Council as follows:

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

Nays: 0

Council President George stated to the public that there was no action taken during Executive Session.

In Memoriam:

A MOTION was made by Council President George to Adjourn the meeting in memory of:

- Ms. Mary K. Morgan
- Mr. David Walker
- Mr. Leon Wade Ashmore
- Mr. Jamaal Lateef Murray
- Senator Billy C. Hudson
- Mr. Latrez Jordan
- Mr. John Clayton

Meeting Adjourn

Council President George declared the **meeting recessed at 5:28 p.m., this 6th day of December, 2022**, by unanimous consent, until the 19th day of December, 2022.

ATTEST:

APPROVE:

Clerk of Council

Council President

ATTEST AND CERTIFY:

APPROVE:

City Clerk

Mayor



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Ginger Lowrey, Planning Administrator

cc: Nathan Satcher, Planner

Date: Tuesday, December 20, 2022

Re: Adopt an Ordinance for the petition filed by William Carey University, Grant Guthrie, and Ben Burnett, to change the zoning classification for unimproved properties located at the intersection of Vernon Street and Magnolia Avenue from R-1A: Single-Family Residential, and R-2: Two-Family Residential to R-3: Multi-Family Residential PPIN's: 13555, 13556, 13557, 13558, 13692, 13684, 13685, 13705, Forrest County, Ward 5). The Planning Commission recommended to Approve on December 7, 2022.
File Number: 2022-934
Minute Book #

Summary

Adopt an Ordinance to rezone properties located on Vernon Street and Magnolia Avenue, Ward 5

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.

Prepared by: City of Hattiesburg
City Clerk's Office
P.O. Box 1898
Hattiesburg, MS 39403-1898
(601)545-4550

Return to: City of Hattiesburg
City Clerk's Office
P.O. Box 1898
Hattiesburg, MS 39403
(601)545-4550

INDEXING INSTRUCTIONS:

ORDINANCE NUMBER _____
OF THE CITY OF HATTIESBURG, MISSISSIPPI
AN ORDINANCE CHANGING AND AMENDING THE
COMPREHENSIVE ZONING DISTRICT MAP, ADOPTED AS PART OF THE
LAND DEVELOPMENT CODE ORDINANCE NO. 3209, AS AMENDED, OF THE CITY
OF HATTIESBURG, MISSISSIPPI FOR UNIMPROVED PROPERTIES LOCATED AT
THE INTERSECTION OF VERNON STREET AND MAGNOLIA AVENUE FROM R-
1A: SINGLE-FAMILY RESIDENTIAL, AND R-2: TWO-FAMILY RESENTIAL
(SECTION 4.5.3 AND 4.5.6) TO R-3: MULTI-FAMILY RESIDENTIAL (SECTION 4.5.7)
(R-1A PARCELS: 2-038G-15-126.00, 2-038G-15-127.00, 2-038G-15-125.00, 2-038G-15-
128.00, 2-038G-15-173.00; PPIN: 13555, 13556, 13557, 13558, 13692; R-2 ZONED
PARCELS: 2-038G-15-171.00, 2-038G-15-187.00, 2-038G-15-172.00; PPIN: 13684, 13685,
13705, FORREST COUNTY, WARD 5).
BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF
HATTIESBURG, MISSISSIPPI:

SECTION 1. That the Comprehensive Zoning District Map, adopted as part of the Comprehensive Zoning Ordinance No. 3209, as amended, of the City of Hattiesburg, Mississippi, be and the same is hereby changed and amended. The Hattiesburg Planning Commission recommended to Approve said change in zoning for the following reasons:

The character of the neighborhood has changed substantially so that rezoning is clearly justified, and there is a public need for the rezoning.

Said properties are described as follows:

PPIN 13555 and 13557:

The South 140 feet of the West 63 feet of Lot Seven (7), Block Ten (10), of BURKETT SURVEY, in the City of Hattiesburg, County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, together with the North 10 feet of Magnolia Avenue now vacated, lying and being South and adjacent to the South line of the above described Lot 7 in Block 10 and more particularly described as follows, to-wit:

Commencing at the southwest corner of Lot 7, Block 10 of the Burkett Survey of the City of Hattiesburg, Mississippi, and run thence North for a distance of 140 feet; run thence East for a distance of 63 feet; run thence South for a distance of 150 feet; run thence West for a distance of 63 feet; run thence North for a distance of 10 feet to the Point of Beginning; together with all improvements thereon and appurtenances thereunto belonging.

North 60 feet of Lot Seven (7) and Lot Eight (8) in Block Ten (10) of the Burkett Survey of the City of Hattiesburg, Mississippi.

PPIN: 13558

Lot 9, Block 10, BURKETT'S SUBDIVISION in the City of Hattiesburg, County of Forrest, State of Mississippi, as per map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, and also the North 10 feet of Magnolia Street lying South of said Lot 9, Block 10, Burkett's Subdivision vacated by City Ordinance No. 1376, dated February 17, 1960, in Book 217 at Page 615 of the Land Deed records of Forrest County, Mississippi, together with all improvements thereon and appurtenances thereunto belonging.

PPIN 13556:

The South 140 feet of Lot Eight (8) and the East 7 feet of the South 140 feet of Lot Seven (7), Block Ten (10) of the BURKETT SURVEY of the City of Hattiesburg, County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, and also the North 10 feet of Magnolia Avenue, now vacated, lying South of said parcel of land and more particularly described as follows, to-wit:

Commencing at the southwest corner of Lot 7, Block 10 of the Burkett Survey and run thence East and along the South line of Lot 7 for a distance of 63 feet to and for a Point of Beginning of the parcel herein described, thence at right angles run South for a distance of 10 feet, thence run East and parallel with the South lines of Lot 7 and 8 for a distance of 77 feet, thence run North to the southeast corner of Lot 8, thence continue North and along the East line of said Lot 8 for a distance of 150 feet, thence run West for a distance of 77 feet, thence run South for a distance of 140 feet to the Point of Beginning; together with all improvements thereon and appurtenances thereunto belonging.

PPIN 13685:

Lot 7, Block 23 of the BURKETT SUBDIVISION, in the City of Hattiesburg, County of Forrest, State of 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 thereunto belonging.

PPIN 13684:

Lots Five (5) and Lot Six (6), Block Twenty-three (23) of the BURKETT'S SUBDIVISION, in the County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi.

PPIN 13692:

The North 140 feet of Lots 1, 2, and 3 and all of Lots 4, 5, and 6 of Block 24 of the Burkett Subdivision of a part of the S ½ of Section 15, Township 4 North, Range 13 West, Forrest County, Mississippi, together with all improvements thereon and all appurtenances and hereditaments thereunto appertaining and belonging.

PPIN 13705:

Southernmost Sixty (60) feet of Lots 1, 2, and 3, Block 24, Burkett Subdivision, City of Hattiesburg, County of Forrest, Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, together

SECTION 2. Except as hereby expressly changed and amended, the aforesaid Comprehensive Zoning District Map and the Land Development Code Ordinance No. 3209, as amended, of said City of Hattiesburg, Mississippi, shall be and remain in full force and form as adopted.

SECTION 3. That this Ordinance take effect and be in force thirty (30) days from and after passage as provided by law.

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

YEAS:

NAYS:

THE President thereby declared the motion carried and the foregoing Ordinance adopted and approved, this the _____ day of _____ A.D., 2022.

(S E A L)

ATTEST:

ADOPTED:

CLERK OF COUNCIL

PRESIDENT

THE above and foregoing Ordinance having been submitted to and approved by the Mayor, this the _____ day of _____ A.D., 2022.

ATTEST:

APPROVED:

CITY CLERK

MAYOR

Item: A
William Carey University, owner, Grant Guthrie, representative, and Ben Burnett, representative
Request for: **Zoning Change From R-1A, R-2 to R-3**



**Planning Commission
Case Fact Sheet**

Name of Petitioners: William Carey University, owner, Grant Guthrie, representative, and Ben Burnett, representative

Address of Property:
Intersection of Magnolia and Vernon Drive

	Tax Parcel	PPIN:	Ward:
R-1A Parcels	2-038G-15-126.00	13555	5
	2-038G-15-127.00	13556	5
	2-038G-15-125.00	13557	5
	2-038G-15-128.00	13558	5
	2-038G-15-173.00	13692	5
R-2 Parcels	2-038G-15-171.00	13684	5
	2-038G-15-187.00	13685	5
	2-038G-15-172.00	13705	5

Request: **Request for: Zoning Change From R-1A, R-2 to R-3**

Purpose of Request: To consider an application to change the zoning classification for unimproved properties located at the intersection of Vernon Street and Magnolia Avenue from R-1A: Single-Family Residential, and R-2: Two-Family Residential (Section 4.5.3 and 4.5.6) to R-3: Multi-Family Residential (Section 4.5.7) (R-1A Parcels: 2-038G-15-126.00, 2-038G-15-127.00, 2-038G-15-125.00, 2-038G-15-128.00, 2-038G-15-173.00; PPIN: 13555, 13556, 13557, 13558, 13692; R-2 Zoned Parcels: 2-038G-15-171.00, 2-038G-15-187.00, 2-038G-15-172.00; PPIN: 13684, 13685, 13705, Forrest County, Ward 5).

Applicant Summary: See Attached

Applicable Regulations:

SECTION 4

Zoning Districts Established

4.5.3 R-1A Residential District: The purpose of the R-1A District is to permit single-family residential uses with related recreational, religious and educational facilities. This district is consistent with the Neighborhood Conservation 1 and 2 districts in the Comprehensive Plan. This zoning district encourages protected lower density residential neighborhoods with only compatible supporting institutional uses and open space.

4.5.6 R-2 Two-Family Residential District: The purpose of the R-2 District is to permit medium density residential uses including two-family, or duplex structures, with related recreational, religious and educational facilities. This district is consistent with the Neighborhood Conservation 1 and 2 districts in the Comprehensive Plan. This zoning district encourages protected residential neighborhoods with only compatible supporting institutional uses and open space.

4.5.7 R-3 Multi-Family Residential District. The purpose of the R-3 District is to permit medium and high density residential uses including multi-family, two-family, and single-family structures with related recreational, religious and educational facilities. This district is consistent with the Neighborhood Conservation 1 and 2 districts in the Comprehensive Plan. This zoning district encourages protected residential neighborhoods with only compatible supporting institutional uses and open space.

5.4.18 Dwelling, Two Family and Multi-Family.

5.4.18.1 On infill development sites in residential districts, multi-family buildings shall be designed to blend in with surrounding single-family residential buildings to the maximum extent practicable with regards to building design, setbacks, driveway and garage design and location, porches, and sidewalks.

5.4.18.2 Site designs shall create a sense of “neighborhood” and shall meet the following requirements:

- i. Buildings shall be sited with front entrances and porches oriented toward streets, drives, and plazas, rather than clustered around parking lots.
- ii. An internal vehicular circulation system for private streets, when included, shall be reflective of a single-family residential street system.
- iii. Parking lots shall be located behind buildings, except where it is deemed appropriate to use a parking lot as a buffer from an arterial street, or where such parking area will directly

about a property line exterior to the development site when located in or adjacent to a residential district.

iv. Walkways shall connect all buildings with parking areas, play areas, clubhouses, and existing public sidewalks adjacent to the development site.

v. Plazas, clubhouses, pools, and recreational facilities shall be centrally located, when provided.

5.4.18.3 Building designs that create variety and do not look monotonous if replicated throughout the development shall be required. Such designs shall include the following:

i. Side and rear building elevations, garages, carports, and all accessory structures shall have the same level of design, aesthetic quality, and architectural detailing.

ii. Porches, varied rooflines, and varied façade depths shall be provided to create variety and individuality of each building.

iii. Windows and projecting wall surfaces shall be used to break up larger wall surfaces, establish visual interest and provide visibility of the street and other public spaces encouraging social interaction.

iv. Protective entry courts, common vestibules, covered breeze ways, or enclosed stair halls shall be used to reduce the number of visible doors, unless designed in a row house or townhouse manner oriented toward the street.

v. Garages shall be designed to be integrated with the building design or sited so as to avoid long monotonous rows of garage doors and building walls. Garages shall be oriented so that they do not visually dominate the building façade or the streetscape.

Present Zoning:	The parcels are currently zoned R-1A and R-2
Present Use:	Vacant / Undeveloped
Future Land Use:	Neighborhood Center Mixed-Use District (parcels south of Magnolia Street) Neighborhood Conservation District 1 (parcels north of Magnolia Street)
Surrounding Zoning and Land Use:	North: R-1A/R-1C Single-Family Residential South: R-1C Single Family Residential R-3 Multi-Family Residential (WCU Campus) East: R-1A Single-Family Residential West: R-1C Single-Family Residential
Letters or Concerns stated:	The Planning Division Office has not received any letters or other written communications relative to this case as of November 23, 2022.

William Carey University, owner, Grant Guthrie, representative, and Ben Burnett, representative
Request for: **Zoning Change From R-1A, R-2 to R-3**

History / Background:

The applicant met with staff in Pre-Application to discuss a potential development for multi-family housing for future medical students. William Carey University has indicated that their medical school has doubled in the past few years and their students have shown interest in housing that is accessible to campus without needing to use private transportation. William Carey University is working with a developer to build, construct, and manage a townhome-style development.

William Carey has provided a conceptual site plan that shows 5 sets of townhouses that have 4 units each. Townhouses are multi-family structures that are separated vertically by a common side wall and cannot be vertically mixed. Each unit would be two stories and sidewalks will be required along the frontage of the development. William Carey has indicated the desire to connect newly built sidewalks to existing sidewalks to improve the pedestrian infrastructure of their campus. The site plan presented has not been reviewed or approved by Site Design and Review Committee. The proposed development will also need to meet the conditions for use and site design outlined in the Land Development Code, 5.4.18 referenced earlier in this report, and all other relevant requirements.

Option: Basis for approval (Zoning Change):

- I. There was a mistake in the original zoning
- II. The character of the neighborhood has changed substantially so that rezoning is clearly justified **and** there is a public need for the rezoning
- III. Annexation

SUBJECT PARCEL:

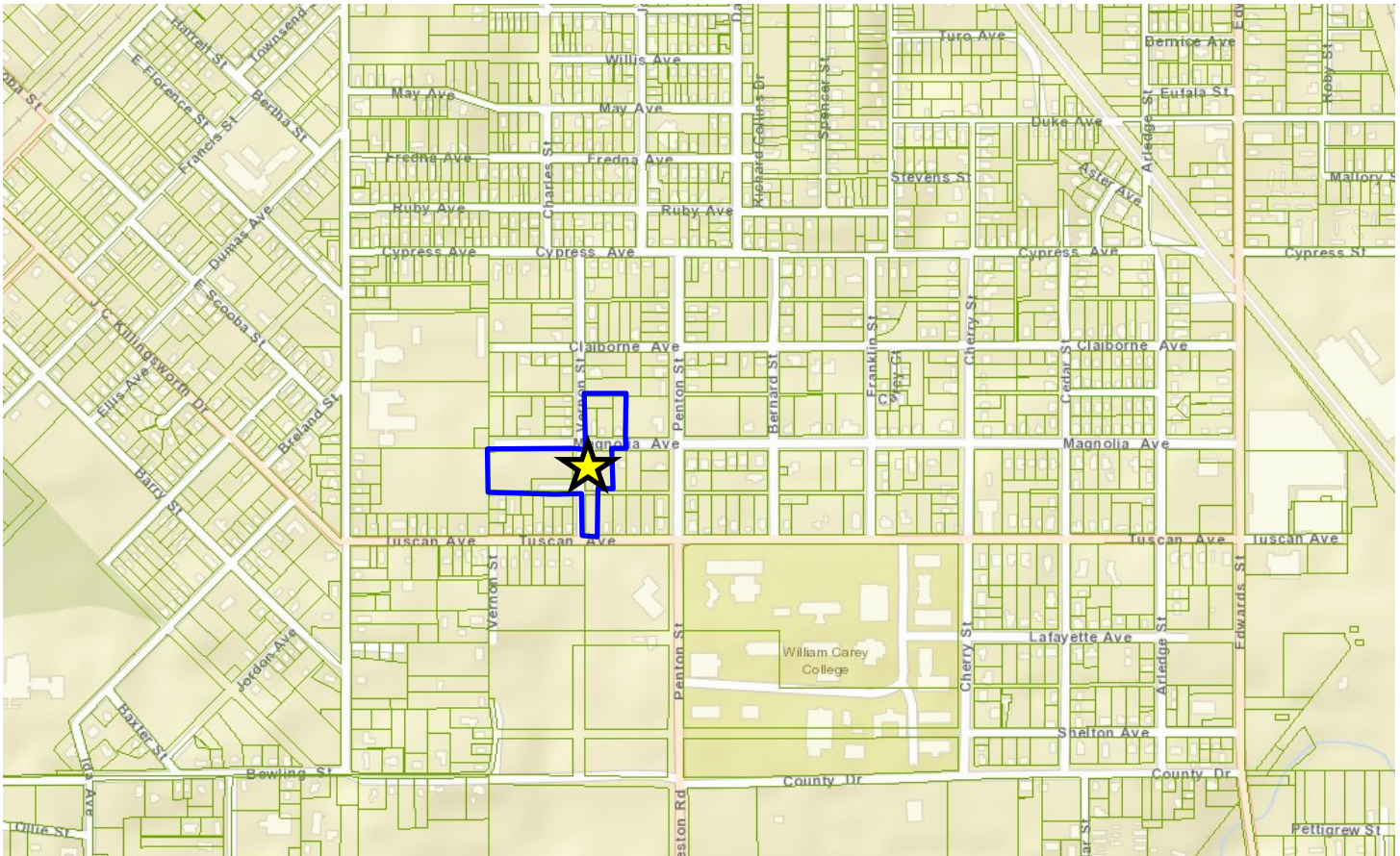
Intersection of Magnolia and Vernon Drive

William Carey University, owner, Grant Guthrie, representative, and Ben Burnett, representative

The petitioners request to change the zoning classification for unimproved properties located at the intersection of Vernon Street and Magnolia Avenue from R-1A: Single-Family Residential, and R-2: Two-Family Residential (Section 4.5.3 and 4.5.6) to R-3: Multi-Family Residential (Section 4.5.7) (R-1A Parcels: 2-038G-15-126.00, 2-038G-15-127.00, 2-038G-15-125.00, 2-038G-15-128.00, 2-038G-15-173.00; PPIN: 13555, 13556, 13557, 13558, 13692; R-2 Zoned Parcels: 2-038G-15-171.00, 2-038G-15-187.00, 2-038G-15-172.00; PPIN: 13684, 13685, 13705, Forrest County, Ward 5).



Vicinity Map—Ward 5



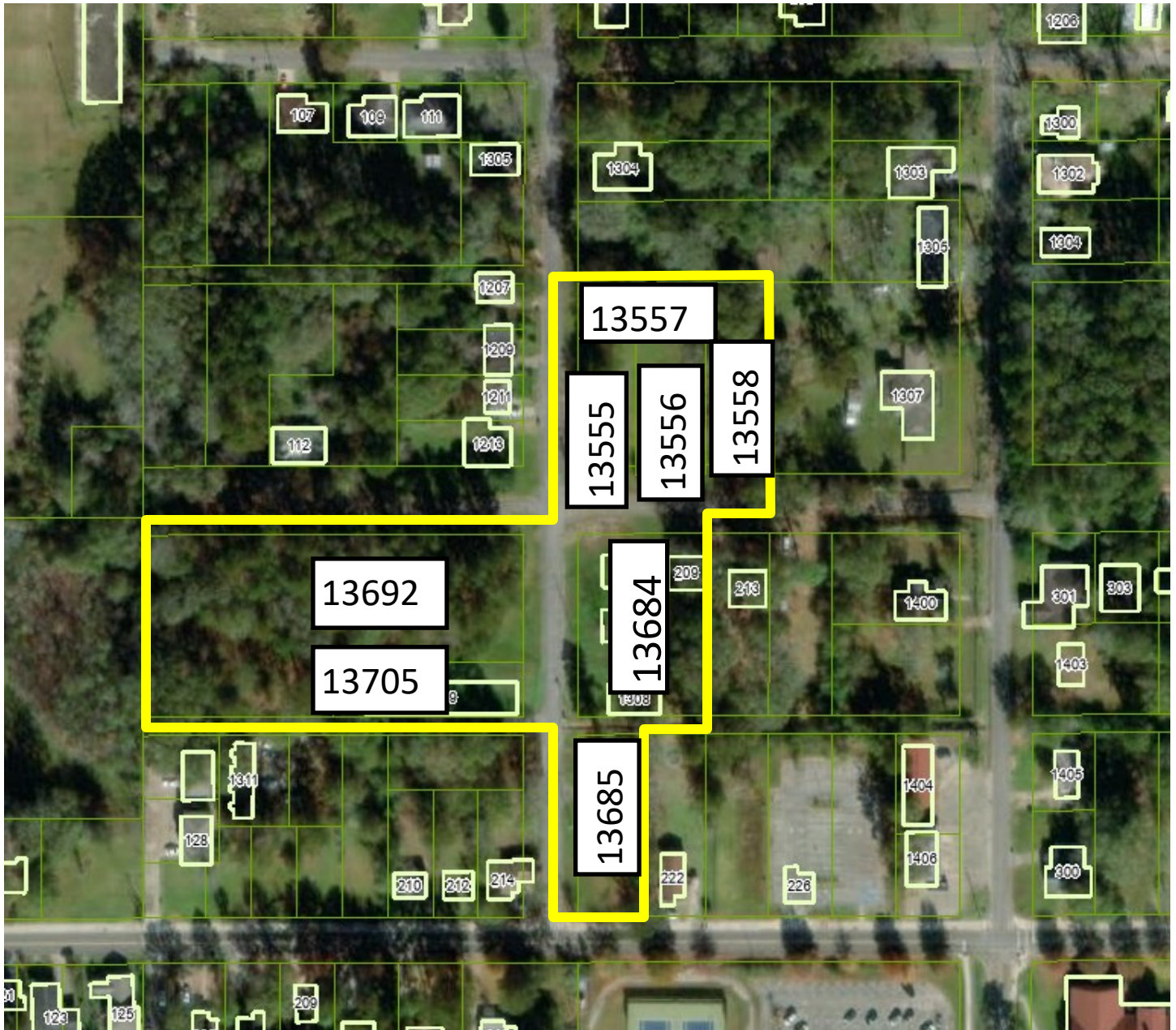
Zoning—R-1A and R-2



Site Aerial w/ PPINs



Site Aerial w/ PPINs (8 Total Parcels)



SURROUNDING AREA

Northern Direction: R-1C

Single-Family Residential



Southern Direction: R-1C

Single-Family Residential

R-1A Single-Family Residential

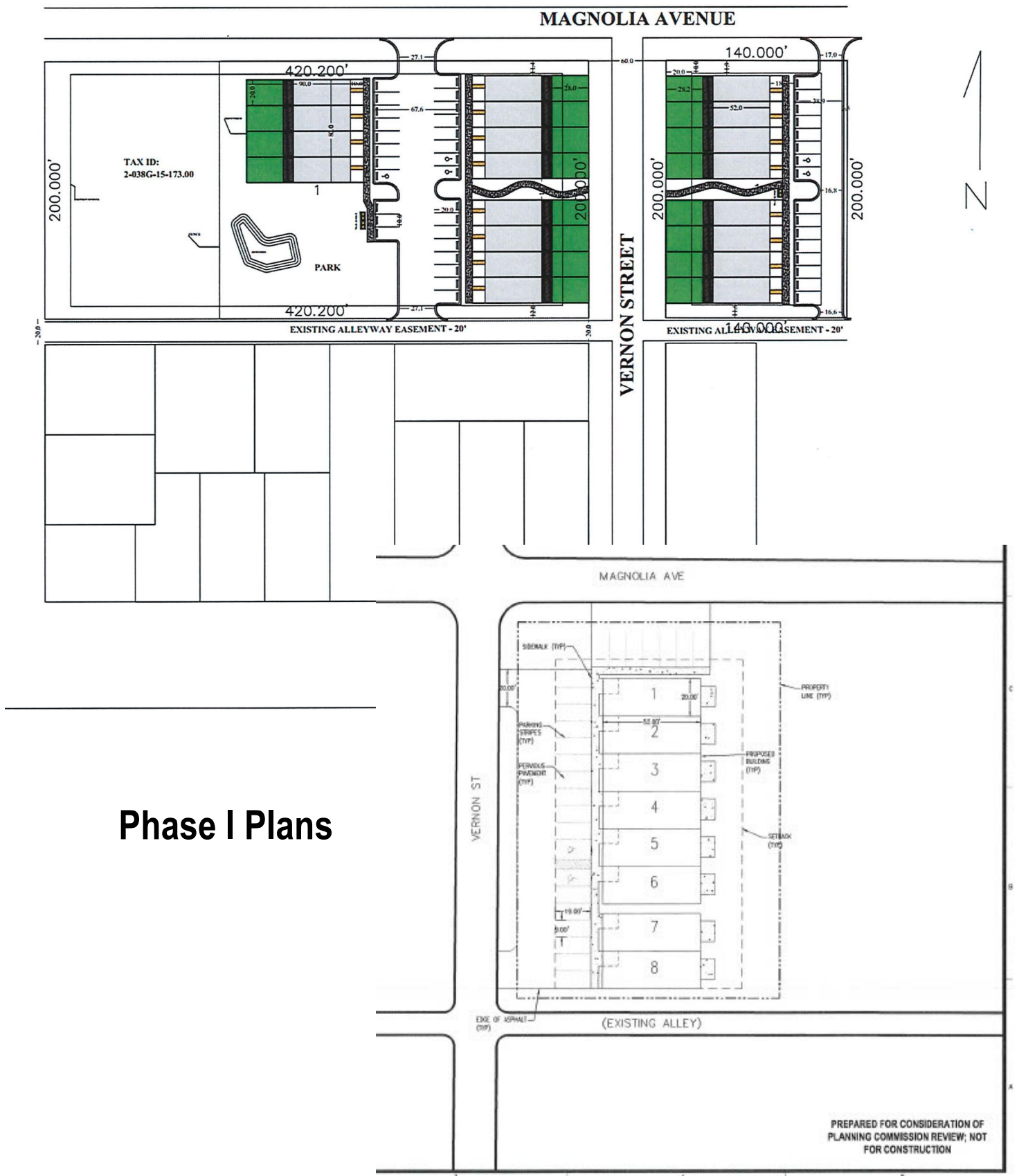


Western Direction: R-1C

Single-Family Residential

**(Dead-end Street,
Vacant/Undeveloped)**

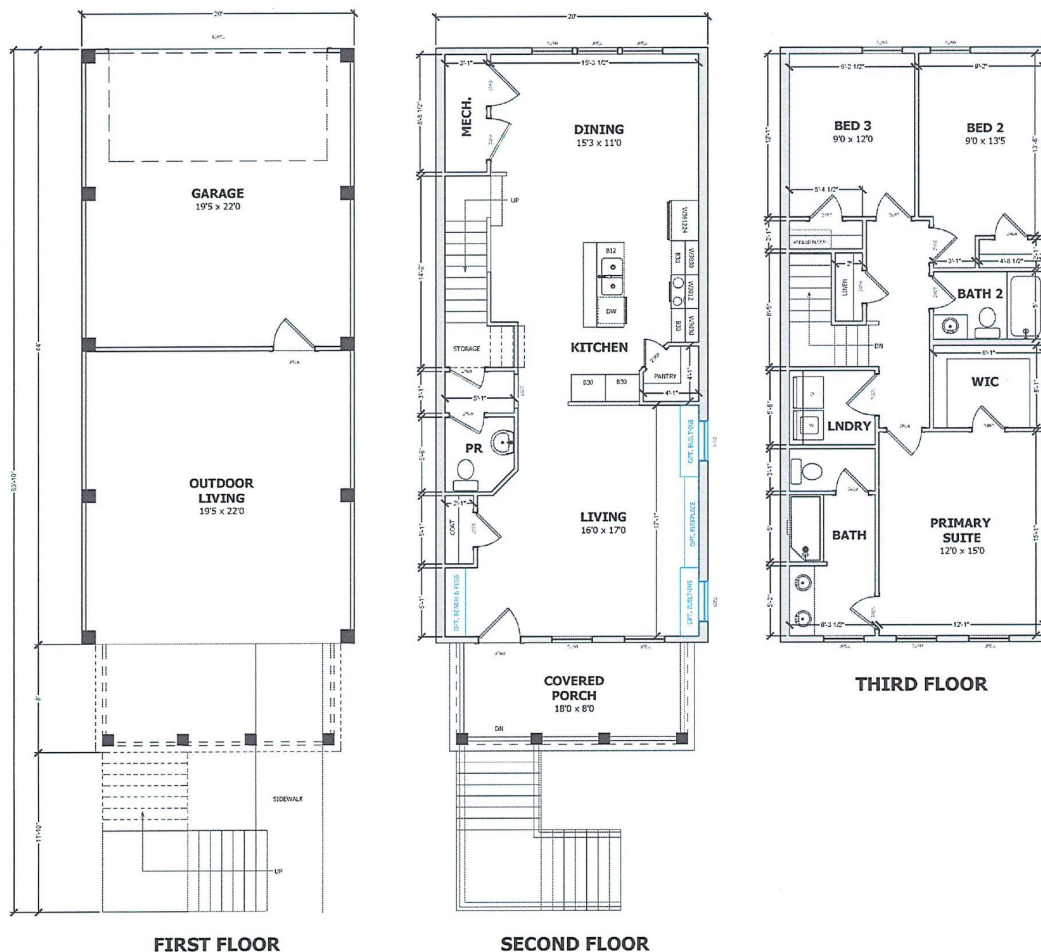




Conceptual Elevation (To be reduced to two-stories as indicated by applicant)



Conceptual Floor (Garage and outdoor living space to be removed per applicant)



Rezoning Information (1 page)

One of the following conditions must be met before a rezoning can be recommended.
Check the condition(s) most applicable to your request and explain in writing.

- ☒ A. There is a material change in the circumstances and conditions of the neighborhood and area surrounding the petitioned property and there is a public need for the change in question, based on the Comprehensive Plan.
- ☐ B. There is a mistake in the original zoning.
- ☐ C. Annexation

Detailed explanation of condition(s) most applicable to your request: (Please print or type.)

A.

William Carey University's growth has necessitated zoning changes for required parcels in order that they may be used for University purposes.

Grant Anthony, CFO

William Carey University

10.24.22



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ginger Lowrey, Planning Administrator
cc: Nathan Satcher, Planner
Date: Tuesday, December 20, 2022
Re: Adopt an Ordinance for the petition filed by Michael Kent Myatt, Joel Ford, to close and vacate a portion of an undeveloped street known as “Hill Street”, which is located north of the intersection of Bouie St and Old Highway 42 between 5566 Old Highway 42 and 5560 Old Highway 42 (Ward 2). The Planning Commission recommended to Approve on December 7, 2022.
File Number: 2022-948
Minute Book #

Summary

Adopt an Ordinance to close and vacate a portion of an undeveloped street known as “Hill Street”, Ward 2

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.



**Planning Commission
Case Fact Sheet**

Name of Petitioner: Michael Kent Myatt, owner, and Joel Ford, engineer

Address of Property:	Tax Parcel	PPIN:	Ward:
Between 5566 and 5560 Old Highway 42			2
North of the intersection of Bouie Street and Old Highway 42- Formerly known as "Hill Street"			

Request: **Alley Closure**

Purpose of Request: To consider an application to close and vacate a portion of an undeveloped street known as "Hill Street", which is located north of the intersection of Bouie St and Old Highway 42 between 5566 Old Highway 42 and 5560 Old Highway 42 (Ward 2).

Applicant Summary: See Attached

Applicable Regulations:

SECTION 12.2 Categories of Development Approvals

Legislative Development Approvals – Street closings

Present Zoning: Public Right of Way

Present Use: Undeveloped

**Surrounding Zoning
and Land Use:**

North: B-3 Community Neighborhood Business District / A-1
General Agricultural
South: B-3 Community Neighborhood Business District
East: B-3 Community Neighborhood Business District
West: B-3 Community Neighborhood Business District

Most Nearly

Bounded By (streets): Located north of Bouie Street, south of Gussie Street, east of Mobile St, and west of the Leaf River

Letters or

Concerns stated: The Planning Division Office has not received any letters or other

Item: D
Michael Kent Myatt, owner, and Joel Ford, engineer
Request for: **Alley Closure**

written communications relative to this case, as of November 23, 2022.

History / Background:

The applicant seeks to close a portion of the alley formerly known as "Hill Street" in order to expand a portion of their current business footprint. The alley is unimproved and the applicant is only seeking to close the portion directly adjacent to his property. The alley would still be accessible from its connection in the North to Gussie Street.

Option:

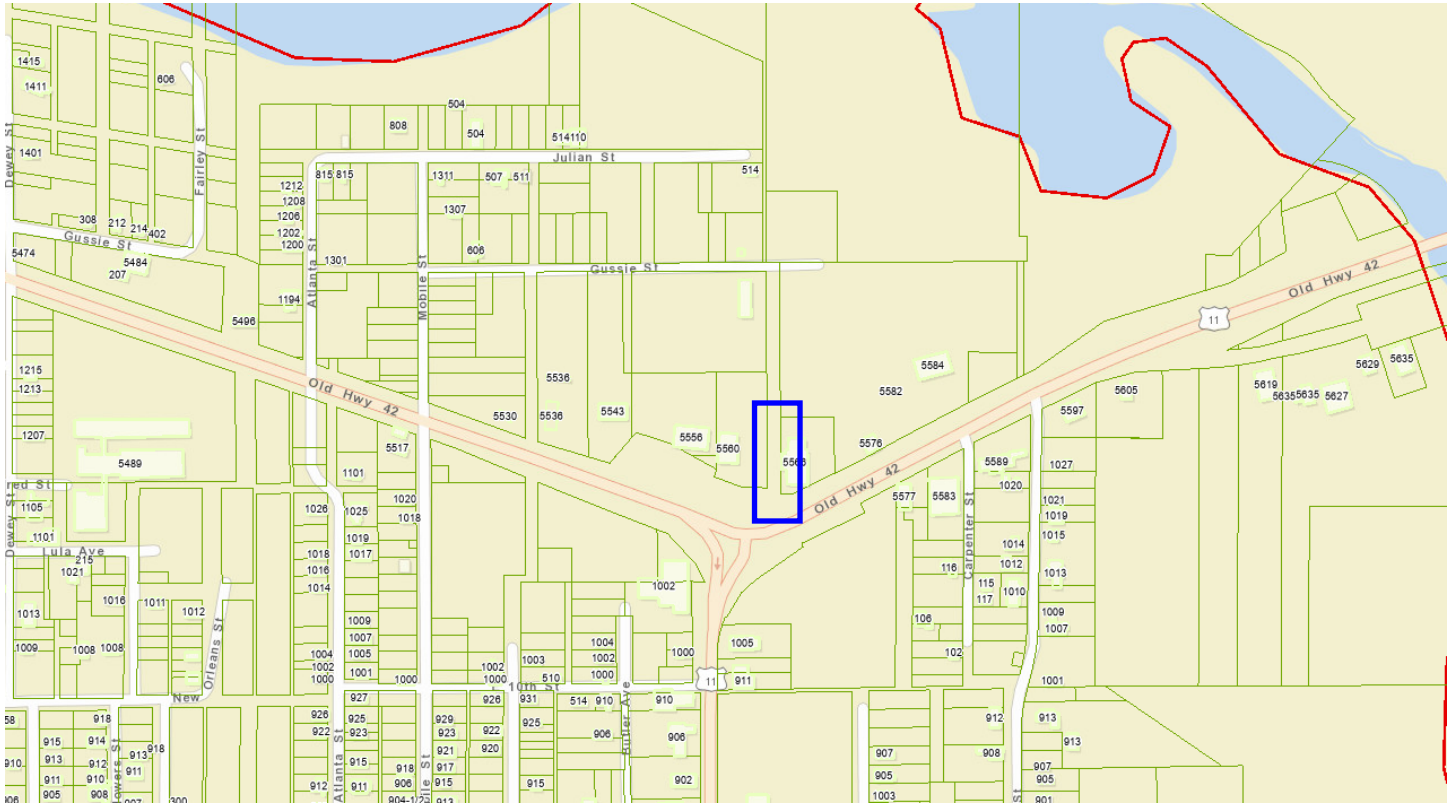
Approve or Deny an application to close and vacate a portion of an undeveloped street known as "Hill Street", which is located north of the intersection of Bouie St and Old Highway 42 between 5566 Old Highway 42 and 5560 Old Highway 42 (Ward 2).

SUBJECT PARCEL:
“Hill Street” - Unimproved Alley
The City of Hattiesburg

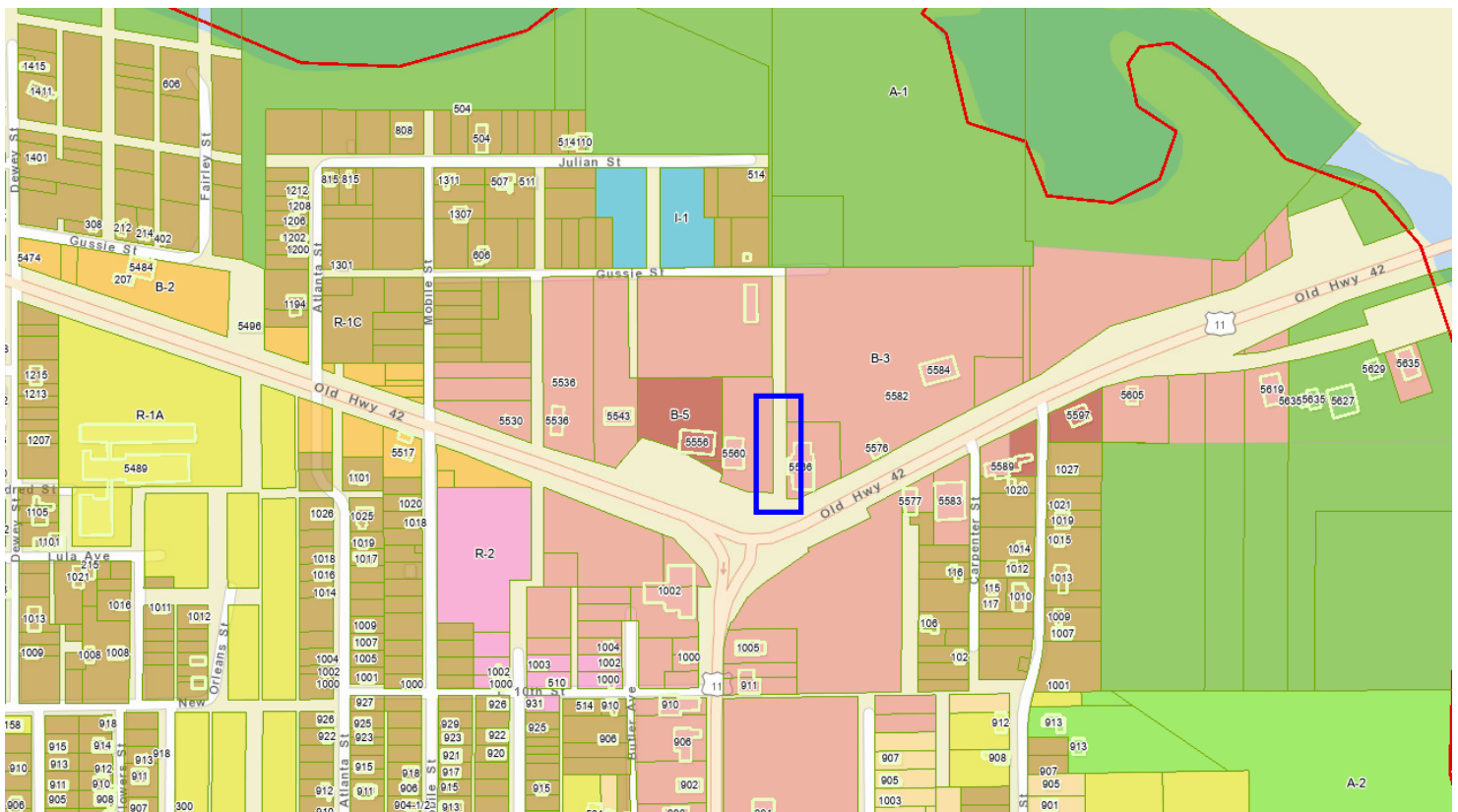
To close and vacate a portion of an undeveloped street known as “Hill Street”, which is located north of the intersection of Bouie St and Old Highway 42 between 5566 Old Highway 42 and 5560 Old Highway 42 (Ward 2).



Vicinity Map—Ward 2



Zoning—B-3





SURROUNDING AREA

**Northern Direction: B-3/A-1 Parcels
and remainder of alley**



**Southern Direction: B-3 Undeveloped
/ Intersection of Bouie and HWY 42**



**Eastern Direction: B-3—Location of
Underwood Outdoor Power**



**Western Direction: B-3 Deviney
Construction**

Street or Alley Closing, Vacating, Naming or Renaming Information (3 pages)

1. Please indicate specific request(s): ☐ Street ☒ Alley
D Closing ☒ D Vacating D Naming D Re-Naming



2. Current name of street/alley to be closed, vacated, named or re-named:

3. Names of all intersecting or bounding streets and/or alleys:
Fairmont St and Gussie St

4. Tax Block(s) and Lot(s) involved in closing request:

PPIN 15065 Parcel ID 2-029A-03-031.00 Kent Myatt 177 Tallulah Ridge, Hattiesburg, MS 39402

PPIN 40528-Parcel ID 2-029A-03-030.00 Deviney Construction P O BOX 6717 Jackson, MS 392826717

- The following properties are not involved in my request, (they do not border my property) but could be involved if the alley vacation is extended to Gussie St.

PPIN 20316-Parcel ID 2-029A-03-028.00 Deviney Construction P O BOX 6717 Jackson, MS 392826717

PPIN 15064 Parcel ID 2-029A-03-009.00 Jimmy Dale Odom P O BOX 661 Petal Ms, 39465

5. Describe existing development on property adjacent to the street/alley (i.e.: type of land uses, number of occupied dwelling units, business, height of buildings, etc.) And surrounding property within 400 feet.

Type of Land Use of adjacent development	Number of each Type adjacent to development	Maximum height of buildings (stories)	Number of properties immediately affected by change	Number of additional properties within 400 feet
Businesses	-1	2 story	1	1
Residences	Zero	N/A	N/A	N/A
Apartments	Zero	N/A	N/A	N/A
Churches/Schools	Zero	N/A	N/A	N/A

Any additional Information:

In this request, I am only asking for closure on the property directly adjacent to my property, (alley bordering PPIN 15065 & PPIN 40528 this alley extends to Gussie St and I am not asking for this to be closed nor do I want to take possession of this property.

5. Describe the effect the proposed change will have on existing development and the transportation system within the

There should be no change to transportation, this alley is unimproved from the 1960's and has never been used for any public transportation.

6. Have applications for zoning, variance, building permit, or other applications been filed?
_____ Yes _____ ☒ No Paper work will be submitted 10-24-2022

If yes, provide reference numbers and dates: _____

7. Acknowledgment of property owners adjacent to the street/alley renaming. Include all names and addresses and a legal opinion or affidavit attesting to the signatures of all owners of record. The affidavit must be sworn to before a notary public or other appropriate official.
(Sample form attached)

Obtain from the City's Engineering Department the legal description of the street/alley or portion thereof to be closed, vacated, named or re-named (need electronic copy)

Hill Street

ATTACH SAMPLE STREET / ALLEY Acknowledgement of Affected residents/business
As PAGE 3

PRESENT NAME: PROPOSED NAME:

CHECK ONE: PROPERTY OWNERS LIST BUSINESS OWNERS LIST

INCLUDE ALL NAMES, ADDRESSES, CITY TAX PARCEL NUMBERS AND A LEGAL OPINION OR AFFIDAVIT ATTESTING TO THE SIGNATURES OF ALL OWNERS OF RECORD.

PLEASE PRINT OR TYPE

NAME Address	PPIN# TAX PARCEL #	Approve	Deny	Signature
Deviney Construction CO	PPIN 40528-Parcel ID 2-029A-03-030.00 PPIN 20316-Parcel ID 2-029A-03-028.00	<i>W</i>		<i>[Signature]</i> <i>Richard Black</i> <i>President</i>

PO Box6717 Jackson, MS 39282-6717



Emma Merritt
10/24/22

Deviney
Parking Lot

PPIN 40528
PARCEL ID 2-029A-03-030.00
OWNERNAME
DEVINEY CONSTRUCTION CO INC

Vacated Alley 51.5' wide
to Gussie St

MS Power
Reming line
is Deadheaded
to Gussie

PPIN 15064
PARCEL ID 2-029A-03-009.00
OWNERNAME
ODOM JIMMY D & KATHERINE

MS Power
Utility

225'

Shed Two Cycle

First Floor	6000 Sq-Ft
Two Cycle Shed	480 Sq-Ft
Second Floor	6000 Sq-Ft
Mechanic Area	1416 Sq-Ft
TOTAL	13,896 Sq-Ft

Mechanic work area

MS Power
Utility

180'

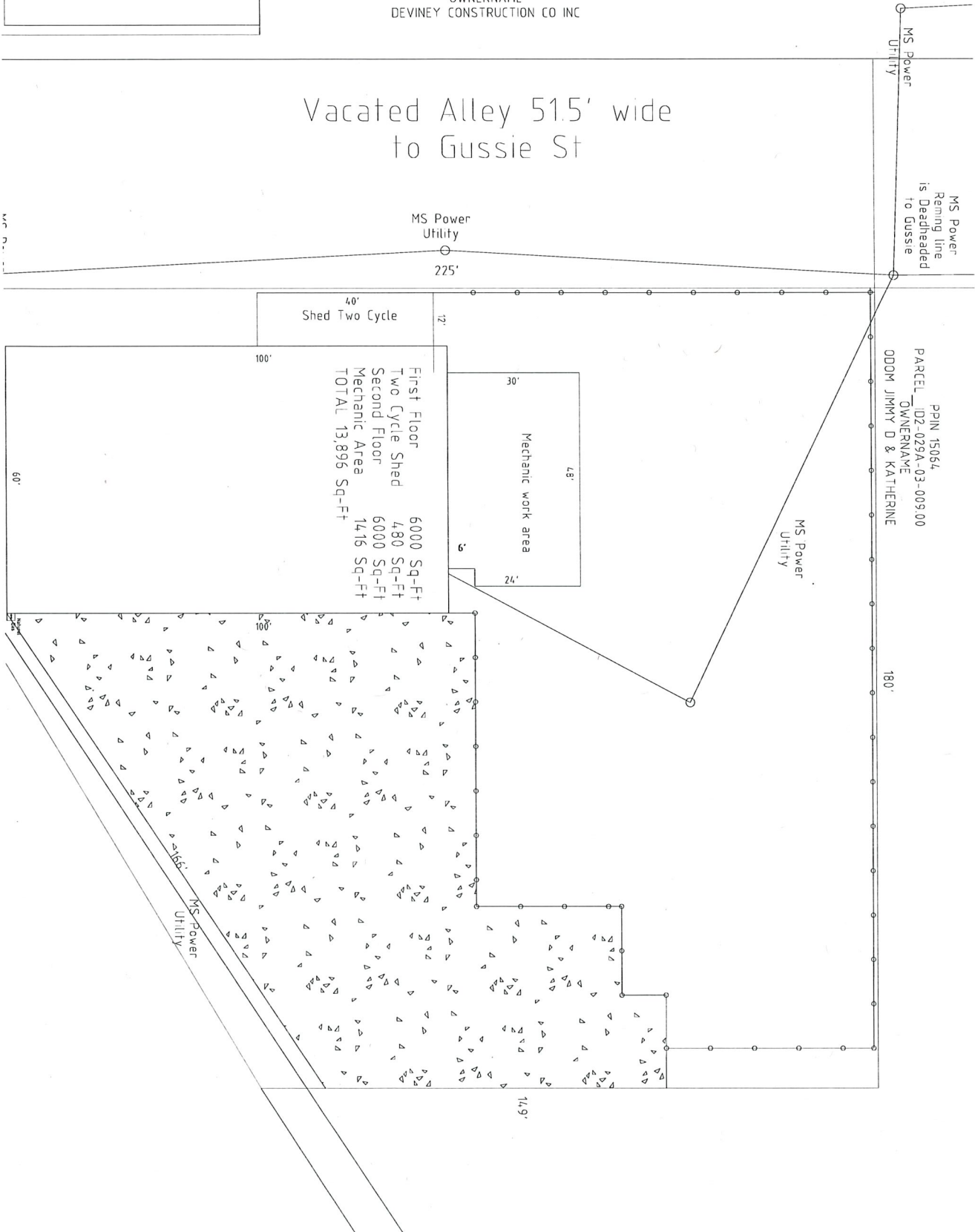
149'

MS Power
Utility

Deviney
Parking Lot

PPIN 40528
PARCEL ID 2-029A-03-030.00
OWNERNAME
DEVINEY CONSTRUCTION CO INC

Vacated Alley 51.5' wide
to Gussie St



Prepared by: City of Hattiesburg
City Clerk's Office
P.O. Box 1898
Hattiesburg, MS 39403-1898
(601)545-4550

Return to: City of Hattiesburg
City Clerk's Office
P.O. Box 1898
Hattiesburg, MS 39403
(601)545-4550

INDEXING INSTRUCTIONS: Part of Blocks 1,2,3 and 4 of Mrs. John Martin Subdivision, a re-subdivision of Block 7 and a portion of Blocks 6 and 9 of the A.R. Fairley 2nd Addition; and also part of Blocks 7,8 and 10 of the A.R.Fairley Subdivision, all being part of the SW 1/4 of the NE 1/4 of Section 3, T-4-N, R-13-W, Forrest County, MS

ORDINANCE NUMBER _____
OF THE
CITY OF HATTIESBURG, MISSISSIPPI

AN ORDINANCE CLOSING AND VACATING AN UNDEVELOPED STREET KNOWN AS "HILL STREET", WHICH IS LOCATED NORTH OF THE INTERSECTION OF BOUIE ST AND OLD HIGHWAY 42 BETWEEN 5566 OLD HIGHWAY 42 AND 5560 OLD HIGHWAY 42 (WARD 2) THAT IS CURRENTLY PLATTED AND EXISTING. IN THE CITY OF HATTIESBURG, MISSISSIPPI

WHEREAS, a portion of an undeveloped street known as "Hill Street", which is located north of the intersection of Bouie St and Old Highway 42 between 5566 Old Highway 42 and 5560 Old Highway 42 (Ward 2); and

WHEREAS, all of the owners of property adjacent to said portion of the undeveloped street known as "Hill Street", have requested the Mayor and Council of the City of Hattiesburg, Mississippi, close and vacate said portion of the undeveloped street known as "Hill Street", described below, have consented to the closing and vacating of said undeveloped street known as "Hill Street", described below, subject to the waiting period of thirty (30) days from the date of publication of this ordinance, and have waived any and all rights to any compensation and/or damages that might otherwise be due to them as abutting landowners as a result of the closing and vacating thereof; and

WHEREAS, the Mayor and City Council do now find, determine and adjudge that said undeveloped street known as "Hill Street", which is located north of the intersection of Bouie St and Old Highway 42 between 5566 Old Highway 42 and 5560 Old Highway 42 (Ward 2) described below is not needed as a public street, and that the public interest, welfare and

convenience require that said undeveloped street described below be closed and vacated, that it would be in the best interest of the City of Hattiesburg. The City of Hattiesburg and the Mayor and Council further find and adjudicate that no compensation for the closing and vacating of said undeveloped street described below is due to the owners of the property abutting thereon.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF HATTIESBURG, MISSISSIPPI:

SECTION 1. That a portion of an undeveloped street known as “Hill Street”, which is located north of the intersection of Bouie St and Old Highway 42 between 5566 Old Highway 42 and 5560 Old Highway 42 (Ward 2) located in the City of Hattiesburg, Forrest County, Mississippi, and being more particularly described as follows:

REQUEST TO VACATE A 36.5 FOOT WIDE PLATTED UNDEVELOPED PUBLIC RIGHT-OF-WAY KNOWN AS HILL STREET ADJOINING BLOCKS 1, 2, 3 AND 4 OF THE MRS. JOHN MARTIN SUBDIVISION, A RESUBDIVISION OF BLOCK 7, AND A PORTION OF BLOCKS 6 AND 9 OF THE A.R. FAIRLEY 2ND ADDITION AND ALSO REQUEST TO VACATE AN ADJOINING 15 FOOT UNDEVELOPED PLATTED ALLEY ADJOINING BLOCKS 7, 8 AND 10 IN THE A.R. FAIRLEY SUBDIVISION, LOCATED IN THE SW 1/4 OF THE NE 1/4 OF SECTION 3, T-4-N, R-13-W, CITY OF HATTIESBURG, FORREST COUNTY, MS . THE ABOVE HEREIN DESCRIBED CONTAINS 0.79 ACRES, MORE OR LESS.

SECTION 2. That the City Engineer has recommended that said portion of the undeveloped street known as “Hill Street” described above be closed and vacated. That the portion of the portion of the undeveloped street known as “Hill Street” described above is not a necessary means of access to any other property. That whenever there are existing utilities present in the areas that have been requested for closure, that utility company shall maintain an easement as long as that utility is present. That it would be in the best interest of the City to close and vacate the same.

SECTION 3. That this Ordinance take effect and be in force thirty (30) days from and after passage as provided by law.

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

YEAS:

NAYS:

THE President thereby declared the motion carried and the foregoing Ordinance adopted and approved, this the _____ day of _____ A.D., 2022.

(S E A L)

ATTEST:

ADOPTED:

CLERK OF COUNCIL

PRESIDENT

THE above and foregoing Ordinance having been submitted to and approved by the Mayor, this the _____ day of _____ A.D., 2022.

ATTEST:

APPROVED:

CITY CLERK

MAYOR



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Ginger Lowrey, Planning Administrator

cc: Nathan Satcher, Planner

Date: Tuesday, December 20, 2022

Re: Approve or Deny a petition filed by Michael Kent Myatt, Joel Ford, to request a conditional use for “gravel outdoor storage space” in a B-3 Zone for a property located at 5566 Old Highway 42 (PPIN 15065 Forrest County, Ward 2). The Planning Commission recommended to Approve on December 7, 2022 with the condition that landscaped screening be added as shown on the presented site plan on the south side of the open storage area.
File Number: 2022-951
Minute Book #

Summary

5566 Old Highway 42 - Conditional Use - gravel outdoor storage space in B-3, Ward 2

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.



**Planning Commission
Case Fact Sheet**

Name of Petitioners: Michael Kent Myatt, Owner, and Joel Ford, Engineer

Address of Property: 5566 Old Highway 42
Tax Parcel: 2-029A-03-031.00
PPIN: 15065
Ward: 2

Requests: **Use- Gravel Storage Lot in a B-3 Zone**

Purpose of Request: To consider an application to request to request a conditional use for “gravel outdoor storage space” in a B-3 Zone (Section 7.12.10.4.iii) for a certain property located at 5566 Old Highway 42 (Parcel No.: 2-029A-03-031.00; PPIN 15065 Forrest County, Ward 2).

Applicant Summary: See Attached

Applicable Regulations:

SECTION 4

Zoning Districts Established

4.5.10 B-3 Community Business District

The purpose of the B-3 District is to provide for retail, personal service, and offices in locations with convenient access to the community consistent with comprehensive planning policies. This district is consistent with the Community Business District in the Comprehensive Plan.

5.4.7 Automotive and Truck Repair, Maintenance, Rental, and Sales

5.4.7.1 Display of Vehicles for Sale or Lease.

i. Vehicles for sale or lease may be displayed in the established front yard provided that no vehicle shall be displayed within fifteen feet of the street right-of-way.

ii. All new display areas shall be paved.

5.4.7.2 Outdoor Storage.

i. A motor vehicle repair, service, body or paint shop which has

wrecked, partially dismantled, or inoperative vehicles located on-site shall store these vehicles in an enclosed building or in a separate motor vehicle storage yard which meets the requirements of this ordinance for such yards.

ii. Storage areas are exempt from the interior landscaping requirements for parking lots. However, the perimeter landscaping requirements of parking lots shall apply to such storage areas

iii. Storage areas may only be located behind the principal building and/or its accessory buildings, and shall not be placed within 100 feet of any property line that abuts a thoroughfare or local public street.

7.12 Parking Requirements.

7.12.10.4 A maximum outdoor equipment storage space of 50% of the side and rear lot area is allowed for business and industrial equipment and materials if outdoor storage is an accessory to another use on the same lot.

i. Unless otherwise permitted, commercial outdoor storage areas shall be hard surface only.

ii. All outdoor storage associated with automotive and tow yard uses shall be hard surface, regardless of zone.

iii. Dustless gravel maintained so as to be free of overgrowth may be allowed for only non-public outdoor storage space of heavy equipment and non-hazardous materials by right in A-1, I zones and as a Conditional Use in A-2, B-5, and B-3 zones. Any approved gravel storage lot shall be subject to driveway requirements per 7.12.8.3.

Present Zoning:	This parcel is currently zoned B-3 (Community Business) District
Present Use:	Small Engine repair, maintenance, and sales
Future Land Use:	Community Business Corridor
Surrounding Zoning and Land Use:	North: B-3 (Community Business) District South: B-3 (Community Business) District East: B-3 (Community Business) District West: B-3 (Community Business) District
Letters or Concerns stated:	The Planning Division Office has not received any letters or other written communications relative to this case, as of November 28 th , 2022.
History / Background:	The petitioners met with Staff in Pre-Application to discuss the expansion of their outdoor gravel storage space to accommodate their commercial needs. The applicant is also seeking to vacate the alley directly to the west to expand the gravel outdoor storage area and the proposed plan is shown in the site plan in the image sheets.

Item: C

Michael Kent Myatt, Owner, and Joel Ford, Engineer
Request for: **Conditional Use for Gravel Outdoor Storage**

Under LDC 2.4.4.1, legal nonconforming uses are allowed one-time expansion, up to 25%. Because the proposed expansion is over 25% based on the increase of square footage, Staff is unable to approve a site plan without the use coming into compliance with the Land Development Code. A Conditional Use must be granted to establish this as legal conforming use and thus remove expansion limitations. On June 22nd, 2021, the City voted to amend the Land Development Code to allow for gravel outdoor storage areas in B-3 zones, and this would be the second request received since the passing of that ordinance.

The applicant is concurrently requesting a Variance of 13% for an outdoor storage space of 63% of the side lot area (only 50%-yard coverage is permitted per Sec 7.12.10.4.).

The property is also within a regulated flood zone (Zone AE 100-year) due to its proximity to the Bouie River to the North and its confluence with the Leaf River to the Northeast. Any new development within this zone must adhere to the Flood Damage Prevention Ordinance (Ord. No. 3294).

The City also approved a rezone request for properties located at 5530 Old Highway 42 from B-3, and R-1C to I-1 (Light Industrial), which is less than 800 feet west of this request and part of the same corridor for this area. The intent of the applicant was to establish a tow yard on that site. No site plan has been approved for that site as of the writing of this report.

Option: Basis for approval:

12.3.3.2 Additional Approval Criteria. In addition to the standards [n/a], the applicant for a request for the Planning Commission to approve a use shall be required to demonstrate that his/her proposal addresses the following additional requirements, except that the Planning Commission may waive any one or more criteria that it determines are not applicable based upon the expected impact of the proposal.

- i. Determination that adequate public facilities and services will be available concurrent with the impacts of the development as evidenced by letters of sufficiency from utilities and schools and a determination by the city engineer that the available capacity of existing streets can safely provide access to the site.
- ii. The proposed development will be compatible with surrounding uses and will protect adjacent properties through the following measures:
 - Protection of privacy. The proposed plan shall provide reasonable visual and auditory privacy for all dwelling units located within and adjacent to the site. Fences, walls, barriers and / or vegetation shall be arranged to

Item: C

Michael Kent Myatt, Owner, and Joel Ford, Engineer

Request for: **Conditional Use for Gravel Outdoor Storage**

protect and enhance the property and to enhance the privacy of on-site and neighboring occupants.

- Protection of use and enjoyment. The proposed plan shall be designed and arranged to have minimal negative impact on the use and enjoyment of adjoining property.
- Compatible design and integration. The use meets all design criteria required by this Code that apply and is designed to integrate well both on and off site.

Conditional Use (2 pages)

12.3.3.1 Compliance Required. Uses requiring Planning Commission approval, as noted in the Tables of Uses in Section 5 of this Code, shall be approved subject to this Section. Any application for such use must comply with all applicable standards that apply to similar uses and properties in the zoning district in general, the specific conditions listed for that use in Section 5, and the following criteria. Where conflicts exist, the Planning Commission shall determine which criteria apply on a case by case basis.

1. Does this application meet the conditions set forth in Section 5 for the requested use? If yes, please explain.

NO. I am requesting to use gravel and for storage in zone B-3 over the 50% for threshold Code 7-12-10-4

2. Describe the effects the proposed use of utilities and facilities will have on the community.

There should be no change driven by this graveling of the vacated alley or to the proposed open shedding on local utilities and facilities in this area. The shed will not require power, water or sewage.

3. Describe how the size of the site is appropriate for the proposed use.

Since the pandemic, manufactures due to supply chain issues, have changed they way they deliver mowers to retailers. This has forced the retailers to take on more finished product in the spring (January through April) of the year. This building should enable me to meet my customers needs and still have the storage to store additional extra inventory during my peak selling season.

4. Will there be any additional pedestrian or vehicular traffic generated by the proposed use? _____
If yes, please explain:

No not directly. It should allow me to have the inventory in stock that customers are in the market for, instead of having them wait months to get the mower of their choice in.

5. Will there be any elevation in the noise level resulting from this proposed use? _____

If yes, please explain:

None over current levels.

6. What is the expected number of customers/employees per day?

Employees per day-9

Peak summer months (March through September) 42 per day

7. Parking Requirements:

Commercial/Industrial: Paved parking will be provided for Fourteen vehicles, and
One ADA vehicle(s); with Two loading spaces.

For more information please reference the Land Development Code Section 12.3.3.2.

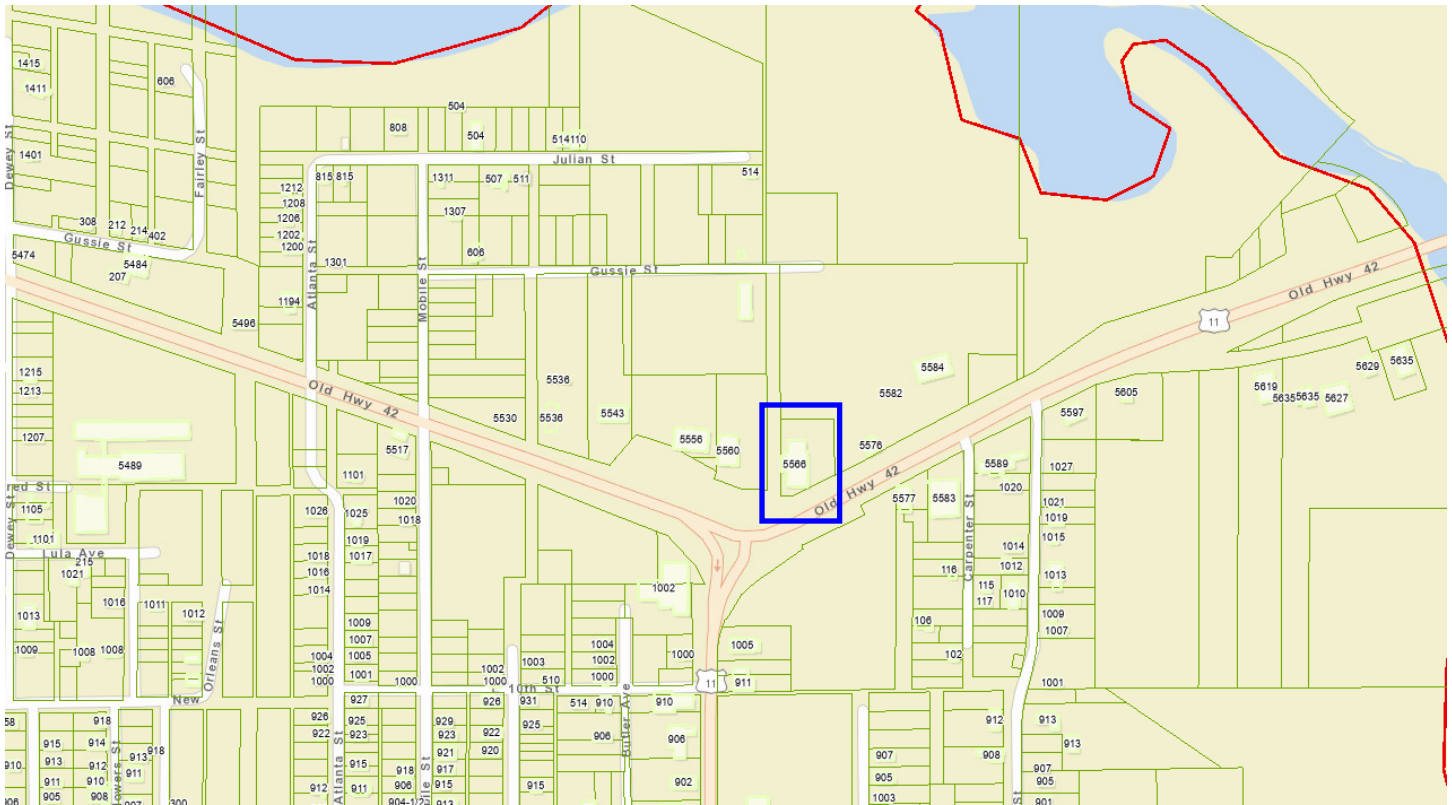
SUBJECT PARCEL: 5566 Old Highway 42

Michael Kent Myatt, Owner, and Joel Ford, Engineer

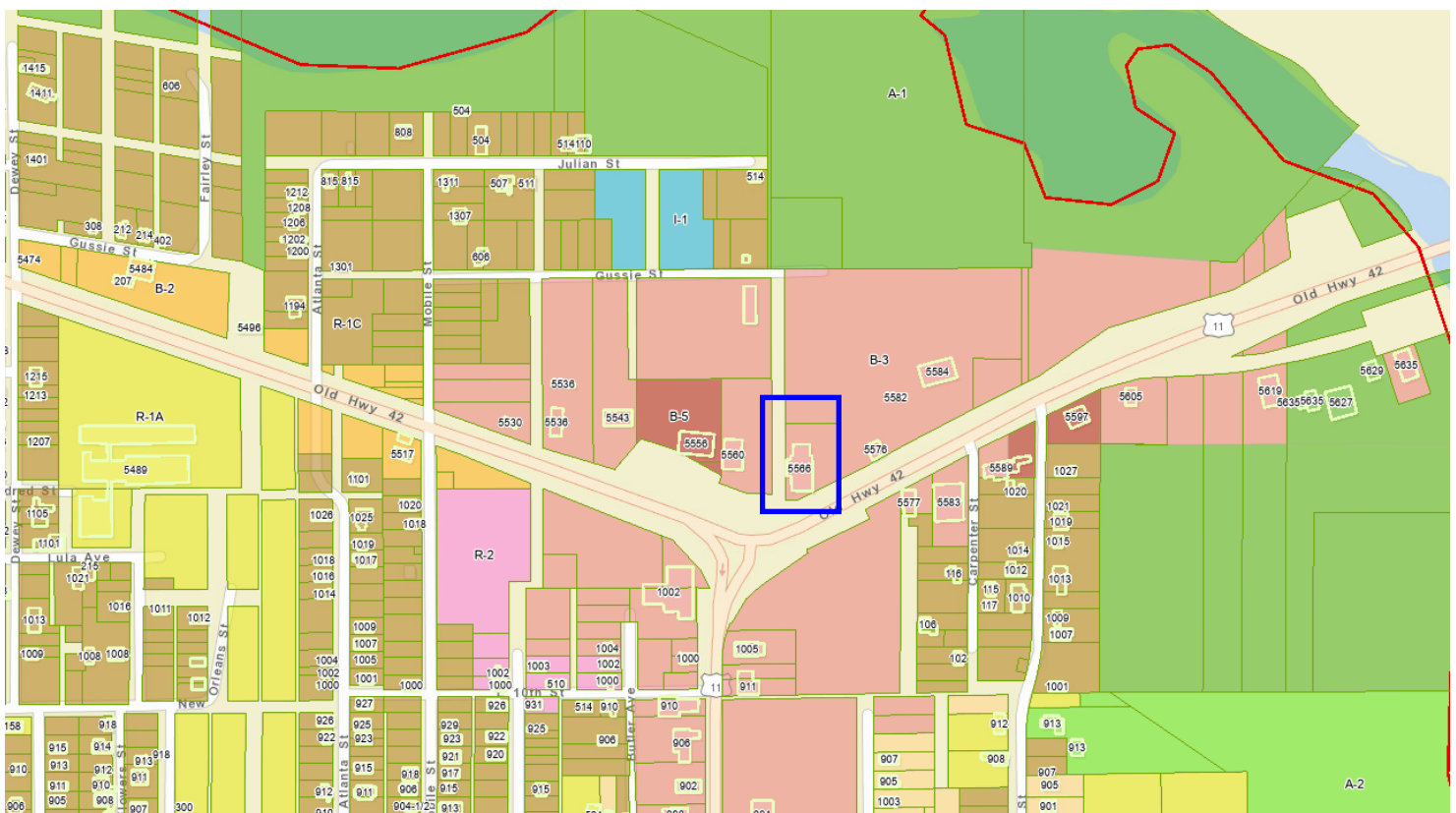
To consider an application to request to request a conditional use for “gravel outdoor storage space” in a B-3 Zone (Section 7.12.10.4.iii) for a certain property located at 5566 Old Highway 42 (Parcel No.: 2-029A-03-031.00; PPIN 15065 Forrest County, Ward 2).



Vicinity Map—Ward 2



Zoning—B-3



Site Aerial



SURROUNDING AREA

**Northern Direction: B-3/A-1 Parcels
and remainder of alley**



**Southern Direction: B-3 Undeveloped
/ Intersection of Bouie and HWY 42**



**Eastern Direction: B-3
Restaurant and Tow Yard (Legal non-
conforming)**



**Western Direction: B-3 Deviney
Construction**



Site Plan



EXISTING PROPERTY OWNERSHIP AND VICINITY MAP
1" = 50'



CONCEPTUAL UNDERWOOD OUTDOOR POWER ADDITIONS AND IMPROVEMENTS
1" = 25'



Focused View



CONCEPTUAL UNDERWOOD OUTDOOR POWER ADDITIONS AND IMPROVEMENTS
1" = 25'



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ginger Lowrey, Planning Administrator
cc: Nathan Satcher, Planner
Date: Tuesday, December 20, 2022
Re: Approve or Deny a petition filed by Michael Kent Myatt, Joel Ford, to request a variance from “Maximum outdoor equipment storage space of 50%” to exceed the allowable amount to “64%” for a variance of 14% for a certain property located at 5566 Old Highway 42 (PPIN 15065 Forrest County, Ward 2). The Board of Adjustment recommended to Approve on December 7, 2022.
File Number: 2022-936
Minute Book #

Summary

5566 Old Highway 42 – Variance – Outdoor storage

Recommendation Statement

Approve or Deny

Please place this on the December 20, 2022 City Council meeting for consideration.



**Board of Adjustment
Case Fact Sheet**

Name of Petitioners:	Michael Kent Myatt, owner, and Joel Ford, engineer		
Address of Property:	Tax Parcel	PPIN:	Ward:
5566 Old Highway 42	2-029A-03-031.00	15065	2
Request:	Outdoor equipment storage yard area variance		
Purpose of Request:	To vary from section 7.12.10.4 "Maximum outdoor equipment storage space of 50%" to exceed the allowable amount to 64% for a variance of 14% for a certain property located at 5566 Old Highway 42 (Parcel No.: 2-029A-03-031.00; PPIN 15065 Forrest County, Ward 2).		
Applicant Summary:	See Attached		
Applicable Regulations:	7.12.10.4 A maximum outdoor equipment storage space of 50% of the side and rear lot area is allowed for business and industrial equipment and materials if outdoor storage is an accessory to another use on the same lot.		
Present Zoning:	This parcel is currently zoned B-3 (Community Business) District		
Present Use:	Small Engine repair, maintenance, and sales		
Future Land Use:	Community Business Corridor		
Surrounding Zoning and Land Use:	North: B-3 (Community Business) District South: B-3 (Community Business) District East: B-3 (Community Business) District West: B-3 (Community Business) District		
Letters or Concerns stated:	The Planning Division Office has not received any letters or other written communications relative to this case, as of November 29 th , 2022.		
History / Background:	The petitioner met with Staff in Pre-Application to discuss the		

Item: B

Michael Kent Myatt, owner, and Joel Ford, engineer
Request for a **Storage Yard Area Variance**

expansion of their outdoor equipment storage space to accommodate their commercial needs. The applicant proposes to increase outdoor storage through the addition of an equipment storage yard on the western portion of the site. The storage yard exceeds the allotted area permitted for outdoor equipment storage. Staff could not approve the expansion as proposed.

The applicant is requesting a Variance of 13% for an outdoor storage space of 63% of the side lot area (only 50% yard coverage is permitted per Sec 7.12.10.4.). The application is also contingent upon the approval of the additional requests by the applicant, in that they are seeking to vacate an alley directly to the west in order to develop on the lot and a conditional use for a gravel outdoor storage.

Basis for Approval (12.4.1.1):

I. Hardship.

- The hardship is unique to the property and is not or will not be caused by the actions or inactions of the applicant.
- There are exceptional conditions creating an undue hardship applicable only to the property involved or the intended use which do not apply generally to the other land areas or uses within the same zoning district.

II. Special Privilege. A variance shall not confer any special privilege that is denied to other lands or structures in the same zoning district.

III. Literal Interpretation. The literal interpretation of the provisions of the regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district and would cause unnecessary and undue hardship on the applicant.

IV. Reasonable Use. The applicant cannot make reasonable use of the property without the requested variance.

V. Minimum Required. The granting of a variance is the minimum variance that will make possible the reasonable use of the land or structure.

VI. Conformance with the Purposes of this Code. The granting of a variance will not conflict with the purposes and intent expressed or implied in the Land Development Code.

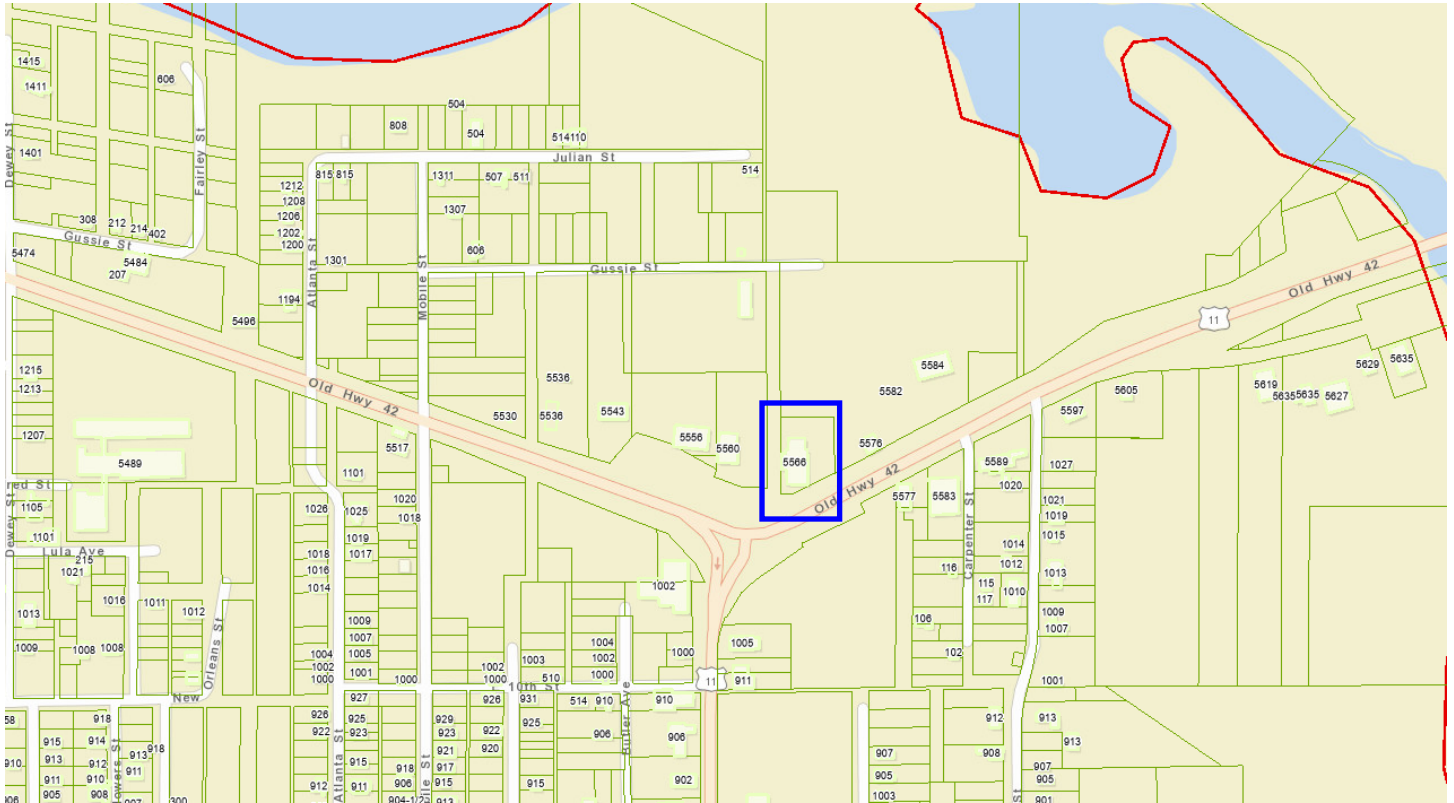
SUBJECT PARCEL: 5566 Old Highway 42

Michael Kent Myatt, Owner, and Joel Ford, Engineer

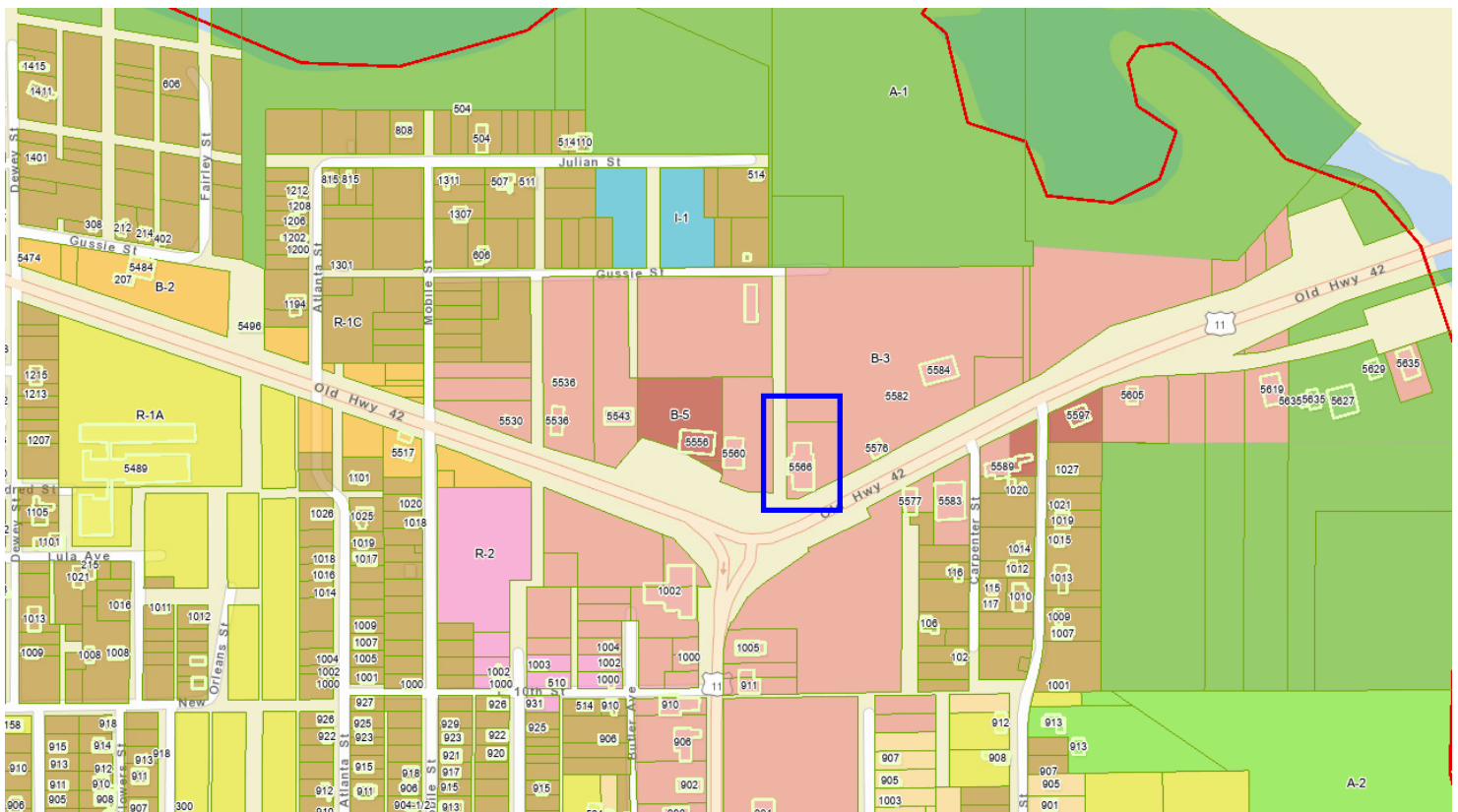
A petition has been filed by Michael Kent Myatt, owner, and Joel Ford, engineer, as required in the Land Development Code, Ord. No. 3209, to request a variance from section 7.12.10.4 “Maximum outdoor equipment storage space of 50%” to exceed the allowable amount to “64%” for a variance of 14% for a certain property located at 5566 Old Highway 42 (Parcel No.: 2-029A-03-031.00; PPIN 15065 Forrest County, Ward 2).



Vicinity Map—Ward 2



Zoning—B-3



Site Aerial



SURROUNDING AREA

**Northern Direction: B-3/A-1 Parcels
and remainder of alley**



**Southern Direction: B-3 Undeveloped
/ Intersection of Bouie and HWY 42**



Eastern Direction: B-3

Restaurant and Tow Yard (Legal non-conforming)



**Western Direction: B-3 Deviney
Construction**

Site Plan

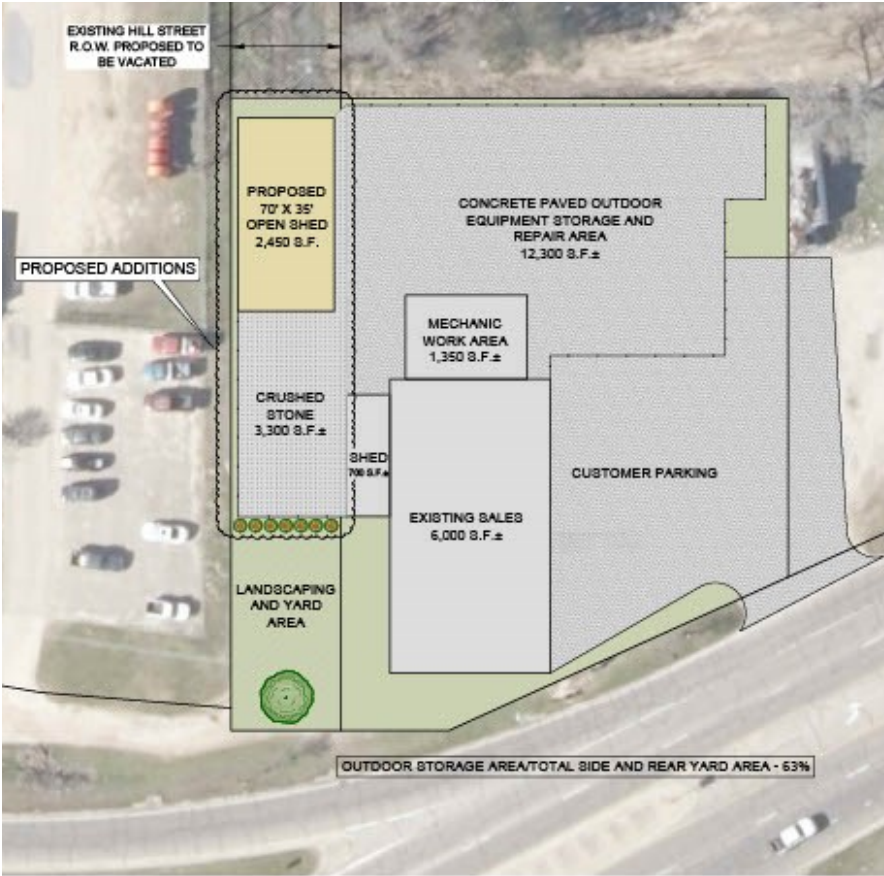


EXISTING PROPERTY OWNERSHIP AND VICINITY MAP
1" = 50'



CONCEPTUAL UNDERWOOD OUTDOOR POWER ADDITIONS AND IMPROVEMENTS
1" = 20'

Focused View



CONCEPTUAL UNDERWOOD OUTDOOR POWER ADDITIONS AND IMPROVEMENTS

Variance Information

The Board of Adjustment has the responsibility to hear and make recommendation on requests for variances to the requirements of this Code (per Section 11.4.). Section 12.4.1 Variances are departures from the standards of the Land Development Code, except land use, which will not be contrary to the public interest and where, owing to conditions peculiar to the property and not as a result of the action of the applicant, a literal enforcement of this Code would result in unnecessary and undue hardship.

The following conditions must be met before a variance can be recommended. Not all criteria must be met. However, a strong application will meet multiple criteria.

Approval Criteria.

A variance is not a right, but a privilege that property owners meeting the following criteria may request. These criteria are to be used to consider all variance requests. It shall be the burden of the applicant to prove that the request meets these criteria. Use this worksheet or format your own to demonstrate the following criteria.

1. **Hardship.** (a) The hardship is unique to the property and is not or will not be caused by the actions or inactions of the applicant. (b) There are exceptional conditions creating an undue hardship applicable only to the property involved or the intended use which do not apply generally to the other land areas or uses within the same zoning district.

b. Due to one increased business, two the pandemic I am asking for a variance to add a fenced area to the alley vacated next to my property. The variance I need is to add gravel to this vacated ROW that is over the 50% allowed in building codes for outside storage and graveled areas. Code 7.12.10.4

The pandemic has created supply chain issues which have created shortages in the lawn and garden retail space. Typically, mower Mfg we able to produce and store at their factory what was needed in the retail chain during the heavy retail selling months. In the past if I needed to replace 10 retailed mowers I just placed an order and they would show up in 3-5 days. That is no longer the case. Retailers are placing yearly orders in October/November and the manufacturers are sending to us some percentage of what we are going to get for the year. If retailers are not able accept large chunks of mowers when they are ready, they will miss out on units to sell for 4-6 months. I need to have approximately 4000 Sq-Ft (90 mowers) of storage space to store what I will be receiving in January-February. I do have some options, I can lease warehouse space, this is expensive and has been in short supply around my location. In addition, we must trailer mowers between the store and the warehouse which creates additional inefficiencies.

After the alley is vacated, Deviney Construction has agreed verbally to let me have their portion of the vacated alley for my addition.

2. **Special Privilege.** A variance shall not confer any special privilege that is denied to other lands or structures in the same zoning district.

No. My direct neighbor to the west, Deviney Construction's property is ~85% storage for large commercial equipment, My neighbor to the east, Jimmy Odom and Scott Taylor's parking lots are 95% gravel. A restaurant and towing lots are operated out of these properties. What I am

Variance Information

asking for is not out of the norm for businesses in this area. Bordering my property to the north east are two large commercial abandoned car storage lots.

I feel I have been a good steward for this property since taking ownership in 2014. When I purchased the property there were abandoned semi trailers, these were removed. The front of the store had pavement, which I had removed and replanted with grass. We have always maintained our portion of the Hill St alley.

3. **Literal Interpretation.** The literal interpretation of the provisions of the regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district and would cause unnecessary and undue hardship on the applicant.

Non Applicable

4. **Reasonable Use.** The applicant cannot make reasonable use of the property without the requested variance.

I am completely out of space and my business will be throttled if I do not develop a plan to increase storage. This is the most cost-effective option.

5. **Minimum Required.** The granting of a variance is the minimum variance that will make possible the reasonable use of the land or structure.

In my opinion, yes.

6. **Conformance with the Purpose of this Code.** The granting of a variance will not conflict with the purposes and intent expressed or implied in the Land Development Code

12.4.1.2 Conditions of Approval. In recommending the granting of a variance, the Board of Adjustment may require appropriate conditions and safeguards in conformity with this Code. Violation of such conditions and safeguards, when made a part of the terms under which a variance is granted, shall be deemed a violation of this Code. The recommendation of the Board of Adjustment shall be presented to the City Council for final action.



Memorandum

To: Mayor Toby Barker and Members of City Council

From: Ginger Lowrey, Planning Administrator

cc: Nathan Satcher, Planner

Date: Tuesday, December 20, 2022

Re: Approve or Deny a petition filed by Trace 4th Street, LLC., to request a conditional use for “restaurant, without drive-through” in a B-2 Zone (Neighborhood Business District) for a certain property located at 1001 Main St (PPIN's 18818, 18817 Forrest County, Ward 2). The Planning Commission recommended to Approve on December 7, 2022 with the condition that the dumpster location as shown on site plan presented to the Planning Commission (in front setback) be permitted.
File Number: 2022-935
Minute Book #

Summary

1001 Main Street – Conditional Use, Use approval – “restaurant, without drive-through” in B-2 Zoning District with condition

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.



**Planning Commission
Case Fact Sheet**

Name of Petitioners: Trace 4th St. LLC, Owner

Address of Property:	Tax Parcel	PPIN:	Ward:
1001 Main Street	2-029G-03-609.00	18818	2
	2-029G-03-608.00	18817	

Request: **Conditional Use – “Restaurant, without Drive-thru”**

Purpose of Request: To consider an application to request a conditional use for “restaurant, without drive-through” in a B-2 Zone (Neighborhood Business District) for a certain property located at 1001 Main St (Parcel No.: 2-029G-03-609.00, 2-029G-03-608.00; PPIN 18818, 18817 Forrest County, Ward 2).

Applicant Summary: See Attached

Applicable Regulations:

SECTION 4 **4.5.9 B-2 Neighborhood Business District.** The purpose of the B-2 District is to provide for retail and personal service uses in locations convenient to residential neighborhoods consistent with comprehensive planning policies. This district is consistent with the Neighborhood Business District in the Comprehensive Plan.

SECTION 5 USE REGULATIONS

5.4.36 Restaurants with and Without Drive-Through Service.

~~5.4.36.1 All restaurants with drive-through service shall provide a minimum of five stacking spaces associated with each drive through window.~~

~~5.4.36.2 No required or intended stacking spaces shall block the safe flow of motoring and pedestrian traffic within the parking lot.~~

~~5.4.36.3 Drive-through facilities located closer than 300 feet to a~~

Request for: **Conditional Use – “Restaurant, without Drive-thru”**
~~residential use shall operate no earlier than 6:00 a.m. or later than 12:00 a.m.~~

~~5.4.36.4 No part of the active use area of a drive through restaurant, including the drive through, menu, and window, may be located closer than 300 feet to a lot containing a legal, conforming residential use.~~

~~5.4.36.5 All restaurants located within the B-1 and B-2 districts shall be limited to a capacity of 80 seats.~~

~~5.4.36.6 All restaurants that abut residential districts shall be screened entirely from view of adjacent residential properties by an opaque fence and/or vegetative screen to a minimum height of six feet. Such screen shall meet the minimum height requirement at the time of issuance of a certificate of occupancy.~~

TABLE 7.11-2 Zoning Buffer Requirements

B-2 – R-1A required 20' landscaped buffer

Present Zoning:	This parcel is currently zoned B-2 Neighborhood Business District
Present Use:	Vacant Building
Future Land Use:	Neighborhood Business Corridor District
Surrounding Zoning and Land Use:	North: B-2 Neighborhood Business District / R-1A Single Family Residential South: B-2 Neighborhood Business District East: R-1C Single-Family Residential West: B-2 Neighborhood Business District
Letters or Concerns stated:	The Planning Division Office has not received any letters or other written communications relative to this case as of November 22, 2022.
History / Background:	The applicant met with staff in Pre-Application to discuss development of the site. The applicant wants to establish a restaurant with an outdoor seating/event space that abuts the Longleaf Trace. B-2 Zoning requires a conditional use to establish a restaurant. The property directly to the north of the Longleaf Trace is currently under construction as a restaurant and the applicant also received Planning Commission Approval for it to be established in December of 2021. A site plan has not yet been approved in Site and Review Committee and exterior changes have not yet been approved through the Hattiesburg Historic Conservation Commission. Site and Design Review Committee is unable to approve the dumpster in the location as proposed. However, the Planning Commission may be able to approve as a Condition if deemed appropriate for the location and overall site design.
Option:	12.3.3.2 Additional Approval Criteria. In addition to the standards [5.4.36], the applicant for a request for the Planning

Request for: **Conditional Use – “Restaurant, without Drive-thru”**

Commission to approve a use shall be required to demonstrate that his/her proposal addresses the following additional requirements, except that the Planning Commission may waive any one or more criteria that it determines are not applicable based upon the expected impact of the proposal.

- i. Determination that adequate public facilities and services will be available concurrent with the impacts of the development as evidenced by letters of sufficiency from utilities and schools and a determination by the city engineer that the available capacity of existing streets can safely provide access to the site.
- ii. The proposed development will be compatible with surrounding uses and will protect adjacent properties through the following measures:
 - Protection of privacy. The proposed plan shall provide reasonable visual and auditory privacy for all dwelling units located within and adjacent to the site. Fences, walls, barriers and / or vegetation shall be arranged to protect and enhance the property and to enhance the privacy of on-site and neighboring occupants.
 - Protection of use and enjoyment. The proposed plan shall be designed and arranged to have minimal negative impact on the use and enjoyment of adjoining property.
 - Compatible design and integration. The use meets all design criteria required by this Code that apply and is designed to integrate well both on and off site.

12.3.3.1 Compliance Required. Uses requiring Planning Commission approval, as noted in the Tables of Uses in Section 5 of this Code, shall be approved subject to this Section. Any application for such use must comply with all applicable standards that apply to similar uses and properties in the zoning district in general, the specific conditions listed for that use in Section 5, and the following criteria. Where conflicts exist, the Planning Commission shall determine which criteria apply on a case by case basis.

1. Does this application meet the conditions set forth in Section 5 for the requested use? If yes, please explain.

NO

2. Describe the effects the proposed use of utilities and facilities will have on the community.

MINIMAL, IF ANY, NEGATIVE EFFECTS. POSITIVE EFFECT DUE TO THE BUILDING BEING OCCUPIED AND MAINTAINED. PROVIDES COMMUNITY WITH PARK AND FOOD, ALONG WITH POTENTIAL COMMUNITY EVENTS.

3. Describe how the size of the site is appropriate for the proposed use.

THE EXIST LAND ADJACENT TO THE TRAIL PROVIDES A GREAT WALKABLE AMENITY UTILIZING THE EXISTING GREEN SPACE AND PROVIDING AMPLE SPACE FOR PATRONS TO GATHER TO ENJOY FOOD, ~~AND~~ THE TRAIL, AND EACH OTHER.

4. Will there be any additional pedestrian or vehicular traffic generated by the proposed use? YES

If yes, please explain:

THE HOPE IS TO PROVIDE A SAFER WALKABLE VENUE THAT INCREASE PEDESTRIAN TRAFFIC IN THE AREA

5. Will there be any elevation in the noise level resulting from this proposed use? YES

If yes, please explain:

EVENTS AND PEOPLE WILL ELEVATE THE NOISE
LEVEL. THIS BUILDING IS CURRENTLY VACANT AND
ABANDONED

6. What is the expected number of customers/employees per day? 30-60

7. Parking Requirements:

Commercial/Industrial: Paved parking will be provided for 9 vehicles, and
2 ADA vehicle(s); with _____ loading spaces. "OFF STREET
PARKING WILL
BE PROVIDED
LESS THAN A
BLOCK AWAY"

For more information please reference the Land Development Code Section 12.3.3.2.

SUBJECT PARCEL:

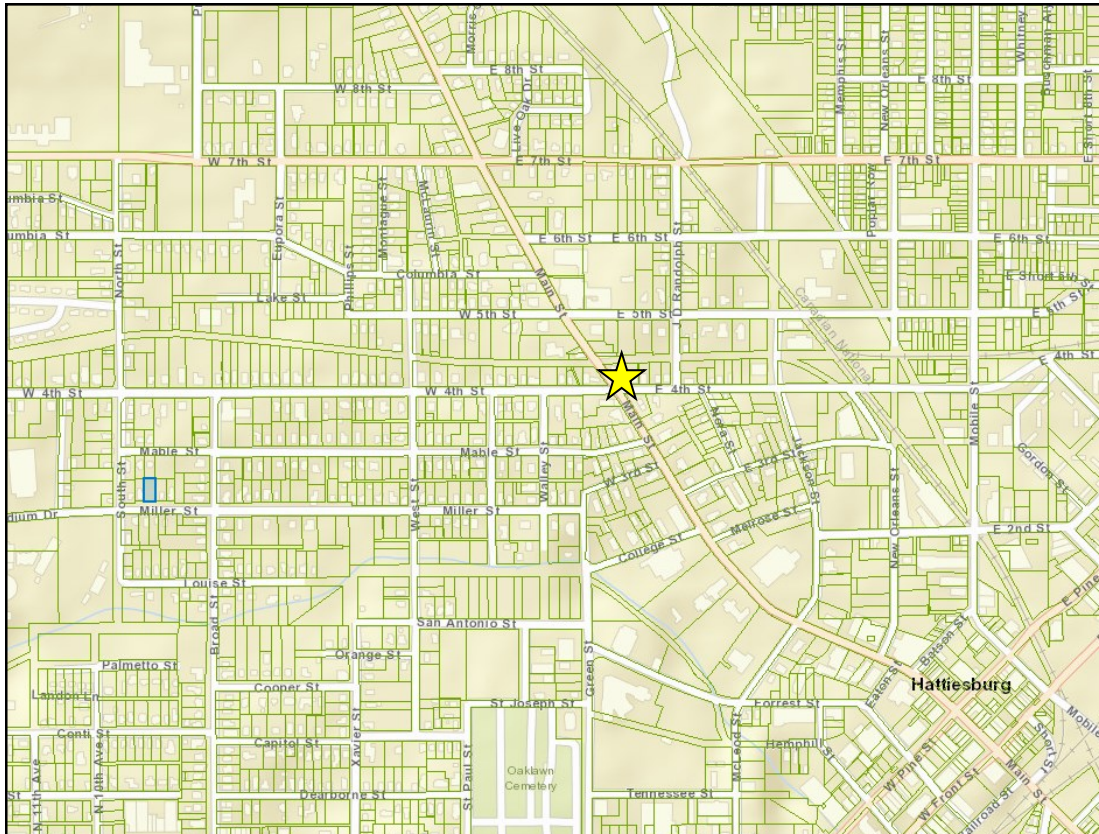
1001 Main St

Trace 4th St. LLC, Owner

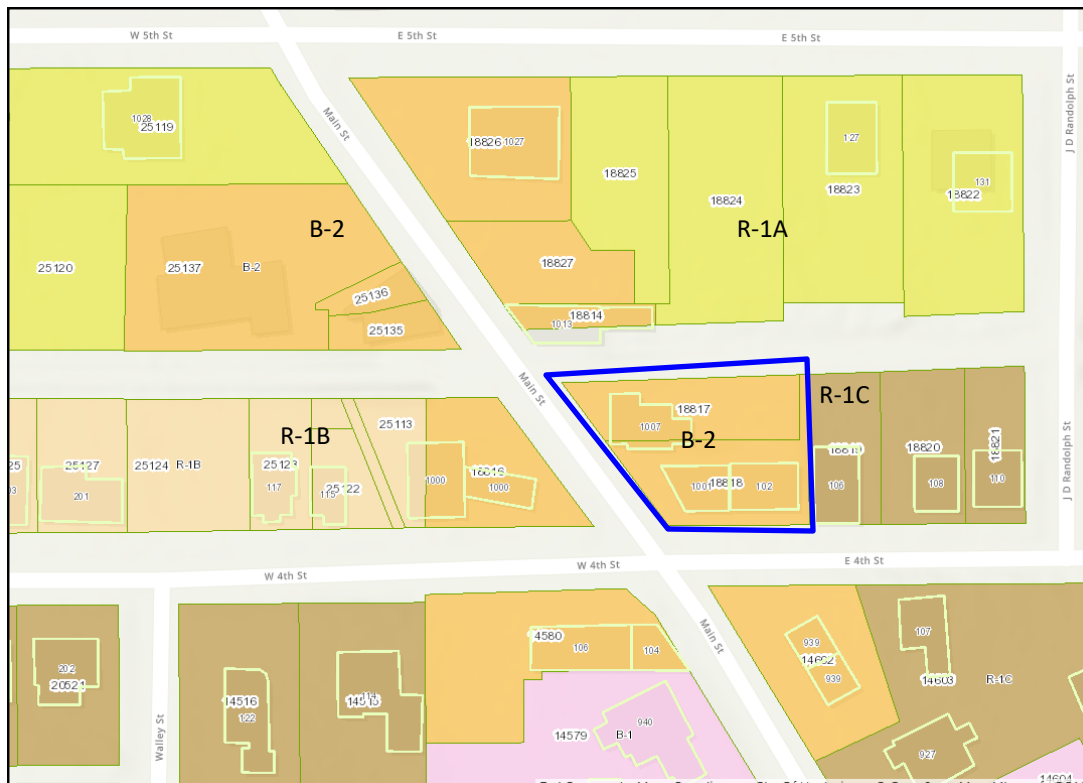
The petitioners request a conditional use for “restaurant, without drive-through” in a B-2 Zone (Neighborhood Business District) for a certain property located at 1001 Main St (Parcel No.: 2-029G-03-609.00, 2-029G-03-608.00; PPIN 18818, 18817 Forrest County, Ward 2).



Vicinity Map—Ward 2



Zoning- B-2



Site Aerial



SURROUNDING AREA

Northern Direction: B-2

Restaurant Under Construction

**(Approved as conditional use by
Planning Commission in December
2021)**



Southern Direction: B-2 commercial

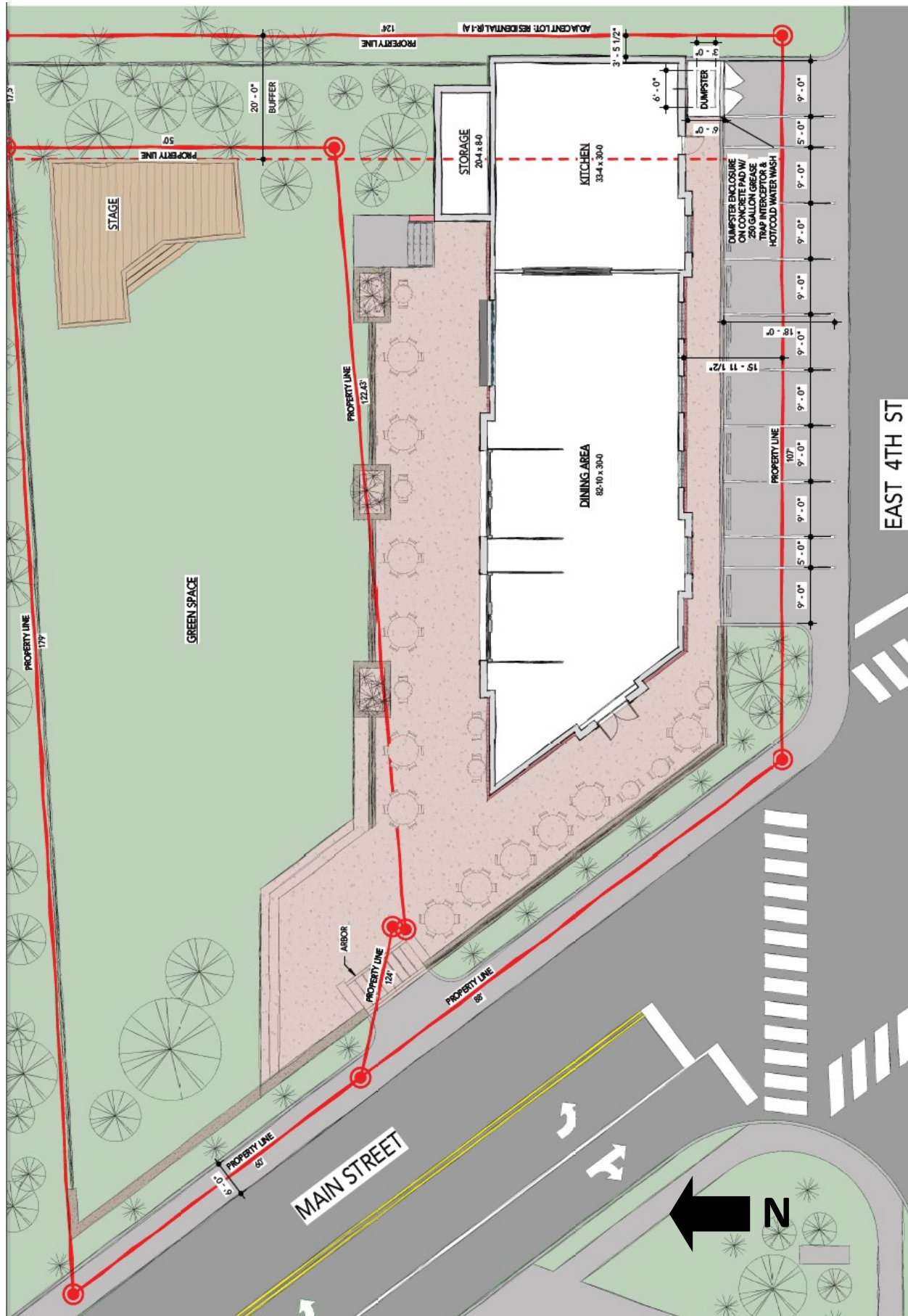


**Eastern Direction: R-1C—occupied
single family residential**

Western Direction: B-2 commercial



Site Plan



Conceptual Renderings



Conceptual Renderings





Memorandum

To: Mayor Toby Barker and Members of City Council

From: Ginger Lowrey, Planning Administrator

cc: Nathan Satcher, Planner

Date: Tuesday, December 20, 2022

Re: Approve or Deny a petition filed by Estacado Interests, LLC, , to request a variance from "Billboards 1000 lineal feet... from any other off-premise sign" and instead allow for a distance of "690 feet" from an off-premise sign for a variance of 310 feet and to vary from the required side setback of "15 feet" and instead allow for "0 feet" for a variance of 15 feet for a proposed billboard and to vary from – Pole Sign "Minimum 150' frontage on any premises freestanding sign" and instead allow for a minimum of "120 feet" frontage for a variance of 30 feet for a proposed on-premise pole sign for the property located at 5032 Hardy St (PPIN 18460, Lamar County, Ward 3). The Board of Adjustment recommended to Approve on December 7, 2022 with the condition the freestanding sign is a monument sign to be more appropriate for the scale of the property size.
File Number: 2022-949
Minute Book #

Summary

5032 Hardy Street – Variances – Billboard buffer, Billboard side setback, Freestanding signage per frontage – Ward 3

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.

Estacado Interests, LLC, applicant

Request for: **Required Billboard Spacing Variance, Billboard Setback Variance, and Freestanding sign minimum frontage variance**



**Board of Adjustment
Case Fact Sheet**

Name of Petitioners: Estacado Interests, LLC.

Address of Property:
5032 Hardy Street

Tax Parcel
051P-11-046.000

PPIN:
18460

Ward:
3

Request: **Required Billboard Spacing Variance, Billboard Setback Variance, and Freestanding sign minimum frontage variance. 3 Variances total for 2 signs**

Purpose of Request: To consider to request for a variance from section 10.6 Signs – Billboards “1000 lineal feet, measured radially, from any other off-premise sign” and instead allow for a distance of “690 feet” from an off-premise sign for a variance of 310 feet and to vary from the required side setback (section 10.6) of “15 feet” and instead allow for “0 feet” for a variance of 15 feet for a proposed billboard. The applicant also requests to vary from section 10.6 Signs – Pole Sign “Minimum 150’ frontage on any premises freestanding sign” and instead allow for a minimum of “120 feet” frontage for a variance of 30 feet for a proposed on-premise pole sign. The applicant requests three (3) total variances for two (2) signs (one off-premise sign/billboard and one on-premise sign) for the property located at 5032 Hardy St (Parcel No.: 051P-11-046.000; PPIN 18460, Lamar County, Ward 3)

Applicant Summary: See Attached

Applicable Regulations:

Estacado Interests, LLC, applicant

Request for: **Required Billboard Spacing Variance, Billboard Setback Variance, and Freestanding sign minimum frontage variance****SECTION 4****Section 10 – Signs****Table 10.6**

Table 10.6 - 2 Dimensional Requirements By Sign Type					
Sign Type	Sign Height/Width (max)	Sign Message Area (max) (sq. ft.)	Setback (min.)		Additional Criteria
			Front	Side	
On Premises Signs Freestanding					
Monument Sign	10'/None	All applicable zones except I-1 and I-2 – 50 square feet;	5'	15'	1 per 500' of parcel street frontage /2 on corner lot (1 per street) with 150' min. frontage for any on premises freestanding sign; bottom edge of message area is min 18" and max 30" above ground; dimensions include multitenant signs
		For I-1 and I-2 – 72 square feet			
Pole Sign	35'/20'	For B-3 – 1square foot sign message area/1' street frontage up to 200 square feet	10'	15'	1 per 500' of parcel street frontage/2 on corner lot (1 per street) with 150' min. street frontage for any on premises freestanding sign; Bottom edge of message area is min. 6' above ground; dimensions include multitenant signs
		B-5, I-1, I-2 – 2 square feet sign message area/1' street frontage up to 400 square feet			
Off Premises <u>Free Standing</u> (Billboards)					
Billboard Signs - B5, I-1 and I-2 Only	10' (min)/35' (max) Height 40' width	400 square feet	25' (Front and Rear)	15'	1 per lot, 1000 lineal feet measured radially, from any other off premises sign, maximum of 2 faces, and not within 100' of A or R zones

Section 10.10.3

Billboard signs shall be in a separate lease area with a clear zone radius where parking, storage, and other uses are prohibited. The lease area must be landscaped. No part of the billboard sign can overhang the boundaries of the lease area.

Present Zoning: B-5 Regional Business

Present Use: Automotive Maintenance and Repair / Vacant

Future Land Use: Regional Business Corridor

Surrounding Zoning:

Estacado Interests, LLC, applicant

Request for: **Required Billboard Spacing Variance, Billboard Setback Variance, and Freestanding sign minimum frontage variance**

and Land Use:

North: B-5 (Regional Business District)
South: B-5 (Regional Business District)
East: B-5 (Regional Business District)
West: B-5 (Regional Business District)

Letters or

Concerns stated:

The Planning Division Office has not received any letters or other written communications relative to this case as of November 29th, 2022. The applicant has not submitted letters of approval/denial from adjoining neighbors as of the writing of this report. The Board of Adjustment has the option to table the item until letters of approval/denial have been received.

History / Background:

The applicant met in Pre-Application to discuss the redevelopment of the site for a proposed gas station (Murphy USA). A legal non-conforming billboard is currently located on the site and will need to be removed for the redevelopment of this parcel. A perpetual easement is in place for the billboard and to develop the site, the developer is proposing to relocate and adjust the perpetual easement for the existing billboard and place it on the eastern boundary of the property in order to make more use of the site. The proposed location of the billboard places it within the required buffer range for the placement of new billboards, which is 1000 feet. The proposed placement would locate the billboard at 690 feet from the nearest billboard. The applicant also proposes to locate the billboard within the required side setback of 15 feet, reducing the setback to 0 feet. Setbacks for signs and billboards are the measurement from the leading edge of the billboard and not the pole. It is measured from the portion of the sign that extends the farthest out.

The applicant is also requesting a variance for their freestanding pole sign for the gas station. Our sign ordinance requires that properties have a minimum of 150' of linear frontage to establish a freestanding sign and the applicant is seeking a variance to reduce that requirement to 120 feet, as that is the maximum width of the lot.

Sign control and regulations are necessary to protect the beauty, character, economic and aesthetic value of land and to protect the safety, welfare, and public health of citizens. Because of their size and their intrusion, they raise concerns for communities. Along the Highway 98 / Hardy Street corridor west of Interstate 59, there are 27 billboards/off-premise signage, where all are considered legal and non-conforming in that they do not meet the minimum 1000 ft buffer distance.

Minimum lot widths for freestanding signs are also in place to protect communities, in that they prevent the establishment of free-standing signs on narrow lots. Minimum lot widths prevent the landscape from becoming cluttered with signs.

Estacado Interests, LLC, applicant

Request for: **Required Billboard Spacing Variance, Billboard Setback Variance, and Freestanding sign minimum frontage variance**

The city understands the need for signage, and one condition the board of adjustment could ask is that the proposed freestanding sign be installed meet the requirement of a monument sign, as opposed to a pole sign to help alleviate visual clutter along this corridor. Monument signs have a maximum height of 10 feet, whereas pole signs can be established at a maximum height of 35 feet.

Basis for Approval (12.4.1.1):

- I. Hardship.
 - The hardship is unique to the property and is not or will not be caused by the actions or inactions of the applicant.
 - There are exceptional conditions creating an undue hardship applicable only to the property involved or the intended use which do not apply generally to the other land areas or uses within the same zoning district.
- II. Special Privilege. A variance shall not confer any special privilege that is denied to other lands or structures in the same zoning district.
- III. Literal Interpretation. The literal interpretation of the provisions of the regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district and would cause unnecessary and undue hardship on the applicant.
- IV. Reasonable Use. The applicant cannot make reasonable use of the property without the requested variance.
- V. Minimum Required. The granting of a variance is the minimum variance that will make possible the reasonable use of the land or structure.
- VI. Conformance with the Purposes of this Code. The granting of a variance will not conflict with the purposes and intent expressed or implied in the Land Development Code.

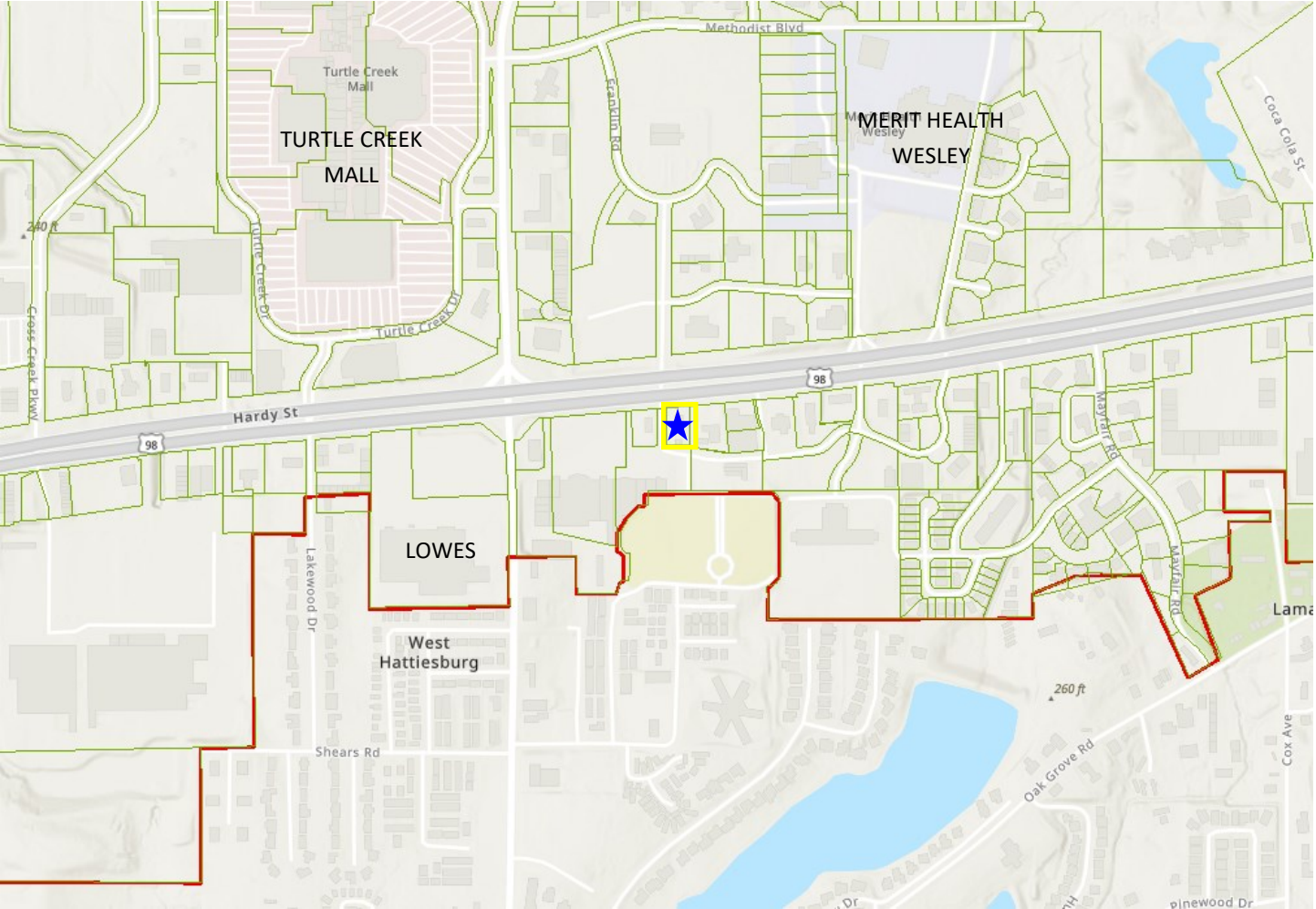
SUBJECT PARCEL: 5032 Hardy Street

Estacado Interests, LLC., Applicant

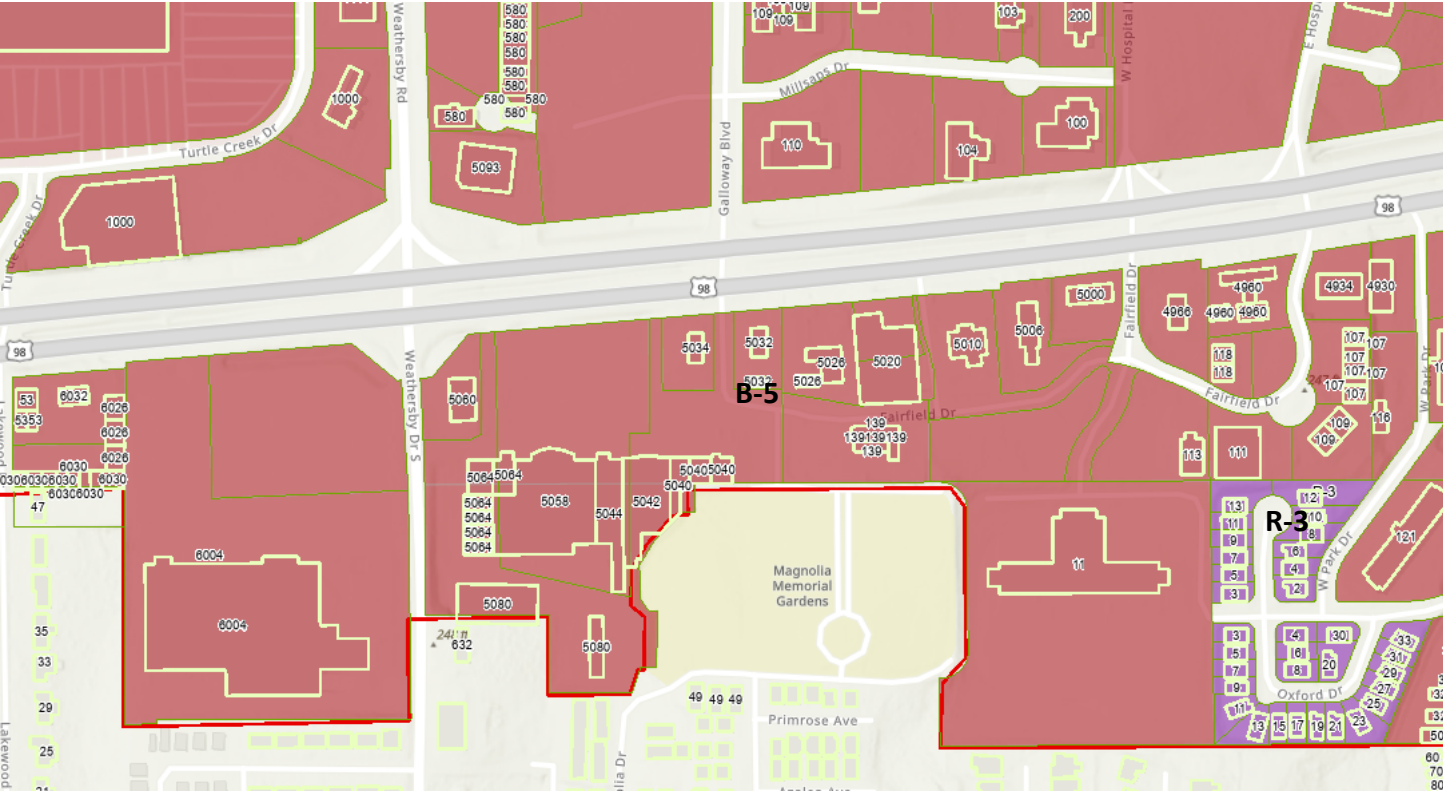
To consider to request for a variance from section 10.6 Signs – Billboards “1000 lineal feet, measured radially, from any other off-premise sign” and instead allow for a distance of “690 feet” from an off-premise sign for a variance of 310 feet and to vary from the required side setback (section 10.6) of “15 feet” and instead allow for “0 feet” for a variance of 15 feet for a proposed billboard. The applicant also requests to vary from section 10.6 Signs – Pole Sign “Minimum 150’ frontage on any premises freestanding sign” and instead allow for a minimum of “120 feet” frontage for a variance of 30 feet for a proposed on-premise pole sign. The applicant requests three (3) total variances for two (2) signs (one off-premise sign/billboard and one on-premise sign) for the property located at 5032 Hardy St (Parcel No.: 051P-11-046.000; PPIN 18460, Lamar County, Ward 3)



Vicinity Map—Ward 3



Zoning—B-5 (Regional Business)



Site Aerial



SURROUNDING AREA

Northern Direction: B-5 (Regional Business)



Southern Direction: B-5 (Regional Business)



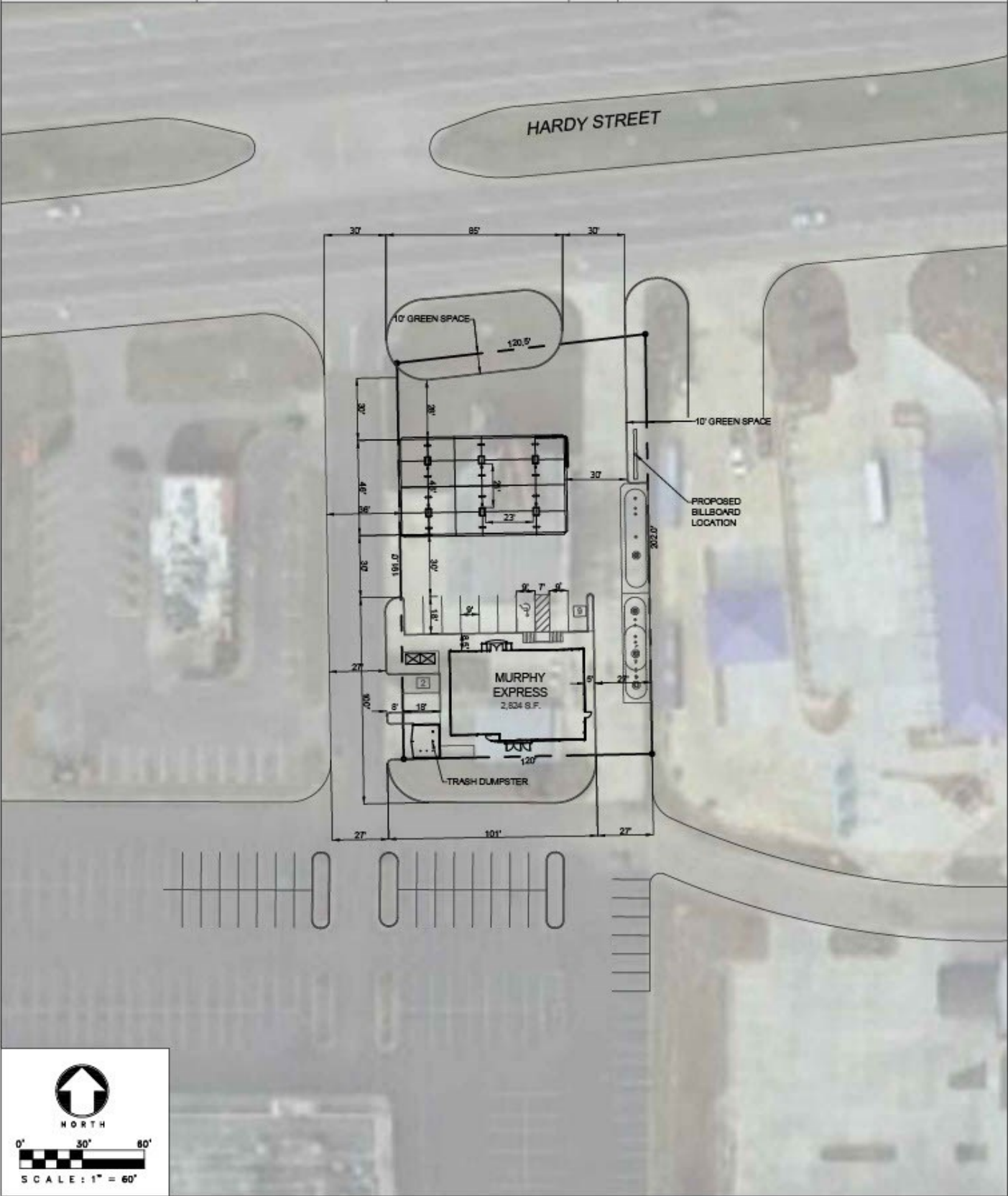
Eastern Direction: B-5 (Regional Business)



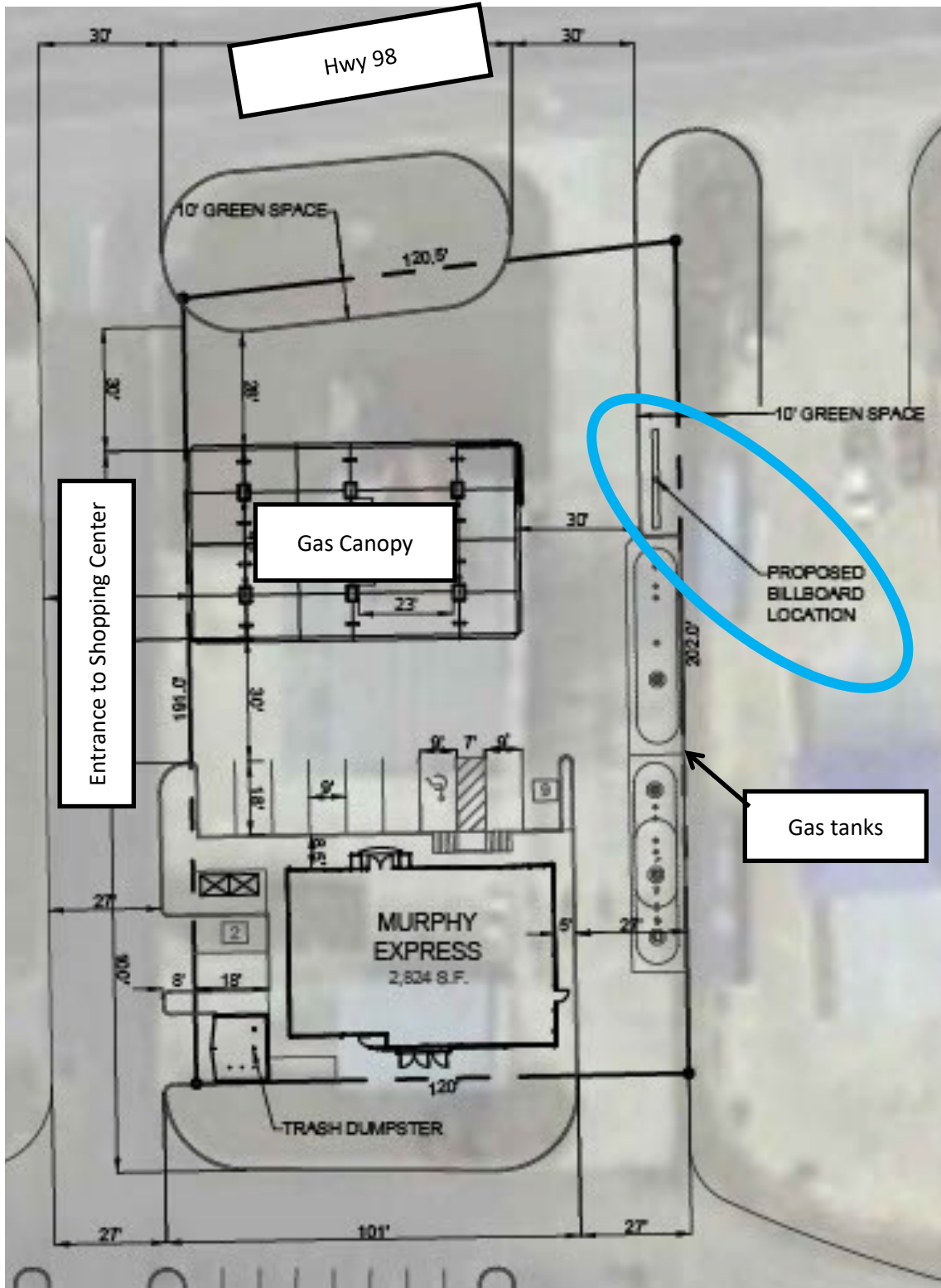
Western Direction: B-5 (Regional Business)

Preliminary Site Plan

PRELIMINARY SITE PLAN			HATTIESBURG, TEXAS HARDY STREET		NOTES: 1. THIS PRELIMINARY SITE PLAN IS FOR PLANNING PURPOSES ONLY. 2. THIS PRELIMINARY SITE PLAN MUST BE REVIEWED BY ALL GOVERNING JURISDICTIONS FOR COMPLIANCE. 3. ALL EXISTING CONDITIONS MUST BE VERIFIED. 4. ALL MEASUREMENTS ARE ESTIMATED.
PROTOTYPE:	MURPHY	DEVELOPER	DESIGNER	DATE	
BLDG SF:	2,824 SF	COMPANY: ESTACADO INTERESTS	COMPANY: STUDIO GREEN SPOT	10-13-22	
ACREAGE:	+/- 0.54 ACRES	NAME: DEVAN PHARIS	NAME: TOM TRONZANO		
PARKING PROVIDED:	11 SPACES	PHONE #: 940-550-8066	PHONE #: 469-990-0475		



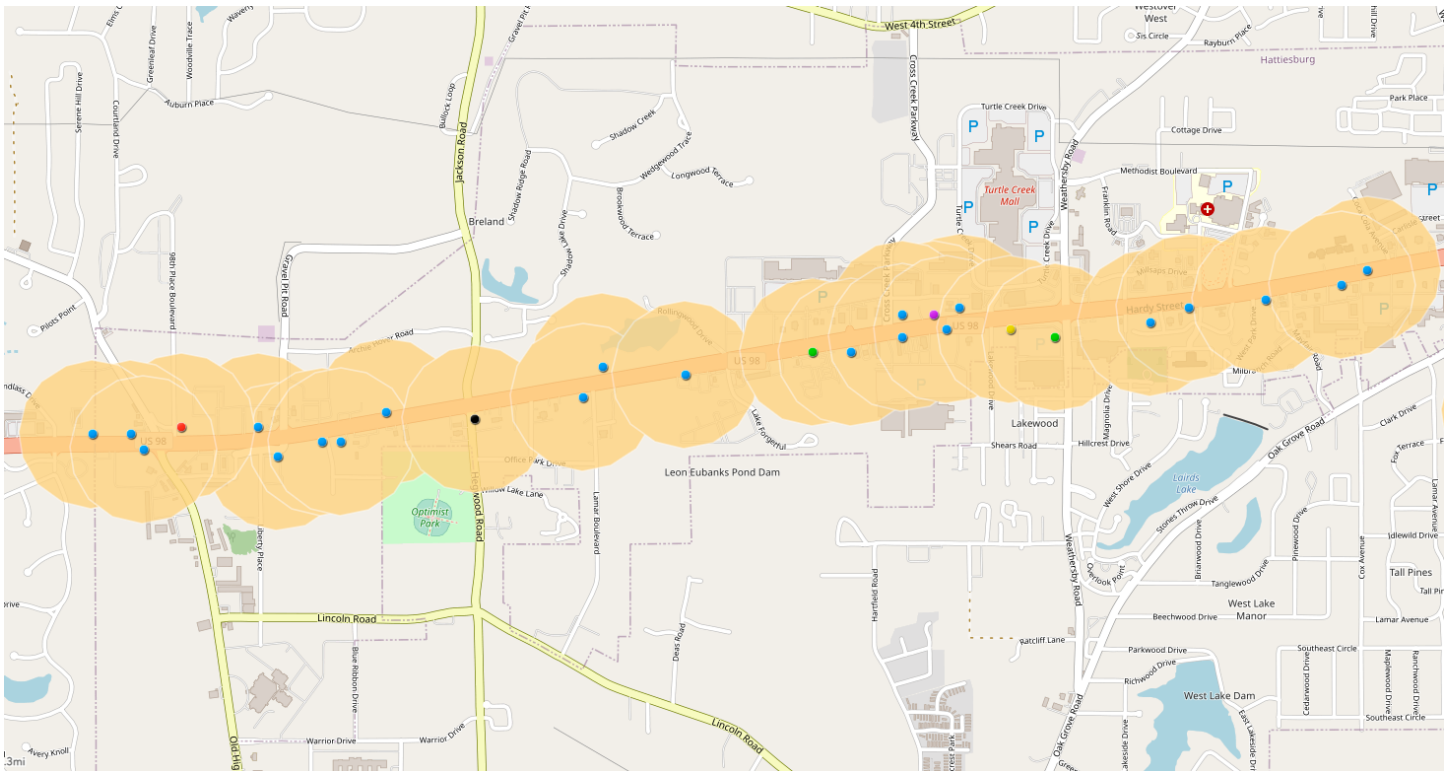
Focused View of Site Plan



Map of Existing Billboards on HWY 98 Corridor West of I-59

With 1000-foot buffer

(required minimum spacing for new billboards)



Variance Information

The Board of Adjustment has the responsibility to hear and make recommendation on requests for variances to the requirements of this Code (per Section 11.4.). Section 12.4.1 Variances are departures from the standards of the Land Development Code, except land use, which will not be contrary to the public interest and where, owing to conditions peculiar to the property and not as a result of the action of the applicant, a literal enforcement of this Code would result in unnecessary and undue hardship.

The following conditions must be met before a variance can be recommended. Not all criteria must be met. However, a strong application will meet multiple criteria.

Approval Criteria.

A variance is not a right, but a privilege that property owners meeting the following criteria may request. These criteria are to be used to consider all variance requests. It shall be the burden of the applicant to prove that the request meets these criteria. Use this worksheet or format your own to demonstrate the following criteria.

1. **Hardship.** (a) The hardship is unique to the property and is not or will not be caused by the actions or inactions of the applicant. (b) There are exceptional conditions creating an undue hardship applicable only to the property involved or the intended use which do not apply generally to the other land areas or uses within the same zoning district.

The hardship is the existing billboard is located within a perpetual easement with no termed lease near the center of the property, and can effectively remain in its current location forever. The property owner has no right to move or remove the billboard without Billboard owner's consent. The billboard cannot be relocated anywhere on the property and be in compliance with the spacing requirements between billboards as stated in the code.

2. **Special Privilege.** A variance shall not confer any special privilege that is denied to other lands or structures in the same zoning district.

There is no special privilege created by the variance request for other property owners. The billboard is already in place and has the right to stay there unless City intervenes to allow for its relocation to a more suitable and safer location within the property.

3. **Literal Interpretation.** The literal interpretation of the provisions of the regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district and would cause unnecessary and undue hardship on the applicant.

The literal interpretation of the code prohibits the property from ever being redeveloped into anything but an oil change or auto-service building. The building is currently a vacant oil change building and is 1 of 7 oil change facility buildings within a 1 mile radius.

Variance Information

4. **Reasonable Use.** The applicant cannot make reasonable use of the property without the requested variance.

The code prohibits the property from ever being used reasonably, as the existing building cannot be removed and no one is willing to lease the building for its limited uses of auto service or oil change because of the national competition and saturation in the immediate vicinity.

5. **Minimum Required.** The granting of a variance is the minimum variance that will make possible the reasonable use of the land or structure.

Because of the properties configuration orientation of the property to adjacent public and private roads, the billboard cannot be relocated, to a material degree, any further away from the nearest billboard, which is 690' to the East, and still allow the property to be used in a reasonable manner.

6. **Conformance with the Purpose of this Code.** The granting of a variance will not conflict with the purposes and intent expressed or implied in the Land Development Code.

The purpose of the code is to reduce the quantity of billboards and limit their proximity to one another. Because the current billboard has the right to remain for perpetuity, there is no way to remove it from the property. The billboard is also 690' from the next closest billboard which is only a 30% variance. Moving the billboard also allows for the removal of a billboard that overhangs a structure, which is not allowed per code.

12.4.1.2 Conditions of Approval. In recommending the granting of a variance, the Board of Adjustment may require appropriate conditions and safeguards in conformity with this Code. Violation of such conditions and safeguards, when made a part of the terms under which a variance is granted, shall be deemed a violation of this Code. The recommendation of the Board of Adjustment shall be presented to the City Council for final action.

Variance Information

The Board of Adjustment has the responsibility to hear and make recommendation on requests for variances to the requirements of this Code (per Section 11.4.). Section 12.4.1 Variances are departures from the standards of the Land Development Code, except land use, which will not be contrary to the public interest and where, owing to conditions peculiar to the property and not as a result of the action of the applicant, a literal enforcement of this Code would result in unnecessary and undue hardship.

The following conditions must be met before a variance can be recommended. Not all criteria must be met. However, a strong application will meet multiple criteria.

Approval Criteria.

A variance is not a right, but a privilege that property owners meeting the following criteria may request. These criteria are to be used to consider all variance requests. It shall be the burden of the applicant to prove that the request meets these criteria. Use this worksheet or format your own to demonstrate the following criteria.

1. **Hardship.** (a) The hardship is unique to the property and is not or will not be caused by the actions or inactions of the applicant. (b) There are exceptional conditions creating an undue hardship applicable only to the property involved or the intended use which do not apply generally to the other land areas or uses within the same zoning district.

The site currently has a pylon sign. We are requesting a variance for the minimum frontage required for a pylon sign. Our site is approximately 30' under the 150' requirement. Both neighbors have pylon signs, as do most properties along this corridor. Preventing us from having a pylon sign puts us at a severe disadvantage and creates an undue hardship for our property as it relates to other lots nearby and in our zoning district.

2. **Special Privilege.** A variance shall not confer any special privilege that is denied to other lands or structures in the same zoning district.

There is an existing pylon sign on the property and both of our neighbors both have pylon signs, one of which also has less than 150' of frontage. Therefore, no special privilege exists.

3. **Literal Interpretation.** The literal interpretation of the provisions of the regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district and would cause unnecessary and undue hardship on the applicant.

Our site is adjacent to a shared access drive on the West side which, if taken into account, effectively gives our site 150' of frontage. Literal interpretation of the code excludes this drive, which is critical to our property functionality and shouldn't be without consideration with this request.

Variance Information

4. **Reasonable Use.** The applicant cannot make reasonable use of the property without the requested variance.

5. **Minimum Required.** The granting of a variance is the minimum variance that will make possible the reasonable use of the land or structure.

There is no way to locate the sign anywhere on the property that would comply more closely with the 150' requirement

6. **Conformance with the Purpose of this Code.** The granting of a variance will not conflict with the purposes and intent expressed or implied in the Land Development Code.

Because of the 30' shared drive isle discussed above and its adjacency to our property, our variance request follows the spirit of the code.

12.4.1.2 Conditions of Approval. In recommending the granting of a variance, the Board of Adjustment may require appropriate conditions and safeguards in conformity with this Code. Violation of such conditions and safeguards, when made a part of the terms under which a variance is granted, shall be deemed a violation of this Code. The recommendation of the Board of Adjustment shall be presented to the City Council for final action.

Variance Information

The Board of Adjustment has the responsibility to hear and make recommendation on requests for variances to the requirements of this Code (per Section 11.4.). Section 12.4.1 Variances are departures from the standards of the Land Development Code, except land use, which will not be contrary to the public interest and where, owing to conditions peculiar to the property and not as a result of the action of the applicant, a literal enforcement of this Code would result in unnecessary and undue hardship.

The following conditions must be met before a variance can be recommended. Not all criteria must be met. However, a strong application will meet multiple criteria.

Approval Criteria.

A variance is not a right, but a privilege that property owners meeting the following criteria may request. These criteria are to be used to consider all variance requests. It shall be the burden of the applicant to prove that the request meets these criteria. Use this worksheet or format your own to demonstrate the following criteria.

1. **Hardship.** (a) The hardship is unique to the property and is not or will not be caused by the actions or inactions of the applicant. (b) There are exceptional conditions creating an undue hardship applicable only to the property involved or the intended use which do not apply generally to the other land areas or uses within the same zoning district.

The property is 120' wide and less than 0.55 acres in size. After imposing the 15' billboard setback from side property lines, the property is left with 90' of develop-able width. There is also an existing billboard within the property overhanging a vacant oil change building. The existing billboard is within a perpetual easement with no termed lease, and can effectively remain in its current location forever. The hardship at hand is the existing billboard location and the overall size and narrowness of the property

2. **Special Privilege.** A variance shall not confer any special privilege that is denied to other lands or structures in the same zoning district.

There is no special privilege created by the variance request for other property owners. The other billboards in this area are encroaching in front and side setbacks.

3. **Literal Interpretation.** The literal interpretation of the provisions of the regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district and would cause unnecessary and undue hardship on the applicant.

Variance Information

4. **Reasonable Use.** The applicant cannot make reasonable use of the property without the requested variance.

Again, there is an existing billboard within the property overhanging a vacant oil change building. The existing billboard is within a perpetual easement with no termed lease, and can effectively remain in its current location forever. The billboard owner will not agree to remove the billboard under any circumstances, but is willing to allow it to be relocated within the property. Without the requested variance, there is no way to place the billboard anywhere within the property, which prohibits the redevelopment of the property as a whole.

5. **Minimum Required.** The granting of a variance is the minimum variance that will make possible the reasonable use of the land or structure.

The requested variance of a 0' side billboard setback is the minimum required variance to be able to repurpose the property for uses allowed in this zoning district. It is important to note that most uses allowed in this zoning district would still not be able to fit on the some 110' of remaining width.

6. **Conformance with the Purpose of this Code.** The granting of a variance will not conflict with the purposes and intent expressed or implied in the Land Development Code.
-
-
-
-
-

12.4.1.2 Conditions of Approval. In recommending the granting of a variance, the Board of Adjustment may require appropriate conditions and safeguards in conformity with this Code. Violation of such conditions and safeguards, when made a part of the terms under which a variance is granted, shall be deemed a violation of this Code. The recommendation of the Board of Adjustment shall be presented to the City Council for final action.



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Shannon Weaver-Harris, Captain-Fleet
cc: Kermas Eaton, City Clerk
Date: Tuesday, December 20, 2022
Re: Adopt an Order to approve the sale of a personal service weapon to retired police Officer Tommy Cook pursuant to Mississippi Code Annotated 45-9-31.
File Number: 2022-940
Minute Book #

Summary

Adopt an order to approve the sale of a personal service weapon, Glock 17 Model 9mm caliber asset ID # (New) Serial Number BSHT 945) to retired police Officer Tommy Cook.

Recommendation Statement

I recommend purchase of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.



HATTIESBURG POLICEMEN'S BENEFIT FUND, Inc.

300 KLONDYKE STREET
HATTIESBURG, MISSISSIPPI 39401



December 7, 2022

Chief Peggy Sealy
Hattiesburg Police Department
300 Klondyke Street
Hattiesburg, MS 39401

Ref: Officer Tommy Cook's Service Weapon

Dear Chief Sealy,

This is my request asking the Hattiesburg Police Department to allow the Hattiesburg Police Benevolent Association to purchase a service weapon for Officer Tommy Cook.

Officer Tommy Cook's, (**Glock 17 9mm caliber asset ID# (New) serial number BSHT945**), on Cook's behalf for a sum of one hundred dollars (\$100.00).

Officer Tommy Cook retired from Hattiesburg Police Department on January 21, 2022 and this is a procedure we have approved for other retiring officers and it is allowed under the MS law, statute 45-9-131.

Should you need any additional information, please don't hesitate to contact me.

Sincerely,

Hattiesburg Police Department's Benevolent Assoc.
601-554-3749 *Phone*
601-545-4937 *Fax*



Memorandum

To: Mayor Toby Barker and Members of City Council

From:

cc:

Date: Tuesday, December 20, 2022

Re: Approve Agreement between the City of Hattiesburg and Southern Pines Animal Shelter for animal shelter management and services for a term beginning October 1, 2022, through September 30, 2023 and authorize the Mayor to execute in duplicate.
File Number: 2022-956
Minute Book #

Summary

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.

STATE OF MISSISSIPPI, CITY OF HATTIESBURG

SOUTHERN PINES ANIMAL SHELTER CONTRACT

This contract between The City of Hattiesburg and Southern Pines Animal Shelter (hereinafter the "Contract") is made as of October 1, 2022, (the "Effective Date") by and between CITY OF HATTIESBURG (hereinafter Hattiesburg City or The City) and SOUTHERN PINES ANIMAL SHELTER (hereinafter "Southern Pines").

WHEREAS, Southern Pines constitutes an animal shelter on property that it owns in Hattiesburg City (hereinafter "Animal Shelter"); and

WHEREAS, the City deems it to be in the best interest of the citizens of Hattiesburg City to enter into a Contract with Southern Pines for the operation and administration of the Animal Shelter for animals intaked by Hattiesburg Animal Control and citizens of Hattiesburg City including prevention of, response to, and disposition of abused, abandoned, unwanted and stray companion animals (canines and felines) as outlined in the Contract to follow; and

WHEREAS, The City and Southern Pines have agreed to this new Contract that will supersede and replace any previous agreements;

THEREFORE, the parties to this Contract, in consideration of these promises, the mutual covenants and conditions contained herein and other valuable consideration by each party hereto, do hereby agree to terminate existing agreements as of the Effective Date and covenant and agree as of the Effective Date as follows:

Article I. Services

Section 1.01 Southern Pines shall have physical possession and control of the Animal Shelter and be responsible for ongoing maintenance of the building and all animals on the Animal Shelter premises.

Section 1.02 During the Term of this Contract, Southern Pines shall receive and provide for the humane disposition of dogs and cats running at-large as delivered into its custody by Animal Control and law enforcement officers of Hattiesburg City during intake hours, which can be safely and adequately kept by Southern Pines until time of disposition.

Section 1.03 Southern Pines is a privately owned and operated entity. The Shelter's intake hours are 9am-4:30pm Monday, Tuesday, Thursday, and Friday, except on holidays. Animals will not be accepted before 9am, after 4:30pm, or on any Wednesdays, weekends, or holidays except in cases of bite quarantines, dangerous animals, or owner arrests.

Section 1.04 Animal Control personnel, law enforcement, and other agents of the City are not authorized to unlock the gate or enter Southern Pines premises without a Southern Pines staff member present. In cases of after hours or holiday emergencies, a Southern Pines agent must be contacted to meet the officer or agent at the Shelter.

Section 1.05 Southern Pines observes the following holidays and is fully closed to the public and Animal Control on these days:

- New Year's Day, January 1st
- Martin Luther King Jr. Day, January 16th
- Easter Day, April 9th
- Memorial Day, May 29th
- Independence Day, July 4th
- Labor Day, September 4th
- Thanksgiving Day, November 23rd
- Christmas Eve, December 24th
- Christmas Day, December 25th

Section 1.06 Residents of Hattiesburg City will receive a 50% discount on surrender fees of all dogs and cats surrendered to Southern Pines Animal Shelter during the 12-month term of this contract. These fee costs are subject to change during the year and notice of fee changes will be relayed to Hattiesburg City. For the 2022-2023 contract year, the following are the surrender fees set forth by Southern Pines; citizens of Hattiesburg City will receive a 50% discount on these fees:

- Fees for canines are as follows:
 - \$150 per adult dog, no heartworm evaluation appointment required.
 - \$150 per litter of puppies under 5.5 months (no adult canines).
- Community cats are not eligible for surrender by the public to Southern Pines and must follow the Community Cat Protocol (Section 1.12) . Fees for cats are as follows:
 - \$150 per indoor, owner-surrendered cat.
 - \$150 per litter of social, inside kittens under 5.5 months (no adult canines) or social, outside kittens who are under 4 months.
- For no additional cost, we are able to have the mother of the puppy/kitten litter fixed, micro-chipped, vaccinated and returned to her family once the puppies/kittens are weaned. If surrendering mom, normal fees and procedures apply.

Section 1.07 In the case of large or exotic animals, livestock, and wildlife, or under unusual circumstances where the chief executive of Southern Pines or his/her designee reasonably determines that an animal(s) cannot be adequately, safely, or humanely housed at the shelter, or if the projected length of stay will adversely impact the animal's health as determined by Southern Pines' veterinary staff and/or chief executive of Southern Pines or his/her designee, Southern Pines will decline to accept the animal into its care.

Section 1.08 Southern Pines agrees to hold all stray dogs for a period of 5 days to allow owners adequate time to reclaim their lost pets. Animals surrendered to Animal Control or the Animal Shelter by an owner will not be held for any stray hold period. It is not the duty of the Shelter to verify the authenticity of ownership.

Section 1.09 No holds may be placed on any animal(s) by Hattiesburg Animal Control, law enforcement, The City, or any agents of The City, except in the case of pending bite quarantine, court cases, or court order. Pets may be returned to their owners at any time after impoundment at the discretion of Southern Pines, except in cases of pending bite quarantines, court cases, or court order.

Section 1.09A In cases where an animal has a valid and current rabies vaccination and the owner has a secure location to house the animal, the animal will be allowed to complete their bite quarantine in their home. The owner must meet all reclaim requirements as listed in Section 1.11, provide proof of rabies, and provide a valid address. Southern Pines is not responsible for monitoring home quarantines or contacting the owner at the conclusion of the quarantine.

Section 1.10 In cases where animals are determined to be ill or injured to such an extent that it would be inhumane to allow said animals to live or be deemed a threat to the health and safety of Southern Pines' staff or the public based on the animal's behavior, Southern Pines shall have the right to humanely euthanize the animal(s) in accordance with state law and at the discretion of Southern Pines' veterinary staff and/or chief executive of Southern Pines or his/her designee, regardless of stray hold or status.

Section 1.11 Southern Pines shall require that all persons who wish to reclaim possession of their pet show proof of ownership and pay redemption and boarding fees ¹ as set by Southern Pines. Photographs of the pet and/or medical records for the pet may constitute proof of ownership. Owners are not required to show proof of ownership if the pet has a nametag or microchip registered to the reclaiming owner and the reclaiming owner produces valid ID.

For the 2022-2023 Contract, the following are the return to owner fees set forth by Southern Pines:

- An animal that enters the Animal Shelter with identification (ID tag or registered microchip) will not be subject to any return to owner fees if the animal is reclaimed within 24 hours of impoundment. If the animal is not reclaimed within 24 hours after impoundment, regular fees apply.
- An unaltered animal that will be reclaimed intact: \$200 + \$20 per day of impoundment
 - Each additional offense adds \$150 to the base return to owner fee (ie. second offense= \$350 + \$20 per day of impoundment)
- An unaltered animal that will be fixed and microchipped upon reclamation: \$25 total
- Altered animals reclaimed at any point, with or without microchipping: \$25

¹ These fees may change on an annual basis which may occur during the contract term based on cost of care. If fees are updated, the City will receive a copy of the updated fees in writing in advance of the change, and fees will be updated on the Shelter website.

Section 1.11A An animal that enters the Animal Shelter with identification (ID tag with contact info or registered microchip) will not be subject to any redemption or boarding fees if the animal is reclaimed within 24 hours of impoundment. If the animal is not reclaimed within 24 hours after impoundment, regular fees apply.

Section 1.12 Southern Pines will alter, immunize against rabies, ear-clip, and release all at-large cats (hereinafter "Community Cats") back to the place where they were initially impounded regardless of the animal's intake type, age, or temperament as long as Southern Pines determines the animal to be reasonably healthy. Neither Animal Control nor The City nor any agents of The City reserve the right to make exceptions to this Section. Community Cats determined to be nuisance animals by

Southern Pines and the City of Hattiesburg will be provided with a disposition that is in the best interest of public health and safety, as determined by Southern Pines, in accordance with State law (may include euthanasia).

Section 1.12A Community Cats may be determined to be nuisance animals if they meet all of the following criteria: 1. They have been previously impounded to the shelter, fixed, vaccinated, ear-clipped, and released 2. The complainant signs a Nuisance Cat form recognizing that the cat may be euthanized 3. The cat poses a reasonable health or safety risk to the complainant, complainant's pets, or the Community 4. The impounding Animal Control officer provides the signed Nuisance Cat form to Southern Pines staff; this form must accompany the cat and will not be accepted later 5. If any of these criteria are not met, the cat will be released as per Section 1.12

Section 1.13 Southern Pines agents will accompany Hattiesburg law enforcement and/or Animal Control officers on suspected animal abuse cases during intake hours at their request and render their professional judgment regarding the health, safety, and humane conditions of suspected abuse cases. Southern Pines will provide mentorship regarding the Mississippi animal cruelty law and will be available for court proceedings that result from abuse cases.

Section 1.14 Southern Pines agents will humanely remove all impounded animals from Animal Control vehicles. These animals shall immediately be placed in a suitable enclosure. Southern Pines agents will sanitize the Animal Control vehicle after each impoundment with chemicals and tools provided by Southern Pines. If the officer or agent refuses sanitation, no animals will be accepted from that vehicle in the future until it has been sanitized by Southern Pines staff.

Section 1.15 Southern Pines only accepts Wednesday, after-hours, weekend, Staff Development Day or holiday intakes of emergencies (as addressed in Section 1.03). The City will be responsible for alternative housing for any animals impounded outside of intake hours that do not meet these parameters, including injured or ill animals. The City will be responsible for transporting this animal(s) to Southern Pines the next business day during intake hours.

Section 1.16 Following any legal holding period, all animal(s), including at-large animals, not redeemed by their owners shall be provided with a disposition that is in the best interest of public health and safety, as determined by Southern Pines in accordance with State law (may include humane euthanasia).

Section 1.17 Southern Pines will not be expected to offer assistance in the form of emergency management of displaced pets during natural or other disasters. If this assistance is requested by the City, a separate meeting will be held to agree upon what services Southern Pines can provide and determine financial reimbursement from The City for said services.

Section 1.18 Southern Pines shall employ a competent and qualified agent for executing the responsibilities under this Contract.

Section 1.19 The operation, supervision, and management of the Animal Shelter shall be under the sole control of Southern Pines.

Section 1.20 Southern Pines is not responsible or liable for any equipment owned by The City that is left on Animal Shelter property.

Section 1.21 Southern Pines will conduct one free dog and cat rabies vaccination clinic to citizens at no additional cost to The City during the Contract period.

Section 1.22 Southern Pines shall keep full and accurate operational records on all animals delivered into its custody. Records shall, among other information, include the date, reason, and manner whereby animals were brought into custody, together with a description of the animal and a record of its final disposition. All such records of Southern Pines shall upon reasonable request by The City be made available to The City or its designated agents for auditing purposes.

Section 1.23 Southern Pines shall conduct an annual Audit or Financial and Expenditure Report in accordance with generally accepted standards which may be requested by the City of Hattiesburg.

Section 1.24 Nothing herein shall impair the ability of Southern Pines, at its discretion, to receive and provide for the humane disposition of dogs and cats running at-large or delivered into its custody by municipalities or citizens. Any fees or expenses paid to Southern Pines from municipalities, citizens, or granting organizations and any moneys collected by Southern Pines as a result of fund-raising, program services, or other activities shall be the Southern Pines' sole money and not a set-off against fees to be paid by The City.

Section 1.25 Southern Pines reserves the right to limit and or halt all intakes from the public, Animal Control, Hattiesburg City, and all other municipalities in times of national, state, or local emergency; pandemic; internal emergencies; overcrowding; disease outbreak; and supply and/or staffing shortages. Southern Pines will notify the Animal Control supervisor and city officials in cases where intake must be limited or halted and will implement a plan for normalizing intake as soon as possible.

Section 1.26 Southern Pines will not be compelled to euthanize animals where such euthanasia goes against the mission of the organization, state law, and/or local ordinance.

Section 1.27 In cases where it is determined by the City that an animal(s) must be held for a period exceeding the legal 5 day stray hold for any reason except bite quarantines of animals without current rabies vaccinations ², the City agrees to contract with an alternative boarding or vet clinic for the duration of the hold. Southern Pines agrees to take ownership of the animal at the conclusion of the hold.

Article II. Hattiesburg Animal Control Field Responsibilities

Section 2.01 Animal Control officers will identify and document a verifiable physical street address for where the animal is picked up, by said officers, prior to delivering the animal to Southern Pines. This address and the time of impoundment will be recorded on the impoundment form and provided to Southern Pines at the time of intake. Southern Pines reserves the right to refuse animals without appropriate and complete impoundment forms. All other agents and citizens are required to go through Southern Pines' regular surrender process.

Section 2.02 Animal Control must present any pertinent bite reports, court documents, etc. for animals being impounded at the time of impoundment or, in cases where a judge's signature is

required, within 1 business day of impoundment. Southern Pines is obligated to enact bite holds and court holds only in cases where documentation has been provided by the Animal Control officer within this time frame.

Section 2.03 Only animals who have bitten humans causing broken skin are eligible for a 10 day bite quarantine, as per [Mississippi state law](#). Animals who have bitten or killed other animals or who did not break skin will not be held for a 10 day bite quarantine.

Section 2.04 Southern Pines will hold for observation, for a time it deems sufficient for determination of disposition, animals who have bitten humans causing severe bruising or broken skin, or have unprovoked killed a domesticated dog, or who meet the definitions for “potentially dangerous, dangerous, or vicious” as defined in the City of Hattiesburg Ordinances.

Section 2.05 Animal Control officers will make every reasonable effort, including scanning animals for microchips in the field, to return at-large animals to their owners prior to delivering them to Southern Pines Animal Control will immediately undertake a reasonable effort to notify the owners of properly tagged pets while in the field.

Section 2.06 Animal Control officers will wear gloves in the field and at the Animal Shelter when handling all animals under 6 months of age and agree to change gloves between groups of animals. All reasonable attempts will be made by Animal Control officers to reduce contamination of all animals, especially dogs and cats under 6 months of age.

Section 2.07 The City or its contracted organization shall employ competent and qualified Animal Control officers and an agent for executing the responsibilities under this Contract

Section 2.09 Animal Control and law enforcement agents agree to keep all transportation vehicles, animal housing areas, and equipment in safe, sanitary, and working order. Southern Pines reserves the right to refuse intake of animals from vehicles and/or housing areas that are deemed to be unsanitary or unsafe.

Section 2.10 In order to reduce disease risk, animals that have been housed at any Municipal, nonprofit, and/or commercial pet housing or holding area (other than a veterinary clinic or licensed boarding facility) prior to intake will not be accepted. This includes but is not limited to temporary or long term housing areas operated by the Municipality, shelters, rescues, or any unlicensed boarding facilities. Animals that have been housed at veterinary clinics for medical care or licensed boarding facilities are excluded from this restriction.

Section 2.11 Animal control officers, agents, and/or law enforcement officers are never to remove animals from their vehicle on Shelter property without the assistance of shelter staff. Animals under 6 months of age are never to be placed on any ground or floor or to be handled without gloves.

Section 2.12 Animal Control officers must remain in their vehicles at all times while on Southern Pines property. They are not permitted to leave their vehicles or enter any Southern Pines buildings for any reason while on the property. The Animal Control Supervisor is exempt from this requirement.

Section 2.13 A Southern Pines agent will carry an operational cell phone at all times during intake hours. Animal Control must use this phone to notify Southern Pines agents of their arrival so that a staff member may be deployed to unload and sanitize their vehicle.

Article III. Contract Fee

Section 3.01 In consideration of the above-mentioned covenants of Southern Pines, The City agrees to pay Southern Pines a yearly amount as determined by Hattiesburg City Council in an amount not to exceed TWO HUNDRED THOUSAND DOLLARS (\$200,000.00). The fees set forth herein will be evaluated on an annual basis and may be increased or decreased by agreement of the parties hereto. There shall not be an automatic annual adjustment of fees; however, Southern Pines shall submit budget requests annually pursuant to The City's usual budget procedures. The City shall not be responsible for payment of costs of animals identified as not coming from Hattiesburg City. Southern Pines will receive payments of 1/12 the Yearly Fee amount in The City Budget, set by City Council, in monthly installments. Southern Pines is in charge of all aspects of managing the Animal Shelter, including but not limited to: maintaining strict compliance with all applicable local, state, and federal rules and regulations, managing the budget, and diligently controlling all monetary aspects of the Animal Shelter.

Section 3.02 In the event of annexation of any additional land, businesses, and or residential areas into the City Limits of Hattiesburg, Southern Pines must be notified in writing. At the time of annexation, the Contract Fee will increase by \$4,555 annually (or \$379.60 monthly) per square mile of annexed area.

Article IV. Management

Section 4.01 The parties agree Southern Pines shall own, operate, and maintain all aspects of the Animal Shelter located at 1901 North 31st Avenue, Hattiesburg, MS 39401.

Article V Default and Remedies

Section 5.01 Default. Any one of the following events shall be deemed a default and a breach of this Contract, namely:

- (a) If a party fails to observe or perform any of the terms, covenants or conditions of this Contract, and such failure continues after the expiration of 30 days from the date the non-defaulting party gives written notice to the defaulting party calling attention to the existence of such failure, provided however, that if the defaulting party cannot reasonably correct the default within said 30 day period, the defaulting party shall be given a mutually agreeable period of time to correct the default; or
- (b) If a party is declared bankrupt or insolvent by judicial decree; or
- (c) If a party takes the benefit of any federal reorganization; or
- (d) If a party makes a general assignment for benefit of creditors.

Section 5.02 Rights in Event of Default. In the event of any default by a party as herein provided, the non-defaulting party at any time thereafter, shall have the right to terminate this Contract by giving the defaulting party written notice of such termination, whereupon, this Contract shall be regarded

as canceled as of the date of the non-defaulting party's termination notice and to pursue all other remedies available at law or equity.

Article VI. Miscellaneous

Section 6.01 Assignment. Neither Southern Pines nor The City may assign this Contract or any of its rights or obligations hereunder without the other parties' written consent.

Section 6.02 Notices. All notices and other communications under this Contract shall be in writing and shall be deemed duly given if personally delivered or if mailed by registered mail or certified mail, return receipt requested, first class, postage prepaid as follows:

If to Southern Pines: P.O. Box 2021, Hattiesburg, MS 39403. Attn: Executive Director

If to The City: Ann Jones, 200 Forrest Street, Hattiesburg, MS 39401, Attn: Chief Administrative Officer

The parties shall be responsible for notifying each other of any changes in address or contact person(s).

Section 6.03 Entire Contract. This Contract contains the entire agreement between the parties hereto. There are no promises, agreements, conditions, undertakings, warranties or representations, oral or written, express or implied, between them, other than as herein set forth,

Section 6.04 Integration. This Contract is intended by the parties hereto to be an integration of all prior and contemporaneous promises, agreements, conditions, negotiations and undertakings between the parties hereto.

Section 6.05 Modification. This Contract may not be modified orally or in any other manner than by an agreement in writing signed by all the parties hereto or their respective successors in interest.

Section 6.06 Partial Invalidity. If any term, covenant, condition or provision of this Contract or the application thereof to any person or circumstance shall, at any time or to any extent, be invalid or unenforceable, the remainder of this Contract, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby (provided that neither party is substantially denied the benefit of its bargain hereunder), and each term, covenant, condition and provision of this Contract shall be valid and enforced to the fullest extent permitted by law.

Section 6.07 Headings. The headings used in this Contract are for reference and convenience only, and shall not enter into the interpretation hereof.

Section 6.08 Counterparts. This Contract may be executed in several counterparts, each of which shall be an original, but all of which shall constitute one and the same instrument.

Section 6.09 Gender. Whenever herein the singular number is used, the same shall include the plural, and the masculine in gender shall include the feminine and neuter genders, and vice versa, all as the context shall require.

Section 6.10 Application of Law. It is the intention of the parties hereto that all questions with respect to the construction of this Contract and the rights and liabilities of the parties hereunder shall be determined in accordance with the laws of the State of Mississippi.

Section 6.11 Binding Effect. Subject to the limitations set forth herein, all of the covenants, conditions and obligations contained in this Contract shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, legal representatives, successors and permitted assigns.

Section 6.12 No Joint Venture. Nothing in this Contract shall be interpreted or deemed to constitute City and Southern Pines as partners or joint ventures in regard to the transactions contemplated in this Contract, or in any aspect thereof.

Section 6.13 Delays. Neither party shall be responsible or liable, or deemed in breach hereof, to the extent the performance of their respective obligations hereunder are prevented or delayed due solely to circumstances beyond the reasonable control and without the fault or negligence of the party experiencing such impediment to performance, including but not limited to acts of God; unusually severe weather; flood, cyclone, hurricane, tornado, earthquake or other similar catastrophe; war, hostility or acts of a public enemy; riots; labor difficulties; fire, epidemics, quarantine restrictions; inability despite due diligence to obtain required licenses; fire; or other casualty for which such party claiming the Force Majeure is not responsible (such causes hereinafter called 'Force Majeure').

The party experiencing the Force Majeure shall exercise due diligence in endeavoring to overcome any Force Majeure impediment to its performance. The party experiencing the Force Majeure shall promptly give written notification to the other party. This written notification shall include a full and complete explanation of the Force Majeure and its cause, the status of the Force Majeure, and the actions such party is taking and proposes to take to overcome the Force Majeure. If performance by either party is delayed due to Force Majeure, the time for that performance shall be extended for a period reasonably necessary to overcome the effect of the delay.

**** The reminder of this page is intentionally left blank. ****

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the day and year first above written.

HATTIESBURG CITY

WITNESSES:

BY:

Its,

SOUTHERN PINES ANIMAL SHELTER

BY

Its, Ginny Sims Executive Director



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Wiley Quinn, Urban Development Director
cc: Kermas Eaton, City Clerk
Date: Tuesday, December 20, 2022
Re: Approve Contractor and Owner Agreement(s) for the Emergency Roof Repair Initiative for an amount not to exceed \$15,000 per project according to the Emergency Roof Repair Initiative Manual and authorize the Mayor to execute in triplicate.
File Number: 2022-931
Minute Book #

Summary

Approve Contractor and Owner Agreement(s) for the Emergency Roof Repair Initiative for an amount not to exceed \$15,000 per project according to the Emergency Roof Repair Initiative Manual and authorize the Mayor to execute in triplicate.

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.



CITY OF HATTIESBURG COMMUNITY DEVELOPMENT
Emergency Repair Roof Initiative Program

Contractor & Owner Agreement

THIS AGREEMENT, made the 20th day of December, 2022 and between the City of Hattiesburg Community Development Division (COHCDD) Emergency Repair Roof Initiative Program (ERRIP) and Alma White of 435 Monroe Street, hereinafter called Owner, and Starter Homes of Mississippi, with its principal place of business located at 57 Carter Drive, Seminary, Mississippi 39479, hereinafter called the Contractor.

WITNESSETH

1. SCOPE OF WORK

The Contractor shall furnish all labor, materials, tools, supplies, supervision and other services and shall perform all operations necessary and required to satisfactorily complete the work shown on the Work Write-Up and described in the specifications and other Contract Documents prepared for the **435 Monroe Street** Project by the Housing Programs Inspector, said work to be preformed on the structure(s)/property located at **435 Monroe Street**, Hattiesburg, Mississippi, all in accordance with terms of the Contract Documents.

2. TIME OF COMPLETION

The Owner/COHCDD shall issue a written Notice to Proceed within 5 days from the date of the Owner/COHCDD signing of this Agreement, accepting the Contractor's bid and proposal, providing the Contractor has obtained the necessary permits and related documents (if needed) and has presented them to the Owner/COHCDD. If the Notice to Proceed is not received by the Contractor within this 5-day period, the Contractor may at his option terminate his obligation under this Agreement, provided he has obtained the necessary permits and related documentation within (15) days from the date of the Owner's/COHCDD's signing of this Agreement, the Owner/COHCDD has the option of terminating the Contract for cause. The Contractor shall commence working within ten (10) calendar days, as time is of the essence in the completion of this contract, after issuance of the Notice to Proceed, and it is to be completed within **thirty (30) days** after issuance of the Notice to Proceed. **One hundred dollars (\$100.00) per day, as liquidated damages, will be deducted from the final payment for every day project repair completion exceeds sixty (30) days.** The Owner/COHCDD has the option of terminating the Contract for failure to commence work within the time allowed by the Contract Agreement.

3. COMPENSATION

As full consideration for the satisfactory performance by Contractor of this Contract, the Owner/COHCDD shall pay to the Contractor the sum of fourteen thousand five hundred dollars (\$14,500.00) subject to any written additions or deductions provided and incorporated herein, in accordance with the payment provisions of this Contract.

4. CHANGES IN THE WORK

The Owner/COHCDD without invalidating the Contract may order Changes in Work consisting of additions, deletions, or modifications, the Contract Sum and the Contract Time being adjusted accordingly. All such Changes in the Work shall be authorized by written Change Order signed by the Owner and COHCDD or their duly authorized agent. The Contract Sum and the Contract Time may be changed by a Change Order. The



cost or credit to the Owner/COHCDD from a Change in the Work shall be determined by mutual agreement before executing the Work involved.

5. CORRECTION OF WORK

The Contractor shall correct any work that fails to conform to the requirements of the Contract Documents where such failure to conform appears during the progress of the Work, and shall remedy any defects due to faulty materials, equipment or workmanship which appears within a period of one year from the Date of substantial Completion of the Contract or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents. The provisions of this statement apply to Work done by Subcontractors as well as to Work done by direct employees of the Contractor.

6. TERMINATION BY THE OWNER

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provisions of the Contract, the Owner/COHCDD may, after seven days written notice to the Contractor and without prejudice to any other remedy they may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor. If the Contractor's workmanship is deficient and he fails to remedy such work within a specified time period, the Owner/COHCDD, at their option, may terminate the Contract and take possession of the site and all materials, supplies and equipment incorporated in the work thereon. The Owner/COHCDD may finish the Work by whatever method they may deem expedient. If the unpaid balance of the Contract Sum exceeds the expenses of finishing the Work, such excess shall be paid to the Contractor for approved work completed, but if such expense exceeds such unpaid balance, the Contractor shall pay the difference to the Owner/COHCDD.

7. PAYMENTS/DRAWS

Payments may be withheld on account of (1) defective Work not remedied, (2) claims filed, (3) failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment, (4) damage to another contractor or (5) unsatisfactory prosecution of the Work of the Contractor.

Final payment shall not be due until the Contractor has delivered to the Owner/CHOCDD filed lien waivers/releases, indemnifying them against any lien.

The making of final payment shall constitute a waiver of all claims by the Owner/COHCDD except those arising from (1) unsettled liens, (2) faulty or defective Work appearing after Substantial Completion, (3) failure of Work to comply with the Requirements of the Contract Documents or (4) terms of any special guarantees required by the Contract Documents. The acceptance of the final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and still unsettled.

1. _____
2. _____
3. _____
4. _____
5. _____



8. ACCEPTANCE AND FINAL PAYMENT

Final payment shall be due thirty (30) days after completion and acceptance of the work, provided the Contract has been satisfactorily performed, subject to the provision of the General Conditions of the Contract.

9. DEED RESTRICTION

There will be deed restriction attached to **435 Monroe Street** for three (3) years. Homeowner agrees to occupy the rehabilitated home for three (3) years after rehabilitation activities are completed. The homeowner agrees to pay the prorated grant amount and legal fees associated with securing repayment to the City of Hattiesburg in the event the property is sold, transferred or disposed of prior to the expiration of the three (3) year affordability period. **Homeowner acknowledges and agrees that this contract shall be binding on his/hers/their heirs, executors and assigns.**

10. ASSIGNMENT OF CONTRACT

This agreement may not be assigned to any Contractor or Agent of Contractor. IN WITNESS WHEREOF, the parties hereto executed this Agreement the ____ day of _____, 2022.

Alma White _____ Date _____

Homeowner Date

City of Hattiesburg, Mississippi

Contractor

By: _____
Toby Barker, Mayor

By: _____

Date: December 20, 2022

Date: _____

Attest: _____
Kermas Eaton, City Clerk

Attest: _____

CITY OF HATTIESBURG EMERGENCY REPAIR PROGRAM (10K+)
Emergency Repair Roof Initiative
GRANT AWARD AGREEMENT

General Terms and Conditions

1. ____ I certify that I currently live in and own the home for which I am accepting repair assistance.
2. ____ I agree to remain in Hattiesburg during the course of the repairs being performed and to make my home accessible between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday, unless otherwise arranged.
3. ____ I understand that I am responsible for packing and storage of jewelry, family heirlooms, food, cleaning and other chemicals, lawn equipment, and toiletries for the duration of the repair work as necessary.
4. ____ I understand that the discovery of illegal activities or the use of verbal or physical threats of harm towards City employees, the contractor or his workers will result in an immediate termination of all repair activities.
5. ____ I agree that the City has irrevocable rights and permission to use my name and to use, reproduce, exhibit, copyright and publish photographic images and/or videotaped images of me and/or my home for advertising, trade and/or any other lawful purpose.
6. ____ I certify that I am not an employee of the City of Hattiesburg, nor do I have an immediate family member who is an elected official of the City of Hattiesburg nor an employee who is responsible for the administration, management and oversight of the program (Community Development Division Staff).
7. ____ I hereby agree to occupy the home to be rehabilitated for a period of not less than **three (3)** years after completion of the repairs funded under in the Emergency Roof Repair Initiative Program. **(Homeowner acknowledges and agrees that this agreement shall be binding on his/hers/their heirs, executors and assigns.)**
8. ____ I agree to repay the prorated grant amount and legal fees associated with securing repayment to the City should I sale, transfer or dispose of the property prior to the expiration of the **three (3)** year affordability period.
9. ____ I understand that I cannot apply for another Housing Rehabilitation or Housing Repair Grant within the **three (3)** year affordability period.
10. ____ I hereby agree to maintain flood insurance, when applicable.
11. ____ I hereby agree to maintain all county and city property taxes as they come due during the affordability period.
12. ____ I hereby agree that the completion of the repairs for which these grant funds are awarded shall constitute a complete work agreement and I will sign all the necessary paperwork to allow for payment to the contractor.
13. ____ I authorize the city to proceed with preliminary testing, requests for bids, and other required steps necessary in order to proceed with a project, and further understand that costs related to the same shall be added to the total cost of the project under this grant award.

By my signature below I, **Alma White of 435 Monroe Street**, agree to all the terms of this grant and understand that failure to abide by any of the terms will result in forfeiture of my grant and/or repayment of expended grant funds this the ____ day of _____, 2022.

Homeowner's Signature

Spouse's Signature

GRANT AWARD

The Homeowner(s), **Alma White of 435 Monroe Street**, is hereby awarded a Housing Rehabilitation Award for costs associated with the repair or rehabilitation of **435 Monroe Street**. The amount of the award shall be the actual cumulative cost of all related preparation and work, including but not limited to: preliminary environmental testing, required abatement work, construction costs, any required legal filing fees, any change orders/discovery repairs and any approved voluntary temporary relocation assistance. General construction/rehabilitation/repair costs are not to exceed \$15,000, excluding change orders/discovery repairs necessary to meet building codes and program standards according to the Emergency Repair Roof Initiative Program.

City of Hattiesburg, Mississippi

By: _____
Toby Barker, Mayor

Date: December 20, 2022

Attest: _____
Kermas Eaton, City Clerk



Department of Urban Development Community Development Division

Homeowner:

Address: 435 Monroe Street

Phone:

WORK WRITE-UP

Project Type:

☐ Rehab ☐ Repair ☐ Special Project

Completed and Approved By:

HP Inspectors:

Date:

Special Classifications:

☐ N/A ☐ Historic District ☐ 50 Years + ☐ Flood Zone
 ☐ Lead ☐ Asbestos

Reviewed and Approved By:

Housing Coordinator:

Date:

Contract Date:

Housing Manager:

Date:

General Requirements: All repairs are to be performed in accordance with the guidelines and material specifications listed in the City of Hattiesburg’s Housing Rehabilitation and Housing Repair Grants Program Manual for CDBG/HOME, Contractor’s Performance Standards for Rehabilitation and the 2018 International Residential Code.

ITEM NO.	WORK DESCRIPTION	ESTIMATED COST
ROOF		
1.	Remove shingles and felt down to decking	
2.	Replace all deteriorated framing and decking (excessive near above damaged soffit)	
3.	Replace deteriorated fascia and soffit (excessive)	
4.	Install new #15 felt	
5.	Install (3) new turbine vents	
6.	Install roof edge	
7.	Install new pipe boots	
8.	Install 25-year mid-grade architectural shingles including small attachment	
Total Cost:		

***Contractor is responsible for walking the roof to identify soft spots and deteriorated decking and/or checking the interior of the structure for leaks and water damage associated with roof deterioration. Call for inspection when shingles and decking is removed.





**CITY OF HATTIESBURG COMMUNITY DEVELOPMENT
Emergency Repair Roof Initiative Program**

Contractor & Owner Agreement

THIS AGREEMENT, made the 20th day of December, 2022 and between the City of Hattiesburg Community Development Division (COHCDD) Emergency Repair Roof Initiative Program (ERRIP) and Lynda Vickers of 514 McInnis Spring Road, hereinafter called Owner, and Starter Homes of Mississippi, with its principal place of business located at 57 Carter Drive, Seminary, Mississippi 39479, hereinafter called the Contractor.

WITNESSETH

1. SCOPE OF WORK

The Contractor shall furnish all labor, materials, tools, supplies, supervision and other services and shall perform all operations necessary and required to satisfactorily complete the work shown on the Work Write-Up and described in the specifications and other Contract Documents prepared for the **514 McInnis Spring Road** Project by the Housing Programs Inspector, said work to be performed on the structure(s)/property located at **514 McInnis Spring Road**, Hattiesburg, Mississippi, all in accordance with terms of the Contract Documents.

2. TIME OF COMPLETION

The Owner/COHCDD shall issue a written Notice to Proceed within 5 days from the date of the Owner/COHCDD signing of this Agreement, accepting the Contractor's bid and proposal, providing the Contractor has obtained the necessary permits and related documents (if needed) and has presented them to the Owner/COHCDD. If the Notice to Proceed is not received by the Contractor within this 5-day period, the Contractor may at his option terminate his obligation under this Agreement, provided he has obtained the necessary permits and related documentation within (15) days from the date of the Owner's/COHCDD's signing of this Agreement, the Owner/COHCDD has the option of terminating the Contract for cause. The Contractor shall commence working within ten (10) calendar days, as time is of the essence in the completion of this contract, after issuance of the Notice to Proceed, and it is to be completed within **thirty (30) days** after issuance of the Notice to Proceed. **One hundred dollars (\$100.00) per day, as liquidated damages, will be deducted from the final payment for every day project repair completion exceeds sixty (30) days.** The Owner/COHCDD has the option of terminating the Contract for failure to commence work within the time allowed by the Contract Agreement.

3. COMPENSATION

As full consideration for the satisfactory performance by Contractor of this Contract, the

Owner/COHCDD shall pay to the Contractor the sum of thirteen thousand four hundred thirty dollars (\$13,430.00) subject to any written additions or deductions provided and incorporated herein, in accordance with the payment provisions of this Contract.

4. CHANGES IN THE WORK

The Owner/COHCDD without invalidating the Contract may order Changes in Work consisting of additions, deletions, or modifications, the Contract Sum and the Contract Time being adjusted accordingly. All such Changes in the Work shall be authorized by written Change Order signed by the Owner and COHCDD or



their duly authorized agent. The Contract Sum and the Contract Time may be changed by a Change Order. The cost or credit to the Owner/COHCDD from a Change in the Work shall be determined by mutual agreement before executing the Work involved.

5. CORRECTION OF WORK

The Contractor shall correct any work that fails to conform to the requirements of the Contract Documents where such failure to conform appears during the progress of the Work, and shall remedy any defects due to faulty materials, equipment or workmanship which appears within a period of one year from the Date of substantial Completion of the Contract or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents. The provisions of this statement apply to Work done by Subcontractors as well as to Work done by direct employees of the Contractor.

6. TERMINATION BY THE OWNER

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provisions of the Contract, the Owner/COHCDD may, after seven days written notice to the Contractor and without prejudice to any other remedy they may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor. If the Contractor's workmanship is deficient and he fails to remedy such work within a specified time period, the Owner/COHCDD, at their option, may terminate the Contract and take possession of the site and all materials, supplies and equipment incorporated in the work thereon. The Owner/COHCDD may finish the Work by whatever method they may deem expedient. If the unpaid balance of the Contract Sum exceeds the expenses of finishing the Work, such excess shall be paid to the Contractor for approved work completed, but if such expense exceeds such unpaid balance, the Contractor shall pay the difference to the Owner/COHCDD.

7. PAYMENTS/DRAWS

Payments may be withheld on account of (1) defective Work not remedied, (2) claims filed, (3) failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment, (4) damage to another contractor or (5) unsatisfactory prosecution of the Work of the Contractor.

Final payment shall not be due until the Contractor has delivered to the Owner/CHOCDD filed lien waivers/releases, indemnifying them against any lien.

The making of final payment shall constitute a waiver of all claims by the Owner/COHCDD except those arising from (1) unsettled liens, (2) faulty or defective Work appearing after Substantial Completion, (3) failure of Work to comply with the Requirements of the Contract Documents or (4) terms of any special guarantees required by the Contract Documents. The acceptance of the final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and still unsettled.

1. _____
2. _____
3. _____
4. _____
5. _____



8. ACCEPTANCE AND FINAL PAYMENT

Final payment shall be due thirty (30) days after completion and acceptance of the work, provided the Contract has been satisfactorily performed, subject to the provision of the General Conditions of the Contract.

9. DEED RESTRICTION

There will be deed restriction attached to **514 McInnis Spring Road** for three (3) years. Homeowner agrees to occupy the rehabilitated home for three (3) years after rehabilitation activities are completed. The homeowner agrees to pay the prorated grant amount and legal fees associated with securing repayment to the City of Hattiesburg in the event the property is sold, transferred or disposed of prior to the expiration of the three (3) year affordability period. **Homeowner acknowledges and agrees that this contract shall be binding on his/hers/their heirs, executors and assigns.**

10. ASSIGNMENT OF CONTRACT

This agreement may not be assigned to any Contractor or Agent of Contractor. IN WITNESS WHEREOF, the parties hereto executed this Agreement the ____ day of _____, 2022.

Lynda Vickers

Date

Homeowner

Date

City of Hattiesburg, Mississippi

Contractor

By:

Toby Barker, Mayor

By:

Date: December 20, 2022

Date:

Attest:

Kermas Eaton, City Clerk

Attest:

CITY OF HATTIESBURG EMERGENCY REPAIR PROGRAM (10K+)
Emergency Repair Roof Initiative
GRANT AWARD AGREEMENT

General Terms and Conditions

1. ____ I certify that I currently live in and own the home for which I am accepting repair assistance.
2. ____ I agree to remain in Hattiesburg during the course of the repairs being performed and to make my home accessible between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday, unless otherwise arranged.
3. ____ I understand that I am responsible for packing and storage of jewelry, family heirlooms, food, cleaning and other chemicals, lawn equipment, and toiletries for the duration of the repair work as necessary.
4. ____ I understand that the discovery of illegal activities or the use of verbal or physical threats of harm towards City employees, the contractor or his workers will result in an immediate termination of all repair activities.
5. ____ I agree that the City has irrevocable rights and permission to use my name and to use, reproduce, exhibit, copyright and publish photographic images and/or videotaped images of me and/or my home for advertising, trade and/or any other lawful purpose.
6. ____ I certify that I am not an employee of the City of Hattiesburg, nor do I have an immediate family member who is an elected official of the City of Hattiesburg nor an employee who is responsible for the administration, management and oversight of the program (Community Development Division Staff).
7. ____ I hereby agree to occupy the home to be rehabilitated for a period of not less than **three (3)** years after completion of the repairs funded under in the Emergency Roof Repair Initiative Program. **(Homeowner acknowledges and agrees that this agreement shall be binding on his/hers/their heirs, executors and assigns.)**
8. ____ I agree to repay the prorated grant amount and legal fees associated with securing repayment to the City should I sale, transfer or dispose of the property prior to the expiration of the **three (3)** year affordability period.
9. ____ I understand that I cannot apply for another Housing Rehabilitation or Housing Repair Grant within the **three (3)** year affordability period.
10. ____ I hereby agree to maintain flood insurance, when applicable.
11. ____ I hereby agree to maintain all county and city property taxes as they come due during the affordability period.
12. ____ I hereby agree that the completion of the repairs for which these grant funds are awarded shall constitute a complete work agreement and I will sign all the necessary paperwork to allow for payment to the contractor.
13. ____ I authorize the city to proceed with preliminary testing, requests for bids, and other required steps necessary in order to proceed with a project, and further understand that costs related to the same shall be added to the total cost of the project under this grant award.

By my signature below I, **Lynda Vickers of 514 McInnis Springs Road**, agree to all the terms of this grant and understand that failure to abide by any of the terms will result in forfeiture of my grant and/or repayment of expended grant funds this the ____ day of _____, 2022.

Homeowner's Signature

Spouse's Signature

GRANT AWARD

The Homeowner(s), **Lynda Vickers of 514 McInnis Springs Road**, is hereby awarded a Housing Rehabilitation Award for costs associated with the repair or rehabilitation of **514 McInnis Springs Road**. The amount of the award shall be the actual cumulative cost of all related preparation and work, including but not limited to: preliminary environmental testing, required abatement work, construction costs, any required legal filing fees, any change orders/discovery repairs and any approved voluntary temporary relocation assistance. General construction/rehabilitation/repair costs are not to exceed \$15,000, excluding change orders/discovery repairs necessary to meet building codes and program standards according to the Emergency Repair Roof Initiative Program.

City of Hattiesburg, Mississippi

By: _____
Toby Barker, Mayor

Date: December 20, 2022

Attest: _____
Kermas Eaton, City Clerk



Department of Urban Development Community Development Division

Homeowner: Lynda Vickers

Address: 514 McInnis Springs Rd

Project Type: ☐ Rehab ☒ Repair ☐ Special Project ☐ Adopt A Home ☐ World Changers

Special Classifications: ☐ N/A ☐ Historic District ☐ 50 Years + ☐ Flood Zone

Contract Date:

Contractor:

WORK WRITE-UP

Completed and Approved By: HP Inspector: Date:

Reviewed and Approved By: Housing Coordinator: Date: Housing Manager: Date:

General Requirements: All repairs are to be performed in accordance with the guidelines and material specifications listed in the City of Hattiesburg’s Housing Rehabilitation and Housing Repair Grants Program Manual for CDBG/HOME, Contractor’s Performance Standards for Rehabilitation and the 2018 International Residential Code.

ITEM NO.	WORK DESCRIPTION	ESTIMATED COST
ROOF		
1.	Remove shingles and felt down to the decking	
2.	Replace all deteriorated decking and framing (multiple damaged 2x6)	
3.	Install (3) 14-inch turbine vents	
4.	Install new vent pipe boots	
5.	Install roof edge	
6.	Properly flash valley	
7.	Install new # 15 felt	
8.	Install 25-year mid-grade architectural shingles	
9.	Replace deteriorated fascia and soffit (Severe damage in rear of structure)	
Total Cost:		

***Contractor is responsible for walking the roof to identify soft spots and deteriorated decking and/or checking the interior of the structure for leaks and water damage associated with roof deterioration. Call for inspection when decking is exposed.





Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ann Jones
cc:
Date: Tuesday, December 20, 2022
Re: Approve Agreement between the City of Hattiesburg and Kids Hub Child Advocacy Center to provide juvenile forensic services as needed to the Hattiesburg Police Department and authorize the Mayor to execute the same.
File Number: 2022-939
Minute Book #

Summary

"Approve agreement between the City of Hattiesburg and Kids Hub Child Advocacy Center to provide juvenile forensic services as needed to the Hattiesburg Police Department"

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.

Memorandum of Understanding

The City of Hattiesburg and Kids Hub Child Advocacy Center located in Hattiesburg, MS agree to the following for fiscal year 2022-2023:

Kids Hub Child Advocacy Center Agrees to:

1. Maintain a multidisciplinary team consisting of Hattiesburg PD, Child Protection Services, Mental Health Providers, Youth Court, District Attorney's Office, Medical Examiners, and other law enforcement agencies to work child abuse cases efficiently.
2. Provide multidisciplinary team facilitation for the city of Hattiesburg including in person team meetings at least once per month which ensure information sharing, coordinated investigations, and services are not duplicative. The facilitator will ensure ongoing communication of team members throughout the life on an investigation free of charge to the agencies and/or families within the city of Hattiesburg.
3. Provide ChildFirst forensic interviews by trained forensic interviewers in a child friendly setting using neutral and non-leading questions to children who meet the agreed upon county protocol. Forensic interviewers will testify as needed in Youth Court and Circuit Court. These services are free of charge to the agencies and/or families within the city of Hattiesburg.
4. Provide family and victim advocacy by trained advocates to ensure appropriate referrals, assist with Crime Victim's Compensation applications, and provide ongoing support to nonoffending caregivers free of charge to the agencies and/or families within the city of Hattiesburg.
5. Provide research based mental health services based on the child and family's needs within the city of Hattiesburg by billing the child's insurance, crime victim's compensation, or offering a sliding scale fee for uninsured families.

The City of Hattiesburg agrees to:

1. Make a \$10,000 contribution to Kids Hub CAC during the fiscal year 2022-2023.
2. Ensure Hattiesburg Police Department follows the multidisciplinary team protocol in reference to working alleged child abuse cases.

DATE

SIGNATURE OF KIDS HUB CAC REP

DATE

SIGNATURE OF CITY OF HATTIESBURG REP



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ann Jones
cc:
Date: Tuesday, December 20, 2022
Re: Approve Memorandum of Agreement between the City of Hattiesburg and Mississippi National Guard related to projects at Bobby Chain Municipal Airport and authorize e Mayor to execute the same.
File Number: 2022-943
Minute Book #

Summary

“Approve Memorandum of Agreement between the City of Hattiesburg and Mississippi National Guard related to projects at Bobby Chain Municipal Airport”

Recommendation Statement

I recommend this item be placed on the Council agenda for consideration.

Please place this on the December 20, 2022 City Council meeting for consideration.

MEMORANDUM OF UNDERSTANDING

BETWEEN

THE CITY OF HATTIESBURG

AND

THE MISSISSIPPI NATIONAL GUARD

SUBJECT: Bobby Chain Municipal Airport

1. BACKGROUND: The Bobby Chain Municipal Airport (“the Airport”) is located only four (4) miles from the Camp Shelby cantonment area and is currently the primary airport for facilitating distinguished visitors (DV) and high-ranking government officials destined for the installation. The airport supports various military exercises by providing contract fuel to both rotary wing and fixed wing assets. It is also used as a staging platform for aviation assets during joint force exercises.

The airport is a natural fit as an “annex” of Camp Shelby due to its proximity to the cantonment area. Unrestricted growth opportunities exist at the airport due to undeveloped and sparsely populated land between the location of the proposed Army Aviation Support Facility (AASF) and Camp Shelby to the south. Rail lines on west side of the runway connect both the airport and Camp Shelby railhead to the recently designated Strategic Port of Gulfport, via the Kansas City Southern (KCS), while the rail lines to the east connect to the deep-water ports of Pascagoula and Mobile via the Canadian National (CN). Significant military training aircraft, from all branches, utilize the airport daily. The airport is located at the interchange of US Highways 49 and 98 – both of which offer direct access to all gates of Camp Shelby.

2. REFERENCES/AUTHORTIES:

- a. Chief National Guard Bureau Instruction (CNGBI) 3000.04, dated 24 January 2018.
- b. *Mississippi Code Annotated* § 61-5-1, et. seq. (The Municipal Airport Law).

3. AUTHORITIES: N/A.

4. PURPOSE: This Memorandum of Understanding (MOU) prescribes the procedures and guidelines for cooperation and support between the City of Hattiesburg and the Mississippi National Guard related to projects at the Bobby Chain Municipal Airport (“the Airport”) that would mutually benefit both parties.

The projects would be prioritized as follows:

- Priority #1 – AASF Flight Facility
- Priority #2 – Runway Extension
- Priority #3 – Readiness Center, etc.

SUBJECT: Bobby Chain Municipal Airport

5. UNDERSTANDING OF THE PARTIES: The City of Hattiesburg would lease approximately 30-40 acres located in the SW ¼ of the NW ¼, Section 6, Township 3 North, Range 12 West, Forrest County, Mississippi, with roadway access, to the Mississippi National Guard at the Airport per the attached exhibit. The Mississippi National Guard would contract with a consultant to perform a Planning and Programming Document Charrette (PPDC) to determine the specific mission and any additional land requirements. Upon completion of the Charrette the intent would be for the Mississippi National Guard and the City of Hattiesburg to enter into a Memorandum of Agreement that would further define each party's roles and responsibilities for the future military presence at the Bobby Chain Airport.

6. PERSONNEL:

Points of Contact:

For Contractual Matters:

Mississippi National Guard
Mr. Brad M. Eldridge
Planning & Programming Branch Chief
1410 Riverside Drive
Jackson, MS 39296-5027
PHONE: 601-313-6549

The City of Hattiesburg
Mr. Randy Pope, City Attorney
P. O. Box 17527
Hattiesburg, Mississippi 39404
PHONE: 601-268-9997

For Technical Matters:

Mississippi National Guard
Mr. Mike Essary, PE
Pine Belt Operations Manager
1410 Riverside Dr
Jackson, MS 39296-5027
PHONE: 601-XXX-XXXX

The City of Hattiesburg
Ms. Ann Jones, Chief Administration
Officer
200 Forrest Street
Hattiesburg, Mississippi 39403
PHONE: 601-545-4503

7. GENERAL PROVISION:

- a. Points of Contacts. See Paragraph 7.
- b. Correspondence: TPB
- c. Funds and Manpower: N/A
- d. Modifications of MOU: The provisions of this MOU may be amended at any time upon mutual agreement of both parties.
- e. Disputes: All or any disputes arising out of or touching upon or in relation to the terms and conditions of this Agreement, including the interpretation and validity of the terms thereof and the respective rights and obligations of the Parties, shall be settled amicably by mutual discussion.
- f. Termination of Understanding: Any party may terminate this Agreement upon presentation of a written notice to the other party

SUBJECT: Bobby Chain Municipal Airport

g. Transferability: N/A

h. Understanding: It is expressly understood and agreed that this MOU embodies the entire understanding between the City of Hattiesburg and the Mississippi National Guard regarding the Bobby Chain Municipal Airport.

i. Effective Date: This MOU takes effect the day after all parties have signed.

j. Expiration Date: None

k. Cancellation of Previous MOU: N/A

APPROVED:

THE CITY OF HATTIESBURG

MISSISSIPPI NATIONAL GUARD

BY: _____

Toby Barker
Mayor
City of Hattiesburg

BY: _____

Janson D. Boyles
Major General, MSNG
The Adjutant General of Mississippi



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ann Jones, Chief Administrative Officer
cc:
Date: Tuesday, December 20, 2022
Re: Approve purchase of property located at PPIN # 19211, parcel # 2-0290-10-021.00 in the amount of \$175,000.00 and the execution of all necessary documents at closing and authorize issuance of manual check for the same
File Number: 2022-941
Minute Book #

Summary

"Approve purchase of property located at PPIN # 19211, parcel # 2-0290-10-021.00 in the amount of \$175,000.00 and the execution of all necessary documents at closing. Authorize issuance of manual check for the same"

Recommendation Statement

I recommend this item be placed on the Council agenda for consideration.

Please place this on the December 20, 2022 City Council meeting for consideration.

APPRAISAL REPORT

Property Identification

Office Building
Located at 101 Ferguson Street,
Hattiesburg, Forrest County, Mississippi 39401



Prepared For:

City of Hattiesburg
c/o Ann Jones, Chief Administrative Officer
200 Forrest Street,
Hattiesburg, Mississippi 39401

As Of:

August 22nd, 2022

Prepared By:

Zac Fairley Appraisals, LLC
84 North of Fields
Hattiesburg, Mississippi 39402

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ADDENDA

Engagement Letter
Improvement Sketch
Flood Map
Forrest County Tax Assessor's Information
Qualifications of Appraisers

101 Ferguson Street, Hattiesburg, Mississippi 39401



September 6th, 2022

City of Hattiesburg
c/o Ms. Ann Jones, Chief Administrative Officer
200 Forrest Street
Hattiesburg, Mississippi 39401

Re: Appraisal of an Office Building located at 101 Ferguson Street, Hattiesburg, Forrest County, Mississippi 39401

Dear Ms. Jones:

Thank you for the opportunity to provide appraisal services. Based on our agreement with you, we have performed an appraisal and reported our findings in this Appraisal Report. This report is intended to comply with the reporting requirements under Standards Rule 2.2(a) of the Uniform Standards of Professional Appraisal Practice.

The subject of this report is located in downtown Hattiesburg at the corner of Ferguson Street and Ronie Street. The site is improved with a +/-5,015 sq. ft. office building situated on a corner parcel containing about 0.44 acres. The building has a masonry block and dravite exterior, a shingle roof, on a slab foundation, and built in 1962. The property is zoned B-5; Regional Business and has all city services in place. The property is currently marketed for sale with a list price of \$200,000 and has been on the market for 75 days. The list price is slightly higher than the concluded market value.

The purpose of the appraisal is to develop an opinion of market value of the fee simple interest in the property as of the effective date of the appraisal, August 22nd, 2022.

MARKET VALUE			
Appraisal Condition	Interest Appraised	Effective Date of Value	Market Value
"As Is"	Fee Simple Estate	August 22 nd , 2022	\$195,000

Respectfully submitted,

A handwritten signature in blue ink, reading 'Zachary H. Fairley', is written over a horizontal line.

Zachary H. Fairley
State Certified General
Real Estate Appraiser, GA-1418

CERTIFICATION

I 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 and limiting conditions and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- ✔ I have no present or prospective interest in the property that is the subject of this report and no personal interest 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.
- ✔ The appraisal assignment was not based on a requested minimum valuation, a specific valuation, or the approval of a loan.
- ✔ Compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- ✔ My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice, 2022-2023 Edition*.
- ✔ Zachary Fairley has made a personal inspection of the property that is the subject of this report.
- ✔ No one provided significant real property appraisal assistance to the persons signing this certification.
- ✔ My analyses, opinions, and conclusions have been developed, and this report has been prepared, in compliance with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice (USPAP) as promulgated by the Appraisal Standards Board of The Appraisal Foundation, and in accordance with the appraisal-related mandates within Title XI of the Federal Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA). This report was also prepared in conformance with the State of Mississippi Standards for Certified General Real Estate Appraisers.
- ✔ I have not relied on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value.
- ✔ It is my opinion that the subject does not include any enhancement in value as a result of any natural,

101 Ferguson Street, Hattiesburg, Mississippi 39401

cultural, recreational or scientific influences retrospective or prospective.

- ✔ I have experience in appraising properties similar to the subject and are in compliance with the Competency Rule of USPAP.
- ✔ 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, I have completed the continuing education program for Practicing Affiliates of the Appraisal Institute.
- ✔ I have not relied on the work of others if we have a reasonable doubt that the work is credible.
- ✔ I have not performed any services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

It is my opinion the market value of the property described herein, as of August 22nd, 2022 is:

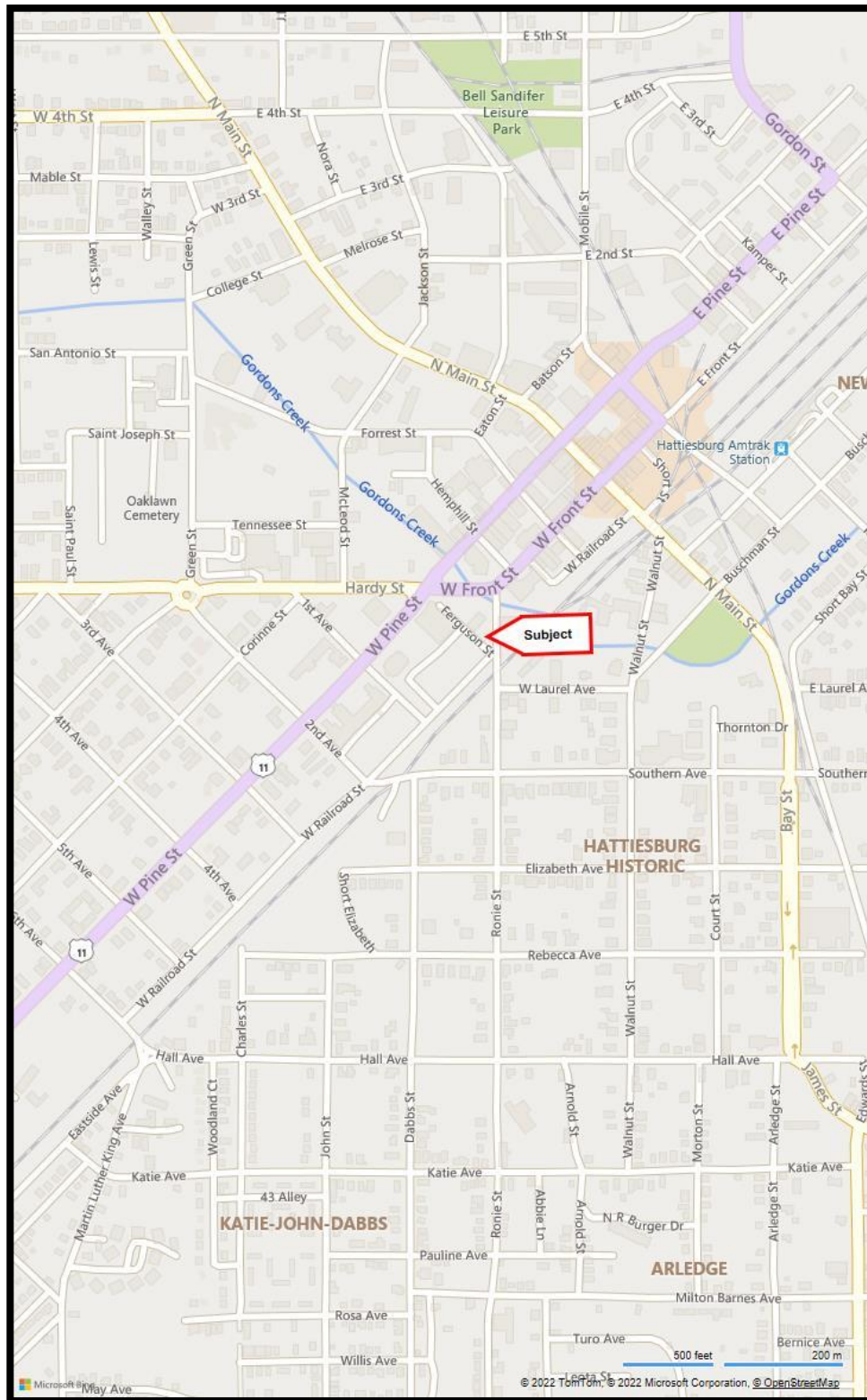
MARKET VALUE			
Appraisal Condition	Interest Appraised	Effective Date of Value	Market Value
"As Is"	Fee Simple Estate	August 22 nd , 2022	\$195,000

Respectfully submitted,



Zachary H. Fairley
State Certified General
Real Estate Appraiser, GA-1418

Location Map



Summary of Salient Facts and Conclusions	
Property Name	Office Building
Property Address	101 Ferguson Street Hattiesburg, Forrest County, Mississippi 39401
Property Location	The property is located at the corner of Ronie Street and Ferguson Street in downtown Hattiesburg.
Property Tax Identification Number(s)	2-0290-10-021.00
Owner of Record	Norris Land and Timber, LLC
Date of the Report	September 6 th , 2022
Effective Date of the Appraisal	August 22 nd , 2022
Property Rights Appraised	Fee Simple
Land Area	19,337 Square Feet or 0.44 Acres
Gross Building Area	5,015 Square Feet
Building Size Net Rentable	5,015 Square Feet
Occupancy	Vacant
Parking	Asphalt parking area located in front of the building.
Year Built	1962
Condition	Average
Actual/Physical Age	60 Years
Effective Age of Building(s)	30-35 Years
Total Economic Life	50 Years
Remaining Economic Life	15-20 Years
Zoning Designation	B-5; Professional Business District
Highest and Best Use As Vacant	Commercial
Highest and Best Use As Improved	Office Building
Estimated Exposure Time and Marketing Period	6-12 Months
Market Value Conclusions	
Sales Comparison Approach	\$195,000
FINAL VALUE CONCLUSION	\$195,000

Purpose of the Appraisal

The purpose of this appraisal is to provide the appraiser's best estimate of the market value of the subject real property, as of the effective appraisal date, August 22nd, 2022.

Intended Use/Client and Intended User(s)

The intended use of this appraisal is for potential acquisition decisions by City of Hattiesburg and/or affiliates. It is our understanding that the intended user of the report is for the City of Hattiesburg, the client. The definition of market value relied upon is included before the Addenda.

Competency of the Appraisers

The appraisers' specific qualifications are included within this report. These qualifications serve as evidence of their competence for the completion of this appraisal assignment in compliance with the competency provision in USPAP. The appraisers' knowledge and experience, combined with their professional qualifications, are commensurate with the complexity of this assignment. The appraisers have previously provided consultation and value opinion for properties similar to the subject in Hattiesburg, Mississippi and surrounding regional markets.

Interest Appraised

- **Fee Simple Interest** is 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.

Effective Date of Value

August 22nd, 2022

Date of Report

September 6th, 2022

Appraisal History

I have not performed any services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

Ownership and Subject Property History

The property is owned by Norris Land and Timber, LLC. This conveyance is recorded via Quitclaim Deed found in Deed Book 950, Page 519, dated December 2nd, 2004.

We are not aware of any other conveyances in ownership in the last three years.

Pending Transactions

The property is currently marketed for sale by Realty Executives on behalf of Jim Stroo with a list price of \$200,000. The property has been on the market for 61 days. The broker stated that he has received a couple offers on the property; however, due the prospective buyers being unable to obtain financing, an agreement could not be reached. He also stated, that the HVAC systems are not working properly and would need to be replaced and serviced. A cost of \$5,000 to \$6,000 was reported by the broker to get the HVAC working properly.

Scope of Work

Scope of work is the most critical decision an appraiser will make in performing an assignment. Solving an appraisal problem involves three steps:

1. Identifying the problem
2. Determining the solution (or scope of work)
3. Applying the solution

None of the three steps can be omitted, and each must be performed in order. To analyze the problem, the appraiser identifies seven key assignment elements: (1) client, (2) intended users in addition to the client, (3) intended use, (4) objective of the appraisal, or type of value and its definition, (5) effective date, (6) property characteristics that are relevant to the assignment such as the interest to be valued and physical and legal characteristics), and (7) assignment conditions such as hypothetical conditions, extraordinary assumptions, and other requirements. These elements provide the framework for the assignment and allow the appraiser to identify the problem to be solved.

The second step is to determine the scope of work to solve the problem. Scope of work encompasses all aspects of the valuation process, including which approaches to value will be used; how much data is to be gathered, from what sources, from which geographic area, and over what time period; the extent of the data verification process; and the extent of property inspection, if any. The scope of work decision is appropriate when it allows the appraiser to arrive at credible assignment results and is consistent with the expectations of similar clients and the work that would be performed by the appraiser's peers in a similar situation.

Source: *Appraisal of Real Estate 14th Edition*

Inspection

The subject site was visited on August 22nd, 2022 by Zachary Fairley. The interior and exterior of the office building was viewed and physically measured.

We are not engineers and are not competent to judge matters of an engineering nature, nor has the appraiser(s) retained independent structural, mechanical, electrical, or civil engineers in connection with the report. As such, the appraiser(s) makes no representations relative to the condition of the improvements, if any exist. Unless otherwise noted in the report, no problems were brought to the attention of the appraiser(s) by ownership or management.

If questions regarding engineering studies are critical to the decision process of the reader, the advice of competent engineering consultants should be obtained and relied upon.

Data Research

I collected factual information about the subject property and the surrounding market. The type and extent of our research and analysis is detailed in individual sections of the report. This includes the steps we took to verify comparable sales, which are disclosed in the comparable sale profile sheets found in the report. Although we make an effort to confirm the arms-length nature of each sale with a party to the transaction, it is sometimes necessary to rely on secondary verification from sources deemed reliable. I researched sales and listings over the last two years and included in my analyses.

Definition of Market Value

“Market Value” means the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well informed or well advised and acting in what they consider their own best interests;
3. A reasonable time is allowed for exposure in the open market;
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. 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. ”

This example definition is from regulations published by federal regulatory agencies pursuant to Title XI of the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) of 1989 between July 5, 1990, and August 24, 1990, by the Federal Reserve System (FRS), National Credit Union Administration (NCUA), Federal Deposit Insurance Corporation (FDIC), and the Office of Comptroller of the Currency (OCC). This definition is also referenced in regulations jointly published by the OCC, FRS, and FDIC on June 7, 1994, and in the *Interagency Appraisal and Evaluation Guidelines*, as revised and updated December 2010.

Aerial Map



Identification of the Property

The site is located at the corner of Ronie Street and Ferguson Street in downtown Hattiesburg. The Veteran's Memorial Park and Gordon's Creek borders the property to the north. This portion of Hattiesburg is developed with older commercial and retail uses, with single-family residential uses located south of the property.

Site Data		
	Land (SF)	Land (Acres)
Gross	19,337	0.44
Legal Description	That portion of Lots 1 and 2 in Block 133 of the Kamper and Whinnery Survey of the City of Hattiesburg, Forrest County, Mississippi, bounded on the easterly side by Front or Ronie Street, and on the southwesterly side by Ferguson Street, and on the northwesterly side by the public alley intersecting said block of said Kamper and Whinnery Survey, according to the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi.	

Site Description	
Shape	Triangular
Frontage	Ronie Street fronts along the eastern boundary for about 240 feet. Ferguson Street fronts along the southern border for about 200 feet.
Access	The site has two access drives from Ronie Street and Ferguson Street.
Topography/Drainage	Open and level at road grade.
Soil/Subsurface	A soils report was not provided for our review. Based on our inspection of the subject and observation of development on nearby sites, there are no apparent ground stability problems. However, we are not experts in soils analysis. We assume that the subject's soil bearing capacity is sufficient to support the existing improvements.
Environmental Concerns	An environmental assessment report was not provided for review, and during our inspection, we did not observe any obvious signs of contamination on or near the subject site. However, environmental issues are beyond our scope of expertise. It is assumed that the property is not adversely affected by environmental hazards.
Functional Utility	The functional utility of the site would be for commercial or office development.
Off-Site Improvements:	
Curb/Gutter	There are curb/gutters along Ronie Street.

Sidewalks	Sidewalk along Ronie Street and Ferguson Street
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Properties adjacent to the subject are as follows:

Adjacent Properties	
North	Veteran's Memorial Park / Office
West	Office / Private School
South	Office / Retail
East	VFW / Jackie Doell Community Center

Utilities and Services

All city services (electric, water, sewer) are in place to the site.

Photographs



Front of the building



Looking south along Ronie Street from the property



View along Ferguson Street and the western property boundary



View of the building from Ferguson Street



Rear View



Veteran's Memorial Park located to the rear of the building

Photographs



HVAC units located on the north side of the building



Gordon's Creek located adjacent to the property



Foyer



Reception Area



Office



Interior Hallway

Photographs



Breakroom



Restroom



Office



Conference Room



Office



Conference Room

Improvement Description

The site is improved with a professional office building containing 5,015 square feet (GBA). The building was constructed in 1962 and is in average condition. The interior layout is designed for a professional office use and consists of 7 private offices, reception area, file rooms, a foyer/waiting area, 2 conference rooms, 2 restrooms, and a kitchenette. Interior finish quality is outdated but in average condition with carpet flooring, sheetrock walls with wood paneling and trim, acoustic grid ceiling, and fluorescent lighting.

General Building Details	
Year Built/Condition	1962 - Average Condition
Gross Building Size	5,015 Square Feet
Building Size Net Rentable	5,015 Square Feet
Overall Property Condition	Average
Market Class	C
No. of Stories	1
Floor Area Ratio	0.26
Land:Building Ratio	3.86:1
Occupancy	Vacant

Construction Details	
Construction Type	Masonry Block w/ Stucco
Foundation	Slab
Roof Structure	Gabled; Composition Shingle We assume the roof is in average condition and is not in need of any significant repair.
Exterior Doors	Wood (front); Metal (rear)
Exterior Walls	Masonry Block w/Stucco
Windows	Aluminum frame; single pane
Plumbing System	City Sewer
HVAC	Central HVAC – 2 Units service the building. The broker stated, one of the HVAC systems needed to be replaced with the other unit requiring servicing. A cost of \$5,000 - \$6,000 was estimated to replace and service the units.
Electrical Service	Standard

Site Improvements	
Drainage/Retention	The site has typical draining systems in place feeding into the city drains
Paving	Asphalt parking area located in front of the building
Landscaping	Average landscaping around perimeter of the building.

Zoning

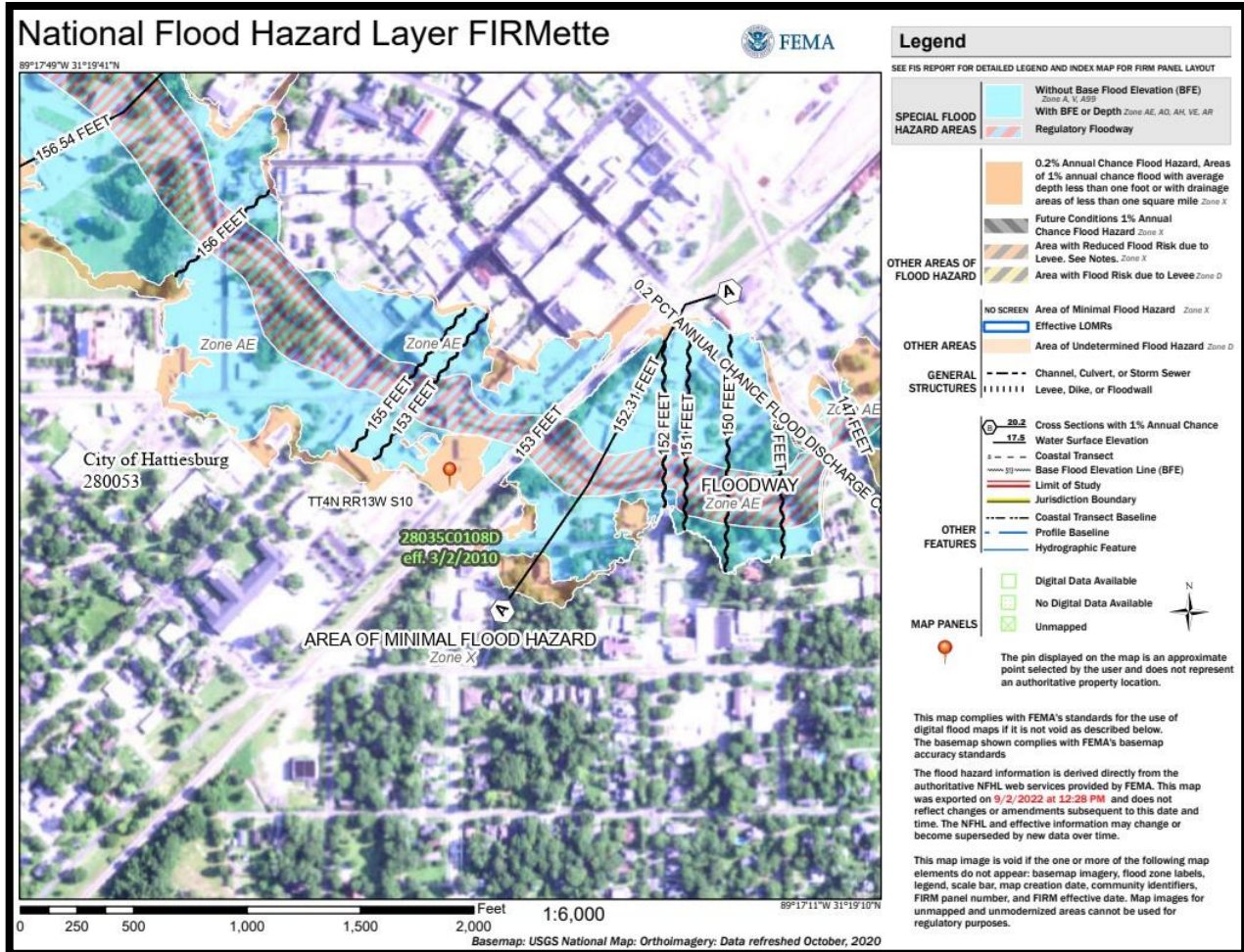
The property is zoned B-5; Regional Business District by the City of Hattiesburg. This zoning district permits the broadest range of commercial uses. The existing use as a Professional Office Building is a legal conforming use. Please refer to the Highest and Best Use section of this report for further discussion.



4.5.12 B-5 Regional Business District.	
Description and Purpose.	Characteristic Development Type
The purpose of the B-5 District is to provide for retail, personal and business services, offices, and financial services in locations with convenient access to the region's population consistent with comprehensive planning policies. This district is consistent with the Regional Business District in the Comprehensive Plan.	
District Uses and Use Standards	See Section 5
District Dimensional Standards	See Section 6
District Development Standards	See Section 7
District Sign Standards	See Section 10

Flood Information

The subject site is generally at road grade. Per FEMA Map No. 28035C0108D, dated March 2nd, 2010, the property is situated in Flood Zone A. This is a 0.2 percent annual chance flood area.



Taxes and Assessments

ASSESSMENT INFORMATION					
Land Size	Land Assessment		Improvement Assessment		Total Assessment
150'x100'	\$72,580	59%	\$51,440	41%	\$124,020

TAX INFORMATION				
County	City	School	Total	Status
\$1,218.50	\$988.38	\$1,229.29	\$3,436.17	Paid – 3% Penalty Applied



Americans with Disabilities Act (ADA)

The Americans with Disabilities Act was passed on July 26, 1990. This Act provides comprehensive civil rights protection for individuals with disabilities in the areas of employment, public accommodations, state and local government services, and telecommunications. This Act was designed to remove barriers which prevent qualified individuals with disabilities from enjoying the same employment opportunities and access to public facilities available to persons without handicaps. We have not made an ADA compliance survey as it is beyond the scope of our expertise as appraisers.

Neighborhood Description

The property is located in downtown Hattiesburg at the corner of Ferguson Street and Ronie Street. The neighborhood area has been built-out over a period of time with older retail and commercial uses. New office and retail development is trending along Highway 98, west of Interstate 59. Veteran's Memorial Park is located adjacent to the rear of the building.

Access to the neighborhood is considered good via either Hardy Street or W Pine Street. Hardy Street is the main east/west corridor for traffic traveling west from downtown Hattiesburg to Highway 98 and outlying Lamar County areas. The neighborhood outlook is considered stable with no increase in demand in the foreseeable future.

Highest and Best Use

According to the *Dictionary of Real Estate Appraisal, 5th Edition*, highest and best use is defined as: 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 physically possible, legally permissible, financially feasible and maximally productive. 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.

When a site is improved, we must recognize that the highest and best use may differ from the existing use; however, the existing use will continue, unless and until, land value (at its highest and best use) exceeds the total value of the property in its present use. The definition of highest and best use recognizes the contribution of a specific use to the community or to individual property owners.

The determination of highest and best use results from the appraiser's judgment and analytical skill; i.e., determination of highest and best use is an opinion, not a fact to be found. In appraisal practice, the concept of highest and best use is the premise upon which value is based. In the context of investment value, "most profitable use" is another alternative term but the degree of risk must be considered.

The highest and best use concept requires an analysis of the subject as if it were vacant and also as improved to determine if the land is more valuable as vacant than the property as improved. There are four criteria that must be met. The highest and best use must be 1) physically possible; 2) legally permissible; 3) financially feasible; and, 4) maximally productive. These criteria are generally considered sequentially and the analysis may indicate more than one use.

Development of Highest and Best Use Opinion (Market Value Appraisals)

Process:

Least Intensive	Inferred, based on readily observed evidence such as surrounding land uses, age and condition of existing improvements, and known market demand for property type*
	Application of four tests (physically possible, legally permissible, financially feasible, maximally productive) but based on readily observed evidence*
	Application of four tests (physically possible, legally permissible, financially feasible, maximally productive) with research into each factor, testing for feasibility
Most Intensive	Application of four tests (physically possible, legally permissible, financially feasible, maximally productive) with complete market analysis and feasibility study

* Extraordinary assumptions may need to be stated about information taken to be true when it is uncertain.

Source: Stephanie Coleman, *Scope of Work* (Chicago: Appraisal Institute, 2006)

Physically Possible

The subject site, given its size and configuration, is well suited for a variety of development. All utilities are available to the property, further promoting its potential. The subject site has an adequate shape for the existing improvements, with good access and visibility. The shape and access present no detriment to its use. The size of the site is 15,000 square feet and is large enough for most commercial uses.

Legally Permissible

The property is zoned B-5; Regional Business District by City of Hattiesburg. This zoning district permits the broadest range of commercial uses. The current office use is a legal conforming land use.

Financially Feasible

Those uses which are financially feasible and that use which is maximally productive are generally closely related. Any use that results in a net return to the land after satisfying the return to the improvements is considered to be financially feasible; however, that use which returns the maximum dollars to the land is considered the use which is maximally productive.

Uses fronting along Ronie Street, Hardy Street, and E. Front Street are commercial or retail oriented. Residential use would not be in harmony with adjacent land uses and could not support a land value comparable to commercial use.

Maximally Productive

The value for commercial land greatly outpaces the value for any alternative use such as multi-family, industrial, or office use. The property is ideally located near Hardy Street and in downtown suitable for office use. In conclusion, due to the visibility, access, and size of the subject property, a commercial/retail use would bring the highest return. Therefore, a professional office is considered the maximally productive use of the property.

As If Vacant

In conclusion, due to the visibility, access, and size of the subject property, a professional office use would bring the highest return as vacant.

As Improved

The site is improved with a professional office building. The building is in average condition and has some remaining economic life. Due to the building layout, alternative uses would be very limited. The total value of the property as improved far outpaces the value as vacant, so removal of the structure is not feasible. The building is well designed and is functioning properly. Therefore, the highest and best use as improved would be the continued use as a professional office building.

Methodology

The **Cost Approach** assumes that the informed purchaser would pay no more than the cost of producing a substitute property with the same utility. This approach is particularly applicable when the improvements being appraised are relatively new and represent the highest and best use of the land or when the property has unique or specialized improvements for which there is little or no sales data from comparable sales. Due to the age of the building, depreciation is difficult to quantify and measure. Measuring depreciation would be speculative and provide a weakly supported value indication. For this reason, the Cost Approach was not performed.

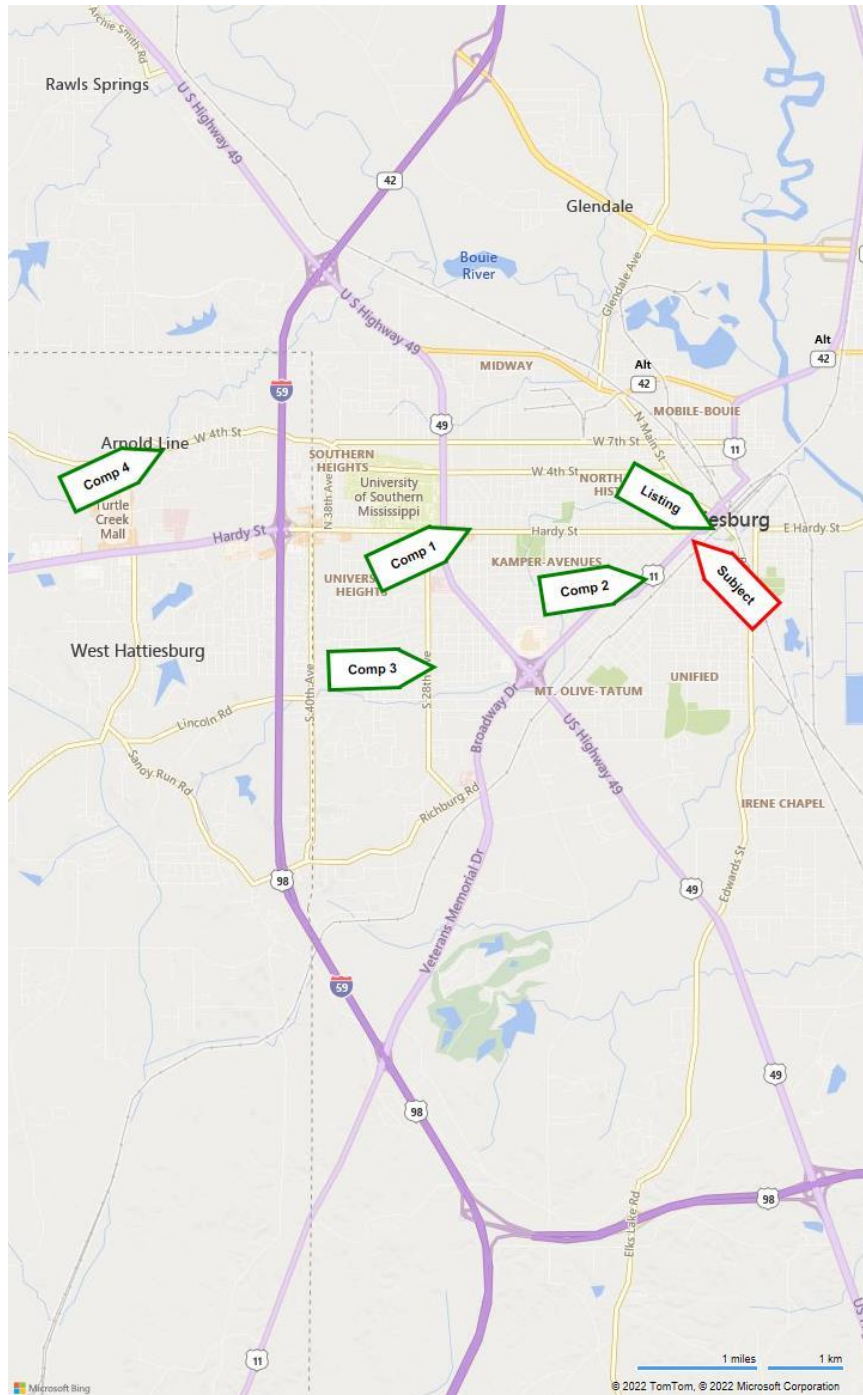
The **Sales Comparison Approach** assumes that an informed purchaser would pay no more for a property than the cost of acquiring another existing property with the same utility. This approach is especially appropriate when an active market provides sufficient reliable data. The Sales Comparison Approach is less reliable in an inactive market or when estimating the value of properties for which no directly comparable sales data is available. The Sales Comparison Approach is often relied upon for owner-user properties.

The **Income Capitalization Approach** reflects the market's perception of a relationship between a property's potential income and its market value. This approach converts the anticipated net income from ownership of a property into a value indication through capitalization. The primary methods are direct capitalization and discounted cash flow analysis, with one or both methods applied, as appropriate. This approach is widely used in appraising income-producing properties.

The Sales Comparison Approach was performed in this report.

Sales Comparison Approach

Direct Sales Comparison is a valuation technique in which a value opinion is predicated on prices paid in actual market transactions. In this process, comparison is made between properties having a satisfactory degree of similarity to the subject. Transactions involving similar office buildings on the following pages.



Improved Sale No. 1



Property Identification

Property Name	Professional Office
Address	2201 Hardy Street, Hattiesburg, Forrest County, Mississippi 39401
Tax ID	016210

Sale Data

Grantor	Samuel Woods
Sale Date	October 23, 2019
Property Rights	Fee Simple
Marketing Time	346
Conditions of Sale	Normal arm's length
Verification	MLS115402

Sale Price	\$140,000
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Land Data

Land Size	0.275 Acres or 12,000 SF
Front Footage	85 ft Total Frontage: 85 ft Hardy Street;
Zoning	B-3 General Business District
Topography	Slightly above road grade
Flood Info	None

General Physical Data

Building Name	Office building
Building Type	Single Tenant
SF	2,073

Construction Type	Wood siding
Roof Type	Asphalt Shingle roof
Foundation	Raised
HVAC	Central H&A
Stories	1
Condition	Average

Indicators

Sale Price/ SF	\$67.53
Floor Area Ratio	0.17
Land to Building Ratio	5.79:1

Remarks

Average quality professional office on Hardy Street east of Highway 49. The office was in average condition, with commercial carpet, a rear kitchen, and clean office interiors. The office was outdated, although was in good/average condition. Originally listed for \$175,000, then \$159,500, and sold after 346 days for \$140,000

Improved Sale No. 2



Property Identification

Property Type	Office
Address	912 West Pine Street, Hattiesburg, Forrest County, Mississippi 39401

Sale Data

Grantor	Royal Oaks Rental Properties, LLC
Sale Date	July 20, 2021
Property Rights	Fee Simple
Conditions of Sale	Normal
Verification	Confirmed with Listing Agent by appraiser

Sale Price	\$199,000
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Land Data

Land Size	0.23 Acres or 10,000 Sq. Ft.
Front Footage	200 ft W Pine Street
Zoning	B-1
Topography	Level
Utilities	All city services

General Physical Data

Building Type	Office Building
SF	2,432

Construction Type	Brick Veneer
Roof Type	Shingle
Foundation	Raised
Year Built	1910 / 2014
Condition	Average

Indicators

Sale Price/Gross SF	\$81.83
Floor Area Ratio	0.24
Land to Building Ratio	4.11:1

Remarks

Property is located west of the subject along W. Pine Street. This is a single-tenant office building in average condition. The interior layout includes a reception area, conference room, 6 private offices, full kitchen, 2 baths with on full shower. The building was renovated in 2014 with new roof, restored hardwood floors, double crown molding.

Improved Sale No. 3



Property Identification

Property Name	Office Building
Address	101 Madison Plaza, Hattiesburg, Forrest County, Mississippi 39401
Tax ID	2-039G-17-096.00
Longitude, Latitude	W-89.330900, N31.307930

Sale Data

Grantor	Buffalo Holdings, LLC
Grantee	HL&C Madison Square, LLC
Sale Date	January 19, 2021
Property Rights	Fee Simple
Conditions of Sale	Arm's Length
Financing	Cash
Verification	Seller

Sale Price	\$432,000
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Land Size	0.482 Acres or 21,000 SF
Front Footage	150 ft Madison Plaza; 140 ft South 28th Avenue;
Zoning	B-3;
Topography	Open; Level at road grade
Utilities	All city
Dimensions	140'x150'
Shape	Square
Flood Info	FEMA Panel No. 28035C0112D; dated, 3/02/2010
Building Type	Single Tenant
Gross SF	5,179

Construction Type	Class D; Brick Veneer Exterior
Roof Type	Gable; Shingle
Foundation	Slab
Electrical	Typical
HVAC	Central
Stories	2
Year Built	1982
Condition	Average

Indicators

Sale Price/Gross SF	\$83.51
Floor Area Ratio	0.25
Land to Building Ratio	4.05:1

Remarks

Property is located at the corner of South 28th Avenue and Madison Plaza, just north of Lincoln Road in Hattiesburg. The site contains 21,000 square feet with corner access. The site is improved with a 2-story professional office building containing 5,179 square feet (GBA). The building has a brick veneer exterior, gabled shingle roof, built in 1982. The interior is outdated but in average condition. The interior consists of carpet flooring, sheetrock walls with crown molding and trim, acoustic tile ceiling, and fluorescent lighting. The layout consists of 7 private offices, foyer and reception area, conference room, large file room, 2 restrooms, and kitchenette. The second floor is access via interior stairwell and includes 13 offices, a breakroom, 2 restrooms, and storage closet. The seller purchased the property for an investment in 2019 for \$392,000 or \$75.69/sf.

Improved Sale No. 4



Property Identification

Property Name Professional office
Address 5000 W. 4th Street, Hattiesburg, Lamar County, Mississippi
39402
Tax ID 051F-02-195.000

Sale Data

Grantor The Tuna House, LLC
Grantee Hattiesburg Employment Professionals, LLC
Sale Date October 23rd, 2020
Property Rights Fee Simple
Conditions of Sale Normal arm's length
Verification Confirmed with Stephen Stetelman by ZF; 3/18/20

Sale Price \$590,000

Land Data

Land Size 1.0 Acre or 43,560 SF
Front Footage 150 ft Weathersby: 355 ft West 4th Street
Utilities All city
Shape Rectangular
Flood Info Not located in flood zone

General Physical Data

Building Name Office
Building Type Single Tenant
SF 9,786

Construction Type Brick
Roof Type Asphalt Shingles
Foundation Slab

HVAC	Central H&A
Stories	2
Year Built	1990

Indicators

Sale Price/ SF	\$60.29
Floor Area Ratio	0.23
Land to Building Ratio	4.45:1

Remarks

Professional office located at the corner of West 4th Street and Weathersby Drive. The site has access from West 4th Street and Weathersby Drive. This is a 2-story office building with average quality interior finish. The property was purchased for employment services.

Active Listing



Property Identification

Property Name	Office Building
Address	222 Main Street, Hattiesburg, Mississippi 39401
List Price	\$489,900
Days on Market	56 Days
Verification	MLS#130349 – Michael Anderson (Listing Agent)
Land Size	0.26 Acres or 11,484 SF
Front Footage	152 ft Main Street; 110 ft Walnut Street;
Zoning	B-4
Topography	Open; Level at road grade
Utilities	All city
Flood Info	FEMA Panel No. 28035C0112D; dated, 3/02/2010
Building Type	Single Tenant
Gross SF	9,426
Construction Type	Class D; Brick Veneer Exterior
Roof Type	Built-up
Foundation	Slab
HVAC	Central
Stories	1
Year Built	1920
Condition	Average

Indicators

List Price/Gross SF	\$51.97
Floor Area Ratio	0.82
Land to Building Ratio	1.22:1

Improved Sales Summary and Adjustment Grid					
	Subject	Comparable 1	Comparable 2	Comparable 3	Comparable 4
Property Name:	Office Building	Office Building	Office Building	Office Building	Office Building
Location:	101 Ferguson Street	2201 Hardy Street	912 W. Pine Street	101 Madison Place	5000 W. 4th Street
City:	Hattiesburg	Hattiesburg	Hattiesburg	Hattiesburg	Hattiesburg
Date of Sale:	Listing	October-19	July-21	January-21	October-20
Sale Price:	\$200,000	\$140,000	\$199,000	\$432,000	\$590,000
Improvement Value		\$68,000	\$139,000	\$285,000	\$460,000
Building Size:	5015	2,073	2,432	5,179	9,786
Unadjusted Imprv. Price/SF:	\$39.88	\$32.80	\$57.15	\$55.03	\$47.01
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
Market Conditions:	Stable	Stable	Stable	Stable	Stable
Adjusted Price/SF:		\$32.80	\$57.15	\$55.03	\$47.01
Location:		Similar	Similar	Similar	Similar
Building Size (SF):	5,015	0%	0%	0%	0%
Year Built / Condition:	1962	-5%	-5%	0%	5%
Eff. Age 30-35 Years		1979	1910 / 2014	1982	1990
Quality	Average	-15%	-30%	-20%	-30%
		Similar	Similar	Superior	Similar
		0.00%	0.00%	-8.00%	0.00%
Net Adjustments:		-20%	-35%	-28%	-25%
Adjusted Imprv. Price/SF:		\$26.24	\$37.15	\$39.62	\$35.25

Improved Sales Analysis

The preceding sales were confirmed to offer the best indication of value of the subject via the Sales Comparison Approach. A number of sales were examined, and in the final analysis they were narrowed to the most comparable transactions. There are several units of comparison generally employed in the analysis of commercial properties. In this instance, the market dictates price per square foot index is most appropriate. The adjustment categories include location, age, size and building quality.

Land Valuation

Commercial land sales in the downtown area range from \$2.05 to \$2.94 per square foot. Based the researched sales, a land value of \$2.50/sf or \$50,000 is estimated for the subject. A copy of the land sales can be found in the work file.

Improvement only value

Prior to making any adjustments to the sales, the estimated land value was extracted from the sales, resulting in the value of the improvements only. The residual improvement only values were adjusted based on age, condition, location, size, and quality. After adjusting the improved sales, the land value of the subject site was added, resulting in the total indicated value of the subject site.

All of the transactions were financed at market terms by third party financial institutions; hence, no adjustments for financing were required. If atypical financing were involved in the transaction, the appraiser would determine if those terms had a quantifiable effect on the sale price necessitating an adjustment.

Each transaction was confirmed to be arm's length between willing buyers and sellers; therefore, no adjustments for abnormal conditions of sale were necessary. However, if a listing is included in the analysis, a downward adjustment is considered to reflect a typical cushion for negotiations. Nonetheless, the amount of adjustment, if any, would depend on the asking price as it relates to the market at that time.

Some transactions might include a bank sale sometimes referred to as "short sale". An adjustment will be made if warranted based on the confirmation of that transaction.

Adjustments for time and price trends attempt to quantify changes in market conditions between the date of each sale and the date of the appraisal, based on current market conditions and available properties. All of the transactions are relatively timely, taking place from October, 2019 to July, 2021. Adjustment for this category would be based on any quantifiable appreciation or depreciation, typically identified through paired sales analysis.

Building size is an adjustment in which comparables site size is compared to the subject. Depending on the market segment, variation in building size can have effect up to a point on the price per square foot index. Typically, if a comparable is larger than the subject, an upward adjustment is applied to reflect economies of scale. Conversely, if a comparable is smaller than the subject site, a downward adjustment is applied. This trend is seen in the comparables. Three of the sales are significantly larger and positive adjustments were made. Adjustments were made to the sales based on the improvement only unit value.

The effective age and condition of the sales are compared to the subject to determine if adjustments are necessary. The historical or chronological age of the structure is less meaningful than its effective age at the time of sale. Effective age is the age indicated by the condition and utility of the structure and is based on the appraiser's judgment and interpretation of market perceptions. Generally speaking, if one building is better maintained than other buildings in its market area, the effective age of the building may be less than its actual age. If a building is poorly maintained, its effective age may be greater than its actual age. If a building has received typical maintenance, its effective age and actual age may be the same. The building was constructed in 1962; however, the building has been upkept with typical maintenance. The building is in average condition and was estimated to have an effective age of about 30-35 years.

The subject was projected to have a total economic life of approximately 50 years. Thus, the improvements are depreciating at a general rate of 2.0% per year (100%/ 50 years). An upward adjustment is typically applied when a comparable has inferior quality as compared to the subject. Conversely, a downward adjustment is applied when a comparable has a superior quality as compared the subject.

The improved sales were all similar office buildings and were all relatively recent sales. Land values were deducted from the sales to reflect building only values. The sales indicate improvement unit values from \$26.24-\$39.62 per square foot. Sales 1 and 4 were considered most similar with adjusted unit values of \$26.24/sf and \$35.32/sf respectively. A unit value of \$30.00/sf was adopted for the building. As previously noted, the broker reported a cost of around \$6,000 to get the HVAC in proper working condition. A lump sum deduction was applied to the adopted building value to account for HVAC. A land value of \$2.50/sf or \$50,000 is estimated for the land value based on sales found in the workfile. The "As Is" market value of \$195,000 was concluded for the subject.

Building Area: 5,015 Square Feet @ \$30.00/SF =	\$150,450
Less Deferred Maintenance (HVAC):	<u>(\$6,000)</u>
Concluded Building Value:	\$144,450
Plus: Land Value	<u>\$50,000</u>
Total Real Estate Value	\$194,450

"As Is" Market Value via Sales Comparison Approach \$195,000

ASSUMPTIONS

1. This is an appraisal report presented in an Appraisal Report which is intended to comply with the reporting requirements set forth under Standard Rule 2-2(a) of the Uniform Standards of Professional Appraisal Practice. It is understood between the parties that the scope of the assignment is limited and we relied on information obtained from the public records of Forrest County, published data sources and discussions with market professionals such as investors and brokers relative to County, published data sources and discussions with market professionals such as investors and brokers relative to the subject's income performance and physical composition. The appraiser is not responsible for unauthorized use of this report.
2. Unless otherwise specifically noted in the body of the report, it is assumed that title to the property or properties which are identified as the subject of the report, are clear and marketable and there are no recorded or unrecorded matters or exceptions to title that would adversely affect marketability or value. The appraiser has not examined title and makes no representations relative to the condition thereof.
3. Unless otherwise specifically noted in the body of the report, the legal description furnished is assumed to be correct. Any abbreviations or discrepancies relative to the legal would be identified.
4. It is assumed that surveys and/or plats furnished to, or acquired by, the appraiser and used in the making of this report are correct. The appraiser has not made a land survey or caused one to be made unless identified in the report and therefore, assumes no responsibility for accuracy of same.
5. It is assumed any improvements have been, or will be, constructed according to approved architectural plans and specifications in conformance with recommendations contained in or based on any soil report(s). Unless otherwise noted, the appraiser has not retained independent engineer(s) or architect(s) in connection with the report and therefore, makes no representations relative to conformance with approved architectural plans, specifications, or recommendations contained in or based on any soil(s) report.
6. It is assumed that all factual data furnished by the client, property owner, owner's representative, or persons designated by the client or owner are accurate and correct unless otherwise specifically noted in the report. I do not guarantee the correctness of such data, although as far as is reasonably possible, the data has been checked and is believed to be correct. Information and data referred to in this paragraph may include but is not limited to information relative to the subject of the report regarding numerical street addresses, lot and block numbers, assessors parcel numbers, land dimensions, square footage area of land, dimensions of the improvements, gross building areas, net rentable areas, usable areas, unit count, room count, rent schedules, income data, budgets, historic operating expenses, and related data. Information obtained regarding demographics, comparable verification, and data of a general sense is assumed factual as confirmed and the source(s) reliable. Any material error in the gathered data could have substantial impact on the conclusions reported; as a result, the appraiser reserves a right to amend conclusions reported if made aware of such an error.
7. Unless otherwise noted in the body of the report, it is assumed that there are no mineral or sub-surface rights of value involved in the report and there are no other development rights of value that may be transferred. Subsurface rights, minerals and oils, were not considered in making this report unless otherwise stated.
8. Any riparian and/or littoral rights identified by survey or plat are assumed to go with the property unless easements and/or deeds of record were found by the appraiser to the contrary.
9. It is assumed that there is full compliance with all federal, state, and local environmental regulations and laws, unless non-compliance is stated, defined, and considered in the report.
10. It is assumed that all applicable zoning and use regulations and restrictions have been complied with, unless the non-conformity has been stated, defined, and considered in the report. Unless otherwise noted, it is assumed that no changes in the present zoning ordinances or regulations governing use, density, or shape, are being considered.
11. It is assumed that all required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, state, or national government or private entity or organization has been, or can be, obtained or renewed for any use on which the value opinion contained in the report is based.
12. Unless otherwise stated in the report, the existence of hazardous material, which may or may not be present on the property, was not observed by the appraisers. The appraisers have no knowledge of the existence of such material on or in the property. The appraisers, however, are not qualified to detect such substances. The presence of substances such as asbestos, urea formaldehyde foam insulation, contaminated ground water, or other potentially hazardous materials may affect the value of the property. The value opinion is predicated upon the assumption that there is no such material on or in the property that would cause loss in value or affect its marketability. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field if desired.

13. The soil of the area which is the subject of the report appears to be firm and solid. Unless otherwise stated, subsidence in the area is unknown or uncommon, but the appraiser does not warrant against this condition and/or occurrence.
14. It is assumed that the utilization of the land and improvements is within the boundaries or property lines as described in the report, and there is no encroachment or trespass, unless noted.
15. The date of value of which the opinions in the report apply is set forth in the body of the report. The appraiser assumes no responsibility for economic or physical factors occurring at some later date which may affect the opinions stated in the report.
16. Unless specifically noted in the body of this report, it is assumed that the property or properties described are structurally sound, seismically safe, and that all building systems (mechanical, electrical, HVAC, elevator, plumbing, etc.) are, or will be upon completion, in good working order with no major deferred maintenance or repair required; that the roof and exterior are in good condition and free from intrusion from the elements; that the property or properties have been engineered in such a manner that it/they will withstand any known elements such as wind storm, flooding, or similar natural occurrences; and that the improvements as currently constituted conform to all applicable local, state, and federal building codes and ordinances. The appraiser retained independent structural, mechanical, electrical, or civil engineers in connection with the report. As such, the appraiser makes no representations relative to the condition of the improvements. Unless otherwise noted in the report, no problems were brought to the attention of the appraiser by ownership or management. If questions regarding engineering studies are critical to the decision process of the reader, the advice of competent engineering consultants should be obtained and relied upon. If engineers and consultants retained should report negative factors of a material nature or if such are later discussed relative to the condition of the improvements, such information could have a substantial negative impact on the conclusions reported. Accordingly, if negative findings are reported by engineering consultants, the appraiser reserves the right to amend the report conclusions.
17. Unless otherwise specifically noted, this report is not being prepared for use in conjunction with litigation. Accordingly, no rights to expert testimony, pretrial or other conferences, disposition, or related services are included in this appraisal. If as a result of this undertaking, the appraiser or any its officers, professionals, and/or consultants are requested or required to provide any of the foregoing services, such shall be subject to the availability of The appraiser professionals or consultants at the time and shall further be subject to the party or parties requesting or requiring such services paying the then applicable professional fees and expenses.
18. Neither all nor any of the contents of the report shall be conveyed to the public through advertising, public relations, news, sales or other media without written consent and approval of the appraiser., particularly as to the valuation conclusions, the identity of the professionals or firm, or any reference to the Appraisal Institute, the MAI designation, or certification by the State of Mississippi. Exempt from restrictions relative to the transmittal of this report to third parties is duplication for internal use of the client-addressee and/or transmission to attorneys, accountants, or advisors of the client-addressee. Also exempt from this restriction is transmission of the report to any court, governmental authority, or regulatory agency having jurisdiction over the party/parties for whom the report was prepared, providing that the report and/or its contents shall not be published, in whole or in part in any public document without the express written consent of the appraiser or its principals, which consent The appraiser reserves the right to deny. The report should not be advertised to the public or otherwise used to induce a third party to purchase the property. Any third party not covered by the exemptions herein who may possess this report is advised that he should rely on his own independently secured advice for any decision in conjunction with the property. The appraiser and/or principals, shall have no accountability or responsibility to any such third party.
19. Unless specifically set forth in the body of the report, nothing contained therein shall be construed to represent any direct or indirect recommendation to buy, sell, or hold the property(ies) at the value(s), or development scenario as stated. Such decisions involve substantial investment strategy and must be specifically addressed in consultation form.
20. The distribution of the total valuation in this report between land and improvements applies only under the existing program of utilization. The separate valuations for land and building must not be used in conjunction with any other report and are invalid if so used.
21. The forecasts, projections, and/or operating estimates contained herein are based on current market conditions, anticipated (though recognizably short term) supply and demand factors, and a continued stable economy, unless otherwise stated. Any forecasts are therefore subject to changes in future conditions.
22. The Americans with Disabilities Act ("ADA") became effective January 26, 1992. The appraiser has not made a specific compliance survey and analysis of this property to determine whether or not it is in conformity with the various detailed requirements of the ADA. It is possible that a compliance survey of the property, together with a detailed analysis of the requirements of the ADA, could reveal that the property is not in compliance with one or more of the requirements of the Act. If so, this fact could have a negative effect upon the value of the property. Since The appraiser has no direct evidence relating to this issue, we did not consider possible non-compliance with the requirements of ADA in estimating the value of the property.
23. **Insurable value is not provided in this report. Taking the difference between our reported Market Value and estimated land value is not an appropriate method for estimating replacement cost of improvements for insurance coverage purposes. We recommend a proper insurance representative to estimate an appropriate coverage for the subject**

property. Insurable value has two definitions per Marshall and Swift LP. 1. The value of an asset or asset group that is covered by an insurance policy. It can be estimated by deducting costs of non-insurable items (e.g., land value) from Market Value. 2. Value used by insurance companies as the basis for insurance. Often considered to be replacement or reproduction cost plus allowances for debris removal or demolition less deterioration and non-insurable items. Sometimes cash value or Market Value, but often entirely a cost concept.

Extraordinary Assumptions

1. None

Hypothetical Conditions

1. None

STATE OF MISSISSIPPI

COUNTY OF FORREST

QUITCLAIM DEED

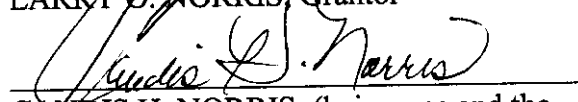
FOR AND IN CONSIDERATION of the sum of Ten Dollars (\$10.00), cash in hand paid, and other good and valuable consideration, the receipt, adequacy and sufficiency of all of which are hereby irrevocably acknowledged and confessed, we, LARRY O. NORRIS and wife, CANDIS H. NORRIS (being one and the same as CANDIS P. HAMIL NORRIS), Grantors herein, do hereby grant, convey and quitclaim unto NORRIS LAND & TIMBER, LLC, a Mississippi limited liability company, Grantee herein, any interest which we may have in the following described real property lying and being situated in the County of Forrest and State of Mississippi, to-wit:

See Exhibit "A" which is attached hereto and made a part hereof as if fully copied and set out at length in words and figures herein.

WITNESS THE SIGNATURES of the Grantors on this, the 2nd day of

December, 2004.


LARRY O. NORRIS, Grantor


CANDIS H. NORRIS, (being one and the same as CANDIS P. HAMIL NORRIS)

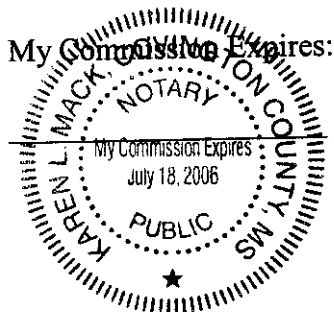
STATE OF MISSISSIPPI

COUNTY OF FORREST

PERSONALLY appeared before me, the undersigned authority in and for said county and state, LARRY O. NORRIS, who acknowledged before me that he executed, signed and delivered the foregoing instrument as his own free act and deed on the day and year therein mentioned.

GIVEN under my hand and seal of office on this, the 2nd day
of December, 2004.

Saren A. Nummer aka
NOTARY PUBLIC
Saren A. Mack



STATE OF MISSISSIPPI

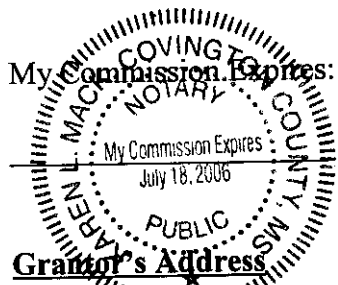
COUNTY OF FORREST

PERSONALLY appeared before me, the undersigned authority in and for said county and state, CANDIS H. NORRIS (being one and the same as CANDIS P. HAMIL NORRIS), who acknowledged before me that she executed, signed and delivered the foregoing instrument as her own free act and deed on the day and year therein mentioned.

GIVEN under my hand and seal of office on this, the 2nd day
of December, 2004.

Saren A. Nummer aka
NOTARY PUBLIC
Saren A. Mack

My Commission Expires:

A circular notary seal for Karen L. Mack, Notary Public, State of Mississippi. The seal contains the text "NOTARY PUBLIC", "KAREN L. MACK", "STATE OF MISSISSIPPI", and "My Commission Expires July 18, 2006".

Grantor's Address
P. O. Box 8
Hattiesburg, MS 39403
(601) 545-2011

Grantees' Address
P. O. Box 8
Hattiesburg, MS 39403
(601) 545-2011

THIS INSTRUMENT PREPARED BY:

MARY DEVER BLUMENTRITT
JACKSON, BOWMAN, & BLUMENTRITT
ATTORNEYS AT LAW
P. O. BOX 15517
HATTIESBURG, MS 39404-15517

FORREST COUNTY
I CERTIFY THIS INSTRUMENT
WAS FILED AND RECORDED
100121
2004 DEC -8 A 10:46
RECORDED, BK. AND PAGE NO. AS SHOWN
FILE NO. AS SHOWN
WITNESS MY HAND AND SEAL
C. A. HENCK
CHANCERY CLERK

INDEXING INSTRUCTIONS TO CHANCERY CLERK:

Please record and index on the Direct/Reverse Alphabetical Land Deed Index and on the Sectional Index for Forrest county, Mississippi, as follows:

Parcel 1:

- ✓ NE 1/4 of the NE 1/4 of Section 21, Township 5 North, Range 14 West, Forrest County, Mississippi, and
- ✓ Lot 24, Block A of the Lakewood Estate, First Addition Subdivision of Forrest County, Mississippi and the NW 1/4 of the NW 1/4, and
- ✓ NW 1/4 of the NW 1/4 of Section 22, Township 5 North, Range 14 West, Forrest County, Mississippi.

Parcel 2:

- ✓ E 1/2 of the NW 1/4 and W 1/2 of the NE 1/4, Section 21, Township 5 North Range 14 West, Forrest County, Mississippi.

Parcel 3:

- ✓ W 1/2 of the SE 1/4 of the NE 1/4, Section 21, Township 5 North, Range 14 West, Forrest County, Mississippi.

Parcel 4:

- ✓ Lot 9 in the S 1/2 of Lot 8, Block 10, Hattiesburg Heights Subdivision, Second Addition in the City of Hattiesburg, Forrest County, Mississippi.

Parcel 5:

- ✓ N 1/2 of the NE 1/4 of the SW 1/4 Section 21, Township 5 North, Range 14 West, Forrest County, Mississippi.

Parcel 6:

- ✓ NE 1/4 of NW 1/4 of SE 1/4 and the SW 1/4 of the NE 1/4 Section 21, Township 5 North Range 14 West, Forrest County, Mississippi.

Parcel 7:

- ✓ Lots 1 and 2 in Block 133 of the Kamper and Whinnery Survey of the City of Hattiesburg, Forrest County, Mississippi.

Parcel 8:

- ✓ Lot 17 of the Waggoner Addition and Lot 6 of the Crittendon Survey, City of Hattiesburg, Forrest County, Mississippi.

EXHIBIT "A":

Parcel 1:

The NE 1/4 of the NE 1/4 of Section 21, Township 5 North, Range 14 West,
Forrest County, Mississippi

AND ALSO:

An easement for the purposes of ingress and egress more particularly described as follows:

The West 50 feet of Lot 24 of Block "A" of the Lakewood Estates, First Addition Subdivision of Forrest County, Mississippi, and also, the South 50 feet of the West 220 feet of the NW 1/4 of the NW 1/4 of Section 22, Township 5 North, Range 14 West, Forrest County, Mississippi;

Parcel 2:

The East 1/2 of the NW 1/4; and the West 1/2 of the NE 1/4, less three acres lying East and West in the Southeast corner of the SW 1/4 of the NE 1/4 all in Section 21, Township 5 North, Range 14 West, Forrest County, Mississippi, and consisting of 157 acres, more or less.

Together with all improvements thereon and appurtenances thereunto belonging.

LESS AND EXCEPT:

Commencing at the NE corner of Section 21, Township 5 North, Range 14 West, Forrest County, Mississippi, thence run N 88° 55' West along the North boundary line of said Section 21, Township 5 North, Range 14 West for 2,667.5 feet to the NE corner of the NE 1/4 of NW 1/4, said Section 21, to and for a point of beginning, thence run South 08° 40' W for 586.0 feet, thence run N 89° 20' W for 283.65 feet; thence run N 09° 17' W for 589.5 feet to the North boundary of aforesaid NE 1/4 of NW 1/4, thence run S 88° 55' East along said North boundary for 467.0 feet back to the point of beginning, said parcel containing 5.00 acres, more or less, located in the NE 1/4 NW 1/4, Section 21, T5N, R14W, Forrest County, Mississippi.

LESS AND EXCEPT:

All that part of the SE 1/4 of NW 1/4 lying West of the county road, containing 1 acre more or less, in Section 21, Township 5 North, Range 14 West, Forrest County, Mississippi.

Parcel 3:

The West ½ of the SE ¼ of the NE ¼, Section 21, Township 5 North, Range 14 West, Forrest County, Mississippi.

Parcel 4:

Lot 9, and the South ½ of Lot 8, Block 10, of the Hattiesburg Heights Second Addition in 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.

Parcel 5:

The North Half of the NE ¼ of the SW ¼ of Section 21, Township 5 North, Range 14 West, Forrest County, Mississippi.

LESS AND EXCEPT that part of the above described property used as a public road.

Parcel 6: The NE ¼ of the NW ¼ of SE ¼ and; three acres of land in the SE corner of the SW ¼ of the NE ¼, said three acres being one acre wide, North and South, and three acres long, East and West, all in Section 21, Township 5 North, Range 14 West, being the same property acquired by Hulon R. Graves from C.R. and Cynthia Hemenger on the 29th day of March, 1949, recorded in Book 208, page 483, of the records of Forrest County, Mississippi.

Parcel 7: That portion of Lots 1 and 2 in Block 133 of the Kamper and Whinnery Survey of the City of Hattiesburg, Forrest County, Mississippi, bounded on the easterly side by Front or Ronie Street, and on the southwesterly side by Ferguson Street, and on the Northwesterly side by the public alley intersecting said block of said Kamper and Whinnery Survey, according to the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi.

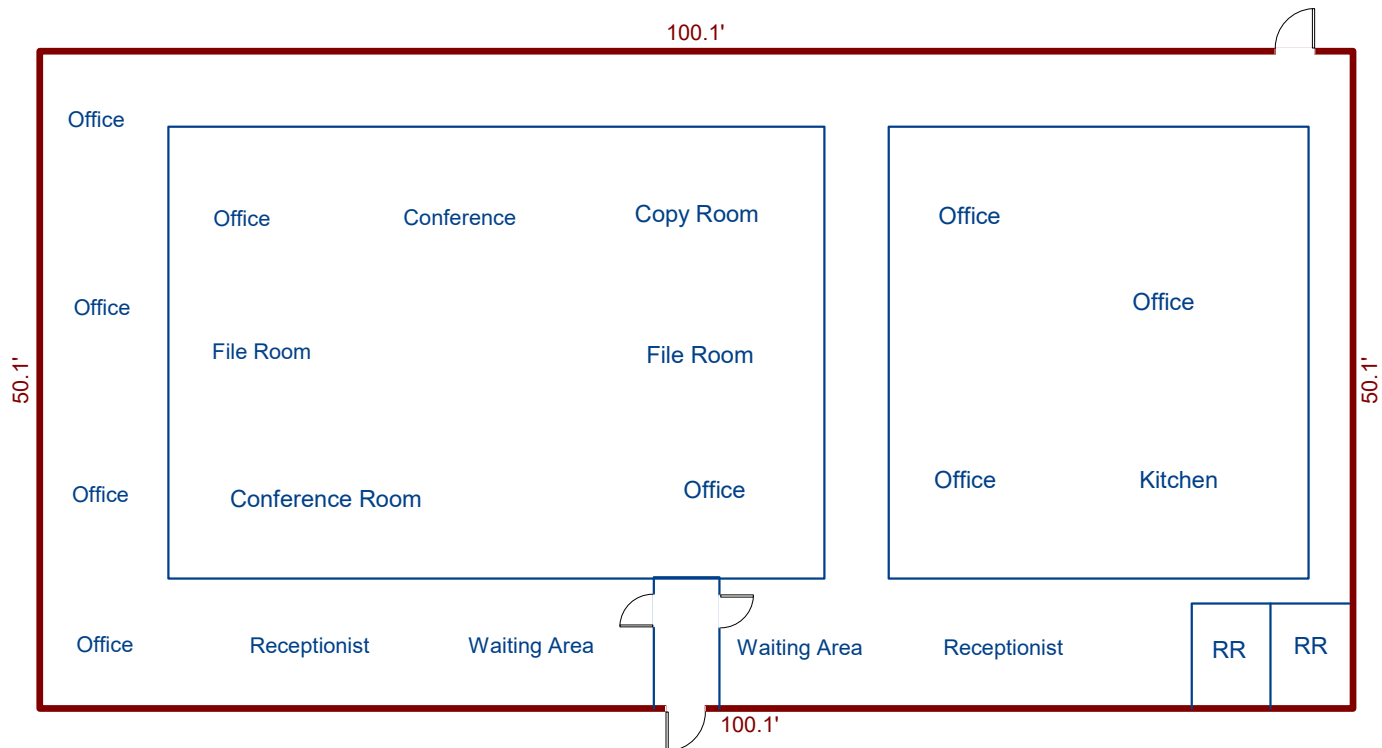
Parcel 8: Begin at the Southeast corner of Lot 17 of the Waggoner Addition being a part of Lot 6 of the Crittenden Survey, said point being the intersection of the North line of West Seventh Street with the West line of North Main Street, and run West along the North line of West Seventh Street for 113 feet, thence run North 25° 45' West for 95.4 feet, thence run North 78° East along the North line of said Lot 17 for 104.1 feet to the West line of North Main Street, thence run South 25° 45' East along the West line of North Main Street for 121 feet to the Point of Beginning, being in the City of Hattiesburg, Forrest County, Mississippi.

SKETCH/AREA TABLE ADDENDUM

SUBJECT INFO

File No.: 130Aug22 Parcel No.: 2-0290-10-021.00
 Property Address: 101 Ferguson Street
 City: Hattiesburg County: Forrest State: MS ZipCode: 39401
 Owner: Norris Land and Timber, LLC
 Client: City of Hattiesburg Client Address:
 Appraiser Name: Zac Fairley Inspection Date: 08/22/2022

SKETCH



Sketch by ApexSketch

AREA CALCULATIONS SUMMARY

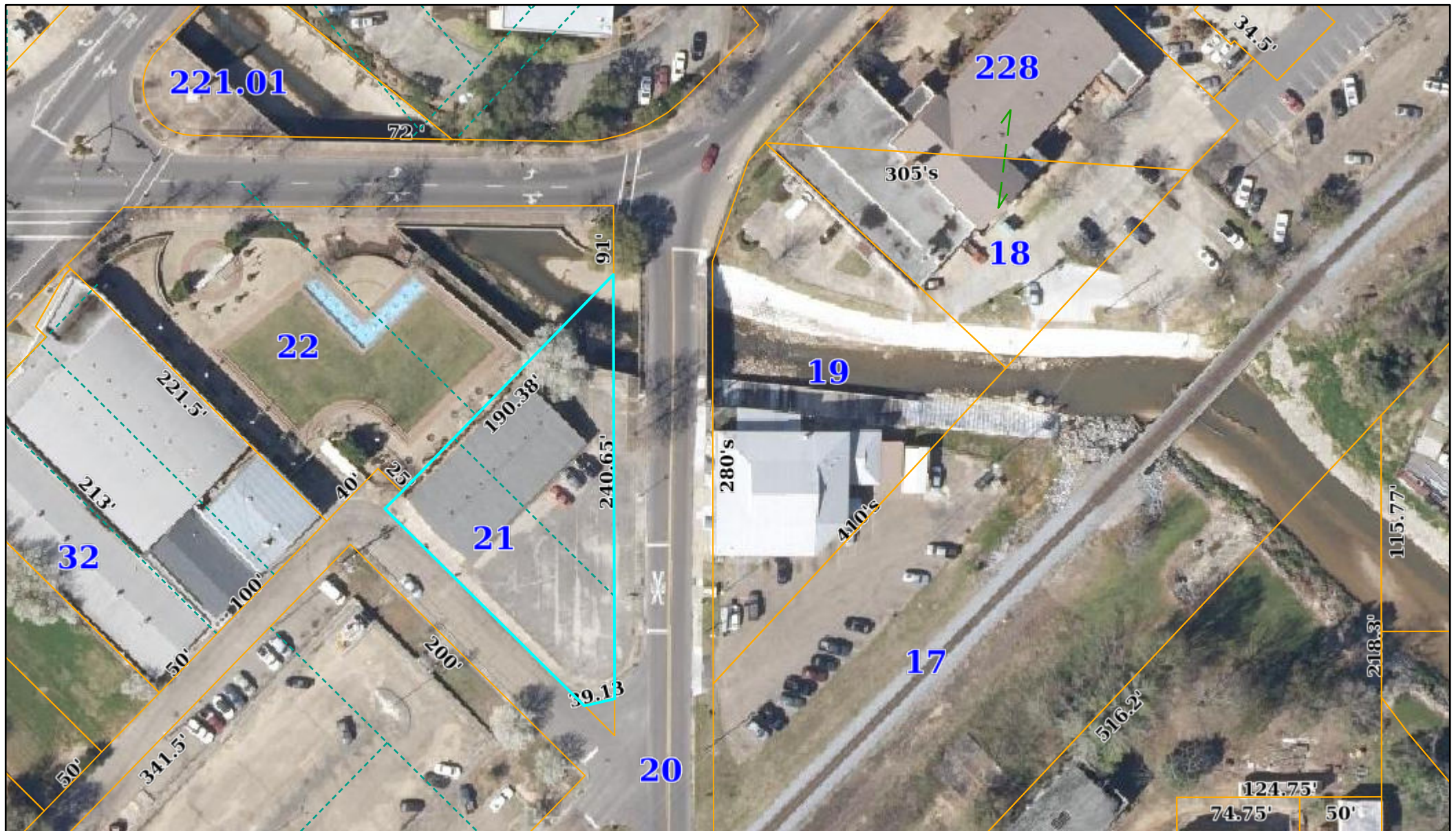
Code	Description	Factor	Net Size	Perimeter	Net Totals
GBA1	Norris Law Office	1.0	5015.0	300.4	5015.0

COMMENT TABLE 1

COMMENT TABLE 2

COMMENT TABLE 3

Net BUILDING cnt 1 (rounded) 5,015



9/1/2022, 2:44:36 PM

Parcels

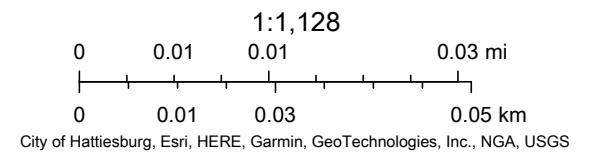
LANDHOOK_LN

LOTLINE

forrest_ms_ac
forrest_ms_dim
forrest_ms_parcelno

Anno

Imagery2015



Forrest County Mississippi



Delta Computer Systems, Inc.

Property Link

FORREST COUNTY, MS

Current Date 9/ 1/2022

Tax Year 2021

Records Last Updated 9/ 1/2022

PROPERTY DETAIL

OWNER NORRIS LAND AND TIMBER LLC
PO BOX 8

HATTIESBURG MS 39403

ACRES : **NA****LAND VALUE : 34810****IMPROVEMENTS : 140320****TOTAL VALUE: 175130****ASSESSED : 26270****PARCEL** 2-0290-10-021.00**ADDRESS** FERGUSON STREET**TAX INFORMATION**

YEAR 2021	TAX DUE PAID		BALANCE
COUNTY	1720.69	1720.69	0.00
CITY	1395.73	1395.73	0.00
SCHOOL	1735.92	1735.92	0.00
PENALTY & OTHER	24.26	24.26	0.00
TOTAL	4876.60	4876.60	0.00

A Print Fee May Apply, Contact County For Total.**LAST PAYMENT DATE** 2 / 24 / 2022**MISCELLANEOUS INFORMATION**

EXEMPT CODE		LEGAL	PT LTS 1&2 BRDED ON ELY SE BY
HOMESTEAD CODE	None		FRONT& RONIE ST & ON SWLY SD
TAX DISTRICT	1110		BY BERGUSONST & ON NWLY SO BY
PPIN	019211-01		PUBLIC ALY INTERSECTING BLK
SECTION	10		133 LESS PT TO CITY B540 P187
TOWNSHIP	03N		6/84
RANGE	13W		PREV #:H0444-60-003
			KAMPER & WHINNERY 1ST
Book 0950	Page 519		

[PURCHASE COUNTY TAX SALE FILES](#)**TAX SALES HISTORY, FOR UNPAID TAXES**

Year **Sold To** **Redeemed Date/By**

NO TAX SALES FOUND

[View Appraisal Record](#)

Back

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QUALIFICATIONS OF ZACHARY H. FAIRLEY

Professional Designations & Affiliations

- ◆ State Certified General Real Estate Appraiser in the State of Mississippi, #GA-1418

Related Job Experience

Zac Fairley Appraisals, LLC December 2019 – Present

Owner - Appraise all forms of real estate, including commercial, industrial, residential, multi-family, subdivision developments, right-of-way, partial interest, and timber land properties.

Collins and Null Appraisals, Inc. April 2007- October 2019

Real Estate Appraiser - Appraise all forms of real estate, including commercial, industrial, residential, rights-of-way, partial interest and timber land. Also includes preparation of documents for court proceedings, review of peer appraisals and expert witness testimony.

Academic Background

Petal High School- Petal, MS - (2003)

High School Diploma

Jones County Junior College - (2005)

Associate of Arts Degree in Business Administration

The University of Southern Mississippi - (2012)

Bachelor of Science in Business Administration (Real Estate, Finance)

Professional Education

Appraisal Principles Course (110) - Dallas, TX	Appraisal Institute	2012
Appraisal Procedures Course (120) - Dallas, TX	Appraisal Institute	2012
Standards of Professional Practice, USPAP - Dallas, TX	Appraisal Institute	2012
Business Practices & Ethics (MAB #49249) Online	Appraisal Institute	2013
General Site Valuation and Cost Approach - Houston, TX	Appraisal Institute	2013
Residential Market Analysis and Highest & Best Use (MAB #7325)	Appraisal Institute	2014
Residential Site Valuation and Cost Approach (MAB #49132)	Appraisal Institute	2014

Residential Sales Comparison and Income Approach	Appraisal Institute	2014
Residential Report Writing and Case Studies	Appraisal Institute	2014
Condemnation Appraising: Principles & Applications (MAB #49179)	Appraisal Institute	2015
USPAP Update (2016-2017)	Appraisal Institute	2016
105 The Uniform Act - Executive Summary	MDOT	2016
General Appraiser Sales Comparison Approach (MAB#49264)	Appraisal Institute	2017
Real Estate Finance, Statistics, and Valuation Modeling (MAB#49442)	Appraisal Institute	2018
USPAP Update (2018-2019)	Appraisal Institute	2018
General Appraiser Income Approach, Part 1 (MAB#49573)	Appraisal Institute	2018
General Appraiser Income Approach, Part 2 (MAB#49342)	Appraisal Institute	2019
General Appraiser Market Analysis & Highest and Best Use (MAB#49647)	Appraisal Institute	2020
Valuation Impacts from Covid-19	Appraisal Institute	2020
General Appraiser Report Writing & Case Studies (MAB#49729)	Appraisal Institute	2020
Advanced Income Capitalization (MAB#49604)	Appraisal Institute	2020
2020-2021 15-Hour Equivalent USPAP (MAB#50212)	Appraisal Institute	2021
2022-2023 7-Hour USPAP Update (MAB#50355)	McKissock	2022

State of Mississippi MISSISSIPPI REAL ESTATE APPRAISER LICENSING AND CERTIFICATION BOARD	
LICENSE # GA-1418	STATUS: ACTIVE
ZACHARY HUNTER FAIRLEY	
HAS BEEN GRANTED A LICENSE AS A STATE CERTIFIED GENERAL APPRAISER	
Effective Date: 05/25/2022	 Expiration Date: 05/31/2024
SIGNATURE OF LICENSEE Robert E. Praytor, Administrator	

Pope & Pope, P.A.

Moran M. Pope, Jr. (1922-2017)
Moran M. Pope, III

Attorneys and Counselors
Post Office Box 17527
Hattiesburg, Mississippi 39404-7527

Telephone: 601-268-9997
Email: randypope@popelaw.com

November 30, 2022

VIA EMAIL: jimstroobroker@gmail.com

Mr. Jim Stroo
Realty Executives, The Executive Team, Inc.
118 Lamar Blvd., Suite 10
Hattiesburg, MS 39402

Re: 101 Ferguson Street, Forrest County, Mississippi Tax Parcel 2—290-10-021.00

Dear Jim:

I represent the City of Hattiesburg (“the City”). I understand represent Norris Land & Timber, LLC, who, as I understand it, owns the above-referenced property

Subject to the approval by the City Council of Hattiesburg (“the City Council”), the City agrees to purchase the above-referenced property from Norris Land & Timber, LLC (“the Seller”), for the sum of \$175,000.00 cash. The City administration anticipates that the City Council will agree to the purchase on the terms set forth herein at its meeting on December 6, 2022, but the Seller understands and agrees that the purchase and sale is contingent upon the approval of the City Council.

Assuming the approval by the City Council as set forth above, closing shall take place not later January 30, 2023. The Seller agrees to furnish to the City, prior to closing, an attorney’s Certificate of Title showing no defects and subject only to easements without encroachments, applicable zoning ordinances, protective covenants and prior mineral reservations. At closing, Seller shall tender to the City a Warranty Deed to the subject property. Ad valorem taxes for either 2022 or 2023, as the case may be, shall be prorated as of the date of closing.

Fire and extended coverage on the subject property prior to closing shall be paid by Seller.

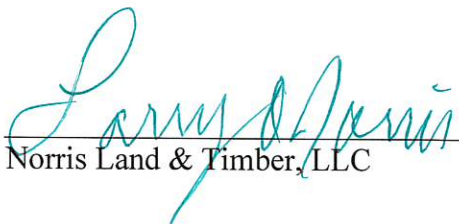
If the terms of the purchase and sale of the property are acceptable to your client, please have your client (or you, if you have the authority) sign below.

Sincerely yours,

Moran M. Pope, III, City Attorney

Mr. Jim Stroo
November 30, 2022
Page Two

SELLER

By: 
Norris Land & Timber, LLC

Date: 12-2-22

MMPIII/rp

cc: Mayor Toby Barker

Ms. Ann Jones, Chief Administrative Officer, City of Hattiesburg

Prepared by:

G. Neil Rogers
Jackson, Tullos & Rogers, PLLC
Attorney at Law
Post Office Box 15517
Hattiesburg, MS 39404-5517
(601) 264-3309

Return to:

G. Neil Rogers
Jackson, Tullos & Rogers, PLLC
Attorney at Law
Post Office Box 15517
Hattiesburg, MS 39404-5517
(601) 264-3309

**STATE OF MISSISSIPPI
COUNTY OF FORREST**

WARRANTY DEED

FOR AND IN CONSIDERATION of the sum of Ten and No/100 Dollars (\$10.00), cash in hand paid, and other good and valuable consideration, the receipt, adequacy and sufficiency of all of which is hereby irrevocably acknowledged and confessed,

**Norris Land & Timber, LLC
A Mississippi limited liability company
101 Ferguson St.
Hattiesburg, MS 39401
(601) _____**

does hereby grant, bargain, sell, convey and warrant unto

**City of Hattiesburg, Mississippi
A political subdivision of the State of Mississippi
P.O. Box 1898
Hattiesburg, MS 39403-1898
(601) 545-4540**

the following described real property lying and being situated in Forrest County, Mississippi, and being more particularly described as follows, to-wit:

See Exhibit "A," attached hereto and made a part hereof for all purposes

INDEXING INSTRUCTIONS: Lots 1 and 2, Block 133, Kamper and Whinnery Survey, City of Hattiesburg

This conveyance and the warranty hereof is subject to any and all prior and outstanding leases, exceptions, reservation and/or conveyances of oil, gas and/or other minerals and any geothermal energy resources lying in, on and under the above described real property.

This conveyance and the warranty hereof is subject to any environmental condition existing upon the subject property which would cause said property to be in violation of any State and/or Federal Environmental Protection Act.

This conveyance and the warranty hereof is subject to any and all other easements and rights-of-way, whether of record or of use, which affect the real property hereby conveyed.

This conveyance and the warranty hereof is subject to that certain easement to the City of Hattiesburg dated 4/16/1947, and recorded at Book 460, Page 84; and those certain conveyances for street purposes to the City of Hattiesburg dated 4/16/1947, recorded at Book 96, Page 78; dated 4/13/1955 at Book 156, Page 345; and dated 9/10/1969, at Book 326, Page 353.

All County and State ad valorem taxes for the current year shall be prorated between Grantor and Grantee and paid by Grantee.

WITNESS THE SIGNATURE of the Grantor on this, the ____ day of _____, A.D., 2022.

Norris Land & Timber, LLC
A Mississippi limited liability company

By: _____
Name: _____
Title: _____

STATE OF MISSISSIPPI

COUNTY OF _____

THIS DAY personally came and appeared before me, the undersigned authority in and for the jurisdiction aforesaid, _____, who acknowledged that he/she is the _____ of Norris Land & Timber, LLC, a Mississippi limited liability company, and that he/she signed and delivered the above and foregoing WARRANTY DEED on the day and year herein shown as her free and voluntary act and deed and in said capacity, after being authorized by said limited liability company so to do.

GIVEN UNDER MY HAND AND OFFICIAL SEAL OF OFFICE, this the ____ day of _____, 2022.

NOTARY PUBLIC

My Commission Expires:

Exhibit "A"

That portion of Lots 1 and 2 in Block 133 of the Kamper and Whinnery Survey of the City of Hattiesburg, Forrest County, Mississippi, bounded on the easterly side by Front or Ronie Street, and on the southwesterly side by Ferguson Street, and on the northwesterly side by the public alley intersecting said block of said Kamper and Whinnery Survey, according to the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi.

JACKSON, TULLOS & ROGERS, PLLC

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

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

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

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

City of Hattiesburg, Mississippi
c/o Ann Jones (via email: annjones@hattiesburgms.com)

Re: Title examination and opinion relating to the property owned by Norris Land
& Timber, LLC, located in Forrest County, Mississippi

Dear Ann:

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

See Exhibit "A," attached hereto and made a part hereof for all purposes

From said examination, assuming that all instruments affecting title to said real property have been properly indexed on the Sectional Index of said County, we find the record title to the surface of the real property to be vested in **NORRIS LAND & TIMBER, LLC**, a Mississippi limited liability company, subject to the following exceptions:

1. There is a current liability for 2022 taxes which constitutes a lien on the subject property which will be due on January 1, 2023, and which will not be in default until on or after February 1, 2023.

PPIN: 19211
Amount: \$4,852.34

2. Subject to a perpetual easement to the City of Hattiesburg for maintenance of Gordon's Creek, dated 8/24/1987, and recorded at Book 460, Page 84.
3. Subject to those conveyances for street purposes to the City of Hattiesburg dated 4/16/1947, recorded at Book 96, Page 78; dated 4/13/1955 at Book 156, Page 345; and dated 9/10/1969, at Book 326, Page 353.

4. Subject to any and all prior and outstanding leases, exceptions, reservations and/or conveyances of oil, gas and/or other minerals and any geothermal energy resources lying in, on and under the above described real property.
5. Subject to any environmental condition existing upon the subject property, which would cause said property to be in violation of any State and/or Federal Environmental Protection Act. This certificate does not express an opinion as to any environmental condition which may be in violation of such laws and is subject to any such condition which may affect the title to said property or lien placed against said property by any lender, individual Corporation or otherwise.
6. Rights or claims of parties in possession not shown by public records.
7. Subject to any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
8. Subject to riparian and other rights created if subject property is bordered by or fronts water.
9. Subject to any and all entities in the chain of title having been validly formed and being in good standing under the laws in the state in which they were formed.

This opinion does not in any manner constitute a guarantee of title to the hereinabove described lands, but is merely the opinion of this office with respect to the title to the property as reflected by the records and instruments which are properly noted in the Sectional Index, and does not extend to problems of adverse possession, errors in survey, or facts which are not shown of record in the Forrest County Courthouse.

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

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

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

This opinion does not cover any state of facts affecting the record title to the subject real property subsequent and after **August 26, 2022**, at **8:00** o'clock a.m., which date shall be deemed to be, and is, the date and time of this opinion and certificate.

Please be advised that, subject to the above date and time of this opinion and subject to the above-recited exceptions, **NORRIS LAND & TIMBER, LLC** is the record owner of a good and marketable title in and to the subject property.

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

Sincerely yours,

JACKSON, TULLOS & ROGERS, PLLC

/s/ G. Neil Rogers

G. Neil Rogers

Signed electronically in his absence to avoid delay

GNR/mb

Exhibit "A"

That portion of Lots 1 and 2 in Block 133 of the Kamper and Whinnery Survey of the City of Hattiesburg, Forrest County, Mississippi, bounded on the easterly side by Front or Ronie Street, and on the southwesterly side by Ferguson Street, and on the northwesterly side by the public alley intersecting said block of said Kamper and Whinnery Survey, according to the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi.



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Hunter White
cc:
Date: Tuesday, December 20, 2022
Re: Approve Lighting Agreement with Mississippi Power Company for additional lighting on Bowling Street for a monthly cost of \$3.95, and authorize the Mayor to execute the same.
File Number: 2022-945
Minute Book #

Summary

Approve Lighting Agreement with Mississippi Power Company for additional lighting on Bowling Street for a monthly cost of \$3.95, and authorize the Mayor to execute the same.

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.

DATE: 12/6/22

RE: STREET LIGHT REQUEST AND AUTHORIZATION LETTER

FROM: CITY/TOWN OF Hattiesburg PHONE: _____

AUTHORIZED SIGNATURE _____ DATE: _____

DEVELOPER NAME _____ ACCOUNT # 598418200

DEVELOPER SIGNATURE _____ DATE: _____

DATE GOVERNMENTAL AUTHORITY TO TAKE OWNERSHIP OF PAYMENT: _____

Attach a plat for development.

TO: MISSISSIPPI POWER COMPANY, ATTN. : (MPC LIGHTING SERVICES) P.O. Box 4079,

Gulfport, MS 39502 or Email: (G2MPCLSVC@southernco.com)

DATE MAIL/EMAIL RECEIVED _____

INSTRUCTIONS: INSTALL STREET LIGHTS AS NOTED IN THE SCHEDULE BELOW. CONSIDER THIS YOUR AUTHORIZATION TO BILL THE NEW LIGHTS UNDER THE TERMS OF THE CURRENTLY APPLICABLE STREET LIGHT RATE (SL) AS APPROVED BY THE MISSISSIPPI PUBLIC SERVICE COMMISSION.

PLEASE TAKE NOTICE: By and through Developer's request and execution hereof, Developer acknowledges and agrees that any electric lighting service for outdoor lighting is subject to MPC's Rules Governing Electric Service and MPC's Outdoor Lighting Electric Rate Schedule (OL). Developer understands and agrees that OL provides for a three (3) year minimum term for lighting (other than special lighting) and Developer shall be liable to MPC for all service under the rate schedule until termination, provided however that Developer shall, in no event, be excused from liability for service during the applicable minimum term. MPC shall be entitled to pursue any and all available legal remedies in the event Developer, or Developer's successors or assigns, fails to make any and all payments as and when due during the term of service.

TYPE LIGHT	NUMBER TO INSTALL (I) NUMBER TO REMOVE (R)	LOCATION AND COMMENTS
COBRA HEAD FIXTURES		
100 WATT HPS	<u>R - 3</u>	_____
150 WATT HPS	_____	_____
250 WATT HPS	_____	_____
400 WATT HPS	_____	_____
1000 WATT HPS	_____	<u>Monthly Increase \$3.95</u>
350 WATT MH	_____	_____
LED FIXTURES		
90 WATT LED	_____	_____
110 WATT LED	_____	_____
190 WATT LED	_____	_____
280 WATT LED	_____	_____
OTHER FIXTURES		
<u>50WLED</u>	<u>I -4</u>	<u>Bowling St First 4 poles off Service Dr</u>
_____	_____	_____
_____	_____	_____

NOTE: FOR NON ROUTINE INSTALLATIONS REQUIRING POLES, UNDERGROUND WIRING OR OTHER SPECIAL CONDITIONS PLEASE CONTACT YOUR MARKET SPECIALIST AND SPECIFIC CONTRACTS WILL BE PREPARED.

PLEASE MAIL OR EMAIL THIS FULLY COMPLETED FORM TO MPC'S LIGHTING SERVICES DEPT. AND WE WILL INSTALL THE LIGHTING INSTALLATIONS THAT YOU REQUEST. YOU MAY ALSO USE THIS FORM TO REPORT LIGHTS NOT BURNING BY LISTING THE ESTIMATED SIZE AND LOCATION ON THE FORM AND FAXING TO US.



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ann Jones, Chief Administrative Officer
cc:
Date: Tuesday, December 20, 2022
Re: Acknowledge receipt of final closing documents for the Friendship Park Lighting Project, authorize payment of final pay application, and authorize final acceptance of the project.
File Number: 2022-946
Minute Book #

Summary

Acknowledge receipt of final closing documents for the Friendship Park Lighting Project, authorize payment of final pay application, and authorize final acceptance of the project.

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.

December 1, 2022
N-S Project No. 16247



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

REFERENCE: CONTRACTORS FINAL ESTIMATE
CITY OF HATTIESBURG
FRIENDSHIP PARK LIGHTING

Dear Mr. Rutland:

Enclosed are three (3) originals of the Contractor's Final Estimate along with Final Close-Out Documents for the referenced project. I have reviewed the Contractor's Final Estimate and find the pay application to be in order. I, therefore, recommend payment to the contractor Buckhault's Electrical Service, LLC, in the amount of \$14,645.00 for work completed.

Please call me at 545-1565 if you have any questions or need additional information.

Sincerely,

NEEL-SCHAFFER, INC.


Korey Hardin, P.E.
Project Manager

Enclosures: Three (3) Applications and Certificate of Payments
Three (3) Copies of Final Close-Out Documents

engineers | planners | surveyors | environmental scientists | landscape architects

P: 601.545.1565 | F: 601.545.2267

704 Hardy Street
Hattiesburg, MS 39401

www.neel-schaffer.com



APPLICATION AND CERTIFICATION FOR PAYMENT

AIA DOCUMENT G702

PAGE ONE OF 2 PAGES

TO CONTRACTOR:
City of Hattiesburg
200 Forrest Street
Hattiesburg, MS 39401
FROM SUBCONTRACTOR:
Buckhaults Electric Service
600 Harrison Street
Ellisville, MS 39437
CONTRACT FOR: Electrical

PROJECT:
East Side Park Field lighting Project

VIA ARCHITECT:
NEEL-SCHAFFER, INC.

APPLICATION NO: 2
PERIOD TO: 9/1/2022
PROJECT NOS: 16247
CONTRACT DATE:

Distribution to:
☐ OWNER
☐ ARCHITECT
☒ CONTRACTOR
☐

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM \$ 292,900.00
2. Net change by Change Orders \$ 0.00
3. CONTRACT SUM TO DATE (Line 1 + 2) \$ 292,900.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$ 292,900.00
5. RETAINAGE:
a. 5 % of Completed Work (Column D + E on G703) \$
b. 5 % of Stored Material (Column F on G703) \$
Total Retainage (Lines 5a + 5b or Total in Column I of G703) \$ 14,645.00
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total) \$
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate) \$ 278255
8. CURRENT PAYMENT DUE \$ 14,645.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6) \$ 0.00

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$0.00	\$0.00
Total approved this Month	\$0.00	\$0.00
TOTALS	\$0.00	\$0.00
NET CHANGES by Change Order	\$0.00	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: Buckhaults Electric Service LLC

By: Richard Buckhaults Date: 9-1-22

State of: Mississippi County of: Jones
Subscribed and sworn to before me this 1st day of September 2022
Notary Public: Kayla Howard
My Commission expires: April 25, 2026

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$ 14,645.00

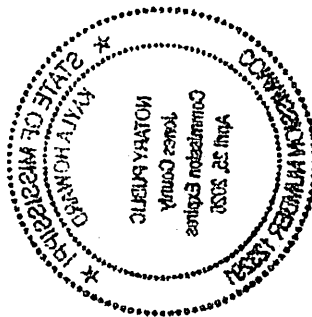
(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT: Korey Hord Date: 01 DEC 2022

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.



Handwritten signature



CONTINUATION SHEET

AIA DOCUMENT G703

PAGE 2 OF 2 PAGES

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 2

APPLICATION DATE: 9/1/2022

PERIOD TO: 9/1/2022

ARCHITECT'S PROJECT NO:

A	B	C	D	E	F	G		H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	%(G ÷ C)	BALANCE TO FINISH (C - G)	RETAINAGE (IF VARIABLE RATE)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD					
	EAST SIDE PARK COMBO BASEBALL/FOOTBALL FIELD LIGHTING PROJECT								
1	Admin and Submittals	\$10,000.00		\$10,000.00		\$10,000.00	100.00%		
2	Mobilization	\$5,000.00		\$5,000.00		\$5,000.00	100.00%		
3	Gear Materials	\$10,000.00		\$10,000.00		\$10,000.00	100.00%		
4	Gear Labor	\$10,000.00		\$10,000.00		\$10,000.00	100.00%		
5	Branch Circuits Material	\$25,000.00		\$25,000.00		\$25,000.00	100.00%		
6	Branch Circuits Labor	\$25,000.00		\$25,000.00		\$25,000.00	100.00%		
7	Field Lighting Material	\$175,900.00		\$175,900.00		\$175,900.00	100.00%		
8	Field Lighting Labor	\$32,000.00		\$32,000.00		\$32,000.00	100.00%		
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	Totals	\$292,900.00		\$292,900.00		\$292,900.00	100.00%		



Consent of Surety Company to Final Payment

Bond Date: 01/11/2022

Bond Number: GRMS54822

Project Name: East Side Park Combo Baseball / Football Field Lighting Project

To (Obligee/Owner): City of Hattiesburg, MS
PO Box 1898
Hattiesburg, MS 39403

Contractor: Buckhaults Electric Services, LLC
600 Harrison St
Ellisville, MS 39437

In accordance with the provisions of the Contract between the owner and the Contractor as included above, the

Granite Re, Inc., 14001 Quailbrook Drive, Oklahoma City, OK 73134

SURETY COMPANY,

On bond of

Buckhaults Electric Services, LLC
600 Harrison St, Ellisville, MS 39437

CONTRACTOR,

Hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety company of any of its obligations to

City of Hattiesburg, MS
PO Box 1898, Hattiesburg, MS 39403

OWNER,

as set forth in the said Surety Company's Bond.

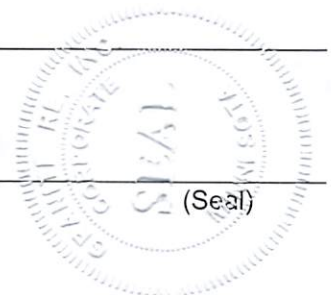
IN WITNESS WHEREOF, the Surety Company has hereunto set its hand this 15 day of September, 2022.

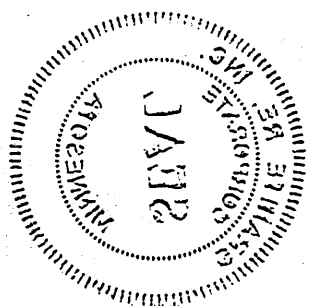
Granite Re, Inc.
Surety Company

A handwritten signature in blue ink, appearing to read 'Hugh Weeks', is written over a horizontal line.

Hugh Weeks, Attorney-in-Fact

(Seal)





GRANITE RE, INC.
GENERAL POWER OF ATTORNEY

Know all Men by these Presents:

That GRANITE RE, INC., a corporation organized and existing under the laws of the State of MINNESOTA and having its principal office at the City of OKLAHOMA CITY in the State of OKLAHOMA does hereby constitute and appoint:

HUGH WEEKS its true and lawful Attorney-in-Fact(s) for the following purposes, to wit:

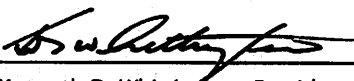
To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said GRANITE RE, INC. a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said GRANITE RE, INC. through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said:

HUGH WEEKS may lawfully do in the premises by virtue of these presents.

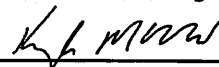
In Witness Whereof, the said GRANITE RE, INC. has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its President and Assistant Secretary, this 3rd day of January, 2020.



STATE OF OKLAHOMA)
) SS:
COUNTY OF OKLAHOMA)



Kenneth D. Whittington, President

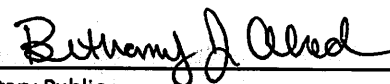


Kyle P. McDonald, Assistant Secretary

On this 3rd day of January, 2020, before me personally came Kenneth D. Whittington, President of the GRANITE RE, INC. Company and Kyle P. McDonald, Assistant Secretary of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said, that they, the said Kenneth D. Whittington and Kyle P. McDonald were respectively the President and the Assistant Secretary of GRANITE RE, INC., the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so fixed by order of the Board of Directors of said corporation, and that they signed their name thereto by like order as President and Assistant Secretary, respectively, of the Company.

My Commission Expires:
April 21, 2023
Commission #: 11003620





Notary Public

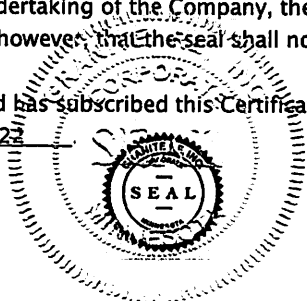
GRANITE RE, INC.
Certificate

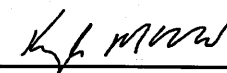
THE UNDERSIGNED, being the duly elected and acting Assistant Secretary of Granite Re, Inc., a Minnesota Corporation, HEREBY CERTIFIES that the following resolution is a true and correct excerpt from the July 15, 1987, minutes of the meeting of the Board of Directors of Granite Re, Inc. and that said Power of Attorney has not been revoked and is now in full force and effect.

"RESOLVED, that the President, any Vice President, the Assistant Secretary, and any Assistant Vice President shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business. On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the Company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

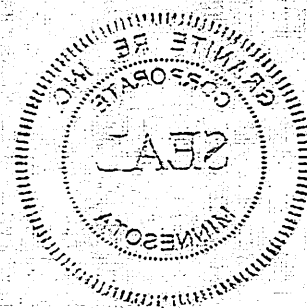
IN WITNESS WHEREOF, the undersigned has subscribed this Certificate and affixed the corporate seal of the Corporation this

15 day of September, 2020





Kyle P. McDonald, Assistant Secretary



SUPPLIER'S WAIVER AND RELEASE OF LIEN AND AFFIDAVIT

Buckhaunts Electric Service

Doc#
B22-050

for the Project: City of Hattiesburg, Eastside Park

The undersigned Supplier, in consideration of payment in full from the Subcontractor for the Project referenced above hereby waives and releases all mechanic's, materialman's or other liens and, to the fullest extent permitted by law, all rights to file any such liens in the future, and any and all other claims and demands of any kind against

the Owner of the Project, the Architect/Engineer, their sureties and the real property on which the Project is located, in any manner arising out of work, labor, services, equipment or materials, performed or furnished by Supplier.

This is a LEGAL INSTRUMENT and must be executed by an officer of the corporation, a partner of the partnership, the business Owner, or a duly authorized agent of the business.

Gilkey Electric
Name of Supplier

10/10/2020
Date

By: [Signature] PRESIDENT
Signature and Title

State of Mississippi
County of Forrest

On this 10th day of October, 2020, appeared before me Patrick Gilkey and he/she made oath in due form of law that the facts, information and representations set forth in the foregoing SUPPLIER'S WAIVER AND RELEASE OF LIEN AND AFFIDAVIT, are true and accurate to the best of his/her knowledge, information and belief.

[Signature]
Notary Public

My Commission Expires:





Memorandum

To: Mayor Toby Barker and Members of City Council

From: Ann Jones, Chief Administrative Officer

cc:

Date: Tuesday, December 20, 2022

Re: Acknowledge bids received November 17, 2022 for the Jaycee Park Parking Improvements Project and accept the bid from J. W. Chain Contractors, Inc. in the amount of \$1,049,620.17; Authorize the mayor to execute contracts when prepared.
File Number: 2022-947
Minute Book #

Summary

Acknowledge bids received November 17, 2022 for the Jaycee Park Parking Improvements Project and accept the bid from J. W. Chain Contractors, Inc. in the amount of \$1,049,620.17; Authorize the mayor to execute contracts when prepared.

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.

November 21, 2022
N-S Project No. 17080.000

Toby Barker
Mayor
City of Hattiesburg
P.O. Box 1898
Hattiesburg, Mississippi 39403-1898

REFERENCE: JAYCEE PARK PARKING IMPROVEMENTS
HATTIESBURG, MISSISSIPPI

Dear Mayor Barker:

Enclosed for your records is one (1) copy of the Certified Bid Tabulation for the bids received for the referenced project. As you are aware, there were three (3) bids submitted, opened, and read at the bid opening on November 17th, 2022, at 10:00 am. Upon review and tabulation of the bid received and opened, J W Chain Contractors, LLC, was the low bidder in the amount of \$1,049,620.17.

Neel-Schaffer therefore recommends that the City of Hattiesburg review the bid submitted by J W Chain Contractors, LLC, and award the project, to the lowest and best bidder.

Sincerely,

NEEL-SCHAFFER, INC.



Geoffrey Crosby, P.E.
Senior Project Manager

Enclosures

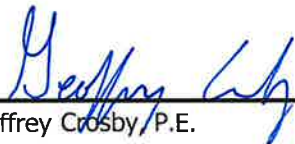
JAYCEE PARK PARKING IMPROVEMENTS

CITY OF HATTIESBURG
FORREST COUNTY, MISSISSIPPI

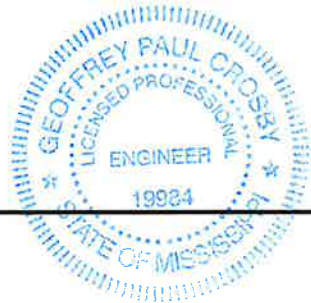
				<i>Engineer's Estimate</i>		J W Chain Contractors, LLC P O Box 16837 Hattiesburg, MS 39404		R & J Construction, Inc. P O Box 6 Laurel, MS 39440		H & M Construction Company, LLC P O Box 1025 Demopolis, AL 36732	
Pay Item No.	Plan Quantity	Unit	Description	Unit Price	Item Total	Unit Price	Item Total	Unit Price	Item Total	Unit Price	Item Total
202-B	250	SY	Removal of Asphalt Pavement, All Depths	\$15.00	\$3,750.00	\$65.87	\$16,467.50	\$20.10	\$5,025.00	\$20.50	\$5,125.00
202-B	25	SY	Removal of Concrete Pavement, All Types	\$35.00	\$875.00	\$78.65	\$1,966.25	\$39.00	\$975.00	\$40.30	\$1,007.50
202-B	50	LF	Removal of Curb & Gutter, All Types	\$25.00	\$1,250.00	\$29.88	\$1,494.00	\$35.00	\$1,750.00	\$16.50	\$825.00
202-B	135	LF	Removal of Metal Fencing And Posts, Inc. Foundations	\$20.00	\$2,700.00	\$13.28	\$1,792.80	\$20.00	\$2,700.00	\$14.30	\$1,930.50
202-B	4	EA	Removal of Wooden Lightposts, Inc. Cables and Guys	\$750.00	\$3,000.00	\$448.13	\$1,792.52	\$1,200.00	\$4,800.00	\$2,340.00	\$9,360.00
202-B	1	EA	Removal of Sign, Inc. Post and Foundations	\$500.00	\$500.00	\$601.09	\$601.09	\$1,200.00	\$1,200.00	\$435.00	\$435.00
202-B	7	EA	Removal of Trees, 6" and Above	\$1,000.00	\$7,000.00	\$4,780.00	\$33,460.00	\$1,200.00	\$8,400.00	\$3,150.00	\$22,050.00
202-B	1	LS	Removal of Electrical Equipment	\$7,500.00	\$7,500.00	\$1,792.50	\$1,792.50	\$3,300.00	\$3,300.00	\$13,900.00	\$13,900.00
203-A	250	CY	Unclassified Excavation, FM, AH	\$25.00	\$6,250.00	\$14.94	\$3,735.00	\$20.74	\$5,185.00	\$17.00	\$4,250.00
203-EX	2000	CY	Borrow Excavation, AH, FME, Class B7-6	\$25.00	\$50,000.00	\$16.95	\$33,900.00	\$20.25	\$40,500.00	\$25.00	\$50,000.00
203-EX	200	CY	Borrow Excavation, AH, FME, Class B9	\$30.00	\$6,000.00	\$35.85	\$7,170.00	\$27.00	\$5,400.00	\$27.00	\$5,400.00
203-G	1250	CY	Excess Excavation, FM, AH	\$15.00	\$18,750.00	\$22.11	\$27,637.50	\$16.11	\$20,137.50	\$23.00	\$28,750.00
209-A	4100	SY	Geotextile Stabilization, Type VI, Non-Woven	\$3.00	\$12,300.00	\$2.81	\$11,521.00	\$3.45	\$14,145.00	\$3.00	\$12,300.00
211-A	1500	SY	Topsoil for Slope Treatment, From Right-of-Way	\$2.00	\$3,000.00	\$8.96	\$13,440.00	\$3.33	\$4,995.00	\$4.00	\$6,000.00
211-A	200	CY	Topsoil for Slope Treatment, Contractor Furnished	\$35.00	\$7,000.00	\$59.75	\$11,950.00	\$15.00	\$3,000.00	\$39.00	\$7,800.00
216-A	3350	SY	Solid Sodding, Centipede	\$7.00	\$23,450.00	\$7.77	\$26,029.50	\$6.60	\$22,110.00	\$11.00	\$36,850.00
219-A	535	KGAL	Watering	\$20.00	\$10,700.00	\$20.00	\$10,700.00	\$20.00	\$10,700.00	\$20.00	\$10,700.00
234-A	1100	LF	Temporary Silt Fence	\$5.00	\$5,500.00	\$8.80	\$9,680.00	\$7.00	\$7,700.00	\$5.00	\$5,500.00
237-A	250	LF	Wattles, 20"	\$8.00	\$2,000.00	\$17.93	\$4,482.50	\$8.00	\$2,000.00	\$10.00	\$2,500.00
246-A	100	LF	Sandbags	\$10.00	\$1,000.00	\$29.88	\$2,988.00	\$15.00	\$1,500.00	\$20.00	\$2,000.00
304-G	950	CY	Size 610 Crushed Stone Base, AEA	\$120.00	\$114,000.00	\$50.00	\$47,500.00	\$123.00	\$116,850.00	\$137.00	\$130,150.00
308-A	120	TON	Cement	\$300.00	\$36,000.00	\$316.68	\$38,001.60	\$214.96	\$25,795.20	\$289.00	\$34,680.00
308-B	4150	SY	Soil-Cement-Water Mixing, Optional Mixers, Base	\$5.00	\$20,750.00	\$5.98	\$24,817.00	\$4.25	\$17,637.50	\$6.50	\$26,975.00
403-A	650	TON	19-mm, ST, Asphalt Pavement	\$185.00	\$120,250.00	\$175.07	\$113,795.50	\$161.15	\$104,747.50	\$218.00	\$141,700.00
403-A	435	TON	9.5-mm, ST, Asphalt Pavement	\$185.00	\$80,475.00	\$211.52	\$92,011.20	\$194.70	\$84,694.50	\$252.00	\$109,620.00
406-D	900	SY	Fine Milling of Bituminous Pavement, All Depths	\$12.00	\$10,800.00	\$12.55	\$11,295.00	\$11.55	\$10,395.00	\$4.50	\$4,050.00
407-A	450	GAL	Asphalt for Tack Coat	\$4.00	\$1,800.00	\$4.00	\$1,800.00	\$3.69	\$1,660.50	\$11.00	\$4,950.00
601-B	12	CY	Class "B" Structural Concrete, Minor Structures	\$2,500.00	\$30,000.00	\$1,382.62	\$16,591.44	\$1,791.50	\$21,498.00	\$1,700.00	\$20,400.00
602-A	1200	LBS	Reinforcing Steel	\$4.00	\$4,800.00	\$3.24	\$3,888.00	\$4.50	\$5,400.00	\$2.50	\$3,000.00
603-CA	186	LF	15" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	\$85.00	\$15,810.00	\$57.36	\$10,668.96	\$69.13	\$12,858.18	\$112.00	\$20,832.00
603-CA	72	LF	24" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	\$100.00	\$7,200.00	\$77.68	\$5,592.96	\$104.53	\$7,526.16	\$157.00	\$11,304.00
604-A	558	LBS	Castings	\$6.00	\$3,348.00	\$9.63	\$5,373.54	\$6.50	\$3,627.00	\$7.00	\$3,906.00
604-B	127	LBS	Gratings	\$8.00	\$1,016.00	\$7.53	\$956.31	\$6.50	\$825.50	\$11.00	\$1,397.00
608-B	1200	SY	Concrete Sidewalk, With Reinforcement	\$85.00	\$102,000.00	\$69.31	\$83,172.00	\$69.03	\$82,836.00	\$87.00	\$104,400.00
609-D	2100	LF	Combination Concrete Curb and Gutter, Type 1 Modified	\$30.00	\$63,000.00	\$27.49	\$57,729.00	\$25.03	\$52,563.00	\$26.00	\$54,600.00
618-A	1	LS	Maintenance of Traffic	\$10,000.00	\$10,000.00	\$22,669.15	\$22,669.15	\$15,366.00	\$15,366.00	\$29,000.00	\$29,000.00
620-A	1	LS	Mobilization	\$85,000.00	\$85,000.00	\$73,642.75	\$73,642.75	\$122,210.00	\$122,210.00	\$45,000.00	\$45,000.00

699-A	1	LS	Roadway Construction Stakes	\$15,000.00	\$15,000.00	\$20,912.50	\$20,912.50	\$18,000.00	\$18,000.00	\$15,000.00	\$15,000.00
628-F	3	EA	Legend Handicap Symbol, Blue ADA	\$650.00	\$1,950.00	\$956.00	\$2,868.00	\$880.00	\$2,640.00	\$1,020.00	\$3,060.00
628-G	185	LF	6" Cold Plastic Detail Stripe, Blue ADA	\$6.00	\$1,110.00	\$11.95	\$2,210.75	\$11.00	\$2,035.00	\$13.00	\$2,405.00
626-G	2060	LF	Thermoplastic Detail Stripe, White	\$4.50	\$9,270.00	\$5.98	\$12,318.80	\$5.50	\$11,330.00	\$6.40	\$13,184.00
626-H	196	LF	Thermoplastic Legend, White	\$6.50	\$1,274.00	\$17.93	\$3,514.28	\$16.50	\$3,234.00	\$19.00	\$3,724.00
630-A	11	SF	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness	\$40.00	\$440.00	\$115.92	\$1,275.12	\$106.70	\$1,173.70	\$124.00	\$1,364.00
630-C	41	LF	Steel U-Section Posts, 3.0 lb/ft	\$20.00	\$820.00	\$32.27	\$1,323.07	\$29.70	\$1,217.70	\$35.00	\$1,435.00
682-A	1600	LF	Underground Branch Circuit, AWG 8, 3 Conductor	\$15.00	\$24,000.00	\$14.79	\$23,664.00	\$14.08	\$22,528.00	\$14.00	\$22,400.00
684-A	32	CY	Pole Foundation, 24" Diameter	\$1,400.00	\$44,800.00	\$1,774.58	\$56,786.56	\$1,463.00	\$46,816.00	\$900.00	\$28,800.00
683-PP	9	EACH	Lighting Assembly, Low Mast, LED, Type 20-1-0-110	\$6,500.00	\$58,500.00	\$3,306.57	\$29,759.13	\$3,811.50	\$34,303.50	\$7,100.00	\$63,900.00
683-PP	12	EACH	Lighting Assembly, Low Mast, LED, Type 20-1-0-135	\$6,500.00	\$78,000.00	\$3,353.17	\$40,238.04	\$3,811.50	\$45,738.00	\$7,100.00	\$85,200.00
637-C	20	LF	Traffic Signal Conduit, Underground, Type 2, 2"	\$30.00	\$600.00	\$29.88	\$597.60	\$16.50	\$330.00	\$56.00	\$1,120.00
637-D	50	LF	Traffic Signal Conduit, Underground, Drilled or Jacked, Type 4, 2"	\$50.00	\$2,500.00	\$50.19	\$2,509.50	\$115.50	\$5,775.00	\$105.00	\$5,250.00
682-F	1	EACH	Secondary Power Controller	\$20,000.00	\$20,000.00	\$19,538.25	\$19,538.25	\$16,500.00	\$16,500.00	\$16,300.00	\$16,300.00
					\$1,137,038.00		\$1,049,620.17		\$1,063,633.44		\$1,235,789.00

I certify this to be a true & accurate Bid Tabulation of bids received @ 10:00a.m., Thursday, November 17th, 2022 for the Jaycee Park Parking Improvements for the City of Hattiesburg, Mississippi.


Geoffrey Crosby, P.E.

Mississippi Registration No. 19984





Memorandum

To: Mayor Toby Barker and Members of City Council
From: Sid Gonsoulin
cc:
Date: Tuesday, December 20, 2022
Re: Acknowledge bids received December 1, 2022 for the Jaycee Park Improvements Project and accept the bid from Phoenix Construction, LLC in the amount of \$734,750.00, which includes the base bid and add alternate #1; Authorize the mayor to execute contracts when prepared.
File Number: 2022-953
Minute Book #

Summary

Acknowledge bids received December 1, 2022 for the Jaycee Park Improvements Project and accept the bid from Phoenix Construction, LLC in the amount of \$734,750.00, which includes the base bid and add alternate #1; Authorize the mayor to execute contracts when prepared.

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.

December 1, 2022

Re: Jaycee Park Improvements
Hattiesburg, Mississippi
CN 22-3922

City of Hattiesburg
200 Forrest Street
Hattiesburg, Mississippi 39401

Attn: Toby Barker, Mayor

Dear Mr. Barker:

This letter shall serve as our acknowledgement that the apparent low bidder for the above referenced project is Phoenix Construction L.L.C. (19024-MC) in the amount of base bid \$727,000.00, Add Alternate One \$7,750.00, and Add Alternate Two \$30,000.00. The contractor holds a valid and current Certificate of Responsibility Number with the Mississippi State Board of Contractors and has provided to you a bid bond in accordance with the Bid Security requirements.

Based on the above facts, we anticipate that the Contractor can fulfill the duties of the proposed Contract for Construction. However, we have not worked with this contractor in the past and recommend you request references from at least two past clients.

Attached, please find the certified Bid Tab result and the supporting documentation as submitted for all bidders for your information and use. If you have any questions, please feel free to contact the office.

If you have any questions, please feel free to contact our office.

Respectfully,



Christian J. Landry
Vice-President

/CJL



JAYCEE PARK IMPROVEMENT

CITY OF HATTIESBURG

HATTIESBURG, MISSISSIPPI

PROJECT NUMBER: CN 22-3922 BID DATE: December 1, 2022

CONTRACTOR	Resp. No.	BASE BID	Add Alternate #1: Paint exposed concrete floor under roof	Add Alternate #2: Paint access isles	TOTAL
JW Chain Contractors LLC	24496-MC	\$824,854.00	\$11,700.00	\$40,092.00	
Phoenix Construction L.L.C.	19024-MC	\$727,000.00	\$7,750.00	\$30,000.00	

I CERTIFY THAT THE ABOVE IS A TRUE AND ACCURATE TABULATION OF BIDS ON THE ABOVE REFERENCED PROJECT;

Christian J. Landry, Vice-President



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ann Jones, Chief Administrative Officer
cc:
Date: Tuesday, December 20, 2022
Re: Acknowledge the receipt of grant from the Mississippi Arts Commission in the amount of \$219,240.00 for renovations of the theatre space at 825 N. Main Street and authorize execution of all necessary grant agreement documents.
File Number: 2022-942
Minute Book #

Summary

"Acknowledge the receipt of grant from the Mississippi Arts Commission in the amount of \$219,240.00 for renovations of the theatre space at 825 N. Main Street."

Recommendation Statement

I recommend this item be placed on the Council Agenda for consideration.

Please place this on the December 20, 2022 City Council meeting for consideration.



MISSISSIPPI ARTS COMMISSION

11/02/2022

Mrs Emily Gallaspy
825 Main Street
Hattiesburg, MS 39402

RE: GRANT# 23-25667986-AI/BFA

Dear Mrs Gallaspy:

Congratulations! MAC has approved your Building Fund for the Arts (BFA) request for \$219,240.00 to renovate the Paper Warehouse Theatre. Please note that this is a multi-year grant, beginning November 1, 2022 and ending June 30, 2024. Please do the following, **immediately**:

- 1) **Download this document to your computer.**
- 2) **Read, sign, and return all required documents ASAP** (grant contract and W-9 form).
 - Returning Signed Contracts: You may email signed grant contracts (found on the following page) to grants@arts.ms.gov - please include in your email your full name and what type of grant you were awarded (i.e. "BFA").
 - You may send any hard copies (not necessary if email copies have already been returned) to: *Grants Team c/o Mississippi Arts Commission, Woolfolk State Office Building, 501 N West St #1101a, Jackson, MS 39201*
- 3) **Grant Management:** Attached to your email notification is a packet entitled:
 - **"Steps to Managing Your BFA Grant."** This grants management packet is VERY important and should be saved as part of your records throughout the grant period. In it you will find directions to set up paymode (our grant payment system), sample press release templates and other steps necessary to properly manage your grant
 - **Say thank you to those who make MAC grants possible!** Within the **"Steps to Managing Your BFA Grant"** packet, you will also find contact information for state and federal legislators and as well as MAC's Board of Commissioners. Please be sure to thank them (and save a copy to show us!) for making MAC's grant programs possible, and let them know how important MAC grants are to your work as an artist.
- 4) **Grant Reporting: Your BFA grant has mid-point and final report requirements.** Please review the attached **"Steps to Managing Your BFA Grant"** and the **"Follow Up Forms"** section of your dashboard in E-grant for more information.

Sincerely,

Larry Morrissey
Interim Executive Director
Mississippi Arts Commission

Mississippi Arts Commission Building Fund for the Arts (BFA) Grant Contract

In accordance with the laws of the State of Mississippi, the Mississippi Arts Commission ("MAC") hereby agrees to provide support in an amount not to exceed \$219,240.00 to **City of Hattiesburg DBA Hattiesburg Community Arts Center** ("grantee"), UEI# N4XZJL9AVM1 for application **23-25667986-AI/BFA** to renovate the Paper Warehouse Theatre.

It is understood that support for this grant is provided on the basis of the application submitted by grantee and is subject to the policies of MAC's and to the following terms and conditions:

1. The grantee, under this program, will spend funds solely for the purpose set forth in grant number **23-25667986-AI/BFA**.
2. The grantee will provide matching financial support in this grant program as described in MAC's BFA Grant guidelines. In the event the grantee fails to raise the necessary matching funds, MAC will provide only a proportionate payment for the actual match from the grantee. The grantee's match should be in hand at the time of award and in accordance with the **Building Fund for the Arts Guidelines and Grant Application, House Bill 1663: Laws of Mississippi 2022**.
3. The grantee has agreed to complete the work as outlined in their application. In the event the grantee is unable to complete the project due to an act or regulation of any public authority, or on account of war, labor difficulties, strikes, riots, epidemics, interruptions of transportation services, or an act of God or other causes beyond grantee's control, MAC shall be obligated to make the payment only to the extent that the grantee has reasonably incurred expenses or obligations that could not have been discharged otherwise.
4. The grantee must submit a final report on the grant-funded project to MAC within 30 days after the ending date of the project or by **June 30, 2024**, whichever comes first. If the project is scheduled to end after May 15, 2024, grantee has five days after the scheduled project end date to complete the report. The report will consist of a comprehensive written evaluation and account of the project expenses. Failure to submit the final report and close out the grant in a timely manner will result in forfeiture of the grantee's final payment and jeopardize future funding.
5. The grantee must comply with all mid-point reporting requests made by MAC board and staff members.
6. All financial accounting shall be subject to an audit by MAC or the appropriate agencies of the federal government or the state. The grantee will be responsible for the safekeeping and the identification of financial records that support the financial statements of the project. Further, the grantee will keep these records on file for a period of three (3) years after the end of the project.
7. It is understood by the grantee that all of MAC's financial obligations outlined in this contract are granted on the condition that the agency receives a sufficient level of financial support from the National Endowment for the Arts and the Mississippi State Legislature.
8. By execution of this contract the grantee assures and certifies that it is not on the debarred or suspended list (System for Award Management (SAM) Exclusions) and is eligible to receive federal and state funds.
9. All of the funds for this grant come from state funds. However, the grant is counted in MAC's match for its federal grant. Therefore, MAC is required to provide the following information on the grant from the National Endowment for the Arts: CFDA# 45.025, NEA grant number: 1903724-61-22, total award amount: \$935,500, award date: 6/19/2022, grant description: To support partnership agreement activities, period of support: 7/1/2022 – 6/30/2023.

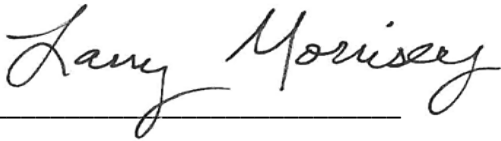
10. This grant cannot be used to match another federal grant. The grantee must also comply with the national policy requirements that govern all federal awards. These are listed on pages 34-37 of the NEA's "General Terms and Conditions" document: (<https://www.arts.gov/sites/default/files/GTC-PARTNERSHIP-FY21-May-2021-rev-3.14.22.pdf>).
11. The grant award may be used for the construction of new buildings and facilities for the presentation, teaching or exhibition of the arts in any and all of its forms and furniture equipment and/or technology for such buildings or facilities. The grant award may also be used for repair, upgrading, expansion, renovation, or enhancement of existing buildings for the presentation, teaching, or exhibition of the arts in any and all of its forms, and permanently fixed furniture, equipment or technology for such buildings.
12. Grantee agrees to adhere to [The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings](#) for appropriate treatment of all historic structures. Please consult with the Mississippi Department of Archives and History (MDAH) Historic Preservation Division prior to making any significant changes to a historic structure. To determine a building's historic status, search the [MDAH Historic Resources Inventory Database](#).
13. It is understood that matching funds raised prior to applying for the grant may be used, but that money may not be spent until execution of this contract. Project expenses incurred before the beginning of the grant period cannot be counted as part of the grantee's matching funds.
14. The grantee agrees to maintain matching funds in a separate bank account. As stated in the application, the matching funds must be demonstrated to be in hand before initial grant payment is disbursed. State funds may not be used as matching funds.
15. Once MAC approves the request, the grantee will receive the total award payment upon receipt of the required information (demonstration of match, signed contract, and W-9).
16. As part of their project, any grantee that is a unit of local government must follow current state laws (Mississippi State Code 31-7-13) governing bidding construction work or purchases:
 - Purchases under \$5,000 require one written bid;
 - Between \$5,000 and \$50,000 require two written bids;
 - \$50,000 or more requires an advertised bidding process (please see Mississippi State Code 31-7-13 for specifics on advertising requirements).
17. The grantee agrees to notify MAC in writing using a [Grant Change Form](#) to receive advance permission from the agency before making any changes in the personnel, activities, timeline, or budget of the project.
18. The grantee agrees to permit a review of the project, without charge, upon the request of any member of MAC's Board of Commissioners or staff.
19. When developing and presenting public programs, the grantee should follow the guidelines issued by local and state health officials related to the COVID-19 pandemic. MAC's support of the grantee's programs does not imply approval of the organization's safety plans related to COVID-19. The grantee is solely responsible for these efforts.
20. It is understood that funds, materials, property, or services provided directly or indirectly under this agreement shall not be used for any partisan political activity or promotion; activities of a primarily sectarian or religious nature; furthering the election or defeat of any candidate for public office; or to lobby members of the U.S. Congress or federal agencies.
21. The grantee agrees to recognize MAC's support in all published material or publicity about the

project. The recognition should read as follows: **"This project is supported in part by funding from the Mississippi Arts Commission, a state agency, and in part, from the National Endowment for the Arts, a federal agency."** When written programs are not used, credit should be given verbally.

22. The grantee agrees to comply with the requirements set forth in MAC's grant guidelines and with all other rules and regulations that may be adopted by the agency.

The grant award will be made in two payments to the grantee. MAC will send 75% of the award no earlier than two weeks prior to the listed project start date. The remaining 25% will be made once the project is completed and the grantee submits a completed and correct final report form.

The contract is made and entered on 11/02/2022. Failure to sign and return this contract within 60 days of receipt will result in cancellation of the grant.



Larry Morrissey
Interim Executive Director
Mississippi Arts Commission

Toby Barker
City of Hattiesburg DBA
Hattiesburg Community Arts
Center

HALL AVENUE WEST PHASE II - ROADWAY
FBLD-8769-00(001) LPA/108639-802000
CITY OF HATTIESBURG
FORREST COUNTY, MISSISSIPPI

				<i>Engineer's Estimate</i>		R & J Construction, Inc. P O Box 6 Laurel, MS 39440		T L Wallace Construction, Inc. 4025 Highway 25 North Columbia, MS 39429	
Pay Item No.	Plan Quantity	Unit	Description	Unit Price	Item Total	Unit Price	Item Total	Unit Price	Item Total
201-A001	1	LS	Clearing and Grubbing	\$35,000.00	\$35,000.00	\$1,741,000.00	\$1,741,000.00	\$40,000.00	\$40,000.00
202-B019	15	LF	Removal of Box Culvert	\$600.00	\$9,000.00	\$1,933.34	\$29,000.10	\$425.00	\$6,375.00
202-B023	1	EA	Removal of Bridge	\$35,000.00	\$35,000.00	\$48,000.00	\$48,000.00	\$15,000.00	\$15,000.00
202-B052	1,235	SY	Removal of Concrete Driveways, All Depths	\$12.00	\$14,820.00	\$9.00	\$11,115.00	\$20.00	\$24,700.00
202-B063	346	SY	Removal of Concrete Paved Ditch	\$15.00	\$5,190.00	\$49.13	\$16,998.98	\$9.00	\$3,114.00
202-B080	1,165	SY	Removal of Concrete Sidewalk	\$10.00	\$11,650.00	\$6.75	\$7,863.75	\$22.00	\$25,630.00
202-B092	8,582	LF	Removal of Curb, All Types	\$10.00	\$85,820.00	\$1.00	\$8,582.00	\$14.00	\$120,148.00
202-B126	1,967	LF	Removal of Fence, All Types	\$10.00	\$19,670.00	\$5.00	\$9,835.00	\$4.75	\$9,343.25
202-B163	1	EA	Removal of Inlet Tops	\$900.00	\$900.00	\$1,500.00	\$1,500.00	\$420.00	\$420.00
202-B164	27	EA	Removal of Inlet and Junction Box, All Types & Sizes	\$500.00	\$13,500.00	\$800.00	\$21,600.00	\$1,100.00	\$29,700.00
202-B188	11,271	SY	Removal of Pavement, All Types and Depths	\$8.00	\$90,168.00	\$4.50	\$50,719.50	\$8.00	\$90,168.00
202-B191	1,558	LF	Removal of Pipe, 8" And Above	\$15.00	\$23,370.00	\$5.00	\$7,790.00	\$20.00	\$31,160.00
202-B219	33	EA	Removal of Sign, Ground Mounted with Posts	\$100.00	\$3,300.00	\$200.00	\$6,600.00	\$343.00	\$11,319.00
202-B244	37	EA	Removal of Trees	\$1,200.00	\$44,400.00	\$800.00	\$29,600.00	\$1,100.00	\$40,700.00
203-A001	4,000	CY	Unclassified Excavation, FM, AH	\$14.00	\$56,000.00	\$16.10	\$64,400.00	\$15.50	\$62,000.00
203-EX012	5,500	CY	Borrow Excavation, AH, FME, Class B3	\$18.00	\$99,000.00	\$18.90	\$103,950.00	\$18.50	\$101,750.00
203-EX020	6,000	CY	Borrow Excavation, AH, FME, Class B9	\$18.00	\$108,000.00	\$18.90	\$113,400.00	\$22.00	\$132,000.00
203-G001	8,500	CY	Excess Excavation, FM, AH	\$13.00	\$110,500.00	\$13.80	\$117,300.00	\$13.65	\$116,025.00
206-A001	3,300	CY	Structure Excavation	\$15.00	\$49,500.00	\$13.80	\$45,540.00	\$13.65	\$45,045.00
206-B001	2,000	CY	Select Material for Undercuts, Contractor Furnished, FM	\$25.00	\$50,000.00	\$135.98	\$271,960.00	\$73.00	\$146,000.00
209-A005	16,250	SY	Geotextile Stabilization, Type V, Non-Woven	\$3.00	\$48,750.00	\$3.25	\$52,812.50	\$4.30	\$69,875.00
211-A001	1,000	SY	Topsoil for Slope Treatment, From Right-of-Way	\$1.00	\$1,000.00	\$7.50	\$7,500.00	\$1.80	\$1,800.00
211-B001	2,500	CY	Topsoil for Slope Treatment, Contractor Furnished	\$20.00	\$50,000.00	\$14.00	\$35,000.00	\$1.00	\$2,500.00
211-C001	385	CY	Topsoil for Plant Holes, Contractor Furnished	\$35.00	\$13,475.00	\$37.40	\$14,399.00	\$40.00	\$15,400.00
216-B002	19,500	SY	Solid Sodding, Centipede	\$7.00	\$136,500.00	\$7.70	\$150,150.00	\$8.30	\$161,850.00
219-A001	390	KGAL	Watering	\$20.00	\$7,800.00	\$20.00	\$7,800.00	\$20.00	\$7,800.00
220-A001	4	ACRE	Insect Pest Control	\$30.00	\$120.00	\$30.00	\$120.00	\$30.00	\$120.00

223-A001	16	ACRE	Mowing	\$50.00	\$800.00	\$50.00	\$800.00	\$50.00	\$800.00
226-A001	1	ACRE	Temporary Grassing	\$1,200.00	\$1,200.00	\$2,200.00	\$2,200.00	\$2,300.00	\$2,300.00
227-A001	1	ACRE	Hydroseeding	\$3,000.00	\$3,000.00	\$3,850.00	\$3,850.00	\$7,000.00	\$7,000.00
230-A042	5	EA	Shrub Planting, Dwarf Yaupon Holly	\$28.00	\$140.00	\$19.80	\$99.00	\$20.00	\$100.00
230-A051	500	EA	Shrub Planting, Giant Liriope	\$6.00	\$3,000.00	\$7.70	\$3,850.00	\$8.25	\$4,125.00
230-A055	30	EA	Shrub Planting, Goldstrum Black Eyed Susan	\$8.00	\$240.00	\$12.10	\$363.00	\$12.50	\$375.00
230-A100	770	EA	Shrub Planting, Parsons Juniper	\$7.00	\$5,390.00	\$6.60	\$5,082.00	\$7.10	\$5,467.00
230-B027	93	EA	Tree Planting, Crape Mytle 'Watermelon Red'	\$240.00	\$22,320.00	\$264.00	\$24,552.00	\$283.00	\$26,319.00
230-B032	22	EA	Tree Planting, Drake Chinese Elm	\$350.00	\$7,700.00	\$346.50	\$7,623.00	\$371.00	\$8,162.00
230-B050	9	EA	Tree Planting, Live Oak	\$500.00	\$4,500.00	\$421.66	\$3,794.94	\$707.00	\$6,363.00
230-D001	5,600	SF	Bed Preparation	\$1.40	\$7,840.00	\$1.71	\$9,576.00	\$1.80	\$10,080.00
232-A003	3	K	Fertilizer for Woody Plant Material, Tablet, 21 gram	\$350.00	\$1,050.00	\$385.00	\$1,155.00	\$393.00	\$1,179.00
233-A003	18	CY	Tree Bark Mulch, Type III	\$40.00	\$720.00	\$40.70	\$732.60	\$41.50	\$747.00
233-A004	18	CY	Tree Bark Mulch, Type IV	\$40.00	\$720.00	\$40.70	\$732.60	\$41.50	\$747.00
907-234-A001	5,500	LF	Temporary Silt Fence	\$4.50	\$24,750.00	\$5.00	\$27,500.00	\$5.50	\$30,250.00
237-A002	1,200	LF	Wattles, 20"	\$8.00	\$9,600.00	\$6.00	\$7,200.00	\$9.65	\$11,580.00
907-242-A002	325	LF	Installation of Chain Link Fence, Per Plans	\$50.00	\$16,250.00	\$27.50	\$8,937.50	\$100.00	\$32,500.00
907-242-A002	235	LF	Installation of Wood Privacy Fence, Per Plans	\$100.00	\$23,500.00	\$33.00	\$7,755.00	\$95.00	\$22,325.00
907-242-A003	3	EA	Installation of Spread Footing, Lighting Foundation	\$3,500.00	\$10,500.00	\$2,416.70	\$7,250.10	\$2,600.00	\$7,800.00
246-B002	1,000	LF	Rockbags	\$12.50	\$12,500.00	\$20.00	\$20,000.00	\$10.00	\$10,000.00
907-258-K001	2	EA	Bollard Removable	\$2,500.00	\$5,000.00	\$2,869.00	\$5,738.00	\$2,800.00	\$5,600.00
907-259-F001	10	EA	Weatherproof GFCI Receptacle	\$1,200.00	\$12,000.00	\$841.50	\$8,415.00	\$600.00	\$6,000.00
907-262-A005	2	EA	Utility Work - Water, 6" Insertion Valve	\$8,500.00	\$17,000.00	\$14,025.00	\$28,050.00	\$12,000.00	\$24,000.00
907-262-A006	200	LF	Utility Work - Water, 6" Ductile Iron Water Main	\$45.00	\$9,000.00	\$214.50	\$42,900.00	\$500.00	\$100,000.00
304-G001	4,500	CY	Size 3/4" and Down Crushed Stone Base, AEA		\$0.00		\$0.00		\$0.00
			OR		\$0.00		\$0.00		\$0.00
304-G002	4,500	CY	Size 610 Crushed Stone Base, AEA	\$120.00	\$540,000.00	\$123.00	\$553,500.00		\$0.00
			OR		\$0.00		\$0.00		\$0.00
304-G003	4,500	CY	Size 825B Crushed Stone Base, AEA		\$0.00		\$0.00	\$158.00	\$711,000.00
308-A001	75	TON	Cement	\$280.00	\$21,000.00	\$209.50	\$15,712.50	\$310.00	\$23,250.00
308-B002	5,000	SY	Soil-Cement-Water Mixing, Optional Mixers, Base	\$3.75	\$18,750.00	\$4.00	\$20,000.00	\$6.00	\$30,000.00
403-A002	2,000	TON	12.5-mm, MT, Asphalt Pavement	\$175.00	\$350,000.00	\$169.40	\$338,800.00	\$180.00	\$360,000.00
403-A005	2,800	TON	19-mm, MT, Asphalt Pavement	\$175.00	\$490,000.00	\$166.10	\$465,080.00	\$177.00	\$495,600.00
403-A014	6,500	TON	9.5-mm, MT, Asphalt Pavement	\$175.00	\$1,137,500.00	\$128.70	\$836,550.00	\$138.00	\$897,000.00
403-B011	1,100	TON	9.5-mm, MT, Asphalt Pavement, Leveling	\$175.00	\$192,500.00	\$165.00	\$181,500.00	\$177.00	\$194,700.00

406-D001	6,975	SY	Fine Milling of Bituminous Pavement, All Depths	\$7.00	\$48,825.00	\$12.05	\$84,048.75	\$12.90	\$89,977.50
407-A001	3,500	GAL	Asphalt for Tack Coat	\$4.00	\$14,000.00	\$3.74	\$13,090.00	\$4.00	\$14,000.00
413-D003	3,000	LF	Cleaning and Filling Joints in PCC Pavement	\$12.50	\$37,500.00	\$5.50	\$16,500.00	\$6.00	\$18,000.00
907-417-A001	480	SY	Polymer Cement Surface System	\$125.00	\$60,000.00	\$203.50	\$97,680.00	\$210.00	\$100,800.00
501-K001	1,456	SY	Transverse Grooving	\$2.50	\$3,640.00	\$2.82	\$4,105.92	\$2.80	\$4,076.80
502-A001	113	SY	Reinforced Cement Concrete Bridge End Pavement	\$375.00	\$42,375.00	\$440.00	\$49,720.00	\$310.00	\$35,030.00
601-A001	380	CY	Class "B" Structural Concrete	\$1,600.00	\$608,000.00	\$1,641.50	\$623,770.00	\$900.00	\$342,000.00
601-B001	149	CY	Class "B" Structural Concrete, Minor Structures	\$1,500.00	\$223,500.00	\$2,141.50	\$319,083.50	\$1,500.00	\$223,500.00
602-A001	76,285	LBS	Reinforcing Steel	\$1.50	\$114,427.50	\$3.50	\$266,997.50	\$1.80	\$137,313.00
603-CA001	32	LF	12" Reinforced Concrete Pipe, Class III	\$75.00	\$2,400.00	\$87.62	\$2,803.84	\$58.00	\$1,856.00
603-CA004	24	LF	15" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	\$75.00	\$1,800.00	\$90.03	\$2,160.72	\$64.00	\$1,536.00
603-CA072	80	LF	42" Reinforced Concrete Pipe, Class V	\$200.00	\$16,000.00	\$230.21	\$18,416.80	\$209.00	\$16,720.00
603-CB002	2	EA	15" Reinforced Concrete End Section	\$1,200.00	\$2,400.00	\$725.00	\$1,450.00	\$950.00	\$1,900.00
603-CE001	1,688	LF	18" x 11" Concrete Arch Pipe, Class A III	\$65.00	\$109,720.00	\$84.70	\$142,973.60	\$98.00	\$165,424.00
603-CE003	848	LF	22" x 13" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets	\$75.00	\$63,600.00	\$91.97	\$77,990.56	\$92.00	\$78,016.00
603-CE009	256	LF	29" x 18" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets	\$90.00	\$23,040.00	\$118.78	\$30,407.68	\$110.00	\$28,160.00
603-CE014	1,256	LF	36" x 23" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets	\$100.00	\$125,600.00	\$126.90	\$159,386.40	\$125.00	\$157,000.00
603-CE019	88	LF	44" x 27" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets	\$135.00	\$11,880.00	\$161.05	\$14,172.40	\$205.00	\$18,040.00
603-PE009	10	LF	8" Corrugated Polyethylene Pipe	\$50.00	\$500.00	\$66.96	\$669.60	\$40.00	\$400.00
603-SB023	3	EA	22" x 13" Branch Connections, Stub into Box Culvert	\$3,000.00	\$9,000.00	\$3,500.00	\$10,500.00	\$550.00	\$1,650.00
603-SB032	3	EA	29" x 18" Branch Connections, Stub into Box Culvert	\$3,000.00	\$9,000.00	\$3,500.00	\$10,500.00	\$700.00	\$2,100.00
604-A001	30,907	LBS	Castings	\$4.00	\$123,628.00	\$6.50	\$200,895.50	\$7.70	\$237,983.90
604-B001	17,634	LBS	Gratings	\$5.00	\$88,170.00	\$6.50	\$114,621.00	\$7.70	\$135,781.80
907-607-PP001	290	LF	Safety Fence	\$720.00	\$208,800.00	\$1,111.00	\$322,190.00	\$960.00	\$278,400.00
608-A001	5,084	SY	Concrete Sidewalk, Without Reinforcement	\$60.00	\$305,040.00	\$88.00	\$447,392.00	\$58.00	\$294,872.00
608-B001	75	SY	Concrete Sidewalk, With Reinforcement	\$250.00	\$18,750.00	\$195.25	\$14,643.75	\$65.00	\$4,875.00
609-B002	30	LF	Concrete Curb, Header	\$40.00	\$1,200.00	\$55.00	\$1,650.00	\$37.00	\$1,110.00
609-D004	306	LF	Combination Concrete Curb and Gutter Type 2 Modified	\$45.00	\$13,770.00	\$55.00	\$16,830.00	\$45.00	\$13,770.00
609-D009	3,398	LF	Combination Concrete Curb and Gutter Type 3A Mod1	\$30.00	\$101,940.00	\$23.65	\$80,362.70	\$26.00	\$88,348.00
609-D010	8,932	LF	Combination Concrete Curb and Gutter Type 3A Mod2	\$30.00	\$267,960.00	\$26.13	\$233,393.16	\$27.00	\$241,164.00
612-B001	50	CY	Flowable Fill, Non-Excavatable	\$300.00	\$15,000.00	\$391.50	\$19,575.00	\$385.00	\$19,250.00
613-D005	12	EA	Adjustment of Manhole	\$2,000.00	\$24,000.00	\$1,000.00	\$12,000.00	\$4,500.00	\$54,000.00

613-D009	5	EA	Adjustment of Utility Appurtenance Fire Hydrant	\$2,000.00	\$10,000.00	\$4,400.00	\$22,000.00	\$16,000.00	\$80,000.00
613-D010	28	EA	Adjustment of Water Meter	\$675.00	\$18,900.00	\$1,540.00	\$43,120.00	\$2,000.00	\$56,000.00
613-D011	13	EA	Adjustment of Water Valve	\$500.00	\$6,500.00	\$880.00	\$11,440.00	\$2,500.00	\$32,500.00
614-B003	1,741	SY	Concrete Driveway, With Reinforcement, 6-inch Thickness	\$90.00	\$156,690.00	\$104.50	\$181,934.50	\$100.00	\$174,100.00
907-616-C001	1,005	SF	Colored and Imprinted Concrete Median and Island Pavement, 10-inch Thickness	\$45.00	\$45,225.00	\$30.25	\$30,401.25	\$79.00	\$79,395.00
618-A001	1	LS	Maintenance of Traffic	\$300,000.00	\$300,000.00	\$41,796.00	\$41,796.00	\$155,000.00	\$155,000.00
619-A2003	2,951	LF	Temporary Traffic Stripe, Continuous Yellow, Paint	\$1.60	\$4,721.60	\$4.40	\$12,984.40	\$1.15	\$3,393.65
619-A3004	1,440	LF	Temporary Traffic Stripe, Skip White, Paint	\$1.60	\$2,304.00	\$4.40	\$6,336.00	\$11.50	\$16,560.00
619-A5002	2,986	LF	Temporary Traffic Stripe, Detail, Paint	\$2.50	\$7,465.00	\$4.40	\$13,138.40	\$2.35	\$7,017.10
619-A6003	88	SF	Temporary Traffic Stripe, Legend, Paint	\$4.75	\$418.00	\$5.50	\$484.00	\$4.50	\$396.00
619-A6004	1,693	LF	Temporary Traffic Stripe, Legend, Paint	\$2.50	\$4,232.50	\$4.40	\$7,449.20	\$2.35	\$3,978.55
619-D1001	353	SF	Standard Roadside Construction Signs, Less than 10 Square Feet	\$10.00	\$3,530.00	\$11.00	\$3,883.00	\$20.00	\$7,060.00
619-D2001	103	SF	Standard Roadside Construction Signs, 10 Square Feet or More	\$18.00	\$1,854.00	\$11.00	\$1,133.00	\$20.00	\$2,060.00
619-G4001	18	LF	Barricades, Type III, Double Faced	\$50.00	\$900.00	\$20.90	\$376.20	\$39.00	\$702.00
619-G4005	240	LF	Barricades, Type III, Single Faced	\$65.00	\$15,600.00	\$36.30	\$8,712.00	\$41.00	\$9,840.00
619-G5001	141	EA	Free Standing Plastic Drums	\$80.00	\$11,280.00	\$77.00	\$10,857.00	\$76.00	\$10,716.00
619-G7001	4	EA	Warning Lights, Type "B"	\$600.00	\$2,400.00	\$324.50	\$1,298.00	\$168.00	\$672.00
620-A001	1	LS	Mobilization	\$1,500,000.00	\$1,500,000.00	\$1,961,938.00	\$1,961,938.00	\$3,350,000.00	\$3,350,000.00
626-A003	1,440	LF	6" Thermoplastic Traffic Stripe, Skip White	\$2.50	\$3,600.00	\$5.50	\$7,920.00	\$2.35	\$3,384.00
626-E003	6,266	LF	6" Thermoplastic Traffic Stripe, Continuous Yellow	\$3.00	\$18,798.00	\$6.60	\$41,355.60	\$2.35	\$14,725.10
626-G002	1,758	LF	Thermoplastic Detail Stripe, White	\$6.00	\$10,548.00	\$6.60	\$11,602.80	\$3.50	\$6,153.00
626-G003	1,704	LF	Thermoplastic Detail Stripe, Yellow	\$6.00	\$10,224.00	\$6.60	\$11,246.40	\$3.50	\$5,964.00
626-H004	804	SF	Thermoplastic Legend, White	\$12.00	\$9,648.00	\$28.60	\$22,994.40	\$11.80	\$9,487.20
626-H005	2,782	LF	Thermoplastic Legend, White	\$8.00	\$22,256.00	\$16.50	\$45,903.00	\$4.70	\$13,075.40
627-J001	12	EA	Two-Way Clear Reflective High Performance Raised Markers	\$15.00	\$180.00	\$33.00	\$396.00	\$11.20	\$134.40
627-K001	103	EA	Red-Clear Reflective High Performance Raised Markers	\$15.00	\$1,545.00	\$33.00	\$3,399.00	\$11.20	\$1,153.60
627-L001	296	EA	Two-Way Yellow Reflective High Performance Raised Markers	\$15.00	\$4,440.00	\$33.00	\$9,768.00	\$11.80	\$3,492.80
630-A001	48	SF	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness	\$35.00	\$1,680.00	\$29.70	\$1,425.60	\$41.00	\$1,968.00
630-A005	255	SF	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness	\$40.00	\$10,200.00	\$40.70	\$10,378.50	\$41.00	\$10,455.00
630-C003	518	LF	Steel U-Section Posts, 3.0 lb/ft	\$12.00	\$6,216.00	\$18.70	\$9,686.60	\$11.80	\$6,112.40
907-632-A007	1	EA	Solid State Traffic Cabinet Assembly, Type III Cabinet, Type 1 Controller	\$22,000.00	\$22,000.00	\$25,113.00	\$25,113.00	\$26,000.00	\$26,000.00

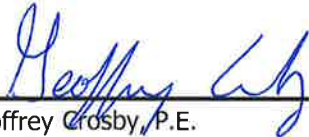
907-632-J001	1	EA	Power Service Pedestal	\$5,000.00	\$5,000.00	\$6,864.00	\$6,864.00	\$1.10	\$1.10
907-634-A230	1	EA	Traffic Signal Equipment Pole, Type III(L), 30' Shaft, 30' & 40' Arm	\$20,000.00	\$20,000.00	\$27,670.50	\$27,670.50	\$29,000.00	\$29,000.00
907-634-A254	1	EA	Traffic Signal Equipment Pole, Type III(L), 30' Shaft, 40' & 40' Arm	\$21,000.00	\$21,000.00	\$28,919.00	\$28,919.00	\$30,000.00	\$30,000.00
907-634-A545	1	EA	Traffic Signal Equipment Pole, Type VI, 8' Shaft	\$2,200.00	\$2,200.00	\$1,578.50	\$1,578.50	\$3,000.00	\$3,000.00
907-634-C001	9	CY	Pole Foundations, Class "B" Concrete	\$1,000.00	\$9,000.00	\$1,193.50	\$10,741.50	\$1,300.00	\$11,700.00
907-634-D002	70	LF	Slip Casing, 30" Diameter	\$35.00	\$2,450.00	\$33.00	\$2,310.00	\$16.85	\$1,179.50
907-634-D003	30	LF	Slip Casing, 36" Diameter	\$35.00	\$1,050.00	\$33.00	\$990.00	\$53.00	\$1,590.00
635-A059	8	EA	Traffic Signal Head, Type 1	\$1,000.00	\$8,000.00	\$1,094.50	\$8,756.00	\$1,080.00	\$8,640.00
635-A065	2	EA	Traffic Signal Head, Type 2 FYA	\$2,000.00	\$4,000.00	\$2,101.00	\$4,202.00	\$1,900.00	\$3,800.00
635-A076	4	EA	Traffic Signal Head, Type 6	\$950.00	\$3,800.00	\$935.00	\$3,740.00	\$695.00	\$2,780.00
907-636-B003	165	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 10, 2 Conductor	\$2.50	\$412.50	\$3.25	\$536.25	\$2.70	\$445.50
907-636-B014	415	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 5 Conductor	\$2.50	\$1,037.50	\$3.14	\$1,303.10	\$2.35	\$975.25
907-636-B016	315	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 8 Conductor	\$3.00	\$945.00	\$3.69	\$1,162.35	\$3.40	\$1,071.00
907-636-B028	10	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 8, 3 Conductor	\$4.50	\$45.00	\$3.52	\$35.20	\$22.50	\$225.00
907-636-D001	80	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 10, 2 Conductor	\$2.80	\$224.00	\$3.25	\$260.00	\$4.00	\$320.00
907-636-D006	40	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 5 Conductor	\$3.00	\$120.00	\$3.14	\$125.60	\$5.00	\$200.00
907-636-D008	205	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 8 Conductor	\$3.00	\$615.00	\$3.69	\$756.45	\$7.00	\$1,435.00
907-637-A002	2	EA	Pullbox Enclosure, Type 2	\$1,400.00	\$2,800.00	\$1,694.00	\$3,388.00	\$1,300.00	\$2,600.00
907-637-A003	1	EA	Pullbox Enclosure, Type 3	\$1,600.00	\$1,600.00	\$1,974.50	\$1,974.50	\$2,700.00	\$2,700.00
907-637-C028	35	LF	Traffic Signal Conduit, Underground, Type 4, 2"	\$20.00	\$700.00	\$17.27	\$604.45	\$18.00	\$630.00
907-637-C030	30	LF	Traffic Signal Conduit, Underground, Type 4, 3"	\$22.00	\$660.00	\$21.45	\$643.50	\$20.00	\$600.00
907-637-D003	130	LF	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 3"	\$25.00	\$3,250.00	\$21.45	\$2,788.50	\$25.00	\$3,250.00
907-639-B001	3	EA	Type 1 Optical Detector	\$1,200.00	\$3,600.00	\$1,210.00	\$3,630.00	\$850.00	\$2,550.00
907-639-C001	455	LF	Type 1 Optical Detector Cable	\$2.25	\$1,023.75	\$2.42	\$1,101.10	\$1.75	\$796.25
907-639-D001	1	EA	Multimode Phase Selector	\$3,500.00	\$3,500.00	\$3,833.50	\$3,833.50	\$3,800.00	\$3,800.00
907-643-A003	1	EA	Video Vehicle Detection Sensor, Type 3	\$25,000.00	\$25,000.00	\$27,197.50	\$27,197.50	\$26,750.00	\$26,750.00
907-643-B001	60	LF	Video Vehicle Detection Cable	\$2.00	\$120.00	\$1.93	\$115.80	\$11.00	\$660.00
907-645-B001	4	EA	Accessible Pedestrian Detection Assembly	\$750.00	\$3,000.00	\$1,012.00	\$4,048.00	\$945.00	\$3,780.00
647-A001	1	LS	Removal of Existing Traffic Signal Equipment	\$4,500.00	\$4,500.00	\$6,198.50	\$6,198.50	\$8,500.00	\$8,500.00
907-653-B001	24	SF	Street Name Sign	\$100.00	\$2,400.00	\$138.60	\$3,326.40	\$125.00	\$3,000.00
907-663-A001	1	EA	Network Switch, Type A	\$2,000.00	\$2,000.00	\$2,706.00	\$2,706.00	\$2,600.00	\$2,600.00

682-A010	5,630	LF	Underground Branch Circuit, AWG 10, 3 Conductor	\$11.00	\$61,930.00	\$9.46	\$53,259.80	\$8.80	\$49,544.00
682-A018	1,145	LF	Underground Branch Circuit, AWG 2, 3 Conductor	\$20.00	\$22,900.00	\$18.32	\$20,976.40	\$18.00	\$20,610.00
682-A034	3,115	LF	Underground Branch Circuit, AWG 6, 3 Conductor	\$12.00	\$37,380.00	\$11.88	\$37,006.20	\$12.20	\$38,003.00
682-A039	1,060	LF	Underground Branch Circuit, AWG 8, 3 Conductor	\$12.00	\$12,720.00	\$10.62	\$11,257.20	\$10.10	\$10,706.00
682-B010	275	LF	Underground Branch Circuit, Jacked or Bored, AWG 10, 3 Conductor	\$18.00	\$4,950.00	\$15.51	\$4,265.25	\$19.85	\$5,458.75
682-B016	175	LF	Underground Branch Circuit, Jacked or Bored, AWG 2, 3 Conductor	\$35.00	\$6,125.00	\$23.10	\$4,042.50	\$27.50	\$4,812.50
682-B032	121	LF	Underground Branch Circuit, Jacked or Bored, AWG 6, 3 Conductor	\$25.00	\$3,025.00	\$17.88	\$2,163.48	\$22.00	\$2,662.00
682-B037	60	LF	Underground Branch Circuit, Jacked or Bored, AWG 8, 3 Conductor	\$20.00	\$1,200.00	\$16.61	\$996.60	\$19.00	\$1,140.00
682-C015	1,165	LF	Structure Mounted Branch Circuit, AWG 2, 3 Conductor	\$50.00	\$58,250.00	\$37.57	\$43,769.05	\$31.50	\$36,697.50
682-C028	25	LF	Structure Mounted Branch Circuit, AWG 6, 3 Conductor	\$45.00	\$1,125.00	\$29.98	\$749.50	\$25.50	\$637.50
682-D002	24	EA	Structure Mounted Pull Box	\$1,200.00	\$28,800.00	\$1,100.00	\$26,400.00	\$2,400.00	\$57,600.00
682-F001	3	EA	Secondary Power Controller	\$11,500.00	\$34,500.00	\$10,884.50	\$32,653.50	\$7,500.00	\$22,500.00
684-A004	82	CY	Pole Foundation, 30" Diameter	\$1,500.00	\$123,000.00	\$1,617.00	\$132,594.00	\$1,250.00	\$102,500.00
699-A001	1	LS	Roadway Construction Stakes	\$135,000.00	\$135,000.00	\$115,000.00	\$115,000.00	\$115,000.00	\$115,000.00
699-B001	1	LS	Bridge Construction Stakes	\$65,000.00	\$65,000.00	\$88,000.00	\$88,000.00	\$100,000.00	\$100,000.00
803-K004	675	LF	Drilled Shaft, 36" Diameter	\$650.00	\$438,750.00	\$720.50	\$486,337.50	\$560.00	\$378,000.00
803-K006	1,425	LF	Drilled Shaft, 48" Diameter	\$700.00	\$997,500.00	\$638.00	\$909,150.00	\$510.00	\$726,750.00
803-L002	1	EA	Test Shaft, 48" Diameter	\$200,000.00	\$200,000.00	\$286,000.00	\$286,000.00	\$225,000.00	\$225,000.00
803-M005	80	LF	Trial Shaft, 48" Diameter	\$900.00	\$72,000.00	\$940.50	\$75,240.00	\$860.00	\$68,800.00
803-N001	300	LF	Exploration	\$15.00	\$4,500.00	\$1.10	\$330.00	\$134.00	\$40,200.00
803-O005	220	LF	Permanent Casing, 36" Diameter	\$500.00	\$110,000.00	\$366.85	\$80,707.00	\$376.00	\$82,720.00
803-O018	200	LF	Temporary Casing, 48" Diameter	\$300.00	\$60,000.00	\$284.90	\$56,980.00	\$290.00	\$58,000.00
907-804-A002	1,072	CY	Bridge Concrete, Class AA	\$1,000.00	\$1,072,000.00	\$1,210.00	\$1,297,120.00	\$1,325.00	\$1,420,400.00
907-804-A004	1,101	CY	Bridge Concrete, Class BD	\$1,100.00	\$1,211,100.00	\$1,430.00	\$1,574,430.00	\$1,250.00	\$1,376,250.00
804-C184	897	LF	150' Prestressed Concrete Beam, Type FIB-72	\$550.00	\$493,350.00	\$605.00	\$542,685.00	\$850.00	\$762,450.00
804-C236	1,048	LF	105' Prestressed Concrete Beam, Type FIB-45	\$400.00	\$419,200.00	\$511.50	\$536,052.00	\$435.00	\$455,880.00
804-C260	373	LF	75' Prestressed Concrete Beam, Type FIB-45	\$400.00	\$149,200.00	\$511.50	\$190,789.50	\$460.00	\$171,580.00
804-C261	674	LF	135' Prestressed Concrete Beam, Type FIB-72	\$550.00	\$370,700.00	\$605.00	\$407,770.00	\$515.00	\$347,110.00
805-A001	366,644	LBS	Reinforcement	\$1.50	\$549,966.00	\$1.76	\$645,293.44	\$2.00	\$733,288.00
907-809-A001	19,494	SF	Retaining Wall System Geogrid Reinforced PMB	\$65.00	\$1,267,110.00	\$136.40	\$2,658,981.60	\$186.00	\$3,625,884.00
907-809-A002	5,300	SF	Retaining Wall System, Gravity Type	\$42.00	\$222,600.00	\$64.55	\$342,115.00	\$44.00	\$233,200.00
813-B001	2,253	LF	Concrete-Steel Railing	\$450.00	\$1,013,850.00	\$268.40	\$604,705.20	\$385.00	\$867,405.00
815-D001	229	CY	Concrete Slope Paving	\$630.00	\$144,270.00	\$13.20	\$3,022.80	\$925.00	\$211,825.00

907-899-A001	1	LS	Railway-Highway Provisions	\$100,000.00	\$100,000.00	\$288,550.00	\$288,550.00	\$500,000.00	\$500,000.00
L00011 - 230-B500	45	EA	Tree Planting, Teddy Bear Magnolia	\$200.00	\$9,000.00	\$366.66	\$16,499.70	\$530.00	\$23,850.00
L00016 - 683-B500	4	EA	Lighting Assembly, Low Mast, LED, Type 30-1-3-100, Bridge Mounted	\$8,500.00	\$34,000.00	\$12,023.00	\$48,092.00	\$14,000.00	\$56,000.00
L00016 - 683-B500	6	EA	Lighting Assembly, Low Mast, LED, Type 32.5-1-3-100, Bridge Mounted	\$10,000.00	\$60,000.00	\$12,375.00	\$74,250.00	\$14,500.00	\$87,000.00
L00016 - 683-B500	11	EA	Lighting Assembly, Low Mast, LED, Type 14-1-0-100	\$6,000.00	\$66,000.00	\$7,991.50	\$87,906.50	\$9,200.00	\$101,200.00
L00016 - 683-B500	55	EA	Lighting Assembly, Low Mast, LED, Type 25-1-0-100	\$7,000.00	\$385,000.00	\$9,201.50	\$506,082.50	\$10,500.00	\$577,500.00
L00018 - 907-258-PP502	35	LF	Handrail, Per Plans	\$250.00	\$8,750.00	\$275.00	\$9,625.00	\$315.00	\$11,025.00
L00052 - 907-262-A504	2,400	LBS	Ductile Iron Fittings	\$7.00	\$16,800.00	\$25.30	\$60,720.00	\$18.50	\$44,400.00
L00076 - 230-A500	300	EA	Shrub Planting, Drift Rose "Peach"	\$28.00	\$8,400.00	\$27.50	\$8,250.00	\$29.50	\$8,850.00
Non-Participating Items									
907-632-A007	1	EA	Solid State Traffic Cabinet Assembly, Type III Cabinet, Type 1 Controller	\$22,000.00	\$22,000.00	\$25,113.00	\$25,113.00	\$26,000.00	\$26,000.00
907-632-J001	1	EA	Power Service Pedestal	\$5,000.00	\$5,000.00	\$6,864.00	\$6,864.00	\$1.10	\$1.10
907-634-A365	1	EA	Traffic Signal Equipment Pole, Type III, 17' Shaft, 30' & 40' Arms	\$20,000.00	\$20,000.00	\$21,433.50	\$21,433.50	\$24,500.00	\$24,500.00
907-634-A374	1	EA	Traffic Signal Equipment Pole, Type III, 17' Shaft, 35' & 40' Arms	\$21,000.00	\$21,000.00	\$22,000.00	\$22,000.00	\$25,500.00	\$25,500.00
907-634-A545	2	EA	Traffic Signal Equipment Pole, Type VI, 8' Shaft	\$2,200.00	\$4,400.00	\$1,578.50	\$3,157.00	\$3,000.00	\$6,000.00
907-634-C001	9	CY	Pole Foundations, Class "B" Concrete	\$1,000.00	\$9,000.00	\$1,413.50	\$12,721.50	\$1,300.00	\$11,700.00
907-634-D003	30	LF	Slip Casing, 36" Diameter	\$35.00	\$1,050.00	\$33.00	\$990.00	\$53.00	\$1,590.00
635-A059	8	EA	Traffic Signal Head, Type 1	\$2,000.00	\$16,000.00	\$1,094.50	\$8,756.00	\$1,080.00	\$8,640.00
635-A065	1	EA	Traffic Signal Head, Type 2 FYA	\$2,000.00	\$2,000.00	\$2,101.00	\$2,101.00	\$1,900.00	\$1,900.00
635-A076	8	EA	Traffic Signal Head, Type 6	\$950.00	\$7,600.00	\$935.00	\$7,480.00	\$695.00	\$5,560.00
907-636-B014	410	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 5 Conductor	\$2.50	\$1,025.00	\$3.14	\$1,287.40	\$245.00	\$100,450.00
907-636-B016	300	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 8 Conductor	\$3.00	\$900.00	\$3.69	\$1,107.00	\$3.40	\$1,020.00
907-636-B028	15	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 8, 3 Conductor	\$4.50	\$67.50	\$3.52	\$52.80	\$22.45	\$336.75
907-636-D006	72	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 5 Conductor	\$3.00	\$216.00	\$3.14	\$226.08	\$5.00	\$360.00
907-636-D008	197	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 8 Conductor	\$3.00	\$591.00	\$3.69	\$726.93	\$7.00	\$1,379.00
907-637-A002	3	EA	Pullbox Enclosure, Type 2	\$1,400.00	\$4,200.00	\$1,694.00	\$5,082.00	\$1,300.00	\$3,900.00
907-637-A003	1	EA	Pullbox Enclosure, Type 3	\$1,600.00	\$1,600.00	\$1,974.50	\$1,974.50	\$2,680.00	\$2,680.00
907-637-C028	65	LF	Traffic Signal Conduit, Underground, Type 4, 2"	\$20.00	\$1,300.00	\$17.27	\$1,122.55	\$18.00	\$1,170.00
907-637-C030	40	LF	Traffic Signal Conduit, Underground, Type 4, 3"	\$22.00	\$880.00	\$21.45	\$858.00	\$20.00	\$800.00
907-637-D003	200	LF	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 3"	\$25.00	\$5,000.00	\$21.45	\$4,290.00	\$25.00	\$5,000.00

907-639-B001	4	EA	Type 1 Optical Detector	\$1,200.00	\$4,800.00	\$1,210.00	\$4,840.00	\$850.00	\$3,400.00
907-639-C001	480	LF	Type 1 Optical Detector Cable	\$2.25	\$1,080.00	\$2.42	\$1,161.60	\$1.75	\$840.00
907-639-D001	1	EA	Multimode Phase Selector	\$3,500.00	\$3,500.00	\$3,833.50	\$3,833.50	\$3,800.00	\$3,800.00
907-643-A003	1	EA	Video Vehicle Detection Sensor, Type 3	\$25,000.00	\$25,000.00	\$27,197.50	\$27,197.50	\$26,760.00	\$26,760.00
907-643-B001	110	LF	Video Vehicle Detection Cable	\$2.00	\$220.00	\$1.93	\$212.30	\$11.50	\$1,265.00
907-645-B001	8	EA	Accessible Pedestrian Detection Assembly	\$750.00	\$6,000.00	\$1,012.00	\$8,096.00	\$945.00	\$7,560.00
907-653-B001	23	SF	Street Name Sign	\$100.00	\$2,300.00	\$138.60	\$3,187.80	\$125.00	\$2,875.00
					\$19,360,456.85		\$24,292,480.68		\$25,439,864.15

I certify this to be a true & accurate Bid Tabulation of bids received @ 10:00a.m., Thursday, November 17th, 2022 for the Hall Avenue West Phase II - Roadway Project FBLD-8769-00(001) LPA/108639-802000 for the City of Hattiesburg, Mississippi.


Geoffrey Crosby, P.E.
Mississippi Registration No. 19984





R&J CONSTRUCTION

LAUREL, MISSISSIPPI

R & J Construction, Inc.

P.O. Box 6

Laurel, Mississippi

39441

Certificate of Responsibility: 13715-MC

Federal TIN: 41-2037763

State Tax ID: 34-16926-8

SEALED BID

Hall Avenue West Phase II - Roadway

Federal Aid Project No

FBLD-8769-00(001) LPA/108639-802000

City of Hattiesburg, Mississippi

Forrest County

November 17, 2022

*SPECIAL PROVISIONS, PROPOSAL AND CONTRACT DOCUMENTS
FOR*

THE CONSTRUCTION

FEDERAL AID PROJECT NUMBER

FBLD-8769-00(001) LPA/108639-802000

***HALL AVENUE WEST PHASE II - ROADWAY
FOR THE***

**CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY**



2022

PREPARED BY



NEEL-SCHAFFER
Solutions you can build upon

Date: October 31, 2022

To: Plan Holders

Company:

Project No.:

Phone No.:

Fax No.:

From: City of Hattiesburg

Subject: ADDENDUM NO. 1
Hall Avenue West Phase II - Roadway
FBLD-8769-00(001)LPA/108639-802000
Forrest County, Mississippi

Attached is Addendum No. 1 for the above referenced project.

Plan Holders are reminded that this Addendum must be acknowledged in Section 905

Please acknowledge receipt of this Addendum by signing in the space below & return this page by fax @ 601-545-2267, or e-mail to jennifer.nobles@neel-schaffer.com before 12:00 P.M., Wednesday, November 2, 2022.

NAME: Scott Hubbard DATE: 11-1-2022 TIME: 12:18 pm

COMPANY (Please Print): R+J Construction

**** ADDENDUM NO. 1 ****

You should receive (17) pages **including this cover sheet**. Please notify us if the message is incomplete or unclear. Thank you.

Date: November 7, 2022

To: Plan Holders

Company:

Project No.:

Phone No.:

Fax No.:

From: City of Hattiesburg

Subject: ADDENDUM NO. 2
Hall Avenue West Phase II - Roadway
FBLD-8769-00(001)LPA/108639-802000
Forrest County, Mississippi

Attached is Addendum No. 2 for the above referenced project.

Plan Holders are reminded that this Addendum must be acknowledged on
Page 905-2.

NAME:  DATE: 11/08/2022 TIME: 6:54 a.m.

COMPANY (Please Print): R & J Construction, Inc.

**** ADDENDUM NO. 2 ****

You should receive (46) pages **including this cover sheet**. Please notify us if the message is incomplete or unclear. Thank you.

Date: November 8, 2022

To: Plan Holders

Company:

Project No.:

Phone No.:

Fax No.:

From: City of Hattiesburg

Subject: ADDENDUM NO. 3
Hall Avenue West Phase II - Roadway
FBLD-8769-00(001)LPA/108639-802000
Forrest County, Mississippi

Attached is Addendum No. 3 for the above referenced project.

*****PLEASE NOTE BID DATE CHANGE*****

Plan Holders are reminded that this Addendum must be acknowledged on
Page 905-2.

NAME:  DATE: 11/10/2022 TIME: 6:10 a.m.

COMPANY (Please Print): R & J Construction, Inc.

**** ADDENDUM NO. 3 ****

You should receive (26) pages **including this cover sheet**. Please notify us if the message is incomplete or unclear. Thank you.

**BIDDER CHECK LIST
(FOR INFORMATION ONLY)**

- _____ All unit prices and item totals have been entered in accordance with Subsection 102.06 of the Mississippi Standard Specifications for Road and Bridge Construction.
- _____ First sheet of SECTION 905--PROPOSAL has been completed.
- _____ Second sheet of SECTION 905--PROPOSAL has been completed and signed.
- _____ Addenda, if any, have been acknowledged. Second sheet of Section 905 listing the addendum number has been substituted for the original second sheet of Section 905. Substituted second sheet of Section 905 has been properly completed, signed, and added to the proposal.
- _____ DBE/WBE percentage, when required by contract, has been entered on last sheet of the bid sheets of SECTION 905--PROPOSAL.
- _____ Form OCR-485-LPA has been completed and signed.
- _____ The last sheet of the bid sheets of SECTION 905--PROPOSAL has been signed.
- _____ Equal Opportunity Clause Certification, when included in contract, has been completed and signed.
- _____ The Certification regarding Non-Collusion, Debarment and Suspension, etc. has been executed in duplicate.
- _____ A certified check, cashier's check or bid bond payable to the Local Public Agency in the principle amount of 5% of the bid has been included with project number identified on same. Bid bond has been signed by the bidder and has also been signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent for the Surety with Power of Attorney attached.
- _____ A completed Notice to Bidders regarding DUNS Requirements must be completed prior to award of the contract.

Return the proposal and contract documents in its entirety in a sealed envelope. DO NOT remove any part of the contract documents; exception – an addendum requires substitution of second sheet of Section 905. A stripped proposal is considered as an irregular bid and will be rejected.

Failure to complete any or all of the applicable requirements will be cause for the proposal to be considered irregular.

CONTENTS

PROJECT: HALL AVENUE WEST PHASE II - ROADWAY
PROJECT NO. FBLD-8769-00(001) LPA / 108639-802000
CITY OF HATTIESBURG
FORREST COUNTY, MISSISSIPPI

Bidder's Checklist

Section 901 - Advertisement for Bids

Section 904 - Notice to Bidders

#1:	Governing Specifications
#1A:	Designating Owner & Engineer
#2:	Status of Right-of-Way with Attachments
#3:	Final Cleanup
#9:	Federal Bridge Formula
#14:	Railway-Highway Provision with Supplement
#15:	Non-use of Precast Drainage Units
#20:	Temporary Steel Bracing
#21:	Intermediate Diaphragms
#113:	Tack Coat
#247:	Norfolk Southern Insurance Requirements
#445:	Mississippi Agent or Qualified Nonresident Agent
#446LPA:	Traffic on Milled Surfaces
#516:	Errata and Modifications to 2017 Specs
#757:	Additional Erosion Control Requirements
#1225:	Early Notice to Proceed
#1226:	Material Storage Under Bridges
#1241:	Fuel and Material Adjustments
#1434:	Erosion Control Plan
#1595:	Vibratory Roller
#1878:	Storm Water Discharge Associated with Construction Activities with Supplement
#2172:	App for Storm Water Reports
#2206:	MASH Compliant Devices
#2273:	Mississippi Special Fuel Tax Law
#2611:	Disadvantaged Business Enterprise with Supplement
#2689LPA:	Asphalt Smoothness Requirement
#2954:	Reflective Sheeting for Signs
#3676:	Asphalt Gyratory Compactor Internal Angle Calibration
#3875:	General ITS Requirements
#3963:	Super Silt Fence
#4113:	Unique Entity ID (SAM) Requirements for Federal Funded Projects
#5865 LPA:	Sampling and Testing of Concrete on Small LPA Projects
#5866 LPA:	Payroll Requirements
#6000 LPA:	Requirements for Traffic Control Personnel

#7015:	Contract Time
#7200:	Specialty Items
#7300:	Placement of Fill Material in Federally Regulated Areas
#7400:	Cooperation Between Contractors
#7800:	Gold Sheet Commitment
#7900:	Prestressed Beams Fillet Concrete
#8500:	Non-roadway Density Requirements
#9100:	Pre-bid Conference Meeting Minutes
#9200:	Fuel Adjustments
#9999:	Bid Opening

Section 906 - County Wage Rates
Supplement to Form FHWA-1273

Section 907 -	907-102-4 LPA:	Bidding Requirements and Conditions
	907-105-1:	Authority of the Engineer
	907-106-1:	Control of Materials
	907-107-2:	Contractor's Erosion Control Plan
	907-108-4:	Subletting of Contract
	907-109-4:	Measurement and Payment
	907-234-1:	Silt Fence
	907-417-1:	Polymer Cement Surface System
	907-262-1LPA :	Water Mains and Appurtenances
	907-616-2:	Colored and Imprinted Concrete Median and Island Pavement
	907-631-1:	Traffic Signal Systems - General
	907-632-1:	Traffic Signal Cabinet Assemblies
	907-634-4:	Traffic Signal and ITS Equipment Poles
	907-636-3:	Electric Cable
	907-637-3:	Traffic Signal Conduit and Pull Boxes
	907-639-2:	Traffic Signal Preemption Systems
	907-643-3:	Video Vehicle Detection
	907-645-1:	Pedestrian Detection Assemblies
	907-653-1:	Traffic and Street Name Signs
	907-700-1:	Material and Tests
	907-701-3:	Hydraulic Cement
	907-702-4:	Bituminous Material
	907-703-1:	Gradation
	907-705-1:	Stone Riprap
	907-707-3:	Joint Materials
	907-708-4:	Concrete Pipe
	907-711-2:	Plain Steel Wire
	907-712-1:	Fence and Guardrail
	907-714-3:	Miscellaneous Materials
	907-718-1:	Timber and Dimension Lumber
	907-720-2:	Acceptance Procedure for Glass Beads
	907-721-4:	Materials for Signing
	907-722-1:	Materials for Traffic Signal Installation
	907-804-11:	Concrete Bridges and Structures
	907-809-10:	Retaining Wall Systems
	907-899-1:	Railway-Highway Provisions

Section 905 - Proposal

- Instructions to Bidders
- Bid Schedule
- Certification with regard to the Performance of Previous Contracts or Subcontracts subject to the Equal Opportunity Clause and the filing of Required Reports
- Affidavit Regarding Non-Collusion, Debarment and Suspension (2 copies)

Section 902 - Contract Form

Section 903 - Contract Bond Forms

Executive Compensation Certification

Guidance for Federal Spending Transparency

Pile Driving Form

OCR-481-LPA – Disadvantaged Business Enterprise List (3 copies)

OCR-485-LPA – List of Firms Submitting Quotes (3 copies)

SAM.GOV Registration and Unique Entity ID

(Revisions to the Above Will Be Indicated on the Second Sheet of Section 905 as Addenda)

SECTION 901 - ADVERTISEMENT FOR BIDS

CITY OF HATTIESBURG FORREST COUNTY, MISSISSIPPI

NOTICE TO CONTRACTORS

HALL AVENUE WEST PHASE II - ROADWAY FEDERAL-AID PROJECT NO. FBLD-8769-00(001) LPA / 108639-802000

Sealed bids will be received by the City of Hattiesburg, at the City Clerk's office, Mississippi, hereafter referred to as Owner, located at 200 Forrest Street, Hattiesburg, Mississippi, 39401, until 10:00 A.M., Local Time, Thursday, **November 10, 2022** for supplying all labor, equipment, and materials (as specified) necessary for the construction of the above referenced project. When bids are submitted electronically, the same requirements for submitting sealed bids shall apply. Electronic bids shall be submitted online at www.hattiesburgsbids.com and shall include a document representing the cover of the envelope containing the aforementioned criteria.

A Pre-bid Conference will be held Thursday, October 27, 2022 at 10:30 a.m. at the Jackie Dole Sherrill Community Center, 220 W. Front Street, Hattiesburg, Mississippi, 39401. All interested Contractors and Subcontractors are encouraged to attend.

The work shall consist essentially of the following items:

Construction of Hall Avenue from West Pine Street to Court Street that includes asphalt pavement, sidewalk, drainage improvements, striping, landscaping, lighting and a bridge over the Norfolk Southern Railroad. All other related items of work required to complete the project as shown and specified in the Contract Documents.

The above general outline of features of the work does not in any way limit the responsibility of the contractor to perform all work and furnish all plant, labor, equipment and materials required by the specifications and the drawings referred to therein.

Contract Drawings, Contract Specifications, Instructions to Bidders and Bidders Proposal forms are on file and open to public inspection in the office of the City Clerk, City of Hattiesburg, 200 Forest Street, Hattiesburg Mississippi 39401. Bid documents are being made available via paper copy or pdf. All interested bidders are required to log-in or register for an account at www.hattiesburgsbids.com to view and order Bid Documents. All plan holders are required to have a valid email address for registration. Bid documents are non-refundable and must be purchased through this website. Questions regarding website registration and online orders should be directed to our web support line at (662) 407-0193.

The attention of bidders is directed to the Special Provisions governing selection and employment of labor.

Minimum wage rates for Federal-Aid projects have been predetermined by the Secretary of Labor and are subject to Public Law 87-581 Work Hours Act of 1962, as set forth in the Contract Provisions.

The City of Hattiesburg hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged and women's business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The award of this contract will be contingent upon the Contractor satisfying the DBE/WBE requirements.

The *2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction*, adopted by the Mississippi Department of Transportation, as referred to herein, may be purchased from the Mississippi Department of Transportation.

Each bid shall be accompanied by a Certified Check on a solvent bank or a Bidder's Bond issued by a Surety Company licensed to operate in the State of Mississippi, in the amount of five percent (5%) of the total bid price, payable to the City of Hattiesburg as bid security. Bidders shall also submit a current financial statement, if requested by the City. The successful bidder will be required to furnish a performance and payment bond in the amount of one hundred percent (100%) of the contract amount. Both bonds shall be signed or countersigned by a Mississippi Resident Agent.

The proposal and contract documents in its entirety shall be submitted in a sealed envelope and deposited with the City Clerk, 200 Forrest Street, Hattiesburg, Mississippi prior to the hour and date above designated.

The City of Hattiesburg reserves the right to reject any or all proposals, to waive technicalities or irregularities, or to advertise for new proposals, and the decision of the City of Hattiesburg to reject any bid or proposal shall not be cause for any liability or damages against the City of Hattiesburg, any officers or employees.

The bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project within the Contract Time. The bidder must also agree to pay as liquidated damages the sum specified in the Standard Specifications per day for each calendar day of overrun in Contract Time that work is not completed.

Work to be performed shall be in accordance with the "Mississippi State Highway Standard Specifications for Road and Bridge Construction, 2017", together with all amendments and/or special provisions and/or addenda to the standards duly approved and adopted, unless otherwise noted in these specifications.

The attention of Bidders is directed to the provisions of Subsection 102.07 pertaining to irregular proposals and rejection of bids.

City Clerk
City of Hattiesburg, Mississippi

Dates of Publication:

October 9, 2022
October 16, 2022

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO NOTICE TO BIDDERS NO. 1

DATE: 06/08/2021

SUBJECT: Governing Specifications

Change the web address at the end of the first paragraph to the following.

<https://shop.mdot.ms.gov/default.aspx?StoreIndex=1>

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1

CODE: (IS)

DATE: 03/01/2017

SUBJECT: Governing Specifications

The current (2017) Edition of the Standard Specifications for Road and Bridge Construction adopted by the Mississippi Transportation Commission is made a part hereof fully and completely as if it were attached hereto, except where superseded by special provisions, or amended by revisions of the Specifications contained within this proposal. Copies of the specification book may be purchased from the MDOT Construction Division, or online at shopmdot/default.aspx?StoreIndex=1.

A reference in any contract document to controlling requirements in another portion of the contract documents shall be understood to apply equally to any revision or amendment thereof included in the contract.

In the event the plans or proposal contain references to the 2004 Edition of the Standard Specifications for Road and Bridge Construction, it is to be understood that such references shall mean the comparable provisions of the 2017 Edition of the Standard Specifications.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 1A LPA

CODE: (SP)

DATE: 01/10/2022

SUBJECT: Designated Owner and Engineer

PROJECT: FBLD-8769-00(001)LPA/108639-802000

Any reference in the Contract Documents to the State of Mississippi, Mississippi Department of Transportation, Mississippi Transportation Commission, or any official thereof, it shall be interpreted to mean the (City of Hattiesburg, Missississippi), the "Owner".

Any reference in the Standard Specifications to the Project Engineer, District Engineer, Chief Engineer, or Engineer it shall be interpreted to mean the (Project Engineer for the City of Hattiesburg, Mississippi, Neel-Schaffer, Inc.).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2

CODE: (IS)

DATE: 03/01/2017

SUBJECT: Status of Right-of-Way

Although it is desirable to have acquired all rights-of-way and completed all railroad agreements, utility adjustments and work to be performed by others prior to receiving bids, sometimes it is not considered to be in the public interest to wait until each and every such clearance has been obtained. The bidder is hereby advised of possible unacquired rights-of-way, relocates, railroad agreements and utilities adjustments which have not been completed.

The status of right-of-way acquisition, utility adjustments, encroachments, potentially contaminated sites, railroad facilities, improvements, and asbestos contamination are set forth in the following attachments.

In the event right of entry is not available to ALL parcels of right-of-way and/or all work that is to be accomplished by others on the date set forth in the contract for the Notice to Proceed is not complete, the Department will issue a restricted Notice to Proceed.

Brad White
Executive Director

P. O. Box 1850
Jackson, MS 39215-1850
Telephone (601) 359-7249
FAX (601) 359-7050
GoMDOT.com



Brian D. Ratliff
Deputy Executive Director/Chief Engineer
Lisa M. Hancock
Deputy Executive Director/Administration
Charles R. Carr
Director, Office of Intermodal Planning

September 6, 2022

Mr. Donald Davis
Division Administrator
FHWA-Mississippi Division
100 West Capitol Street, Suite 1062
Jackson, MS 39269

RE: City of Hattiesburg
Hall Avenue West Phase II – Intersection of Hall Avenue/Bay Street/James
Street/Arledge Street, W to West Pine Street
FBLD-8769-00(001) LPA 108639-802000
Forrest County

RIGHT-OF-WAY CERTIFICATION

Dear Mr. Davis:

This is to certify that all necessary highway rights-of-way, including control of access has been acquired or legal Right of Entry obtained and rights-of-way were acquired in accordance with 49CFR Part 24, **except** as indicated on the Status of Right of Way.

This is to further certify that all individuals and families have been relocated to decent, safe and sanitary housing, or comparable relocatees and the steps relative to relocation advisory assistance administration of the Highway Relocation Assistance Program have been taken, **except** as indicated on the attached **Status of Right of Way**.

All improvements have been removed from the highway right of way, **except** the improvements to be removed by the Contractor as indicated in the contract plans and as indicated on the attached **Status of Improvements**.

This project was inspected and there were no visible indications of any Potentially Contaminated Sites on proposed Right of Way, **except** as indicated on the attached **Status of Potentially Contaminated Sites**. The status of the utilities to be adjusted or relocated is shown in the attached **Utility Status Report**.

Mr. Donald Davis
September 6, 2022

Sincerely,

RIGHT OF WAY DIVISION



Stephen D. Downing
Assistant Division Administrator

SDD: vs

Attachments:

Right of Way Certification Report (EZ Form)
Right of Way Status Report
Improvements Status Report
Asbestos Abatement Status Report
Utility Status Report
Railroad Facilities Status Report
Anticipated Bid Schedule

Pc: Chief Engineer (65-01)
LPA Division (77-01)
Construction Engineer (73-01)
District Six (26-01)

STATUS OF RIGHT-OF-WAY

City of Hattiesburg

Hall Avenue West Phase II – Intersection of Hall Avenue/Bay Street/James
Street/Arledge Street, W to West Pine Street
FBLD-8769-00(001) LPA 108639-802000
Forrest County

September 6, 2022

Right of Way Certification is issued subject to the following **conditions**:
(See attached Anticipated Bid Schedule)

Right of Way Status – All rights and legal rights of entry have been acquired **except** the following:

1. Parcels 25261 and 25251 have not been acquired but are to be acquired prior to Notice to Proceed to construction.
2. The Aerial Easement of Norfolk Southern RR has not been acquired but is to be acquired prior to Notice to Proceed to construction.
3. The residential relocation of Parcel 32854 has not been completed but the tenant is to be moved prior to October 1, 2022.
4. The residential relocation of Parcel 25261 has not been completed, but the MPP is to be completed prior to October 1, 2022.
5. The residential relocation of Parcel 25251 has not been completed but the owner is to be moved prior to March 1, 2023.

Improvements Status:

1. The residential improvements as listed on the Improvements Status Report are to be cleared by the LPA prior to Notice to Proceed to construction.

Asbestos Abatement Status:

1. The residential improvements as listed on the Asbestos Abatement Status Report are to be abated and demolished prior to Notice to Proceed to construction.

Utility Status:

1. The listed utility in conflict with project construction, Hattiesburg Water, is to be coordinated and relocated by the Contractor during construction.
2. The listed utilities in conflict with project construction, Mississippi Power, AT&T, Comcast, and Spire Gas, are to be relocated by the utility owners prior to Notice to Proceed to construction.

Railroad Facilities Status:

1. The railroad agreement will be completed prior to Notice to Proceed to construction.

LPA-ROW-EZ Form
Rev 08/21

RIGHT OF WAY CERTIFICATION REPORT

Name of LPA: City of Hattiesburg
Project Description & Termini: Hall Avenue West Phase II - Intersection of Hall Ave / Bay Street / James Street / Vantage Street, W to West Pine Street
FMS Project No.: 108639-002000
External Project No. FBLD-8798-00(001) LPA
County: Forrest
Date: August 1, 2022

Yes No

☐ ☒

(1) The LPA certifies that all project activities will take place on existing ROW and no additional ROW is required.

☒ ☐

(2) The LPA certifies that based on a site inspection of the right of way for the project the right of way is clear of encroachments.

☐ ☒

(3) The LPA certifies that there are no improvements that remain within the project right of way limits.

☒ ☐

(4) The LPA certifies that the project has been inspected and there are no visible indications of potentially contaminated sites within the proposed right of way.

☐ ☒

(5) The LPA certifies that the project right of way does not contain structures that required asbestos abatement.

☐ ☒

(6) The LPA certifies that there are no utilities in conflict with the project.

☐ ☒

(7) The LPA certifies that there are no railroads facilities affected by the above referenced project.

If the project requires any additional ROW, or the LPA cannot certify yes to any of the seven certifications listed above, then the LPA must complete the appropriate status report found in the MDOT-LPA Project Development Manual's (PDM) Chapter 5, section 11 and include with this Report. Any errors to this certification will be the responsibility of the certifying LPA.

The LPA certifies that the LPA will accept full financial responsibility for any damage caused, or delay claims that arise, in whole or in part, due to the failure of the LPA to remove, relocate or adjust, or clear any encroachment, utility, or contaminated site. Any additional construction costs incurred as a result of working around any encroachment, utility, or contaminated site will be paid by the LPA as a non-reimbursable expense.

Lamar Rutland
LPA Project Director (Print)

Lamar Rutland
Signature

Colo A. Jones
MDOT District Utility Coordinator
(For verification of Utilities only)

08/01/2022
Date

9/2/22
Date



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

COUNCIL - WARD THREE
Carter Carroll

COUNCIL - WARD FOUR
Dave Ware

COUNCIL - WARD FIVE
Nicholas Brown

RIGHT OF WAY STATUS REPORT

City of Hattiesburg
Hall Avenue West Phase II – Intersection of Hall Avenue/Bay Street/James Street/Arlidge Street, W to West Pine Street
FBLD-8769-00(001)LPA/108639-802000
Forrest
August 1, 2022

The above named LPA certifies that "ROW is required" for the above referenced LPA project.

This is to certify that all necessary rights of way, including control of access rights (when pertinent), have not been acquired, including legal and physical possession, for the above referenced project in accordance with Federal and State laws, including 49 CFR Part 24. All lands and improvements (if appropriate) are not yet vacant, and the agency does not yet have physical possession and the right to enter upon all lands.

Furthermore, this is to certify that there were individuals or families displaced by this project. Therefore, the 49 CFR Part 24, covering the relocation of displaced persons to decent, safe, and sanitary housing and availability of adequate replacement housing is applicable to this project. If persons were displaced, as a result of the project, all individuals and families have not been moved from the ROW and relocated in accordance with 49 CFR Part 24.

The attached Table 1, Right of Way Status Report, shows all real property interests and the date that each interest has been or will be acquired and the date that each displaced person has been or will be moved as part of the above referenced project.

Lamar Rutland, P.E.
(Type Name of LPA Project Director)

Lamar Rutland
Signature

8/16/22
Date

Table 1
Right of Way Status Report

City of Hattiesburg
FBLD-8769-00(001) LPA/108639-802000
August 1, 2022

Parcel/Interest Reference No.	Begin Station #	Name of Owner/Tenant	Indicate acquired by Type of Deed or by ROE	Date of Possession (m/d/y)	Acquisition Cost /ROE Deposit Amt.	Relocation Assistance Cost	Date Moved
19281	10+50	Dossett Pontiac	Deed	07/22/2022	\$215,640.00		N/A
19282	10+50	Dossett Pontiac	Deed	07/22/2022			N/A
19280	12+70	Dossett Pontiac	Deed	07/22/2022			N/A
21714	12+70	Daniel Dossett ETAL	Lease Hold Interest	07/22/2022	\$15,200.00		N/A
21714	12+70	HPSD	Lease Hold Interest	7/12/2022	\$21,714.00		
21715	12+70	Daniel Dossett ETAL	Lease Hold Interest	07/22/2022	\$1,555		N/A
21715	12+70	HPSD	Lease Hold Interest	7/12/2022	\$630.00		
32304	18+10	MLK Ave Baptist	Lease Hold Interest	07/22/2022			N/A
32303	18+10	MLK Ave Baptist	Lease Hold Interest	07/22/2022	\$74,030.00		N/A
32303	18+10	HPSD	Leasehold Interest	7/12/2022	\$28,770.00		
32304	18+10	HPSD	Leasehold Interest	7/12/2022			
32854	20+00	MLK Ave Baptist	Lease Hold Interest	07/22/2022	\$50,150.00		
32854	20+00	HPSD	Leasehold Interest	7/22/2022	\$4,800.00		
32854	20+00	Polk & Dawson	Leasehold Interest	7/26/2022	\$100.00	TBD	Prior 10/1/2022
25261	20+70	Ralph Lindsey	Deed		\$85,560.00	TBD	Prior 10/1/2022

25251	22+20	Jennifer Brown & ETAL	Deed		\$48,750.00	TBD	Prior 3/1/2023
25252	22+70	Raymond Bullock	Warranty Deed	07/11/2022	\$10,230.00		N/A
File 12	14+90	HPSD	Lease Hold Interest	07/22/2022			N/A
File 13	16+95	HPSD	Lease Hold Interest	07/22/2022	\$21,225.00		N/A
21791	101+45	Hand Marketing Group	Lease Hold Interest	07/13/2022	\$420.00		N/A
21791	101+45	HPSD	Lease Hold Interest	07/22/2022	\$1,130.00		
Railroad	16+00	Norfolk Southern	Aerial Easement	Prior NTP	\$6,355.00		
Railroad	16+00	HPSD	Aerial Easement	7/12/2022	\$100.00		
18772	33+68	Michael McCullum	TCE	07/11/2022	\$1,050.00		N/A
23733	33+45	State of MS	Patent				
18467	41+85	Elizabeth Wilson	TCE	07/11/2022	\$ 150.00		N/A
13178	43+65	James & Francis Maloney	TCE	07/22/2022	\$1,800.00		N/A
19173	47+41	Clark Investments	TCE	07/13/2022	\$ 100.00		N/A
19174	48+20	Patrice Butler	TCE	07/11/2022	\$ 650.00		N/A
19175	48+70	Charles & Patrick Johnson	TCE	07/11/2022	\$3,710.00		N/A
23748	31+62	Paul & Beatrice Meyers	TCE	07/13/2022	\$ 575.00		N/A
13184	39+84	Pam & Keyland Grant	TCE	07/28/2022	\$3,650.00		N/A



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

COUNCIL - WARD THREE
Carter Carroll

COUNCIL - WARD FOUR
Dave Ware

COUNCIL - WARD FIVE
Nicholas Brown

IMPROVEMENTS STATUS REPORT

City of Hattiesburg
Hall Avenue West Phase II – Intersection of Hall Avenue/Bay Street/James Street/Arlidge Street, W to West Pine Street
FBLD-8769-00(001)LPA/108639-802000
Forrest
August 1, 2022

This is to certify that the project does contain improvements that remain within the project right of way limits.

The following is a list of each improvement and the details regarding the demolition and clearance of each improvement(s).

List of Improvements & Station Location	Demolition and Clearance plan
(ex.) 1 story residence Sta. 20+15	To be cleared by LPA prior to Notice to Proceed to Construction
(ex.) 1 story residence Sta. 21+25	To be cleared by LPA prior to Notice to Proceed to Construction
(ex.) 1 story residence Sta. 22+70	To be cleared by LPA prior to Notice to Proceed to Construction

Lamar Rutland, P.E.
(Type Name of LPA Project Director)


Signature

8/26/22
Date



MAYOR
Toby Barker

COUNCIL - WARD ONE

Jeffrey George

COUNCIL - WARD TWO

Deborah Denard Delgado

COUNCIL - WARD THREE

Carter Carroll

COUNCIL - WARD FOUR

Dave Ware

COUNCIL - WARD FIVE

Nicholas Brown

ASBESTOS ABATEMENT STATUS REPORT

City of Hattiesburg

Hall Avenue West Phase II – Intersection of Hall Avenue/Bay Street/James Street/Arlidge Street, W to West Pine Street

FBLD-8769-00(001)LPA/108639-802000

Forrest

August 1, 2022

This is to certify that the project does contain structures that required asbestos abatement.

The following is a list of structure(s) that requires asbestos abatement and the details regarding the asbestos abatement and demolition plan for each structure.

List of Structures Containing Asbestos	Asbestos Abatement and Demolition Plan
(ex.) 1 story residence Sta. 20+15	To be abated and demolished prior to Notice to Proceed to Construction
(ex.) 1 story residence Sta. 21+25	To be abated and demolished prior to Notice to Proceed to Construction
(ex.) 1 story residence Sta. 22+70	To be abated and demolished prior to Notice to Proceed to Construction

Lamar Rutland, P.E.

{Type Name of LPA Project Director}

Lamar Rutland
Signature

8/26/22
Date



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

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Carter Carroll

COUNCIL - WARD FOUR
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COUNCIL - WARD FIVE
Nicholas Brown

UTILITY STATUS REPORT

City of Hattiesburg
Hall Avenue West Phase II – Intersection of Hall Avenue/Bay Street/James Street/Ariedge Street, W to West Pine Street
FBLD-8769-00(001)LPA/108639-802000
Forrest
August 1, 2022

The following is a list of each utility owner on the above mentioned project, describing the status of each utility on the right of way and its impact on the project.

List of Each Utility Owner on the Project	Status of the Conflict with Project Construction
Hattiesburg Water	In conflict with construction, to be coordinated and relocated by the Contractor during construction.
Hattiesburg Sewer	Not in conflict with construction
Mississippi Power	In conflict with construction, to be relocated prior to the Notice to Proceed to construction.
AT&T	In conflict with construction, to be relocated prior to the Notice to Proceed to construction.
Comcast	In conflict with construction, to be relocated prior to the Notice to Proceed to construction.
C Spire	Not in conflict with construction

Spire Gas	In conflict with construction, to be relocated prior to the Notice to Proceed to construction.
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The above named LPA understands that any claim by the contractor due to NOT having the utilities relocated will be a non-participating item. In the event the utility facilities are discovered to be in conflict, damaged, or otherwise impact the proposed construction, the above named LPA shall bear all responsibility and/or claims associated with these facilities.

Lamar Rutland, P.E.
{Type Name of LPA Project Director}

Lamar Rutland
Signature

8/17/22
Date

District Utility Coordinator Concurrence:

C. A. 220
Signature

9/2/22
Date



MAYOR
Toby Barker

COUNCIL - WARD ONE
Jeffrey George

COUNCIL - WARD TWO
Deborah Denard Delgado

COUNCIL - WARD THREE
Carter Carroll

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RAILROAD FACILITIES STATUS REPORT

City of Hattiesburg
Hall Avenue West Phase II – Intersection of Hall Avenue/Bay Street/James Street/Arledge Street, W to West Pine Street
FBLD-8769-00(001)LPA/108639-802000
Forrest
August 1, 2022

There are railroads facilities affected by the above referenced project.

The status of the affected railroad(s) facilities on the above referenced project is subject to the following listed condition(s):

Railroad Agreement will be completed prior to Notice to Proceed to Construction.

Lamar Rutland, P.E.
{Type Name of LPA Project Director}


Signature

9/6/22
Date

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3

CODE: (SP)

DATE: 01/17/2017

SUBJECT: Final Clean-Up

Immediately prior to final inspection for release of maintenance, the Contractor shall pick up, load, transport and properly dispose of all litter from the entire highway right-of-way that is within the termini of the project.

Litter shall include, but not be limited to, solid wastes such as glass, paper products, tires, wood products, metal, synthetic materials and other miscellaneous debris.

Litter removal is considered incidental to other items of work and will not be measured for separate payment.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 9

CODE: (IS)

DATE: 03/01/2017

SUBJECT: Federal Bridge Formula

Bidders are hereby advised that the latest revision of Federal Highway Administration Publication No. FHWA-HOP-06-105, **BRIDGE FORMULA WEIGHTS**, dated August 2006, is made a part of this contract when applicable.

Prior to the preconstruction conference, the Contractor shall advise the Engineer, in writing, what materials, if any, will be delivered to the jobsite via Interstate route(s).

Copies of the **BRIDGE FORMULA WEIGHTS** publication may be obtained by contacting:

Federal Highway Administration
400 7th Street, SW
Washington, DC 20590
(202) 366-2212

or

http://www.ops.fhwa.dot.gov/Freight/publications/brdg_frm_wghts/bridge_formula_all_rev.pdf

An on line **BRIDGE FORMULA WEIGHTS CALCULATOR** is available at

http://ops.fhwa.dot.gov/freight/sw/brdgcalc/calc_page.htm

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO NOTICE TO BIDDERS NO. 14

DATE: 06/30/2022

PROJECT: FBLD-8769-00(001)LPA/108639-802000
Hall Avenue West Phase II-Roadway

After the second paragraph on page 1, add the following:

Name Insured: Norfolk Railroad

Description and Designation: Hall Avenue, near Hattiesburg, MS

Mile Post: 86.26

After the fourth paragraph on page 1, add the following:

Norfolk Railroad

Jake Watson

650 W. Peachtree St

Atlanta, GA 30308

470-463-6778 (Office)

404-859-9597

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 14

CODE: (SP)

DATE: 01/17/2017

SUBJECT: Railway-Highway Provisions

Prior to bidding, the Contractor shall contact the Railroad concerning insurance coverage required for this project. In case the railroad requires coverage over and above that required by the Standard Specifications, the railroad requirements shall be met.

The name insured, description of the work and designation of the job site to be shown on the Policy are as follows:

Notice of starting to work, completion of any required forms, and correspondence pertaining to railroad liability insurance shall be directed to the person below.

The Contractor shall not commence, or carry on, any work for installation, maintenance, repair, changing or renewal of any FACILITY, under, over or on RAILROAD property at any location without giving at least ten (10) working days prior notice to the RAILROAD authorized representative at the RAILROAD's office(s) below.

If in the opinion of the RAILROAD, the presence of an authorized representative of the RAILROAD is required to supervise the same, the RAILROAD shall render bills to the Contractor for all expenses incurred by it for such supervision. This includes all labor costs for flagmen or cable locate supplied by the RAILROAD to protect RAILROAD operation, and for the full cost of furnishing, installation and later removal of any temporary supports for said tracks, as the RAILROAD's Chief Engineer's Office may deem necessary.

It will be the Contractor's responsibility to pay all bills associated with railroad flagging and cable locating. Generally, the flagging rate is \$700.00 per day (1 to 8 hours) plus overtime at \$125.00 per hour, however, the Contractor shall contact the RAILROAD to verify all rates.

A flagman is required anytime a Contractor does any work on or near RAILROAD property within twenty-five (25) feet horizontally of the centerline or any work over any railroad track. The RAILROAD, however, also reserves the right to require a flagman for work on RAILROAD property, which is more than twenty-five (25) feet from the centerline of a railroad track when there are other conditions or considerations that would dictate the need for a flagman to safeguard the RAILROAD's operations, property and safety of working personnel.

A cable locate of RAILROAD owned facilities may be required to identify and protect Signal & Communication cables that have been installed to provide power, signal control, wayside communications. These cables are vital to a safe and reliable railway operation. The cable locate will be performed by a qualified RAILROAD employee.

Outside Contractors are prohibited from driving on, along, or across any track that does not have a RAILROAD installed crossing. They may utilize an existing public crossing. The practice of allowing rubber tired equipment to operate over track with no crossing has been banned.

Exceptions to this rule will require the express approval from the RAILROAD Engineers.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 15

CODE: (SP)

DATE: 01/17/2017

SUBJECT: Non-Use of Precast Drainage Units

Bidders are hereby advised that the use of precast inlets and junction boxes will **NOT** be allowed on this project. Subsection 601.02.3 states that "the Contractor may request approval from the Engineer to furnish and install precast units in lieu of cast-in-place units". Should the Contractor make this request, the request will be denied.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 20

CODE: (SP)

DATE: 03/01/2017

SUBJECT: Temporary Steel Bracing

Bidders are advised that temporary steel bracing will be required when beams are to be placed over railroads and roadways. The attached detail sheet shall be used for temporary beam bracing on this project.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 21

CODE: (SP)

DATE: 03/01/2017

SUBJECT: Intermediate Concrete Diaphragms

Bidders are advised that the bridge plans for this project indicates that intermediate concrete diaphragms are required between the beams. If the bridge is designed using Load and Resistance Factor Design (LRFD), the intermediate concrete diaphragms may be eliminated at the Contractor's option. If the Contractor desires to make this change, a written request shall be sent to the Project Engineer who will forward it to the Bridge Division for concurrence. If eliminated, any concrete and reinforcement shown on the plans for intermediate diaphragms will not be included in the measurement and payment of concrete and reinforcement.

If the intermediate concrete diaphragms are eliminated, the Contractor shall temporarily brace the beams in accordance with the attached detail sheet.

This bracing shall be addressed in the Contractor's written request to eliminated intermediate diaphragms.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 113

CODE: (SP)

DATE: 04/18/2017

SUBJECT: Tack Coat

Bidders are advised that in addition to the products listed on the Department's APL as referenced in Subsection 401.03.1.2 on page 256, the Contractor may use one of the following as a tack coat.

- CSS-1
- CSS-1h
- SS-1
- SS-1h

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 247

CODE: (SP)

DATE: 06/27/2017

SUBJECT: Norfolk Southern Insurance Requirements

Bidder's attention is brought to the following special insurance requirements regarding Norfolk Southern Railroads.

- A. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Prime Contractor will be required to carry insurance of the following kinds and amounts:
1. a. Commercial General Liability Insurance having a combined single limit of not less than \$2,000,000 per occurrence for all loss, damage, cost and expense, including attorneys' fees, arising out of bodily injury liability and property damage liability during the policy period. Said policy shall include explosion, collapse, and underground hazard (XCU) coverage, shall be endorsed to name Railroad specified in item A.2.c. below both as the certificate holder and as an additional insured, and shall include a severability of interests provision.
 - b. Automobile Liability Insurance with a combined single limit of not less than \$1,000,000 each occurrence for injury to or death of persons and damage to or loss or destruction of property. Said policy or policies shall be endorsed to name Railroad specified in item A.2.c. below both as the certificate holder and as an additional insured and shall include a severability of interests provision;
 2. Railroad Protective Liability Insurance having a combined single limit of not less than \$2,000,000 each occurrence and \$6,000,000 in the aggregate applying separately to each annual period. If the project involves track over which passenger trains operate, the insurance limits required are not less than a combined single limit of \$5,000,000 each occurrence and \$10,000,000 in the aggregate applying separately to each annual period. Said policy shall provide coverage for all loss, damage or expense arising from bodily injury and property damage liability, and physical damage to property attributed to acts or omissions at the job site.

The standards for the Railroad Protective Liability Insurance are as follows:

- a. The insurer must be rated A- or better by A.M. Best Company, Inc.
NOTE: Norfolk Southern (NS) does not accept from insurers Chartis (AIG or Affiliated Company including Lexington Insurance Company), Hudson Group or Liberty or Affiliated Company.
- b. The policy must be written using one of the following combinations of Insurance Services Office ("ISO") Railroad Protective Liability Insurance Form Numbers:
 - (1) CG 00 35 01 96 and CG 28 31 10 93; or
 - (2) CG 00 35 07 98 and CG 28 31 07 98; or
 - (3) CG 00 35 10 01; or
 - (4) CG 00 35 12 04; or
 - (5) CG 00 35 12 07; or
 - (6) CG 00 35 04 13.

- c. The named insured shall read:
 - Norfolk Southern Corporation and its subsidiaries
 - Three Commercial Place
 - Norfolk, Virginia 23510-2191
 - Attn: S. W. Dickerson Risk Management
- (NOTE: NS does not share coverage on RRPL with any other entity on this policy)
- d. The description of operations must appear on the Declarations, must match the project description in this agreement, and must include the appropriate Department project and contract identification numbers.
- e. The job location must appear on the Declarations and must include the city, state, and appropriate highway name/number. NOTE: Do not include any references to milepost, valuation station, or mile marker on the insurance policy.
- f. The name and address of the prime contractor must appear on the Declarations.
- g. The name and address of the Department must be identified on the Declarations as the "Involved Governmental Authority or Other Contracting Party."
- h. Endorsements/forms that are **required** are:
 - (1) Physical Damage to Property Amendment
 - (2) Terrorism Risk Insurance Act (TRIA) coverage must be included
- i. Other endorsements/forms that will be accepted are:
 - (1) Broad Form Nuclear Exclusion — Form IL 00 21
 - (2) 30-day Advance Notice of Non-renewal or cancellation
 - (3) Required State Cancellation Endorsement
 - (4) Quick Reference or Index Form CL/IL 240
- j. Endorsements/forms that are **NOT** acceptable are:
 - (1) Any Pollution Exclusion Endorsement except CG 28 31
 - (2) Any Punitive or Exemplary Damages Exclusion
 - (3) Known injury or Damage Exclusion form CG 00 59
 - (4) Any Common Policy Conditions form
 - (5) An Endorsement that limits or excludes Professional Liability coverage
 - (6) A Non-Cumulation of Liability or Pyramiding of Limits Endorsement
 - (7) An Endorsement that excludes TRIA coverage
 - (8) A Sole Agent Endorsement
 - (9) Any type of deductible endorsement or amendment
 - (10) Any other endorsement/form not specifically authorized in item no. 2.h above.

- B. If any part of the work is sublet, similar insurance, and evidence thereof as specified in A. 1 above, shall be provided by or on behalf of the subcontractor to cover its operations on Railroad's right of way.
- C. All insurance required under the preceding subsection A shall be underwritten by insurers and be of such form and content, as may be acceptable to the Company. Prior to entry on Railroad right-of-way, the original Railroad Protective Liability Insurance Policy shall be submitted by the Prime Contractor to the Department at the address below, [with copies to the Project Engineer](#). MDOT will be responsible for its review and transmittal to the Railroad. In addition, certificates of insurance evidencing the Prime Contractor's and any subcontractors' Commercial General Liability Insurance shall be issued to the Railroad and the Department at the addresses below, and forwarded to the Department for its review and transmittal to the Railroad. The certificates of insurance shall state that the insurance coverage will not be suspended, voided, canceled, or reduced in coverage or limits without (30) days advance written notice to Railroad and the Department. No work will be permitted by Railroad on its right-of-way until it has reviewed and approved the evidence of insurance required

herein.

DEPARTMENT:

Mississippi Department of Transportation
Bridge Division
P.O. Box 1850
Jackson, MS 39215-1850

RAILROAD:

Risk Management
Norfolk Southern Corporation and its subsidiaries
Three Commercial Place
Norfolk, Virginia 23510-2191

- D. The insurance required herein shall in no way serve to limit the liability of Department or its Contractors under the terms of this agreement.
- E. Insurance Submission Procedures
1. Railroad will only accept initial insurance submissions via US Mail or Overnight carrier to the address noted in C above. Railroad will NOT accept initial insurance submissions via email or faxes.
 2. Railroad requires the following two (2) forms of insurance in the initial insurance submission to be submitted under a cover letter providing details of the project and contact information:
 - a. The full original or certified true countersigned copy of the railroad protective liability insurance policy in its entirety inclusive of all declarations, schedule of forms and endorsements along with the policy forms and endorsements.
 - b. The Contractor's commercial general, automobile, and workers' compensation liability insurance certificate of liability insurance evidencing a combined single limit of a minimum of \$2M per occurrence of general and \$1M per occurrence of automobile liability insurance naming Norfolk Southern Railway Company, Three Commercial Place, Norfolk, VA 23510 as the certificate holder and as an additional insured on both the general and automobile liability insurance policy.
 3. It should be noted that the Railroad does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Railroad must have the full original countersigned policy. Further, please note that mere receipt of the policy is not the only issue but review for compliance. Due to the number of projects system-wide, it typically takes a minimum of 30 - 45 days for the Railroad to review.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 445

CODE: (SP)

DATE: 10/10/2017

SUBJECT: Mississippi Agent or Qualified Nonresident Agent

Bidders are hereby advised of the requirements of Subsections 102.08, 103.05.2, and 107.14.2.1 of the *2017 Standard Specifications for Road and Bridge Construction* as it refers to bonding agents. Proposal guaranties, bonds, and liability insurance policies must be signed by a **Mississippi Agent or Qualified Nonresident Agent.**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 446 LPA

CODE: (SP)

DATE: 11/1/2017

SUBJECT: Traffic on Milled Surface

Bidders are hereby advised that when the main lanes of a roadway are fine milled, traffic will be allowed to run on a milled surfaces for up to five (5) calendar days. The Contractor will be assessed a penalty of **\$5,000 per calendar day** afterwards until the milled surfaces are covered with the next lift of asphalt. It shall be the Contractor's responsibility to ensure that the milling operations do not commence until such time as forecasted weather conditions are suitable enough to allow the placement of the asphalt pavement after the milling operations.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 516

CODE: (IS)

DATE: 11/28/2017

SUBJECT: Errata and Modifications to the 2017 Standard Specifications

<u>Page</u>	<u>Subsection</u>	<u>Change</u>
16	102.06	In the seventh full paragraph, change “Engineer” to “Director.”
33	105.05.1	In the sixth sentence, change “Contract Administration Engineer” to “Contract Administration Director.”
34	105.05.2.1	In subparagraph 2, change “SWPPP, ECP” to “SWPPP and the ECP”
35	105.05.2.2	In subparagraphs 2, add “ and” to the end of the sentence. In subparagraph 3, remove “, and” and add “.”.
90	109.04.2	In the last paragraph of subparagraph (a), place a period “.” at the end of the sentence.
93	109.04.2	In the last paragraph of subparagraph (g), place a period “.” at the end of the sentence. Also, in the first paragraph of subparagraph (h), place a period “.” at the end of the sentence.
97	109.07	Under ADJUSTMENT CODE, subparagraph (A1), change “HMA mixture” to “Asphalt mixtures.”
98	109.11	In the third sentence, change “Engineer” to “Director.”
219	308.04	In the last sentence of the last paragraph, change “Contractor’s decision” to “Engineer’s decision.”
300	405.02.5.9	In the first sentence of the second paragraph, change “Hot Mix Asphalt” to “Asphalt Mixtures.”
502	630.01.1	In the first paragraph, change “ <u>AASHTO</u> ” to “AASHTO’s <u>LRFD</u> ”.
636	646.05	Change “each” to “per each” for the pay item units of payment.
640	656.02.6.2	In item 7), change “down stream” to “downstream”.
688	630.03.2	Change the subsection number from “630.03.2” to “680.03.2.”

- | | | |
|-----|---------------|---|
| 725 | 702.08.3 | In the second sentence of the first paragraph, change “hot-mix” to “asphalt.” |
| 954 | 804.02.13.1.6 | In the definition for “M” in the % Reduction formulas, change “paragraph 7.3” to “paragraph 5.3.” |

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 757

CODE: (SP)

DATE: 03/20/2018

SUBJECT: Additional Erosion Control Requirements

Bidders are hereby advised of the following requirements that relate to erosion control activities on the project.

THE MAXIMUM TOTAL ACREAGE THAT CAN BE DISTURBED, AT ONE TIME, ON THE PROJECT IS NINETEEN (19) ACRES. THE CONTRACTOR SHALL BE REQUIRED TO STABILIZE DISTURBED AREAS PRIOR TO OPENING UP ADDITIONAL SECTIONS OF THE PROJECT. STABILIZED SHALL BE WHEN THE DISTURBED AREA MEETS ONE OF THE FOLLOWING CRITERIA:

- **THE AREA HAS BEEN SEEDED, EITHER TEMPORARY OR PERMANENT, AND MULCHED ACCORDING TO THE SPECIFICATIONS, OR**
- **A CRUSHED STONE COURSE OR A LIFT OF ASPHALT PAVEMENT HAS BEEN PLACED, OR**
- **THE AREA HAS BEEN CHEMICALLY TREATED USING PORTLAND CEMENT OR LIME-FLY ASH, AND SEALED.**

DISTURBED AREAS INCLUDE THE ROADBED, SLOPES AND REMAINING AREA OUT TO THE ROW LINE.

Clearing and Grubbing: Prior to beginning any clearing and grubbing operations on the project, controls shall be in place to address areas such as drainage structures, wetlands, streams, steep slopes and any other sensitive areas in accordance with the approved Erosion Control Plan or as directed by the Engineer. Clearing and grubbing should be limited to the minimum area necessary to construct the project. Grubbing operations should be minimized in areas outside the construction limits and stumps should be cut off flush with the existing ground elevations. A buffer area of at least fifteen (15) feet or as shown in the Plans shall be in place adjacent to the right-of-way line. The buffer area can either be the existing vegetation that is left undisturbed or re-established by planting new vegetation if clearing and grubbing was required. [As applicable, see the Riparian Buffer Erosion Control sheet\(s\) in the Plans for clearing and grubbing limits adjacent to stream banks.](#)

Unclassified Excavation: Cut sections shall be graded in accordance with the typical sections and plan grades. Permanent erosion control BMP's should be placed as soon as possible after the cut material has been moved. Fill sections that are completed shall have permanent erosion control BMP's placed. Fill sections that are not completed shall be either permanently or temporarily seeded until additional material is made available to complete these sections. All unclassified excavation on the project is required to be moved prior to incorporating any borrow excavation. The Contractor may have to stockpile unclassified excavation in order to comply with the nineteen (19) acre requirement. No additional compensation will be made for stockpiling operations.

Disturbed areas that remain inactive for a period of more than fourteen (14) days shall be temporary grassed and mulched. Temporary grassing and mulching shall only be paid one time for a given area.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1225

CODE: (SP)

DATE: 11/13/2018

SUBJECT: Early Notice to Proceed

Bidders are advised that if an early notice to proceed is allowed by the Department and the Contractor experiences problems or delays between the early notice to proceed date and the original notice to proceed date, this shall not be justification for any monetary compensation or an extension of contract time.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1226

CODE: (IS)

DATE: 11/16/2018

SUBJECT: Material Storage Under Bridges

Bidders are advised that Subsection 106.08 of the Standard Specifications allows the Contractor to store materials and equipment on portions of the right-of-way. However, the Contractor will not be allowed to store or stockpile materials under bridges without written permission from the Project Engineer. The Contractor shall submit a detailed request of all proposed materials to be stored under bridges to the Engineer a minimum of 14 calendar days prior to anticipated storage. This detail shall include, but not limited to, bridge location, material type, material quantity, and duration of storage. The Project Engineer and any other needed Division will review this information and determine whether to grant approval. The Contractor shall not store any material under any bridge without written approval from the Project Engineer.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1241

CODE: (IS)

DATE: 11/27/2018

SUBJECT: Fuel and Material Adjustments

Bidder's attention is brought to the last paragraph of Subsection 109.07 of the Standard Specifications which states that no fuel or material adjustment will be made after the completion of contract time. Any fuels consumed or materials incorporated into the work during the monthly estimate period falling wholly after the expiration of contract time will not be subject a fuel or material adjustment.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1434

CODE: (IS)

DATE: 03/06/2019

SUBJECT: Erosion Control Plan

Bidders are advised that the Best Management Practices (BMPs) shown at sensitive areas on the Erosion Control Sheets in the Plans shall be shown on the Contractor's Erosion Control Plan and shall be used in the field as indicated on the original plans sheets. Should the installation of these BMPs produce an unsatisfactory result, the Contractor shall submit to the Engineer alternate BMPs for approval. Once approved, the Contractor shall revise the Contractor's Erosion Control Plan to include these changes.

NTB 1878 Supplement
PRIME CONTRACTOR CERTIFICATION

(File prior to the Issuance of Notice to Proceed)

PRIME CONTRACTOR'S MAILING ADDRESS AND TELEPHONE NUMBER:

NAME: _____

NUMBER AND STREET (P. O. BOX): _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE NUMBER (INCLUDING AREA CODE): _____

NAME OF OWNER: _____

STORM WATER GENERAL NPDES PERMIT NUMBER: MSR 15

PROJECT NAME: _____

PROJECT LOCATION: _____ County (ies)

PERMIT COVERAGE FOR MATERIAL PITS MAY BE NEEDED AND MUST BE APPLIED FOR BY THE CONTRACTOR SEPARATELY.

I CERTIFY THAT I AM THE PRIME CONTRACTOR OF THIS PROJECT, HAVE THE PRIMARY RESPONSIBILITY TO FULLY COMPLY WITH ALL OF THE REQUIREMENTS OF THE ABOVE REFERENCED GENERAL NPDES PERMIT, AND ACCEPT FULL LIABILITY FOR NOT COMPLYING WITH THESE REQUIREMENTS.

SIGNATURE

DATE SIGNED

PRINTED NAME

TITLE

**THIS DOCUMENT SHALL BE SIGNED ACCORDING TO THE GENERAL PERMIT, CONDITION NO. T-4,
PAGE 19 OF 26.**

CITY OF HATTIESBURG

SECTION 904 - NOTICE TO BIDDERS NO. 1595

CODE: (SP)

DATE: 08/12/2022

SUBJECT: Vibratory Roller

PROJECT: FBLD-8769-00(001)LPA /108639-802000

Bidders are advised that the use of vibratory rollers **will not** be allowed and the lot density required in sections 401.02.6.4.1 and 401.03.1.4 of the 2017 Edition of the Mississippi Standard Specification for Road and Bridge Construction shall be reduced by **one percent**.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1878

CODE: (SP)

DATE: 08/27/2019

**SUBJECT: Storm Water Discharge Associated with Construction Activity
(≥ 1 and < 5 Acres)**

Construction Storm Water General NPDES Permit MSR 15 to discharge storm water associated with construction activity is required. This project is granted permission to discharge treated storm water into State waters. Copies of said permit and Storm Water Pollution Prevention Plan (SWPPP) are on file with the Department.

Prior to the execution of the contract, the successful bidder shall execute and deliver to the Executive Director an original signed copy of the completed Prime Contractor Certification (Form No. 1).

Failure of the bidder to execute and file the completed Prime Contractor Certification (Form No. 1) shall be just cause for the cancellation of the award.

The executed Prime Contractor Certification (Form No. 1) shall be prima facie evidence that the bidder has examined the permit, is satisfied as to the terms and conditions contained therein, and that the bidder has the primary responsibility for meeting all permit terms and conditions including, but not limited to, the inspection and reporting requirements of [the permit](#). For this project, the Contractor shall furnish, set up and read, as needed, an on-site rain gauge.

The Contractor must furnish the Project Engineer a completed copy of the Small Construction Notice of Intent (SCNOI) along with the Contractor's Erosion Control Plan.

The Contractor shall make inspections in accordance with condition No. S-4, Page [20](#), and shall furnish the Project Engineer with the results of each weekly inspection as soon as possible following the date of inspection. The weekly inspections must be documented monthly on the Inspection and Certification Form, a copy of which is provided. The Contractor's representative and the Project Engineer shall jointly review and discuss the results of the inspections so that corrective action can be taken. The Project Engineer shall retain copies of the inspection reports.

The Engineer will have the authority to suspend all work and/or withhold payments for failure of the Contractor to carry out provisions of MDEQ's Storm Water Construction General Permit, the erosion control plan, updates to the erosion control plan, and /or proper maintenance of the BMPs.

Securing a permit (s) for storm water discharge associated with the Contractor's activity on any other regulated area the Contractor occupies, shall be the responsibility of the Contractor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2172

CODE: (SP)

DATE: 01/06/2020

SUBJECT: App for Storm Water Reports

Bidders are advised that the Department has created a smart phone App for completing and submitting storm water reports required on this project. The Contractor who monitors storm water activities and completes storm water reports will be required to download and use this App when completing and submitting storm water reports. The reports will then be readily available to all persons who need access to the forms. The App is free and is available for downloading at the following location.

<https://extacctmgmt.mdot.state.ms.us/>

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2206

CODE: (IS)

DATE: 01/14/2020

SUBJECT: MASH Compliant Devices

Bidders are hereby advised that compliance associated with the requirements of meeting either the National Cooperative Highway Research Program (NCHRP) Report 350 or the Manual for Assessing Safety Hardware (MASH) for installations of certain traffic control devices and permanent safety hardware devices (guardrails, guardrail terminals, permanent portable barriers, cast-in-place barriers, all other permanent longitudinal barriers, crash cushions, cable barriers, cable barrier terminals, bridge rails, bridge rail transitions, all other terminals, sign supports, and all other breakaway hardware) as listed throughout the Standard Specifications and/or the Standard Drawings, or both, is now replaced with the requirements of meeting the 2016 version of MASH after December 31, 2019. This change applies to new permanent installations and to full replacements of existing installations.

At the preconstruction conference or prior to starting any work on the project, the Contractor shall submit a letter stating that the traffic control devices and permanent safety hardware devices as outlined within the paragraph above that are to be used on the project are certified to meet MASH 2016.

When a MASH 2016-compliant device does not exist for the new permanent installations and/or full replacement installations of permanent safety hardware devices, as listed above, a MASH 2009-compliant or a NCHRP 350-compliant device may be proposed by the Contractor for the project. A written request for such instances must be submitted by the Contractor either at the preconstruction conference or prior to starting any work on the project. The Contractor shall submit the following items to the Project Engineer: (1) a detailed list of the proposed devices and locations thereof; and (2) certification letters indicating that the proposed devices are compliant with either MASH 2009 or NCHRP 350.

When a MASH 2016-compliant device does not exist for the temporary work zone traffic control devices (Category 1, Category 2, and Category 3 devices), a MASH 2009-compliant or a NCHRP 350-compliant device may be proposed by the Contractor for the project. Temporary work zone traffic control devices (Category 1, Category 2, and Category 3 devices) that are MASH 2009-compliant or NCHRP 350-compliant that have been in use prior to December 31, 2019, and that have a remaining service life may be proposed for use throughout their normal service life on the project by the Contractor. For either of these scenarios for temporary work zone traffic control devices, a written request must be submitted by the Contractor either at the preconstruction conference or prior to starting any work on the project. The Contractor shall submit the following items to the Project Engineer: (1) a detailed list of the proposed devices and locations thereof; and (2) certification letters indicating that the proposed devices are compliant with either MASH 2009 or NCHRP 350.

Work will only be allowed to proceed after the Department has granted written concurrence(s) with the proposed request(s) as listed above.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2273

CODE: (SP)

DATE: 02/12/2020

SUBJECT: Mississippi Special Fuel Tax Law

Bidder's attention is brought to the second paragraph of Subsection 107.02 of the Standard Specifications which states that all Contractors and Subcontractors must comply with all requirements contained in the Mississippi Special Fuel Tax Law, Section 27-55-501, *et seq.* Attached are two Fact Sheets provided by the Mississippi Department of Revenue (MDOR) with additional information.

Gasoline and Dyed Diesel Used for Non-Highway Purposes

Mississippi provides a reduced rate for gasoline and dyed diesel used for non-highway purposes. The reduced rates are 6.44 cents per gallon and 5.75 cents per gallon of gasoline or dyed diesel. These fuels are generally taxed at 18 cents per gallon if for on road use.

Gasoline Used for Non-Highway Purposes

You may be entitled to a refund of 11.56 cents per gallon (making this an equivalent to a tax rate of 6.44 cents per gallon) if you desire to purchase gasoline to be used off road. The gasoline must be used for agricultural, maritime, industrial, manufacturing, domestic or non-highway purposes only.

Examples of non-highway include gasoline used in boats, golf carts, machinery used for manufacturing or farm equipment used exclusively in plowing, planting or harvesting farm products.

Refund Gasoline User

The refund is based on the amount of gallons used. Before a refund is issued, you are required to...

1. Obtain a refund gasoline user's permit and a certificate for refund booklet from the Department of Revenue;
2. Have a storage tank marked "REFUND GASOLINE"; and,
3. Purchase the gasoline from someone who holds a refund gasoline dealer's permit.

No refund will be allowed for gasoline used in motor vehicles owned or operated by a government entity or used in Mississippi government contracts.

Refund Gasoline Dealer

You must obtain a refund gasoline dealer's permit from the Department of Revenue before selling refund gasoline. At no time should the gasoline be delivered to a tank that is not properly marked. The gasoline must be dyed a distinctive mahogany color at the time of delivery.

The Department of Revenue may waive the dye requirement if the dye may cause damage to the equipment. The refund gasoline user is required to obtain the waiver from the Department of Revenue.

Dyed Diesel Used for Non-Highway Purposes

Unlike gasoline, you are not required to apply for a refund if you desire to purchase dyed diesel to be used off road. Mississippi provides a reduced rate of 5.75 cents per gallon on dyed diesel used off road. Diesel used on road is subjected to 18 cents per gallon. Dyed diesel used in motor vehicles owned or operated by a government entity or used in Mississippi government contracts will be subjected to 18 cents per gallon.

Dyed Diesel Used on the Highway

Any person who purchases, receives, acquires or uses dyed diesel for highway use will be liable to pay 18 cents per gallon and subject to a penalty in the amount of \$1000.

Identifying Dyed Diesel

Storage facilities for dyed diesel must be plainly marked "NONHIGHWAY DIESEL FUEL" or "NONHIGHWAY KEROSENE". Retailers are also required to mark all pumps or dispensing equipment.



Special Fuel Used on Government Contracts

State and Local Government Contracts

Special fuel purchased, acquired or used in performing contracts with the State of Mississippi, counties, municipalities or any political subdivision is taxed at a rate of 18 cents per gallon. Special fuel includes but is not limited to the following:

- Dyed diesel fuel;
- Kerosene;
- Undyed diesel fuel; and,
- Fuel oil.

State and local government contracts include construction, reconstruction and maintenance or repairs of projects such as roads, bridges, water systems, sewer systems, buildings, drainage canals and recreational facilities. The Department of Revenue may require contractors to remit the excise tax directly to the state in lieu of paying the tax to a distributor.

Special Fuel Direct Pay Permit

Contractors that remit the excise tax to the state will be issued a Special Fuel Direct Pay Permit. This permit relieves the distributor from collecting the tax and requires the contractor to file a monthly special fuel return. The distributor should include the contractor's permit number on all invoices that are related to tax-free sales.

The contractor is required to furnish a surety or cash bond guaranteeing the payment of the excise tax prior to receiving the Special Fuel Direct Pay Permit. The Department of Revenue may accept a contractors tax bond if the bond covers the excise tax levied on special fuel.

Special Fuel Distributors

If the contractor does not have a Special Fuel Direct Pay Permit, distributors are required to collect the 18 cents excise tax and remit the tax to the Department of Revenue. The additional 12.25 cents levied on special fuel (excluding undyed diesel) should be reported on schedules 5F and 5G of the special fuel return.

Environmental Protection Fee

Special fuel distributors are required to collect the environmental protection fee even if the contractor has a Special Fuel Direct Pay Permit. The fee is levied at 4/10^{ths} of a cent per gallon. The fee is suspended or reinstated when the trust fund has exceeded or fallen below the obligatory balance.

Penalties

Any person who knowingly and willfully purchases untaxed fuel for use in equipment utilized on a road or highway construction site in this state is guilty of a misdemeanor and, upon conviction, shall be fined not less than \$1,000 or more than \$100,000, or imprisoned in the county jail for not more than one year, or both.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO NOTICE TO BIDDERS NO. 2611 LPA

DATE: **06/25/2020**

The goal is 7% percent for the Disadvantaged Business Enterprise. All Bidders are required to submit Form OCR-481 for all DBEs.

LPA Projects: Delete entire Pre-Bid Meeting Section on page 5.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2611 LPA

CODE: (IS)

DATE: 06/25/2020

SUBJECT: Disadvantaged Business Enterprises In Federal-Aid Highway Construction

This contract is subject to the "Moving Ahead for Progress in the 21st Century Act (MAP-21)" and applicable requirements of "Title 49, Code of Federal Regulations, [Part 26](#)." Portions of the Act are set forth in this Notice as applicable to compliance by the Contractor and all of the Act, and the MDOT DBE Program, is incorporated by reference herein.

The Department has developed a Disadvantaged Business Enterprise Program that is applicable to this contract and is made a part thereof by reference.

Copies of the program may be obtained from:

Office of Civil Rights
Mississippi Department of Transportation
P. O. Box 1850
Jackson, Mississippi 39215-1850

POLICY

It is the policy of the Mississippi Department of Transportation to provide a level playing field, to foster equal opportunity in all federally assisted contracts, to improve the flexibility of the DBE Program, to reduce the burdens on small businesses, and to achieve that amount of participation that would be obtained in a non-discriminatory market place. In doing so, it is the policy of MDOT that there will be no discrimination in the award and performance of federally assisted contracts on the basis of race, color, sex, [or](#) national origin.

ASSURANCES THAT CONTRACTORS MUST TAKE

MDOT will require that each contract which MDOT signs with a sub-recipient or a Contractor, and each subcontract the Prime Contractor signs with a Subcontractor, includes the following assurances:

"The Contractor, sub-recipient or Subcontractor shall not discriminate on the basis of race, color, [sex](#), [or](#) national origin in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as MDOT deems appropriate."

DEFINITIONS

For purposes of this provision the following definitions will apply:

"Disadvantaged Business" means a small business concern: (a) which is at least 51 percent owned by one or more socially and economically disadvantaged individual(s) or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individual(s); and (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individual(s) who own it. It is important to note that the business owners themselves must control the operations of the business. Absentee ownership or title ownership by an individual who does not take an active role in controlling the business is not consistent with eligibility as a DBE under 49 CFR Part 26.71.

CONTRACTOR'S OBLIGATION

The Contractor and all Subcontractors shall take all necessary and reasonable steps to ensure that DBE firms can compete for and participate in the performance of a portion of the work in this contract and shall not discriminate on the basis of race, color, sex, or national origin. Failure on the part of the Contractor to carry out the DBE requirements of this contract constitutes a breach of contract and after proper notification the Department may terminate the contract or take other appropriate action as determined by the Department.

When a contract has a zero percent (0%) DBE goal, the Contractor still has the responsibility to take all necessary and reasonable steps to ensure that DBE firms can compete for and participate in the performance of the work in the contract. In this case, all work performed by a certified DBE firm is considered to be a "race neutral" measure and the Department will receive DBE credit towards the overall State goals when the DBE firm is paid for their work. If the Prime Contractor is a certified DBE firm, the Department can receive DBE credit only for the work performed by the Prime Contractor's work force or any work subcontracted to another DBE firm. Work performance by a non-DBE Subcontractor is not eligible for DBE credit.

CONTRACT GOAL

The goal for participation by DBEs is established for this contract in the attached Supplement. The Contractor shall exercise all necessary and reasonable steps to ensure that participation is equal to or exceeds the contract goal.

If the percentage of the contract that is proposed for DBEs is 1% or greater, the Contractor shall agree to meet or exceed the contract goal on the last bid sheet of the proposal.

All Bidders shall submit to the Office of Civil Rights Form OCR-481, signed by the Prime Contractor and the DBE Subcontractors, no later than the 3rd business day after opening of the bids.

Form OCR-481 is available on the MDOT website at www.mdot.ms.gov under the Civil Rights tab, or by calling 601-359-7466.

The OCR-481 Form must contain the following information:

The name and address of each certified DBE Contractor / Supplier;

The Reference Number, percent of work to be completed by the DBE subcontractor and the dollar amount of each item. If a portion of an item is subcontracted, a breakdown of that item including quantities and unit price must be attached, detailing what part of the item the DBE firm is to perform and who will perform the remainder of the item.

If the DBE Commitment shown on the last bid sheet of the proposal, does not equal or exceed the contract goal, the bidder must submit, to MDOT Contract Administration Division prior to bid opening, information to satisfy the Department that adequate good faith efforts have been made to meet the contract goal.

Failure of the lowest bidder to furnish acceptable proof of good faith efforts, submitted to MDOT Contract Administration Division prior to bid opening, shall be just cause for rejection of the proposal. Award may then be made to the next lowest responsive bidder or the project may be re-advertised.

GOOD FAITH EFFORTS

The following factors are illustrative of matters the Department will consider in judging whether or not the bidder has made adequate good faith effort to satisfy the contract goal.

- (1) Whether the bidder attended the pre-bid meeting that was scheduled by the Department to inform DBEs of subcontracting opportunities;
- (2) Whether the bidder advertised in general circulation, trade association, and minority-focus media concerning the subcontracting opportunities;
- (3) Whether the bidder provided written notice to a reasonable number of specific DBEs that their interest in the contract is being solicited;
- (4) Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainty whether they were interested;
- (5) Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goal;
- (6) Whether the bidder provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;

- (7) Whether the bidder negotiated in good faith with interested DBEs and did not reject them as unqualified without sound reasons based on a thorough investigation of their capabilities; and
- (8) Whether the bidder made efforts to assist interested DBEs in obtaining any required bonding or insurance.
- (9) Whether the bidder has written notification to certified DBE Contractors soliciting subcontracting for items of work in the contract.
- (10) Whether the bidder has a statement of why an agreement was not reached.
- (11) Proof of written notification to certified DBE Contractors by certified mail that their interest is solicited in subcontracting the work defaulted by the previous DBE or in subcontracting other items of work in the contract.

The bidder's execution of the signature portion of the proposal shall constitute execution of the following assurance:

The bidder hereby gives assurance pursuant to the applicable requirements of "Moving Ahead for Progress in the 21st Century Act (MAP-21)" and applicable requirements of "Title 49, Code of Federal Regulations, Part 26" that the bidder has made a good faith effort to meet the contract goal for DBE participation for which this proposal is submitted.

DIRECTORY

A list of "Certified DBE Contractors" which have been certified as such by the Mississippi Department of Transportation and other Unified Certification Partners (UPC) can be found on the Mississippi Department of Transportation website at www.mdot.ms.gov. The list is in the top left corner of the current Letting Calendar under Contracts & Letting. The DBE firm must be certified at the time the project is let and approved by MDOT to count towards meeting the DBE goal.

REPLACEMENT

If a DBE Subcontractor cannot perform satisfactorily, and this causes the OCR-481 commitment to fall below the contract goal, the Contractor shall take all necessary reasonable steps to replace the DBE with another certified DBE Subcontractor or submit information to satisfy the Mississippi Department of Transportation that adequate good faith efforts have been made to replace the DBE. The good faith efforts outlined previously in this document still apply. The replacement DBE must be a DBE who was on the Department's list of "Certified DBE Contractors" when the job was let, and who is still active. All DBE replacements must be approved by the Department.

Under no circumstances shall the Prime or any Subcontractor perform the DBE's work (as shown on the OCR-481) without prior written approval from the Department. See "Sanctions" at the end of this document for penalties for performing DBE's work.

When a Contractor proposes to substitute/replace/terminate a DBE that was originally named on the OCR-481, the Contractor must obtain a release, in writing, from the named DBE explaining why the DBE Subcontractor cannot perform the work. A copy of the original DBE's release must be attached to the Contractor's written request to substitute/replace/terminate along with appropriate Subcontract Forms for the substitute/replacement/terminated Subcontractor, all of which must be submitted to the DBE Coordinator and approved, in advance, by MDOT.

PRE-BID MEETING

A pre-bid meeting will be held in the Commission Room on the 1st Floor of the MDOT Administration Building in Jackson, at 2:00 P.M. on the day preceding the date of the bid opening.

This meeting is to inform DBE firms of subcontracting and material supply opportunities. Attendance at this meeting is considered of prime importance in demonstrating good faith effort to meet the contract goal.

PARTICIPATION / DBE CREDIT

Participation shall be counted toward meeting the goal in this contract as follows:

- (1) If the Prime Contractor is a certified DBE firm, only the value of the work actually performed by the DBE Prime can be counted towards the project goal, along with any work subcontracted to a certified DBE firm.
- (2) If the Contractor is not a DBE, the work subcontracted to a certified DBE Contractor will be counted toward the goal.
- (3) The Contractor may count toward the goal a portion of the total dollar value of a contract with a joint venture eligible under the standards of this provision equal to the percentage of the DBE partner in the joint venture.
- (4) Expenditures to DBEs that perform a commercially useful function may be counted toward the goal. A business is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of the work and carries out its responsibilities by actually performing, managing, and supervising the work involved.
- (5) The Contractor may count 100% of the expenditures for materials and supplies obtained from certified DBE suppliers and manufacturers that produce goods from raw materials or substantially alters them for resale provided the suppliers and manufacturers assume the actual and contractual responsibility for the provision of the materials and supplies. The Contractor may count sixty percent (60%) of the expenditures to suppliers that are not

manufacturers, provided the supplier performs a commercially useful function in the supply process. Within 30 days after receipt of the materials, the Contractor shall furnish to the DBE Coordinator invoices from the certified supplier to verify the DBE goal.

- (6) Any work that a certified DBE firm subcontracts or sub-subcontracts to a non-DBE firm will not count towards the DBE goal.
- (7) Only the dollars actually paid to the DBE firm may be counted towards the DBE goal. The participation of a DBE Firm cannot be counted towards the Prime Contractor's DBE goal until the amount being counted towards the goal has been paid to the DBE.

AWARD

Award of this contract to the low bidder will be contingent upon the following conditions:

- (1) Concurrence from Federal Highway Administration, when applicable.
- (2) **All Bidders** must submit to the Office of Civil Rights for approval, Form OCR-481 (DBE Commitment) no later than the 3rd business day after opening of the bids to satisfy the Department and that adequate good faith efforts have been made to meet the contract goal. For answers to questions regarding Form OCR-481, contact the MDOT Office of Civil Rights at (601) 359-7466.
- (3) Bidder must include OCR-485 information with their bid proposal listing all firms that submitted quotes for material supplies or items to be subcontracted. OCR-485 information must be **signed and** included with the bid proposal. If the OCR-485 information is not included as part of bid proposal, your bid will be deemed irregular.

Prior to the start of any work, the bidder must notify the Project Engineer, in writing, of the name of the designated "DBE Liaison Officer" for this project. This notification must be posted on the bulletin board at the project site.

DEFAULT

If the contract goal established by MDOT in this proposal is 1% or greater, it must be met to fulfill the terms of the contract. The Contractor may list DBE Subcontractors and items that exceed MDOT's contract goal, but should unforeseen problems arise that would prevent a DBE from completing its total commitment percentage, the Contractor will meet the terms of the contract as long as it meets or exceeds MDOT's Contract Goal. For additional information, refer to "Replacement" section of this Notice.

DBE REPORTS

- (1) OCR-481: Refer to "CONTRACT GOAL" section of this Notice to Bidders for information regarding this form.

- (2) OCR-482: At the conclusion of the project, before the final estimate is paid and the project is closed out, the Prime Contractor will submit to the Project Engineer for verification of quantities and further handling Form OCR-482 whereby the Contractor certifies to the amounts of payments made to all Contractors / Suppliers over the life of the contract. The Project Engineer shall submit the completed Form OCR-482 to the DBE Coordinator (Office of Civil Rights). Final acceptance of the project is dependent upon Contract Administration Division's receipt of completed Form OCR-482 which they will receive from the Office of Civil Rights.
- (3) OCR-483: The Project Engineer/Inspector will complete Form OCR-483, the Commercially Useful Function (CUF) Performance Report, in accordance with MDOT S.O.P. No. OCR-03-05-02-483. Evaluations reported on this form are used to determine whether or not the DBE firm is performing a CUF. The Prime Contractor should take corrective action when the report contains any negative evaluations. DBE credit may be disallowed and/or other sanctions imposed if it is determined the DBE firm is not performing a CUF. This form should also be completed and returned to the DBE Coordinator (Office of Civil Rights).
- (4) OCR-484: Each month, the Prime Contractor will submit to the Project Engineer OCR-484 that certifies payments to all Subcontractors and shows all firms even if the Prime Contractor has paid no monies to the firm during that estimate period (negative report). The Project Engineer will attach the form to the monthly estimate before forwarding to the Contract Administration Division for further processing. Failure of the Contractor to submit the OCR-484 will result in the estimate not being processed and paid.
- (5) OCR-485: ALL BIDDERS must submit signed form with bid proposal of all firms that submitted quotes for material supplies or items to be subcontracted. If the OCR-485 information is not included as part of bid proposal, the bid will be deemed irregular.
- (6) OCR-487: Only used by Prime Contractors that are certified DBE firms. This form is used in determining the exact percentage of DBE credit for the specified project. The low Bidder should return this form to MDOT with the OCR-481 form, or can also be returned with the Permission to Subcontract Forms (RPS-1, NRAA-1 and SCC-1).

DBE Forms, can be obtained from the Office of Civil Rights Division, MDOT Administration Building, 401 North West Street, Jackson, MS, or at www.mdot.ms.gov under the Civil Rights tab.

SANCTIONS

The Department has the option to enforce any of the following penalties for failure of the Prime Contractor to fulfill the DBE goal as stated on the OCR-481 form or any violations of the DBE program guidelines:

- (1) Disallow credit towards the DBE goal

(2) Withhold progress estimate payments

(3) Deduct from the final estimate or recover an amount equal to the unmet portion of the DBE goal which may include additional monetary penalties as outlined below based on the number of offenses and the severity of the violation as determined by MDOT.

1 st Offense	10% of unmet portion of goal	or	\$5,000 lump sum payment	or	Both
2 nd Offense	20% of unmet portion of goal	or	\$10,000 lump sum payment	or	Both
3 rd Offense	40% of unmet portion of goal	or	\$20,000 lump sum payment	or	\$20,000 lump sum payment and debarment

(4) Debar the Contractor involved from bidding on MDOT federally funded projects for a period of up to 12 months after notification by certified email.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2689 LPA

CODE: (SP)

DATE: 06/15/2017

SUBJECT: Asphalt Smoothness Requirement

Bidders are advised that Subsection 403.03.2.1—Smoothness Tolerances for Mean Roughness Index (MRI) is removed from this project. Any incentive or disincentive for asphalt smoothness associated with (MRI) is also hereby eliminated from this project.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2954

CODE: (SP)

DATE: 12/01/2020

SUBJECT: Reflective Sheeting for Signs

Bidders are hereby advised that the retroreflective sign sheeting used for signs on this project shall be as listed below and shall meet the requirements of Subsection 721.06.

Temporary Construction Signs

Temporary traffic control (orange) sign sheeting shall be a minimum Type IX Fluorescent Orange sheeting as shown in Special Provision 907-721.

Permanent Signs

Permanent signs, except signs on traffic signal poles/mast arms, shall be as follows:

- Brown background sheeting on guide signs shall be a minimum Type VIII sheeting,
- Green and blue background sheeting on guide signs shall be a minimum Type IX sheeting, and
- All white, yellow, red, fluorescent yellow, and fluorescent yellow/green sheeting shall be Type XI sheeting.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3676

CODE: (SP)

DATE: 09/21/2021

SUBJECT: Asphalt Gyratory Compactor Internal Angle Calibration

Bidders are advised that by March 1, 2022, all asphalt gyratory compactors shall be calibrated to an internal angle of $1.16^{\circ} \pm 0.02^{\circ}$. This requirement will be reflected in updates made to MT-78, MT-80, and MT-83. This calibration requirement also extends to all QC/QA testing.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3875

CODE: (SP)

DATE: 12/15/2021

SUBJECT: ITS General Requirements

For this Notice to Bidders, the “Engineer” shall mean the Project Engineer and/or their designee(s) throughout the rest of this NTB, unless stated otherwise.

Submittals

All submittals covered under this section shall be made electronically to the Project Engineer and to the ITS Engineer, shall clearly state the project name and project number, and should be in as few separate submittals as possible.

All products selected for use on this project shall be in compliance with 2 CFR 200.216, in addition to all other contract requirements as outlined throughout the specifications, special provisions and plans. No telecommunication and video surveillance equipment or services shall be manufactured by the following companies: Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, Dahua Technology Company, and any subsidiary or affiliate of these entities.

Product Data. Manufacturers’ product data including specifications/cut-sheets, design guides, installation manuals, operating manuals, and maintenance/service manuals shall be submitted by the Contractor for each component of the ITS system, including but not limited to cabinets, controllers, sensors, conduit, pull boxes, hardware, and all other parts of the system selected for installation.

The complete information for the original product data submittal shall be contained in as few submittals as possible and be in an organized fashion.

The product data submittal shall be accompanied by a specification checklist. At a minimum, this checklist shall clearly state the following:

- 1) The project name and project number
- 2) The date of the submittal
- 3) The pay item number and description
- 4) The part and/or model number, matching the cut-sheet
- 5) The manufacturer
- 6) A Certification Statement that the referenced product is not manufactured by any of the following: Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, Dahua Technology Company, and any subsidiary or affiliate of these entities. (as per 2 CFR 200.216)
- 7) Every material requirement as stated in in this Notice to Bidders and as outlined elsewhere within this contract.

- 8) A statement of whether the product complies with the requirements set forth in the specifications, special provisions, plans and NTB. If product is not compliant, an explanation of non-compliance shall be provided.

All subsections of a particular section may be omitted if the section heading is included, is indicated to be not applicable, and that it is evident that all subsections being omitted are also not applicable.

It shall be the responsibility of the Contractor to guarantee the accuracy of the checklist.

Other Submittals. The following submittals shall be required:

- 1) Shop Drawings
- 2) Cabinet wiring diagrams with system labeling schedule.
- 3) Site wiring/connection drawings.
- 4) Rack diagrams showing rack mounted equipment.
- 5) All documentation as described in the Project Testing Plan Requirements section below.
- 6) Project Record Drawings:
 - a. The purpose of Project Record Drawings is to provide factual information regarding all aspects of the Work, to enable future service, modifications, and additions to the Work.
 - b. Project Record Drawings are an important element of this Work. Contractor shall accurately maintain Project Record Drawings throughout the course of this project.
 - c. Project Record Drawings shall include documentation of all Work, including the conduit locations, pull box locations, equipment locations, foundation details, setup parameters and wiring and block diagrams.
 - d. Project Record Drawings shall accurately show the physical placement of the following:
 - i. Cabinets, sensors, pull boxes, and other materials installed at each site.
 - ii. Conduit runs and splicing information.
 - e. Project Record Drawings shall show the physical placement of each system component installed during the project at each site. Where the plan details do not depict actual field conditions, the Contractor shall amend the construction plan as required.
- 7) Upon completion of Work, and prior to Final Acceptance, the Contractor shall prepare and submit the final record set of Project Record Drawings. This set shall reflect the installed Work.
- 8) Closeout Submittals - A set of Project Record Drawings shall be provided to the Project Engineer and ITS Engineer for any items that changed or were not previously submitted, including:
 - a. Project Record Drawings
 - b. Product Data
 - c. Installation Manuals
 - d. Operating Manuals
 - e. Maintenance/Service Manuals

As-Built Plans. The Contractor shall provide GPS locations of all pull boxes, splices,

termination equipment cabinets, ITS field locations and all pole locations. The Contractor shall record and submit the sequential footage markers from the fiber optic trunk and drop cables for each GPS location. The Contractor shall provide scanned PDF files of all plan sheets with pen and ink markups. The Contractor shall provide a site location inventory of ITS devices to include manufacturer model, serial numbers, MAC addresses, and IP addresses (as applicable) for all installed devices. All documentation will be due to the Department a minimum of thirty (30) calendar days after the installation.

Additional Quality Assurance Measures

The project shall be constructed in such a manner as to comply with environmental regulations and erosion control as specified in the plans and elsewhere in MDOT standard specifications.

At the completion of the Work, the site shall be cleaned, restored, grassed and otherwise stabilized to a condition consistent with conditions before work began. This work shall be paid for under other items of work.

All disturbed signs, guardrail, markers, fencing, and other roadway appurtenances shall be restored. Disturbed roadway appurtenances that require complete removal and replacement will be identified within the contract and will have separate pay items and quantities set forth for such work.

The Contractor shall clean-up debris caused by Contractor's activities on a daily basis as the work progresses. This work shall be paid for under other items of work.

All work-related accidents shall be reported immediately to the Project Engineer or his/her representative.

Maintenance and Technical Support. The supplier must provide and have a parts support system capable of providing parts for the length of the warranty period.

Project Testing Plan Requirements

The Contractor shall conduct a Project Testing Plan as required below in addition to all other project testing and acceptance procedures required elsewhere in the specifications and Plans. Some specifications contain details regarding the testing for individual device types or attributes, but this section outlines the overall testing plans for the entire project as a whole. The Project Testing Plan shall include a series of tests on all project materials occurring at various stages in the project. All costs associated with the Project Testing Plan shall be absorbed in contract pay items; no separate payment will be made for any testing.

General Requirements. The Contractor is responsible for planning, coordinating, conducting and documenting all aspects of the Project Testing Plan as detailed below and providing all required equipment for the tests. The Engineer reserves the right to attend and observe all tests.

Each test shall be an individual and separate event for each type of test and for each type of equipment as defined elsewhere within this NTB. The Contractor shall follow the testing sequence as described in this NTB and shall perform the required tests on all applicable

devices and infrastructure.

Test procedures shall be submitted and approved for each test as part of the project submittals programs. Test procedures shall include every action necessary to fully demonstrate that the material under test is clearly and definitively in full compliance with all project requirements. Test procedure actions shall cross-reference to the specifications or Plans requirement that is the subject of the test action. Test procedure actions shall cross-reference the applicable sections of the final approved Project Submittal Compliance Form and the submittal materials for the subject of the test action. Test procedures shall contain test setup and block/wiring diagrams showing all materials being tested and all test and measurement equipment, with calibration documentation, and shall contain documentation regarding the equipment configurations and programming. Test procedures shall include checkoff blanks for each project requirement included in that test and shall include forms for the documentation of all measured test results.

No testing shall be scheduled until approval of all project submittals for all materials covered under a given test and approval of the test procedures for the given test has been granted.

Unless otherwise required herein, the Contractor shall request in writing the Engineer's approval for each test occurrence a minimum of 14 days prior to the requested test date. Test requests shall include the test to be performed and the material to be tested. The Engineer reserves the right to reschedule tests if needed.

For any series of tests on different installations of a given material (e.g., different sections of cable), the Contractor shall request in writing the Engineer's approval for the first test occurrence of the series a minimum of 14 days prior to the requested test date, regardless of the notification requirements for subsequent test occurrences.

The Contractor shall provide all ancillary equipment, materials, diagnostic and test software, and computers as required in the approved test procedures.

All test results shall be documented in writing by the Contractor in accordance with the test procedure and submitted to the Engineer within seven (7) days of the completion of the test. Any given test session is considered incomplete until the Engineer has approved the documentation for that test session.

The Contractor shall provide test results documentation in electronic format and printed format (3 copies). Electronic formats shall be provided in both PDF and Microsoft Excel or other approved application. Printed copies shall be bound and organized by test, equipment type, and individual unit.

- Two sets are for the Traffic Engineering ITS Department
- One set is for the Engineer

All test results shall be provided in English units of measure.

All test results deemed by the Engineer to be unsatisfactorily completed shall be repeated by the Contractor, following all test requirements as defined elsewhere in this NTB and contract specifications. This shall include a request in writing for the Engineer's approval for the repeated test a minimum of 14 days prior to the requested test date, unless this requirement is waived by the Engineer. In the written request for each test occurrence that is a repeat of a previous test, the Contractor shall summarize the diagnosis and correction of each aspect of the previous test that was deemed unsatisfactory. Any revisions to the test procedures for a repeated test occurrence shall meet all requirements for the original test procedures, including review and approval by the Engineer.

The satisfactory completion of any test shall not relieve the Contractor of his responsibility to provide a completely acceptable and operating system that meets all requirements of this project.

It is possible for the Contractor to schedule multiple test dates and revise the actual test being performed on a particular day if; 1) the Engineer approves of the change, 2) all test scheduling requirements above have still been met for the actual test to be performed on the date, and 3) there is not an unreasonable change of location, time, duration, or requirement of the Engineer.

Factory Acceptance Test (FAT). FATs shall be conducted at the Manufacturer or Contractor's facility or at a facility acceptable to all parties prior to shipping from the factory. The goal of the FAT is to verify that the equipment meets the requirements of the specifications. All equipment to be utilized for this project shall be subject to tests that demonstrate the suitability of the design and manufacturing procedures and compliance with the contract requirements, unless an exception for a specific equipment item is granted by the Engineer. The tests shall be performed on production units identified to be delivered under this Contract. As a minimum, a FAT is required for each of the following project materials:

- Dynamic Message Signs

The FAT testing procedures and results for specifically identified materials shall demonstrate that all testing requirements as outlined within the contract (standard specifications, plans, special provisions, and notice to bidders) are met, including, but not limited to: functional/system performance requirements, electrical requirements, data transmission/communication requirements, safety/password requirements, environmental requirements, and interface requirements with other components of the project system.

The Engineer reserves the right to waive FATs which are deemed to be unnecessary and reserves the right to witness all FATs that are determined to be critical to the project. At the Engineer's discretion, the Engineer may be in attendance at the FAT for any units tested. The FAT for the first three (3) units shall be conducted during the same time period and shall be completed before additional units are produced.

The Engineer shall be notified a minimum of 45 calendar days in advance of such tests. Salary and travel expenses of the Engineer and his/her representatives will be the responsibility of the Department. In case of equipment or other failures that make a retest necessary, travel expenses associated with retests for the Engineer and his/her representatives shall be the responsibility of

the Contractor. The travel expenses shall include all costs associated with having a two-person Engineer review team on site, including but not limited to airfare, automobile rental, lodging, and per diem. These costs, excluding airfare, shall not exceed \$500.00 per representative, per day. These costs shall be deducted from the payments due or charged to the withholding account of the Contractor when the project is terminated.

The vendor must complete the FAT on all remaining units on their own and submit documentation to the Engineer that the FATs were completed. The Engineer reserves the right to randomly attend those FAT tests.

No equipment for which a FAT is required shall be shipped to the project site without successful completion of factory acceptance testing as approved by the Engineer and the Engineer's approval to ship.

Bench Test Components (BTC). The Contractor shall perform a complete BTC on the lesser of the full contract quantity of units of equipment and materials or the number of units required as specified in this subsection below. The quantity listed in the subsection below is a "minimum" quantity and the Engineer reserves the right to require testing of additional quantities if the initial testing is not deemed adequate. The Contractor shall provide the testing location and facility, which shall be in Mississippi and within a 25-mile radius of the project limits. The test location must be approved by the Engineer as part of the BTC test procedure submittal.

The BTC shall demonstrate that all equipment and materials are in full compliance with all project requirements and works "out of the box" by visual inspection, setup and operation "on the bench", functional testing of the component including manufacturer's recommended startup diagnostics, and testing prior to any field installation of that equipment or material. Test results documentation shall be provided for each equipment item and material in the full contract quantity; test results documentation shall include the manufacturer's serial number and the project location ID for each item.

As a minimum, a BTC is required for each of the following project materials for quantities as shown.

- Closed Circuit Television Equipment, 4 PTZ units & 6 fixed units
- Dynamic Message Sign, 2 complete units of each type
- Travel Time Signs, 2 complete units
- Network Switches Type A, 4 units
- Network Switches Type B & F, 2 units each
- Network Switches, Type C, D, & E, 1 unit each
- ITS Radar Vehicle Detection Sensors, 6 units
- Highway Advisory Radios, 2 units
- Radio Interconnect System, 4 units of each type
- Bluetooth Detection System, 6 units
- DSRC devices, 6 units
- Roadway Weather Information System, 2 complete units
- Traveler Information Video Kiosk, 2 complete units

- Smart Work Zone System
 - Portable CCTV station, 2 complete units
 - Non-Intrusive Vehicle Detection Devices / Portable Traffic Sensors, 4 complete units
 - Highway Advisory Radio, 2 complete units
 - Portable Changeable Message Signs, 2 complete units
 - Portable Traffic Signal, 2 complete units
- Off-the-shelf and Vendor Software, all necessary
- Equipment Cabinet (Type A), 2 cabinets
- Equipment Cabinet (Type B), 4 cabinets
- Equipment Cabinet (Type C), 2 cabinets

Pre-Installation Tests (PIT). The Contractor shall perform Pre-Installation Tests (PIT) on all device quantities that are not included in the BTC. The Contractor shall provide the testing location and facility, which shall be within a 25-mile radius of the project limits or as approved by the Engineer. The test location must be approved by the Engineer as part of the PIT test procedure submittal. The PIT shall be a shortened version of the BTC to ensure the equipment will power up, operate, and was not damaged during shipment. The Engineer reserves the right to attend any PIT as desired; however, the contractor shall submit documentation of the PITs whether the Engineer is present or not. In addition to these requirements, see the DMS, TTS, and Fiber Optic Cable Special Provisions for more details.

Stand Alone Site Tests (SAT). The Contractor shall perform a complete SAT on all equipment and materials associated with the field device site, including but not limited to electrical service, conduit, pull boxes, communication links infrastructure (fiber, leased copper, wireless), cable, poles, camera lowering devices, device communication cables, cabinet apparatus, etc. The goal of the SAT is to verify that the equipment has been properly installed and commissioned according to the manufacturer requirements. A SAT shall be conducted at every field device site including communications hubs. A SAT shall be conducted for a fully installed and completed control center in the TMC as described in the TMC modification NTB. A SAT shall be conducted for all fiber optic infrastructure.

The SAT shall demonstrate that all equipment and materials are in full compliance with all project requirements, are fully functional as installed, and are in their final configuration. As part of this demonstration, SATs shall include but are not limited to the following:

- A visual inspection of the cabinet and all construction elements at the site to ensure they are compliant with the Specifications and have no physical damage or deformities.
- The inspection of the cabinet at each site shall include the functional test of all cabinet equipment, including circuit breaker, receptacles, fan and thermostat, lights, and door switches.
- Verify that manufacturer documentation for each device is present.
- A measurement of the DC power supply shall be made at the cabinet when it is operating under full load.
- Verify that all equipment has proper power, surge protector, and grounding connections.
- Inspect the integrity of all cable connections and terminations and verify that the cables are

connected and terminated as specified in the Plans.

The SATs for each site type shall include but are not limited to the following:

- *CCTV Stand Alone Site Test:* Shall be conducted at the CCTV Cabinet and shall demonstrate the complete operation of the CCTV, Network Switch, and the link(s) to any devices that are connected to the Power Supply in the CCTV Cabinet. The SAT shall include a 5-minute recording of each PTZ and Fixed camera showing the field of view and video quality. Two copies of the recording shall be provided to the Engineer on USB flash drives. The recording will start at the preset default position(s) and will demonstrate the full zoom capabilities of the cameras, as well as the full range of the pan and tilt functions of PTZ cameras. This recording shall be in a format playable with Windows Media Player or pre-approved by the Engineer.
- *ITS Communications HUT Stand Alone Site Test:* Shall be conducted at the HUT and shall demonstrate the complete operation of all equipment inside the HUT including Network Switches. This also includes visual inspection of the Site elements associated with the HUT.
- *ITS Termination Cabinet Stand Alone Site Test:* Shall be conducted at the termination cabinet and shall demonstrate the complete operation of all equipment inside the cabinet including Network Switches. This also includes visual inspection of the Site elements associated with the termination cabinet.
- *Radio Interconnect System Stand Alone Site Test:* Shall be conducted from the cabinets at both ends of the communications link (even if one end consists of existing equipment) and shall demonstrate that the radios, the antennas, the entire link, the Network Switch, and the transmission of video and/or data are fully operational. See Radio Interconnect Special Provision for more details.
- *Highway Advisory Radio Site Test:* Shall be conducted at the HAR cabinet, antenna, and advisory signs and shall demonstrate complete operation of recordings, transmissions, and remote flashing beacon unit(s). See HAR Special Provision for more details.
- *Fiber Optic Cable Stand Alone Site Test:* Shall be conducted at each Cabinet and at each HUB and shall include both power meter tests and OTDR tests. See Fiber Optic Special Provision for more details.
- *Conduit Detection Wire Stand Alone Site Test:* Shall be conducted at each pull box and shall demonstrate that a continuous run of conduit detection wire was installed between pull boxes, vaults, cabinets, and structures as required.
- *ITS Radar Vehicle Detection Stand Alone Site Test:* Shall be conducted at the IRVD Cabinet and shall demonstrate the complete operation, proper configuration, and verification of detection for each lane of traffic or zone of the IRVD unit(s).
- *BDS Stand Alone Site Test:* Shall be conducted at the Device Cabinet and shall demonstrate the complete operation and proper configuration of the unit(s), verify network connection to the BDS through ping and telnet sessions from a remote PC, and confirm that the system is fully functional by detecting Bluetooth devices at a sample rate approved by the Engineer.
- *RWIS Stand Alone Site Test:* Shall be conducted at the RWIS Cabinet and shall demonstrate the complete operation and proper configuration of the RWIS and shall verify that the remote flashing beacon unit(s) on the warning signs are activated properly as

specified and will de-activate automatically without renewal at preset intervals.

- *SWZ Stand Alone Site Test:* Shall be conducted at each device at its initial location and shall demonstrate the complete operation and proper configuration of the device as described in the Smart Work Zone Special Provision and NTB. At any subsequent locations, at a minimum, a document verifying that the device is configured for the new location shall be submitted to the Engineer.
- *Kiosk Stand Alone Site Test:* Shall be conducted at the device, verify all required video layouts and displays, demonstrate all required software features, and demonstrate the complete operation of the device and Network Switch. Refer to the Traveler Information Video Kiosk specification for more details.

DMS & TTS Stand Alone Site Test: Shall be conducted at the Device Cabinet, verify that all pixels are operational, verify that the sign can be controlled locally through both the serial and Ethernet ports, and demonstrate the complete operation of the device and Network Switch. The signs shall be delivered with and tested using default fonts and sizes that are provided by the MDOT ATMS drivers.

The Contractor shall request in writing the Engineer's approval for each test occurrence a minimum of 14 days prior to the requested test date. The Contractor shall arrange, at no additional expense to the State, the attendance of a qualified technical representative of the equipment manufacturer to attend each test until a minimum of two (2) sites of that type are approved.

Sub-System Test (SST). The Contractor shall perform an SST on each DMS and TTS to verify and document that all remote TTS and DMS functions and alarms are operational from the TMC.

An SST is required for at least ten percent (10%) of each of the following devices being placed for the project, taken by a random sampling: BDS, Network Switch, IRVD, HAR, Radio, CCTV, Video Vehicle Detection, and RWIS including beacons. The SST will require the Contractor to demonstrate and document that all functions and alarms are operational from the TMC.

An SST is required for each Traveler Information Kiosk in the project and will require the Contractor to demonstrate and document the features demonstrated in the Kiosk SAT using remote access from the TMC.

An SST is required for each Smart Work Zone device in the project and will require the Contractor to demonstrate and document the connection between the device and the central data/video collection site. Once a Smart Work Zone device has been verified to be properly configured, working, and communicating at its current location, the device can be utilized without further testing. The Conditional System Acceptance Test, Burn-in period, Final Inspection, or Final System Acceptance is not required for a device being solely utilized as part of the temporary Smart Work Zone System. Devices moved to a new location do require verification that they are still working as intended in the new location.

The Contractor shall coordinate the SST to be performed with the Project Engineer or designee present. The Contractor shall provide an SST plan to the Project Engineer for review and approval a minimum of two weeks in advance of tests being performed.

Conditional System Acceptance Test. The Contractor shall perform a complete conditional system acceptance test on all equipment and materials in the project. The Contractor shall not request the conditional system acceptance test until the SATs have been satisfactorily completed, all as-built documentation has been submitted and approved, and all other project work has been completed to the satisfaction of the Engineer. Prior to a Conditional System Acceptance Test, the Contractor shall provide advance notice of and written test results documenting that the Contractor has performed a dry-run of the conditional system acceptance test. The Engineer reserves the right to attend a dry-run test session.

The Contractor shall coordinate the CSAT with the Engineer. The Contractor shall provide a CSAT plan to the Engineer and be approved a minimum of fourteen (14) calendar days in advance of tests being performed. The CSAT plan shall be inclusive of steps and procedures to be performed and scheduled times to perform test procedures.

The Contractor shall test all project systems simultaneously from the State TMC in a manner equivalent to the normal day-to-day operation of the system. The Conditional System Acceptance Test shall demonstrate that all equipment and materials in the network are in full compliance with all project requirements and fully functional as installed and in final configuration, communicating with and being controlled through the control center at the State TMC. If pre-processing systems (e.g., edge computing) or post-processing systems (e.g., video image processing and analytics, detection in one device triggering an alarm or event in another device, etc.) are present, these shall be tested, verified, and documented as working as intended during the CSAT. Edge computing is where data-handling activities, such as analysis and event-triggering, takes place near the physical location that the data is collected.

The Engineer reserves the right to require, at no additional expense to the State, the attendance of a qualified technical representative of the equipment and/or software manufacturers to attend any given Conditional System Acceptance Test.

Upon completion and full approval of the Conditional System Acceptance Test for all equipment in all phases, Conditional System Acceptance will be given and the Burn-in Period will begin.

Burn-In Period. Following the Engineer's written notice of successful completion of the Conditional System Acceptance Test, the entire newly installed system must operate successfully for a **thirty (30) day** burn-in period. The Contractor shall be responsible for the full maintenance of the newly installed equipment during the burn-in period. This maintenance includes all troubleshooting and repairs as well as providing preventive maintenance that meets the equipment manufacturer's recommendations. However, no separate payment will be made during the burn-in period. Successful completion of the burn-in period will occur at the end of **thirty (30) complete days** of operation without a system failure attributable to hardware, software or communications components. Each system failure during the burn-in period will require an additional **thirty (30) days** of successful operation prior to being eligible for Final Acceptance (i.e., if the initial burn-in period is **thirty (30) days** and there are two (2) system failures during this time, the burn-in period would be increased to **ninety (90) days**).

Burn-In General Requirements:

- Determination of a system failure shall be at the sole discretion of the Engineer.
- System failure is defined as a condition under which the system is unable to function as a whole or in significant part to provide the services as designed. While a single component failure will not constitute a system failure, chronic failure of that component or component type may be sufficient to be considered a system failure. Chronic failure of a component or component type is defined as three (3) or more failures for the same component during the burn-in period.
- Components are defined as contract items or major material elements in a contract item. For electrical and electronic contract items, components are defined as the complete assembly of materials that makes up the contract item.
- Specifically exempted as system failures are failures caused by accident, acts of God, or other external forces that are beyond the control of the Contractor. However, failure of the contractor to respond to the repair request for that failure within 24 hours may be considered a system failure.
- The Department will advise the Contractor in writing when it considers that a system failure has occurred or chronic failure exists.
- If multiple system and/or chronic failures continue to occur throughout the burn-in period due to a single component type, the Contractor may be required to replace all units of that component type with a different model or manufacturer.
- The Contractor shall document all failures and subsequent diagnosis and repair. The repair documentation shall include as a minimum:
 - Description of the problem
 - Troubleshooting and diagnosis steps
 - Repairs made
 - List of all equipment and materials changed including serial numbers.
 - Update of the equipment inventory where needed.
 - The Contractor shall provide the repair documentation to the Engineer within two (2) days of completing the repair; failure to provide acceptable documentation as required shall be reason to not approve the repair as complete. The Engineer will provide acceptance or rejection of the repair and documentation within seven (7) days of receiving the repair documentation.
 - The Engineer reserves the right to require, at no additional expense to the State, the presence of a qualified technical representative of the equipment and/or software manufacturers as related to the diagnosis and/or repair of any system failure.
- During the burn-in period, the Contractor shall perform incidental work such as touching up, cleaning of exposed surfaces, leveling and repair of sites, sodding/grassing and other maintenance work as may be deemed necessary by the Engineer to ensure the effectiveness and neat appearance of the work sites.
- During the burn-in period, the Engineer shall maintain a "burn-in period punch list" that contains required Contractor actions but that the Engineer does not define as a system failure. Each burn-in period punch list action item shall be completed by the Contractor to the Engineer's satisfaction within seven (7) days of Contractor notification of the action item.
- During the burn-in period, the Contractor is required to meet the following response times

once notified there is a problem. A response is defined as being on-site to begin diagnosing the problem.

- o Monday thru Friday: The Contractor shall respond no later than 9:00 a.m. the following morning after being notified.
 - o Weekends: If the Contractor is notified on Friday afternoon or during the weekend, the Contractor shall respond by 9:00 a.m. on Monday morning.
- During the burn-in period, the Contractor shall provide all labor, materials, equipment and replacement parts to completely maintain, troubleshoot and repair all items installed under this contract. No separate payment will be made for any labor, materials, equipment, or replacement parts needed during the burn-in period.
- The overall burn-in period will be considered complete upon the successful completion of the burn-in time periods, the Engineer's acceptance of all repairs and repair documentation, completion of all burn-in period punch list actions, and a final inspection as described below.

Contract time will not cease during the burn-in period(s). Contract time for the burn-in period was considered when determining the original contract time.

Final Inspection. Upon successful completion of the burn-in period, the entire project shall be eligible for Final Inspection. The Final Inspection will be conducted provided the burn-in period has demonstrated the entire system is operating successfully. The Final Inspection shall include but is not limited to:

1. monitoring of all system functions at the State TMC to demonstrate the overall system is operational
2. a field visit to each site to ensure all field components are in their correct final configuration
3. verification that all burn-in punch list items have been completed
4. verification that all final cleanup requirements have been completed
5. approval of final as-built documentation

Prior to conducting the Final Inspection, the burn-in period shall demonstrate that all requirements defined in the specifications have been met, including, but not limited to: functional/system performance requirements, electrical requirements, data transmission/communication requirements, safety/password requirements, environmental requirements, and interface requirements with other components of the system.

The Contractor shall request in writing the Engineer's approval to start the Final Inspection a minimum of 14 days prior to the requested start date. The Engineer reserves the right to reschedule the start date if needed. The start date for the Final Inspection cannot be prior to the successful completion of the overall burn-in period.

An unsuccessful or incomplete Final Inspection shall require a new Final Inspection after the Contractor has made the necessary corrections. Up to 14 days shall be allowed for the Engineer to conduct a Final Inspection. The presence of the MDOT ITS Engineer or his/her designee is required during the final inspection.

The Engineer reserves the right to require, at no additional expense to the State, the attendance of a qualified technical representative of the equipment and/or software manufacturers to attend a portion of a Final Inspection.

The Contractor shall be responsible for the full maintenance of all project equipment and materials during the entire time period from the successful completion of the burn-in period until Final System Acceptance is granted.

Final System Acceptance. Upon successful completion of the Final Inspection and all other items of work on the project, the Engineer will grant Final System Acceptance in accordance with Subsection 105.20 of the Standard Specifications.

Beneficial Use of Dynamic Message Signs During Construction. Each DMS shall be roadside controllable (by sign vendor software) within 30 days of attachment to structures (visible to motorists). The Contractor's construction schedule shall clearly identify when installation of the signs over the roadway shall occur, and when roadside control shall be established for each sign. The Contractor shall not install a DMS over the roadway until all ancillary and infrastructure elements, including cabinets, controllers, conduits, cabling, etc. necessary to operate the sign are in place and functional. Once roadside controllable, the Contractor shall display emergency, special event, construction, safety or traveler information messages approved by MDOT, only when requested by MDOT, at no additional cost to MDOT. Normal diagnostic messaging for the purpose of installation and testing shall be determined by the Contractor but shall not be allowed to the extent that excessive power consumption or distraction to motorists occurs as determined by the Engineer. Any beneficial use of the signs to MDOT and the public prior to Final Acceptance does not constitute MDOT acceptance or waive any Contractor testing requirements. The cost that may be incurred by the Contractor to display messages as described above during this construction contract shall be considered incidental and included in the cost of other items.

Warranties

The following components of the Project shall be warranted against manufacturing defects and workmanship for a period of at least one (1) year:

- Radio interconnect system components as listed under SP 907-662-2
- Layer 2, Type A; Layer 3, Type C, Type C4, Type E1, and Type E2 Network Switches; and Network Terminal Server & Network Cellular Modem as listed under SP 907-663-5
- Communication Node Hut & Hut Modifications under SP 907-664-4
- Video Communication Equipment components under SP 907-665-1
- Bluetooth Detection System components under SP 907-666-3
- Roadway Weather Information System & Warning Signs with Flashing Beacon under SP 907-670-3
- Kiosk Monitoring Camera under SP 907-671-1
- Travel Time Sign under SP 907-674-1
- ITS Radar Vehicle Detector under SP 907-641-2
- On Street Video Equipment under SP 907-650-4;
- Highway Advisory System components under SP 907-655-2;
- Dynamic Message Signs under SP 907-656-1.

The following components of the Project shall be warranted against manufacturing defects and workmanship for a period as listed below for each respective item from the date of Final Maintenance Release.

- *Fiber Optic Cable*: Ten (10) year warranty on materials and workmanship
- *Traveler Information Video Kiosk*: Two (2) year extended warranty on materials/hardware
- *TMC Modification*: Two (2) year warranty on hardware and one (1) year warranty on software
- *Type C1, C2, & C3 Network Switches*: Five (5) year warranty on hardware
- *Type D, E, & F Network Switches*: Five (5) year warranty on hardware

The Contractor shall supply the warranties in writing with the Final Maintenance Release date documented on them. These warranties shall cover complete replacement at no charge for the equipment. The Contractor will be responsible for all labor, shipping, insurance and other charges until Final System Acceptance. Equipment covered by the manufacturers' warranties shall have the registration of that component placed in the Department's name prior to Final Inspection. The Contractor is responsible for ensuring that the vendors or manufacturers supplying the components and providing the equipment warranties recognize MDOT as the original purchaser and owner/end user of the components from new.

During the warranty period, the supplier shall repair or replace with new material of equal or greater kind and quality and meeting all of the applicable specifications herein, at no additional cost to the State, any product containing a warranty defect, provided the product is returned postage-paid by the Department to the supplier's factory or authorized warranty site. Products repaired or replaced under warranty by the supplier shall be returned prepaid by the supplier. During the warranty period, technical support shall be available from the Contractor via telephone within four (4) hours of the time a call is made by the Department. If it is deemed necessary by the Engineer, technical support shall be available from factory certified personnel of the supplier via telephone within eight (8) hours of the time of the initial call made by the Department. During the warranty period, updates, patches, performance improvements, and corrections to all software and firmware used during the project shall be made available to the Department by the supplier at no additional cost.

Training

After the Stand Alone Site Tests have been conducted but prior to Conditional System Acceptance, the Contractor shall provide separate training sessions for each subsystem training pay item included in the project. The training sessions may require multiple classes as noted below) and shall accommodate from six (6) to twelve (12) personnel per class. Additional sessions for additional personnel may be required if the make and model of the subject component is not currently in the MDOT system.

The training must include formal classroom and "hands-on" operations training with a complete demonstration of the configuration, operation, and capabilities of each component in the system. The training should also consist of a hands-on demonstration of all software configuration and functionality where applicable. Each training day shall include a mixture of classroom style

training in equipment operations, hands-on operator training using the same models of equipment furnished for the project, and question and answer sessions.

During the burn-in period, the Contractor shall also provide two (2) identical non-consecutive training sessions on the maintenance of the overall system. The training shall be provided for at least ten (10) personnel with individual copies of all training materials provided to each participant. The training must include both classroom style training and hands-on training in the field of the maintenance and troubleshooting procedures required for each component. Additional sessions for additional personnel may be required if the make and model of certain components are not currently in the MDOT system.

Prior to scheduling the training, the Contractor shall submit resume and references of the training instructor(s) to the Engineer for approval. The qualifications of the trainers must meet, at a minimum, the recommended qualifications of the equipment manufacturer with a minimum of four years of experience in training personnel. If qualified personnel are not on the Contractor's staff, a representative of the manufacturer shall provide the training.

The training shall be provided at an agreed upon location. If training requires travel on the part of training instructors, then the cost of travel shall be included.

The Contractor shall provide individual copies of documentation, training, and maintenance materials for each participant. These materials shall include detailed specifications and information pertaining to each device in the system. The documentation shall include details of the technical and operational aspects of the completed system. This shall include operational and maintenance manuals, system diagrams, cabling diagrams and mounting/positioning details. The Contractor shall supply emergency contact information and necessary procedures for obtaining vital replacement parts within a designated, agreed upon time frame.

The Contractor shall submit a detailed Training Plan including course agendas, detailed description of functions to be demonstrated, and a general schedule to the Engineer for approval within 90 days of Contract Notice-to-Proceed. The exact date of the training shall be submitted to the Engineer for approval at least four (4) weeks ahead of the date.

Grounding

The Contractor shall provide a grounding and lightning protection system to protect from electrical power surges caused by lightning or disruptions in the power supply system. Ground rods, ground conductor, lightning collectors and appurtenances shall be as detailed on the plans and as required by these specifications.

General. All non-current carrying metal parts of the site shall be grounded according to NEC specifications. In addition, all non-current carrying metal parts shall have a voltage potential of zero relative to reference ground. This reference ground shall be achieved via the equipment-grounding conductor.

Support cable, metallic cable sheaths, conduit, metal poles, pedestals, and communication building shall be made mechanically and electrically secure and grounded. Bonding and grounding jumpers

shall be properly sized according to the NEC and in no case shall they be smaller than a #6 AWG copper wire. Ground pole-mounted accessories to the pole. Equipment on wood poles shall be grounded.

Permanently ground the poles by bonding the No. 6 AWG solid copper wire to a separate ground rod.

Metal raceways, metal enclosures of electrical devices, lighting fixtures, panelboards, and other non-current carrying metallic parts of equipment shall be securely grounded.

Ground rods shall be installed according to plan details. A length of copper conductor shall be attached to the ground rod, utilizing the specified grounding methods, and connected to the grounding system. Do not ground to a permanent water system instead of the driven ground rod. Ensure that grounding devices conform to the requirements of the NEC and NEMA.

Cabinet Grounding. A single-point grounding system shall be constructed.

All grounds for the cabinet shall be installed on the side of the building that utilities, communication cables, and fiber enter. All earth grounds shall be connected to this point, including the grounding system for Surge Protection Devices (SPD). All connections to SPDs shall be made according to the manufacturer's recommendations.

A single ground bus bar shall be mounted on the side of the cabinet wall adjacent to the power panel for the connection of AC neutral wires and chassis ground wires.

The Contractor shall ensure that communication cables, AC power, emergency generator, and equipment frames are connected by the shortest practical route to the grounding system. The lead lengths from each device to the SPD shall be protected. Electrical continuity of all connections shall be verified. All non-conducting surface coatings shall be removed before each connection is made. Ground conductors shall be downward coursing, vertical, and as short and straight as possible. Sharp bends and multiple bends shall be avoided in grounding conductors.

Surge Suppressor

Surge protection device (SPD) shall be provided to protect electronics from lightning, transient voltage surges, and induced current. All SPDs shall be installed at the top and bottom of each pole to provide reliable lightning protection. SPDs shall be installed on all power, data, video and any other conductive circuit.

SPD for 120 Volt or 120/240 Volt Power. A SPD shall be installed at the utility disconnect to the cabinet. The SPD at the utility disconnect shall include L-N, L-G, and N-G protection. The SPD shall meet the requirements of UL 1449, Third Edition and be listed by a NRTL.

A SPD shall be provided where the supply circuit enters the cabinet. The SPD shall be located on the load side of the main disconnect and ahead of any and all electronic devices and connected in parallel with the AC supply. The SPD in the cabinet shall include L-N, L-G, and N-G protection. The SPD shall meet the requirements of UL 1449, Third Edition and be listed by a NRTL.

The SPD shall have a visual indication system that monitors the weakest link in each mode and shows normal operation or failure status and also provides one set of normally open (NO)/normally closed (NC) Form C contacts for remote alarm monitoring. The enclosure for a SPD shall have a NEMA 4 rating

SPDs for Low-Voltage Power, Control, Data and Signal Systems. A specialized SPD shall be installed on all conductive circuits including, but not limited to, data communication cables, coaxial video cables, and low-voltage power cables. These devices shall comply with recommendations from the device manufacturer.

SPD at Point of Use. A SPD shall be installed at the point the ITS devices receive 120 volt power and connected in series with the circuits. SPDs shall be selected and installed according to recommendation from the device manufacturer. The units shall be rated at 15 or 20 amps load and configured with receptacles. These units shall have internal fuse protection and provide common mode (L+N-G) protection.

SPDs shall meet the requirements of UL 497B or UL 497C, as applicable, and are listed by a NRTL.

Solar Power Systems

The Contractor shall provide a solar power system meeting the following requirements:

1. The supplier shall provide documentation specifying approximate daily power generation, power consumption, storage capacity, and charge rates representing an optimal power source to the satisfaction and approval of the Project Engineer.
2. Shall include a solar controller with automatic battery temperature compensation and automatic charging circuitry to prevent overcharging.
3. The battery back-up system chargers shall meet all specified requirements while operating between -40 °C to +74 °C (-40 °F to +165 °F), and 95% relative humidity.
4. Shall include metering for voltage and charging current.
5. Solar panels shall be Jet Propulsion Laboratory Block-5 tested and approved.
6. Solar panels shall be compliant with IEC 61215 and IEEE 1262.
7. Solar panels shall be break-resistant and sealed.
8. Battery shall be maintenance-free, sealed, gel-cell.
9. The Contractor shall test the battery for faulty irregularities and provide documentation to the Project Engineer stating the battery's voltage, and resistance. The battery voltage and resistance shall meet the manufacturer's specifications.

The Solar Power Systems for each site type shall include but are not limited to the following:

- *HAR Flashing Beacons:*
 1. A performance design study shall be conducted and submitted for approval for the proposed solar power system. The solar power system shall be designed on the performance design study.
 2. The solar system shall, at a minimum, operate the flashing beacons continuously at

- full power for at least three (3) days with no sunlight. This must be accomplished without an auxiliary generator or AC power connection.
3. Solar panels shall have a power rating of 80-watts.
 4. The Solar power system shall include a separate aluminum NEMA 3R enclosure to house the battery. This enclosure shall be designed to provide protection from rain, sleet, snow and corrosion.
 - a. The enclosure shall be constructed from 0.125" thick aluminum alloy type 5052- H32.
 - b. The enclosure shall be lockable.
 - c. The enclosure door shall include a EDPM rubber or equivalent closed-cell gasket
- *Type A BDS:*
 1. All solar panels shall be in accordance with UL1703, or equivalent.
 2. The solar cell shall have a minimum power capacity of 30 watts.
 3. The battery shall provide sufficient power for all BDS component operation for a minimum of 168 hours (7 days).
 4. Should solar power be specified with the Type A BDS, the NEMA 4 enclosure shall be sized appropriately for the solar power components.

Performance Design Study. A performance design study shall be conducted where required before the installation of a Solar Power System. The performance design study shall include, but is not limited to:

1. The daily Solar Insulation data averaged on a monthly basis.
2. The correct Tilt Angle for the solar array.
3. The daily Array Output, in Amp-Hours, averaged on a monthly basis.
4. The total Daily Load requirement, in Amp Hours, averaged on a monthly basis.
5. A monthly Loss of Load Probability (LOLP) of the designed power supply.
6. The number of Battery Reserve Days, averaged on a monthly basis.
7. The monthly Average Battery State of Charge.
8. The statistical Interval to Loss of Load, in years.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3963

CODE: (SP)

DATE: 01/19/2022

SUBJECT: Super Silt Fence

Bidders are hereby advised that Kengro Siltron SIL-M-36 may be used as a substitute material for pay item 907-234-C001, Super Silt Fence, in accordance with Subsection 234.03.1.2 of the Standard Specifications. In the event that the material fails to perform, the Department reserves the right to require Super Silt Fence be installed as per the Standard Drawing at no additional cost to the Department.

<https://www.kengro.com/products/siltron>

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4113

CODE: (SP)

DATE: 03/23/2022

SUBJECT: Unique Entity ID (SAM) Requirement for Federal Funded Projects

Bidders are advised that the Prime Contractor must register and maintain a current registration in the System for Award Management (<http://sam.gov>) at all times during this project. Upon registration, the Contractor will be assigned a SAM Unique Entity ID.

Bidders are also advised that prior to the award of this contract, they MUST be registered, active, and have no active exclusions in the System for Award Management.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 5865 LPA

CODE: (SP)

DATE: 11/30/2015

SUBJECT: Sampling and Testing of Concrete on Small LPA Projects

Bidders are advised that the following concrete items will be tested at a reduced amount and will not be accepted based on the Quality Control / Quality Assurance (QC/QA) requirements of Section 804 of the specifications.

<u>Section</u>	<u>Description</u>
221	Paved Ditches
601	Minor Structures - manholes, inlets, catch basins, junction boxes, pipe headwalls, and pipe collars.
605	Edge Drain and Underdrain Outlet Pads
606	Guardrail Anchors
607	Fence Post Footings
608	Sidewalks
609	Curb and Gutter
614	Driveways
616	Median and Island Pavement
630	Sign Footings, except Overhead Sign Supports

The material requirements for the above pay items are as follows:

1. Cement and aggregates for concrete items shall be from approved sources. Concrete shall be produced from a concrete batch plant which has a current plant calibration. The Project Engineer shall furnish plant inspection as deemed necessary for control. The producer shall furnish with each load of concrete a delivery ticket containing the following information:
 - a. Project Number
 - b. Class Concrete
 - c. Weight of Cement
 - d. Free Water in Aggregate (gallons)
 - e. Weight of Fine Aggregate
 - f. Weight of Coarse Aggregate
 - g. Water in Mix (gallons)
 - h. Number of Revolutions Mixed
 - i. Time of Batching
2. The Contractor is required to submit mix designs to accomplish this work in accordance with Section 804.
3. A set of three cylinders, slump test, and air test will be performed on the first day of production for each mix design. The compressive strength test shall be the average of three cylinders.
4. An additional set of cylinders, slump test, and air test will be performed at a minimum of rate of one per 100 cubic yards of mix produced.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SECTION 904 - NOTICE TO BIDDERS NO. 5866 LPA

CODE: (SP)

| DATE: 10/28/2015

SUBJECT: Payroll Requirements

Bidders are hereby advised that the Contractor and Subcontractor(s) are required to submit payroll information to the Project Engineers on a weekly basis.

On Federal-Aid Projects, LPA-880, LPA-881 and certified payroll submissions are required each week the Contractor or a Subcontractor performs work on the project. This is addressed in Section IV of Form FHWA-1273.

On State-Funded Projects, LPA-880 is required each week the Contractor or a Subcontractor performs work on the project.

| When no work is performed on either Federal-Aid or State-Funded Projects, the Contractor should only submit LPA-880 showing no work activities.

The Contractor shall make all efforts necessary to submit this information to the Project Engineer in a weekly manner. The Engineer will have the authority to suspend the work wholly or in part and to withhold payments because of the Contractor's failure to submit the required information. Submission of forms and payrolls shall be current through the first full week of the month for the estimate period in order for the Project Engineer to process an estimate.

Bidders are advised to review the requirements regarding payroll submissions in Section 110 of the Standard Specifications.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 6000 LPA

CODE: (SP)

DATE: July 15, 2019

SUBJECT: Traffic Control Personnel Requirements

Bidders are hereby advised that the Contractor's Traffic Control Supervisor, and the LPA's person (LPA staff, or CE&I Consultant) in responsible charge of the traffic control on the project submit to the training requirements set forth in section **618.01.2** of the Mississippi Standard Specifications for Road and Bridge Construction, 2017 edition.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7015

CODE: (SP)

DATE: 9/15/2022

SUBJECT: Contract Time

PROJECT: FBLD-8769-00(001)LPA/108639-802000

The calendar date for completion of work to be performed by the Contractor for this project shall be **November 30, 2024** which date or extended date as provided in Subsection 108.06 shall be the end of contract time.

The Notice of Award will be issued within 60 days of the bid opening date and the effective date of the Notice to Proceed/ Beginning of Contract Time Date will be within **One** months following the Date of the Notice of Execution of Contract Letter. Should the Notice to Proceed/Beginning of Contract Time Date fall within the winter months of December, January, or February the Notice to Proceed/Beginning of Contract time will be March 1st.

The Contractor shall request a Notice to Proceed/Beginning of Contract Time date in writing after receiving the Notice of Execution of Contract Letter and the date requested should be within the **One** month period following the Date of the Notice of Execution of Contract Letter. The Contractor's written request for Notice to proceed Date should be given a minimum of seven (7) calendar days in advance of the Notice to Proceed requested. Should the Contractor request a Notice to Proceed earlier than stipulated above, and it is agreeable with the LPA for an early Notice to Proceed, the requested date will become the new Notice to Proceed date. Regardless of whether an early Notice to Proceed is granted or notification letter from the LPA stating a NTP early or not, contract time will start at the original Notice to Proceed date.

A Preconstruction Conference as required by Subsection 108.03.2 should be held prior to commencement of any field work by the Contractor. Any fabrication of needed materials can begin after the contract has been executed and submittals are approved.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 7200

DATE: 10/20/2017

SUBJECT: Specialty Items

PROJECT: FBLD-8769-00(001)LPA / 108639-802000 -- Forrest County

Pursuant to the provisions of Section 108, the following work items are hereby designated as "Specialty Items" for this contract. Bidders are reminded that these items must be subcontracted in order to be considered as specialty items.

Category: Construction Staking

<u>Pay Item</u>	<u>Description</u>
699-A001	Roadway Construction Stakes
699-B001	Bridge Construction Stakes

Category: Electrical

<u>Pay Item</u>	<u>Description</u>
907-259-F001	Weatherproof GFCI Receptacle
682-F001	Secondary Power Controller
L00016: 683-B500	Lighting Assembly, Low Mast, LED, Type 30-1-3-100 Bridge Mounted
L00016: 683-B500	Lighting Assembly, Low Mast, LED, Type 32.5-1-3-100 Bridge Mounted
L00016: 683-B500	Lighting Assembly, Low Mast, LED, Type 14-1-0-100
L00016: 683-B500	Lighting Assembly, Low Mast, LED, Type 25-1-0-100

Category: Concrete

<u>Pay Item</u>	<u>Description</u>
907-417-A001	Polymer Cement Surface System
907-616-C001	Colored and Imprinted Concrete Median and Island Pavement, 10-inch Thickness

Category: Miscellaneous

<u>Pay Item</u>	<u>Description</u>
907-242-A002	Installation of Chain Link Fence, Per Plans
907-242-A002	Installation of Wood Privacy Fence, Per Plans
907-258-K001	Bollard Removable
907-607-PP001	Safety Fence
907-899-A001	Railway-Highway Provisions

Category: Bridge and Retaining Wall

<u>Pay Item</u>	<u>Description</u>
803-K004	Drilled Shaft, 36" Diameter
803-K006	Drilled Shaft, 48" Diameter
803-L002	Test Shaft, 48" Diameter
803-M005	Trial Shaft, 48" Diameter
803-N001	Exploration
803-O005	Permanent Casing, 36" Diameter
803-O018	Temporary Casing, 48" Diameter
809-A003	Retaining Wall System, Mechanically Stabilized
813-B001	Concrete-Steel Railing

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7300

CODE (SP)

DATE:

SUBJECT: Placement of Fill Material in Federally Regulated Areas

PROJECT: FBLD-8769-00(001)LPA/108639-802000

A Permit (404, General, Nationwide, etc.) for placing fill material federally regulated sites is required.

The Department has acquired the following permits for permanently filling at regulated sites that are identified during project development:

Nationwide Permit (Waters of the US) -- All sites with area less than 0.10 acre.

Copies of said permit(s) are on file with the Department.

Securing a permit(s) for the filling of any other regulated site, the purpose of which is temporary construction for the convenience of the Contractor, shall be the responsibility of the Contractor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7400

CODE: (SP)

DATE: 01/10/2022

SUBJECT: Cooperation Between Contractors

PROJECT: FBLD-8769-00(001)LPA/108639-802000

The Bidder's attention is hereby called to Subsection 105.07, Cooperation between Contractors, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction.

The Bidder is advised that an adjacent section of Hall Avenue is currently under construction at the East end of this project.

The Contractor shall cooperate in all respects and shall coordinate construction of all phases of work at the East end of this project with the Contractor of the adjacent project.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7800

CODE: (SP)

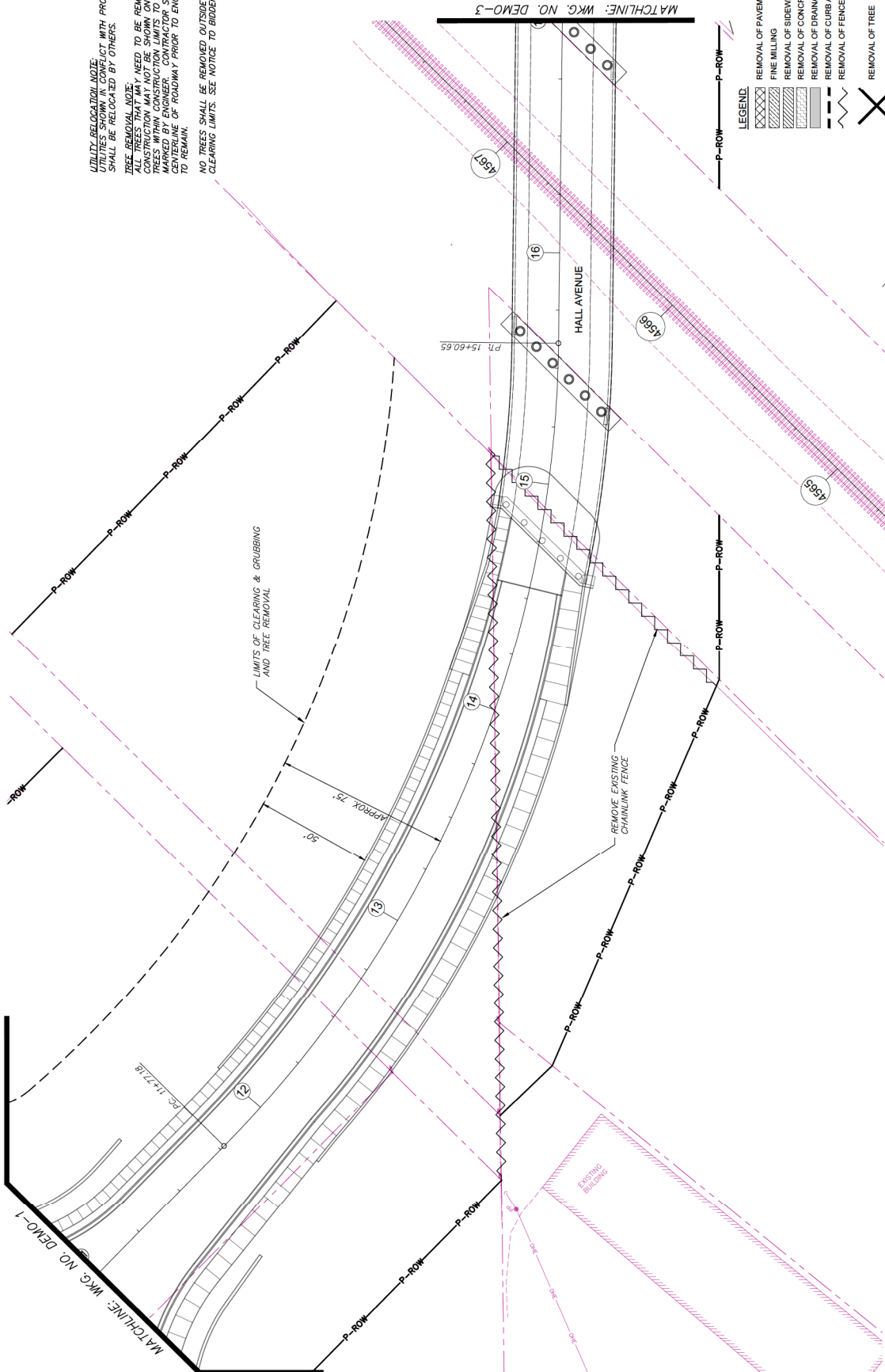
DATE: 07/05/2022

SUBJECT: Historical & Archeological Preservation

PROJECT: FBLD-8769-00(001) LPA/108639-802000 – Forrest County

Bidders are hereby advised that this project contains Historic and Archeological Sites.

During the life of this project, the Contractor shall take measures necessary to protect Historic and Archeological Sites as identified in the attached map.



UTILITY RELOCATION NOTE:
UTILITIES SHALL BE RELOCATED WITH PROPOSED IMPROVEMENTS
SHALL BE RELOCATED BY OTHERS.

TREE REMOVAL NOTE:
ALL TREES THAT MAY NEED TO BE REMOVED TO FACILITATE
CONSTRUCTION MAY NOT BE SHOWN ON PLANS.
TREES WITHIN CONSTRUCTION LIMITS TO REMAIN SHALL BE
MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL BE
CENTERLINE OF ROADWAY PRIOR TO ENGINEER-MARKING TREES
TO REMAIN.

NO TREES SHALL BE REMOVED OUTSIDE THE INDICATED
CLEARING LIMITS. SEE NOTICE TO BIDDERS #7800.

- LEGEND
- REMOVAL OF PAVEMENT
 - FINE MILLING
 - REMOVAL OF SIDEWALK
 - REMOVAL OF CONCRETE DRIVEWAY
 - REMOVAL OF DRAINAGE STRUCTURE
 - REMOVAL OF CURB AND GUTTER
 - REMOVAL OF FENCE OR TRAFFIC SIGNAL
 - REMOVAL OF TREE
- GRAPHIC SCALE
1 inch = 20 feet

NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC. HEREBY REFERS TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR THE PROJECT DESCRIBED HEREIN. THIS DRAWING SHALL NOT BE USED FOR ANY OTHER PROJECT OR FOR ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN CONSENT OF NEEL-SCHAFFER, INC. SHALL BE AT THE USER'S SOLE RISK AND THE USER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, ARISING OUT OF OR RESULTING THEREFROM.		REVISIONS NO. DATE BY DESCRIPTION		DRAWING INFORMATION N-S PROJECT NO. NS1624.000 FILENAME: 1624_000.dwg SCALE: 1" = 20' SURVEYED BY: CLEARPOINT DESIGN: GPC DATE: 04/2022 DRAWN: JPF DATE: 04/2022 C.D.D. DATE: 04/2022	
DEMOLITION PLAN HALL AVENUE STA. 11+00 TO STA. 17+00		HALL AVENUE - PHASE 2 - ROADWAY WEST PINE STREET TO COURT STREET FEDERAL AID PROJECT NO. FBLD-8769-00(001) LPA/108639-802000 CITY OF HATTIESBURG - FORREST COUNTY HATTIESBURG, MISSISSIPPI		NEEL-SCHAFFER Solutions you can build upon	
WORKING NUMBER: DEMO-2				DRAWING NUMBER: DEMO-2	

SECTION 904 – NOTICE TO BIDDERS NO. 7900

CODE: (SP)

DATE: 08/12/2022

SUBJECT: Prestressed Beams Fillet Concrete

Bidders are advised that the concrete fillets over the prestressed beams are much deeper and heavier than typical projects. Forming the bridge deck will require special attention and may require temporary forms in lieu of stay-in-place forms. The Contractor shall submit detailed shop drawings showing how the beam fillets will be formed.

Due to the extra weight of the fillets and the length of the spans, temporary steel bracing in accordance with Notice to Bidders No. 20 and notes on the plans are required on all spans.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 8500 LPA

CODE: (SP)

DATE: 12/18/2020

SUBJECT: Allowable Density Deviations on Non-Roadway Facilities

Bidders are advised that the Engineer may, at his discretion, allow minor deviations in density requirements, not more than five percent (5%), from the specified test values per the following equation:

$$\text{Minimum allowable density} = \text{specified minimum density} - \text{allowable deviation}$$

As an example, a new asphalt bike trail with a specified minimum asphalt density of 93% of maximum density and an allowed deviation of 5%, the in-place density at full pay could be 88% of maximum density.

This deviation shall only be allowed for items of work characterized as pedestrian facilities, such as Pedestrian Pathways, Bike Trails, and Multi-use Pathways, which are not part of the roadway structure.

Before allowable deviations are accepted, the Contractor shall have demonstrated during performance of the work and documented prior to payment of each monthly estimate for the work, good faith efforts to meet the original contract requirements. This documentation shall be presented in a manner acceptable to the Engineer. Any such acceptance will not relieve the Contractor from responsibility for maintenance of the work, until the release of maintenance.

If the deviation in density from the specified test values for the work exceeds five percent (5%), the work shall be removed and replaced by the Contractor at no expense to the LPA, their Consultant, MDOT, or FHWA.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

NOTICE TO BIDDERS NO. 9100

CODE: (SP)

DATE: 10/31/2022

SUBJECT: PRE-BID CONFERENCE MEETING MINUTES

PROJECT: FBLD-8769-00(001)LPA/108639-802000

A copy of the Pre-Bid Conference Meeting Minutes is included for reference.

October 27, 2022

**HALL AVENUE WEST PHASE II - ROADWAY
FEDERAL AID PROJECT NO. FBLD-8769-00(001)LPA/108639-802000**

PRE-BID MEETING MINUTES

- **OPENING STATEMENT**
 - Pre bid meeting for Hall Avenue West Phase II - Roadway
 - This is not a mandatory meeting
 - Questions will be taken verbally at the end of this meeting. Questions and responses will be distributed via Addendum to plan holders
- **SIGN-IN SHEET** – attached.
- **ADVERTISEMENT**
 - Bid Opening **November 10, 2022 at 10:00 A.M.**, local time.
 - Submit bids to the Office of the City Clerk, 200 Forrest Street, Hattiesburg, MS 39401
 - Return the entire proposal, stripped bids will not be accepted
 - **Electronic bidding option is available through www.hattiesburgsbids.com**
 - 5% Bid Bond required at time of Bid Opening
- **QUESTIONS PRIOR TO BID**
 - Contractors shall direct questions in writing to the Design Engineer (Neel-Schaffer). Questions shall be sent to:
 - Geoffrey Crosby, P.E. – geoffrey.crosby@neel-schaffer.com
 - Korey Hardin, P.E. – korey.hardin@neel-schaffer.com
 - Mike Essary, P.E. – Michael.essary@neel-schaffer.com
 - No Questions will be accepted after **10:00 a.m. on Tuesday, November 8, 2022.**
- **ADDENDUM**
 - Addenda will be forwarded via www.hattiesburgsbids.com.
 - Bidders are required to acknowledge receipt of all addenda on the Bid Form located on page 905-2 in the Section 905 of the Proposal. Page 905-2 will be issued with each addendum.
- **ITEMS REQUIRED WITH BID SUBMITTALS**
 - See Bidders Checklist located at the front of the proposal.
 - Bidders are advised that the successful bidder will be required to provide a performance and payment bond in accordance with MDOT requirements.
- **BID OPENING AND CONTRACT AWARD**
 - Per the advertisement, bids shall be delivered to the City Clerk's Office, 200 Forrest Street, Hattiesburg, Mississippi 39401 until 10:00 am on Thursday, November 10, 2022. Bids will be opened and read aloud at that time.

- **PLANS AND SPECIFICATIONS**
 - Governing Specifications (Notice to Bidders #1) shall be the - *Mississippi Standard Specifications for Road and Bridge Construction - 2017 Edition* (MDOT Redbook) including any supplemental specifications that have been issued by MDOT to this edition and Notice to Bidders, Special Provisions or Supplements to Special Provisions for *this project*.
 - Plans along with the Proposal and Contract Documents can be viewed at all plan rooms or purchased from Plan House through www.hattiesburgsbids.com.
- **WAGE AND LABOR REQUIREMENTS**
 - Minimum Wage Rates (Section 906)
 - Comply with Davis Bacon Act
 - LPA-880, LPA-881 and certified payroll submissions required weekly
 - DBE Requirements – The DBE goal is 7% as specified in NTB-2611 with Supplement.
 - DBE's must be on the MDOT approved list.
 - A Form OCR 481 must be completed for all DBEs that will be used towards this goal, there are three copies of this form included in the proposal.
 - Form OCR 485 must be completed showing all quotes received from subs, be sure to indicate if the sub providing the quote is a DBE. There are three (3) copies of the form in the proposal, and each form has space for five (5) quotes.
- **PROJECT SCOPE OF WORK**
 - Constructing improvements along Hall Avenue from West Pine Street to Court Street. Work includes paving, drainage, sidewalks, striping, retaining walls, bridge over Norfolk Southern Railroad, lighting, traffic signals, and landscaping.
 - Construction Elements
 - Demolition
 - Earthwork and Paving
 - Storm Drainage
 - Drainage Inlets, underground detention (pipe and box culvert), box culvert
 - Utility Items
 - Minor adjustment to water and sewer.
 - The Contractor is responsible for field locating all utilities on site during construction.
 - Retaining walls
 - Bridge – 8000 Drawings in the Plans. Section 907-809-1 of the Specifications
 - West Pine Street
 - Concrete work
 - Traffic Signals
 - Walnut Street
 - West Pine Street
 - Removal of Signal at 6th Avenue and West Pine Street
 - Lighting – Lighting assembly specified in the electrical drawings to match adjacent projects on Hall Avenue. This is a sole source item. No approved equal.
 - Bridge – 8000 Drawings in the Plans.
 - Submittals required
 - Traffic Control Plan - A Traffic Control Plan has also been developed by the Design Engineer for this project. However, it is fully the Contractor's responsibility to amend this plan as necessary to accomplish the work. Any amendment must be approved by the Engineer.

Complete road closures require a minimum of 2 business day advance notice and approval from the City.

- Storm Water Pollution Prevention Plan (SWPPP):
 - Greater than 1 acre of disturbance but less than 5 acres
 - At the preconstruction conference or prior to starting any work on the project, the contractor shall submit an erosion control plan to the Engineer for approval. This plan shall meet the requirements of section 107.22, NTB 1878, 2172, and 907-107-2.
- Permits
 - Norfolk Southern – See NTB 14, 247, and 907-899-1
 - Nationwide – See NTB 7300
- Cooperation Between Contractors – See NTB 7400. Phase I and Hall Avenue East currently under construction
- Gold Sheet Requirement – See NTB 7800
- Pre-stressed Beam Fillet – See NTB 7900, Plan Sheets 8015, 8021, and 8024. Deeper beam fillets near midspan.
- Non-use of Precast Drainage Units – See NTB 15
- **GENERAL REQUIREMENTS**
 - Advancement of materials will be allowed on the project. Fuel Adjustments will be allowed on this project.
 - Sampling and testing will be coordinated by the Engineer.
- **COMPLETION TIME**
 - Specified Completion Day Contract
 - A Specified Completion date has been set at November 30, 2024 as specified in Notice to Bidders 7015.
 - Liquidated damages per day will be made for each Calendar Day after the expiration of the Contract Completion Date in accordance with Section 108 of the Standard Specifications.
 - The successful bidder must submit a Progress Schedule per Section 108.03.1. The progress schedule must be approved prior to commencing work.
 - As noted in the General Notes of the Plans, no work will be allowed on Sunday.
- **Meeting adjourned at 10:45.**

[illegible]

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 9200

DATE: 11/08/2022

SUBJECT: Fuel Adjustments

PROJECT: FBLD-8769-00(001)LPA / 108639-802000 -- Forrest County

Bidders are hereby instructed to use the attached Petroleum Product prices dated November 7, 2022.

November 7, 2022

In accordance with Senate Bill No. 2241 of the Mississippi Legislature Regular Session 1981, the industry wide current petroleum products base prices for contracts to be let in November 2022 are furnished as follows.

FUELS

	<u>Per Gallon</u>	<u>Per Liter</u>
Gasoline	\$2.9904	\$0.7900
Diesel	\$4.5499	\$1.2020

MATERIALS OF CONSTRUCTION

<u>ASPHALT CEMENT</u>	Per Gallon	Per Ton	Per Liter	Per Metric Ton
Viscosity Grade AC-5	\$2.8241	\$670.00	\$0.7460	\$738.54
Viscosity Grade AC-10	\$2.8662	\$680.00	\$0.7572	\$749.56
Viscosity Grade AC-20	\$2.7819	\$660.00	\$0.7349	\$727.51
Viscosity Grade AC-30	\$2.7819	\$660.00	\$0.7349	\$727.51
Grade PG-64-22	\$2.7819	\$660.00	\$0.7349	\$727.51
Grade PG-67-22	\$2.8952	\$686.88	\$0.7648	\$757.14
Grade PG-76-22	\$3.5225	\$835.71	\$0.9306	\$921.20
Grade PG-82-22	\$4.0464	\$960.00	\$1.0689	\$1058.20
<u>EMULSIFIED ASPHALTS, PRIMES, & TACK COATS</u>				
Grade SS-1	\$2.4868		\$0.6569	
Grade RS-2C (CRS-2)	\$2.9415		\$0.7771	
Grade CRS-2P	\$3.2397		\$0.8558	
Grade EA-1, EPR-1, & AE-P	\$3.4500		\$0.9114	
Grade CSS-1 & 1H (Undiluted)	\$2.6248		\$0.6934	
Grade CSS-1 & 1H	\$1.7900		\$0.4729	

DSM: WCC

SHANE MARTIN, P.E.
STATE CONSTRUCTION ENGINEER

MPC's current reference prices for PG 67-22 and PG 76-22PM are:

GARYVILLE, LA

PG 67-22 \$690

PG 76-22PM \$815

MEMPHIS, TN

PG 67-22 \$710

PG 76-22PM \$840

Quote Date_ NOVEMBER 1, 2022

Please fill in your quote either in type or ink, F.O.B. Plant.

Price
AC-5

Price
AC-10

Price
AC-20

Price
AC-30

Price
PG 64-22

Price
PG 67-22

\$720.00 per ton-Vicksburg, MS
\$720.00 per ton-Memphis, TN
\$720.00 per ton-Yellow Creek, MS

Price
PG 76-22
\$880.00 per ton-Vicksburg, MS
\$880.00 per ton-Memphis, TN

Price
PG 82-22
\$980.00 per ton-Vicksburg, MS
\$980.00 per ton-Memphis, TN

Price
EA-1
\$3.45/gal-Vicksburg, MS
\$3.45/gal-Memphis, TN

Price
SS-1

Price
CRS-2
\$3.31/gal-Vicksburg, MS
\$3.31/gal-Memphis, TN

Price
CRS-2P
\$3.61/gal-Vicksburg, MS
\$3.61/gal-Memphis, TN

Price
SS-1 & 1H

Price
CSS-1 & 1H (Undiluted)
\$2.65/gal-Vicksburg, MS
\$2.65/gal-Memphis, TN

Price
CSS-1 & 1H (Diluted
1 to 1 Fog Seal)
\$1.79/gal-Vicksburg, MS

Price
CMS-1P (QP)

Price
CMS-1P (CR)

Return to:

Mr. William C. Curry, for

[REDACTED]
State Construction Engineer
Mississippi Department of Transportation
P.O. Box 1850
Jackson, MS 39215
FAX (601) 359-7333

ERGON ASPHALT & EMULSIONS, INC.

Name of Supplier

By: PATRICK NATION, SR VP SALES & MKTG



Quote Date November 1, 2022

Please fill in your quote either in type or ink, F.O.B. Plant.

Price <u>AC-5</u>	Price <u>AC-10</u>	Price <u>AC-20</u>	Price <u>AC-30</u>
N/A	\$ 700.00	\$ 670.00	\$ 670.00

Price <u>PG 64-22</u>	Price <u>PG 67-22</u>	Price <u>PG 76-22</u>	Price <u>PG 82-22</u>
\$ 670.00	\$ 670.00	\$ 820.00	\$ 920.00

Price <u>EA-1</u>	Price <u>SS-1</u>	Price <u>CRS-2</u>	Price <u>CRS-2P</u>
N/A	N/A	N/A	N/A

Price <u>SS-1&1H</u>	Price <u>CSS-1&1H</u> (Undiluted)	Price <u>CSS-1&1H</u> (Diluted 1 to 1 Fog Seal)	Price <u>CMS-1P (QP)</u>
N/A	N/A	N/A	N/A

Price
CMS-1P(CR)
N/A

Return to:

Mr. William Curry for
[REDACTED]
STATE CONSTRUCTION ENGINEER
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
P. O. BOX 1850
JACKSON, MS 39215
FAX (601) 359-7333

HUNT SOUTHLAND REFINING CO.
SANDERSVILLE (ROGERS LACY)

Name of Supplier

BY:


Peyton L. Wilson
Sr. Customer Service Representative



Quote Date November 1, 2022

Please fill in your quote either in type or ink, F.O.B. Plant.

Price
AC-5
na

Price
AC-10
na

Price
AC-20
\$ 670.00

Price
AC-30
\$ 670.00

Price
PG 64-22
\$ 670.00

Price
PG 67-22
\$ 670.00

Price
PG 76-22
\$ 820.00

Price
PG 82-22
N/A

Price
EA-1
N/A Gallon

Price
SS-1
N/A Gallon

Price
CRS-2
\$ 2.6170 Gallon

Price
CRS-2P
\$ 2.9149 Gallon

Price
SS-1&1H
N/A

Price
CSS-1&1H
(Undiluted)
\$ 2.5745

Price
CSS-1&1H
(Diluted 1 to 1 Fog Seal)
N/A

Price
CMS-1P (QP)
N/A

Price
CMS-1P(CR)
N/A

Return to:

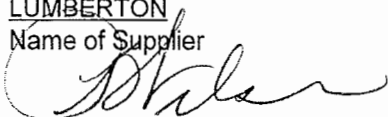
Mr. William Curry for

STATE CONSTRUCTION ENGINEER
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
P. O. BOX 1850
JACKSON, MS 39215
FAX (601) 359-7333

HUNT SOUTHLAND REFINING CO.
LUMBERTON

Name of Supplier

BY:


Peyton L. Wilson
Sr. Customer Service Representative



Quote Date November 1, 2022

Please fill in your quote either in type or ink, F.O.B. Plant.

Price
AC-5
\$ 670.00

Price
AC-10
\$ 660.00

Price
AC-20
\$ 645.00

Price
AC-30
\$ 645.00

Price
PG 64-22
\$ 645.00

Price
PG 67-22
\$ 645.00

Price
PG 76-22
N/A

Price
PG 82-22
N/A

Price
EA-1
N/A

Price
SS-1
\$ 590.00

Price
CRS-2
\$ 600.00

Price
CRS-2P
\$ 670.00

Price
SS-1&1H
N/A

Price
CSS-1&1H
(Undiluted)
N/A

Price
CSS-1&1H
(Diluted 1 to 1 Fog Seal)
N/A

Price
CMS-1P (QP)
N/A

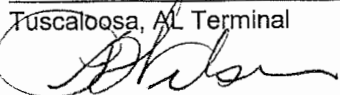
Price
CMS-1P(CR)
N/A

Return to:
Mr. William Curry for

STATE CONSTRUCTION ENGINEER
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
P. O. BOX 1850
JACKSON, MS 39215
FAX (601) 359-7333

HUNT REFINING COMPANY
Tuscaloosa, AL Terminal

BY:


Peyton L. Wilson
Sr. Customer Service Representative



Quote Date November 1, 2022

Please fill in your quote either in type or ink, F.O.B. Plant.

Price
AC-5
N/A

Price
AC-10
N/A

Price
AC-20
\$ 645.00

Price
AC-30
\$ 645.00

Price
PG 64-22
\$ 645.00

Price
PG 67-22
\$ 645.00

Price
PG 76-22
\$ 795.00

Price
PG 82-22
N/A

Price
EA-1
N/A

Price
SS-1
N/A

Price
CRS-2
N/A

Price
CRS-2P
N/A

Price
SS-1&1H
N/A

Price
CSS-1&1H
(Undiluted)
N/A

Price
CSS-1&1H
(Diluted 1 to 1 Fog Seal)
N/A

Price
CMS-1P (QP)
N/A

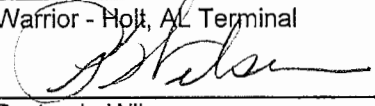
Price
CMS-1P(CR)
N/A

Return to:
Mr. William Curry for

STATE CONSTRUCTION ENGINEER
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
P. O. BOX 1850
JACKSON, MS 39215
FAX (601) 359-7333

HUNT REFINING COMPANY
Warrior - Holt, AL Terminal

BY:


Peyton L. Wilson
Sr. Customer Service Representative



Quote Date November 1, 2022

Please fill in your quote either in type or ink, F.O.B. Plant.

Price
AC-5
N/A

Price
AC-10
N/A

Price
AC-20
\$ 670.00

Price
AC-30
\$ 670.00

Price
PG 64-22
\$ 670.00

Price
PG 67-22
\$ 670.00

Price
PG 76-22
N/A

Price
PG 82-22
N/A

Price
EA-1
N/A

Price
SS-1
N/A

Price
CRS-2
N/A

Price
CRS-2P
N/A

Price
SS-1&1H
N/A

Price
CSS-1&1H
(Undiluted)
N/A

Price
CSS-1&1H
(Diluted 1 to 1 Fog Seal)
N/A

Price
CMS-1P (QP)
N/A

Price
CMS-1P(CR)
N/A

Return to:
Mr. William Curry for
[REDACTED]
STATE CONSTRUCTION ENGINEER
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
P. O. BOX 1850
JACKSON, MS 39215
FAX (601) 359-7333

HUNT REFINING COMPANY
Chickasaw Terminal - Chickasaw, AL
BY: [Signature]
Peyton L. Wilson
Sr. Customer Service Representative

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 9999

CODE: (SP)

DATE: 11/08/2022

SUBJECT: Bid Opening

PROJECT: FLBD-8769-00(001)LPA /108639-802000, Forrest County

The Bid Opening has been revised as follows:

Sealed bids will be received by the City of Hattiesburg, at the City Clerk's office, Mississippi, hereafter referred to as Owner, located at 200 Forrest Street, Hattiesburg, Mississippi, 39401, until 10:00 A.M., Local Time, on **Thursday, November 17, 2022**, for supplying all labor, equipment, and materials (as specified) necessary for the construction of the above referenced project.

"General Decision Number: MS20220131 02/25/2022

Superseded General Decision Number: MS20210131

State: Mississippi

Construction Type: Highway

County: Forrest County in Mississippi.

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	02/18/2022
2	02/25/2022

ELEC0903-006 01/01/2022

	Rates	Fringes
ELECTRICIAN.....	\$ 29.20	6.68+1.5%+8%

* SUMS2010-054 08/04/2014		

	Rates	Fringes
CARPENTER (Form Work Only).....	\$ 12.00 **	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 11.54 **	1.63
HIGHWAY/PARKING LOT STRIPING: Truck Driver (Line Striping Truck).....	\$ 14.55 **	0.00
INSTALLER - SIGN.....	\$ 12.19 **	0.00
INSTALLER: Guardrail.....	\$ 12.39 **	0.00
IRONWORKER, REINFORCING.....	\$ 16.44	0.00
LABORER: Common or General, Including Asphalt Raking, Shoveling, Spreading.....	\$ 10.34 **	0.00
LABORER: Flagger.....	\$ 11.42 **	0.00
LABORER: Grade Checker.....	\$ 14.82 **	0.00
LABORER: Luteman.....	\$ 12.88 **	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 10.57 **	0.00
LABORER: Pipelayer.....	\$ 14.50 **	0.00
LABORER: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper.....	\$ 12.17 **	0.00
OPERATOR: Asphalt Spreader.....	\$ 14.71 **	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 14.20 **	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 11.86 **	0.00
OPERATOR: Broom/Sweeper.....	\$ 10.94 **	0.00
OPERATOR: Bulldozer.....	\$ 13.99 **	0.00
OPERATOR: Concrete Saw.....	\$ 13.93 **	0.00
OPERATOR: Crane.....	\$ 14.80 **	0.00
OPERATOR: Distributor.....	\$ 11.46 **	0.00
OPERATOR: Grader/Blade.....	\$ 16.09	0.00
OPERATOR: Loader.....	\$ 13.99 **	0.00

OPERATOR: Mechanic.....	\$ 13.00 **	0.00
OPERATOR: Milling Machine.....	\$ 16.96	0.00
OPERATOR: Oiler.....	\$ 12.22 **	0.00
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 11.56 **	0.00
OPERATOR: Roller (All Types)....	\$ 12.17 **	0.00
OPERATOR: Scraper.....	\$ 14.00 **	0.00
OPERATOR: Tractor.....	\$ 12.00 **	0.00
SURVEYOR (Staking, Marking and Brush Clearing).....	\$ 11.56 **	0.00
TRUCK DRIVER: Flatbed Truck.....	\$ 14.72 **	0.00
TRUCK DRIVER: Lowboy Truck.....	\$ 14.18 **	0.00
TRUCK DRIVER: Mechanic.....	\$ 12.31 **	0.00
TRUCK DRIVER: Water Truck.....	\$ 17.08	0.00
TRUCK DRIVER: Dump Truck (All Types).....	\$ 11.58 **	0.00
TRUCK DRIVER: Semi/Trailer Truck.....	\$ 14.36 **	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage

determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

SUPPLEMENT TO FORM FHWA-1273

DATE: 08/05/2022

SUBJECT: Federal Contract Provisions for Subcontracts

Federal Contract Provisions for Subcontracts

All subcontracts shall be in writing and contain all pertinent provisions and requirements of the prime contract.

Each “Request for Permission to Subcontract” (Mississippi Department of Transportation LPA Form RSP-1) shall include a copy of the subcontract. The federal contract provisions (FHWA-1273, SUPPLEMENT TO FORM FHWA-1273, NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246), DAVIS-BACON AND RELATED ACT PROVISIONS (WAGE RATES)) must be physically incorporated as part of the subcontract. A completed Mississippi Department of Transportation LPA Form NRAA-1 and LPA Form SCC-1 must be attached to the LPA Form RSP-1.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants /

Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:

The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding (29 CFR 5.5)

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics,

including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records (29 CFR 5.5)

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or

subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees (29 CFR 5.5)

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State

Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the

corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor

set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility (29 CFR 5.5)

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1 of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1 of this section. 29 CFR 5.5.

* \$27 as of January 23, 2019 (See 84 FR 213-01, 218) as may be adjusted annually by the Department of Labor; pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990).

3. Withholding for unpaid wages and liquidated damages.

The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 of this section. 29 CFR 5.5.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section. 29 CFR 5.5.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or

equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance

with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.326.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders

or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.326.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant

who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is

submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(b) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(c) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier

subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.
2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goal for female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work, is 6.9%.

Until further notice	Goals for minority participation for each trade (percent)
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SHSA Cities:

Pascagoula - Moss Point -----	16.9
Biloxi - Gulfport -----	19.2
Jackson -----	30.3

SMSA Counties:

Desoto -----	32.3
Hancock, Harrison, Stone-----	19.2
Hinds, Rankin-----	30.3
Jackson -----	16.9

Non-SMSA Counties:

George, Greene-----	26.4
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Alcorn, Benton, Bolivar, Calhoun, Carroll, Chickasaw, Clay, Coahoma, Grenada, Itawamba, Lafayette, Lee, Leflore, Marshall, Monroe, Montgomery, Panola, Pontotoc, Prentiss, Quitman, Sunflower, Tallahatchie, Tate, Tippah, Tishomingo, Tunica, Union, Washington, Webster, Yalobusha -----	26.5
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Attala, Choctaw, Claiborne, Clarke, Copiah, Covington, Franklin, Holmes, Humphreys, Issaquena, Jasper, Jefferson, Jefferson Davis, Jones Kemper, Lauderdale, Lawrence, Leake, Lincoln, Lowndes, Madison, Neshoba, Newton, Noxubee, Oktibbeha, Scott, Sharkey, Simpson, Smith, Warren, Wayne, Winston, Yazoo-----	32.0
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Forrest, Lamar, Marion, Pearl River, Perry, Pike, Walthall-----	27.7
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Adams, Amite, Wilkinson -----	30.4
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These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4.2(d). Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is to the county and city (if any), stated in the advertisement.

5. The notification required in Paragraph 3 shall be addressed to the following:

Contract Compliance Officer
Mississippi Department of Transportation
P.O. Box 1850
Jackson, Mississippi 39215-1850

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-102-4 LPA

CODE: (SP)

DATE: 06/30/2017

SUBJECT: Bidding Requirements and Conditions

Subsection 102.06--Preparation of Proposal. Delete the first, second, third and fourth paragraphs of Subsection 102.06 on page 15 and substitute the following:

The bidder's complete original proposal shall be submitted upon the forms furnished by the Department and shall enter in a unit price and extension in the appropriate columns for each bid item exclusive of those items for which a fixed contract unit price and the extension are shown. Lump sum bid items are to be bid as an item total only since a unit price is not required. The bidder shall also enter where indicated the subtotal amount for each of the various divisions and the total amount of the proposal which shall also include the extensions of the items with a fixed contract unit price. In case of discrepancy between a unit price and the extension, the unit price will govern and the extension along with the total amount of the proposal will be corrected. All figures shall be in ink or typed.

Delete the first sentence of the ninth paragraph and add the following:

The bidder's proposal must be signed with ink by the individual, by one or more members of the partnership, by one or more members or officers of each firm representing a joint venture, or by one or more officers of a corporation; or by an agent of the Contractor legally qualified to bind the Contractor and acceptable to the State.

Subsection 102.08--Proposal Guaranty. Delete the two paragraphs in Subsection 102.08 on page 17 and substitute the following:

No proposal will be considered unless accompanied by certified check, cashier's check or bid bond, made payable to the LPA listed in the contract, in an amount of not less than five percent (5%) of the total amount of the proposal offered. The guaranty shall be evidence of good faith that, if awarded the contract, the bidder will execute the contract and give performance and payment contract bond(s) as stipulated in Subsection 103.05.1, 103.05.2, and as required by law.

If a bid bond is offered as guaranty, the bond must be on a form approved by the Chief LPA Official, made by a Surety acceptable to the Chief LPA Official and signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent and the Bidder. Such bid bond shall also conform to the requirements and conditions stipulated in Subsection 103.05.2 as applicable.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-105-1

CODE: (SP)

DATE: 05/07/2021

SUBJECT: Authority of the Engineer

Section 105, Control of Work, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-105.1--Authority of the Engineer. Delete the first sentence of the second paragraph of Subsection 105.01 on page 31, and substitute the following.

The Engineer has the right to suspend the work wholly or in part and to withhold payments because of the Contractor's failure to correct conditions unsafe for workmen or the general public, for failure to carry out provisions of the Contract, or for failure to carry out orders.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-106-1

CODE: (IS)

DATE: 10/25/2022

SUBJECT: Control of Materials

Section 106, Control of Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

After Subsection 106.13 on page 47, add the following.

907-106.14--Buy America Materials Sourcing Requirements for Federal-Aid Projects. The “Infrastructure Investment and Jobs Act” (the “Act”), or Bipartisan Infrastructure Law (BIL), was enacted on November 15, 2021 (See Public Law No. 117-58, Sections 70901-70953). The Buy America provisions of the Act expand the previous Buy America requirements beyond what is currently required for steel and iron products.

Any steel and iron materials per Subsection 700.01 or construction materials per Subsection 907-700.01.1, that are used for a Federal-Aid highway construction project, shall be domestically manufactured (as further described in Subsection 700.01) and compliant with current requirements of the Act, as implemented by the Office of Management and Budget (OMB) in the “Preliminary Guidance for Construction Materials” in OMB Memorandum M-22-11.

As determined by the Department within the contract prior to award, all products and/or materials will only be classified under one of the following categories: Steel and Iron, Manufactured Products, and Construction Materials. It is the Prime Contractor’s responsibility to ensure all submittals required for Buy America are submitted to the Project Engineer prior to the products and/or materials being incorporated into the work.

The following items require Buy America Certification on Federal-Aid projects:

- (a) Steel and Iron
- (b) Construction Materials

A list of items that require Buy America Certification may be viewed at www.goMDOT.com under Business Center → Engineering Standards/Guides/Manuals → Construction Materials.

Items classified as a Manufactured Product that do not include steel and iron components do not require a Buy America Certification on a Federal-Aid project. Manufactured Products are currently exempted under the 1983 waiver from FHWA. Manufactured Products are determined by the Department’s Materials Division.

To be considered a Manufactured Product, an item shall meet one of the following requirements:

- (a) The item consists of two or more of the listed construction materials that have been combined through a manufacturing process.
- (b) The item consists of at least one of the listed construction materials that has been combined through a manufacturing process with a material that is not listed as a construction material.

Buy America provisions do not apply to temporarily used items that (1) are specified to be removed at the end of the project per the contract provisions or (2) are specified to remain in place per the contract provisions and are also documented by the Department in the contract provisions to be removed in a subsequent imminent, near-term phased project.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-2

CODE: (SP)

DATE: 01/31/2018

SUBJECT: Contractor's Erosion Control Plan

Section 107, Legal Relations and Responsibility to Public, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-107.22--Environmental Protection.

907-107.22.1--Contractor's Erosion Control Plan (ECP). After the first sentence of the first paragraph of Subsection 107.22.1 on page 63, add the following.

The ECP shall be submitted electronically to the Project Engineer who will forward it to the appropriate MDOT Divisions.

Delete the example Narrative in Subsection 107.22.1 on page 65, and substitute the following.

EXAMPLE
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
Storm Water Pollution Prevention Plan (SWPPP)
Narrative

General Permit Coverage No: MSR_____

Project Number: _____

County: _____

Route: _____

SITE INFORMATION

This project consists of grading and installing drainage structures necessary to construct approximately 6 miles of parallel lanes on SR 31 between the Hinds County Line and the Rankin County Line.

SEDIMENT AND EROSION CONTROLS

- a) **Vegetative Controls:** Clearing and grubbing areas will be minimized to comply with the buffer zones (minimum of 15 feet along the ROW lines and 5 feet along creeks) as per the contract documents. A combination of temporary and permanent grassing will be used to protect slopes as construction progresses. **Should a disturbed area be left undisturbed for 14 days or more, placement of temporary BMPs (seeding & mulching, silt fences, basins, ditch checks, slope drains, etc.) or permanent erosion control measures (seeding & mulching, riprap, paved ditch, flumes, etc.) will be initiated by the next working day after the land disturbing activities have stopped.**
- b) **Structural Controls:** Gravel construction entrance/exit will be installed near Stations 145+50, 159+50, 164+50 & 172+50. Riprap ditch checks will be constructed at Stations 144+50, 151+75, 162+00 & 166+25. The Concrete washout area will be at Stations 140+25, 152+00 & 168+50.
- c) **Housekeeping Practices:** Structural BMPs will be cleaned out when sediment reaches 1/3 to 1/2 of the height of the BMP. Maintenance and repair of equipment will be performed off-site, material wash out will occur either off-site or within designated wash out areas.
- d) **Post-Construction Control Measures:** As construction is completed, permanent vegetative growth will be established on disturbed soils to improve soil stability and provide a buffer zone for loose material. Paved ditches and flumes will be placed as specified in the ECP to reduce erosion in concentrated flow areas and rip rap will be placed as specified to dissipate flow energy and reduce flow velocity.

IMPLEMENTATION SEQUENCE

Perimeter controls will be installed first. Clearing and grubbing will be performed in 19-acre sections beginning at the BOP and temporary grassing will be installed as needed. Temporary erosion control BMPs will be installed at the drainage structures prior/during construction of the drainage structures. Grading activities will commence at the BOP and proceed towards the EOP, fill slopes will be permanently grassed in stages for fill heights that exceed 5 feet. Base materials will be installed on completed grading sections with the paving to follow.

MAINTENANCE PLAN

All erosion and sediment control practices will be checked for stability and operation following every rainfall but in no case less than once every week. Any needed repairs will be made immediately to maintain all practices as designed. Sediment basins will be cleaned out when the level of sediment reaches 2.0 feet below the top of the riser. Sediment will be removed from the front/upstream end of the BMPs when it becomes about 1/3 to 1/2 height of BMP.

Prime Contractor's Signature

Date

Printed Name

Title

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-4

CODE: (SP)

DATE: 10/07/2020

SUBJECT: Subletting of Contract

Section 108, Prosecution and Progress, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-108.01--Subletting of Contract.

907-108.01.1--General. Delete the third sentence of the tenth paragraph of Subsection 108.01.1 on the bottom of page 72.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-109-4

CODE: (IS)

DATE: 04/19/2021

SUBJECT: Measurement and Payment

Section 109, Measurement and Payment, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-109.01--Measurement of Quantities. Delete the sixth full paragraph of Subsection 109.01 on page 88, and substitute the following.

If appropriate based on the specific circumstances of the project, the Contractor may request that material specified to be measured by the cubic yard or ton be converted to the other measure. The Contractor must submit this request to the Engineer. The Engineer will provide an approval or denial in writing. The decision is in the sole discretion of the Engineer. If approved, factors for this conversion will be determined by the District Materials Engineer and agreed to by the Contractor. The conversion of the materials along with the conversion factor will be incorporated into the Contract by supplemental agreement. The supplemental agreement must be executed before such method of measurement is used.

907-109.04--Extra Work.

907-109.04.1--Supplemental Agreement. Delete the second paragraph of Subsection 109.04.1 on page 90.

907-109.06--Partial Payment.

907-109.06.2--Advancement on Materials.

Delete the next to last paragraph of Subsection 109.06.2 on page 95, and substitute the following.

Materials for which an advanced payment has been allowed must be paid for by the Contractor within 30 days of the estimate on which the advanced payment was first allowed and proof of said payment must be verified by the supplier. If proof of payment is not furnished within the allowable 30 days, the advanced payment will be deducted on subsequent current estimates until such time that proof of payment is furnished.

907-109.07--Changes in Material Costs. After the fifth paragraph of Subsection 109.07 on page 96, change the web address to the following.

https://mdot.ms.gov/portal/current_letting

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-234-1

CODE: (SP)

DATE: 10/13/2021

SUBJECT: Silt Fence

Section 234, Silt Fence, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-234.02--Materials. Delete the first paragraph of Subsection 234.02 on page 181, and substitute the following.

Materials used in silt fence and super silt fence may be accepted by certification per Subsection 700.05.1. Geotextile fabric, posts, staples and woven wire backing, when required, shall meet the requirements of Subsection 714.13.

907-234.05--Basis of Payment. Add the “907” prefix to the pay items listed on page 183.

CITY OF HATTIESBURG

SPECIAL PROVISION NO. 907-262-1LPA

CODE: (SP)

DATE: 12/01/08

SECTION 262 - WATER MAINS AND APPURTENANCES

262.01 - Description. The work covered by this section consists of furnishing all labor, equipment and materials and performing all operations in connection with the installation of potable water lines, as indicated on the drawings and as specified herein. The work includes clearing, grubbing, trenching, bedding, pipe laying, backfilling, pipe fittings, valves, hydrants, and all incidental items including testing and disinfection of the completed water lines, which are necessary for installation of the mains and connections to hydrants and existing mains and meters.

262.02 - Materials.

262.02.1 – Bedding/Backfill Material. Class 6, Group C Granular Material for bedding shall be in accordance with Section 703.07 of the *Mississippi Standard Specifications for Road and Bridge Construction, 2004 Edition*. Class 9, Group C Granular Material for select backfill shall be in accordance with Section 703.07 of the *Mississippi Standard Specifications for Road and Bridge Construction, 2004 Edition*.

262.02.2 - Concrete. Concrete shall be MDOT Standard Class B concrete.

262.02.3 - Polyvinyl Chloride (PVC) Pipe. PVC water lines shall be "Blue Brute" (blue in color), or equal, Class 150, DR 18 polyvinyl chloride pipe manufactured in accordance with AWWA C-900 (latest edition) and shall be U.L. listed. Pipe shall be furnished in standard lengths (minimum 20 feet) with integrally cast bells or couplings using elastomeric gaskets that meet the requirements of ASTM D 1869 and F-477. All necessary adapters for connection to fittings shall be provided.

262.02.4 - Ductile Iron Pipe. Ductile iron pipe shall be designed in accordance with AWWA Specification C150 and manufactured in accordance with AWWA Specification C151. Joints shall conform with AWWA Specification C111 or C115 as applicable and shall be of the push on or mechanical type except where flanged joints are indicated on the plans. Where designated on the plans, pipe joints shall be restrained with mechanical restraint devices. Pipe interior shall be cement mortar lined per ANSI A21.4 (AWWA C104). Ductile iron pipe 4" and less in diameter shall be of thickness Class 51. Ductile iron pipe 6" and greater in diameter shall be of thickness Class 50, except pipe with threaded flanges shall be Class 53.

262.02.5 - Fire Hydrants. Hydrants shall be three-way M & H Model 129, Mueller Super Centurion 250, or American Flow Control B-84-B-5, with four and one-half inch (4 1/2") valve opening. The length of the lower barrel on each hydrant shall be appropriate for the depth of the water main. The color shall be chosen by the City conforming to the requirements of AWWA C-502.

262.02.6 - Water Valves. Water valves shall be "resilient seat" or "resilient wedge" type gate valves complying with the requirements of AWWA C509 or AWWA C515. Valves shall be epoxy coated inside and outside in conformance with the requirements of AWWA C550. Valves shall be rated for zero leakage to 200 psi and 400 psi hydrostatic test pressure. Valves shall be furnished with a non-rising stem and shall open by turning a 2 inch square operating nut counterclockwise. Gates shall be encapsulated in rubber where exposed to line velocity and shall be field replaceable. Valve ends shall be flanged or mechanical joint, as appropriate for the connection. Mechanical joints shall be recommended by the manufacturer for use with AWWA C-900 PVC or ductile iron pipe and shall be furnished with MJ retainer glands.

Insertion valves shall be installed in the location determined by the Engineer. Insertion valves shall be opened in the open position under pressure and flow conditions without interruption of water service. Final assembly shall provide for the complete shutoff of the flow of water. Sleeve shall be capable of installation on cast iron, ductile iron, asbestos cement and C900 PVC pipe. Sleeve shall be fabricated in two pieces and shall provide a 360 degree seal around the pipe under all working pressures of the system.

262.02.7 - Valve Boxes. Valve boxes shall be of cast or ductile iron as manufactured by Mueller, Kennedy, M & H or equal. Covers shall be cast or ductile iron with a designation of "WATER" embossed on the topside and shall be of the screw down type. Valve boxes shall be the three-piece type, adjustable in length and suitable for installation in roadway surfaces. Stack pipe for valve box adjustment shall be class 150 DR 18 manufactured in accordance with AWWA C-900 PVC or ductile iron pipe. Adjustment risers shall be cast iron and approved prior to use by the Engineer or his authorized representative.

262.02.8 - Fittings. Fittings for water mains of four inch (4") diameter and larger shall be seal coated cast iron or ductile iron with flanged or mechanical joint ends, as appropriate for each connection. All fittings shall be cement mortar lined per ANSI A21.4 (AWWA C104). Mechanical joints shall be recommended by the manufacturer for use with AWWA C-900 PVC or ductile iron pipe and shall be furnished with MJ retainer glands. Fittings shall be manufactured in accordance with AWWA C110. Fittings for use with ductile iron pipe may be of the push-on type. Fittings for connections between new main and existing mains and pipes shall be specifically designed for interconnection of the lines being joined and will be subject to the approval of the City's Engineer or his authorized representative.

262.02.9 – Water Service Tubing. Water service tubing shall be polyethylene "PE" tubing having copper tube O.D. sizes and complying with ASTM D2737, NSF approved, dimensions to fit standard CTS fittings, SDR 9, 200 psi.

262.02.10 – Water Service Appurtenances. Corporation stops, curb stops, wye fittings, and other required service fittings shall conform to AWWA C800. All connections to service tubing shall be by approved compression type fitting, with stainless steel tubing inserts as recommended by the fitting manufacturer.

Curb valves shall employ a one-piece integral plug with full-opening port and tee head, turning on a plastic thrust washer at the top and sealed by an "O"-ring. Typically, curb valves shall have a CTS x FIP connection for non-metered services. For any existing, metered connection, Contractor shall supply a curb valve having the appropriate fitting to reconnect to the existing meter. Existing meters shall be kept in service until after short/long service connection is complete. See plans for typical installation of water services. The valve body shall be a one-piece brass casting with closed bottom. The inlet and/or outlet port shall be sealed by a second "O"-ring. The design shall include a locking ring designed to permit locking the valve in the closed position, using a standard padlock.

Service saddles are required for all service line connections and shall be ductile iron or brass with double stainless steel bands. Saddles shall be specifically recommended for use with the type of pipe being connected to.

262.02.11 – Water Meter Boxes. Service valve boxes shall be plastic structural foam boxes with plastic lid with hinged reader lid. Box shall measure not less than 10" x 16" (at the top) by 12" deep. Where meters boxes must be located in paved areas (concrete or asphalt), provide cast iron meter boxes similar to Vulcan model V-8402.

262.02.12 – Water Meters. Existing water meter to be relocated unless damaged. Water meters that need replacing to be provided by the City of Hattiesburg.

262.02.13 – Filter Fabric. Geotextile fabric shall be non-woven, needle punched, and weigh a minimum of four ounces (4 oz.) per square yard.

262.02.14 – Mechanical Joint Retainer Glands. MJ retainer glands shall be used for all connections of pipe to fittings, valves, or fire hydrants, and shall be made with a suitable restrained joint system, meeting any one of the following specifications:

1. For Ductile or PVC Pipe, a suitable ductile iron retainer gland, designed and recommended by the gland manufacturer, for the type of pipe used. Gland shall be manufactured entirely of 60-42-10 ductile iron conforming to ASTM A536-80. Glands shall attach to the pipe barrel through a plurality of individually activated gripping surfaces (wedges).
2. For PVC Pipe, a heavy ductile iron or fused epoxy coated structural steel (ASTM A36) clamp which employs serrations on its inside surface to firmly grip the outside of the PVC pipe barrel. Clamp shall be specifically designed and recommended for use with the size and thickness class of pipe used. All hardware shall be ductile iron.
3. For Ductile Pipe only, a ductile iron mechanical joint retainer gland employing cupped-end threaded set screws which conform with the pipe manufacturer's guidelines as to number of set screws and torque to be applied to properly restrain the joint to a rating of not less than 250 p.s.i.

262.02.15 – Pipe Joint Restraints. Pipe Joint Restraints shall be installed where applicable as designated on the Drawings, in all pipe encasements, and for pipe joints within specified distances from fittings per the schedule in Drawings. Use two glands similar in design and materials to the joint retainer glands previously specified, one immediately behind the joint bell and one on the pipe spigot, connected by two or more ductile iron rods spanning across the pipe joint. For ductile iron pipe, it is also permissible to use mechanical joint pipe with restrained retainer gland, or special "lock-ring" pipe joints.

262.02.16 – Locator Wire & Utility Marker Tape. Locator wire for attachment to all non-detectable pipe materials shall be a No. 12 coated solid copper wire.

Underground utility marker tape for burial with all types of pipe shall be a minimum of 5 mils thick and 3 inches in width. Minimum tensile strength shall be 35 pounds and tape shall elongate not less than 80 percent before breaking. Tape shall be permanently imprinted with an appropriate legend to identify the contents of the pipe (e.g. "Water Main Below".)

262.02.17 – Tapping Sleeves & Valves. Tapping sleeves shall be fabricated from heavy Type 304 stainless steel, with a full circumferential seal to the run pipe provided by a rubber gasket resistant to water, salt solutions, mild acids, gases, and sewage. Multiple stainless steel bolts shall ensure uniform sealing. Outlet flange shall conform with ANSI 150 pound drilling, recessed for tapping valve per MSS-SP 60. A 3/4 inch NPT test plug shall be provided. O.D. range of body must match the actual measured O.D. of the pipe being tapped.

Tapping valves shall conform with the requirements for Gate Valves and Valve Boxes on Water Mains, except that the inlet shall be Class 125 Flange and the outlet, Mechanical Joint. The valve opening shall be oversized to permit a cutter head to pass which is 1/2" smaller than the nominal branch pipe size. Valves shall be furnished complete with cast iron sectional valve box, as is specified under "Gate Valves & Valve Boxes" in these Specifications. A retainer gland as is specified under "Water Pipe & Fittings" is required for the connection of the new pipe to the tapping valve.

262.02.18 – Line Stopping. Line stopping shall include all components of the type and size required to plug the existing water main to be tapped. This will be done to facilitate the tap without losing pressure along the existing water main that is to remain in place.

The line stop fitting shall be split mechanical bolt-on type, fabricated from ASTM A-36 carbon steel, epoxy coated with 18-8 type 304 stainless steel nuts, bolts, and washers, and be complete with equalization fittings, blind flange with gaskets, nuts and bolts. Flanges are AWWA 207 Class D, ANSI 150# drilling. Gaskets are compounded for use with water, salt solutions, and mild acids.

262.03 - Construction Requirements.

262.03.1 – Excavation – General. Excavation shall include the clearing of the site of the work, the loosening, loading, removing, transporting and disposing of all pavements, obstructions, and any other materials, wet or dry, above or below ground necessary to be removed to construct all pipes included in this contract to the lines, grades and locations shown on the Drawings. No burying or burning of trees, stumps, roots, or other debris will be allowed.

It is intended that areas designated as “Easement” be cleared only as necessary to allow construction of the facilities. Any trees or shrubs designated on the plans or directed by the Engineer to remain shall be protected from damage.

Low hanging and unsound or unsightly branches on trees or shrubs designated to remain shall be removed as directed. All trimming shall be done by skilled workman and in accordance with good tree surgery practices. An approved asphaltum base paint prepared specifically for tree surgery shall be furnished and applied by Contractor to cut or scarred surfaces on trees or shrubs selected to remain.

Where required, the Contractor shall remove with care all shrubbery, plants, flower planters, flower bed borders, set aside, watered, and kept alive and reset as before construction work. The Contractor shall furnish and install replacement plants which die as a result of construction operations.

In areas where water main will be installed in close proximity to trees designated to remain or any Live Oak trees, the major root systems and the limbs of the trees shall be protected from damage. Where necessary, contractor shall install water main by tunneling or boring underneath the tree roots, with no additional compensation for materials, labor, or otherwise. If, in the opinion of the Engineer, any damage to the tree does occur, Contractor shall, at his own expense, obtain the services of a certified tree surgeon to perform any and all actions necessary to mitigate or repair the damage.

The Contractor shall, at his own expense, furnish and install all temporary sheeting, timbering and bracing required to maintain the excavation in a condition to furnish safe working conditions and to permit the safe and efficient installation of all items of contract work. The Contractor shall further, at his own expense, shore up or otherwise protect all fences, buildings, walls, walks, curbs, or other property adjacent to any excavation which might be disturbed during the progress of the work, except for such facilities which are within the allowable trench limits and are designated for removal and restoration.

Temporary supports must be removed by the Contractor at his own expense after or concurrently with the completion of the permanent facility.

The Contractor shall do all ditching, pumping, well pointing and bailing, build all drains, and do all other work necessary to keep the excavation clear of ground water, sewage or storm water during the progress of the work and until the finished work is safe from injury. Where the excavation is wet sand, and suitable construction conditions cannot be obtained by other methods, the Contractor shall install and operate, at his own expense, a pumping system connected with well points, so as to drain the same effectually. All well point holes shall be backfilled with sand after removal. No masonry or pipe shall be laid in water, and water shall not be allowed to rise over masonry until concrete or masonry has set at least 48 hours. All water pumped or drained from the work shall be disposed of in a manner that will not damage adjacent property or other work under construction. Necessary precautions shall be taken to protect all construction against flooding.

Whenever the excavation is carried beyond the lines and grades shown on the drawings, the Contractor shall, at this own expense, refill all such excavated space with such material and in such manner as may be directed.

Unsuitable and surplus excavated material not incorporated in the work shall be disposed of by the Contractor at his own expense.

In the event that any existing gas pipe, water pipes, conduits, sewers, storm drains or poles are blocked or interfered with by the excavation required on this project, the Contractor shall maintain them in

continuous operation, and restore them to the same condition as they were prior to the start of construction of this project. Gas pipes or electrical power distribution facilities or any other utilities which are disturbed in any way shall be inspected and repaired (if necessary) by the utility owner, all at no additional compensation from the Owner.

Any culvert pipe joint exposed by excavation shall be wrapped with an approved geotextile filter fabric, three feet in width, before backfilling, at no additional compensation.

262.03.2 – Trench Excavation. The ground shall be excavated in open trenches, of sufficient width and depth to provide ample room within the limits of the excavation, or lines of sheeting and bracing, for the proper construction of the water main.

Mechanical excavation of trenches shall be stopped above the final invert grade elevation so that the pipe may be laid on a firm, undisturbed native earth bed.

The width of the trench at the top of the pipe shall not exceed the outside diameter of the pipe plus two feet. The maximum allowable trench width at the ground surface shall not exceed the outside diameter of the pipe, plus twice the depth of cut. Restoration of disturbed facilities as a pay item will only be allowed within these limits. Facilities disturbed outside the allowable restoration limits shall be restored as detailed in “Restoration of Disturbed Facilities” in these Specifications, but at Contractor’s expense.

The minimum depth of excavation shall be as required for a cover over the completed water main of not less than 30 inches on city and county roads and 36 inches on MDOT rights-of-way. Where water pipes cross under existing drainageways, provide not less than 30 inches under ditches or 18” clearance between the top of the pipe and the bottom of existing storm drain pipes or structures.

262.03.3 – Bedding. Trenches shall be dry when the trench bottom is prepared. A continuous trough shall be pared or excavated to receive the bottom quadrant of the pipe barrel. In addition, bell holes shall be excavated so that after placement, only the barrel of the pipe receives bearing pressure from the trench bottom.

Preparation of the trench bottom and placement of the pipe shall be carefully made so that when in final position, the pipe is true to line and grade.

262.03.4 – Laying Pipe. All nonmetallic pipes shall be installed with a No. 12 coated solid copper wire attached to the top of the pipe. The locator wire shall be permanently secured to the pipe at six foot increments. The locator wire shall be continuous along the length of each pipe segment between access points and be accessible at every valve box, including valves for fire hydrants. Splices shall be made with waterproof connectors. Locator wire assemblies shall also be installed at the locations shown on the plans to provide a maximum spacing of not more than 500 feet between access points to the locator wire. Upon completion of all piping, locator wire, assemblies, and other access points, the Contractor shall coordinate with the Owner for testing. The Owner’s representative will use his locator to test the locator wiring system.

Pipe shall be protected during handling against impact shocks and free fall. Pipe shall be clean at all times, and no pipe shall be used in the work that does not conform to the appropriate specifications.

Pipe shall be laid accurately, to the line and grades with fittings and valves at the required locations as designated in the Drawings. Preparatory to making pipe joints all surfaces of the portions of the pipe to be jointed or of the factory-made jointing material shall be clean and dry. Lubricants, primers, adhesives, etc., shall be used as recommended by the pipe or joint manufacturer's specifications. The jointing materials or factory fabricated joints shall then be placed, fitted, joined, and adjusted in such a workmanlike manner as to obtain the degree of water-tightness required.

If dirt enters the pipe, it shall be removed and the interior pipe surface swabbed with a 1 percent hypochlorite disinfecting solution.

Trenches shall be kept water-free and as dry as possible during bedding, laying, and jointing and for as long a period as required. As soon as possible after the joint is made, sufficient backfill material shall be placed along each side of the pipe to offset conditions that might tend to move the pipe off line and grade.

If pipe and fittings are not kept dry during installation, Contractor shall ensure that any water entering the pipe contains an available-chlorine concentration of approximately 25 mg/l by adding calcium hypochlorite granules or tablets to each length of pipe.

Wherever necessary to deflect pipe from a straight line, either in the horizontal or vertical plane, the degree of deflection shall not exceed maximum permissible deflections as recommended by pipe manufacturer.

262.03.5 – Backfilling. All trenches and excavation shall be backfilled as soon as the work has developed sufficient strength to resist backfilling loads and forces and the work shall be prosecuted expeditiously after it has commenced.

No pipe shall be backfilled above the top of the pipe until the pipe elevations, alignment and the pipe joints have been checked, inspected, and approved by the Engineer.

All pipes as soon as laid shall have the space between the pipe and the bottom and the sides of the trench backfilled to the spring line of the pipe with a select material. This material shall be thoroughly compacted by hand or mechanical means.

Backfill shall then proceed with the placement of select material in 6 inch layers to one foot above the top of the pipe. This backfill shall be compacted by mechanical compactor to not less than 95 percent Standard Proctor Maximum Dry Density.

If pipe trench is under or immediately adjacent to existing or proposed road or drive surfaces, the remainder of the trench shall be backfilled with select material in 8 inch layers to not less than 95 percent Standard Proctor Maximum Dry Density, using a mechanical compactor.

Where the native excavated is not considered suitable by the Engineer, the Engineer may authorize the replacement for such unsuitable material with contractor-furnished select backfill, and shall not be measured for a separate payment. All surplus or unsuitable material not used in backfilling shall be disposed of offsite by Contractor at his own expense.

262.03.6 – Utility Marking. All pipe installations require that utility marker tape (in addition to locator wire attached to nonconductive pipe) be buried in the backfill approximately 12 inches above the top of the pipe. Tape shall be permanently imprinted with an appropriate legend to identify the contents of the pipe (e.g. "Water Main Below".)

262.03.7 – General Requirements. All connections between pipe and fittings shall be made with an approved restrained joint system. In addition, all pipe joints within a distance which is tabulated in the Drawings from a fitting must also employ an approved restrained joint system. The assembly and installation of each restrained joint system shall be in strict accordance with the manufacturer's printed instructions and in the presence of a representative of the Engineer.

For all pipe sizes and types, install only full lengths of pipe adjacent to fittings, except in unusual circumstances.

Contractor must use care to prevent the entry of ground water or other contaminants into the water pipe, fittings, valves and appurtenances, either before, during, or after construction. Pipe delivered for construction shall be stored so as to minimize the entrance of foreign materials. All openings in the pipeline shall be closed with watertight plugs when pipe laying is stopped.

Connections to existing distribution system shall be made in a manner approved by the Engineer and shall be scheduled during times with the least inconvenience to customers and shall be accomplished in a timely manner with a minimum interruption of service. Contractor will be required to provide a minimum of 24 hours advance notification to customers where service will be interrupted. Contractor shall also provide advance notification to the Owner's water department and fire department.

Contractor shall verify size and type of existing water mains prior to connection of the new system. Necessary adapter fittings, glands, or special gaskets shall be furnished as needed to properly connect to the type of existing pipe or fitting encountered.

Where the project requires connection, removal, or any type of contact with existing asbestos cement pipe, Contractor shall comply with all local, state, and federal requirements for the cutting, handling, and disposal of asbestos cement pipe.

Contractor must coordinate the use of domestic water with the Owner. The Owner may allow Contractor to utilize water from the distribution system for the filling of the new water mains and a reasonable amount of water for wellpointing and initial flushing, without compensation. If, in the opinion of the Engineer and Owner, the Contractor did not take proper precautions in preventing debris and contaminants from entering the new system during construction or does not follow proper disinfection procedures as described in the latest revision of AWWA C651, the Owner reserves the right to assess charges to the Contractor for any excessive use of domestic water.

The new water mains shall be kept isolated from the active distribution system until satisfactory bacteriological testing has been completed and the disinfected water flushed out. All valves which separate existing in-service water mains from new water mains constructed under this contract shall remain closed at all times except when opened to fill or flush the new mains. A water-proof plastic tag shall be placed in each separation valve box, with the notice "Keep Closed at All Times." When valves are opened for filling or flushing, only one valve shall be opened at any one time, and only after a suitable flush point has been opened in the new system to relieve pressure and positively prevent the backflow of water from the new mains into the in-service mains.

Contractor shall be responsible for the proper handling and disposal of water discharged during flushing operations. All water discharged from the water system shall be disposed of in a manner that will not damage adjacent property, other work under construction, or adversely affect traffic or the general public. No water shall be discharged to the sanitary sewer collection system. Contractor shall advise and coordinate flushing of water mains with the Owner's water department and fire department and shall be performed in a manner that will not result in less than acceptable water pressure in the existing system. In case of fire or emergency, Contractor shall temporarily cease flushing operations.

262.03.8 – Hydrostatic Testing. Pressure and leakage testing shall be conducted on all pipe and appurtenances, including hydrants and water services, by the Contractor at his expense and in the presence of the Engineer or his representative. The hydrostatic test procedure used shall conform with the requirements of AWWA C-600, Section 4. The test shall be conducted by filling the pipe with clean water under a minimum pressure of 100 p.s.i. There shall be no visible leakage, nor shall the leakage exceed 9.5 gallons per 24 hours per inch diameter per mile as measured over a period of two hours. The Engineer reserves the right to select the line segments to be tested together as a unit, and may choose to separately test small segments if the test result for a larger segment is marginal.

262.03.9 – Disinfection. After completion of the construction and pressure testing of water distribution lines, hydrants, and water services, they shall be flushed and disinfected using at least a 50 mg/l free chlorine solution for 24 hours or as described in the latest revision of AWWA C651, Standard for Disinfecting Water Mains, and in a manner acceptable to the Mississippi State Department of Health. Disposal of heavily chlorinated water may require the Contractor to obtain a permit from the Department of Environmental Quality/Office of Pollution Control.

After final flushing and before the new water mains are connected to the distribution system, the Contractor shall arrange for microbiological water samples to be collected by a Certified Operator of the system, a representative of the Mississippi State Department of Health, or a certified technician of a laboratory certified by the Mississippi State Department of Health. At least one sample shall be collected from every 1200 feet of looped lines and from every dead-end line. No hose or fire hydrant shall be used in the collection of samples.

Water being collected for testing shall not have a chlorine residual higher than is normally maintained in other parts of the distribution system. No chlorine, which is a result of line disinfection, shall be present. A sample showing "No Coliform Present" shall constitute a satisfactory sample when analyzed by the Mississippi State Department of Health environmental laboratory or a laboratory certified by the Mississippi State Department of Health. The costs for all bacteriological sampling and testing shall be the responsibility of the Contractor.

If trench water has entered the new mains during construction or, if in the opinion of the Engineer, excessive quantities of dirt or debris have entered the new mains, bacteriological samples shall be taken at intervals of approximately 200 feet. Samples shall be taken of water that has stood in the new mains for at least 16 hours after final flushing has been completed.

If the initial disinfection fails to produce satisfactory bacteriological results, the new mains shall be reflushed and resampled. If check samples also fail to produce acceptable results, the mains shall be rechlorinated by the continuous-feed or slug method of chlorination as described in the latest revision of AWWA C651 until satisfactory results are obtained.

262.03.10 – Wastewater Disposal Method. The construction contractor shall submit for review and approval the method proposed for disposal of wastewater from hydrostatic tests and disinfection, prior to performing hydrostatic tests. Hydrostatic test and disinfection wastewater discharged to the storm sewer, sanitary sewer, or natural water stream shall not have a chlorine residual greater than 0.01mg/L.

262.03.11 – Separation of Water and Sewer Mains. Water mains should be laid at least 10 feet horizontally and 18 inches vertically from any sanitary sewer or manhole. The bottom of the water line should be at least 18" above the top of the sewer line. Water and sewer lines shall be constructed in separate trenches with adequate space for maintenance.

Where adequate horizontal separation cannot be maintained, the water main should be constructed of ductile iron with joints located at the maximum distance possible from sewer line joints.

Where the horizontal and vertical separation cannot be maintained, then the sewer main must be constructed to water main standards, in addition to the use of ductile iron for the water main.

Where water lines cross over sewer lines, the above requirements will be waived if pipe segments are centered to provide maximum spacing of the joints of both the water and sewer lines and the 18 inch vertical separation (water over sewer) is provided.

262.03.12 – Water Main Removal and Disposal Method. Contractor shall submit for review and approval a proposed schedule and method for the removal of sections or subsections of the existing water system. Also, Contractor shall submit for review and approval a proposed method of documenting the removal and disposal of existing mains in accordance with all applicable laws. Contractor shall maintain records and submit said records prior to any payment for removal of water mains.

262.03.13 – Gate Valves. Gate Valves shall be installed as detailed in the Drawings and in strict accordance with manufacturer's recommendations, along with restrained joint retainer glands and thrust blocking as indicated in the Drawings.

Where any gate valve shall be installed at a depth equal to or greater than 3.5 feet below finished grade, Contractor shall supply and install a valve key extension on the valve. The extension shall be securely

bolted or otherwise attached to the gate valve key per the recommendations of the manufacturer and as approved by the Engineer. Valve key extensions shall be installed plumb in the valve box and at a normal depth to allow easy operation of deep valves with a standard valve key.

262.03.14 – Fire Hydrants. Hydrants shall be installed as shown in the detailed drawings and in a manner that will provide complete accessibility and will prevent damage from vehicles. All hydrants shall stand plumb and shall have their pumper connections at right angles to the centerline of the road. Thrust block backings shall be constructed in strict accordance with manufacturer's recommendations.

Crushed stone or gravel shall be placed at the base of the hydrant to provide drainage.

After installation and prior to final acceptance the fire hydrants shall be painted above the ground line in accordance with AWWA Standard C-502. Color shall match existing hydrants in the project area, or as directed by the City's Engineer or his authorized representative. Multiple coats may be required to achieve uniform appearance if the hydrants are supplied by the manufacturer in a different color than desired.

It should be anticipated that some hydrants designed for bury depths greater than the standard 36 inches will be required, due to existing utility lines and/or ditch flowline elevations. Contractor may choose to utilize manufactured hydrant barrel extensions for some or all of the long-barrel hydrants.

262.03.15 – Water Services.

Where an existing residence or business is currently being serviced by an existing water service, it is Contractor's responsibility to physically locate the point where the existing service pipe crosses the property line (approximate location only - no surveys required). The existing water meter shall then be installed to this point. All work to locate the existing service and to make the final connection to it is included in "Long Service Connection"/"Short Service Connection".

Installation of all service line components (service saddle, corporation stop, tubing, and curb valve) shall be in strict accordance with manufacturer's recommendations. Service lines shall be laid deep enough to prevent damage from freezing, or during routine road or street maintenance, but not so deep as to require installing the line at an excessive angle in the meter box.

Service location reports will be furnished by the Engineer. Forms will be completed and submitted to Engineer by Contractor prior to any progress payments for water services.

It shall be Contractor's responsibility to keep active water service to any and all parcels which are in use or may be in use. Expenses associated with keeping the water service active at necessary lots shall be absorbed by Contractor. Damages to the newly constructed water services by the removal of the existing water mains shall be repaired at Contractor's expense.

262.03.16 – Line Stop Procedure. The contractor shall clean the exterior of the main to remove debris, corrosion deposits and other surface irregularities that might interfere with proper seating and sealing of the line stop fitting against the main.

Line stop fittings installed on slip joints or mechanical joint pipe require at least three standard lengths of pipe remain buried from the point of the line stop to where the line will be cut open. An alternate method is to anchor the line stop fitting in concrete. Line stop fittings shall be installed and pressure tested at 150 psi for 15-30 minutes prior to tapping the main.

Concrete support/anchor shall be installed after pressure test. Concrete support should extend to the "BEAM POINT or CENTER LINE" of the pipe main. This method should prevent movement laterally where the line is isolated and cut open.

Temporary line stop valve shall be installed into the line stop fittings (flanged tee may be mounted to the valve for temporary bypass). Drilling machine shall then be mounted to line stop valve, and the wet tap should be performed.

Once the coupon from the tap is retracted into the machine, the stop valve can be closed and the drilling machine can be de-pressurized and removed. Coupon shall be measured to verify pipe I.D. for sizing adjustments of the folding head stop sealing element.

Line stop machine shall then be mounted on stopping valve and line stop assembly, valve opened, and assembly entered into the pipe and the line stop performed.

Once the pipe main is de-pressurized, alterations can begin.

After alterations are completed, and the new line shall be sanitized. The line stop shall be re-pressurized, and the stopper head removed from the line stop and the valve closed.

Drilling machine with closure plug is mounted to stop valve. Valve is opened and the assembly is installed and locked into position inside the neck of the stop fitting.

The drilling machine shall then be removed, and blind flange shall be installed to the line stop fitting for completion of the job.

262.03.17 – Connection to Existing Water Mains. It is the intent of this contract that the new segments of water mains be constructed and pressure tested prior to connecting them to existing pipes. Temporary plugs and water service-type connections will be required to allow this.

Tapping Sleeves and Valves:

1. Installation of tapping sleeves shall fully conform with manufacturer's recommendations. The pipe barrel to be tapped shall be fully and carefully cleaned. Asbestos cement pipe shall be smoothed with a wire brush to ensure a tight seal of the gaskets against the pipe.
2. Before each sleeve is installed, the pipe barrel to be tapped shall be measured and the actual measured pipe O.D. shall be within the range recommended for the sleeve used.
3. The actual size of the hole cut in the pipe barrel shall be not more than 1/2 inch smaller than the nominal size of the branch connection (e.g., not less than 5 1/2 inches for a 6 inch tap). The drilling machine and shell cutter head used shall be specifically recommended for the type of pipe being tapped.
4. After the tap is complete and the tapping valve closed, the sleeve shall be bled of air and then visually checked for leakage before backfilling.

Connections made to existing water mains (other than those connections made with a tapping sleeve and valve), fittings, or stubs shall be made according to all the requirements in these Specifications. Necessary adapter fittings, glands, or special gaskets shall be furnished as needed to properly connect to the type of existing pipe or fitting encountered. Any cast or ductile iron fittings so used will be measured for separate payment as "Ductile Iron Fittings".

The Owner will assist Contractor by locating existing valves necessary to turn off the water pressure for a short period necessary to make the connection. Contractor shall provide at least 48 hours notice to the Owner for any outages. The Contractor may be requested to schedule some connections for a specific time of day or night, to reduce inconvenience to customers. The Owner and the Engineer do not guarantee that any specific sections of the water system can be isolated by closing existing valves.

After the new water main system is in service and all service connections are transferred, then the existing water mains replaced as a part of this Work shall be physically removed and disposed of in accordance with these Specifications.

Notice is given that some connections to and between the existing water mains which are to be abandoned may exist other than as shown in the Drawings. It is Contractor's obligation to find and disconnect all points of connection between the water mains to be removed and water mains which are to remain, whether shown in the Drawings or not.

The plans indicate certain existing fire hydrants and water valves which are to be removed. Fire hydrants so designated shall be removed in their entirety, including base elbow and bolted-on shut-off valve if so equipped. Valves may be "removed" by removing the 2" operating nut from the top of the valve and removing the valve box -- the entire valve need not be completely removed, unless this is needed to disconnect the water main. All materials removed shall remain the property of the Owner. They shall be delivered in good condition and unloaded at a location determined by the owner.

Where insertion valves or tapping valves are installed deeper than 3.5 feet below finished grade, Contractor shall supply and install valve key extensions in accordance with the requirements of "Gate Valves & Valve Boxes" in these Specifications.

262.03.17 – Separation of Water and Sewer Mains. Water mains should be laid at least 10 feet horizontally and 18 inches vertically from any sanitary sewer or manhole. The bottom of the water line should be at least 18" above the top of the sewer line. Water and sewer lines shall be constructed in separate trenches with adequate space for maintenance.

1. Where adequate horizontal separation cannot be maintained, the water main should be constructed of ductile iron with joints located at the maximum distance possible from sewer line joints.
2. Where the horizontal and vertical separation cannot be maintained, then the sewer main must be constructed to water main standards, in addition to the use of ductile iron for the water main.
3. Where water lines cross over sewer lines, the above requirements will be waived if pipe segments are centered to provide maximum spacing of the joints of both the water and sewer lines and the 18 inch vertical separation (water over sewer) is provided.

262.04 - Method of Measurement. Water distribution pipe, regardless of material type, will be measured as the number of linear feet of pipe in place, field measure, including locator wire and marker tape, regardless of depth, select bedding, select and general backfill, structure excavation, cleaning and disinfection, pumping, and testing. Contractor shall restore trenches and disturbed areas, dispose of unsuitable materials and perform grading and cleanup operations during the course of construction. Areas which are not properly cleaned up and maintained will not be approved for payment.

Where ductile iron pipe is required by the Drawings or directed by the Engineer, payment will also be measured as the number of linear feet of ductile iron pipe installed, field measure, including any necessary locator wire and marker tape, regardless of depth, select bedding, select and general backfill, structure excavation, cleaning and disinfection, pumping, and testing. Contractor shall restore trenches and disturbed areas, dispose of unsuitable materials and perform grading and cleanup operations during the course of construction. Areas which are not properly cleaned up and maintained will not be approved for payment.

Restrained pipe joints will not be measured separately for payment. Carrier pipe in pipe encasements shall be ductile iron, restrained joint pipe.

Removal of all water items shall be included in "Removal of Obstructions".

Distribution pipe fittings will be measured by the pound of fittings in place, including glands, bolts, and gaskets computed upon unit weights listed in AWWA C-110. This applies even if the fittings used are compact ductile iron fittings conforming to AWWA C-153.

Gate Valves will be measured per each. Valves used as fire hydrant isolation valves will not be measured under this item. Payment made for gate valves will be inclusive of all associated costs, including any

required valve key extensions. Where required, valve key extensions will not be measured for separate payment.

Adjustment of Water Meters shall be measured per each, for each respective diameter, as the number of actual services connected, regardless of the main's size. Service connections shall include all labor and materials necessary to result in a fully functioning water service, including but not limited to location and connection to existing water service, location and connection to existing/proposed water main, water service tubing, excavation, bedding and backfill, service saddles, corporation stops, curb stops, relocation of water meter, purchase of water meter due to damage by contractor, meter boxes, structure excavation, select bedding, and select or general backfill.

Location of and connection to existing water services will not be measured separately for payment.

Where directed by Engineer and in accordance with these Specifications, Contractor shall wash, bore, or jack water services under existing or proposed improvements. Such work shall be considered incidental to the installation of the new water services and shall not be measured for separate payment.

Fire hydrants shall be measured as the number of units in place, per each, including but not limited to mainline tee, excavation, bedding, concrete and reinforcement, saddle, sleeve, joint restraints, 6-inch gate valve and all appurtenances. No separate payment will be made for hot tapping.

Insertion valve shall be measured per each and shall include furnishing and installing valve and sleeve components, and all equipment, tools, labor, and incidentals necessary to complete the work.

Line stop valve shall be measured per each and include furnishing and installing all fittings, nuts, bolts, washers, blind flange, gasket, tapping sleeve, plugging after completion of the work and all equipment, tools, labor, and incidentals necessary to complete the work.

262.05 - Basis of Payment. This work will be paid for at the contract unit prices per unit specified, complete in place, which shall be full compensation for completing the work. Materials or work for which a pay item is not included and are necessary to complete the work under this section shall be furnished or performed and shall be considered incidental to the completed construction.

Payment will be made under:

907-262-A: 6" Ductile Iron Water Main	-per linear foot
907-262-A: Ductile Iron Fittings	- per pound
907-262-A: 6" Insertion Valve	- per each
613-D: Adjustment of Water Meter	- per each
613-D: Adjustment of Fire Hydrant	- per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-417-1

CODE: (SP)

DATE: 06/26/2019

SUBJECT: Polymer Cement Surface System

Section 907-417, Polymer Cement Surface System, is hereby added to and made a part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-417-POLYMER CEMENT SURFACE SYSTEM

907-417.01--Description. This work consists of furnishing labor, materials, and equipment required for the application of a polymer cement surface system (PCSS) on a prepared concrete surface. The polymer cement surface system shall provide skid and abrasion resistance, and the resulting surface may be patterned and/or monolithic as specified in the plans, or as directed by the Engineer.

907-417.02--Materials. Material for the PCSS shall meet the following requirements.

<u>Properties</u>	<u>Test Value</u>	<u>Test Method</u>
Compressive Strength, (28 days), psi, minimum	3,100	ASTM C 109
Tensile Strength, psi, minimum	700	AASHTO T 132
Bond Strength, psi, minimum	250	ASTM C 1583
Friction Number, minimum	45	AASHTO T 242
Length Change, percent, maximum	0.024	ASTM C 157

The Contractor shall furnish the Engineer with certified test reports showing that the material meets the requirements of the Specification.

When not installed by the Manufacturer, the Contractor performing the work shall be authorized by the Manufacturer to install the product. When someone other than the Manufacturer installs the product, the Contractor shall furnish the Engineer with an Authorized Applicator Certification or other documentation from the Manufacturer stating that the Contractor is certified to install the product.

A textured finished surface shall be required for the PCSS and shall be achieved with aggregate. Aggregate shall be selected such that it will produce a friction number of at least 45 in accordance with AASHTO: T 242 using a tire meeting the requirements of AASHTO: M 261. The Department will conduct a friction test within 30 days after installation to verify that the material meets a friction number of 45.

The color of the PCSS shall be similar to the color of the surface which it is to be applied and shall be approved by the Engineer prior to use. Any chemical admixtures and/or color pigments used, the dosage rates, and the conditions for use in the PCSS shall be approved by the Manufacturer.

The material shall be delivered to site in weatherproof containers and stored in a covered and ventilated location.

907-417.03--Construction Requirements.

907-417.03.1--Weather Limitations. The PCSS shall not be placed during periods of fog or rain. Should a rain event occur during installation, all operations shall cease and work shall not be resumed until dry conditions are present. Authorization to continue placement after a rain event shall be approved by the Engineer.

907-417.03.1.1--Cold Weather Limitations. The PCSS shall only be installed when the temperature of the concrete surface is at or above 50°F and expected to remain above 50°F for six (6) hours. There shall be no forecast ambient temperatures below 35°F within 24 hours from the time of placement. When the ambient temperature is below 50°F, but will remain above 40°F during PCSS installation, the PCSS can be placed only when Manufacturer approved accelerators are added to the mix and approval of the Engineer is obtained.

907-417.03.1.2--Hot Weather Limitations. The PCSS shall only be installed when the temperature of the concrete surface is at or below 130°F. When the ambient temperature exceeds 90°F, the use of cold water or ice should be considered for the blending operation at a rate approved by the Manufacturer. If the use of cold water or ice is not possible, then the use of a Manufacturer approved retarder may be permitted.

907-417.03.2--Surface Preparation. For proper adhesion, the concrete shall be dry, clean, and sound. Any spalls or failures in the concrete shall be repaired to the satisfaction of the Engineer and the Manufacturer. Cost of concrete repairs shall be included in the costs of the PCSS. The existing concrete shall be cleaned to a SSPC-SP13/NACE 6, Surface Preparation of Concrete, or better. The prepared surface shall be tested in accordance with ASTM C 1583 to assure proper adhesion. The minimum near-surface tensile strength of the substrate shall be 250 psi or failure in the substrate. If the test is being run on a concrete overlay that is to receive the PCSS instead of directly on the substrate, the failure mode shall also be 250 psi or failure in the substrate. Tests shall be conducted by the Contractor/Manufacturer in the presence of the Engineer. Upon successful completion of testing, the Contractor shall continue with mixing and placement as soon as possible to avoid contamination of the surface that may affect bonding of the PCSS to the concrete surface.

907-417.03.3--Mixing. The measuring and mixing operation shall be capable of producing a consistent homogeneous mix sufficient to maintain the production levels required for the work. The water and dry blend shall be charged into the mixer and blended to the desired consistency while maintaining effective temperatures to prevent flashing of the mix. Hand mixing in pails is not permissible.

907-417.03.4--Placing. The PCSS shall be uniformly deposited on the substrate by a device approved by the Manufacturer and Project Engineer, and have the capability of mixing the materials at a rate to ensure continuous application.

907-417.03.5--Base Coat. A base coat shall be applied to the prepared concrete surface at a rate recommended by the Manufacturer. Curing shall be required as recommended by the

Manufacturer prior to placing of the top coat. Once curing is complete, installation of the top coat shall begin immediately. There shall be no time differential between curing of the base coat and installation of the top coat.

907-417.03.6--Top Coat. A top coat shall be applied over the base coat. When a pattern is required, the pattern shall be specified in the plans. The combined cured thickness of the base coat and top coat should be between 1/8" and 3/16". The completed PCSS shall be tested to ensure proper bond strength with the substrate using ASTM C 1583, and the value obtained shall be a minimum of 250 psi or failure in the substrate.

907-417.03.7--Curing and Release to Traffic. Care shall be taken by the Contractor to protect the PCSS from traffic until the area is sufficiently cured. Curing time will vary depending on ambient and surface temperatures. At 70°F, curing time is approximately two (2) hours, with an increase in curing time as the ambient temperature decreases. The PCSS shall not be opened to traffic until it has reached a sufficient compressive strength such that the surface will not be damaged by vehicular traffic. A Manufacturer Representative, Certified Applicator, or the Engineer shall provide the final approval for release to traffic.

907-417.03.8--Equipment. Equipment used when installing the PCSS shall be designed for installing the material applied and suitable for use by the Manufacturer and Project Engineer.

907-417.03.9--Protection. Areas that are not to receive the PCSS shall be masked to protect the surfaces prior to application. The Contractor should also take the necessary precautions to protect other structures and the traveling public from any unwanted application.

907-417.03.10--Acceptance. The Contractor shall furnish a Manufacturer's certification stating that the material used is one acceptable for the product and the product has been installed in accordance with the Manufacturer's recommendations.

The Contractor shall furnish the Engineer with a test report verifying the results of ASTM C 1583 as addressed in Subsections 907-417.03.2 and 907-417.03.6.

When a component material, as indicated by a test result or poor performance, or the finished product indicate an inferior, unsatisfactory or unacceptable product, the work or materials shall be removed and replaced or otherwise corrected by the Contractor at no additional cost to the State in a manner satisfactory to the Engineer.

907-417.04--Method of Measurement. Polymer cement surface system will be measured by the square yard.

907-417.05--Basis of Payment. Polymer cement surface system, measured as prescribed above, will be paid for at the contract unit price per square yard, which price shall be full payment for all materials, tools, labor, testing, protection, and all incidentals necessary for completing the work.

Payment will be made under:

907-417-A: Polymer Cement Surface System

- per square yard

CITY OF HATTIESBURG

SPECIAL PROVISION NO. 907-616-2

CODE: (SP)

DATE: 08/25/2009

SUBJECT: Colored and Imprinted Concrete Median and Island Pavement

Section 616, Median and Island Pavement, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as amended by this special provision is applicable to Colored And Imprinted Concrete only.

907-616.01--Description. This work consists of furnishing all labor, materials, tools, tests, royalties, services and other incidentals as may be required for the good and proper completion of the colored and imprinted concrete island and median pavement.

The locations for colored and imprinted concrete island and median pavement are shown on the plans, but generally are limited to all proposed concrete islands and concrete median end noses.

The Contractor is advised of additional notes on the plans which call attention to particular requirements or conditions regarding colored and imprinted concrete island and median pavement.

Quality Assurance. Installation shall be performed by an installer with at least one year experience in the placement of colored and imprinted concrete paving systems.

907-616.02--Materials. Colored concrete materials and imprinting tool release agents shall meet the following requirements.

- A. Coloring Agents: Contractor may elect to color the concrete integrally, or may apply dry-shake to the surface of the freshly poured concrete. Whichever method is used, the coloring agent shall be a mineral oxide pigment approved by the Engineer.

Colors for colored and imprinted concrete shall be selected by the Engineer from Standard or Designer color charts, or an approved manufacturer's color charts.

- B. Curing and Finishing Material: Contractor shall utilize a color-matched curing and finishing material recommended by the manufacturer. Curing materials or methods for uncolored concrete shall not be used with Colored and Imprinted Concrete.
- C. Release Agent: Contractor shall utilize a dry-shake powder to facilitate the release of the concrete imprinting tools. The color of the release agent shall match the selected main coloring agent chosen by the Engineer for the concrete.
- D. Imprinting Tools: Tools shall be of high quality and shall provide uniform control of joint depth.

- E. Imprint Tool Pattern: The imprint pattern to be used for all concrete imprinting shall be a 4" x 8" brick herringbone pattern, with a 4" x 8" matching soldier course border used along the perimeter of all proposed concrete islands and median end noses. The Contractor shall reference the plans for pattern layout and orientation of the imprint patterns.

Once the color, method of coloring, and the imprinting tools have received approval from the Engineer, the Contractor shall provide a 4-foot square test panel, separate from proposed island and median end nose areas, to be reviewed and approved by the Engineer. Engineer will evaluate color as compared to color chart and texture of broom finish.

Subsequent test panels may be required, if the finish, imprint quality, or color is unacceptable to the Engineer. The Contractor shall remove unaccepted test panels immediately from site. Accepted panel shall remain until all colored concrete islands and median end noses have been completed by the Contractor, at which time the Contractor shall then remove the acceptable test panel from the site.

907-616.03.4--Handling, Measuring, Proportioning, and Mixing Materials. Should an integral coloring method be selected by the Contractor, the Contractor shall mix coloring agent in strict accordance with the approved manufacturer's written instructions. Copies of the manufacturer's written instructions shall be furnished to the Engineer prior to manufacture and placement of colored concrete.

Should a dry-shake applied coloring method be selected by the Contractor, the Contractor shall measure and apply coloring agent in strict accordance with the approved manufacturer's written instructions. Copies of the manufacturer's written instructions shall be furnished to the Engineer prior to manufacture and placement of colored concrete.

907-616.03.4--Protection and Curing. Protection and curing materials and methods of application for colored and imprinted concrete shall be in strict accordance with the approved manufacturer's written instructions. Copies of the manufacturer's written instructions shall be furnished to the Engineer prior to manufacture and placement of colored concrete.

907-616.04--Method of Measurement. Colored and imprinted concrete median and island pavement, completed and accepted, will be measured by the square foot or square yard. Test panels will not be measured for separate payment.

907-616.05--Basis of Payment. Colored and imprinted concrete median and island pavement, measured as prescribed above, will be paid for at the contract unit price per square foot or square yard, which price shall be full compensation for all labor, tools, materials, equipment, test panels, placement of concrete, imprinting the concrete, and all incidental necessary to complete the work.

Payment will be made under:

907-616-C: Colored and Imprinted Concrete Median and
Island Pavement, Thickness

- per square foot or
square yard

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-631-1

CODE: (IS)

DATE: 11/15/2017

SUBJECT: Traffic Signal Systems - General

Section 631, Traffic Signal Systems - General, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-631.02--Materials.

907-631.02.4--Operations. Delete the second paragraph in Subsection 631.02.4 on page 513 and substitute the following.

The Contractor shall conduct the work at all times in such a manner as to ensure the least possible inconvenience to the traveling public, and to property owners on the streets, alleys, and other public places where the construction will take place.

907-631.02.5--Electrical Service. Delete the first paragraph in Subsection 631.02.5 on page 515 and substitute the following.

It shall be the Contractor's responsibility to make the necessary arrangements with the local power company to provide the electrical service for any new installation. The Contractor shall pay for, at no cost to the Department, all deposits, hook-up charges, or other service fees required by the power company for the establishment of new service. The cost of all such fees shall be considered incidental and absorbed within existing pay items. The Department or the local agency will be responsible for payment of the monthly service bill for the new power service installation. It shall be the responsibility of the Contractor to swap the electrical service account over to the Department or local agency.

907-631.03--Construction Requirements.

907-631.03.2--Electrical Service Equipment. Delete the paragraphs of Subsection 631.03.2 on pages 515 and 516, and substitute the following.

The power supply assembly shall consist of all equipment mounted in a Power Service Pedestal as described in Subsection 722.13 or as otherwise shown in the plans. The configuration and installation of the equipment mounted on the assembly shall meet the safety requirements and approval of the utility company or municipality furnishing power for operation.

When required, service poles shall be provided by the Contractor and consist of wood poles with required pole line hardware, conduit, ground rods, guy wires and anchors and all other accessories and appurtenances mounted on the pole, except those items furnished by the utility company or

municipality, or as specified separately in the contract or plans. Costs of service poles shall be included in other items bids.

Main disconnect switches shall be separately housed on the power supply assembly. Circuit breaker cabinets and meters shall not be installed on the street or walk side of the pole or pedestal.

907-631.03.3--Performance Tests. Delete the second sentence of Subsection 631.03.3 on page 516.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-632-1

CODE: (IS)

DATE: 11/15/2017

SUBJECT: Traffic Signal Cabinet Assemblies

Section 632, Traffic Signal Cabinet Assemblies, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 632 on pages 517 thru 538, and substitute the following.

SECTION 907-632 - TRAFFIC SIGNAL CABINET ASSEMBLIES

907-632.01--Description. This work consists of furnishing, assembling, configuring and installing all component materials and software required to form completed traffic signal controller assemblies, closed loop master controller assemblies and signal system installation of the types specified, in conformity with these specifications, to ensure fully operational traffic signal installations as shown on the plans.

907-632.02--Materials.

907-632.02.1--Cabinet Assembly. Cabinet Assemblies shall meet the NEMA 3R requirements and be constructed principally of 0.125-inch thick, 5052-H32 aluminum. The aluminum shall have a mill finish per NEMA TS 2 7.7.3. Intermittent welds may be used for construction and any unwelded cabinet seams shall be sealed with clear RTV silicone. All external fasteners shall be stainless steel and no holes will be allowed in top of cabinet.

The door handles shall be stainless steel or cast aluminum. Door hinges shall be of the continuous type with a stainless steel hinge pin. Rivets are not be used to attach the hinge. The main door stop rod shall be constructed using stainless steel. The door stop mechanism shall be adjustable and capable of being securely latched in multiple opened positions including 90 degrees and a maximum of 120 degrees. The brackets attaching the stop rod to the door and cabinet shall be aluminum and welded in place. The main door cylinder lock shall be a #2 key type lock. Two (2) traffic industry standard No. 2 keys shall be provided with each cabinet and shall be made using heavy duty key blanks.

Extruded aluminum channels permanently attached to the right and left cabinet sides shall be provided for attaching adjustable shelving and mounting of other component panels. The cabinet shall have two (2) shelves installed. Both shelves shall be provided with the front edge pre-drilled with 0.25-inch holes located twelve (12) inches apart.

907-632.02.2--Physical Features.

907-632.02.2.1--Pull Out Drawer. A pull out drawer shall be installed and centered under the

bottom shelf. The drawer shall be made of 0.080-inch thick, 5052-H32 aluminum and come out on full extension drawer slides. The pull out drawer shall provide an approximate 16-inch x 14-inch working area and have the ability to bear a constant 25 pound burden. There shall be a compartment for document storage. The lid shall be hinged at the rear, to gain access to the storage area. The drawer will be used to store documents as well as support a notebook computer. The drawer slides shall be of the full extension ball bearing type. Dimensions of the drawer shall be large enough to support a notebook computer and a drawer of sufficient size to hold at least two (2) copies of the cabinet drawings and other related cabinet documentation. The surface of the lid shall have a non-slip surface.

907-632.02.2.2--Cabinet Lighting. Cabinets shall be provided with a minimum of two (2) white light LED modules. One (1) lighting module shall be installed along the front top section of the cabinet and the second lighting module shall be installed underneath the bottom cabinet shelf in such a location as to provide direct lighting of the load bay area of the cabinet but must not interfere with the cabinet drawer operation.

Both LED lighting modules shall be controlled by a NEMA rated, commercial quality, pushbutton door switch. The cabinet lighting shall turn on when the cabinet main door is opened and shall turn off when the main door is closed or an ON/OFF NEMA rated, commercial quality, toggle switch mounted on the inside cabinet door service panel shall be provided to turn both LED lighting modules on or off.

907-632.02.2.3--Police Panel Switches. Police panel switches shall be provided with all controller cabinets. All switches shall be hard wired and labeled as to their function.

NORMAL-FLASH: When this switch is in the FLASH position, all signal indications shall transfer to the flashing mode. AC power shall be removed from the load switches when the signal indications transfer to the flashing mode.

The controller unit shall operate in accordance with appropriate specifications during the flashing mode. When the switch is placed in the NORMAL position, transfer from the flash mode to normal operation shall be made in accordance with uniform code flash requirements.

SIGNAL ON-OFF: AC power shall be removed from the signal heads and the intersection will become dark when this switch is in the OFF position.

MANUAL CONTROL ON-OFF: When this switch is in the ON position, a logic ground shall be applied to the manual control enable input of the controller unit.

INTERVAL ADVANCE INPUT JACK: A manual jack shall be installed on the police panel. The jack shall inter-mate with a 3-circuit, 1/4-inch diameter phone plug. The tip and ring (middle) circuits of the jack shall be connected to the logic ground and the interval advance inputs of the controller unit. When the manual hand cord is plugged into the jack and the pushbutton is pressed, logic ground shall be connected to the interval advance input of the controller unit.

When specified in the contract documents, an interval advance cord shall be provided. The cord

shall have a minimum length of three (3) feet. It shall have a ¼-inch diameter, three circuit plug connected to one end and a manual pushbutton enclosed in a hand-held enclosure at the other end. A complete cycle (push-release) of the manual pushbutton shall terminate the controller unit interval which is active except the vehicular yellow and red clearance intervals. Cycling the pushbutton during the vehicular yellow or all red clearance intervals shall not terminate the timing of those intervals.

907-632.02.2.4--Service Panel Switches. Service panel switches shall be hard wired and clearly labeled to identify as to their functions. Service panel switches shall be mounted on the service panel located on the inside of the main cabinet door. Alternate switch locations may be described in the plans or contract documents but final switch design and location shall be approved by the Engineer prior to cabinet fabrication.

NORMAL-FLASH: When this switch is in the FLASH position, all signal indications shall transfer to the flashing mode. AC power shall be removed from the load switches when the signal indications transfer to the flashing mode.

The controller unit shall operate in accordance with appropriate specifications during the flashing mode. When the switch is placed in the NORMAL position transfer from the flash mode to normal operation shall be made in accordance with uniform code flash requirements.

CONTROLLER ON-OFF: When this switch is in the OFF position, AC power shall be removed from the controller. When this switch is returned to the ON position, the controller unit shall perform normal start up functions and resume normal operation in accordance with the applicable specification.

STOP TIME-RUN-NORMAL: A 3-position manual switch shall be provided which places the controller into Stop Time mode manually or through remote input.

VEHICLE DETECTORS: A 3-position switch shall be provided for each vehicle and pedestrian detector circuit. All switches shall be located on a panel mounted on the inside of the main cabinet door. The switch panel shall be labeled CALL SWITCH. Labeling of phase number and intended function (vehicles or pedestrian calls) shall be provided for each switch.

The vehicle detector switch functions are defined as follows:

Locked Call	Call is continually placed into the controller unit.
Off (center)	Vehicle detector is connected to the controller unit vehicle detector input, i.e. normal detector operation.
Momentary Call	Call is continuous as long as the switch is manually held in this position.

907-632.02.2.5--Police and Service Panel Locations. The police and service panels shall be constructed of 5052-H32 0.125-inch thick aluminum.

The police panel shall be located behind the police door which is enclosed within the main door.

The police door shall be hinged and provided with a neoprene gasket seal. Access to any portion or equipment contained behind the main cabinet door shall not be accessible through any part of the police panel. The police panel shall be of appropriate dimensions to accommodate all switch or devices described within this specification, the plans or contract document. The police door shall be provided with a treasury #2 key type lock and two (2) keys for the police door lock shall be provided with each cabinet.

The service panel shall be mounted on the inside portion of the main cabinet door, adjacent to the back side of the police panel or on the left hand side of the cabinet.

907-632.02.2.6--Cabinet Ventilation. Cabinets shall be vented to allow dissipation of the heat generated by the equipment contained within. All cabinets shall have a thermostatically controlled exhaust fan located at the top of the cabinet that is capable of 100 cubic feet per minute air displacement. The thermostat shall be mounted on the inside top of the cabinet and shall have a nominal temperature range from 80°F to 170°F.

The intake vent shall be louvered or equivalent design to prevent rain infiltration. The vent area will be located along the bottom portion of the cabinet door. A 16-inch x 12-inch x 1-inch disposable pleated air filter shall be provided on the inside portion of the cabinet and shall fully cover the vent area.

907-632.02.2.7--Air Filter Assembly. Air filters shall be one piece and shall be held firmly in place against the cabinet door in order to prevent dust from bypassing the perimeter of the filter and shall fully cover the vent area. Wing nuts or thumbscrews are preferred. Air filter shall be a 16-inch x 12-inch x 1-inch disposable pleated filter.

907-632.02.2.8--Cabinet Sizes.

907-632.02.2.8.1--Type I Cabinet. A Type I cabinet, 51"H x 30"W x 18"D, may be used for both pole and base mounted cabinets that require a maximum eight (8) position load bay. Pole mounted cabinets do not require rear access.

907-632.02.2.8.2--Type II Cabinet. A Type II cabinet, 51"H x 36"W x 18"D, may be used for both pole and base mounted cabinets that require a maximum twelve (12) position load bay. Pole mounted cabinets do not require rear access.

907-632.02.2.8.3--Type III Cabinet. A Type III cabinet, 56"H x 44"W x 27"D, shall be used for base mount installations and shall require a sixteen (16) position load bay and rear access door.

907-632.02.2.8.4--Type IV Cabinet. A Type IV dual chamber cabinet, 56"H x 57"W x 29"D, shall be used for base mount installations and shall require a sixteen (16) position load bay, rear access door, and external generator plug. When called for in the plans, a UPS shall be housed inside this cabinet.

907-632.02.2.8.5--Type V Cabinet. A Type V cabinet, 77"H x 44"W x 27"D, shall be used for base mount installations and shall require a sixteen (16) position load bay and rear access door.

907-632.02.3--Power Distribution Panel. The power panel shall be wired to provide the necessary power to all equipment. It shall be manufactured from 0.125-inch thick, 5052- H32 aluminum. The power panel shall house the following components: Main Breaker, Auxiliary Breakers, and Terminal Block. The panel shall be of such design so as to allow a technician to easily access the main and auxiliary breakers.

A 3-position terminal block with a removable insulated cover accepting up to AWG #4 stranded wire shall be supplied for accepting only the incoming power lines. This terminal block shall be in advance of and supply only the 30-amp main breaker, 10-amp and 5-amp Auxiliary breakers, AC neutral buss and earth ground buss.

907-632.02.3.1--Ground and Neutral Busbars. Cabinet grounding shall meet the requirements set forth in Subsection 722.09 for grounding and ground rods. A solid copper ground busbar shall be mounted on the side of the cabinet wall adjacent to the power panel for the connection of chassis ground wires. If more than one (1) ground busbar is used in a cabinet, a minimum of an AWG #6 copper wire shall be used to bond them.

The copper ground busbar shall have a minimum of thirteen (13) connector points, each capable of securing at least one (1) AWG #6 conductor.

A solid copper neutral busbar shall be mounted on the side of the cabinet wall adjacent to the power panel for the connection of AC neutral wires.

The copper neutral busbar shall have a minimum of thirteen (13) connector points, each capable of securing at least one (1) AWG #6 conductor.

907-632.02.3.2--Terminal Strips. Conductors shall be terminated on terminal strips with insulated terminal lugs. When two (2) or more conductors are terminated on field wiring terminal strip screws, a terminal ring lug shall be used for termination of those conductors. The voltage and current rating of terminal strips shall be greater than the voltage and current rating of the wire which is terminated on the terminal strip.

907-632.02.3.3--Cabinet Receptacles. A 3-wire 115 Volt AC (15A) Ground Fault Circuit Interrupt (GFCI) duplex receptacle shall be provided in the cabinet for maintenance use. It shall be securely mounted near the bottom right side of the cabinet and easily accessible.

Two (2) 3-wire 115 Volt AC (15A) non-GFCI protected outlets shall be installed, one on each side of the cabinet. These two (2) outlets are used for communication or other auxiliary equipment.

907-632.02.3.4--Operating Line Voltage. All equipment shall be designed to operate from a 120 volt, 60 cycle AC supply. Operation shall be satisfactory at voltages from 105 volts to 130 volts. All operating voltages into and out of the controller shall be NEMA level DC voltages except for the controller AC power source (Connector A, Pin p – AC-Control and Pin U – AC Common).

907-632.02.3.5--Circuit Breakers. Circuit breakers shall meet the requirements set forth in

Subsection 722.07. A 30-amp main breaker, with a minimum of 10,000 amp interrupting capacity, shall be provided for all cabinets to supply power to the controller, MMU, signals, and rack power supply.

Two (2) auxiliary breakers shall be provided. The first breaker, 10-amp, shall supply power to the fan, light, GFCI utility receptacle and two (2) auxiliary standard receptacles. The second breaker, 5-amp, shall be installed to supply power for the Controller Unit and MMU2. The above circuit breakers line side shall be jumpered together and will be fed from an external main circuit. A third 5-amp breaker shall be required if an ITS camera panel is called for in the plans.

907-632.02.3.6--Main Line Arrestors. Surge protection shall be provided that meets the requirements set forth in Subsection 722.12. A main line arrestor shall be provided to reduce the effects of voltage transients on the AC power line. It shall be installed after the circuit breaker. The main line arrestor shall be sufficient to protect all equipment and devices as per the plans and the following minimum specifications.

- Multi-stage Hybrid Design
- Series induction filtering
- Thermally protected Metal Oxide Varistors (TMOV's)
- Operating Voltage: 120 VAC
- Clamping Voltage: 395 VAC
- Operating Current: 15 A
- Peak Surge Current: 50 kA/Mode, 100 kA/Phase
- Operating Frequency: 47-63Hz
- EMI Attenuation: 40 dB Typ
- SPD Technology: TMOV's w/ W-C Filter
- Modes of Protection: L-N, L-G, N-G
- Status Indication: Power On & TMOV's Functional
- Connection Type: ¼-20 Stainless Steel Stud
- Operating Temperature: -40°F to +185°F

907-632.02.3.7--Solid State Main Line Relay (SSR). A normally-open, 75-amp, hybrid SSR shall be provided on the power distribution panel. The relay shall include a LED indicator to verify circuit power.

907-632.02.4--Terminal Facilities Board. The Terminal Facility shall be a hardwired load bay for NEMA TS 2 Type 1 actuated controllers. The load bay shall include either eight (8), twelve (12) or sixteen (16) load switch positions, as specified by the plans, and shall be centered along the back of the cabinet below the bottom shelf.

All wires terminated behind the backboard, as well as any additional panels, shall be soldered. No pressure or solderless connectors shall be used, unless they are soldered to the wire and tab after connection.

907-632.02.4.1--Load Switches and Flashers. Solid State Load Switches, compatible with low

wattage LED signals, shall be provided for the sequence called for on the plans. The load switch sockets shall be wired for triple-signal load switches conforming to NEMA TS 1-1994 and NEMA TS 2-2003 requirements.

The flasher socket shall be wired for and provided with a Type 3, two (2) circuit Solid State Flasher conforming to NEMA TS 1-1994 and NEMA TS 2-2003 requirements. It shall be possible to flash either the amber or red indication on any load switch outputs. It shall be possible to easily change the flash indication from the front side of the panel using readily available tools such as a screwdriver. A nominal flash rate of 50 to 60 FPM shall be provided. Flash rate shall be stable when used with generators or inverters.

Support(s) shall be provided to support the Flasher and Load Switches at some point approximately half of the total length from the panel surface. Sufficient area beneath the Load Switch or Flasher shall be clear in order to allow for free flow of air across the Load Switches or Flasher. Load Switches and Flashers must be provided with LED indicator lights on the side facing the cabinet door.

907-632.02.4.2--Flash Transfer Relay. All flash transfer relays, as a minimum, shall meet NEMA TS 1 requirements. The number of relays that shall be supplied with each cabinet shall accommodate the number of signal phases as indicated in the project plans. The coil of the flash transfer relay must be de-energized for flash operation.

907-632.02.5--Cabinet Wiring. Controller cabinets shall be wired in accordance with the signal phasing plans. If phases are indicated as omitted for future use, or if phases are not shown to be used in the plans, the cabinet shall be wired for use of the phases shown as future or unused. Load Switches shall not be provided for future or unused phases.

Wiring in the cabinets shall conform to the requirements of the National Electrical Code (NEC) and all of these specifications. All conductors in the cabinet shall be stranded copper. All wiring shall be laced. All wiring shall be in accordance as specified by Section 636 and Subsection 722.03 for Electric Cable and IMSA Specification 19 and/or 20 for Signal Wiring.

Connector harnesses for controller, conflict monitor, vehicle detectors, and accessory equipment (including NEMA defined Card Rack with power supply and pre-wired optical detection slots) shall be provided and wired into the cabinet circuitry. Connecting cables for controller and conflict monitor harnesses shall be sleeved in a braided mesh. All wires shall be securely terminated on terminal strips. The lay of the interconnect cable between the components must be such that when the door is closed, it does not press against the cables or force the cables against the various components inside the cabinets.

All communication wiring shall be bundled and routed independently of all other wiring. All live conductors shall be covered with suitable insulating material. All equipment grounds shall run directly and independently to the grounding bus.

All wires shall be cut and terminated as close as possible to the proper length before assembly. Consideration of equipment location adjustments must be made when determining appropriate

wire lengths. Excessive lengths of wire or cable shall not be allowed. All line voltage conductors used in controller cabinet shall conform to the following color code:

AC Neutral: White
AC Hot: Black
Safety Ground: Green

907-632.02.5.1--Signal Terminal Arrestor Grounding Bar. A field terminal arrestor grounding bar shall be provided along the back portion of the cabinet for the installation of signal arrestors. This bar shall be attached using an AWG #10 stranded copper to the earth ground circuitry.

907-632.02.5.2--Signal Terminal Arrestors. The field terminal arrestor shall be a three (3) circuit protective device intended for use on traffic control load relay outputs. The arrestor shall be furnished with three (3) leads and a grounding stud which will be used to attach the arrestor to the grounding bar. The field terminal arrestor shall meet the following minimum specifications:

- Operating Voltage: 120 VAC
- Clamping Voltage: 475 VAC
- Peak Surge Current: 10 kA
- Operating Frequency: 47 – 63 Hz
- SPD Technology: MOV's
- Connection Type: Wire Leads
- Lead Wire: 14 AWG 12" Length
- Ground Stud: 10 x 32 5/8" Length
- Operating Temperature: -40°F to +185°F

907-632.02.6--Accessory Components.

907-632.02.6.1--Traffic Actuated Controller Unit. The fully actuated controller unit shall, at a minimum, meet the requirements of both NEMA TS 1–1989 and NEMA TS 2-2003 requirements for actuated controller units. The controller shall be of the TS 2 Type 2 configuration. The controller shall be provided with the multiple communication interface devices or properties as defined below.

- 10 Base-T Ethernet with front panel RJ-45 connector
- IEEE defined MAC address
- EIA-232 port
- External Serial Fiber options for both single and multi-mode (optional as per plans)
- External FSK 1200 bps modem (optional as per plans)
- D connector with 37 pin configuration for TS 1 compatibility
- USB port for signal controller database upload/download to the controller flash
- Controller
- ECOMM Compatible

The controller unit must have an alphanumeric backlit LCD display with a minimum of sixteen

(16) lines at 40 characters per line. The controller must be air-cooled with sufficient ventilation openings and capable of operating between -30°F and 165°F. The controller unit must be provided with a time-of-day clock, automatic daylight savings time adjustment and a power supply for maintaining SRAM during a power outage. The controller unit shall be capable of being used in a Closed-Loop System and must be capable of operating in the role of master controller in a Closed Loop System. The controller unit firmware shall be fully compatible with the Department's existing Traffic Signal Management Software. The Contractor shall ensure all controller firmware versions are compatible with the existing Traffic Signal Management Software that the Regional Department staff currently utilizes prior to submitting the controller for approval. The Contractor shall notify the Department if any special controller configuration or firmware is needed prior to submitting the controller for approval based on project requirements.

Where Flashing Yellow Arrow (FYA) operations are being used, all traffic signal controller firmware shall be capable of delaying the onset of the flashing yellow arrow.

All operator entered data shall be stored and backed up on to a flash memory device provided with the controller unit at no cost. This flash memory device shall require no battery to support value storage. No internal components of circuitry shall require battery support. The database shall be able to be backed up to a USB drive via the USB drive on the controller.

Traffic Actuated Controllers shall be of the Type shown on the plans. Type 1 Controllers shall have a Linux based processor and a minimum of one (1) USB port. Type 2 Controllers shall have the same features as Type 1 Controllers with the addition of an ATC backplane.

Type 3 Controllers shall have all features of the Type 2 Controller with the addition of the ATC module. All three (3) types of actuated controllers shall have Master controller capability, and if required shall be designated with 'M' in the plans.

907-632.02.6.2--Closed Loop Master Controller Unit. When called for in the plans, this work also consists of furnishing, installing and configuring the equipment, software and accessories necessary to connect one (1) traffic Closed-Loop Master Controller to its corresponding central or portable PC-based Traffic Computer Facility Control System via a communications connection. The communications or network connection device will be either existing or provided by the Contractor.

907-632.02.6.2.1--General. The Master shall monitor intersections in the system, display status and operational state and provide traffic flow data from intersection vehicle detectors. The Master shall include all communications equipment and software necessary to provide reporting to a remote terminal as well as upload/download of all local intersection data and provide timing synchronization. Communications to local controllers from the Master and from the Master to the central-office computer facility shall be by FSK, 900 MHz Radio, Broadband Radio, Serial Fiber, Ethernet, Fiber, Cell Modem or Leased Line, as indicated in the plans. The Master shall be able to run on the same controller simultaneously operating the intersection, with the local signal control software, on any given controller unit.

907-632.02.6.2.2--System Configuration. The system architecture shall be designed to minimize

the effect of equipment failures on system operation and performance. The system consists of four (4) principal elements:

- Local System Intersection Controllers
- Communication (Telemetry Links)
- On-Street Master(s)
- Central-Office Computer Software

907-632.02.6.2.3--Local System Intersection Controller. The local system intersection controllers connected to the Master controller unit shall be capable of controlling a fully actuated two (2) to sixteen (16) phase intersection and shall meet or exceed NEMA TS 1-1989 and TS 2-2003 standards for fully actuated traffic control units. The local controller shall have internal communication capability with direct access to the data memory. The local system controller shall be capable of processing controller and detector data and provide all necessary intersection control functions. The local system intersection controller shall meet the requirements of the Traffic Actuated Controller Unit.

907-632.02.6.2.4--Communications (Telemetry) Links. The communications links for the "Closed-Loop" System shall perform the following functions:

- Provide the medium (radio/fiber/hardwire/etc.) for two-way communications between the On-Street Master and the local intersection controllers.
- Provide the medium for two-way communication between the On-Street Master and the central-office computer facility.
- Error checking shall be included in both mediums to assure transmission and reception of valid data.

907-632.02.6.2.5--On-Street Master. The On-Street Master may be located at an intersection and connected via the communication network to at least 32 local intersection controllers. The Master shall be capable of implementing Traffic Responsive Control, Time Base Control, Manual Control or Remote Control modes of operation.

Analysis of sampling sensor data from at least 64 system detectors and corresponding selection of the best Traffic Responsive timing pattern shall be provided by the On-Street Master during the Traffic Responsive mode of operation.

Automatic and continuous monitoring of system activity shall be provided by the On-Street Master to include both Master and intersection alarm conditions.

System parameter entry shall be provided via the On-Street Master including all Master and local intersection assignment and group parameters. Master parameters shall include:

- System coordination setup and pattern data entry by group
- System time base event scheduler
- System traffic responsive computational and pattern selection setup by group
- Intersection system group and detector assignments

The On-Street Master shall provide comprehensive system report generation including, as a minimum: system, intersection, detector and failure status and history reports in addition to system performance reporting.

A RS-232C interface shall be provided on the On-Street Master to allow for printing of reports or for interconnecting to a remote central site.

To enhance overall system operation and increase system management flexibility, the On- Street Master shall also support two-way dial-up communications to a central office computer for control, monitoring, data collection and for timing pattern updating purposes, all from a remote central office location. Continuous, seven (7) days/week - 24 hours/day, system monitoring shall be enhanced by the On-Street Master's capability to automatically dial-up the central office computer upon detection of user defined critical alarm conditions.

907-632.02.6.2.6--System Functional Requirements.

907-632.02.6.2.6.1--Operator Interface. In order to provide ease in programming and operation, the system shall provide a simplified user-friendly menu format at each local, master and central office facility. No special programming skills shall be required for the user to fully access and operate this control and monitoring system at any level.

All programming, both of the local intersection controllers and the On-Street Master(s) shall be via a front panel keyboard and display, driven by English Language menus. All data change entries will be automatically verified against established ranges prior to acceptance to prevent programming data errors. Data access shall be controlled by user- definable access controls.

907-632.02.6.2.6.2--System Traffic Control. The system shall have the capability of controlling a minimum of sixteen (16) vehicle phases and eight (8) pedestrian phases. The system shall have the capability of implementing a minimum of four (4) timing rings, fifteen (15) alternate sequences, and sixteen (16) offsets.

The system shall provide the capability of selecting any of the following operational modes on a group basis:

- Traffic Responsive
- Time Base (Time-of-Day/Day-of-Week)
- Remote (External Command)
- Manual (Operator Entry)

The system shall be capable of implementing system FLASH and system FREE operation. The system shall have the capability to command, on/off based on time, up to eight (8) independent special functions.

907-632.02.6.2.6.3--Detectors. The system shall have the capability of accepting and processing data from at least 632 system detectors for Traffic Responsive program selection.

907-632.02.6.2.6.4--Pattern Selection. In addition to providing Manual and Remote program selection capability, the Master shall provide for Traffic Responsive and Time Base modes of operation for timing pattern selection.

907-632.02.6.2.6.4.1--Traffic Responsive Mode. Traffic plan selection in the Traffic Responsive mode shall be user-enabled and supplied with the controller, per the plans and specifications. The pattern selection shall be based on sampling detector volume and occupancy analysis by the On-Street Master.

907-632.02.6.2.6.4.2--Time Base Mode. The system shall provide the capability of implementing time-of-day, day-of-week and week-of-year control for each of the two (2) groups using an internal time clock referenced to the 60-Hz AC power line frequency for its time base. The Time Base mode shall contain automatic adjustment for leap year and daylight savings time changes.

The system Time Base mode shall provide, as a minimum, 100 events each capable of requesting any of the 48 traffic control patterns along with Traffic Responsive override enable or auxiliary events consisting of enable/disable any of up to four (4) system-wide special functions and setting sample and log interval time periods.

907-632.02.6.2.6.5--System Control Priority. The system coordination control (program-in-effect) for each group shall be selected on a priority basis. The priority from highest to lowest shall be as follows:

- Manual Control Entry
- External Control (Remote Command)
- Time Base Control (Time-of-Day/Day-of-Week) (Traffic Responsive control will prevail whenever Traffic Responsive Override Enable is active and the selected cycle length is greater than that being commanded by Time Base)
- Traffic Responsive Control

907-632.02.6.2.6.6--Measures of Effectiveness. The system shall have the capability to report selected Measures of Effectiveness (MOE's) on an intersection basis. MOE calculations shall be made on all phases by the local system intersection controller and as a minimum shall include measures such as: volume, number of stops, delays and green utilization. These measures shall be calculated on the basis of the active timing plan. Alternate ways of reporting MOE'S may be approved on a case-by-case review.

907-632.02.6.2.6.7--Uploading and Downloading. The system shall provide, for any selected local system intersection controller, the capability of uploading and downloading any or all, new or modified local intersection parameters from the central-office computer and the Department Central Traffic Signal Management Software, and shall include, as a minimum, all: Phase Timing and Unit Data; Coordination Data, Time Base Data; Preemption Data, System Communication Parameters, System Traffic Responsive Data, and any other System Data residing at the intersection such as Detector Diagnostic Values, Report Parameters and Speed Parameters.

During either uploading or downloading operations, normal traffic control operations shall not be suspended. All data shall be continually accessible and may be displayed at the On- Street Master or the central office computer.

907-632.02.6.2.6.8--System Monitoring and Diagnostics. The system shall automatically and continually monitor system activity and log/report occurrences of Master and intersection alarm conditions. All alarm condition events shall include at the intersection, (Master and central-office computer) an alpha-numeric description of the event as well as the time and date of occurrence.

As a minimum, monitored master alarms conditions shall include:

- Insufficient or Improper Data
- Failed Computational Channels
- Failed System Detectors
- Intersection Communication Failure
- Failed Controllers
- Minimum of six (6) special user defined alarms for user application flexibility
- Monitored intersection alarms conditions shall include as a minimum:
 - Cycle Faults and Failures
 - Coordination Failures
 - Voltage Monitor
 - Conflict, Local and Remote Flash Conditions
 - Preempt
 - Local Free
- Minimum of six (6) special user defined alarms for additional user flexibility.

When the Master detects a critical alarm condition, as defined by the user, it shall automatically dial-up the central office computer and report the condition. On a BUSY or NO ANSWER, the system may be programmed, at user option, to alert a secondary computer.

The system shall also automatically and continually monitor, verify and attempt to correct Sync Pulse, Time Base Clock and Pattern-In-Effect. The system shall provide capabilities to perform diagnostics on system and local detectors, communications and intersection operations. When a fault has been detected, an indication shall be provided. It shall be possible to isolate the fault to the failed unit from controls and indicators available on the Master unit. Auxiliary equipment such as a data terminal or CRT shall not be required to identify the failure.

907-632.02.6.2.6.9--Real Time Display. The Master shall provide for any selected local system intersection controller, real-time status information on its front panel. Real-time intersection status information shall include simultaneous display of: vehicle and pedestrian signal and detector status by phase, overlap signal status and cars waiting count by phase. Real-time controller status information shall include simultaneous display of: two (2) Ring Active timers, On/Next, Call/Recall and Hold/Omit Status by phase, Coordination, Preempt and Stop Time Status.

907-632.02.6.2.6.10--System Management. The system, without hardware changes but with its

ability to directly modify Master and intersection parameters, shall provide the user system configuration and operational controls of the following functions: add/delete controllers and system detectors, enable Traffic Responsive mode, assign intersections to groups, assign system detectors to computational channels and channels to pattern select routines, and assign special and/or standard detectors as system detectors for use with computational channels or to track activity.

907-632.02.6.2.6.11--System Logging and Reports. The system shall automatically and continually process system data and log/report on occurrence of changes in intersection status, system detector status, communications status, controller status and local detector status in addition to system program changes, Traffic Responsive computations, measures of effectiveness and performance.

907-632.02.6.2.6.12--Security. The On-Street Master shall provide for a user-specified security code entry before any data may be altered. In order to view any parameter, security code entry shall not be required. Security access shall be automatically rescinded approximately ten (10) minutes after either access was gained or the last parameter change was entered. The Master and local controller shall have the ability via keyboard to disable security code requirements, allowing for perpetual access without requiring hardware changes.

907-632.02.6.2.7--Design Characteristics. The On-Street Master shall be designed to operate in either an office or field environment and shall be suitably housed in a separate enclosure or in a local intersection cabinet. The Master shall be designed to meet the following electrical and mechanical requirements:

907-632.02.6.2.7.1--Programming and Security. Operator programmable data entry shall be accomplished through panel keyboard(s). The Master shall prevent the alteration of keyboard set variables prior to the user having entered a specific access code through the keyboard. The Master shall maintain user-programmable variables in non-volatile memory with a battery-backed RAM to assure continued efficient system operation.

907-632.02.6.2.7.2--Test and Repair. To enhance maintenance and trouble-shooting activities, On-Street Masters shall include resident diagnostics as a standard. No extender- cards, special tools or PROMs shall be necessary to fully maintain these components. The Master unit design shall ensure that all printed circuit boards be readily accessible for maintenance testing purposes. All fuses, connectors and controls shall be accessible from the front of the Master unit.

907-632.02.6.2.8--Traffic Signal System Software. All Traffic Signal System Software shall be compatible with the latest version of the Department's existing Master and local controllers and existing Traffic Signal Management Software for the Department region.

907-632.02.6.2.8.1--Traffic Signal Closed Loop Software. The Traffic Signal Closed-Loop Software shall provide the ability to manage Master and local controller databases including the uploading and downloading of data parameters. The software shall provide status information and provide reporting capabilities for Master and local controller data, alarms and logs.

907-632.02.6.2.8.2--Traffic Signal System Workstation Software. The Traffic Signal System Workstation shall provide the ability to manage Master and local controller databases including the uploading and downloading of data parameters. The software shall provide status information and provide reporting capabilities for Master and local controller data, alarms and logs.

The Traffic Signal System Workstation Software shall also be capable of operating as a network-connected user workstation to existing centralized signal systems and their associated databases.

When disconnected from the centralized signal system, the software shall be capable of running as a standalone system similar to the Closed-Loop Software. Under this mode, the software shall provide management, report and status functions for Master and local controllers. Under Standalone Mode of operation the software shall allow for its own database(s) for data management without the need for connecting to a centralized signal system database.

907-632.02.6.2.9--Services. Technical services shall be provided, as required, to assist in installation and initial setup of the Closed-Loop Master System and its sub-components. Technical assistance with database migration and/or setup, as well as the development of graphics (such as master maps and local intersection depictions) and the assignment of associated attributes such as detectors, phasing, signals, etc., shall be provided as required. Additionally, training shall be provided on a basic or advanced target user level, as required.

907-632.02.6.3--Malfunction Management Unit (MMU2). The Malfunction Management Unit (MMU2) shall be a shelf-mountable, sixteen (16) channel, solid-state, IP addressable MMU. The MMU2 shall accomplish the detection of, and response to, improper and conflicting signals and improper operating voltages in a traffic signal controller assembly, including support for four (4) section Flashing Yellow Arrow (FYA) left turn displays. The MMU2 shall be capable of running a minimum of twelve (12) different modes of FYA operation.

The MMU2 shall meet or exceed Section 4 requirements of the NEMA Standards Publication No. TS 2-2003 including NEMA TS 2 Amendment #4-2012 and provide downward compatibility to NEMA Standards Publication No. TS 1-1989: Type 12 Operation, in addition to those specifications set forth in this document.

The MMU2 shall include a graphics based Liquid Crystal Display (LCD) to view the current monitor status and navigate the unit's menus. An RJ-45 Ethernet Port shall be provided for communications.

A built-in Diagnostic Wizard shall be provided that displays detailed diagnostic information regarding the fault being analyzed. This mode shall provide a concise view of the signal states involved in the fault, pinpoint faulty signal inputs and provide guidance on how the technician should isolate the cause of the malfunction. The Diagnostic Wizard shall be automatically invoked when the MMU2 is in the fault mode and the HELP button is pressed. It shall also be automatically invoked when the MMU2 is in the Previous Fail (PF) event log display and the HELP button is pressed.

A built-in Setup Mode shall be provided that automatically configures the Dual Indication Enable, Field Check Enable, Red Fail Enable and Minimum Yellow Plus Red Clearance Enable parameters from user input consisting only of channel assignment and class (vehicle, ped, pp-turn, FYA, etc.) responses.

The MMU2 shall be capable of operating in the Type 12 mode with SDLC communications enabled on Port 1. The Channel Status display shall operate in the Type 12 configuration and provide the Field Check function for up to four (4) Pedestrian Walk inputs.

In the interest of reliability and repair ability, printed circuit board mounted MS connectors shall not be acceptable. Internal MS harness wire shall be a minimum of nineteen (19) strand AWG 22 wire.

907-632.02.6.4--NEMA defined Card Rack and Power Supply. A minimum of one (1) NEMA compliant detector card rack with five (5) slot positions (first slot for power supply and four (4) available slots) shall be provided in each cabinet. The detector rack shall be installed on the bottom shelf of the cabinet. The power supply for the NEMA defined card slots shall be provided as a 175W minimum with four (4) independent regulated channels of 24 VDC each rated at 0.75 amps over the full NEMA operating temperature range of -30°F to +165°F. The output should be regulated to 24 VDC +/- 15%. Each of the four (4) outputs shall be independently fused, each with a separate LED for displaying output and fuse status for each of the four (4) outputs. Each of the four (4) outputs shall be protected against voltage transients by a minimum 1500 watt suppressor. All card racks shall be wired for the type detection shown in the plan sheets.

Card Guides shall be provided on the top and bottom of the card rack for each connector position.

907-632.02.6.5--In-Cabinet Network.

907-632.02.6.5.1--Communications Arrestor. The Controller Cabinet network shall consist of an SDLC connection between the Controller Unit and MMU2. Surge suppression for this network shall meet the requirements set forth in Subsection 722.12 and the following minimum requirements below:

- Operating Voltage: 5 VDC
- Clamping Voltage: 8 VDC
- Operating Current: 1.5 A
- Peak Surge Current: 47 A (10x1000 μ s)
- Frequency Range: 0 to 20 MHz
- Insertion Loss: < 0.1 dB at 20 MHz
- SPD Technology: SAD
- Connection Type: DB-15
- Operating Temperature: -40°F to +185°F

907-632.02.6.6--System Communications.

907-632.02.6.6.1--Traffic Signal Ethernet Switch. When specified in the plans or contract

documents, a traffic signal Ethernet switch shall be installed in the cabinet assembly. It shall meet the requirements for the type specified in Section 907-663. Ethernet patch cables of sufficient length shall be provided for all supplied Ethernet ready cabinet components. The switch and all components shall be connected and configured.

907-632.02.6.6.2--Fiber Optic Patch Panel. When specified in the plans or contract documents, fiber optic attenuator patch cords shall be installed in the cabinet assembly as specified in Section 907-661.

907-632.02.6.6.3--Wireless Communications. When specified in the plans or contract documents, wireless communication components shall be installed in the cabinet assembly and shall be as specified in Section 907-662.

907-632.02.6.6.4--Serial Port Server or Terminal Server. When specified in the plans or contract documents, serial port servers shall be installed in the cabinet assembly and shall be as specified in Subsection 907-663.02.2.

907-632.02.6.6.5--GPS Clock. This work includes furnishing a Global Positioning System (GPS) Synchronization clock that can be used to sync the internal clocks in traffic signal controllers when coordination is desired, but communication is not necessary. The GPS Clock System shall provide GPS based time and date synchronization to provide coordination of traffic controllers to a common time base. The system shall process GPS Time data using a tamper/vandal resistant GPS antenna and correct for Time Zone, Daylight Savings Time, Leap Years, and GPS Leap Seconds. The processed time information shall be sent to the traffic controller in the native format for the respective controller. A contact closure synchronization pulse with variable pulse width shall be available for a once per day update. If the GPS antenna is blocked for up to one (1) hour prior to scheduled time of synchronization, the system shall synchronize the traffic controllers with less than 0.4 seconds variance from the accuracy provided under normal operation with GPS satellites in view.

- The GPS Clock shall also meet the following minimum specifications:
- Input Voltage: 9-24 VDC
- Current Draw: 150 mA (max) at 12 VDC: 125 mA (max) at 24 VDC
- Contact Closure: 750 mA at 30 VDC
- Temperature Rating: -29.4°F to +167°F

GPS unit shall be mounted to the traffic signal controller cabinet as per the manufacturer's recommendation. Any and all holes created in the cabinet for the purpose of mounting the GPS unit shall be sealed to the satisfaction of the Engineer at no direct pay.

907-632.02.6.6.6--Power-Over-Ethernet Arrestor. Surge suppression that meets the requirements set forth in Subsection 722.12 shall be provided. In addition, the following minimum specifications shall be supplied for loads that require Power-Over-Ethernet with isolated shielded or non-shielded cable:

- Operating Voltage: 48 VDC
- Clamping Voltage: 68 VDC
- Operating Current: 0.75 A per Pin Continuous
- Peak Surge Current: 10 kA
- Insertion Loss: < 0.1 dB
- SPD Technology: GDT, SAD, with series PTC
- Modes of Protection: All Lines (1-8) Protected (L-L) and (L-G): Signal High- Low; High-Ground; Low-Ground
- Transmission Speeds: 10BaseT; 100BaseT; 1000BaseT
- Connection Type: RJ-45
- Operating Temperature: -40°F to +185°F

907-632.02.7--Detector Panel. A vehicle detector harness shall be provided to connect the detector panel to the card rack. The detector panel shall accept the connection of sixteen (16) field loop inputs and four (4) pedestrian detector inputs.

907-632.02.7.1--Detector Input Arrestors. Field Loop and Pedestrian input arrestors shall meet the requirements set forth in Subsection 722.12. Field loop arrestors shall have differential and common mode protection and be provided with the following minimum specifications:

- Operating Voltage: 75 VDC
- Clamping Voltage: 130 VDC
- Peak Surge Current: 250 A
- SPD Technology: Silicon Break-Over
- Operating Temperature: -40°F to +185°F

Pedestrian input arrestors shall be a four (4) circuit device provided with the following minimum specifications:

- Operating Voltage: 30 VDC
- Clamping Voltage: 36 VDC
- Operating Current: 0.15 A
- Peak Surge Current: 10 kA (8 x 20 μ s)
- Frequency Range: 0 to 20 MHz
- Insertion Loss: < 0.1 dB at 20 MHz
- SPD Technology: GDT, SAD, with Series PTC
- Connection Type: Terminal Block with compression lugs; Terminals accept up to 10 AWG
- Operating Temperature: -40°F to +185°F

907-632.02.8--System Detectors. The controller shall have the ability to receive input data from up to eight (8) special system detectors in addition to the normal actuated controller unit phase detectors. The user shall have the option to assign any of the phase detectors as “system detectors”.

907-632.02.9--Preemption. The cabinet shall be completely wired to accept and service calls from preemption phase selector modules, associated optical detector units and GPS units. Optical detector units and GPS unit cabinet components shall be as specified in Section 639. Provision for two (2) standard card modules shall be accommodated in a separate card rack for preemption. The preemption card rack shall provide a minimum of eight (8) channels.

Provisions shall also be made in the cabinet to accommodate Railroad Preemption when specified in the plans or contract documents. Railroad Preemption shall meet the requirements set forth in Section 639. While it is not necessary that a Railroad Preemption interface board be provided with the cabinet, the cabinet and back panel shall be designed so that a Railroad Preemption interface panel that uses a relay to isolate the track switch from the controller cabinet circuitry can be installed. Preempt 1 and 2, in the case of gate down preemption, shall be reserved for Railroad Preemptions; all subsequent preemptions shall be reserved for Emergency Vehicle, Fire Station, or Police Preemption.

907-632.02.10--Uninterruptable Power Supply. When specified in the plans or contract documents an Uninterruptable Power Supply (UPS) System shall be installed in the cabinet assembly. The UPS shall be installed in the cabinet and meet the requirements set forth in Section 633.

907-632.02.11--Power Service Pedestal. A Power Service Pedestal shall be provided as described in Section 631.03.2.

907-632.03--Construction Requirements.

907-632.03.1--Mounting. Traffic Signal Cabinet Assemblies shall be wall or pole mounted, base mounted on a concrete cabinet pad, or base mounted using a composite enclosure as specified below and as shown in the plans.

Power Service Pedestal shall be base mounted on a concrete cabinet pad or on a composite enclosure as specified below and as shown in the plans.

907-632.03.1.1--Wall or Pole Mounted. Wall or pole mount hardware shall be provided for mounting cabinets in specific installations as indicated in the design plans. Wall or pole mounted cabinets shall be manufactured with rigid tabs, rigid brackets or other acceptable configuration for attachment of the cabinet to the wall or pole support. Rigid attachment devices must allow for field alignment of cabinet to the wall or pole support.

907-632.03.1.2--Concrete Cabinet Pad. Concrete foundations shall be constructed of Class B concrete in specific installations as indicated in the design plans.

Cabinets for installation on a concrete base shall be manufactured with rigid tabs, rigid brackets or other acceptable configuration for attachment of the cabinet bottom to its flat support structure. Rigid attachment devices must allow for field alignment of cabinet with the support base. Concrete base construction details shall be provided in the design plan drawings.

907-632.03.1.3--Composite Enclosure. Cabinets for installation on a composite enclosure base shall be manufactured with rigid tabs, rigid brackets or other acceptable configuration for attachment of the cabinet bottom to its' flat support structure. Rigid attachment devices must allow for field alignment of cabinet with the composite enclosure. Composite enclosure attachment details shall be provided as shown in the plans.

907-632.03.2--Documentation. Documentation packages shall be delivered for each unit at the same time as the equipment to which it pertains.

A minimum of two (2) sets of complete schematic drawings and equipment documentation shall be supplied with each cabinet. The first copy shall be placed in a clear re-sealable print pouch of sufficient size to accommodate one (1) complete set of folded cabinet prints and placed in the pull-out drawer of the cabinet and the second copy shall be provided to the Department. Comprehensive controller data shall be included as part of the cabinet documentation package and shall be placed in the cabinet drawer pouch. Digital copies of all cabinet documentation shall be provided to the Department before final acceptance.

The documentation packages shall contain a schematic wiring diagram of the controller cabinet assembly and all auxiliary equipment. The schematic wiring diagram, including a symbols legend, shall show in detail all integrated circuits, transistors, resistors, capacitors, inductors as well as switches and indicators. All parts shown shall be easily identified on both in the cabinet and on the schematic diagram. Model numbers shall be used on schematic diagram when available.

A complete physical description of the signal cabinet assembly shall be provided to include at least the physical dimensions of the unit, weight, temperature ratings, voltage requirements, power requirements, material of construction, and complete performance specifications.

A complete set of operation guides, user manuals, and performance specifications shall be provided.

Detailed programming instructions, preventative maintenance requirements, and troubleshooting procedures shall also be provided for the controllers. These documents shall fully cover all programming procedures and programmable options capable of being made to the controllers and associated traffic control equipment. Instructions for modifications within the range of the capabilities of the unit such as changes in phases or sequences and programming matrix boards shall be included.

An intersection diagram shall be provided on the cabinet door showing geometric configuration, lane use assignments, controller cabinet and signal pole locations, vehicle and pedestrian signal head locations, vehicle and pedestrian detector zone locations, ring-barrier phasing diagram, and detector channel assignments. The intersection diagram shall be labeled with, at a minimum, a North Arrow, main street name(s), side street name(s), signal pole numbers, vehicle and pedestrian head type(s), detector zone designations, volume density and phase recall requirements, flash sequence. All field wires within the cabinet shall be labeled to coincide with those shown on the intersection diagram.

907-632.04--Method of Measurement. Traffic Signal Cabinet Assembly will be measured as a unit per each.

Remove and Replace Existing Traffic Signal Cabinet Assembly will be measured as unit per each.

Modify Existing Traffic Signal Cabinet will be measured as a unit per each.

Solid State Traffic Actuated Controller, of the type specified in the project plans, will be measured as a unit per each.

Signal Software License, of the type specified in the project plans, will be measured as a unit per each.

Malfunction Management Unit, of the type specified in the project plans, will be measured as a unit per each.

Card Rack, of the type specified in the project plans, will be measured as a unit per each.

GPS Clock, as specified in the project plans, will be measured as a unit per each.

Power Service Pedestal, as specified in the project plans, will be measured as a unit per each.

All pay items shall be inclusive of all materials, work, system integration, testing and incidentals necessary for a complete and operable unit in place and accepted. All removal, turn on, and acceptance of equipment, devices, traffic signals, and traffic signal assemblies shall follow Section 631 - Traffic Signal Systems-General prior to payment.

907-632.05--Basis of Payment. Traffic Signal Cabinet Assembly, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for furnishing, installing, configuring, wiring, testing, and mounting foundation construction, cabinets, relays, terminals, circuit breakers, modules, coordination and time base control programs, connectors wiring, overlap equipment, load switches, power cables, power supplies, controller mechanism and housing, MMU2, mounting material, all other materials, and all equipment, labor, tools, and incidentals necessary to complete the work.

Remove and Replace Existing Traffic Signal Cabinet Assembly, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for furnishing, installing, configuring, wiring, testing, cabinets, relays, terminals, circuit breakers, modules, coordination and time base control programs, connectors wiring, overlap equipment, load switches, power cables, power supplies, controller mechanism and housing, MMU2, mounting material, all other materials, removal, disposal, transfer, storage, and/or resetting of components that are existing, all other components included in the traffic signal cabinet, and all equipment, labor, tools, and incidentals necessary to complete the work.

Modify Existing Traffic Signal Cabinet, measured as prescribed above, will be paid for at the

contract unit price per each, which price shall be full compensation for furnishing, installing, configuring, and mounting all components, wiring, and devices; rewiring, reconfiguring, removal, disposal, transfer, storage, and/or resetting of existing components and devices, installing or changing coordination and time base control programs in the traffic signal cabinet assemblies, testing, final cleanup, all equipment, labor, tools, and incidentals necessary to complete the work.

Solid State Traffic Actuated Controller, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of the controller mechanism(s) and housing(s), all power cables, power supplies, wiring, factory and manufacturing inspection, attachment hardware, testing, storage, packaging, shipping, warranty, and all work, equipment, and appurtenances, and all incidentals necessary to provide a fully functional traffic controller ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the traffic controller.

Signal Software Licenses, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of furnishing, installing and configuring the Signal Software, all power cables, power supplies, wiring, factory and manufacturing inspection, testing, storage, packaging, shipping, warranty, appurtenances, and all incidentals necessary to provide fully functional Signal Software ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the Signal Software.

Malfunction Management Unit, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of furnishing, installing and configuring the Malfunction Management Unit (MMU2), all power cables, power supplies, wiring, attachment hardware, factory and manufacturing inspection, testing, storage, packaging, shipping, warranty, and all work, equipment, and appurtenances, and all incidentals necessary to provide a fully functional Malfunction Management Unit (MMU2) ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the Malfunction Management Unit (MMU2).

Card Rack, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of furnishing, installing and configuring the Card Rack, all power cables, power supplies, wiring, attachment hardware, factory and manufacturing inspection, testing, storage, packaging, shipping, warranty, and all work, equipment, and appurtenances, and all incidentals necessary to provide a fully functional Card Rack ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the Card Rack.

GPS Clock, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for all labor, equipment, tools, materials inclusive of furnishing, installing and configuring the Global

Positioning System (GPS) Clock(s), all power cables, power supplies, wiring, attachment hardware, factory and manufacturing inspection, testing, storage, packaging, shipping, warranty, and all incidentals necessary to provide a fully functional GPS Clock ready for use. It shall also include all documentation including operations and maintenance manuals and other material necessary to document the operation of the GPS Clock.

Power Service Pedestal, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract, which price shall be full compensation for furnishing, installing, configuring, wiring, testing, and mounting foundation construction, cabinets, circuit breakers, connectors wiring, mounting material, all other materials, and all equipment, labor, tools, and incidentals necessary to complete the work.

Payment will be made under:

907-632-A: Solid State Traffic Signal Cabinet Assembly, Type __ Cabinet, Type __ Controller	- per each
907-632-B: Remove and Replace Existing Traffic Signal Cabinet Assembly, Type __ Cabinet, Type __ Controller	- per each
907-632-C: Modify Existing Traffic Signal Cabinet Assembly	- per each
907-632-D: Solid State Traffic Actuated Controller, Type ____	- per each
907-632-E: Single-user Workstation Signal Software License	- per each
907-632-F: Single-user Server Signal Software License	- per each
907-632-G: Malfunction Management Unit	- per each
907-632-H: Card Rack, ____ Position	- per each
907-632-I: GPS Clock	- per each
907-632-J: Power Service Pedestal	- per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-634-4

CODE: (IS)

DATE: 05/25/2021

SUBJECT: Traffic Signal and ITS Equipment Poles

Section 634, Traffic Signal and ITS Equipment Poles, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-634.02--Materials.

907-634.02.1--Poles. Delete the bullet for Type X poles in Subsection 634.02.1 on page 542 and substitute the following.

- Type X -- Aluminum Pole for Detectors

After Type XI poles in Subsection 634.02.1 on page 542, add the following.

- Type XII -- ITS Extension Poles

907-634.02.1.1--Traffic Signal Poles. Delete the first, third, fourth, and fifth bullets in Subsection 634.02.1.1 on pages 542 and 543, and substitute the following.

- Self-supporting straight or upswept mast arm(s), in accordance with Plan details. Where possible, the mast arms shall match the adjacent signal poles in the area unless otherwise stated;
- Tag installed on shaft side opposite the mainline highway and located approximately 48 inches above the top of the Baseplate;
- Minimum nominal size of four (4) inches wide by 26 inches tall reinforced hand-hole with included terminal block(s);
- A ½-inch coarse thread grounding stud shall be located on the interior side of the pole hand-hole opening;

907-634.02.1.2--Galvanized Steel Poles for Cameras. Delete the second paragraph of Subsection 634.02.1.2 on page 543, and substitute the following.

Unless specified otherwise in the plans, poles shall be designed in accordance with the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans, including all interims and updates. Design life shall be 50 years for all poles. The design wind speed for all parts of the structure shall meet the wind requirements set forth in the latest edition of the AASHTO Wind Map, as stated in Subsection 722.02.3. The pole shall meet the design wind loading with all equipment installed.

In the fifth sentence of the fifth paragraph of Subsection 634.02.1.2 on page 544, change “butt welded” to butt-welded” and change “radio graphically” to radio-graphically.”

Delete the second bullet in Subsection 634.02.1.2 on page 544, and substitute the following.

- Consideration shall be given for all possible loading combinations including ice and wind loads.

After the fourth bullet in Subsection 634.02.1.2 on page 544, add the following.

- Top of pole deflection shall not exceed one (1) inch deflection from center due to 30 mph (non-gust) winds or the maximum deflection allowed by Subsection 722.02.3, whichever is more restrictive, for 80-foot poles.

In the first bullet in Subsection 634.02.1.2 at the bottom of page 544, change “cross sectional” to “cross-sectional.”

In the second paragraph of Subsection 634.02.1.2.4 on page 545, change “butt weld” to “butt-weld.”

907-634.02.1.3--Galvanized Steel Poles for Detectors. In the first paragraph of Subsection 634.02.1.3 on page 546, change “ground mounted” to “ground-mounted.”

Delete the second paragraph of Subsection 634.02.1.3 on page 546, and substitute the following.

Unless specified otherwise in the plans, poles shall be designed in accordance with the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans, including all interims and updates. Design life shall be 50 years for all poles. The design wind speed for all parts of the structure shall meet the wind requirements set forth in the latest edition of the AASHTO Wind Map, as stated in Subsection 722.02.3.

Delete the last two sentences of the fifth paragraph of Subsection 634.02.1.3 on page 546, and substitute the following.

Design wind loading shall be as indicated in Subsection 722.02.3 unless otherwise noted in the plans. The pole shall meet design wind loading with all equipment installed.

907-634.02.1.4--Aluminum Poles for Detectors. Delete the second paragraph of Subsection 634.02.1.4 on page 547, and substitute the following.

Unless specified otherwise in the plans, poles shall be designed in accordance with the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans, including all interims and updates. Design life shall be 50 years for all poles. The design wind speed for all parts of the structure shall meet the wind requirements set forth in the latest edition of the AASHTO Wind Map, as stated in Subsection 722.02.3. The pole shall meet design wind loading with detector(s) installed.

907-634.02.1.5--Structure-Mounted ITS Equipment Poles. Delete the second paragraph of Subsection 634.02.1.5 on page 548, and substitute the following.

Unless specified otherwise in the plans, poles shall be designed in accordance with the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans, including all interims and updates. Design life shall be 50 years for all poles. The design wind speed for all parts of the structure shall meet the wind requirements set forth in the latest edition of the AASHTO Wind Map, as stated in Subsection 722.02.3. For projects that are in areas with higher wind standards, the higher standard is required. The pole shall meet design wind loading with all equipment installed.

In the fifth sentence of the fifth paragraph of Subsection 634.02.1.5 on page 548, change “butt welded” to butt-welded” and change “radio graphically” to radio-graphically.”

Delete the second bullet in Subsection 634.02.1.5 on page 548, and substitute the following.

- Consideration shall be given for all possible loading combinations including ice and wind loads, as stated in Subsection 722.02.

In the first bullet in Subsection 634.02.1.5 at the top of page 549, change “cross sectional” to “cross-sectional.”

After Subsection 634.02.1.8 on page 549, add the following.

907-634.02.1.9--ITS Extension Poles. ITS extension poles are used to provide ITS devices a mounting location with a vertical or horizontal clearance away from an existing pole or structure to which they are to be attached. As such, extension poles and the mounting and attachment hardware shall be of a material that will not cause galvanic corrosion with existing or proposed equipment. If possible, the extension poles shall be similar in color to the base pole or structure, unless otherwise directed. They shall meet the requirements of the base pole, the plans, and Subsection 722.02. Design considerations shall be given to the additional loading being subjected to the base pole or structure.

907-634.02.2--Camera Lowering Device. The lowering device system shall be designed to support, raise, and lower a standard CCTV camera, lens, housing, PTZ mechanism, cabling, connectors, and other supporting field components. The camera connector box shall be cast ZA-12 (12% Al and 88% Zn) and have a minimum weight that ensures stability of the camera during raising and lowering operation. The camera connector box shall have fully gasketed doors to prevent water intrusion. The bottom of the camera connector box shall be equipped with a condensation/moisture exit system. The camera connector block shall be molded in thermoset, weather-resistant, synthetic rubber designed to handle harsh environments.

Electrical contacts must also be designed to handle harsh environments. There shall be a locking mechanism between the fixed and movable components. For the movable components, a latching mechanism shall be provided to hold the device in place (when latched all weight shall be removed

from the lowering cable) and to raise or lower the assembly using the lowering tool and lowering cable. The suspension contact unit housing shall be weatherproof with a gasket to isolate the interior from dust and moisture.

All pulleys shall have sealed, self-lubricated bearings, oil tight bronze bearings, or sintered bronze bushings. The lowering cable shall be a minimum 1/8-inch diameter stainless steel aircraft cable. Internal wireways shall prevent the stainless steel lifting cable from contacting power or video cabling. The only cable permitted to move is the lifting cable, all other cables must remain stable and secure during lowering and raising operations.

The lowering tool shall consist of a lightweight metal frame and winch assembly, a quick release cable connector, an adjustable safety clutch, and a variable speed industrial duty electric drill motor. This tool shall be able to access the lifting cable through a pole hand hole, shall support itself and the load during lowering, and shall provide a means to prevent freewheeling when loaded. This tool shall have a reduction gear to reduce the manual effort required during lifting operations. In addition, this tool shall be provided with an adapter for operating the lowering device with a portable drill using a clutch mechanism. The portable lowering tool shall be included as part of the installed system. The lowering device shall include customized adapter brackets to install cylindrical type PTZ CCTV cameras that have a mounting base below the camera assembly and is require to be installed in an upright position.

907-634.03--Construction Requirements.

907-634.03.1--Foundations. Delete the last sentence of the fourth paragraph of Subsection 632.03.1 on page 550, and substitute the following.

Where foundations are constructed in areas where the pavement edge elevation and shoulder edge elevation differ more than twelve (12) inches, taller foundations may be used but must be approved by the Engineer.

After Subsection 634.03.3 on page 552, add the following.

907-634.03.4--Submittals. The submittal requirements defined in the Notice to Bidders entitled “ITS General Requirements”, along with the requirements in this specification, shall be met for all ITS components. All costs associated with submittals shall be included in the overall contract price; no separate payment will be made for any documenting and submitting.

907-634.03.5--Quality Assurance. The quality assurance requirements defined in the Notice to Bidders entitled “ITS General Requirements” shall be met for all ITS components. All costs associated with the quality assurance requirements shall be included in the overall contract price.

907-634.04--Method of Measurement. After the last sentence of the fourth paragraph of Subsection 634.04 on page 552, add the following.

Field conditions may require taller foundations than specified in the plans. In which case, the addition concrete will be paid for at the contract bid price per cubic yard for pole foundations.

After the sixth paragraph of Subsection 634.04 on page 553, add the following.

ITS extension poles of the type specified will be measured as a unit quantity per each.

Delete the last paragraph in Subsection 634.04 on page 553 and substitute the following.

Wooden poles will be measured as a unit quantity per each.

Camera lowering device will be measured as a unit quantity per each.

907-634.05--Basis of Payment. Delete the fourth paragraph of Subsection 634.05 on page 553, and substitute the following.

Camera pole with foundation and detector pole with foundation, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials, all documentation and submittals, for excavating, backfilling, replacing sod, and for all constructing, placing, curing, erecting, installing, connecting and testing; for foundations, poles, pole bases, conduit inside foundation as indicated on the plans, connections to support structures, caps, covers, ground wire, ground rods, hardware and for all equipment, tools, labor and incidentals necessary to complete the work and quality assurance, including remote and local control of the camera site complete in place and ready for use.

Camera lowering device and camera lowering tool, as described above, shall be paid for at the contract unit price per each. This price shall be full compensation for all materials, design, installation, equipment, tools, labor and incidentals associated with providing and installing the camera lowering device and the camera lowering tool.

Delete the sixth paragraph of Subsection 634.05 on page 553, and substitute the following.

Structure-mounted equipment pole, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials, all documentation and submittals, for all constructing, placing, erecting, installing, connecting and testing, for poles, conduit between structure attachment location as indicated in the plans; wiring between pole-mounted devices and field cabinet; all structure-mounting hardware indicated in the plans, caps, covers, ground wire, ground rods, hardware and for all equipment, tools, labor and incidentals necessary to complete the work and quality assurance, including remote and local control of the camera site complete in place and ready for use.

ITS extension poles, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials, all documentation and submittals, for installing the extension pole, mounting attachments as necessary, adjusting the pole to meet specific project needs, and for all equipment, tools, labor, and incidentals necessary to complete the work and quality assurance.

After the last paragraph of Subsection 634.05 on page 554, add the following.

Sizing poles and their appurtenances to field conditions is the Contractor's responsibility. No separate payment will be made for designing to meet project specifications and field conditions.

Delete the pay items listed on page 554, and substitute the following.

907-634-A: Traffic Signal Equipment Pole, Type __, __' Shaft, __' Arm *	- per each
907-634-B: Traffic Signal Equipment Pole Shaft Extension, ____' **	- per each
907-634-C: Pole Foundations, Class ____ Concrete	- per cubic yard
907-634-D: Slip Casing, ____" Diameter	- per linear foot
907-634-E: Camera Pole with Foundation, ____' Pole	- per each
907-634-F: Detector Pole with Foundation, ____' Pole	- per each
907-634-G: Traffic Signal Equipment Pole Mast Arm Extension, ____' **	- per each
907-634-H: ITS Equipment Pole, Structure Mounted, ____' Pole	- per each
907-634-I: Wood Pole, Class ____ Height ____'	- per each
907-634-J ITS Extension Pole, ____' **	- per each
907-634-K: Camera Lowering Device	- per each

* Multiple Arms may be indicated

** Additional information may be indicated

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-636-3

CODE: (IS)

DATE: 05/25/2021

SUBJECT: Electrical Cable

Section 636, Electrical Cable, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-636.01--Description. Delete the last sentence of the last paragraph in Subsection 636.01 on page 555 and substitute the following.

It shall include excavating, laying, placing tracer cable or tape, backfilling, replacing sod, aerial supports and/or pull-through conduits, as applicable; and transformer enclosures and/or terminal boxes when not placed under other items of the contract.

907-636.02--Materials. After the paragraph of Subsection 636.02 on page 555, add the following.

907-636.02.1--ITS Ground Mounted Meter Enclosure.

907-636.02.1.1--Meter Base. Meter bases shall be NEMA Type 3R with a minimum rating of 100 amps and shall meet the requirements of the local utility. The meter base shall be provided with ampere rating of meter sockets based on sockets being wired with insulated wire rated at least 167°F. The meter base shall be designed for underground service.

Meter bases shall be 4-terminal, 600 volt, single phase, 3-wire furnished with the following:

- (a) Line, load and neutral terminals accepting #8 to 2/0 AWG copper/aluminum wire,
- (b) Ringed or ringless type, with or without bypass,
- (c) Made of galvanized steel,
- (d) Listed as meeting UL Standard UL-414, and
- (e) Underground service entrance as specified.

The meter bases shall have electrostatically applied dry powder paint finish, light gray in color, with a minimum thickness of 2.4 mils.

A 1-inch watertight hub for threaded rigid conduit shall be furnished with meter base.

907-636.02.1.2--Disconnect. External electrical service disconnects shall be furnished with a single pole 50-amp inverse time circuit breaker with at least 10,000 RMS symmetrical amperes short circuit current rating in a lockable in open or closed position in accordance with National Electric Code (NEC) and be a NEMA 3R Type enclosure. The disconnect shall be listed as meeting UL Standard UL-489 and marked as being suitable for use as service equipment.

The disconnect enclosure shall be fabricated from galvanized steel and electrostatically apply dry powder paint finish, light gray in color, to yield a minimum thickness of 2.4 mils. Ground bus and neutral bus shall be provided with at least four terminals with minimum wire capacity range of number 14 through number 4.

For 480V service, a local utility approved, lockable, non-fused disconnect switch on the supply side of the meter base shall be furnished, installed, and labeled as "Utility Disconnect". A separate load side disconnect with overcurrent protection shall be provided within two feet (2') of the meter.

907-636.02.1.3--Ground Mounted – Pedestal – Service Panel. The pedestal shall be of NEMA Type 3R rainproof construction and shall be UL Listed as "Enclosed Industrial Control Equipment" (UL 508A). External construction shall comply with UL50 requirements and shall be of G90 galvanized steel with light green #14672 Federal Specification 595 polyurethane industrial grade powder paint.

Hinges shall be stainless steel and of the continuous piano hinge type.

The pedestal mounting bolts shall not be externally accessible. The pedestal shall be able to be embedded in concrete or use anchor bolts for mounting on concrete base. Either pedestal mounting base or anchor bolt kit shall be used for installation.

The service pedestal should have three separate isolated sections for metering equipment, utility termination and customer equipment.

The metering section shall be pad-lockable and sealable and have a hinged swing hood with an integral hinged polycarbonate sealable window for access to demand meters. Meter socket type shall meet the requirements of the serving utility.

The utility termination section shall be pad-lockable and sealable and shall have a stainless steel handle provided on a lift-off cover. Sufficient clearance shall be provided for a 4-inch diameter conduit for utility cables entrance. Utility landing lugs shall be UL listed and shall accommodate conductor sizes between AWG #6 – 350 kcmil.

The customer compartment door shall be hinged on the left hand side. A stainless pad-lockable hasp shall be provided to secure customer compartment. A door keeper shall be provided to keep the door in an open position. A print pocket shall be provided on the inside of the door in a weatherproof sleeve. Required UL labeling shall be located on the inside of the customer door. Distribution and control equipment shall be behind an internal dead-front door with a quarter-turn securing latch and be hinged to open more than 90 degrees. The dead-front door shall be hinged on the same side as the customer section door. All distribution and control equipment shall be factory wired using 600-volt wire sized to NEC and UL requirements.

The service pedestal shall be rated for operation at 10K minimum amps interrupting capacity (AIC). The provided documentation shall list circuit breaker combinations and those to be used for de-rated operation for series ratings. Circuit breakers shall be permanently labeled with engraved name plates.

The serving utility shall be contacted for necessary requirements before ordering or installing equipment.

907-636.02.2--ITS Ground Mounted Transformer Enclosure.

907-636.02.2.1--Disconnect. The disconnect shall meet the requirements of Subsection 907-636.02.1.2.

907-636.02.2.2--Ground Mounted - Pedestal – Service Panel. The ground mounted - pedestal – service panel shall meet the requirements of Subsection 907-636.02.1.3. In addition, the transformer shall be rated to match the requirement of the primary service and the types of load served as specified in the plans. The transformer unit shall be installed inside the enclosure and meet all applicable codes. Each transformer shall be furnished as one complete unit and wiring of multiple transformers to meet the required ratings at each enclosure location is not allowed. Step-up and Step-down transformers shall be designed specifically for each application. Reverse feeding of step-up and step-down transformers is not allowed. All transformers shall be designed for outdoor installation and rated 600 VAC and below.

907-636.03--Construction Requirements.

907-636.03.1--Direct Buried Cable. After the fourth sentence of Subsection 636.03.1 on page 555, add the following.

Direct buried electric cable shall not be placed in the same trench as fiber optic cables.

907-636.04--Method of Measurement. Delete the first paragraph of Subsection 636.04 on page 557, and substitute the following.

Electric cable of the type specified, constructed as specified on the plans, will be measured by the linear foot. Measurement will be computed horizontally along the conduit, messenger cable or mast arm and vertically along the pole. Measurement in underground conduit is only in the horizontal plane and no additional quantity shall be added for conduit depth or change in elevation of the conduit. No extra length will be allowed for cable inside signal heads, drip loops, or sag in aerial supported cable. Tracer tape, when required in the plans, used with tracer cable will not be measured for separate payment but shall be included in the contract price for Tracer Cable. The terminals for the measurements of lengths will be considered specifically as the center of the pull boxes, poles, signal heads or controller cabinets.

After the first paragraph of Subsection 636.04 on page 557, add the following.

ITS Ground Mounted Enclosures, complete in place and accepted, will be measured as a unit quantity per each for a complete and operable unit in accordance with the contract provisions.

907-636.05--Basis of Payment. After the first paragraph of Subsection 636.05 on page 557, add the following.

ITS Ground mounted enclosures, measured as prescribed above, will be required wherever ground mounted meter enclosures or step-up or step-down transformers are noted as required in the plans. The enclosures shall be paid for at the contract unit price bid per each; which price shall be full compensation for any transformers (as described in the plans), foundation construction, cabinets, pedestals, meter bases, disconnects, relays, terminals, circuit breakers, sockets, hubs, buses, connectors, mounting material, all other materials for constructing, installing, connecting, testing and final cleanup; and for all equipment, labor, tools and incidentals necessary to complete the work in accordance with the contract documents.

In the first sentence of the second paragraph of Subsection 636.05 on page 557, change “relaid” to “re-laid”.

Delete the list of pay items on pages 557 and 558, and substitute the following.

907-636-A: Electric Cable, Direct Burial, <u>Type</u> , AWG ___, ___ Conductor	- per linear foot
907-636-B: Electric Cable, Underground in Conduit, <u>Type</u> , AWG ___, ___ Conductor	- per linear foot
907-636-C: Electric Cable, Aerial Supported, <u>Type</u> , AWG ___, ___ Conductor	- per linear foot
907-636-D: Electric Cable, Aerial Supported in Conduit, <u>Type</u> , AWG ___, ___ Conductor	- per linear foot
907-636-E: Electric Cable, Underground in Conduit, Tracer Cable	- per linear foot
907-636-F: Electric Cable, Repair	- per linear foot
907-636-G: Underground Cable and Conduit, Removed	- per linear foot
907-636-H: Underground Cable and Conduit, Removed and Re-laid	- per linear foot
907-636-I: ITS Ground Mounted * Enclosure	- per each

* Indicate Meter or Transformer

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-637-3

CODE: (IS)

DATE: 05/25/2021

SUBJECT: Traffic Signal Conduit and Pull Boxes

Section 637, Traffic Signal Conduit and Pull Boxes, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-637.02--Materials.

907-637.02.1--Pull Box / Enclosures. Delete the first sentence of the second paragraph of Subsection 637.02.1 on page 558, and substitute the following.

For grade level pull boxes and enclosures only, Tier 22 (22,500-pound design load, 33,750-pound test load) enclosures with minimum size dimensions as shown in the detail drawings on the plans shall be installed for use in traffic signal construction. Enclosure boxes shall be open bottom.

Delete the fourth sentence of the second paragraph of Subsection 637.02.1 on page 558.

907-637.03--Construction Requirements.

907-637.03.1--Pull box/Enclosures. Delete the sixth sentence of the first paragraph of Subsection 637.03.1 on page 559, and substitute the following.

Enclosures located in soil or sodded areas shall be installed with a supporting poured concrete collar or approved composite collar assembly, as shown by details on the plans.

907-637.03.2.1--Conduit Duct Bank. Delete the first sentence of subparagraph a) under Bored or drilled conduit in Subsection 637.03.2.1 on page 560, and substitute the following.

All conduits under railroad tracks shall be horizontal directional bored or drilled at a minimum of ten (10) feet below the railroad bed, or as required by the Railroad Company.

Delete Subsections 637.03.2.4 and 637.03.2.5 on pages 561 & 562, and substitute the following.

907-637.03.2.4--Blank.

907-637.03.2.5--Blank.

After Subsection 637.03.2.7 on page 563, add the following.

907-637.03.3--Submittals. The submittal requirements defined in the Notice to Bidders entitled “ITS General Requirements” shall be met if the NTB is included as part of the Project Proposal

and Contract Documents. In all cases, submittals shall be thorough and timely. All costs associated with submittals shall be included in the overall contract price; no separate payment will be made for any documenting and submitting.

907-637.03.4--Quality Assurance. The quality assurance requirements defined in the Notice to Bidders entitled "ITS General Requirements" shall be met if the NTB is included as part of the Project Proposal and Contract Documents. In all cases, the Contractor shall conduct, maintain, and leave the worksite in a professional and organized manner. All costs associated with the quality assurance requirements shall be included in the overall contract price.

907-637.04--Method of Measurement. Delete subparagraphs a) and b) in Subsection 637.04 on page 563, and substitute the following.

- a) From center to center of pull box and/or foundation.
- b) Any above ground vertical conduit runs, as indicated in the plans. Measurement in underground conduit is only in the horizontal plane and no additional quantity shall be added for conduit depth or change in elevation of the conduit.

907-637.05--Basis of Payment. Delete the first, second, third, fourth and fifth paragraphs of Subsection 637.05 on page 564, and substitute the following.

Pull Box Enclosures, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials including the cover, installing, crushed gravel underlayment, poured concrete collars, replacement of sod or existing grassing, final clean-up and for all equipment, all documentation and submittals, tools, labor and incidentals necessary to complete the work and quality assurance.

Conduit / Duct Bank, measured as prescribed above, will be paid for per linear feet, which price shall be full compensation for all materials, equipment, labor, trenching, installing, backfilling trench, plowing, directional boring, restoration, marking tape, pull tape, duct plugs, fittings, testing, bore logs, all documentation and submittals, and all other incidentals necessary for the installation and quality assurance of the conduit system.

Rigid Galvanized Steel, measured as prescribed above, will be paid for per linear feet, which price shall be full compensation for all materials, equipment, labor, all documentation and submittals, all related materials including but not limited to couplings, mounting straps, bonding to ground, etc., that is installed on sign structures, poles or between the pull boxes, and all other incidentals necessary for the installation and quality assurance of the conduit system.

Duct Plugs and Sealant will be included in the cost of the conduit and will not be measured separately.

Delete the pay items listed on page 564 and substitute the following.

907-637-A: Pull Box Enclosure, Type

- per each

907-637-B:	Pull Box Enclosure, Structure Mounted, <u>Type</u>	- per each
907-637-C:	Traffic Signal Conduit, Underground, <u>Type, Size</u>	- per linear foot
907-637-D:	Traffic Signal Conduit, Underground Drilled or Jacked, <u>Type, Size</u>	- per linear foot
907-637-E:	Traffic Signal Conduit, Structural Conduit, <u>Type, Size</u>	- per linear foot
907-637-F:	Traffic Signal Conduit, Aerial Supported, <u>Type, No, Size</u>	- per linear foot
907-637-G:	Traffic Signal Conduit, Underground Encased in Concrete, <u>Type, Size</u>	- per linear foot
907-637-H:	Traffic Signal Conduit Bank, Underground, <u>Type, No., Size</u>	- per linear foot
907-637-I:	Traffic Signal Conduit Bank, Underground Drilled or Jacked, <u>Type, No., Size</u>	- per linear foot
907-637-J:	Traffic Signal Conduit Bank, Structural Conduit, <u>Type, No., Size</u>	- per linear foot
907-637-K:	Traffic Signal Conduit Bank, Aerial Supported, <u>Type, Size and Number</u>	- per linear foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-639-3

CODE: (SP)

DATE: 03/10/2020

SUBJECT: Traffic Signal Preemption Systems

Section 639, Traffic Signal Preemption Systems, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 639 on pages 566 thru 578, and substitute the following.

SECTION 907-639 - TRAFFIC SIGNAL PREEMPTION SYSTEMS

907-639.01--Description. This item consists of providing Railroad Signal Preemption, Type 1, Type 2, and Type 3 Emergency Vehicle Preemption for the traffic signal controller in accordance with Plan details, the Standard Specifications, these specifications, and as directed by the Engineer.

The Type 1 Emergency Vehicle Preemption for the traffic signal controller shall use optical communication to identify the presence of designated priority vehicles and cause the traffic signal controller to advance to and/or hold a desired traffic signal display selected from phases normally available.

The Type 2 Emergency Vehicle Preemption for the traffic signal controller shall utilize Radio/GPS to identify the presence of designated priority vehicles and cause the traffic signal controller to advance to and/or hold a desired traffic signal display selected from phases normally available.

The Type 3 Emergency Vehicle Preemption with Remote Cabinet Monitoring for the traffic signal controller shall utilize Radio/GPS to identify the presence of designated priority vehicles and cause the traffic signal controller to advance to and/or hold a desired traffic signal display selected from phases normally available. The system also allows remote monitoring capabilities of Traffic Signals using either Ethernet communications via fiber or Cellular communications.

A confirmation lights and rotating beacons shall be utilized to indicate the activation of preemption call. The system shall initiate beacons indicating a priority call has been received. The system shall initiate a confirming steady white light to the approach direction from which the vehicle is approaching once the desired priority display has been received. The beacon and confirming white light shall remain energized until the preemption call is dropped.

907-639.02--Materials. All connections and equipment shall be new and constructed using the highest quality, commercially available components and techniques to assure high reliability and minimum maintenance of the emergency vehicle and railroad signal preemption systems.

The requirements for the emergency preemption vehicle equipment in Subsection 907-639.02.2.1 are to be furnished and installed by the local maintaining agencies and not the responsibility of the

Contractor. However, it is the responsibility of the Contractor to provide the intersection preemption equipment required in Subsections 907-639.02.2.2 and 907-639.03 that is compatible with the equipment listed in Subsection 907-639.02.2.1.

907-639.02.1--Railroad Preemption. The Railroad Signal Preemption shall consist of the minimum following components:

- Coordination
- Flagger (as required)
- Application Submittals (as required)
- Connections to hardware (as required)

907-639.02.2--Type 1 Emergency Vehicle Preemption. Emergency Vehicle Preemption Systems shall consist of the following principal Intersection Equipment components: Detectors/Receivers, Multimode Phase Selectors, and Auxiliary Interface Panel. The function intended for use with this system includes Emergency Vehicle Preemption to the traffic signal.

907-639.02.2.1--Vehicle Equipment.

907-639.02.2.1.1--Emitter. The emitter shall include a multi-purpose communication port compliant with the SAE J1708 communication standard. This port shall enable unit configuration to be set into the emitter and read from the emitter. It also shall allow real- time communication between the vehicle and the emitter.

An ON/OFF switch (available for each emitter) shall be equipped with an indicator light providing internal diagnostics to assist in troubleshooting.

While operating, the emitter shall conduct self-diagnostics designed to monitor data transmission integrity by checking for missing pulses. Any failures of the self-diagnostic tests shall be displayed by flashing of the ON/OFF switch indicator light.

The emitter shall be equipped with a disabling input that, when activated, will cause the emitter to stop flashing. This input shall eliminate the possibility of inadvertent signal transmission after the priority vehicle has arrived at its destination. The disable input shall be programmable to operate in either a latching or non-latching mode. Operation of the disable input shall be programmable using software.

The emitter shall provide operating modes that allow it to be powered on with the strobe/LEDs for activation of the preempt.

The emitter shall be powered by the DC voltage supplied from the battery of the vehicle, 10 to 32 volts DC.

The unit shall be equipped with a weatherproof in-line fuse holder and a weatherproof quick-disconnect plug.

The emitter shall contain visible light LEDs which may be user configured as follows:

- Flash at emitter flash rate during normal operation.
- Flash at diagnostic rate when unit has failed or is in disable mode.
- Off during normal operation, flash at diagnostic rate when unit has failed or is in
- Disable mode. The visible LEDs will be Off during normal operation.
- Flash once per second for ten (10) seconds at power up.
- Always Off: The visible LEDs will remain Off at all times.

The Emitter shall be supplied complete with a two (2) foot installation cable.

The flash sequence generated by the emitter shall carry three (3) types of information:

- The first type shall be one (1) of three (3) distinctly different base frequencies of:
 - o 10Hz for a low priority emitter;
 - o 14Hz for a high priority emitter; or
 - o 12Hz for Probe frequency.
- The second type of information generated by the emitter shall be a vehicle classification and identification code that is interwoven into the base frequency flashes. Setting the vehicle classification and identification code shall be accomplished through Emitter Programming Software.
- The third type of information generated by the emitter shall be reserved for setting the intersection detection range. A specially equipped emitter control module with a range setting command switch will enable the Engineer to activate the range code from the vehicle.

The emitters shall use infrared LEDs with an angle of half intensity of ± 10 degrees to provide precise directionality control. The emitter shall operate over a temperature range of -30°F to +165°F. The emitter shall operate over a relative humidity range of 5% to 95%. Windows™ based software shall be available at no charge for programming the emitter through its SAE J1708 compatible multi-purpose port.

907-639.02.2.2--Intersection Equipment.

907-639.02.2.2.1--Multimode Phase Selector. The multimode phase selector recognizes inputs from both infrared and Radio/GPS activation methods at the intersection and supplies coordinated inputs to the controller.

The multimode phase selector shall be designed to be installed in the traffic controller cabinet and is intended for use directly with numerous controllers. These include Type 170/2070 controllers with compatible software, NEMA controllers, or other controllers along with the system card rack and suitable interface equipment and controller software.

The multimode phase selector shall include the ability to directly sense the green traffic controller signal indications through the use of dedicated sensing circuits and wires connected directly to field wire termination points in the traffic controller cabinet. This connection shall be made using the Auxiliary Interface Panel.

The multimode phase selector will be a plug-in, 4-channel, multiple-priority, multi-modal device intended to be installed directly into a card rack located within the controller cabinet. The multimode phase selector shall be capable of using existing infrared or Radio/GPS system card racks. The multimode phase selector shall be powered from either +24 VDC or 120 VAC.

The multimode phase selector shall support front-panel RS-232, USB and Ethernet interfaces to allow management by on-site interface software and central software. An RS-232 port shall be provided on the unit. Additional RS-232 communication ports shall be available using the Auxiliary Interface Panel.

The multimode phase selector shall have the capability of storing a minimum of 10,000 priority control calls. When the log is full, the phase selector shall drop the oldest entry to accommodate the new entry. The multimode phase selector shall store each call record in non-volatile memory and shall retain the record if power terminates.

The multimode phase selector shall support a minimum of 5,000 code pairs (agency ID, vehicle ID) for each of the priority levels, high and low, providing unique vehicle identification and system security implementation at the vehicle level.

The multimode phase selector shall include several programmable control timers that will limit or modify the duration of a priority control condition, by channel. The control timers will be as follows:

- Max call time
- Off approach call hold time
- Lost signal call hold time
- Call delay time

The multimode phase selector shall have the ability to enable or disable all calls of all priority levels. This shall be independently settable by channel.

A unique intersection name, which shall be broadcast, shall be settable for each Multimode Phase Selector.

Up to 25 different radio channels shall be available to be assigned to the multimode phase selector.

The multimode phase selector shall operate in a mode that shall vary the output based on the status of the approaching vehicle's turn signal. Additional outputs available on an auxiliary interface panel may be needed. Settings shall be available for this mode as follows:

- Output mappings for each channel.
- Separate setting for high and low priority levels.
- Separate settings for each left turn, right turn or straight signal status for each of the four (4) channels and priority levels.

The multimode phase selector's default values shall be programmable by the operator on- site or at a remote location.

The multimode phase selector shall be capable of three (3) levels of signal discrimination, as follows:

- Verification of the presence of the signal of either high priority or low priority.
- Verification that the vehicle is approaching the intersection within a prescribed
- Estimated Time of Arrival (ETA).
- Determination of when the vehicle is within the prescribed range, either by intensity level or distance from the intersection.

The multimode phase selector shall include one (1) opto-isolated NPN, or sinking, output per channel that provides the following electrical signal to the appropriate pin on the card edge connector:

- 6.25Hz $\pm$ 0.1Hz 50% on/duty square wave in response to a low priority call.
- A steady ON in response to a high priority call.
- The multimode phase selector will also have the option of providing separate outputs for High and Low priority calls for controllers that do not recognize a 6.25 Hz pulsed
- low priority request.
- Additional outputs or output modes shall also be available on the Auxiliary Interface
- Panel in case of need for additional modes of operation.

The multimode phase selector shall accommodate the following three (3) methods for setting range thresholds for High and Low priority signals.

- Based on the approaching vehicle's Estimated Time of Arrival (ETA). This shall be settable between zero (0) and 255 seconds in one (1) second increments.
- Based on the approaching vehicle's distance from the intersection. This shall be settable in one (1) foot increments.
- Based on emitter intensity the system shall accommodate setting a separate range from 200 feet to 2,500 feet with range set points for both High and Low priority signals.

The multimode phase selector will have the following indicators:

- A status indicator that illuminates steadily to indicate proper operation.
- A link indicator on the multimode phase selector illuminates if other radios are within range.
- A radio indicator that indicates the status of the communication between the vehicle control unit and the Radio/GPS unit. The indicator illuminates to indicate that there is communication between the vehicle control unit and the Radio/GPS unit. The indicator illuminates to indicate that a GPS signal has been acquired and the 2.4 GHz radio is on the air.
- LED indicators (one (1) for high priority, one (1) for low priority) for each channel display

active calls as steady ON and pulse to indicate pending preemption requests.

The multimode phase selector shall have a test switch for each channel to test proper operation of High or Low Priority.

The multimode phase selector shall utilize the time obtained from the GPS satellites to time stamp the activity logs. The user will set the local time zone (offset from GPS time) via the interface software.

The interface software shall have the capability to set the multimode phase selector to automatically adjust the GPS time offset for changes in daylight savings time.

An auxiliary interface panel shall be available to facilitate interconnections between the multimode phase selector and traffic cabinet wiring as well as provide additional outputs.

A multimode phase selector port may be configured to output GPS data at a user selectable baud rate in the NMEA 0183format. It will output the following messages depending on the baud rate:

- GGA - Global Positioning System Fix Data (2400 baud and higher)
- GSA - GPS DOP and active satellites (2400 baud and higher)
- GSV - Satellites in view (4800 baud and higher)
- RMC - Recommended Minimum Navigation Information (1200 baud and higher)

The following diagnostic tests are incorporated in the multimode phase selector:

- Power up built in test
- Communications port tests
- Preemption output test call
- Detector response test

The multimode phase selector shall be capable of call bridging.

When used with a GPS radio unit, the multimode phase selector shall relay a priority request to the next adjacent intersection based on the direction indicated by the vehicle's turn signals.

The multimode phase selector shall support evacuation mode for Low priority calls. The multimode phase selector shall allow relative priority.

907-639.02.2.2.1.1--Card Rack. The required card rack shall provide simplified installation of a multimode phase selector into controller cabinets that do not already have a suitable card rack.

The card rack shall be factory wired with one (1) connector, located behind the card slot, and one (1) connector on the front of the card rack.

The card rack connector on the front shall provide for connections to the traffic controller.

The Contractor shall verify card rack requirements with the Engineer prior to submitting this equipment.

One (1) version of the card rack shall contain a 24 VDC power supply to power the phase selector. The power supply shall be capable of being powered by 100-240 VAC 50-60 Hz.

Another version of the card rack shall pass 120 VAC through to the rear card rack connector. This version shall provide labeled terminal blocks for connecting the primary infrared detectors to a phase selector.

Additionally, there shall be an optional card rack with a built-in Electromechanical Relay for use in switching high current loads such as flashers and gate operators. The relay shall be capable of switching the following loads.

Resistive: 10 A, 240 VAC
10 A, 30 VDC

General Use: 7.5 A, 120 VAC
7.5 A, 240 VAC
7 A, 30 VDC
1/6 hp, 120 VAC
1/3 hp, 240 VAC

907-639.02.2.2.2--Optical Detector.

907-639.02.2.2.2.1--General. The optical detector shall be a light-weight, weather proof device capable of sensing and transforming pulsed optical energy into electrical signals for use by the traffic signal phase selection equipment.

907-639.02.2.2.2.2--Functional Requirements. The optical detector unit shall perform the following functions and meet the requirements listed below.

- a) The unit shall be high-impact polycarbonate construction with stainless steel and/or brass hardware. The unit shall be designed for easy mounting at or near an intersection on mast arm, pedestal, pole, or intersection span wire.
- b) The unit shall accept optical signals from one (1) or two (2) directions and provide a single electrical output signal, as specified in the plans. The unit shall include a design feature to allow aiming of the two optical sensing inputs for hills, skewed approaches or slight curves.
- c) The unit shall have built-in terminal strip to simplify wiring connections. The unit shall receive power from the traffic signal phase selector equipment and have internal voltage regulation to be operational from 16 to 40 volts AC.
- d) The unit shall be responsive to the optical emitter at a distance of 1,800 feet. The unit shall deliver the necessary electrical signal to the traffic signal phase selector equipment via up to 1,000 feet of optical detector cable.
- e) The unit shall employ replacement circuit board assembly and photocells to facilitate repair.

907-639.02.2.2.3--Optical Detector Cable. The optical detector cable shall meet the requirements listed below.

- a) The cable shall guarantee delivery of the necessary quality signal from the optical detector to the traffic signal phase selector equipment over non-spliced distance of 1,000 feet. The cable shall guarantee sufficient power to the optical detector over a non-spliced distance of 1,000 feet.
- b) The cable shall be of durable construction for installation by direct burial, in conduit or mast arm, or exposed overhead supported by messenger wire. The weight of the cable shall have a minimum insulation rating of 600 volts and a temperature rating of 80°C.
- c) The cable shall have three (3) conductors of AWG 20 stranded, individually tinned copper color coded as follows.
 1. Orange for delivery of optical detector power (+)
 2. Blue for optical detector power return (-)
 3. Yellow for optical detector signal

The conductors will be shielded with aluminized polyester and have an AWG #20 stranded and individually tinned drain wire to provide signal integrity and transient protection. The shield wrapping shall have 20% overlap to ensure integrity following conduit and mast arm pulls.

907-639.02.2.2.4--Electrical and Environmental Requirements. All equipment supplied as part of the priority control system intended for use in the controller cabinet shall meet the following electrical and environmental specifications spelled out in the NEMA Standards Publication TS 2-2003, Part 2: v02.06:

- Line voltage variations per NEMA TS 2-2003, Paragraph 2.1.2.
- Power source frequency per NEMA TS 2-2003, Paragraph 2.1.3.
- Power source noise transients per NEMA TS 2-2003, Paragraph 2.1.6
- Temperature range per NEMA TS 2-2003, Paragraph 2.1.5
- Humidity per NEMA TS 2-2003, Paragraph 2.1.5
- Shock test per NEMA TS 2-2003, Paragraph 2.2.9.
- Vibration per NEMA TS 2-2003, Paragraph 2.2.8
- Non-Destructive Transient immunity NEMA TS 2-2003, Paragraph 2.1.8.
- Input-output terminals NEMA TS 2-2003, Paragraph 2.1.7.
- FCC Part 15 Subpart B Class A EMC Standard
- Canada ICES-003, Issue 4:2004 Class A EMC Standard
- EN50293: 2000 Electromagnetic Compatibility--Road Traffic Signal Systems -- Product Standard.
- EN 61326-1:2006 EMC Standard.
- EN 55011:2007 +A2:2007 EMC Standard.

907-639.02.3--Type 2 Emergency Vehicle Preemption. Emergency Vehicle Preemption Systems shall consist of the following principal Intersection Equipment components: Detectors/Receivers, Multimode Phase Selectors, and Auxiliary Interface Panel. The function intended for use with this system includes Emergency Vehicle Preemption to the traffic signal.

907-639.02.3.1--Vehicle Equipment.

907-639.02.3.1.1--Vehicle Control Unit. The vehicle control unit shall provide the interface between the vehicle and the priority control system. The vehicle control unit shall also interface with the Radio/GPS module. The vehicle control unit shall monitor the status of the vehicle turn signal via an interface cable that will connect between the vehicle control unit and the left and right turn signal lines in the vehicle. The vehicle control unit shall also monitor the disable input line as well as the remote activation input. Power to the vehicle equipment shall be provided through the vehicle control unit.

The vehicle shall transmit the following information when within range of an equipped intersection:

- The priority level of the vehicle equipment. This shall be either high priority or low priority. The priority level shall be factory set. Each vehicle control unit shall be capable of setting 254 different agency IDs and 15 different vehicle type classifications with 9,999 different identification numbers per class.
- The location, speed and heading of the vehicle.
- The status of the vehicle's turn signal.
- The radio channel as assigned by the intersection and the serial number of the Vehicle Control Unit.

The vehicle shall be capable of being wired so that the GPS data is available either while the equipment is requesting priority or when not requesting priority. The vehicle control unit shall be equipped with an ON/OFF switch to activate the system and request priority. The switch shall be depressed to activate the system. In addition, a remote activation line shall be provided to interface with other vehicle equipment. This line shall have +12 VDC applied to request priority. The equipment shall be configured to activate with the light bar/remote activation line or via the ON/OFF switch.

The vehicle equipment shall be supplied complete with a 20-foot minimum installation cable as well as a 15-foot minimum vehicle interface cable.

The vehicle control unit shall include multi-purpose communication ports compliant with the RS-232 communication standard. These ports shall enable unit configuration to be set into the vehicle control unit and read from vehicle control unit. It also shall allow real-time communication between the vehicle control unit and the interface computer as well as interfacing with other devices. One of the ports shall be configured to output GPS data at a user selectable baud rate in the NMEA format while the vehicle control unit is turned On. It shall output the following messages (depending on the baud rate):

- GGA Global Positioning System Fix Data (2400 baud and higher)
- GSA GPS DOP and active satellites (2400 baud and higher)
- GSV Satellites in view (4800 baud and higher)
- RMC Recommended Minimum Navigation Information (1200 baud and higher)

The vehicle control unit shall also have a series of indicator lights that will operate as follows:

- A power indicator as well as an indicator light in the switch will indicate that the equipment is powered On.
- A GPS indicator will indicate the status of GPS reception.
- An indicator will indicate the status of the communication between the vehicle control unit and the Radio/GPS unit.
- A disable indicator will indicate if the vehicle equipment is in a Disable mode. The disable indicator and the indicator in the power switch will flash green or any other color as approved by the Engineer.
- The indicators shall be capable of being programmed to provide feedback for the following:
 - Phase selector has received preemption request.
 - Another vehicle approaching the intersection has received the preemption request.
 - Phase selector has received preemption request and another equipped vehicle is approaching the intersection from another direction.

The vehicle control unit shall be equipped with a disable input that, when activated, will cause the radio to transmit that the vehicle is in Disable mode, thereby eliminating the possibility of the priority request continuing after the priority vehicle has arrived at its destination. The disable input shall be programmable to operate in either a latching or non- latching mode. The disable input shall be programmed so that the input may be activated by applying ground or by applying +12 VDC. Operation of the disable input shall be programmable using software. Additional inputs shall be included to temporarily switch the vehicle control unit to low priority and to Probe Mode. The vehicle equipment shall operate over a temperature range of -30°F to 165°F and a relative humidity range of 5% to 95%. Windows™ based software shall be available for programming the vehicle control unit through its RS-232 compatible multi-purpose port.

907-639.02.3.1.1.1--Antenna. A GPS receiver and antenna shall obtain the vehicle position, speed and heading from the GPS satellite system operated by the Department of Defense (DOD). The time information from the GPS satellites shall also be used to synchronize the frequency hopping of the 2.4 GHz radio.

The Radio/GPS antenna cables shall consist of a pair of 25-foot coax cables with factory terminated SMA connectors. One of these connectors shall have a pin and the other shall have a socket.

907-639.02.3.1.1.2--Radio. The Radio shall operate in the reserved Industrial, Scientific and Medical (ISM) communications band, requiring no license. A 2.4 GHz spread spectrum/frequency hopping radio shall provide the communications from the vehicle to the intersection when within range of a Radio/GPS equipped intersection. The radio shall have a transmit power of not more than one (1) watt. The radio shall have an unobstructed range of at least 2,500 feet. The radio shall meet FCC Part 15 rules. Radio link association and coordination among intersections and vehicles shall be automatic.

907-639.02.3.2--Intersection Equipment.

907-639.02.3.2.1--Multimode Phase Selector. The multimode phase selector recognizes inputs from both infrared and Radio/GPS activation methods at the intersection and supplies coordinated

inputs to the controller.

The multimode phase selector shall be designed to be installed in the traffic controller cabinet and is intended for use directly with numerous controllers. These include Type 170/2070 controllers with compatible software, NEMA controllers, or other controllers along with the system card rack and suitable interface equipment and controller software.

The multimode phase selector shall include the ability to directly sense the green traffic controller signal indications through the use of dedicated sensing circuits and wires connected directly to field wire termination points in the traffic controller cabinet. This connection shall be made using the Auxiliary Interface Panel.

The multimode phase selector will be a plug-in, 4-channel, multiple-priority, multi-modal device intended to be installed directly into a card rack located within the controller cabinet. The multimode phase selector shall be capable of using existing infrared or Radio/GPS system card racks. The multimode phase selector shall be powered from either +24 VDC or 120 VAC.

The multimode phase selector shall support front-panel RS-232, USB and Ethernet interfaces to allow management by on-site interface software and central software. An RS-232 port shall be provided on the unit. Additional RS-232 communication ports shall be available using the Auxiliary Interface Panel.

The multimode phase selector shall have the capability of storing a minimum of 10,000 priority control calls. When the log is full, the phase selector shall drop the oldest entry to accommodate the new entry. The multimode phase selector shall store each call record in non-volatile memory and shall retain the record if power terminates.

The multimode phase selector shall support a minimum of 5,000 code pairs (agency ID, vehicle ID) for each of the priority levels, high and low, providing unique vehicle identification and system security implementation at the vehicle level.

The multimode phase selector shall include several programmable control timers that will limit or modify the duration of a priority control condition, by channel. The control timers will be as follows:

- Max call time
- Off approach call hold time
- Lost signal call hold time
- Call delay time

The multimode phase selector shall have the ability to enable or disable all calls of all priority levels. This shall be independently settable by channel.

A unique intersection name, which shall be broadcast, shall be settable for each Multimode Phase Selector.

Up to 25 different radio channels shall be available to be assigned to the multimode phase selector.

The multimode phase selector shall operate in a mode that shall vary the output based on the status of the approaching vehicle's turn signal. Additional outputs available on an auxiliary interface panel may be needed. Settings shall be available for this mode as follows:

- Output mappings for each channel.
- Separate setting for high and low priority levels.
- Separate settings for each left turn, right turn or straight signal status for each of the four (4) channels and priority levels.

The multimode phase selector's default values shall be programmable by the operator on- site or at a remote location.

The multimode phase selector shall be capable of three (3) levels of signal discrimination, as follows:

- Verification of the presence of the signal of either high priority or low priority.
- Verification that the vehicle is approaching the intersection within a prescribed Estimated Time of Arrival (ETA).
- Determination of when the vehicle is within the prescribed range, either by intensity level or distance from the intersection.

The multimode phase selector shall include one (1) opto-isolated NPN, or sinking, output per channel that provides the following electrical signal to the appropriate pin on the card edge connector:

- 6.25Hz $\pm$ 0.1Hz 50% on/duty square wave in response to a low priority call.
- A steady ON in response to a high priority call.
- The multimode phase selector will also have the option of providing separate outputs for High and Low priority calls for controllers that do not recognize a 6.25 Hz pulsed low priority request.
- Additional outputs or output modes shall also be available on the Auxiliary Interface Panel in case of need for additional modes of operation.

The multimode phase selector shall accommodate the following three (3) methods for setting range thresholds for High and Low priority signals.

- Based on the approaching vehicle's Estimated Time of Arrival (ETA). This shall be settable between zero (0) and 255 seconds in one (1) second increments.
- Based on the approaching vehicle's distance from the intersection. This shall be settable in one (1) foot increments.
- Based on emitter intensity the system shall accommodate setting a separate range from 200 feet to 2,500 feet with range set points for both High and Low priority signals.

The multimode phase selector will have the following indicators:

- A status indicator that illuminates steadily to indicate proper operation.
- A link indicator on the multimode phase selector illuminates if other radios are within range.
- A radio indicator that indicates the status of the communication between the vehicle control unit and the Radio/GPS unit. The indicator illuminates to indicate that there is communication between the vehicle control unit and the Radio/GPS unit. The indicator illuminates to indicate that a GPS signal has been acquired and the 2.4 GHz radio is on the air.
- LED indicators (one (1) for high priority, one (1) for low priority) for each channel display active calls as steady ON and pulse to indicate pending preemption requests.

The multimode phase selector shall have a test switch for each channel to test proper operation of High or Low Priority.

The multimode phase selector shall utilize the time obtained from the GPS satellites to time stamp the activity logs. The user will set the local time zone (offset from GPS time) via the interface software.

The interface software shall have the capability to set the multimode phase selector to automatically adjust the GPS time offset for changes in daylight savings time.

An auxiliary interface panel shall be available to facilitate interconnections between the multimode phase selector and traffic cabinet wiring as well as provide additional outputs.

A multimode phase selector port may be configured to output GPS data at a user selectable baud rate in the NMEA 0183format. It will output the following messages depending on the baud rate:

- GGA - Global Positioning System Fix Data (2400 baud and higher)
- GSA - GPS DOP and active satellites (2400 baud and higher)
- GSV - Satellites in view (4800 baud and higher)
- RMC - Recommended Minimum Navigation Information (1200 baud and higher)

The following diagnostic tests are incorporated in the multimode phase selector:

- Power up built in test
- Communications port tests
- Preemption output test call
- Detector response test

The multimode phase selector shall be capable of call bridging.

When used with a GPS radio unit, the multimode phase selector shall relay a priority request to the next adjacent intersection based on the direction indicated by the vehicle's turn signals.

The multimode phase selector shall support evacuation mode for Low priority calls. The

multimode phase selector shall allow relative priority.

907-639.02.3.2.1.1--Card Rack. The required card rack shall provide simplified installation of a multimode phase selector into controller cabinets that do not already have a suitable card rack.

The card rack shall be factory wired with one (1) connector, located behind the card slot, and one (1) connector on the front of the card rack.

The card rack connector on the front shall provide for connections to the traffic controller. The Contractor shall verify card rack requirements with the Engineer prior to submitting this equipment.

One (1) version of the card rack shall contain a 24 VDC power supply to power the phase selector. The power supply shall be capable of being powered by 100-240 VAC 50-60 Hz.

Another version of the card rack shall pass 120 VAC through to the rear card rack connector. This version shall provide labeled terminal blocks for connecting the primary infrared detectors to a phase selector.

Additionally, there shall be an optional card rack with a built-in Electromechanical Relay for use in switching high current loads such as flashers and gate operators. The relay shall be capable of switching the following loads.

Resistive: 10 A, 240 VAC
10 A, 30 VDC

General Use: 7.5 A, 120 VAC
7.5 A, 240 VAC
7 A, 30 VDC
1/6 hp, 120 VAC
1/3 hp, 240 VAC

907-639.02.3.2.2--Blank.

907-639.02.3.2.3--Intersection Radio/GPS Module. A GPS receiver and antenna shall obtain the intersection position from the GPS satellite system operated by the DOD. The time information from the GPS satellites shall be used to synchronize the frequency hopping of the 2.4 GHz radio and to time stamp the activity log. The GPS receiver and the GPS antenna shall reside inside of the Radio/GPS module.

A 2.4 GHz spread spectrum/frequency hopping radio shall provide the communications from the intersection to the vehicle as well as from intersection to intersection, or as shown in the plans.

As an alternate, the following Radio/GPS unit and Radio GPS antenna may be used in the intersection.

The Radio/GPS antenna shall be a hemispherical dome with a pair of 15-foot coax cables with factory terminated SMA connectors. One (1) of these connectors shall have a pin and the other will have a socket. This antenna shall include one (1) element for receiving the GPS signal and

one (1) element for transmitting and receiving the radio signal. This antenna, along with the radio/GPS module, may also be used in the intersection.

The radio shall have a maximum transmit power of not more than one (1) watt. The radio shall have an unobstructed range of at least 2,500 feet. The radio will meet FCC Part 15 rules. The radio and the radio antenna shall reside inside of the Radio/GPS module.

The Radio/GPS module shall be housed in an impact resistant polycarbonate housing that will include a water resistant wire entry point. It shall contain a water resistant access cover to facilitate cable termination.

The Radio/GPS module shall be designed for mounting at or near an intersection on mast arms and span wire poles. Additional hardware may be needed.

The Radio/GPS module shall communicate to the multimode phase selector via a Radio/GPS cable up to 250 feet in length.

907-639.02.3.2.4--Radio/GPS Cable. The Radio/GPS cable shall deliver sufficient power from the multimode phase selector to the Radio/GPS module and will deliver the necessary quality signal from the Radio/GPS module to the multimode phase selector over a non-spliced distance of 250 feet.

Coaxial cable will not be permitted for this cable.

The Radio/GPS cable shall deliver sufficient power from the vehicle control unit to the Radio/GPS module and will deliver the necessary quality signal from the Radio/GPS module to the vehicle control unit over a non-spliced distance of 50 feet.

The cable shall be of durable construction to satisfy the following installations:

- Direct burial.
- Conduit and mast arm.
- Exposed overhead (supported by messenger wire)

The outside diameter of the cable shall not exceed 0.4 inches. The insulation rating of the cable shall be 300 volts minimum.

The temperature rating of the detector cable will be -40°F to +194°F.

The conductors shall be AWG #20 (7x28) stranded and individually tinned. The cable shall be shielded and have a drain wire to provide signal integrity and transient protection.

When the aluminum enclosure version of the Radio/GPS module is used, the Radio/GPS cable assembly shall use a 15-pin connector that will mate with the connector on the Radio/GPS module.

907-639.02.3.2.5--Electrical and Environmental Requirements. All equipment supplied as part

of the priority control system intended for use in the controller cabinet shall meet the following electrical and environmental specifications spelled out in the NEMA Standards Publication TS 2-2003, Part 2: v02.06:

- Line voltage variations per NEMA TS 2-2003, Paragraph 2.1.2.
- Power source frequency per NEMA TS 2-2003, Paragraph 2.1.3.
- Power source noise transients per NEMA TS 2-2003, Paragraph 2.1.6
- Temperature range per NEMA TS 2-2003, Paragraph 2.1.5
- Humidity per NEMA TS 2-2003, Paragraph 2.1.5
- Shock test per NEMA TS 2-2003, Paragraph 2.2.9.
- Vibration per NEMA TS 2-2003, Paragraph 2.2.8
- Non-Destructive Transient immunity NEMA TS 2-2003, Paragraph 2.1.8.
- Input-output terminals NEMA TS 2-2003, Paragraph 2.1.7.
- FCC Part 15 Subpart B Class A EMC Standard
- Canada ICES-003, Issue 4:2004 Class A EMC Standard
- EN50293: 2000 Electromagnetic Compatibility--Road Traffic Signal Systems – Product Standard.
- EN 61326-1:2006 EMC Standard.
- EN 55011:2007 +A2:2007 EMC Standard.

907-639.02.4--Type 3 Emergency Vehicle Preemption with Remote Cabinet Monitoring.

907-639.02.4.1--Vehicle Equipment. The Vehicle Device shall conform to the following requirements:

- The device shall function correctly between -34°C and +74°C.
- The device shall be capable of being mounted inside a vehicle either under a seat or strapped under the dashboard. The unit will come with all wiring needed to connect the system to the vehicle.
- The device shall interface to a non-invasive road sensor for environmental measurements via either RS485 or Bluetooth connection.
- The device shall be provided with appropriately rated and keyed connectors that allows the device to be exchanged by unplugging connectors, without tools.
- The device shall incorporate an integrated GPS and/or cell modem.
- The configuration of the device shall be accomplished by accessing the internal web server with a browser. It shall be possible to configure the device without any special software.
- The device shall incorporate an integrated GPS which will allow the device to geo-locate itself on the map, without configuration.
- The device shall operate without requiring static IP address. The only configuration required at the device is to enter the URL of where the TSPRMS central software is hosted.
- In the event that the cell service is interrupted or is not available, the device shall store any events that occur in internal memory, and forward these events automatically to the cabinet monitoring system when the cell service is restored. In this way, a complete record of events at the device can be maintained even if cell service is interrupted for a period.
- The device shall utilize HTTP and HTTPS protocols, and XML data structures, for

communications with the cabinet monitoring system. In this way the data will be open for future expansion and competition. The use of secret proprietary protocols is not permitted.

- The device shall support Ethernet, cellular and license free radio communication.
- The device shall have the option of being supplied with an enhanced GPS, which provides GPS coordinates based on dead-reckoning even when the GPS signal is shielded from the vehicle such as under an overpass; in a tunnel or in between tall buildings in a city. The dead reckoning system shall include accelerometers, gyroscopes and a distance measure that will provide accuracy of better than 20 feet in 1000 feet, when there is no information from the GPS satellites. The enhanced GPS shall optionally be connected to the vehicle OBD-II port; the J1939 ECU port (for heavy vehicles) or a wheel tick sensor as the project requires. The enhanced GPS shall self-calibrate the wheel tick input.

907-639.02.4.2--Intersection Equipment. It is a requirement that the Emergency Vehicle Preemption with Remote Cabinet Monitoring system operate independent of the brand/type of intersection controller deployed at the intersection. The Contractor shall install a small field device into each intersection cabinet which connects to the terminal strip in the cabinet (via a provided wiring harness) and makes the system function independent of controller operation. A 19" Rack Mounted option shall be available if required in the plans.

The system Field Device shall conform to the following requirements:

- The Device shall function correctly between -34°C and +74°C.
- The nominal size of the Device shall be 19" x 7.455" by 1.719", and shall be suitable for placing in Traffic Signal Cabinets specified in Section 632 of the attached specification.
- The Device shall be provided with appropriately rated connectors that allow the Device to be exchanged by unplugging connectors, without tools.
- The Device shall incorporate an integrated GPS and cell modem (when required).
- The configuration of the Device shall be accomplished by accessing the internal web server with a browser. It shall be possible to configure the Device without any special software.
- The Device shall be powered via a standard 120V input power.
- The Device shall allow for the routing of the controller configuration packets to and from the controller (either by Ethernet or serial communications) for the three types of controller that are utilized by the Department. In this way it shall be possible to configure the controller, and utilize the controller specific software to interrogate the controller, and the system shall provide the communications pipe which allows this to be accomplished.
- The Device shall utilize field initiated communications. This allows for a low cost cellular data plans to be used, with infrequent polling. However, when an abnormal event occurs and is detected by the Device, then the Device will immediately initiate the transfer of a data packet to the system to enable real-time alerting of response personnel to take place.
- The Device shall, within the size limitations above, include a battery and battery charging/monitoring circuit, to allow the system to function correctly even when all power to the intersection has failed. The battery shall continue to power the Device for a minimum of five (5) hours after all power has failed to the intersection.
- The Device shall incorporate an integrated GPS which will allow the Device to geo-locate itself on the map, without configuration.

- The Device shall operate without requiring a static IP address. The only configuration required at the Device is to enter the URL of where the system central software is hosted.
- In the event that the cell service is interrupted or is not available, the Device shall store any events that occur in internal memory, and forward these events automatically to the system when the cell service is restored. In this way, a complete record of events at the device can be maintained even if cell service is interrupted for a period.
- The Device shall utilize HTTP and HTTPS protocols, and XML data structures, for communications with the system. In this way the data will be open for future expansion and competition. The use of secret proprietary protocols is not permitted.

907-639.02.4.3--Client User Interface. The user interface software shall provide, at a minimum, features to meet the following requirements:

907-639.02.4.3.1--General. The user interface shall be web based and able to be viewed using a browser. Internet Explorer, Chrome and Firefox browsers shall be supported, as well as Safari on an iPad. Systems that use remote desktop or similar to view a thick-client user interface will not be acceptable. The user interface shall require a user name and password to log on.

907-639.02.4.3.2--Map Display. The system shall include a scrollable, zoomable map display, with the intersections and emergency vehicles shown as representative icons on the map.

The alarm status of the intersection shall be clearly indicated on the icon on the map, so that the user can see at a glance which intersections are in alarm.

The map display shall also include a list of intersections, with the number and priority of alarms indicated on the list. Intersections in high priority alarm shall be moved to the top of the list, followed by medium priority, low priority and then finally by intersections not in alarm.

The icons shall change to be able to clearly indicate if an intersection is offline.

Clicking on the icon on the map shall expose a box with the current parameters of the intersection shown.

The default map display position and zoom shall be configurable by user, so that the user's view will default to show the intersections that the user is responsible for managing.

The map view shall have the ability to show traffic overlays on the map.

The map view shall be able to show vehicle trails when the vehicles have been in an emergency or not active.

907-639.02.4.3.3--Regional Intersection and Vehicle Grouping. The System shall provide for intersections and vehicles to be logically grouped into regional groupings (for example, north; south; Fire 1; Fire 2)

The System user logon shall be configurable so that if a maintenance or operational person is responsible for, say, the north intersections and emergency vehicles then when that user logs on, the user has visible only the intersections that belong to the group that the user is authorized to view.

907-639.02.4.3.4--Intersection Detail Display. Intersection detail display shall be possible to drill down, either from the map icon or from the list, to a device level detail for the intersection, which as a minimum shall display the following parameters:

- The alarm status, with priority indicated, and a text description of the alarm (if an alarm is present for this device).
- The time since the last communication with the device
- The following parameters (real time now values, minimum for the day values, maximum for the day values, and average for the day values)
 - The AC mains voltage (value)
 - The battery back-up voltage (value)
 - The cabinet temperature (value)
 - The cabinet humidity (value)
 - The presence of AC power (OK or Fail)
 - The flashing status of the intersection (OK or Flashing)
 - Stop Time status (OK or Stop Time Active)
 - The cabinet door status (Open or Closed)
 - The intersection fan status (Fan On or Fan off)
- It shall be possible to view graphs of each of the value parameters in graphical form, over the recent two week period. This includes at a minimum real time graphs of:
 - The AC mains voltage
 - The battery back-up voltage
 - The cabinet temperature
 - The cabinet humidity

907-639.02.4.3.5--Diagnostics and Log Display. From the device level detail, it shall be possible to further drill down to get the raw data; the error logs; and the communications logs to allow a technician to fault-find problems on the System.

It shall also be possible to:

- filter the logs by Device; by Device Type and/or by Group as well as between dates.
- print these selected logs to a local printer or a PDF file.
- export these logs to Excel on the local computer for further analysis.

907-639.02.4.3.6--Alarms. The System shall have a comprehensive alarm generation capability.

It shall be possible to configure alarms to be generated on any parameter becoming out of tolerance, including analog values, digital values and enumerated values.

Alarms shall be configurable to be of Low, High or Critical Priority.

The alarm priority shall be displayed throughout the System, on all displays, using color codes such as red-critical; yellow – high; and amber-low to indicate the priority of the alarm.

The current active alarms shall be accessible for view via an expandable window, to see which alarms are active and when the alarm occurred. The highest priority alarms shall rise to the top of the list.

907-639.02.4.3.7--Alerts. The System shall have comprehensive alerting capability, to enable the response personnel to be notified when an abnormal situation has occurred.

It shall be possible to configure alerts to one or more personnel for each alarm. This will cause, as selected, an SMS and/or an email to be sent to the person when an alarm occurs.

The alert shall be configurable to optionally send via email and/or via SMS a message when an alarm clears.

The intention is that the System provides the alerts to the user in near real time. The SMS and email shall be issued within 30 seconds of the occurrence of event which results in an alert being issued.

907-639.02.4.3.8--Reports. It shall be possible to view reports on the screen, in the browser of the System, and if desired print the report to a printer or a PDF file.

Alarm Activity Report. The System shall include a report which shows the alarms activity for a period. The Alarm Report shall indicate the time the alarm occurred; by color the priority of the alarm; whether it is still active; and if not active then the time that the alarm cleared. It shall be possible to filter the alarms by Device Type; by Device and/or by Device Group as well as by date time to be able drill down into a large alarm list to be able to view, for example, the alarm activity for a particular intersection or controller type over a three month period.

User Activity Report. The System shall include a report which shows user activity for a given period, to enable an audit of a user's response to an alarm to be made. The report shall show which screens the user viewed; when the screen was viewed, and the IP address of the computer from which the screen was viewed.

Preempt System Operational Availability Report. The System shall include a report which shows the overall operational availability of the Department intersections. The intersection is available when not in an alarm condition such as flashing or power fail. The availability report shall be detailed for each intersection for the period (say 1 month) and summarized by group (region) and for each controller type. Using this report it shall be possible to determine if system availability is trending up or down for the overall intersection system; by region and/or by controller type. It shall also be possible to compare the system availability by region; and also to compare system availability by controller type.

Fault Occurrence By Controller Type Report. The System shall include a report which shows the number and type of faults that have occurred in each intersection, which can be summarized by

region and/or by controller type. This report will allow the user to compare the frequency of faults by region and by controller type.

Response Time for Fault Repair Report. The System shall include a report which shows the response time to clear faults, for a given time frame (say 1 month). This report will allow the user to determine the number of faults, and the total and average time to clear the fault. This report will allow the response times by region to be compared.

Vehicle Trip Report. The System shall include a report which shows all the emergency vehicle trips and include information on start time, end time, total travel time, average speed and destination point. The report shall provide the user the ability to select a start date and end date. This report will show response times to emergency call outs and how quickly the vehicle arrived.

907-639.02.4.3.9--Vehicle Trails. The maps display shall show live information of the preempt status of the emergency vehicles on the system.

The user shall have the option to select which class of emergency vehicles to display on the map via the information overlay menu.

The information overlay will provide the option to select the number of hours of live data the operator would like to see. This ranges from 1 hour to 24 hours. The user shall have the ability to select that the trails will fade away as the data becomes older.

The information overlay shall provide the ability for user to display the device names on the map, for easy identification of both intersections and emergency vehicles.

Operators will have the ability to display legends that explain the emergency vehicle trails color codes, including idle, preempt service requested, left turn indicator, and right turn indicator so that it is easy to see the behavior of the emergency vehicle.

907-639.02.4.3.10--Vehicle Playback. The System shall include the ability to playback the activity of the emergency vehicles, so that retrospective fault finding of the preempt system can be carried out.

Playback shall support the same controls for panning and zooming the map, as well as using the information overlay to select the type of data being displayed on the playback menu.

Users shall have the additional functionality of controlling which devices are displayed by selecting the checkboxes on a selection panel on the left of the map.

The playback screen should provide the user with the option to select a date range via a drop down date selector menu. The menu will provide a full calendar and the option to select the exact start time and end time for the playback.

The bottom section of the map screen shall display the timestamp based on the location within playback.

The user shall have controls that allow one click access to start from the beginning, rewind, play, fast-forward, and scroll to end.

The user shall have the option to use a slider that is operated by click and drag to the time of interest in the playback.

907-639.02.4.3.11--Remote Power Cycle. The System shall include the ability to remotely cycle power to the outlets on the back of the field device. In this way it shall be possible to cycle power to ancillary connected equipment such as network switches, cameras and similar equipment.

The user interface shall display the status of the outlets, and provide confirmation via an associated input whether the sockets are energized or not.

907-639.02.4.4--Electrical and Environmental Requirements. All equipment supplied as part of the priority control system intended for use in the controller cabinet shall meet the following electrical and environmental specifications spelled out in the NEMA Standards Publication TS 2-2003, Part 2: v02.06:

- Line voltage variations per NEMA TS 2-2003, Paragraph 2.1.2.
- Power source frequency per NEMA TS 2-2003, Paragraph 2.1.3.
- Power source noise transients per NEMA TS 2-2003, Paragraph 2.1.6
- Temperature range per NEMA TS 2-2003, Paragraph 2.1.5
- Humidity per NEMA TS 2-2003, Paragraph 2.1.5
- Shock test per NEMA TS 2-2003, Paragraph 2.2.9.
- Vibration per NEMA TS 2-2003, Paragraph 2.2.8
- Non-Destructive Transient immunity NEMA TS 2-2003, Paragraph 2.1.8.
- Input-output terminals NEMA TS 2-2003, Paragraph 2.1.7.
- FCC Part 15 Subpart B Class A EMC Standard
- Canada ICES-003, Issue 4:2004 Class A EMC Standard
- EN50293: 2000 Electromagnetic Compatibility--Road Traffic Signal Systems -- Product Standard.
- EN 61326-1:2006 EMC Standard.
- EN 55011:2007 +A2:2007 EMC Standard.

907-639.02.5--Confirmation Light. This indication is intended for use at traffic signal installations that employ Emergency Vehicle Preemption (EVP) systems which utilize confirmation lights to notify the emergency vehicle operators that the designated preemption display is active and from which approach direction the call activating the display was received. The indication shall be an incandescent, tungsten-halogen or light emitting diode (LED) lamp. The confirmation light lamp shall be rated for outdoor use and shall have the illumination equivalent of a 95W incandescent lamp.

907-639.02.5.1--Confirmation Light Lamp Holder. The confirmation light lamp holder shall meet the following.

- (a) Be precision die-cast aluminum with heat sinks and ribbing to maximize heat dissipation.
- (b) Be a medium base lamp holder that accepts PAR38 lamps up to 250W incandescent or Tungsten-Halogen, and will also accept LED style lamps.
- (c) Have a premium porcelain socket with double reinforced screw shell and spring loaded center contact.
- (d) Be suitable for wet locations.
- (e) Have a gasket that consists of a thick silicone rubber seal backed up by a durable heat barrier and anchored in place with a metal lock ring to ensure unit stays weather tight in any position, above or below horizontal.
- (f) Have a nominal ½-inch NPT threaded adjustable arm, locknut preinstalled, and pre-lubed to facilitate mounting.
- (g) Have cast-in quadrants with serrated teeth to lock unit in place once aimed.
- (h) Have extra-long wire pigtails for easy splicing.
- (i) Shall be UL Listed.

907-639.02.5.2--Confirmation Light Mounting. The confirmation light may be mounted as an assembly with the appropriate optical detector, utilizing conventional conduit and fittings in accordance with Section 722 of the Standard Specifications. When mast arm mounted, all wiring shall be routed internally to the mounting assembly.

907-639.02.6--Rotating Beacon. The rotating beacon indication is intended for use in traffic signal systems that employ EVP systems that utilize rotating beacons to notify the emergency vehicle operators that a preemption call has been received.

907-639.02.6.1--General Construction. The rotating beacon shall be constructed with a non-corroding polycarbonate base with combination mount with a flat base and 1-inch pipe mounting. The lens shall have an elliptical dome shape and shall provide a high light transmission and light output. The outer surface shall be smooth to minimize the accumulation of dust and dirt. A gasket seal shall be provided between the dome lens and the base. The rotating beacon assembly shall be nominally six and one-half inches (6½") tall and five and one-half inches (5½") wide at its maximum width. The rotating beacon shall have a single light source and shall provide the rotating effect by a rotating refractor within the assembly. The dome lens shall be BLUE in color.

907-639.02.6.2--Rotating Beacon Mounting. The rotating beacon shall be mounted at locations and at heights above the pole bases as shown on the plans. The rotating beacon shall be mounted in a vertical position, employing a single traffic signal bracket in accordance with Section 722, of the Standard Specifications on the bottom of the rotating beacon. When mounted on a steel pole with internal wiring, all wiring shall be internal to the bracket and the pole.

907-639.03--Construction Requirements.

907-639.03.1--Railroad Preemption. The Contractor shall secure all items that are required to complete the installation. The Contractor shall coordinate with the railroad company for the connection of the Railroad Signal Preemption to the railroad controller's contact closure termination point as indicated in the Plans. The Contractor shall contact the railroad company

prior to starting any construction to obtain any requirements for the connection.

During construction, the Contractor shall meet all railroad requirements to provide the connection including:

- Boring, Jacking, or Trenching of casing pipe, conduit, roll pipe, or any other required materials.
- Conduit connections into cabinet.
- Contact closure cable connections on termination blocks.

When required by the railroad company and any agreements, the Contractor shall furnish a Flagger to accommodate work within the railroad right of way. The Contractor shall schedule all work to minimize time within the right of way.

907-639.03.2--Type 1, Type 2, and Type 3 Emergency Vehicle Preemption.

907-639.03.2.1--Vehicle Equipment. Equipment shall be the responsibility of the local maintaining agency for all necessary equipment and installation.

907-639.03.2.2--Intersection Equipment. The Contractor shall install, configure, and demonstrate a fully functional Emergency Vehicle Preemption System as shown in the Plans. The Contractor shall install all equipment according to the manufacturer's recommendations. The Type 1 intersection equipment including, the multimode phase selector, intersection optical detector, associated optical detector cabling, and card rack shall be installed per the manufacturer's recommendations or as outlined in the plans and/or contract documents. The Type 2 and Type 3 intersection equipment including, the multimode phase selector, intersection Radio/GPS module, associated Radio/GPS cabling, card rack and Remote Monitoring Field Device shall be installed per the manufacturer's recommendations or as outlined in the plans and/or contract documents. All installation requirements of the equipment manufacturer shall be followed unless otherwise directed by the Engineer. All necessary equipment shall be mounted in the cabinet and configured according to the Plans, Contract Documents, and manufacturer's recommendations. The completed installation shall present a neat and positive appearance and shall not in any way interfere with the proper operation of the traffic signal system installation of which it is part.

907-639.04--Method of Measurement. Railroad Signal Preemption, Type 1 Optical Detector, Multimode Phase Selector, Type 2 Radio/GPS Module, and Type 3 Intersection Device will be measured per each. Type 1 Optical Detector Cable and Type 2 Radio/GPS Cable will be measured by the linear foot, which measurement will be computed horizontally and vertically along the pole, conduit or messenger cable which the electric cable is placed, from center to center of the several installations comprising the circuits. No extra length will be allowed within conduit for vertical changes in elevation of the conduit. No extra length will be allowed for cable inside signal heads, drip loops, or sag in aerial supported cable. The terminals for the measurements of lengths will be considered specifically as the center of the pull boxes, poles, signal heads or controller cabinets.

Confirmations Light and Rotating Beacon will be measured per each.

907-639.05--Basis of Payment. Railroad Signal Preemption, Type 1 Optical Detector, Multimode Phase Selector, Type 2 Radio/GPS Module, [Type 3 Intersection Device](#), Type 1 Optical Detector Cable, and Type 2 Radio/GPS Cable, measured as prescribed above, will be paid for at the contract price per each or linear foot, which price shall be full compensation for coordinating and accommodating railroad requirements, providing hardware, sealing; testing, cabling, connections, documentation, configuration, flagger, training, materials, labor, tools, equipment, and all other incidentals necessary to complete the work and provide a fully functional preemption system.

Confirmations Light and Rotating Beacon, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing, installing, connection and testing all materials; for pulling through conduit, mast arms and poles for attaching to messenger cable; for final cleanup; and for all labor, equipment, tools and incidentals necessary to complete the work.

Payment will be made under:

907-639-A: Railroad Signal Preemption	- per each
907-639-B: Type 1 Optical Detector	- per each
907-639-C: Type 1 Optical Detector Cable	- per linear foot
907-639-D: Multimode Phase Selector	- per each
907-639-E: Type 2 Radio/GPS Module	- per each
907-639-F: Type 2 Radio/GPS Cable	- per linear foot
907-639-G: Confirmation Light	- per each
907-639-H: Rotating Beacon	- per each
907-639-J: Type 3 Intersection Device	- per each

CITY OF HATTIESBURG, MISSISSIPPI

SPECIAL PROVISION NO. 907-643-3

CODE: (IS)

DATE: 09/20/2021

SUBJECT: Video Vehicle Detection

Section 643, Video Vehicle Detection System, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 643 on pages 601 thru 628 and substitute the following.

SECTION 907-643 - VIDEO VEHICLE DETECTION

907-643.01--Description. This section specifies the minimum requirements for Video Vehicle Detection (VVD) and Multi-Sensor Vehicle Detection (MSVD) furnished and installed in accordance with the design(s) for the location(s) designated on the project plans, in any related notice to bidders, or as directed. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, test, and operate VVD and/or MSVD. The video vehicle detection system shall at a minimum use one or more cameras recommended by the manufacturer or an integrated thermal sensor and video analytics hardware and software to detect vehicle presence, provide a detection output, and generate volume, occupancy, and speed data.

Type 1 Video Vehicle Detection will provide presence or pulse detection of vehicles, bicycles, and pedestrians for Traffic Signal Controller inputs. There are two variations of Type 1 Video Vehicle Detection: Type 1A – camera with independent video detection processor, Type 1B – a single integrated camera with video detection processor. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Video Vehicle Detection equipment, complete and ready for service.

Type 2 Video Vehicle Detection will provide presence or pulse detection of vehicles, bicycles, and pedestrians for Traffic Signal Controller inputs. Type 2 Video Vehicle Detection shall be designed to be span wire mounted. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Video Vehicle Detection equipment, complete and ready for service.

Type 3 Video Vehicle Detection will provide presence or pulse detection and tracking of vehicles, bicycles, and pedestrians for Traffic Signal Controller inputs. Type 3 Video Vehicle Detection shall be a single fish-eye lens camera, designed to be mounted on signal pole or mast arm. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Video Vehicle Detection equipment, complete and ready for service.

The Multi-Sensor Vehicle Detection (MSVD) will provide detection of vehicles on a roadway using a Multi-Sensor Detection for Traffic Signal Controller inputs. The Multi-Sensor shall utilize two (2) different sensors of different technologies, video imaging and radar, to detect and track vehicles. The module shall process information from both video imaging and radar sensors simultaneously in real-time. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, and test the Multi-Sensor Vehicle Detection equipment, complete and ready for service.

907-643.02--Materials.

907-643.02.1--Materials Type 1 Video Vehicle Detection. The Type 1 Video Vehicle Detection shall consist of power supply, video camera, mounting brackets, and lightning protection as recommended by the manufacturer, video detection processors/extension modules capable of processing the number of camera and phase combination video sources shown on the project plans or in the purchase order. In addition, Type 1B Video Vehicle Detector shall consist of a single integrated camera with video detection processor, a cabinet interface which mounts in a standard detector rack or as a standalone shelf mount unit.

907-643.02.1.1--Functional Requirements for Type 1 Video Vehicle Detection. The Type 1 Video Vehicle Detection configuration shall utilize video processors with one or more video inputs and one (1) video output, responding to specific site applications, camera locations and detection zones shown on the project plans. Video processors or interface modules shall be provided which plug directly into NEMA TS 1 and TS 2 detector racks without adapters. Extension modules which allow detection zones from one camera to be routed to other card slots shall also be provided if required. The system shall be Ethernet compatible with an RJ45 port. The Type 1 Video Vehicle Detection shall be able to detect vehicles and bicycles in multiple lanes using only the video image.

907-643.02.1.2--Interface Type 1 Video Vehicle Detection. The following interfaces shall be provided:

- 1) Video inputs that accept RS 170 (NTSC) signals from an external video source. A BNC type interface connector shall be provided and located on the front of the video processing unit.
- 2) A LED indicator to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.
- 3) One (1) video output per processor module. The video output shall be RS 170 compliant and shall pass through the input video signal. The video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Control of the overlays and video switching shall also be provided through the serial communications port. The video output interface connector shall be BNC or RCA type. If RCA connector is used, an RCA to BNC adapter shall be provided.
- 4) A serial communications port on the front panel. The serial port shall be compliant with RS-232 or RS-422 electrical interfaces and shall use a DB9 or RJ45 type connector. The serial communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information.
- 5) Interface software. The interface protocol shall support multi-drop or point-to-multipoint communications. Each video detection sensor shall have the capability to be individually IP addressable either built in or with third party video server units.
- 6) Open collector contact closure outputs meeting NEMA TS-2 requirements. The open collector output will be used for vehicle detection indicators as well as discrete outputs for alarm conditions.
- 7) LED status indicators on the front panel. The LED's shall illuminate when a contact closure

- output occurs. Provide one output LED for each contact closure output.
- 8) A mouse compatible port (PS-2 or USB) on the front panel of the video processing unit. The mouse port shall be used as part of the system setup and configuration.
 - 9) A Cabinet Interface shall be provided that is specifically designed to mount in a standard NEMA TS 1 and TS 2 detector rack without adapters or rewiring, or as a stand-alone shelf mount unit. The Interface shall operate in a temperature range from -31°F to +165°F and a humidity range from 0% to 95% relative humidity. The Cabinet Interface shall be powered by 100v to 240v AC, 50 or 60Hz. The front of the Interface shall include LED detection indications for each channel of detection. One BNC video output and detector test switches that allow the user to place calls on each channel

907-643.02.1.3--Functionality Type 1 Video Vehicle Detection. Detection zones shall be programmed via an on-board menu displayed on a video monitor and a pointing device connected to the video detection processor. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. The video detection processor shall detect vehicles, bicycles, and pedestrians in real time as they travel across each detection zone. The video detection processor shall have an RS-232 (DB9 or RJ45) port for communications with an external computer. The video detection processor port shall be multi-drop capable.

It shall be possible to upload and save all configuration data including loop placement and save the file on a computer. It shall be possible to download a configuration file from a computer to the detection device.

The video detection processor shall accept new detection patterns from an external computer through the RS-232 port when the external computer uses the correct communications protocol for downloading detection patterns.

A WindowsTM based software designed for local and remote connection shall be provided for video capture, real-time detection indication and detection zone modification capability. The video detection processor shall send its detection patterns to an external computer through the RS-232 port.

The video detection processor shall default to a safe condition, such as minimum recall, fixed recall or a constant call on each active detection channel, in the event of unacceptable interference with the video signal, low visibility conditions, or power failure.

The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined detection zones in a constant call mode. The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

907-643.02.1.4--Detection. Type 1A shall have a minimum of 24 detection zones per camera input and each detection zone shall be capable of being sized to suit the site and the desired vehicle detection area. Type 1B shall have a minimum of 8 detection zones per camera input and each detection zone shall be capable of being sized to suit the site and the desired vehicle detection area.

A single detection zone shall be able to replace multiple inductive loops and the detection zones

shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

Placement of detection zones shall be done by using only a pointing device, and a Graphical Interface built into the video detection processor and displayed on a video monitor, to draw the detection zones on the video image from each video camera. Detection zones created in this manner shall be compatible with the PC-based software provided with the system.

The video detection processor shall support bicycle type zones where the zone can differentiate between motorized vehicles and bicycles, producing a call for one but not the other. Bicycle zones shall only output when a bicycle is detected. The video detection processor shall provide the ability to assign a separate output channel for bicycle zones to allow traffic controllers to implement special bicycle timing for applications where the traffic controller has separate bicycledetection inputs. Bicycle zones shall have the ability to have extensions assigned to individual bicycle zones for applications where the traffic controller does not have bicycle specific detectioninputs.

For Type 1A, six (6) additional count zones for bicycles shall be provided to accumulate bicycle counts at user specified intervals.

The video detection processor's memory shall be non-volatile to prevent data loss during power outages.

When a vehicle is detected crossing a detection zone, the corners or entire zone of the detection zone shall flash/change color on the video overlay display to confirm the detection of the vehicle. It shall be possible to record the operation of the unit in real time with the detection zones operating.

Detection shall be at least 98% accurate in all weather conditions, with slight degradation acceptable under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility.

The video detection processor shall maintain normal operation of existing detection zones when one (1) zone is being added or modified.

The video detection processor shall output a constant call on any detector channel corresponding to a zone being modified and shall resume normal operation upon completion.

Detection zones shall be directional to reduce false detections from objects traveling in directions other than the desired direction of travel in the detection area.

The video detection processor shall process the video input from each camera using a microprocessor at 30 frames per second at one volt, peak to peak, 75 ohms, or EIA 170 NTSC video standard.

The video detection processor shall output minimum recall, fixed recall or constant call for each enabled detector output channel if a loss of video signal occurs. The recall behavior shall be user selectable for each output. The video detection processor shall output a constant call during the

background "learning" period.

Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds in increments of 0.1 seconds.

Type 1A shall have up to six (6) detection zones per camera view that have the capability to count the number of vehicles detected, measure classification, **occupancy**, and speed. The data values shall be internally stored within the processor module for later retrieval through the RS-232 port. The data collection interval shall be user definable in periods of 5, 15, 30, or 60 minutes or by intersection cycle. Real-time data shall be retrieved from the PC-based software provided with the system.

~~907-643.02.1.5~~---Camera. Type 1A cameras shall be completely compatible with the video detection processor and shall be certified by the manufacturer to ensure proper system operation.

Type 1B shall be a single integrated camera with built in video detection processor.

The Video Vehicle Detection shall produce accurate detector outputs under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.009 to 930 foot-candles.

The camera shall use a color CCD sensing element with resolution of not less than 470 lines horizontal and 400 lines vertical.

The camera shall include mechanisms to compensate for changing of lighting by using an electronic shutter and/or auto-iris lens.

The camera shall include a variable focal length lens with factory preset focus that requires no field adjustment. Zooming of the camera lens to suit the site geometry by means of a portable interface device designed for that purpose. The horizontal field of view shall be adjustable. Camera configuration shall be customized for each approach based on field site conditions and the project plans.

The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate

of the enclosure. The heater shall directly heat the glass lens and require less than five (5) watts over the temperature range.

Power consumption of the camera shall be 15 watts or less under all conditions.

The camera enclosure shall be equipped with separate, weather-tight connections for power and setup video cables at the rear of the enclosure. These connections shall allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module furnished under this bid item.

The video signal output by the camera shall in accordance with NTSC standards.

All necessary mounting brackets shall be mounted to pole shafts, mast arms, or other structures to mount cameras as indicated on the project plans. Mounting brackets shall result in a fixed- position mounting. Mounting Brackets shall be included at no additional cost.

907-643.02.1.6--Video Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance. The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.1.7--Power Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance.

Camera power cable shall be suitable for installation in conduit and in exposed sunlight environment, and UL listed.

The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.1.8--Surge Protection. Surge protection devices shall be provided for all new or added video detection devices as recommended by the manufacturer. A surge protection device (SPD) shall be installed at the point the video detection devices receive 120 volt power and connected in series with the circuits. SPDs shall be selected and installed according to recommendation from the device manufacturer. The units shall be configured with receptacles. The units shall have an internal fuse protection and shall provide common mode (L+N-G) protection.

Video and/or Power cable shall be protected with an inline surge suppressor as recommended by the manufacturer or a panel mounted surge suppressor as recommended by the manufacturer or approved equal, installed and grounded per manufacturer's recommendations.

907-643.02.1.9--Physical and Environmental Specifications. Physical and Environmental Specifications shall be as follows.

Video Vehicle Detection Processor: The video vehicle detection processor shall operate reliably in a typical roadside traffic cabinet environment. Internal cabinet equipment and a videovehicle detection processor shall be provided that meets the environmental requirements of NEMATS-2-2003 Section 2. If the processor is located in the sensor, it shall meet the same requirements.

Video Camera Sensor: The operating ambient temperature range shall be -30°F to 140°F. Additionally, a heater shall be included to prevent the formation of ice and condensation in cold weather. The heater shall not interfere with the operation of the video camera sensor electronics, or cause interference with the video signal.

Vibration: Vibrations shall meet the requirements of NEMA TS 2-2003 Section 2.1.9. Shock: Shock shall meet the requirements of NEMA TS 2-2003 Section 2.1.10.

Acoustic Noise: A video camera sensor and enclosure shall be provided that can withstand 150 dB for 30 minutes continuously, with no reduction in function or accuracy.

907-643.02.2--Materials Type 2 Video Vehicle Detection. The Type 2 Video Vehicle Detection shall be span wire mounted and consist of power supply, video camera, mounting brackets, and lightning protection as recommended by the manufacturer, video detection processors/extension modules capable of processing the number of camera and phase combination video sources shown on the project plans or in the purchase order

907-643.02.2.1--Functional Requirements for Type 2 Video Vehicle Detection. The Type 2 Video Vehicle Detection configuration shall utilize video processors with one or more video inputs and one (1) video output, responding to specific site applications, camera locations and detection zones shown on the project plans. Video processors or interface modules shall be provided which plug directly into NEMA TS 1 and TS 2 detector racks without adapters. Extension modules which allow detection zones from one camera to be routed to other card slots shall also be provided if required. The system shall be Ethernet compatible with an RJ45 port. The Type 2 Video Vehicle Detection shall be able to detect vehicles and bicycles in multiple lanes using only the video image.

907-643.02.2.2--Interface Type 2 Video Vehicle Detection. The following interfaces shall be provided:

- 1) Video inputs that accept RS 170 (NTSC) signals from an external video source. A BNC type interface connector shall be provided and located on the front of the video processing unit.
- 2) A LED indicator to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.
- 3) One (1) video output per processor module. The video output shall be RS 170 compliant and shall pass through the input video signal. The video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Control of the overlays and video switching shall also be provided through the serial communications port. The video output interface connector shall be BNC or RCA type. If RCA connector is used,

- an RCA to BNC adapter shall be provided.
- 4) A serial communications port on the front panel. The serial port shall be compliant with RS-232 or RS-422 electrical interfaces and shall use a DB9 or RJ45 type connector. The serial communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information.
 - 5) Interface software. The interface protocol shall support multi-drop or point-to-multipoint communications. Each video detection sensor shall have the capability to be individually IP addressable either built in or with third party video server units.
 - 6) Open collector contact closure outputs meeting NEMA TS 2 requirements. The open collector output will be used for vehicle detection indicators as well as discrete outputs for alarm conditions.
 - 7) LED status indicators on the front panel. The LED's shall illuminate when a contact closure output occurs. Provide one output LED for each contact closure output.
 - 8) A mouse compatible port (PS-2 or USB) on the front panel of the video processing unit. The mouse port shall be used as part of the system setup and configuration.
 - 9) A Cabinet Interface shall be provided that is specifically designed to mount in a standard NEMA TS 1 and TS 2 detector rack without adapters or rewiring, or as a stand-alone shelf mount unit. The Interface shall operate in a temperature range from -31°F to +165°F and a humidity range from 0% to 95% relative humidity. The Cabinet Interface shall be powered by 100v to 240v AC, 50 or 60Hz. The front of the Interface shall include LED detection indications for each channel of detection. One BNC video output and detector test switches that allow the user to place calls on each channel

907-643.02.2.3--Functionality Type 2 Video Vehicle Detection. Detection zones shall be programmed via an on-board menu displayed on a video monitor and a pointing device connected to the video detection processor. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. The video detection processor shall detect vehicles, bicycles, and pedestrians in real time as they travel across each detection zone. The video detection processor shall have an RS-232 (DB9 or RJ45) port for communications with an external computer. The video detection processor port shall be multi-drop capable.

It shall be possible to upload and save all configuration data including loop placement and save the file on a computer. It shall be possible to download a configuration file from a computer to the detection device.

The video detection processor shall accept new detection patterns from an external computer through the RS-232 port when the external computer uses the correct communications protocol for downloading detection patterns.

A Windows™ based software designed for local and remote connection shall be provided for video capture, real-time detection indication and detection zone modification capability. The video detection processor shall send its detection patterns to an external computer through the RS-232 port.

The video detection processor shall default to a safe condition, such as minimum recall, fixed recall or a constant call on each active detection channel, in the event of unacceptable interference with

the video signal, low visibility conditions, or power failure.

The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined detection zones in a constant call mode. The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

907-643.02.2.3.1--Functionality for Type 2 Video Vehicle Detection. The Video Detection Processor (VDP) for the Type 2 Video Vehicle Detection shall employ Dynamic Zone Stabilization to provide motion tracking and compensation for swaying camera sensors mounted on dual or single span wires. The VDP shall include software that discriminately detects the presence of vehicles and bicycles in single or multiple lanes using only the video image. The VDP shall compensate for swaying motions by tracking the position of the stop bar for the approaching vehicle or bicycle movement. The VDP shall compensate for low frequency (cable sag) motion due to temperature changes during the day. The VDP shall compensate for moderate frequency motion induced by winds. The VDP shall compensate for up to ± 5 degrees of tilt from vertical without any adverse detection false calls or dropped calls.

907-643.02.2.4--Detection. Type 2 shall have a minimum of 24 detection zones per camera input shall be possible, and each detection zone shall be capable of being sized to suit the site and the desired vehicle detection area. .

A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

Placement of detection zones shall be done by using only a pointing device, and a Graphical Interface built into the video detection processor and displayed on a video monitor, to draw the detection zones on the video image from each video camera. Detection zones created in this manner shall be compatible with the PC-based software provided with the system.

The video detection processor shall support bicycle type zones where the zone can differentiate between motorized vehicles and bicycles, producing a call for one but not the other. Bicycle zones shall only output when a bicycle is detected. The video detection processor shall provide the ability to assign a separate output channel for bicycle zones to allow traffic controllers to implement special bicycle timing for applications where the traffic controller has separate bicycledetection inputs. Bicycle zones shall have the ability to have extensions assigned to individual bicycle ones for applications where the traffic controller does not have bicycle specific detection inputs.

Six (6) additional count zones for bicycles shall be provided to accumulate bicycle counts at user specified intervals.

The video detection processor's memory shall be non-volatile to prevent data loss during power outages.

When a vehicle is detected crossing a detection zone, the corners or entire zone of the detection

zone shall flash/change color on the video overlay display to confirm the detection of the vehicle. It shall be possible to record the operation of the unit in real time with the detection zones operating.

Detection shall be at least 98% accurate in all weather conditions, with slight degradation acceptable under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility.

The video detection processor shall maintain normal operation of existing detection zones when one (1) zone is being added or modified.

The video detection processor shall output a constant call on any detector channel corresponding to a zone being modified and shall resume normal operation upon completion.

Detection zones shall be directional to reduce false detections from objects traveling in directions other than the desired direction of travel in the detection area.

The video detection processor shall process the video input from each camera using a microprocessor at 30 frames per second at one volt, peak to peak, 75 ohms, or EIA 170 NTSC video standard.

The video detection processor shall output minimum recall, fixed recall or constant call for each enabled detector output channel if a loss of video signal occurs. The recall behavior shall be user selectable for each output. The video detection processor shall output a constant call during the background "learning" period.

Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds in increments of 0.1 seconds.

The processor shall have up to six (6) detection zones per camera view shall have the capability to count the number of vehicles detected, measure classification and speed. The data values shall be internally stored within the processor module for later retrieval through the RS-232 port. The data collection interval shall be user definable in periods of 5, 15, 30, or 60 minutes or by intersection cycle. Real-time data shall be retrieved from the PC-based software provided with the system.

907-643.02.2.5--Camera. Type 2 cameras shall be completely compatible with the video detection processor and shall be certified by the manufacturer to ensure proper system operation.

The Video Vehicle Detection shall produce accurate detector outputs under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.009 to 930 foot-candles.

The camera shall use a color CCD sensing element with resolution of not less than 470 lines horizontal and 400 lines vertical.

The camera shall include mechanisms to compensate for changing of lighting by using an

electronic shutter and/or auto-iris lens.

The camera shall include a variable focal length lens with factory preset focus that requires no field adjustment. Zooming of the camera lens to suit the site geometry by means of a portable interface device designed for that purpose. The horizontal field of view shall be adjustable. Camera configuration shall be customized for each approach based on field site conditions and the project plans.

The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure. The heater shall directly heat the glass lens and require less than five (5) watts over the temperature range.

Power consumption of the camera shall be 15 watts or less under all conditions.

The camera enclosure shall be equipped with separate, weather-tight connections for power and setup video cables at the rear of the enclosure. These connections shall allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module furnished under this bid item.

The video signal output by the camera shall in accordance with NTSC standards.

All necessary mounting brackets shall be mounted to pole shafts, mast arms, or other structures to mount cameras as indicated on the project plans. Mounting brackets shall result in a fixed- position mounting. Mounting Brackets shall be included at no additional cost.

907-643.02.2.6--Video Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance. The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.2.7--Power Cable. The cable provided shall be as recommended by the manufacturer for optimal video detection performance.

Camera power cable shall be suitable for installation in conduit and in exposed sunlight environment, and UL listed.

The power and video cable may be installed under the same outer jacket. The cable and installation tools shall be approved by the supplier and manufacturer's instructions must be followed to ensure proper connection.

907-643.02.2.8--Surge Protection. Surge protection devices shall be provided for all new or added video detection devices as recommended by the manufacturer.

Video and/or Power cable shall be protected with an inline surge suppressor as recommended by the manufacturer or a panel mounted surge suppressor as recommended by the manufacturer or approved equal, installed and grounded per manufacturer's recommendations.

907-643.02.2.9--Physical and Environmental Specifications. Physical and Environmental Specifications shall be as follows.

Video Vehicle Detection Processor: The video vehicle detection processor shall operate reliably in a typical roadside traffic cabinet environment. Internal cabinet equipment and a video vehicle detection processor shall be provided that meets the environmental requirements of NEMA TS 2-2003 Section 2. If the processor is located in the sensor, it shall meet the same requirements.

Video Camera Sensor: The operating ambient temperature range shall be -30°F to 140°F. Additionally, a heater shall be included to prevent the formation of ice and condensation in cold weather. Do not allow the heater to interfere with the operation of the video camera sensor electronics, or cause interference with the video signal.

Vibration: Vibrations shall meet the requirements of NEMA TS 2-2003 section 2.1.9. Shock: Shock shall meet the requirements of NEMA TS 2-2003 section 2.1 .10.

Acoustic Noise: A video camera sensor and enclosure shall be provided that can withstand 150 dB for 30 minutes continuously, with no reduction in function or accuracy.

907-643.02.3--Materials Type 3 Video Vehicle Detection and Tracking System. The Type 3 Video Vehicle Detection and Tracking System (VIVTDS) shall consist of the following:

- One VIVTDS processor capable of connecting with 1 to 8 sensors
- One or more VIVTDS sensors, with at least one sensor having a fisheye lens for omnidirectional viewing of the roadway or intersection.
- One surge protector junction unit, per each advanced/stopline sensor
- One mounting pole and bracket (90° pole per each fisheye sensor; or straight, vertical pole per each advanced/stopline sensor). Pole should be assembled in two (2) pieces (3' x 3' plus 7' straight, vertical base)
- One ball-swivel, bracket, and surge protector junction unit, per each fisheye sensor
- One Ethernet Protection Module (surge protector located in the traffic cabinet), per each VIVTDS sensor
- VIVTDS interface cables to the traffic signal controller based on model/type.
- Optional portable field computer to configure and monitor system operations
- Optional computer to configure and monitor system operations at the TOC or other remote location
- Optional Ethernet Repeater to extend VIVTDS sensors beyond 300 feet

- Optional Fiber interconnect to extend VIVTDS sensors up to 2000 feet
- Optional POE Powered Switch for use with more than two sensors

907-643.02.3.1--Functional Requirements for Type 3 Video Vehicle Detection. The Type 3 Video Vehicle Detection configuration shall be for a system that views, captures, and derives data based on the objects that pass within the sensor field of view along a highway, road, ramp, or other commonly used transit pathway via processing video images. The detection of objects by a VIVTDS can be accessed and used by and for many applications, including:

- Vehicle detection and actuation at intersections
- Pedestrian Actuation
- Pedestrian Counting
- In the Box bicycle discrimination and clearance extension
- Bicycle Counting
- Highway flow monitoring
- Ramp metering
- Advanced detection
- Pedestrian crossing extensions
- Temporary construction zone detection
- Situational awareness of location area, including an intersection center
- Automated alerts and reports of potentially unsafe conditions, incidents, malfunctions, or signal timing inefficiencies
- Collecting and archiving traffic data on the Cloud for future analysis to improve performance by optimizing timing plans at intersections
- Non-recurring charges for Cloud Data access
- Occupancy-based vehicle actuation
- Signal Performance Metrics
- User-defined zone output pulses
- Onboard video recording and playback
- Open API for data access

The system shall have a modular electrical design and use Ethernet to connect and network with the different system components. Streaming video images, alerts, and data shall be transmitted from the field back to a Traffic Operations Center (TOC) via the systems client software and to the VIVTDS's cloud by using any or combination of the following:

- Fiber optic
- Wireless Radios
- WAN
- TCP/IP
- Optional Internal modem
- Any other means of commonly used communication practices and standards for digital content and information.

The VIVTDS client software shall provide graphical user interfaces between the administrator(s) and permissioned users of the system and the VIVTDS sensor(s) itself. The software shall allow the user to configure sites, conduct maintenance, monitor information relayed from the sensor(s), and provide access to real-time data, system and user defined alerts, and access to historical data collected by the sensor(s). The client software should be installed on a single personal computer or across a network of computers. One or more users will be able to access VIVTDS simultaneously.

907-643.02.3.2—Processor Hardware.

The VIVTDS processor shall support 1 or 2 fisheye sensors, or if equipped with 1 fisheye sensor the VIVTDS processor should, at a minimum, be capable of simultaneously supporting up to four (4) additional VIVTDS sensors for special requirements such as advance detection or underpass detection.

The VIVTDS processor shall comply with NEMA standards, TS1, TS2 Type 1 and Type 2; 170/2070; and ITS. The VIVTDS processor shall provide the following inputs and outputs:

Type	Inputs	Outputs
TS1	24	24
TS2	16	64
170/2070	8	24
ITS	16	64

The VIVTDS processor will have at a minimum four (4) USB 3.0 ports for expansion flexibility and have an optional, built-in modem.

The VIVTDS processor shall be no more than 1U high with dimensions, excluding connectors, not to exceed 8.5" x 11.5" x 1.75" and weigh no more than 5.2 lbs. The unit shall have flexible mounting options including the ability to lie flat on a cabinet shelf, be mounted in a standard traffic cabinet rack with optional mounting ears or be installed vertically with optional base. The outer enclosure shall be a powdered coated aluminum.

907-643.02.3.3-- Type 3 Video Vehicle Detection System Software.

Each VIVTDS system shall include software for up to six (6) sensors for detecting and counting the vehicle's entrance and exit of the intersection. The VIVTDS system will also include software for communicating with the traffic controllers and other electronic devices.

Client software shall be included free of charge with each VIVTDS system and should be downloaded and run on any personal computer with a Windows 7 or newer operating system. The client software at minimum should include management tools to perform the following:

- View, diagnose, configure, and reset individual sensor outputs
- View the status of inputs to enable setup and troubleshooting in the field
- Configure and view calls and phases
- The ability to create and define, as well as edit, vehicle zones, road masks, object masks, and pedestrian zones by drawing arbitrary shaped polygons using a computer
- The ability to detect and track vehicles, motorcycles, bicycles, and pedestrians through the entire 360-degree field of view
- Distinguish between bicycles and vehicles in the center of the intersection (The Box) and provide distinct detector calls to the traffic controller for each object type
- Provide system calls based on zone occupancy
- View the site's configuration history
- Publish and revert back to previous configuration
- View real-time image streaming from the sensor(s) within the software's Client interface
- Optionally access and use an API that is documented online and uses HTTP
- Enterprise security with user-based roles

- Ability to utilize LDAP for user access
- Provide System Alerts for diagnostic and administrative events

The VIVTDS system shall support optional performance data packages for purchase that provide count data, access to real time data, and system and user defined alerts. The performance data shall be accessible directly from the processor or from a remote computer with a network connection, or via a Cloud storage platform. The performance data shall include the following types of reports and alerts:

- Turning movement counts, including U-turns
- Length based vehicle classifications
- Incident reporting
- Volume
- 7 Day Volume
- Occupancy on Green
- Occupancy on Red
- Percentage of Arrivals on Green
- Percentage of Arrivals on Red
- Speed
- Pedestrian Counts
- Bicycle Turning Movements
- Bicycle Counts
- RTSP (H.264) streaming capability
- Wrong way vehicle detection
- Loss of visibility event
- Volume Exceeded

Reports should be exportable and downloadable in the following formats:

- PDF
- Excel
- Synchro Export – Turning Movement Counts

907-643.02.3.4--Detection. VIVTDS system shall provide real time vehicle detection (within 500 milliseconds (ms) of vehicle arrival). The system should detect the presence of vehicles for up to 64 detection zones per VIVTDS sensor. The detection zones shall be sensitive to the direction a vehicle travels and the direction to be detected by each detection zone shall be programmable by a client software user.

The VIVTDS system should provide a flexible detection zone placement anywhere within one hundred (150) feet of the VIVTDS sensors. Preferred presence detector configurations shall be arbitrarily shaped polygons, including simple boxes, drawn across lanes of traffic or placed in line with lanes of traffic. A single VIVTDS sensor should replace one or more conventional detectors. Advanced detection zones may be placed up to three hundred (300) feet from a Fisheye sensor when mounted at least forty (40) feet high.

Placement of detection zones will be done by means of a graphical interface using the MJPEG image of the roadway. The client software displays images of the detection zones overlaid on the video image of traffic while the VIVTDS processor is running. The detection zones, when

operating, shall display outlined or filled, with a visible change indicating activation.

A laptop should be used to draw detection zones. Alternatively, a mouse, keyboard, and monitor may be connected directly to the processor to configure a site. The detection zones should be capable of being sized and shaped to provide optimal road coverage and detection. It should be possible to upload detector configurations to the VIVTDS processor and to retrieve the sensor configuration that is currently running in the VIVTDS processor through the client software. The configuration should also be retrievable from the VIVTDS system's cloud if properly backed up.

The user will be able to edit previously defined detector configurations in order to fine tune the detection zone placement size and shape. Once a detection configuration has been created, the system will provide a graphic display of the new configuration on its monitor. While this fine-tuning is being done, the sensor will be required to continue to operate from the sensor configuration, currently in place. A user should be able to use a system command to revert to previous configurations stored in the client software or on the VIVTDS system's cloud if properly backed up.

When a vehicle occupies a detection zone, the detection zone on the live video will indicate the presence of a vehicle, thereby verifying proper operation of the system.

The presence of the vehicle as well as the signal states will be indicated via colored LED lights on the front panel of VIVTDS processor. With the absence of images, the VIVTDS processor's display shall indicate proper operation of the detection zones.

Detection zones shall be sensitive to the direction of vehicle travel. The direction will be capable of being detected by each detection zone and will be programmable by the user. The vehicle detection zones will not activate if a vehicle is traveling in any direction other than the one specified for detection in the zone. Cross-street and wrong way traffic shall not cause a false detection.

Detection zones will be capable of an optional user defined call to detect a side entrance (90° or less angled entrance).

The VIVTDS system will be able to reliably detect vehicle presence in the design field of view. The design field of view shall be defined as the sensor view when the image sensor is mounted thirty-five (35) feet (10.5 meters) or higher above the roadway, when the sensor is in front of all stop lines, no more than seventy-five (75) feet from the intersection center, and the beginning of the detection area is not greater than one hundred and fifty (150) feet from the image sensor. Within this design field of view, the VIVTDS processor should be capable of setting up detection zones for point detection (equivalent to the operation of a 6' x 6' inductive loop). A VIVTDS sensor, placed at the proper mounting height, is able to monitor up to and including five (5) traffic lanes per approach simultaneously. A single fisheye sensor, placed at the proper mounting height, should be able to monitor detection zones in an intersection of five (5) approaches, at a minimum. Fisheye sensors mounted no less than forty (40) feet should be capable of advanced vehicle detection of up to three hundred (300) feet.

Detection accuracy of the VIVTDS system shall be comparable to properly operating inductive loops. Detection accuracy should include the presence of any vehicle in the defined detection zone regardless of the lane the vehicle is occupying. Occlusion produced by vehicles in the same or adjacent lanes shall not be considered a failure of the VIVTDS processor, but a limitation of the VIVTDS sensor placement.

Detection shall be 98% accurate with slight degradation possible under adverse weather or road conditions (i.e. rain, snow, fog). Detection will be expected for the entire design field of view on a lane by lane or by approach basis.

Equipment failure, either sensor or VIVTDS processor, shall result in constant vehicle detection on affected detection zones. The VIVTDS system will be required to have the ability to place a constant call to a specific zone, if said zone loses visibility, while simultaneously making calls in the traditional manner in the remaining zones.

907-643.02.3.5--Camera. The VIVTDS should have at least one downward-facing fisheye sensor capable of seeing the center of the intersection and have an omnidirectional line of site to track vehicles entering and exiting the intersection. Other required features shall include the following:

- Color images outputted into digital format as MJPEG images
- Camera lens shall not require adjustment and is always in focus
- A thermostatically controlled heater residing inside the enclosure to reduce the effects of ice and condensation
- Any plastics used in the enclosure shall have ultraviolet inhibitors
- A waterproof and dust tight aluminum enclosure

The sensor dimensions excluding connectors shall not exceed 9.9" x 7.9" (height x diameter). The weight of the sensor including the enclosure shall not exceed eight pounds. The VIVTDS sensor manufacturer shall provide a lifetime "always in focus" guarantee on the iconic bell-shaped fisheye camera. The sensor's mounting bracket shall utilize a two (2) piece, ten (10) foot 90° mounting pole. The sensor junction box should mount at the base of the vertical pole and allow for the installer to adjust the sensor's horizontal position with one hand and tighten the bracket without having to support the sensor simultaneously.

907-643.02.3.5.1—Optional VIVTDS sensors.

Certain projects will have special requirements or needs, such as advanced detection beyond three hundred (300) feet and/or stopline detection. In these instances, an additional VIVTDS sensor with a field of view of either 30° - 50° for stopline detection or a field of view of 9° - 18° for advanced detection should be used. The sensor dimensions excluding connectors and mounting bracket shall not exceed 8" x 15" x 3.5" and the weight should not exceed eight pounds. Other required features are the following:

- Color images outputted into digital format as MJPEG images
- A 5 – 50 mm varifocal lens set for the specific application
- A thermostatically controlled heater residing inside the enclosure to reduce the effects of ice and condensation
- A sun shield to minimize lens exposure to the sun
- A waterproof and dust tight powdered coated aluminum housing

The VIVTDS should support thermal imaging sensors for use in specific situations.

907-643.02.3.6—Power.

The VIVTDS sensor(s) will use five (5) watts nominally and a maximum of fifty (50) watts with active heaters. The sensor(s) will be Power Over Ethernet (POE) and will only require a single shielded, burial grade, gel-filled CAT5e cable for both power and data or composite fiber cable.

Each VIVTDS sensor shall have its own surge protector junction unit and EPM surge protection unit in the traffic cabinet.

The VIVTDS processor shall operate within a range of 89 to 240 VAC, 60Hz single phase. Power to the VIVTDS processor is from the transient protected side of the AC power distribution system in the traffic control cabinet where the VIVTDS processor is installed.

907-643.02.3.6—CAT5E Cable. CAT5E cabling shall be a high performance shielded direct burial data cable capable of 350MHz bandwidth for data applications. The cabling shall consist of a 24 AWG solid core copper wire with 8 solid conductors in a gel-filled jacket. The jacket shall consist of linear low-density polyethylene (LLDPE) that is UV resistant and have a cable diameter of no more than 6.5 mm. The cable shall have easily identifiable striped pairs as follows:

- Orange-White, Orange
- Green-White, Green
- Blue-White, Blue
- Brown-White, Brown

The cable shall be rated at a minimum for 60 V.

The surge protector junction unit for the VIVTDS sensor shall provide protection against a transient pulse with a pulse shape of 8/20 μ s and a max current of 75A. The unit shall weigh no more than two (2) lbs.

The EPM, surge protection unit for the VIVTDS sensor, shall have at most a max impulse discharge current of 40 KA and an impedance of at least 100 ohms. The unit should have at least Line-Line and Line-Ground protection options, and the POE current should not exceed 1.8A.

907-643.02.3.7—Composite Fiber. Composite Fiber cable shall meet the following requirements:

- Multimode, OM3, Indoor-Outdoor rated
- Meet ICEA-S-83-597 Standard
- Four Fiber Strands and Two 16 AWG Copper Power Conductors

Fiber cable shall be terminated with FASTconnect LC connectors and maintain a signal strength between -20 dBm and -24 dBm.

The Fiber cable shall connect the Fisheye Sensor and/or other Optional Sensors using PoE Media Converters.

PoE Media Converters shall meet the following requirements:

- Material: UV Stabilized, Polycarbonate/ASA Blend
- Environmental: -29° F - 165° F (-34° C - 74° C)
- IP66

907-643.02.3.8—Physical and Environmental Specifications. The VIVTDS processor will meet or exceed the NEMA TS-2 standard of -29° F - 165° F (-34° C - 74° C) and meet or exceed a 5-30Hz vibration test as well as a 10G shock test.

The VIVTDS processor shall operate properly in an environment with 0% to 95% relative humidity, non-condensing. The VIVTDS sensor(s) shall operate properly in an environment with 0% to 100% relative humidity.

907-643.02.3.9—System Software Operation. The VIVTDS must transmit and receive all information needed for sensor setup, to monitor vehicle detection, to view vehicle traffic flow, and to interpret stored data. The remote communications link between the VIVTDS processor shall not interfere with the on-street detection of the VIVTDS processor.

The user should be able to view the detection area in a horizon to horizon fisheye view or in a configurable four (4) pane flattened view on the same screen. Each view should be able to be customized by the user, with the ability to digitally pan-tilt-zoom.

907-643.02.3.10—Installation and Training. The supplier of the VIVTDS system shall supervise the installation and testing of the sensors, processor, and other sensor components.

System installers will be required to be certified by the system manufacturer. A manufacturer's instructional guide will not be considered an adequate substitute for practical, classroom training and formal certification by an approved agency.

However, the manufacturer shall provide an online user guide and an electronic copy of the user guide within the client software and on board the VIVTDS processor for reference.

Formal levels of factory authorized training are required for installers, contractors and system operators. All training must be certified by the VIVTDS system manufacturer.

907-643.02.3.10—Warranty, Maintenance and Support. The video detection system must be warranted to be free of defects in material and workmanship for a period of 3 years from date of shipment from the manufacturer's facility. During the warranty period, the system manufacturer will be required to repair with new or refurbished materials, or replace at no charge, any product containing a warranty defect provided the product is returned FOB to the supplier's factory or authorized repair site. Return product, product for repair, or product to be replaced under warranty by the supplier shall have prepaid transportation. This warranty does not apply to any products damaged by accident, improperly operated, abused, serviced by unauthorized personnel or unauthorized modification.

Ongoing software support by the manufacturer includes updates of the VIVTDS processor's engine and updates to the client software shall be provided free of charge for the life of the system.

907-643.02.4--Materials Multi-Sensor Vehicle Detection.

907-643.02.4.1--General. The Multi-Sensor Vehicle Detector shall utilize two (2) different sensors of different technologies, video imaging and radar, to detect and track licensed and unlicensed vehicles at distances up to 600 feet. The detector shall fuse vehicle information from the two sensors to provide highly accurate and precise detection for special or advanced applications.

The Multi-Sensor Vehicle Detector shall use a primary detector rack mounted processor to interface with the traffic control cabinet. The module shall process information from both video imaging and radar sensors simultaneously in real-time.

907-643.02.4.2--Detector Configuration. The proposed MSVD shall be available in various configurations to allow maximum deployment flexibility. Each configuration shall have an identical user interface for system setup and configuration. The communications protocol to each

configuration shall be identical and shall be hardware platform independent.

The detector shall include software that detects vehicles in multiple lanes. Video imaging detection zones shall be defined using only an on-board video menu and a pointing device to place the zones on a video image. Up to 24 video detection zones per camera view shall be available. Two (2) additional trigger zones for the radar sensor shall be available and be configurable by using the same system setup menu on the DP. A separate computer shall not be required to program the detection zones. A pre-programmed setup tool is required to align and input radar information and set the camera field of view (zoom and focus).

907-643.02.4.3--Multi-Sensor Vehicle Detection Hardware. The MSVD hardware shall consist of the following four (4) elements:

- 1) Video Imaging Camera Sensor
- 2) Radar Sensor
- 3) Sensor Data Combiner
- 4) Detection Processor

907-643.02.4.3.1--Video Imaging Camera Sensor. The video imaging camera sensor shall meet the following minimum requirements:

- To accommodate deployment flexibility, the MSVD camera sensor shall be compatible with the Data Processor platforms. The MSVD camera sensor shall be supplied by the MSVD manufacturer.
- The advanced camera enclosure shall utilize technology for the heating element of the front glass. The transparent coating shall not impact the visual acuity and shall be close to optically clear.
- Cable terminations at the data combiner for video and power shall not require crimping or special tools.
- The camera sensor shall allow the user to set the focus and field of view via Wi-Fi connectivity.
- The camera shall produce a useable video image of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 1.0 lux to 10,000 lux.
- The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.
- The imager luminance signal to noise ratio (S/N) shall be more than 50 dB with the automatic gain control (AGC) disabled.
- The imager shall employ three (3) dimensional dynamic noise reduction (3D-DNR) to remove unwanted image noise.
- The camera image shall employ wide dynamic range (WDR) technology to compensate for wide dynamic outdoor lighting conditions. The dynamic range shall be greater than 100 dB.
- The camera shall be digital signal processor (DSP) based and shall use a CCD sensing element and shall output color video with resolution of not less than 550 TV lines.
- The camera sensor shall include an electronic shutter control based upon average scene

luminance and shall be equipped with an auto-iris lens that operates in tandem with the electronic shutter. The electronic shutter shall operate between the range of 1/1 to 1/10,000th second.

- The camera sensor shall utilize automatic white balance.
- The camera sensor shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry by means of a portable interface device designed for that purpose and manufactured by the detection system supplier.
- The horizontal field of view shall be adjustable. This camera configuration may be used for the majority of detection approaches in order to minimize the setup time and spares required by the user. The lens shall be a minimum 10X zoom lens with a variable focal length.
- The lens shall also have an auto-focus feature with a manual override to facilitate ease of setup.
- The camera shall incorporate the use of preset positioning that store zoom and focus positioning information. The camera shall have the capability to recall the previously stored preset upon application of power.
- The camera shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications. The housing shall allow the camera to be rotated to allow proper alignment between the camera and the traveled road surface.
- The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.
- The camera enclosure shall be designed so that the pan, tilt and rotation of the camera assembly can be accomplished independently without affecting the other settings.
- The camera enclosure shall include a proportionally controlled heater design that maximizes heat transfer to the lens. The output power of the heater shall vary with temperature, to assure proper operation of the lens functions at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.
- The glass face on the front of the enclosure shall have an anti-reflective coating to minimize light and image reflections.
- When mounted outdoors in the enclosure, the camera shall operate in a temperature range from -29°F to +165°F and a humidity range from 0% RH to 100% RH.
- Measurement of satisfactory video shall be based upon DP system operation.
- The camera sensor shall acquire its power from the sensor data combiner.
- Recommended camera placement height shall be 18 to 33 feet above the roadway, and over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. The camera shall view approaching vehicles at a distance not to exceed 350 feet for reliable detection (height to distance ratio of 10:100). Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.
- The video signal shall be fully isolated from the camera enclosure and power cabling.
- A weather-proof protective cover shall be provided to protect all terminations at the camera.

907-643.02.4.3.2--Radar Sensor. The radar sensor shall meet the following minimum requirements:

- The radar sensor shall operate in the 24 GHz frequency band.
- The radar detection range shall be 600 feet minimum, $\pm 5\%$.
- The radar sensor shall be able to track up to 20 independent objects simultaneously.
- Object speed detection shall be within a range of zero (0) to 150 mph ± 1.0 mph.
- The radar sensor shall be able to detect vehicles in one (1) to four (4) traffic lanes.
- The radar sensor shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications. The housing shall allow the radar to be adjusted to allow proper alignment between the sensor and the traveled road surface.
- When mounted outdoors in the enclosure, the radar shall operate in a temperature range from -29°F to $+165^{\circ}\text{F}$ and a humidity range from 0% RH to 100% RH.
- The radar sensor shall communicate with the sensor data combiner.
- The radar sensor shall acquire its power from the sensor data combiner.
- Data and power cables between the radar sensor and sensor data combiner shall be fully isolated from the sensor enclosure.

907-643.02.4.3.3--Multi-Sensor Vehicle Detection Assembly. Multi-Sensor Vehicle Detection Assembly shall meet the following requirements:

- Both camera and radar sensors shall be housed in an overall, single enclosure assembly.
- The maximum power consumption for the Multi-Sensor Vehicle Detection Assembly shall be less than ten (10) watts typical, 20 watts peak.

907-643.02.4.3.4--Sensor Data Combiner. The sensor data combiner (if required) shall meet the following minimum requirements:

- A sensor data combiner that combines sensor information from both video and radar sensors shall be employed.
- Sensor data combiner shall supply primary power to each sensor unit.
- Sensor data combiner shall facilitate digital communications between the sensor data combiner and each of the sensor units.
- Sensor data combiner shall get its primary power from an AC power source using industry standard 3-conductor cabling.
- Sensor data combiner shall communicate with the detection processor using a single coax cable. Both video imaging and radar data shall use the single coax cable.
- The sensor data combiner shall also employ industry standard Wi-Fi connectivity for remote sensor system setup using a mobile programming device such as a netbook or tablet computer. Video camera and radar sensor shall be able to be configured independently.
- Sensor data signal shall be fully isolated from the mechanical enclosure and power cabling.
- Cable terminations at the sensor data combiner shall not require crimping tools.
- The Sensor Data Combiner shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications.

907-643.02.4.3.5--Detection Processor. The detection processor shall meet the following minimum requirements:

- Each sensor input shall accept RS170 (NTSC) or CCIR (PAL) signals from an external video source. The interface connector shall be BNC type and shall be located on the front of the processing unit. The sensor input shall have the capability to be terminated into 75- ohms or high impedance (Hi-Z) using dip switches or software control from the user menu. The sensor input shall also facilitate the data from the radar sensor.
- A LED indicator shall be provided to indicate the presence of the sensor signal. The LED shall illuminate upon valid sensor synchronization and turn off when the presence of a valid sensor signal is removed.
- One (1) video output shall be provided. The video output shall be RS170 or CCIR compliant and shall pass through the input video signal. For multi-channel video input configurations, a momentary push-button shall be provided on the front panel to cycle through each input video channel. In the absence of a valid sensor signal, the channel shall be skipped and the next valid sensor signal shall be switched. The real time video output shall have the capability to show text and graphical overlays to aid in system setup. The video output interface connector shall be positive locking BNC type. Friction type (e.g. RCA type) connectors shall not be allowed.
- A communications port shall be provided on the front panel. The communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information. The interface protocol shall be documented or interface software shall be provided. Each MSVD shall have the capability to be addressable. The DP shall support data rates of 1200 bps to 230,400 bps, inclusive.
- Open collector (contact closure) outputs shall be provided. Four (4) open collector outputs shall be provided for the single or dual channel rack-mount configuration. Additionally, the DP shall allow the use of extension modules to provide up to 24 open collector contact closures per camera input. Each open collector output shall be capable of sinking 30 mA at 24 VDC. Open collector outputs will be used for vehicle detection indicators as well as discrete outputs for alarm conditions. The DP outputs shall be compatible with industry standard detector racks assignments.
- Logic inputs such as delay/extend or delay inhibit shall be supported through the appropriate detector rack connector pin or front panel connector in the case of the I/O module. For DPs and extension modules, four (4) inputs shall be supported via detector rack interface. The I/O module shall accommodate eight (8) inputs through a 15-pin "D" connector.
- Detection status LEDs shall be provided on the front panel. The LEDs shall illuminate when a contact closure output occurs. The front panel of the DP shall have detector test switches to allow the user to manually place calls on each DP output channel. The test switch shall be able to place either a constant call or a momentary call depending on the position of the switch.
- A USB mouse port shall be provided on the front panel of the rack mount detection processing unit. The mouse port shall not require special mouse software drivers. The mouse port shall be used as part of system setup and configuration.
- Extension modules (if required) shall be connected to the DP by an 8-wire twisted- pair cable with modular RJ45 connectors. DP and EM communications shall be accommodated by methods using differential signals to reject electrically coupled noise.
- Extension modules (EM) shall be available to eliminate the need of rewiring the detector

rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack to provide additional open collector outputs. The extension module shall be available in both two (2) and four (4)-channel configurations. The DP and EM shall be specifically designed to mount in a standard detector rack, using the edge connector to obtain power, provide contact closure outputs and accept logic inputs (e.g. delay/extend). No adapters shall be required to mount the DP or EM in a standard detector rack. Detector rack rewiring shall not be required.

- The DP shall utilize non-volatile memory technology to store on-board firmware and operational data.
- The DP shall enable the loading of modified or enhanced software through the EIA232 or USB port (using a USB thumb drive) and without modifying the DP hardware.
- The DP and EM shall be powered by 12 or 24 volts DC. DP and EM modules shall automatically compensate for either 12 or 24 VDC operation. DP power consumption shall not exceed 7.5 watts. The EM power consumption shall not exceed three (3) watts.
- The DP shall operate satisfactorily in a temperature range from -40°F to +165°F and a humidity range from zero (0) %RH to 95 %RH, non-condensing as set forth in NEMA specifications.
- A video surge suppresser shall be provided for each sensor input. The surge suppresser shall be appropriately grounded to the cabinet ground rod using AWG 14 minimum.

907-643.02.4.4--Detection Software. The detection software shall meet the following general system functions:

- Detection zones shall be programmed via an on board menu displayed on a video monitor and a pointing device connected to the DP. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. A separate computer shall not be required for programming detection zones or to view system operation.
- The DP shall store up to three (3) different detection zone patterns in non-volatile memory. The DP can switch to any one of the three (3) different detection patterns within one (1) second of user request via menu selection with the pointing device. Each configuration shall be uniquely labeled and able to be edited by the user for identification. The currently active configuration indicator shall be displayed on the monitor.
- The DP shall detect vehicles in real time as they travel across each detection zone.
- The DP shall accept new detection patterns from an external computer through a communications port when the external computer uses the correct communications protocol for downloading detection patterns. A Windows™ based software designed for local or remote connection and providing video capture, real-time detection indication and detection zone modification capability shall be provided with the system.
- The DP system shall have the capability to automatically switch to any one of the stored configurations based on the time of day which shall be programmable by the user.
- The DP shall send its detection patterns to an external computer through the communications port when requested when the external computer uses the appropriate communications protocol for uploading detection patterns.
- The DP shall default to a safe condition, such as a constant call on each active detection channel, in the event of unacceptable interference or loss of the sensor signal.
- The system shall be capable of automatically detecting a low-visibility condition such as

fog and respond by placing all effected detection zones in a constant call mode. A user-selected alarm output shall be active during the low-visibility condition that can be used to modify the controller operation if connected to the appropriate controller input modifier(s). The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

- Up to 24 detection zones per camera input shall be supported and each detection zone can be sized to suit the site and the desired vehicle detection region.
- The DP shall support two (2) independent trigger points for radar outputs for dilemma zone applications.
- The DP shall provide up to 24 open collector output channels per sensor input using one or more extension modules.
- A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single approach of traffic movement.
- Placement of detection zones shall be done by using only a pointing device, and a graphical interface built into the DP and displayed on a video monitor or laptop computer to draw the detection zones on the video image from each video camera.
- When a vehicle is detected within a detection zone, a visual indication of the detection shall activate on the video overlay display to confirm the detection of the vehicle for the zone.
- Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon site geometry, camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality.
- The DP shall provide dynamic zone reconfiguration (DZR). DZR enables normal operation of existing detection zones when one zone is being added or modified during the setup process. The new zone configuration shall not go into effect until the configuration is saved by the operator.
- Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.
- The DP shall process the video input from each camera at 30 frames per second. Multiple camera processors shall process all video inputs simultaneously.
- The DP shall output a constant call during the background learning period of no more than three (3) minutes.
- Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse, extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds.
- Up to six (6) video detection zones per sensor input shall have the capability to count the number of vehicles detected. The count value shall be internally stored for later retrieval through the communications port.
- In addition to the count type zone, the DP shall be able to calculate and/or acquire average speed and lane occupancy using both video and radar sensors. These values shall be stored in non-volatile memory for later retrieval.
- The DP shall have an "advance" zone type where detection outputs to the traffic controller

are compensated for angular occlusion and distance.

- The user shall have the ability to enable or disable the display of the phase information on the video output.
- The DP shall have the capability to change the characteristics of a detection zone based on external inputs such as signal phase. Each detection zone shall be able to switch from one zone type (i.e. presence, extension, pulse, etc.) to another zone type based on the signal state. For example, a zone may be a “count” zone when the phase is green but change to a “presence” zone type when the phase is not green. Another application would be zone type of “extension” when the signal phase is green and then “delay” when red.
- The DP shall aid the user in drawing additional detection zones by automatically drawing and placing zones at appropriate locations with only a single click of the mouse. When the user wishes to modify the location of a zone, the DP shall allow the user move a single zone, multiple zones or all zones simultaneously.
- On-screen zone identifiers shall be modifiable by the user. The user shall be allowed to select channel output assignments, zone type, input status, zone labels or zone numbers to be the identifier.
- For multiple camera input DPs, the user shall have the ability to enable automatic video output switching. The dwell time for each sensor input shall be user programmable.
- For the radar sensor zones the output can be triggered by presence of a vehicle only or by presence of a vehicle above a speed defined by the user.

907-643.02.4.5--Multi-Sensor Cable. The cable to be used between the Multi-Sensor Vehicle Detection Assembly and the DP in the traffic cabinet shall be per manufacturer’s specifications. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. BNC plug connectors shall be used where applicable. The cable, BNC connector, and crimping tool shall be approved by the supplier of the MSVD, and the manufacturer's instructions must be followed to ensure proper connection.

907-643.02.4.6--Power Cable. The power cabling shall be per manufacturer’s specifications. The cabling shall comply with the National Electric Code, as well as local electrical codes.

907-643.05--Construction Requirements. The Construction and testing requirements for Type 1, Type 2, and Multi-Sensor Vehicle Detection are the same.

907-643.05.1--General Requirements. The Contractor shall perform the following:

- 1) Install all sensors, system processors and associated enclosures and equipment at the locations specified in the plans, in any related notice to bidders, per manufacturer’s recommendations, or as directed.
- 2) Install all cabinet-mounted equipment in the intersection equipment cabinet or as specified in the plans.
- 3) Cabling from all sensors shall be installed in accordance with the manufacturer's recommendations.
- 4) Make all necessary adjustments and modifications to the total VVD/MSVD prior to requesting inspection for system/device acceptance.
- 5) Mount the sensors as per manufacturer’s recommendations or as shown in the plans.

- 6) Mount the sensors so as to view approaching traffic unless otherwise directed.
- 7) Optimize the sensors location and zone of detection as directed by the Engineer, or authorized designee.
- 8) Adjust the sensor zoom lens to match the width of the road/detection area, and minimize lane vehicle occlusion.
- 9) Fasten all other cabinet components, with hex-head or Phillips-head machine screws insulated with nuts (with locking washer or insert) or into tapped and threaded holes. Do not use self-tapping or self-threading fasteners.
- 10) Provide electrical cables for video, communications signaling and power supply between the cabinet and the VVD/MSVD image sensor cameras as recommended by the manufacturer, and as required for a fully functional System.

907-643.05.2--Contractor Training. Installation of the Video Vehicle Detection shall be as recommended by the manufacturer and performed by a Contractor trained and certified by the supplier. Where time does not reasonably permit training of the installing Contractor, a supplier factory representative shall supervise and assist a Contractor during installation of the Video Vehicle Detection.

Installation of the Multi-Sensor Vehicle Detection shall be as recommended by the supplier and performed by a Contractor with factory-certified installers and documented in installation materials provided by the supplier. Proof of factory certification shall be provided.

907-643.05.3--Testing. All equipment associated with the Video Vehicle Detection System site shall undergo testing to verify conformance to requirements of the plans and these special provisions. All costs associated with testing shall be included in the overall contract price; no separate payment will be made for any testing.

907-643.05.3.1--Standalone Acceptance Test (SAT). The SAT shall include videos of the approach with detection zones overlaid showing detector activations.

- 1) One (1) hour videos shall be made of each approach and compared to actual detection calls.
- 2) 30-minute videos shall be made starting 15 minutes prior to sunrise and sunset for each approach and compared to actual detection calls.
- 3) All videos shall be date and time stamped.
- 4) Provide all videos to the Engineer with a summary of the results included total calls, missed calls and false calls.
- 5) All test results must meet a 98% accuracy requirement.

The Contractor must demonstrate the accuracy requirements specified in Subsection 907-643.02.1.7 at selected intersections after a sixty (60) day burn in period for Type 1 and a thirty (30) day burn in period for Type 2 and MSDS. The intersections to be tested will be randomly selected by the Project Engineer.

907-643.05.4--Warranty. The Video Vehicle Detection shall be warranted to be free of manufacturer defects in materials and workmanship for a period of three (3) years from the date of final acceptance. Equipment covered by the manufacturer's warranties shall have the

registration of that component placed in the Department's name prior to final inspection. The Contractor is responsible for ensuring that the vendors and/or manufacturers supplying the components and providing the equipment warranties recognize the Department as the original purchaser and owner/end user of the components from new. During the warranty period, the supplier shall repair or replace with new or refurbished material, at no additional cost to the State, any product containing a warranty defect, provided the product is returned postage-paid by the Department to the supplier's factory or authorized warranty site. Products repaired or replaced under warranty by the supplier shall be returned prepaid by the supplier.

The Multi-Sensor Vehicle Detector shall be warranted to be free of manufacturer defects in materials and workmanship for a period of three years (3) from the date of final acceptance.

During the warranty period, technical support shall be available from the supplier via telephone within four (4) hours of the time a call is made by the Department, and this support shall be available from factory certified personnel. During the warranty period, updates and corrections to Control Unit Software shall be made available to the Department by the supplier at no additional cost.

907-643.05.5--Training. When called for in the Plans, the Contractor shall submit to the Project Engineer for approval a detailed Training Plan including course agendas, detailed description of functions to be demonstrated and a schedule. The Contractor must also submit the Trainer's qualifications to the Project Engineer for approval prior to scheduling any training. The training must include both classroom style training and hands-on training in the field of the maintenance and troubleshooting procedures required for each component. The training should also consist of a hands-on demonstration of all software configuration and functionality where applicable.

The supplier of the detection system shall, at a minimum, provide a 16-hour operations and maintenance training class with suitable documentation for up to eight (8) persons selected by the Department. The operations and maintenance class shall be scheduled at a mutually acceptable time and location.

907-643.05.6--Maintenance and Technical Support. The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the detection system. Spare parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale of said spare parts.

The suppliers shall maintain an ongoing program of technical support for the detection system. This technical support shall be available via telephone or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale of said technical support services.

The installation or training support shall be provided by a factory-authorized representative and shall be a minimum IMSA-Level II Certified Traffic Signal Technician.

All product documentation shall be written in the English language.

907-643.06--Method of Measurement. Video Vehicle Detection Sensor of the type specified will be measured as a unit per each.

Video Vehicle Detection Cable and/or Power Cable will be measured by the linear foot, measured horizontally along the conduit, messenger cable or mast arm and vertically along the pole.

Video Vehicle Detection Training will be measured as a lump sum after the completion of all training.

Multi-Sensor Vehicle Detection of the type specified will be measured as a unit per each.

Multi-Sensor Detection Cable and/or Power Cable will be measured by the linear foot, measured horizontally along the conduit, messenger cable or mast arm and vertically along the pole.

907-643.07--Basis of Payment. Video Vehicle Detection Sensor, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for installation, system integration, documentation, system software, and testing of a complete video detection sensor site including video camera sensor/processor, the sensor environmental enclosure, attachment hardware and brackets, completion of all testing requirements, [warranties](#) and all work, equipment and appurtenances as required to provide and install a complete video detection system. The price bid shall also include all system documentation including: shop drawings, operations and maintenance manuals, wiring diagrams, block diagrams and other materials necessary to document the operation of the Video Vehicle Detection Sensor. This price shall be full compensation for all labor, tools, materials, equipment and incidentals necessary to complete the work [and quality assurance](#).

Video Vehicle Detection Cable and/or Power Cable will be paid at the contract unit price per linear foot, which price shall be full compensation for all labor, materials, equipment tools, furnishing, installing, system integration, connections, testing, and all incidentals necessary to complete the work.

Video Vehicle Detection Training, measured as prescribed above, will be paid for at the contract unit lump sum price, which price shall be full compensation for all training costs [including all coordination, materials, labor, training location costs, and all incidentals required to complete the training](#).

Multi-Sensor Vehicle Detection Sensor, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for installation, system integration, documentation, and testing of a complete Multi-Sensor Vehicle Detection Sensor site including video imaging camera sensor, radar sensor, sensor data combiner, detection processor, system software, the sensor environment enclosure, attachment hardware and brackets, completion of all testing requirements and all work, equipment and appurtenances as required to provide and install a complete Multi-Sensor Vehicle Detection Sensor. The price bid shall also include all system documentation including: shop drawings, operations and maintenance manuals, wiring diagrams, block diagrams and other materials necessary to document the operation of the multi-sensor detection system. This price shall be full compensation for all labor, tools, materials,

equipment and incidentals necessary to complete the work.

Multi-Sensor Detection Cable and/or Power Cable will be paid at the contract unit price per linear foot, which price shall be full compensation for all labor, materials, equipment tools, furnishing, installing, system integration, connections, testing, and all incidentals necessary to complete the work.

Payment will be made under:

907-643-A: Video Vehicle Detection Sensor, Type ____	- per each
907-643-B: Video Vehicle Detection Cable	- linear foot
907-643-C: Video Vehicle Detection Power Cable	- linear foot
907-643-D: Video Vehicle Detection Training	- lump sum
907-643-E: Multi-Sensor Vehicle Detection Sensor	- per each
907-643-F: Multi-Sensor Vehicle Detection Cable	- linear foot
907-643-G: Multi-Sensor Vehicle Detection Power Cable	- linear foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-645-1

CODE: (IS)

DATE: 11/15/2017

SUBJECT: Pedestrian Detection Assemblies

Section 645, Pedestrian Detection Assemblies, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-645.02--Materials.

907-645.02.1--Standard Pedestrian Pushbutton Detector. Before the first sentence of the paragraph in Subsection 645.02.1 on page 629, add the following.

The Standard Pedestrian Pushbutton Detector shall meet the latest ADA Compliant Specifications.

907-645.02.1.2--Pushbutton. Delete the second sentence of the paragraph in Subsection 645.02.1.2 on page 629, and substitute the following.

The switch, when activated, shall give an audible (i.e., click) and visual indication of actuation. The visual indication shall remain illuminated until the pedestrian's WALK indication is displayed.

907-645.02.5--Environmental. Delete the paragraph in Subsection 645.02.5 on page 631, and substitute the following.

Ensure equipment performs all required functions during and after being subjected to the environmental testing procedures described in NEMA TS 2, Sections 2.2.7, 2.2.8, and 2.2.9.

907-645.05--Basis of Payment. Add the "907" prefix to the list of pay items on page 631.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-653-1

CODE: (IS)

DATE: 11/15/2017

SUBJECT: Traffic and Street Name Signs

Section 653, Traffic and Street Name Signs, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-653.02--Materials.

907-653.02.1--Reflective Sheeting. Delete the paragraph in Subsection 653.02.1 on page 637, and substitute the following.

Reflective sheeting for traffic and street name signs shall be Type XI retroreflective and of the color as specified in the plans.

907-653.04--Method of Measurement. Delete the sentence in the paragraph of Subsection 653.04 on page 638, and substitute the following.

Traffic sign and street name sign will be measured by the square foot, which measurement being inclusive of aluminum sign blank, applied reflective sheeting, mounting brackets and banding materials and begin inclusive of all materials, work and services necessary for a properly constructed sign.

907-653.05--Basis of Payment. Delete the pay items listed on page 638, and substitute the following.

907-653-A: Traffic Sign - per square foot

907-653-B: Street Name Sign - per square foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-700-1

CODE: (IS)

DATE: 10/25/2022

SUBJECT: Materials and Tests

Section 700, Materials and Tests, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

After Subsection 700.01 on page 713, add the following.

907-700.01.1--Buy America Materials Sourcing Requirements for Construction Materials.

As related to the requirements in Subsection 907-106.14, Construction Materials shall include an article or material that is or consists primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Construction Materials which are exempt from the requirements in Subsection 907-106.14 include the following: cement or cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

For Construction Materials, both the final manufacturing process and the manufacturing stage immediately preceding the final manufacturing process shall occur domestically.

907-700.01.2--Compliance Requirements. Prior to incorporation into the work, the Contractor shall furnish the Project Engineer with certificates of compliance documenting conformance to the requirements of Subsection 907-106.14.

The certificates shall be on the Supplier's/Manufacturer's letterhead, containing the following:

- Project number
- Name of manufacturer and address of manufacture location
- Material description
- Batch number / Heat number / Lot number
- Bill of lading number
- Date received
- "I certify each material listed on this certificate to be permanently incorporated in this project has been manufactured domestically."
- Signature of an authorized representative of the Supplier/Manufacturer

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-701-3

CODE: (SP)

DATE: 05/04/2021

SUBJECT: Hydraulic Cement

Section 701, Hydraulic Cement, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-701.01--General. In the first sentence of the second paragraph of Subsection 701.01 on page 718, change “mills” to “plants.”

In the second sentence of the sixth paragraph of Subsection 701.01 on pages 718 and 719, change “shall” to “will.”

907-701.02--Portland Cement.

907-701.02.1-General.

907-701.02.1.2--Alkali Content. Delete the sentence in Subsection 701.02.1.2 on page 719, and substitute the following.

When used in portland cement concrete, the total alkali contribution from all cement types in this Subsection shall not exceed 4.0 lb. per cubic yard of concrete calculated as follows:

$$\text{lb alkali per cu Yd} = \frac{(\text{lb cement per cu Yd}) \times (\% \text{Na}_2\text{O equivalent in cement})}{100}$$

In the above calculation, the maximum cement alkali content reported on the cement mill certificate shall be used. An example calculation can be found in the Department’s *Concrete Field Manual*.

907-701.02.2--Replacement by Other Cementitious Materials. Delete the paragraph in Subsection 701.02.2 on page 719, and substitute the following.

The maximum replacement of cement by weight is 25% for fly ash or 50% for ground granulated blast furnace slag (GGBFS). Replacement contents below 20% for fly ash or 45% for GGBFS may be used, but will not be given any special considerations, such as the maximum acceptance temperature for portland cement concrete containing pozzolans in Subsection 804.02.13.1.5. Special considerations shall only apply for replacement of cement by fly ash or GGBFS.

Delete Subsection 701.02.2.1 on pages 719 and 720, and substitute the following.

907-701.02.2.1--Portland Cement Concrete Exposed to Soluble Sulfate Conditions or Seawater.

When portland cement concrete is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall be as follows in Table 1. Class C fly ash shall not be used as a replacement for cement in any of the sulfate exposure conditions listed in Table 1.

Table 1- Cementitious Materials for Soluble Sulfate Conditions or Seawater

Sulfate Exposure	Water-soluble sulfate (SO ₄) in soil, % by mass	Sulfate (SO ₄) in water, ppm	Cementitious material required
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type I cement with one of the following replacements of cement by weight: 24.5 - 25.0% Class F fly ash, or 49.5 - 50.0% GGBFS or Type II ^{*,**} cement
Severe	0.20 - 2.00	1,500 - 10,000	Type I cement with a replacement by weight of 49.5 - 50.0% GGBFS, or Type II [*] cement with one of the following replacements of cement by weight: 24.5 - 25.0% Class F fly ash, or 49.5 - 50.0% GGBFS

* Type III cement conforming to AASHTO M85 with a maximum 8% tricalcium aluminate (C₃A) may be used in lieu of Type II cement as allowed in Subsection 701.02.1; this cement is given the designation "Type III(MS)."

** Class F fly ash or GGBFS may be added as a replacement for cement as allowed in Subsection 907-701.02.2.

Delete Subsection 701.02.2.2 on page 720, and substitute the following.

907-701.02.2.2--Portland Cement for Soil Stabilization Exposed to Soluble Sulfate Conditions or Seawater. When portland cement for use in soil stabilization is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall meet the requirements of Subsection 701.02.2.1.

907-701.04--Blended Hydraulic Cement.

907-701.04.1--General. Delete Subsection 701.04.1.1 on page 720, and substitute the following.

907-701.04.1.1--Types of Blended Hydraulic Cement. Blended hydraulic cements (blended cements) shall be of the following types and conform to AASHTO M 240:

Type IL – Portland-limestone cement
Type IP – Portland-pozzolan cement
Type IS – Portland blast-furnace slag cement

Blended cement Types IL, IP, and IS meeting the “MS” sulfate resistance requirement listed in AASHTO M 240, Table 3 shall have the “(MS)” suffix added to the type designation.

907-701.04.1.2--Alkali Content. Delete the sentence in Subsection 701.04.1.2 on page 720, and substitute the following.

All blended cement types shall be made with clinker that would result in cement meeting the requirements of Subsection 701.02.1.2 when used in the production of AASHTO M 85, Type I or Type II cement.

The blended cement manufacturer shall include the percent equivalent alkalis as Na₂O on their cement mill reports.

When calculating the total alkali contribution with blended cements, use the equivalent alkali content of the base portland cement. An example calculation for cases where blended cements are used can be found in the Department’s *Concrete Field Manual*.

907-701.04.2--Replacement by Other Cementitious Materials. Delete the paragraph in Subsection 701.04.2 on page 720, and substitute the following.

The maximum replacement of blended cement Type IL by weight is 35% for fly ash or 50% for GGBFS. Replacement contents below 20% for fly ash or 45% for GGBFS may be used, but will not be given any special considerations, such as the maximum acceptance temperature for blended cement concrete containing pozzolans in Subsection 804.02.13.1.5. Special considerations shall only apply for replacement of blended cement by fly ash or GGBFS.

No additional cementitious materials, such as portland cement, blended cement, fly ash, GGBFS, or others, shall be added to or as a replacement for blended cement Types IP and IS.

Delete Subsection 701.04.2.1 on pages 720 and 721, and substitute the following.

907-701.04.2.1--Blended Cement Concrete Exposed to Soluble Sulfate Conditions or Seawater. When blended cement concrete is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall be as follows in Table 2. Class C fly ash shall not be used as a replacement for cement in any of the sulfate exposure conditions listed in Table 2.

Table 2- Cementitious Materials for Soluble Sulfate Conditions or Seawater

Sulfate Exposure	Water-soluble sulfate (SO ₄) in soil, % by mass	Sulfate (SO ₄) in water, ppm	Cementitious material required
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type IL (MS)* cement, Type IL cement with one of the following replacements of cement by weight: 24.5 - 35.0% Class F fly ash, or 49.5 - 50.0% GGBFS, Type IP (MS) cement, or Type IS (MS) cement
Severe	0.20 - 2.00	1,500 - 10,000	Type IL cement with a replacement of cement by weight of 49.5 - 50.0% GGBFS, or Type IL (MS) cement with one of following replacements of cement by weight: 24.5 - 35.0% Class F fly ash, or 49.5 - 50.0% GGBFS

* Class F fly ash or GGBFS may be added as a replacement for cement as allowed in Subsection 907-701.04.2.

Delete Subsection 701.04.2.2 on page 721, and substitute the following.

907-701.04.2.2--Blended Cement for Soil Stabilization Exposed to Soluble Sulfate Conditions or Seawater. When blended cement for use in soil stabilization is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall meet the requirements of Subsection 701.04.2.1.

Delete Subsection 701.04.3 on page 721.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-702-4

CODE: (IS)

DATE: 09/11/2018

SUBJECT: Bituminous Materials

Section 702, Bituminous Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-702.04--Sampling. Delete the sentence in Subsection 702.04 on page 722, and substitute the following.

Sampling of bituminous materials shall be as set out in AASHTO R 66.

907-702.07--Emulsified Asphalt. Delete the last sentence in Subsection 702.07 on page 724, and substitute the following.

Asphalt for fog seal shall conform to the requirements of Subsection 907-702.12, Table V.

907-702.12--Tables. Delete Table V in Subsection 702.12 on page 729, and substitute the following.

**TABLE V
SPECIFICATION FOR FOG SEAL**

Test Requirements	LD-7		CHPF-1		Test Method
	Min.	Max.	Min.	Max.	
Viscosity, Saybolt Furol, @ 25°C, Sec.	10	100	-	100	AASHTO T 72
Storage Stability Test, 24 hr, %	-	1	-	1	AASHTO T 59
Settlement, 5 day, %	-	5	-	-	AASHTO T 59
Oil Distillate, %	-	1	-	-	AASHTO T 59
Sieve Test, % *	-	0.3	-	0.1	AASHTO T 59
Residue by Distillation, %	40	-	40	-	AASHTO T 59
Test on Residue from Distillation					
Penetration @ 25°C, 100g, 5 sec	-	20	40	90	AASHTO T 49
Softening Point, °C	65	-	-	-	ASTM D 36
Solubility in trichloroethylene, %	97.5	-	-	-	AASHTO T 44
Elastic Recovery @ 25°C, %	-	-	40	-	AASHTO T 301
Original DSR @ 82° (G*/Sinδ, 10 rad/sec)	1	-	-	-	AASHTO T 111

* The Sieve Test result is tested for reporting purposes only and may be waived if no application problems are present in the field.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-703-1

CODE: (IS)

DATE: 06/13/2018

SUBJECT: Gradation

Section 703, Aggregates, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-703.03--Course Aggregates for Hydraulic Cement Concrete.

907-703.03.2--Detail Requirements.

907-703.03.2.4--Gradation. In the table in Subsection 703.03.2.4 on page 734, add 100 for the percent passing by weight on the 1½-inch sieve for Size No. 67 aggregates.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-705-1

CODE: (IS)

DATE: 06/13/2018

SUBJECT: Stone Riprap

Section 705, Stone Blanket Protection and Filter Blanket Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-705.04--Stone Riprap. Delete the last sentence of the first paragraph of Subsection 705.04 on page 750, and substitute the following.

Quality requirements for rock to be furnished under these specifications will come from a pre-approved source and be visually approved prior to use.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-707-3

CODE: (SP)

DATE: 10/27/2021

SUBJECT: Joint Materials

Section 707, Joint Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-707.02--Joint Filler.

907-707.02.2--Preformed Sponge, Rubber, Cork and Closed-Cell Polypropylene Foam Joint Fillers for concrete Paving and Structural Constructions. Delete the two paragraphs of Subsection 707.02.2 on page 755, and substitute the following.

Preformed joint filler shall conform to AASHTO M 153 for sponge, rubber, and cork and tested according to ASTM D545. The type required will be indicated on the plans.

Closed-cell polypropylene foam shall conform to the requirements in ASTM D8139 and tested in accordance with ASTM D545.

907-707.02.3--Wood. Delete paragraph (b) of Subsection 707.02.3 on page 755, and substitute the following:

- (b) Dimensions shall be as shown on the plans. Dimensions shown on the plans are “dressed” sizes in accordance with Table 3 of the American Softwood Lumber Standard, SP-20. At the discretion of the Engineer, a 3/4-inch dressed board may be used in lieu of a 1-inch dressed board. A tolerance of plus or minus 1/16 inch thickness and plus or minus 1/8 inch width will be permitted. For slip-form paving a tolerance of minus 1/4 inch on each end in length will be permitted.

907-707.06--Flexible Plastic Gasket for Joining Conduit. Delete the third paragraph of Subsection 707.06 on page 756, and substitute the following.

The Department may require the performance test described in ASTM C 990.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-708-4

CODE: (SP)

DATE: 09/21/2021

SUBJECT: Concrete Pipe

Section 708, Non-Metal Structures and Cattlepasses, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-708.02--Concrete Pipe.

907-708.02.1--Materials for Use in Concrete Pipe.

907-708.02.1.2--Fly Ash. Delete Subsection 708.02.1.2 on page 758, and substitute the following.

Fly ash conforming to the requirements of Subsection 714.05 may be used to replace hydraulic cement on a one to one replacement rate. If a type IL cement conforming to the requirements of Subsection 701.04 is used, the fly ash replacement shall not exceed 35% by weight of the cement. For all other Types of cement, the fly ash replacement rate shall not exceed 25% by weight of hydraulic cement.

907-708.02.3--Exceptions to AASHTO Standard Specifications. After Subsection 708.02.3.7 on page 760, add the following.

907-708.02.3.8--Lifting Device. In lieu of lift holes, the producer may cast an approved lifting device in the pipe during the manufacturing process. Should a lifting device be included with the pipe, the Contractor shall cut off or grind down the lifting device flush with the pipe surface after placement of the pipe. The area around the lifting device shall be coated with a sealer approved by the Engineer.

907-708.02.5--Reinforced Concrete Pipe. Delete the second paragraph in Subsection 708.02.5 on page 760, and substitute the following.

907-708.02.5.1--Class V Pipe With Diameter 54 Inches and Greater. Class V pipe with diameters of 54 inches and larger shall meet the requirements of AASHTO M 170 or M 242 as modified by Subsection 708.02 and herein.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-711-2

CODE: (IS)

DATE: 09/11/2018

SUBJECT: Plain Steel Wire

Section 711, Reinforcement and Wire Rope, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-711.02--Deformed and Plain Carbon-Steel Bars for Concrete Reinforcing.

907-711.02.3--Steel Welded and Non-Welded Wire Reinforcement, Plain and Deformed, for Concrete.

907-711.02.3.1--Plain Steel Wire. Delete the sentence in Subsection 711.02.3.1 on pages 780 and 781, and substitute the following.

Plain steel wire and plain steel welded wire shall conform to the requirements of AASHTO M 336.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-712-1

CODE: (SP)

DATE: 12/07/2021

SUBJECT: Fence and Guardrail

Section 712, Fence and Guardrail, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-712.01--General. After the sentence in Subsection 712.01 on page 785, add the following.

All materials' inspection, testing, and certification will be performed in accordance with the requirements of the current version of the Department's *Materials Division Inspection, Testing, and Certification Manual*.

Delete Subsections 712.02 and 712.03 on page 785, and substitute the following.

907-712.02--Barbed Wire. Barbed wire shall conform to the requirements of AASHTO M 280. In the coastal counties of Hancock, Harrison, and Jackson, either Coating Type Z Class 3 or Coating Type A shall be furnished. In all other areas of the State, either Coating Type Z Class 1, Coating Type Z Class 3, Coating Type ZA Class 60, or Coating Type A shall be furnished.

907-712.03--Metallic-Coated, Steel Woven Wire Fence Fabric. Woven wire fencing (i.e., "hog wire") shall conform to the requirements of AASHTO M 279. In the coastal counties of Hancock, Harrison, and Jackson, either Coating Type Z Class 3 or Coating Type A shall be furnished. In all other areas of the State, either Coating Type Z Class 1, Coating Type Z Class 3, Coating Type ZA Class 60, or Coating Type A shall be furnished.

907-712.04--Chain Link Fence. Delete Subsections 712.04.1 thru 712.04.7 on pages 785 & 786, and substitute the following.

907-712.04.1--Fabric. In the coastal counties of Hancock, Harrison, and Jackson, either Type I Class D, Type II, Type III, or Type IV fabrics shall be furnished. In all other areas of the State, either Type I Class C, Type I Class D, Type II, Type III, or Type IV fabrics shall be furnished.

907-712.04.2--Tie Wire. Tie wire shall be of the same material as the fencing wire being used, shall be of good commercial quality, and shall meet the requirements of AASHTO M 181. Either Type I, Type II, Type III, or Type IV tie wire shall be furnished.

907-712.04.3--Tension Wire. Tension wire shall be of the same material as the fencing wire being used, shall be of good commercial quality, and shall meet the requirements of AASHTO M 181. In the coastal counties of Hancock, Harrison, and Jackson, either Type I Class 3, Type II, Type III, or Type IV tension shall be furnished. In all other areas of the State, either Type II, Type III, Type IV, or Type I Classes 1, 2, or 3 tension wires shall be furnished.

907-712.04.4--Posts Rails, Gate Frames, and Expansion Sleeves. Posts, rails, gate frames, and expansion sleeves shall conform to the requirements for posts in Subsection 712.05.2, unless otherwise designated in the contract.

907-712.04.5--Miscellaneous Fittings and Hardware. Miscellaneous fittings and hardware shall conform to the requirements of Subsection 712.16.

907-712.05--Fence Posts and Braces.

907-712.05.1--Treated Timber Posts and Braces.

907-712.05.1.1--General. Delete the third, fourth, fifth, and sixth paragraphs of Subsection 712.05.1.1 on page 787, and substitute the following.

All wood posts and braces shall be treated in accordance with Subsections 718.03 and 718.04.

907-712.05.1.2--Round Posts. Delete the last sentence of the last paragraph of Subsection 712.05.1.2 on page 788.

907-712.05.1.3--Sawed Posts. Delete the last sentence of the paragraph of Subsection 712.05.1.3 on page 788.

907-712.05.1.4--Sawed Braces. Delete the last sentence of the paragraph of Subsection 712.05.1.4 on page 788.

Delete Subsection 712.05.2 on page 788, and substitute the following.

907-712.05.2--Metal Posts.

907-712.05.2.1--Round Steel Pipe. Round steel pipe shall meet the requirements of AASHTO M 181, either Grade 1 (i.e., meeting the requirements in ASTM F 1083) or Grade 2 (i.e., meeting the requirements of ASTM F 1043).

Round steel pipe shall be sized in accordance with NPS (nominal pipe size) designations as shown on Plans, and not according to the outer or inner pipe diameter.

907-712.05.2.2--Steel Fence Post and Assemblies, Hot-Wrought. Steel posts with the following section shapes, Tee, channel or U, and Y-Bar shall meet the requirements of AASHTO M 281, galvanized in accordance with the requirements of AASHTO M 111, unless otherwise specified in the contract. Acceptance of these steel posts shall be by certification from the manufacturer, producer, supplier, or fabricator, as applicable.

907-712.05.2.3--Blank.

907-712.05.2.4--Steel H-Beam Posts. Steel H-Beam posts shall be produced from structural quality weldable steel having a minimum yield strength of 45,000 psi and shall be galvanized in accordance with ASTM A 123. Steel H-Beam line posts shall be 2.250 inches by 1.625 inches and shall weigh 3.43 pounds per foot. A tolerance of plus or minus 5.0 percent is allowed for

weight per foot. A tolerance of plus or minus 1.0 percent is allowed for dimensions.

907-712.05.2.5--Aluminum-Alloy Posts and Assemblies. Round aluminum-alloy posts shall meet the requirements of ASTM B 241, Alloy 6061, T6. Aluminum-Alloy H-Beam posts shall meet the requirements of ASTM B 221, Alloy 6061, T6.

907-712.05.2.6--Formed Steel Section Posts. Formed steel section posts, "C" sections, shall be formed from sheet steel conforming to ASTM A 1011, Grade 45, and shall be galvanized in accordance with ASTM A 123.

907-712.06--Guard and Guardrail Posts.

907-712.06.2--Treated Wood Posts.

907-712.06.2.1--Square Posts. Delete the paragraph in Subsection 712.06.2.1 on page 789, and substitute the following.

All square posts shall be inspected for conformance with Section 712.05, except that the posts may be rough and shall be within $\pm 3/8$ " of the dimensions shown on the plans.

907-712.06.2.2--Round Posts. Delete the paragraph in Subsection 712.06.2.2 on page 789, and substitute the following.

All round posts shall be inspected for conformance with Section 712.05, except that the posts shall be of the shape and dimensions shown on the plans.

907-712.06.5--Treated Wood Blocks for Use with Metal Guardrail Posts. Delete the paragraphs of Subsection 712.06.5 on pages 789 & 790, and substitute the following.

Treated wood blocks for use with metal guardrail posts shall be within $\pm 3/8$ " of the size and dimensions shown on the plans, except that a minus tolerance shall not be allowed for the slotted width in which the metal post must fit.

Delete Subsection 712.16 on page 791, and substitute the following.

907-712.16--Hardware. All ferrous metal hardware for fencing such as bolts, nuts, washers, and metal straps shall be as specified on the plans and galvanizing shall not be less than 1.0 ounce per square foot of uncoated area. Aluminum coated hardware shall be coated with aluminum meeting the requirements of AASHTO M 181 for aluminum coating and at the rate of not less than 0.4 ounces per square foot of uncoated area.

Aluminum alloy hardware shall conform to the requirements of ASTM B 221 for extruded aluminum alloy 6063, T6. The finished members shall be of uniform quality.

Aluminum-zinc coated hardware shall be coated with an aluminum-zinc alloy meeting the chemical requirements and weight of coating specified for aluminum-zinc alloy coated metal gates.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-714-3

CODE: (SP)

DATE: 08/31/2021

SUBJECT: Miscellaneous Materials

Section 714, Miscellaneous Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-714.01--Water.

907-714.01.1--General. Delete the last sentence of the second paragraph in Subsection 714.01.1 on page 794.

907-714.01.2--Water for Use in Concrete. Delete Subsection 714.01.2 on page 794, and substitute the following:

Water from municipal sources is permitted be used as mixing water in concrete, mortar, and grout without Department testing. Water from non-municipal water sources used in mixing of concrete, mortar, and grout which does not meet the requirements in Subsection 714.01.1 shall be tested for conformance as required in AASHTO M157, Table 1 and Table 2.

907-714.01.3--Water for Use in Chemically Stabilized Based. Delete the first sentence of first paragraph in Subsection 714.01.3 on page 794, and substitute the following:

Water used in the construction of bases that contain cement, lime, or other chemical additive shall be as set out in Subsection 714.01.1. Water from municipal sources is permitted to be used without testing for conformance to the requirements below. If water is not from a municipal source, it shall not contain impurities in excess of the following limits:

Delete Subsection 714.01.6 on page 795, and substitute the following.

907-714.01.6--Blank.

907-714.05--Fly Ash.

907-714.05.1--General. Delete the first sentence of the fifth paragraph in Subsection 714.05.1 on page 797.

907-714.13--Geotextiles.

907-714.13.11--Tables. Delete Table 1 in Subsection 714.13.11 on page 813, and substitute the following.

Table 1 - Geotextiles									
Type Designation	I¹ Sediment Control	II¹ Drainage	III Drainage	IV Paving	V Separation & Drainage	VI Separation, Stabilization & Reinforcement		VII High Strength	IX High Strength
						Woven	Non- Woven	Non- Woven	
Physical Property²									Test Method
Grab Strength (lb)	50	90	110	90	200	280	180	450	ASTM D 4632
Elongation (%)	----	50% max @ 45 lb	20% min	50% min @ break	50% min	50% max	50% min	50% max	ASTM D 4632
Seam Strength (lb)	----	----	70	----	180	240	160	400	ASTM D 4632
Puncture Strength (lb)	----	----	40	----	80	110	75	180	ASTM D 6241
Trapezoidal Tear (lb)	----	----	40	----	80	100	70	150	ASTM D 4533
Asphalt Retention (gal/yd ²)	----	----	----	0.2	----	----	----	----	ASTM D 6140
Permittivity (sec ⁻¹) min	0.05	0.05	0.5	----	0.2	0.2	0.2	0.2	ASTM D 4491
AOS Woven (mm) max	0.60	0.60	0.6	----	0.6	0.43	----	0.43	ASTM D 4751
AOS Non-Woven (mm) max	0.84	0.84	0.43	----	0.43	----	0.43	0.43	
Tensile Strength after UV (%) Retained	70% @ 500 hr	70% @ 500 hr	50% @ 500 hr	----	50% @ 500 hr	50% @ 500 hr	50% @ 500 hr	50% @ 500 hr	ASTM D 4355
Melting Point °(F)	----	----	----	325	----	----	----	----	ASTM D 276
Minimum Ultimate Tensile Strength ³ (lb/in)	----	----	----	----	----	----	----	660	ASTM D 4595

Notes: 1 - All property values, with the exception of apparent opening size (AOS), represent minimum average roll values in the weakest principal direction. Values for AOS represent the maximum average roll values, 2 - Values not identified in this table should meet manufacturer certification for the use and application, 3 - Machine direction

Delete Subsection 714.15 on pages 816 and 817 and substitute the following.

907-714.15--Geogrids.

907-714.15.1--General. A geogrid is defined as a geosynthetic formed by a regular network of connected elements with apertures greater than 0.25 inch to allow interlocking with surrounding soil, rock, and other surrounding materials to function primarily as reinforcement.

Geogrid shall be manufactured from an expanded strain hardened monolithic polymer sheet composed of one or more synthetic polymers and shall be mildew resistant and inert to biological degradation and naturally encountered chemicals, alkalis and acids. The geogrid shall contain stabilizers and/or inhibitors, or a resistance finish or covering to make it resistant to deterioration from direct sunlight, ultraviolet rays, and heat.

Geogrid manufacturers shall participate in and be in compliance with the American Association of State Highway Transportation Officials (AASHTO) National Transportation Product Evaluation Program's (NTPEP) Geosynthetics audit program. Geogrid shall meet the requirements of Table II for the application and type shown on the plans and shall be selected from the Department's Approved Lists.

907-714.15.1.1--Geogrid for Retaining Walls and Reinforced Soil Slopes. Geogrid for retaining walls and reinforced soil slopes shall be creep tested in accordance with AASHTO R69 and meet Long Term Design Load, Minimum Ultimate Tensile Strength, and open area criteria listed in Table II. Manufacturers shall perform at least one long-term creep test for no less than 10,000 hours in accordance to ASTM D 5262 for each polymer or composition of polymers from which the geogrid is produced. The long-term design load that shall be reported for design use, shall be that load at which no more than 10% strain occurs over a 100-year design life of the geogrid, as calculated in accordance with AASHTO R69. Long-term design loads shall be reported unfactored, and the AASHTO strength reduction factors (Durability and Installation, and safety factors) will be considered by the Department's Geotechnical Branch on a site specific design basis.

907-714.15.1.2--Geogrid for Subgrade Stabilization. Geogrid for subgrade stabilization shall meet Minimum Ultimate Tensile Strength and open area criteria listed in Table II.

907-714.15.2--Marking, Shipment, and Storage. Each roll or container of geogrid shall be visibly labeled with the name of the manufacturer, trade name of the product, lot number, and quantity of material. In addition, each roll or container shall be clearly tagged to show the type designation that corresponds to that required by the plans. During shipment and storage the geogrid shall be protected from direct sunlight, and temperatures above 120°F or below 0°F. The geogrid shall either be wrapped and maintained in a heavy duty protective covering or stored in a safe enclosed area to protect from damage during prolonged storage.

907-714.15.3--Manufacturer Certification. The Contractor shall furnish the Engineer three copies of the manufacturer's certified test reports indicating that the geogrid furnished conforms to the requirements of the specifications and is of the same composition as the originally approved

by the Department.

907-714.15.4--Acceptance Sampling and Testing. Final acceptance of each shipment will be based upon results of tests performed by the Department on verification samples submitted from the project, as compared to the manufacturer's certified test reports. The Engineer will select one roll or container at random from each shipment for sampling. As sample extending full width of the randomly selected roll or container and being at least five (5) square yards in area will be obtained and submitted by the Engineer. All material samples shall be provided at no cost to the State.

**TABLE II
GEOGRIDS**

Physical Properties	Type Designation						Test Method
	I	II	III	IV	V	VI	
Long Term Design Load ¹ , pounds per foot, Machine Direction	250	500	750	1500	2500	3500	AASHTO R69, ASTM D5262
Minimum Ultimate Tensile Strength ² , pounds per foot, Machine Direction	500	1000	1500	3000	5000	7000	ASTM D6637
Open Area, percent	70	70	50	50	50	50	Direct Measurement

¹ Minimum design criteria requirement.

² Minimum Average Roll Value (MARV).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-718-1

CODE: (SP)

DATE: 12/07/2021

SUBJECT: Timber and Dimension Lumber

Section 718, Timber and Dimension Lumber, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete the Subsections in Section 718 on pages 836 thru 838, and substitute the following.

907-718.01--General. All timber and dimension lumber shall be Southern pine and shall conform in all respects to applicable requirements of AASHTO M 168. The Department reserves the right to sample and to test all materials at any time; all inspection, testing, and certification of materials will be performed in accordance with the requirements of the current version of the Department's *Materials Division Inspection, Testing, and Certification Manual*.

Timber and dimension lumber shall be furnished in the sizes shown on the plans or as specified. Unless otherwise specified, timber and dimension lumber shall be No. 1, or better, graded according to the latest American Lumber Standards.

Only one type of preservative shall be used for the treatment of materials for any one class of construction on a project, unless otherwise specified.

Where treated timber and dimensional lumber is to be used in non-highway construction or use, such as decking, handrails in walking trails, or in any manner where general public exposure by touch is possible, the treatment requirements will be as per project plans and/or approved by the State Materials Engineer.

907-718.02--Untreated Timber and Dimension Lumber. Untreated timber and dimension lumber shall conform to the requirements of AASHTO M 168.

907-718.03--Treated Timber and Dimension Lumber. Timber and dimension lumber to be treated shall meet the requirements herein specified and shall be treated as specified. Treated timber or dimensional lumber will not be accepted for use unless it has been inspected by an authorized representative of the Department and found to be satisfactory after treatment.

907-718.03.1--Blank.

907-718.03.2--Treatment.

907-718.03.2.1--General. All materials shall be treated in accordance with AASHTO M 133 unless otherwise directed by the Environmental Protection Agency (EPA).

907-718.03.2.2--Blank.

907-718.03.2.3--Inspection. Treated timber and dimension lumber shall be inspected by an authorized representative of the Department before being incorporated into the work. Treatment reports shall be provided to the Department for each lot of material supplied.

907-718.03.3--Blank.

907-718.03.4--Storage of Treated Material. All material treated for stock shall be stacked as compactly as possible on a well-drained surface. Material shall be supported on sills spaced as necessary, not to exceed 10 foot intervals and shall have at least one foot of air space beneath the stacks.

All materials treated with preservatives for use in buildings and applications where painting is required shall be dried after treatment. The treated wood shall be dried in accordance with American Lumber Standards.

907-718.04--Preservative. Preservatives shall be as specified in AASHTO M 133 unless otherwise directed by the Environmental Protection Agency (EPA).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-720-2

CODE: (IS)

DATE: 09/11/2018

SUBJECT: Acceptance Procedure for Glass Beads

Section 720, Pavement Marking Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-720.01--Glass Beads.

907-720.01.4--Acceptance Procedures. Delete the last sentence of the paragraph in Subsection 720.01.4 on page 841, and substitute the following.

Acceptance sampling and testing of glass beads will be in accordance with Subsection 2.9.2 of the Department's Materials Division Inspection, Testing, and Certification Manual.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-4

CODE: (IS)

DATE: 04/19/2022

SUBJECT: Materials for Signing

Section 721, Materials for Signing, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-721.06--Reflective Sheeting.

907-721.06.2--Performance Requirements. Delete Table 4 and Table 5 in Subsection 721.06.2 on pages 860 & 861, and substitute the following.

MINIMUM COEFFICIENTS OF RETROREFLECTION Candela per foot candle per square foot (cd/fc/ft²) Per ASTM Designation D4956

TABLE 4
Type IX Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Fluorescent Yellow/Green	Fluorescent Yellow	Fluorescent Orange
0.2°	-4.0°	380	285	38	76	17	300	230	115
0.2°	+30.0°	215	162	22	43	10	170	130	65
0.5°	-4.0°	240	180	24	48	11	190	145	72
0.5°	+30.0°	135	100	14	27	6.0	110	81	41
1.0°	-4.0°	80	60	8.0	16	3.6	64	48	24
1.0°	+30.0°	45	34	4.5	9.0	2.0	36	27	14

TABLE 5
Type XI Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Brown	Fluorescent Yellow/Green	Fluorescent Yellow	Fluorescent Orange
0.2°	-4.0°	580	435	58	87	26	17	460	350	175
0.2°	+30.0°	220	165	22	33	10	7.0	180	130	66
0.5°	-4.0°	420	315	42	63	19	13	340	250	125
0.5°	+30.0°	150	110	15	23	7.0	5.0	120	90	45
1.0°	-4.0°	120	90	12	18	5.0	4.0	96	72	36
1.0°	+30.0°	45	34	5.0	7.0	2.0	1.0	36	27	14

After Subsection 721.10 on page 864, add the following.

907-721.11--Digital Applied Printing. The following addresses the requirements for digitally printed finished retroreflective traffic control signs on flat sheet aluminum and digitally printed traffic sign faces intended to be applied to a sign substrate.

907-721.11.1--Digitally Printed Ink Systems. Traffic signs must be produced using components, and processes that comply with the retroreflective sheeting manufacturer's recommendations.

Digital printed ink systems used to print traffic signs must meet and comply with daytime and nighttime chromaticity (color standards) as recognized in ASTM D4956 “Standard Specification for Retroreflective Sheeting for Traffic Control.”

Digital printed ink systems must meet 70% of the initial retroreflectivity specifications of each respective reflective film color as found in ASTM D4956 “Standard Specification for Retroreflective Sheeting for Traffic Control.”

Prior to fabrication and preferably at the preconstruction meeting, the Contractor shall advise the Project Engineer in writing as to which signs on the project will be digitally printed and which ones will be screen printed. The Contractor shall submit to the Project Engineer certifications for all digitally printed signs, which will be forwarded to the State Traffic Engineer for review.

907-721.11.2--Protective Overlay Film. Permanent traffic signs printed with digital ink systems will be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlamine shall comply with the retroreflective sheeting manufacturer’s recommendations to ensure proper adhesion and transparency and will also meet the reflective film durability as identified in Table 1.

Table 1
Retroreflective Film Minimum Durability Requirements

ASTM D4956 Type	Full Sign Replacement Term (years)	Sheeting Replacement Term (years)
IV	7	10
VIII	7	10
IX	7	12
XI	7	12

Temporary signs used in work zones printed with black ink only will not require a protective overlay film as long as the finished sign is warranted for a minimum outdoor durability of three years by the sheeting manufacturer.

907-721.11.3--Inspection. During fabrication, the Contractor shall provide sufficient testing and quality control throughout fabrication to insure good workmanship. Once the material has been received, it may be subject to random testing to ensure compliance with all requirements. If any test samples do not conform to the requirements, the entire order may be returned at the vendor’s expense.

907-721.11.4--Traffic Sign Performance Warranty Provisions. Based on the ASTM Type of sheeting specified, traffic control signs shall be warranted for the duration shown in Table 1. The Contractor shall supply a copy of the warranty document with complete details of terms and conditions upon request of the Department.

907-721.11.5--Certified Digital Sign Fabricator. Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

Certified sign fabricators must undergo an audit process by the sheeting manufacturer to ensure they have the proper equipment, manufacturing capabilities, manufacturing application processes and the materials required to fulfill the sheeting manufacturer's warranty obligations. Sign fabricators must recertify annually with reflective sheeting manufacturers or utilize a 3rd party certifier approved by the reflective sheeting manufacturer.

The Contractor shall submit proof of Sign Fabricator Certification as issued by the retroreflective sign sheeting manufacturer to the Project Engineer upon delivery of the signs, or with the Shop Drawings.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-722-1

CODE: (IS)

DATE: 11/15/2017

SUBJECT: Materials for Traffic Signal Installation

Section 722, Materials for Traffic Signal Installation, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follow.

907-722.02.3--Design Strength Requirements. Delete Subsection 722.02.3 on pages 864 thru 866, and substitute the following.

Unless specified otherwise in the plans, poles shall meet the requirements of the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*, as specified in the plans with all interim supplements. All components of the assemblies shall be designed to the following:

- Importance Factor: 1.0; 50 year mean recurrence interval
- Basic Wind Speed (3 second gust): As shown on the project plans
- Minimum Gust Effect Factor: 1.14
- Fatigue Category: II
- Ice Loading: As shown on the project plans
- Natural Wind Gust Pressure Loads: Included
- Truck Induced Gust Pressure Loads: Not included
- Galloping: Not included

907-722.02.5--Mast Arms for Traffic Signal and Equipment Poles. Delete the first four sentences of the third paragraph of Subsection 722.02.5 on page 867, and substitute the following.

Anchor base plates must meet the minimum requirements of ASTM A36 or ASTM A709 Grade 36 or ASTM A572 Grade 50 and must be welded to the shaft by either telescoped with two continuous arc welds or by back up ring using full penetration welds.. Flange plate shall telescope the large end of the arm and be welded by either two (2) continuous arc welds, one (1) being on the outside of the plate, adjacent to the shaft, and the other one (1) on the inside at the end of the tubular cross section or by back up ring using full penetration welds. The thru-bolt flange plate or tapped flange plate supporting the mast arm shall be welded to the pole near the top and supported side plate tangent to the pole and gusset plates both top and bottom. The thru-bolt or tapped flange plate must be sufficient to develop the full capacity of the connecting bolts.

907-722.03--Electric Cable. Delete the paragraphs for Loop Detector Wire and Loop Detector Lead-in Cable in Subsection 722.03 on page 869.

Delete the first sentence of “Communication Cable” in Subsection 722.03 on page 870, and substitute the following.

Communication cables shall be as per the manufacturer's recommendation.

907-722.05.4--Type III or Type IV Rigid Non-Metallic Conduit. After the last sentence of Subsection 722.05.4 on page 871, add the following.

Schedule 40 conduit shall be used unless otherwise noted in the plans.

Delete the title of Subsection 722.13.3 on page 876, and substitute the following.

907-722.13.3--Power Service Pedestal.

Delete the first paragraph of Subsection 722.13.3 on page 876, and substitute the following.

The pedestal shall be of NEMA Type 3R rainproof construction and shall be UL Listed as "Enclosed Industrial Control Equipment" (UL 508A). External construction shall comply with UL50 requirements and shall be unpainted aluminum.

Nominal size of the pedestal shall be 48"H x 16"W x 16"D.

Pedestal shall have a voltage rating or 120v/240v single phase with an Amperage rating of 800A.

After the first sentence of the seventh paragraph of Subsection 722.13.3 on page 876, add the following.

An outdoor rated heavy duty combination lock shall be provided to lock the customer compartment door.

907-722.14.1.3--Optical System. Delete the sixteenth paragraph of Subsection 722.14.1.3 on page 879, and substitute the following.

The signal module on-board circuitry shall include voltage surge protection to withstand high-repetition noise transients and low-repetition high-energy transients as stated in Section 2.1.6, NEMA Standard TS 2, 1992.

Delete the last sentence of the seventeenth paragraph of Subsection 722.14.1.3 on page 879, and substitute the following.

Load switches shall be compatible with NEMA TS 1 or later, or Model 170-1989 or later.

Delete Subsection 722.14.5 on page 882, and substitute the following.

907-722.14.5--Blank.

Delete Subsections 722.14.7 and 722.14.8 on page 882.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-804-11

CODE: (SP)

DATE: 05/05/2021

SUBJECT: Concrete Bridges and Structures

Section 804, Concrete Bridges and Structures, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-804.02--Materials.

907-804.02.3--Non-Quality Control / Quality Assurance Concrete.

Delete the third sentence of the first paragraph on page 936 and substitute the following.

The Contractor is required to submit mixture designs to accomplish this work in accordance with Section 804 and perform normal Quality Control functions in accordance with Table 4, Contractor's Minimum Requirements for Quality Control, Items A and B.

Add the following to the list of concrete items on page 937 that are not accepted based on the Quality Control / Quality Assurance (QC/QA) requirements.

<u>Section</u>	<u>Description</u>
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610	High Tension Cable Barrier
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907-804.02.6--Classification and Uses of Concrete. After the last class of concrete listed in Section 804.02.6 on page 938, add the following.

10) Class BDX - Concrete for bridge decks (4,500 psi)

907-804.02.10--Hydraulic Cement Concrete Mixture Design. Add the following to Table 3 in Subsection 804.02.10 on page 941.

BDX	Bridge Deck ¹	57 or 67	0.42-0.45	4500	5 [-2.5]	4.5±1.5 6.5±1.5	N/A
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Delete footnote 1 of Table 3 in Subsection 804.02.10 on pages 941 & 942 and substitute the following.

¹ An approved synthetic structural fiber meeting the requirements of Subsection 711.04 shall be incorporated into the mixture at 1.25 times the approved dosage rate. For each additional pound of fibers per cubic yard added in excess of the requirement stated above, an additional inch of slump will be allowed up to a maximum permitted slump of eight (8) inches.

For Class BD, the maximum cementitious material content shall be 550 pounds per cubic yard

For Class BDX, the maximum cementitious material content shall be 564 pounds per cubic yard.

Delete footnote 3 of Table 3 in Subsection 804.02.10 on page 942 and substitute the following:

- ³ The design slump selected by the Contractor for the mixture design approval is the maximum slump permitted.

Delete the last sentence of the first paragraph on page 942 and substitute the following.

Other hydraulic cements may be used in accordance with the specifications listed in Section 701. Other small coarse aggregate sizes meeting the requirements of Subsection 703.03.2.4 may be used in conjunction with the coarse aggregate sizes listed in Table 3.

907-804.02.12--Contractor's Quality Control. Delete Table 4 in Subsection 804.02.12.5 on page 950, and substitute the following.

Table 4
CONTRACTOR'S MINIMUM REQUIREMENTS FOR QUALITY CONTROL

Hydraulic Cement Concrete		
Control Requirement	Frequency	AASHTO/ASTM
A. PLANT AND TRUCKS 1. Mixer Blades 2. Scales a. Tared b. Calibrate c. Check Calibration 3. Gauges & Meters - Plant & Truck a. Calibrate b. Check Calibration 4. Admixture Dispenser a. Calibrate b. Check Operation & Calibration	Monthly Daily Every 6 months Weekly Every 6 months Weekly Every 6 months Daily	
B. AGGREGATES 1. Sampling 2. Fine Aggregate a. Gradation / FM b. Moisture c. Specific Gravity / Absorption 3. Coarse Aggregates a. Gradation b. Moisture c. Specific Gravity / Absorption	250 yd ³ concrete Check meter against test results weekly 2500 yd ³ concrete 250 yd ³ concrete Minimum of once daily or more as needed to control production. Check meter against test results weekly. 250 yd ³ Concrete if the coarse aggregate oven dry specific gravity is less than 2.450, or 2500 yd ³ Concrete if the coarse aggregate oven dry specific gravity is greater than or equal to 2.450	T 2 T 27 T 255 T 84 T 27 T 255 T 85
C. PLASTIC CONCRETE 1. Sampling 2. Air Content 3. Slump 4. Density (Unit Weight) 5. Compressive Strength 6. Yield 7. Temperature	First load then one per 50 yd ³ First load then one per 50 yd ³ 100 yd ³ or when cylinders are made A minimum of one set (three cylinders) for each 100 yd ³ inclusive and one set for each additional 100 yd ³ or fraction thereof for each class concrete delivered and placed on a calendar day from a single supplier. A test shall be the average of three cylinders. Each 400 yd ³ Concrete With each sample	R 60 T 152 or T 196 T 119 T 121 T 22, T 23, T 231 T 121 T 309

907-804.02.13--Quality Assurance Sampling and Testing. Delete Table 5 in Subsection 804.02.13 on pages 951 and 952, and substitute the following.

TABLE 5
DEPARTMENT'S MINIMUM REQUIREMENTS
FOR QUALITY ASSURANCE

Quality Assurance Tests	Frequency	AASHTO/ASTM
A. AGGREGATES		
1. Sampling		T 2
2. Fine Aggregate Gradation and FM	250 yd ³ concrete	T 27
3. Coarse Aggregates Gradation	250 yd ³ concrete	T 27
4. Coarse Aggregate a. Specific gravity / Absorption	250 yd ³ Concrete if the coarse aggregate oven dry specific gravity is less than 2.450, or 2500 yd ³ Concrete if the coarse aggregate oven dry specific gravity is greater than or equal to 2.450	
B. PLASTIC CONCRETE		
1. Sampling		R 60
2. Air Content	Every 100 yd ³	T 152 or T 196
3. Slump	Every 100 yd ³	T 119
4. Density (Unit Weight)	100 yd ³ or when cylinders are made	T 121
5. Compressive Strength	One set (three cylinders) for every 100 yd ³ inclusive. A test shall be the average of three cylinders.	T 22, T 23, T 231
6. Temperature	With each sample	T 309

907-804.02.13.1.4--Yield. Delete the first sentence of Subsection 804.02.13.1.4 on page 953 and substitute the following.

If the yield of the concrete mixture is more than plus or minus three percent ($\pm 3\%$) of the design volume, the mixture design shall be adjusted by a Class III Certified Technician representing the Contractor to yield the correct volume, plus or minus three percent ($\pm 3\%$).

907.804.02.13.1.7--Static Segregation. Delete the second sentence of Subsection 804.02.13.1.7 on page 954 and substitute the following.

If the static segregation of the concrete mixture design exceeds this requirement, the mixture design shall be adjusted by a Class III Certified Technician representing the Contractor to ensure a static segregation in conformance with the requirement in Table 3.

907-804.03--Construction Requirements. Delete Subsection 804.03.16.1 on pages 970 & 971, and substitute the following.

907-804.03.16.1--Cold Weather Concreting.

907-804.03.16.1.1--Mixture Acceptance Temperature. For the purpose of job site acceptance temperature in accordance with Subsection 804.02.13.1.5, in cold weather, the acceptance temperature of the concrete when delivered to the job site shall conform to the temperature limitations of "Temperature Limitations on Concrete when Delivered to Job Site" listed in Table 8 below. For the purpose of mixture acceptance temperature, cold weather is defined as three consecutive days when there is a probability that the daily average of the highest and lowest

ambient temperatures is expected to be less than 40°F. This three-day forecast shall be based on the latest information available from the National Weather Service.

TABLE 8
COLD WEATHER TEMPERATURE LIMITATIONS ON CONCRETE
WHEN DELIVERED TO JOB SITE

Section thickness in the least dimension inches	Jobsite Acceptance Temperature Range °F
Less than 12	55 to 75
12 to 36	50 to 70
36 to 72	45 to 65
Greater than 72	40 to 60

907-804.03.16.1.2--Structure Concrete Protection. The Contractor shall assume all risk and added cost connected with the placing and protecting of concrete during cold weather. For the purpose of structure protection, cold weather is defined as periods where there are indications of temperatures less than 40°F during the first four days after placement. Permission given by the Engineer to place concrete during such time will in no way relieve the Contractor of responsibility for satisfactory results. Protection of the concrete shall be accomplished in accordance with the requirements in Subsection 907-804.03.16.1.2.1. If approved by the Engineer, the protection of the concrete may be accomplished in accordance with the requirements in Subsection 907-804.03.16.1.2.2. In either case, should it be determined at any time that the concrete placed under such conditions is unsatisfactory, it shall be removed and replaced with satisfactory concrete by the Contractor without extra compensation.

Before placing concrete, all ice or frost shall be removed from the forms and reinforcement.

In the case of concrete placed directly on or in the ground, such as for footings or bottom slabs, protection and curing during cold weather may be provided as set for concrete pavement under Subsection 501.03.20.3.

907-804.03.16.1.2.1--Enclosure Method. The Contractor shall have available on the project the approved facilities necessary to enclose uncured concrete and to keep the temperature of the air inside the enclosure between 50°F and 100°F for the duration of the cold weather period. The Contractor shall use such heating equipment such as stoves, salamanders, or steam equipment as deemed necessary to protect the concrete. When dry heat is used, means of maintaining atmospheric moisture shall be provided.

The Contractor shall install the temperature sensors and other appurtenances to measure and record the temperature history of the air inside the enclosure. The Contractor shall be able to determine the temperature history of air inside the enclosure while remaining outside the enclosure

In the event that the Contractor's enclosure method does not successfully maintain the air temperature within the required range, the Contractor shall suspend additional concrete placements until either 1) such time that changes in the enclosure method are demonstrated to successfully

maintain the required temperatures during other periods of cold weather, or 2) such time that concrete placements are not conducted during periods of cold weather.

If the air temperature inside the enclosure at the end of the protection period is more than 20°F greater than the ambient temperature, the Contractor shall 1) stop using heating equipment, 2) leave the enclosure undisturbed, and 3) allow the air temperature inside the enclosure to decrease to within 20°F of the ambient temperature before disturbing or removing the enclosure.

907-804.03.16.1.2.2--Insulating Blanketing Method. At the option of the Contractor with the approval of the Engineer, an approved insulating blanketing material capable of maintaining the temperature of the concrete at or above 40°F may be used to protect the work. The insulating blanketing material shall remain in place until both 1) the required concrete strength in Table 6 is achieved as determined using the Maturity Method in accordance with Subsection 804.03.15, and 2) the temperature differential between the ambient temperature and the internal concrete temperature determined by the maturity meter does not exceed 20°F.

In the event the Engineer does not approve of using the Insulating Blanketing Method, the Contractor shall use the Enclosure Method per Subsection 907-804.03.16.1.2.1.

907-804.03.16.1.2.3--Batching Considerations. One or more of the aggregates and/or mixing water may be heated. The aggregates may be heated by steam, dry heat, or by placing in the mixing water that has been heated. Frozen aggregates shall not be used. When either aggregates or water are heated above 100°F, the aggregates and water shall be combined first in the mixer before the cement is added to avoid flash set. Cement shall not be mixed with water or with a mixture of water and aggregate having a temperature greater than 100°F.

The use of salt or other chemical admixtures in lieu of heating will not be permitted.

907-804.03.17--Curing Concrete.

907-804.03.17.1--Water with Waterproof Cover. In the second sentence of the fourth paragraph of Subsection 804.03.17.1 on page 973, delete the word “due”.

Delete the first sentence of the fifth paragraph of Subsection 804.03.17.1 on page 973, and substitute the following.

The Contractor shall maintain the burlap in a fully wet condition using powered fogging equipment, such as a commercially available pressure washer, which is capable of producing a fog spray of atomized droplets of water (i.e., producing a very fine and gentle mist that looks like a foggy morning) until the concrete has gained sufficient strength to allow foot traffic without the foot traffic marring the surface of the concrete.

Delete the seventh paragraph of Subsection 804.03.17.1 on page 973, and substitute the following.

If there is an unanticipated delay in the placement of the first layer of saturated burlap outside the time limit which is due to unforeseen events which are not a part of the Contractor's curing operations for meeting the requirements of this Subsection and which are outside the direct control

of the Contractor, the struck-off and finished concrete shall be kept wet by use of the powered fogging equipment used to keep the burlap wet as described previously in the Subsection.

In the second sentence of the eighth paragraph of Subsection 804.03.17.1 on page 973, replace the word “like” with “such as”.

907-804.03.17.1.2--Liquid Membrane. In the first sentence of the first paragraph of Subsection 804.03.17.1 on page 973, replace “polyethylene sheets” with “white polyethylene sheets.”

907-804.03.19.7--Finishing Bridge Decks.

907-804.03.19.7.1--General. Delete the second paragraph of Subsection 804.03.19.7.1 on page 985, and substitute the following.

In the event a method is not designated on the plans, the Contractor may use either the Longitudinal Method in accordance with Subsection 907-804.03.19.7.2 or the Transverse Method in accordance with Subsection 907-804.03.19.7.3.

907-804.03.19.7.2--Longitudinal Method. Delete the first sentence of the first paragraph of Subsection 804.03.19.7.2 on page 985, and substitute the following.

The longitudinal method may only be used for repairs to bridge decks or bridge widening projects.

907-804.03.19.7.3--Transverse Method. Before the first sentence of the first paragraph of Subsection 804.03.19.7.3 on page 986, add the following.

The transverse method shall be used for construction of new bridge decks and may be used for bridge deck repair or bridge widening.

907-804.05--Basis of Payment. Delete the first and second pay items listed on page 999, and substitute the following.

907-804-A: Bridge Concrete, Class _____ - per cubic yard

907-804-B: Box Bridge Concrete, Class _____ - per cubic yard

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-809-10

CODE: (SP)

DATE: 11/7/2022

SUBJECT: Retaining Wall Systems

Section 809, Retaining Wall Systems, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-809—Retaining Wall Systems. Delete the entire sections on pages 1009 thru 1021 and substitute the following.

PRECAST MODULAR BLOCK RETAINING WALL

PART 1 – GENERAL

1.01 SUMMARY

- A. This Section includes furnishing all materials and labor required for the construction of a precast concrete modular block (PMB) retaining wall with geosynthetic reinforcement. Precast modular block retaining wall blocks under this section shall be cast utilizing a wet-cast concrete mix and exhibit a final handling weight in excess of 1,000 pounds (450 kg) per unit.
- B. Scope of Work: The work shall consist of furnishing shop drawings, materials, labor, equipment and supervision for the construction of a precast modular block (PMB) retaining wall structure in accordance with the requirements of this section and in acceptable conformity with the lines, grades, design and dimensions shown in the project site plans.
- C. Drawings and General Provisions of the Contract apply to this Section.

1.02 PRICE AND PAYMENT PROCEDURES

- A. Allowances. No allowance shall be made in the price of the retaining wall for excavation beyond the limits required for retaining wall construction and foundation preparation as shown on the project plans. The cost of excavation for the purposes of site access shall be the responsibility of the General Contractor. Removal of unsuitable foundation soils and replacement with compacted granular backfill shall be as directed on the construction drawings and these specifications. Any additional excavation of foundation soils shall be as directed by the Owner's Representative and shall be paid under a separate pay item.
- B. Unit Prices. In addition to the scope of work described in Part 1.01 of this Section, the General Contractor shall provide a unit price per square foot of vertical wall face that shall be the basis of compensation for the overall scope of the retaining wall work.

C. Measurement and Payment.

1. The unit of measurement for furnishing the PMB retaining wall system shall be the vertical area of the wall face surface as measured from the top of the leveling pad to the top of the PMB but excluding coping. The final measured quantity shall include the materials and construction of the geogrid reinforced PMB retaining wall system, all excavation, reinforced fill, retained fill, leveling pad, all materials for the wall drainage system, facing material, soil reinforcement, equipment, labor, and incidentals necessary to complete the work. Any required undercut and backfill will be paid for separately as Excess Excavation and Borrow Material.
2. The final accepted quantities of the PMB retaining wall system will be compensated per the vertical face area as described above. The quantities of the PMB retaining wall as shown on the plans and as approved by the Owner shall be the basis for determination of the final payment quantity. Payment shall be made per square foot of vertical wall face.

Payment will be made under:

907-809-A001: Geogrid Reinforced PMB Retaining Wall System - per square foot

1.03 REFERENCES

A. Where the specification and reference documents conflict, the Owner's designated representative will make the final determination of the applicable document.

B. Definitions:

1. Precast Modular Block (PMB) Unit – machine-placed, “wet cast” concrete modular block retaining wall facing unit.
2. Geotextile – a geosynthetic fabric manufactured for use as a separation and filtration medium between dissimilar soil materials.
3. Geogrid – a geosynthetic material comprised of a regular network of tensile elements manufactured in a mesh-like configuration of consistent aperture openings. When connected to the PMB facing units and placed in horizontal layers in compacted fill, the geogrid prevents lateral deformation of the retaining wall face and provides effective tensile reinforcement to the contiguous reinforced fill material.
4. Drainage Aggregate – clean, crushed stone placed within and immediately behind the precast modular block units to facilitate drainage and reduce compaction requirements immediately adjacent to and behind the precast modular block units.
5. Unit Core Fill – clean, crushed stone placed within the hollow vertical core of a precast modular block unit. This shall be the same material used for drainage aggregate as defined above.
6. Foundation Zone – soil zone immediately beneath the leveling pad and the reinforced zone.
7. Retained Zone – the soil zone immediately behind the reinforced zone.
8. Reinforced Zone – structural fill zone within which successive horizontal layers of geogrid soil reinforcement have been placed to provide stability for the retaining wall face.
9. Reinforced Fill – structural fill placed within the reinforced zone.
10. Leveling Pad – cast-in-place concrete upon which the bottom course of PMB units are placed.
11. Undercut Zone – Zone below reinforced zone where unsuitable foundation soils are to be removed and replaced with compacted granular backfill.

C. Reference Standards

1. Design

- a. AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017.
 - b. Minimum Design Loads for Buildings and Other Structures – ASCE/SEI 7-10.
 - c. International Building Code, 2012 Edition.
 - d. FHWA-NHI-10-024 Volume I and GEC 11 Design of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes.
 - e. FHWA-NHI-10-025 Volume II and GEC 11 Design of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes.
2. Precast Modular Block Units
- a. ACI 201 – Guide to Durable Concrete
 - b. ACI 318 – Building Code Requirements for Structural Concrete
 - c. ASTM C33 – Standard Specification for Concrete Aggregates
 - d. ASTM C39 – Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
 - e. ASTM C94 – Standard Specification for Ready-Mixed Concrete.
 - f. ASTM C136 – Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - g. ASTM C143 – Standard Test Method for Slump of Hydraulic-Cement Concrete.
 - h. ASTM C150 – Standard Specification for Portland Cement
 - i. ASTM C231 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
 - j. ASTM C260 – Standard Specification for Air-Entraining Admixtures for Concrete.
 - k. ASTM C494 – Standard Specification for Chemical Admixtures for Concrete.
 - l. ASTM C595 - Standard Specification for Blended Hydraulic Cements.
 - m. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
 - n. ASTM C666 – Standard Test Method for Concrete Resistance to Rapid Freezing and Thawing.
 - o. ASTM C845 - Standard Specification for Expansive Hydraulic Cement.
 - p. ASTM C920 – Standard Specification for Elastomeric Joint Sealants.
 - q. ASTM C989 - Standard Specification for Slag Cement for Use in Concrete and Mortars.
 - r. ASTM C1116 – Standard Specification for Fiber-Reinforced Concrete.
 - s. ASTM C1157 - Standard Performance Specification for Hydraulic Cement.
 - t. ASTM C1218 - Standard Test Method for Water-Soluble Chloride in Mortar and Concrete.
 - u. ASTM C1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures.
 - v. ASTM C1611 – Standard Test Method for Slump Flow of Self-Consolidating Concrete.
 - w. ASTM C1776 – Standard Specification for Wet-Cast Precast Modular Retaining Wall Units.
 - x. ASTM D6638 – Standard Test Method for Determining Connection Strength Between Geosynthetic Reinforcement and Segmental Concrete Units (Modular Concrete Blocks).
 - y. ASTM D6916 – Standard Test Method for Determining Shear Strength Between Segmental Concrete Units (Modular Concrete Blocks).
3. Geosynthetics
- a. AASHTO M 288 – Geotextile Specification for Highway Applications.
 - b. ASTM D3786 – Standard Test Method for Bursting Strength of Textile Fabrics Diaphragm Bursting Strength Tester Method.
 - c. ASTM D4354 – Standard Practice for Sampling of Geosynthetics for Testing.
 - d. ASTM D4355 – Standard Test Method for Deterioration of Geotextiles
 - e. ASTM D4491 – Standard Test Methods for Water Permeability of Geotextiles by Permittivity.
 - f. ASTM D4533 – Standard Test Method for Trapezoid Tearing Strength of Geotextiles.

- g. ASTM D4595 – Standard Test Method for Tensile Properties of Geotextiles by the Wide-Width Strip Method.
 - h. ASTM D4632 – Standard Test Method for Grab Breaking Load and Elongation of Geotextiles.
 - i. ASTM D4751 – Standard Test Method for Determining Apparent Opening Size of a Geotextile.
 - j. ASTM D4759 – Standard Practice for Determining Specification Conformance of Geosynthetics.
 - k. ASTM D4833 – Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products.
 - l. ASTM D4873 – Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples.
 - m. ASTM D5262 – Standard Test Method for Evaluating the Unconfined Tension Creep and Creep Rupture Behavior of Geosynthetics.
 - n. ASTM D5321 – Standard Test Method for Determining the Coefficient of Soil and Geosynthetic or Geosynthetic and Geosynthetic Friction by the Direct Shear Method.
 - o. ASTM D5818 – Standard Practice for Exposure and Retrieval of Samples to Evaluate Installation Damage of Geosynthetics.
 - p. ASTM D6241 – Standard Test Method for the Static Puncture Strength of Geotextiles and Geotextile-Related Products Using a 50-mm Probe.
 - q. ASTM D6637 – Standard Test Method for Determining Tensile Properties of Geogrids by the Single or Multi-Rib Tensile Method.
 - r. ASTM D6706 – Standard Test Method for Measuring Geosynthetic Pullout Resistance in Soil.
 - s. ASTM D6992 – Standard Test Method for Accelerated Tensile Creep and Creep-Rupture of Geosynthetic Materials Based on Time-Temperature Superposition Using the Stepped Isothermal Method.
4. Soils
- a. AASHTO M 145 – AASHTO Soil Classification System.
 - b. AASHTO T 104 – Standard Method of Test for Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate.
 - c. AASHTO T 267 – Standard Method of Test for Determination of Organic Content in Soils by Loss of Ignition.
 - d. ASTM C33 – Standard Specification for Concrete Aggregates.
 - e. ASTM D422 – Standard Test Method for Particle-Size Analysis of Soils.
 - f. ASTM D448 – Standard Classification for Sizes of Aggregates for Road and Bridge Construction.
 - g. ASTM D698 – Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort. (12,400 ft-lbf/ft (2,700 kN-m/m)).
 - h. ASTM D1241 – Standard Specification for Materials for Soil-Aggregate Subbase, Base and Surface Courses.
 - i. ASTM D1556 – Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method.
 - j. ASTM D1557 – Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort. (56,000 ft-lbf/ft (2,700 kN-m/m)).
 - k. ASTM D2487 – Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).
 - l. ASTM D2488 – Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

- m. ASTM D3080 – Standard Test Method for Direct Shear Test of Soils Under Consolidated Drained Conditions.
 - n. ASTM D4254 – Standard Test Method for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density.
 - o. ASTM D4318 – Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
 - p. ASTM D4767- Test Method for Consolidated-Undrained Triaxial Compression Test for Cohesive Soils.
 - q. ASTM D4972 – Standard Test Method for pH of Soils.
 - r. ASTM D6938 – Standard Test Method for In-Place Density and Water Content of Soil and Aggregate by Nuclear Methods (Shallow Depth).
 - s. ASTM G51 – Standard Test Method for Measuring pH of Soil for Use in Corrosion Testing.
 - t. ASTM G57 – Standard Test Method for Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method.
5. Drainage Pipe
- a. ASTM D3034 – Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
 - b. ASTM F2648 – Standard Specification for 2 to 60 inch [50 to 1500 mm] Annular Corrugated Profile Wall Polyethylene (PE) Pipe and Fittings for Land Drainage Applications.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Preconstruction Meeting. As directed by the Owner, the General Contractor shall schedule a preconstruction meeting at the project site prior to commencement of retaining wall construction and subsequent to review and approval of the Retaining Wall Installation Contractor's submittals by the Owner's Representative as specified in Section 1.05. Participation in the preconstruction meeting shall be required of the General Contractor, Owner's Representative, Retaining Wall Design Engineer, Retaining Wall Installation Contractor, Geotechnical Engineer and the Owner's Inspection Engineer. The General Contractor shall provide notification to all parties at least 10 calendar days prior to the meeting.
1. Preconstruction Meeting Agenda:
- a. The Retaining Wall Installation Contractor shall explain all sequencing, staging, and construction procedures/operations for the geogrid reinforced PMB retaining wall.
 - b. The Retaining Wall Installation Contractor shall explain all excavation needs, site access and material staging area requirements to the General Contractor .
 - c. The Retaining Wall Installation Contractor shall explain any measures required for coordination of the installation of utilities or other obstructions in the reinforced or retained fill zones of the retaining wall.

1.05 SUBMITTALS

- A. Product Data. At least 14 days prior to construction, the General Contractor shall provide an electronic portable document file of the retaining wall product submittal package to the Owner's Representative for review and approval. The submittal package shall include technical specifications and product data from the manufacturer for the following:

1. Precast Modular Block System brochure. The Highway Innovative Technology Evaluation Center (HITEC) evaluation shall be provided, if available.
 2. Precast Modular Block concrete test results specified in paragraph 2.01, subparagraph B of this section as follows:
 - a. 28-day compressive strength
 - b. Air content
 - c. Slump or Slump Flow (as applicable)
 3. Drainage Pipe
 4. Geotextile
 5. Geogrid. The contractor shall provide certified manufacturer test reports for the geogrid material(s) in the manufactured roll width specified. The test report shall list the individual roll numbers for which the certified material properties are valid.
 6. Reinforced Fill. The Contractor shall provide the reinforced fill borrow source and geotechnical laboratory test results including, but not limited to, sieve analyses (ASTM D 422), AASHTO T88, standard Proctor (ASTM D 698) and sand triaxial (USACE).
- B. Retaining Wall Installation Contractor Qualification Data. At least 14 days prior to construction, the General Contractor shall submit the qualifications of the business entity responsible for construction of the PMB units, and the Retaining Wall Installation Contractor, per paragraph 1.07, subparagraph A of this section.
- C. Retaining Wall Construction Shop Drawings. At least 14 days prior to construction, the General Contractor shall furnish an electronic portable document file of construction shop drawings to the Owner's Representative for review and approval. This submittal shall include the following:
1. Dated drawings prepared in accordance with these construction plans and specifications to include all plans, profiles, sections and details for construction.
 2. Qualifications Statement of Experience of the Retaining Wall Installation Contractor as specified in paragraph 1.07, subparagraph B of this section.
 3. Certificate of Insurance of the Retaining Wall Installation Contractor as specified in paragraph 1.06, subparagraph B of this section.

1.06 CONSTRUCTION SHOP DRAWING PREPARATION

- A. The Retaining Wall Installation Contractor shall coordinate the retaining wall construction shop drawing preparation with the Owner's Representative and the Retaining Wall Inspector.

1.07 QUALITY ASSURANCE

- A. Retaining Wall Installation Contractor Qualifications. In order to demonstrate basic competence in the construction of precast modular block walls, the Retaining Wall Installation Contractor shall document compliance with the following:
1. Experience.
 - a. Construction experience with a minimum of 15,000 square feet (1,400 square meters) of the proposed precast modular block retaining wall system.
 - b. Construction of at least five (5) precast modular block retaining wall structures within the past three (3) years.

- c. Construction of at least 25,000 square feet (2,330 square meters) of precast modular block retaining walls within the past three (3) years.
- 2. Retaining Wall Installation Contractor experience documentation for each qualifying project shall include:
 - a. Project name and location
 - b. Date (month and year) of construction completion
 - c. Contact information of Owner or General Contractor
 - d. Type (trade name) of precast modular block system built
 - e. Maximum height of the wall constructed
 - f. Face area of the wall constructed

1.08 QUALITY CONTROL

- A. The Owner's Representative shall review all submittals for materials, the Retaining Wall Installation Contractor qualifications, and the Retaining Wall Construction Shop Drawings.
- B. The Owner shall retain the services of an Inspection Engineer who is experienced with the construction of precast modular block retaining wall structures to perform Quality Control inspection and testing. The cost of inspection shall be the responsibility of the Owner. Inspection shall be continuous throughout the construction of the retaining walls.
- C. The Inspection Engineer shall perform the following duties:
 - 1. Inspect the construction of the precast modular block structure for conformance with construction shop drawings and the requirements of this specification.
 - 2. Verify that soil or aggregate fill placed and compacted in the reinforced, retained and foundation zones of the retaining wall conforms with paragraphs 2.04 and 2.05 of this section .
 - 3. Verify that the shear strength of the in-situ foundation soils and notify Retaining Wall Design Engineer and Geotechnical Engineer of any suspected deficiencies.
 - 4. Inspect and document soil compaction in accordance with these specifications:
 - 5. Notify the General Contractor, the Owner's Representative and the Retaining Wall Installation Contractor of any deficiencies in the retaining wall construction and provide the Retaining Wall Installation Contractor a reasonable opportunity to correct the deficiency.
 - 6. Notify the General Contractor, Owner and Retaining Wall Design Engineer of any construction deficiencies that have not been corrected timely.
 - 7. Document all inspection results.
 - 8. Test compacted density and moisture content of the retained backfill with the following frequency:
 - a. At least once every 1,000 square feet (90 square meters) (in plan) per 9-inch (230 mm) vertical lift, and
 - b. At least once per every 9 inches (460 mm) of vertical wall construction per day.
- D. The Owner's engagement of the Inspection Engineer does not relieve the Retaining Wall Installation Contractor of responsibility to construct the proposed retaining wall in accordance with the approved construction shop drawings, these specifications and construction plans.
- E. The Owner's Representative, the General Contractor, the Inspection Engineer and the Retaining Wall Installation Contractor shall inspect the on-site grades and excavations prior to construction for conformance with the retaining wall construction shop drawings.

1.09 DELIVERY, STORAGE AND HANDLING

- A. The Retaining Wall Installation Contractor shall inspect the materials upon delivery to ensure that the proper type, grade, and color of materials have been delivered.
- B. The Retaining Wall Installation Contractor shall store and handle all materials in accordance with the manufacturer's recommendations as specified herein and in a manner that prevents deterioration or damage due to moisture, temperature changes, contaminants, corrosion, breaking, chipping, UV exposure or other causes. Damaged materials shall not be incorporated into the work.
- C. Geosynthetics
 - 1. All geosynthetic materials shall be handled in accordance with ASTM D4873. The materials should be stored off the ground and protected from precipitation, sunlight, dirt and physical damage.
- D. Precast Modular Blocks
 - 1. Precast modular blocks shall be stored in an area with positive drainage away from the blocks. The blocks shall be protected from mud and excessive chipping and breakage. Precast modular blocks shall not be stacked more than three (3) units high in the storage area.
- E. Drainage Aggregate and Backfill Stockpiles
 - 1. Drainage aggregate or backfill material shall not be piled over unstable slopes or areas of the project site with buried utilities, unless specifically identified for burial on the shop drawings.
 - 2. Drainage aggregate and/or reinforced fill material shall not be staged where it may become mixed with or contaminated by poor draining fine-grained soils such as clay or silt.

PART 2 – MATERIALS

2.01 PRECAST MODULAR BLOCK RETAINING WALL UNITS

- A. All units shall be wet-cast precast modular retaining wall units conforming to ASTM C1776. The wall shall be fabricated from Redi-Rock block units 28" (710 mm) PC Middle (R-218 PCM) and 28" (710 mm) PC Top (R-28 PCT).
- B. All units for the project shall be obtained from the same manufacturer. The manufacturer shall be licensed and authorized to produce the retaining wall units by the precast modular block system patent holder/licensor and shall document compliance with the published quality control standards of the proprietary precast modular block system licensor for the previous three (3) years or the total time the manufacturer has been licensed, whichever is less.
- C. Concrete used in the production of the precast modular block units shall be first-purpose, fresh concrete. It shall not consist of returned, reconstituted, surplus or waste concrete. It shall be an original production mix meeting the requirements of ASTM C94 and exhibit the properties as shown in the following table:

Concrete Mix Properties

Freeze Thaw Exposure Class ⁽¹⁾	Minimum 28-Day Compressive Strength ⁽²⁾	Maximum Water Cement Ratio	Nominal Maximum Aggregate Size	Aggregate Class Designation ⁽³⁾	Air Content ⁽⁴⁾
Moderate	4,000 psi (27.6 MPa)	0.45	1 inch (25 mm)	3M	4.5% +/- 1.5%
Severe	4,000 psi (27.6 MPa)	0.45	1 inch (25 mm)	3S	6.0% +/- 1.5%
Very Severe	4,500 psi (30.0 MPa)	0.40	1 inch (25 mm)	4S	6.0% +/- 1.5%
Maximum Water-Soluble Chloride Ion (Cl⁻) Content in Concrete, Percent by Weight of Cement^(5,6)					0.15
Maximum Chloride as Cl⁻ Concentration in Mixing Water, Parts Per Million					1000
Maximum Percentage of Total Cementitious Materials By Weight ^(7,9) (Very Severe Exposure Class Only):					
Fly Ash or Other Pozzolans Conforming to ASTM C618					25
Slag Conforming to ASTM C989					50
Silica Fume Conforming to ASTM C1240					10
Total of Fly Ash or Other Pozzolans, Slag, and Silica Fume ⁽⁸⁾					50
Total of Fly Ash or Other Pozzolans and Silica Fume ⁽⁸⁾					35
Alkali-Aggregate Reactivity Mitigation per ACI 201					
Slump (Conventional Concrete) per ASTM C143⁽¹⁰⁾			5 inches +/- 1½ inches (125 mm +/- 40 mm)		
Slump Flow (Self-Consolidating Concrete) per ASTM C1611			18 inches – 32 inches (450 mm – 800 mm)		

⁽¹⁾Exposure class is as described in ACI 318. "Moderate" describes concrete that is exposed to freezing and thawing cycles and occasional exposure to moisture. "Severe" describes concrete that is exposed to freezing and thawing cycles and in continuous contact with moisture. "Very Severe" describes concrete that is exposed to freezing and thawing cycles and in continuous contact with moisture and exposed to deicing chemicals. Exposure class should be specified by owner/purchaser prior to order placement.

⁽²⁾Test method ASTM C39.

⁽³⁾Defined in ASTM C33 Table 3 *Limits for Deleterious Substances and Physical Property Requirements of Coarse Aggregates for Concrete*.

⁽⁴⁾Test method ASTM C231.

⁽⁵⁾Test method ASTM C1218 at age between 28 and 42 days.

⁽⁶⁾Where used in high sulfate environments or where alkali-silica reactivity is an issue, water soluble chloride shall be limited to no more than trace amounts (from impurities in concrete-making components, not intended constituents.)

⁽⁷⁾The total cementitious material also includes ASTM C150, C595, C845, C1157 cement. The maximum percentages shall include:

(a) Fly ash or other pozzolans in type IP, blended cement, ASTM C595, or ASTM C1157.

(b) Slag used in the manufacture of an IS blended cement, ASTM C595, or ASTM C1157.

(c) Silica fume, ASTM C1240, present in a blended cement.

⁽⁸⁾Fly ash or other pozzolans and silica fume shall constitute no more than 25 and 10 percent, respectively, of the total weight of the cementitious materials.

⁽⁹⁾Prescriptive limits shown may be waived for concrete mixes that demonstrate excellent freeze/thaw durability in a detailed and current testing program.

⁽¹⁰⁾Slump may be increased by a high-range water-reducing admixture.

D. Each concrete block shall be cast in a single continuous pour without cold joints. With the exception of half-block units, corner units and other special application units, the precast modular block units shall conform to the nominal dimensions listed in the table below and be produced to the dimensional tolerances shown.

Block Type	Dimension	Nominal Value	Tolerance
28" (710 mm) Block	Height	18" (457 mm)	+/- 3/16" (5 mm)
	Length	46-1/8" (1172 mm)	+/- 1/2" (13 mm)
	Width*	28" (710 mm)	+/- 1/2" (13 mm)

* Block tolerance measurements shall exclude variable face texture

- E. Individual block units shall have a nominal height of 18 inches (457 mm).
- F. With the exception of half-block units, corner units and other special application units, the precast modular block units shall have two (2), circular dome shear knobs that are 10 inches (254 mm), in diameter and 4 inches (102 mm) . The shear knobs shall fully index into a continuous semi-cylindrical shear channel in the bottom of the block course above. The Peak interlock shear between any two (2) vertically stacked precast modular block units, with 10-inch (254 mm) diameter shear knobs, measured in accordance with ASTM D6916 shall exceed 6,500 lb/ft (95 kN/m) at a minimum normal load of 500 lb/ft (7kN/m). as well as an ultimate peak interface shear capacity in excess of 11,000 lb/ft (160 kN/m). Test specimen blocks tested under ASTM D6916 shall be actual, full-scale production blocks of known compressive strength. The interface shear capacity reported shall be corrected for a 4,000 psi (27.6 MPa) concrete compressive strength. Regardless of precast modular block configuration, interface shear testing shall be completed without the inclusion of unit core infill aggregate.
- G. The 28" (710 mm) precast modular block units shall be cast with a 13" (330 mm) wide, continuous vertical core slot that will permit the insertion of a 12" (305 mm) inch wide strip of geogrid reinforcement to pass completely through the block. When installed in this manner, the geogrid reinforcement shall form a non-normal load dependent, positive connection between the block unit and the reinforcement strip. The use of steel for the purposes of creating the geogrid to block connection is not acceptable.
- H. Without field cutting or special modification, the precast modular block units shall be capable of achieving a minimum radius of 14 ft 6 in (4.42 m).
- I. The precast modular block units shall be manufactured with an integrally cast shear knobs that establishes a standard horizontal set-back for subsequent block courses. The precast modular block system shall be available in the horizontal set-back facing batter listed below:

Horizontal <u>Set-Back/Blk. Course</u> 0.01"	Max. <u>Facing Batter</u> Vertical
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The precast modular block units shall be furnished with the required shear knobs that provide the facing batter required in the construction shop drawings.

- J. The precast modular block unit face texture shall be Ledge stone. Each textured block facing unit shall be a minimum of 5.76 square feet (0.54 square meters) with a unique texture pattern that repeats with a maximum frequency of once in any 15 square feet (1.4 square meters) of wall face.
- K. The block color shall be "natural concrete gray" in color.
- L. All precast modular block units shall be sound and free of cracks or other defects that would interfere with the proper installation of the unit, impair the strength or performance of the constructed wall. PMB units to be used in exposed wall construction shall not exhibit chips or cracks in the exposed face or faces of the unit that are not otherwise permitted. Chips smaller than 1.5" (38 mm) in its largest dimension and cracks not wider than 0.012" (0.3 mm) and not longer than 25% of the nominal height of the PMB unit shall be permitted. PMB units with bug holes in the exposed architectural face smaller than 0.75" (19 mm) in its largest dimension shall be permitted. Bug holes, water marks, and color variation on non-architectural faces are acceptable. PMB units that exhibit cracks that are continuous through any solid element of the PMB unit shall not be incorporated in the work regardless of the width or length of the crack.

2.02 GEOGRID REINFORCEMENT

- A. Geogrid reinforcement shall be a geosynthetic formed by a regular network of integrally connected elements with apertures greater than 0.25 inch to allow interlocking with surrounding soil, rock, earth, and other surrounding materials to function primarily as reinforcement. The geogrid shall be mildew resistant and inert to biological degradation and naturally encountered chemicals, alkalis and acids. The geogrid shall contain stabilizers and/or inhibitors, or a resistance finish or covering to make it resistant to deterioration from direct sunlight, ultraviolet rays, and heat. The geogrid shall be furnished in prefabricated roll widths of certified tensile strength by the manufacturer.
- B. The ultimate tensile strength (T_{ult}) of the geogrid reinforcement shall be measured in accordance with ASTM D6637.
- C. Connection between the PMB retaining wall unit and the geogrid reinforcement shall be determined from short-term testing per the requirements of FHWA NHI-10-025, Appendix B.4 for a minimum 75-year design life.
- D. The geogrid used for construction of the reinforced precast modular block retaining wall shall be Miragrid 8XT, 20XT and 24XT geogrid reinforcement manufactured by Tencate Mirafi Geosynthetics, Pendergrass, GA. The geogrid reinforcement strip shall be furnished in nominal prefabricated roll widths of 12 ". No field modification of the geogrid roll width shall be permitted. The Miragrid 8XT, 20XT and 24XT shall be installed at the schedule indicated on the approved construction shop drawings.

- E. The minimum length of geogrid reinforcement shall be lengths shown on the shop drawings. The minimum cut length (Lc) shall be in accordance with Section 3.04.D.2. The geogrid strip length (Lc) shall be continuous for its entire length. No spliced lengths are permitted.
- F. Constructability Requirements. Geogrid design embedment length shall be measured from the back of the precast modular block facing unit and shall be consistent for the entire height of a given retaining wall section.
- G. Geogrid shall be positively connected to every precast modular block unit, unless specifically designated on the construction and approved shop drawings.

2.03 GEOTEXTILE

- A. Woven geotextile fabric shall be placed as indicated on the retaining wall construction shop drawings and on foundation materials in undercut zones. Additionally, the woven geotextile fabric shall be placed in the V-shaped joint between adjacent block units on the same course. The woven geotextile fabric shall be an approved MDOT Type V Woven Geotextile in accordance with MDOT Specifications Section 714. Overlaps for geotextiles on foundation soils in undercut zones shall be 2 ft (min.)

2.04 DRAINAGE AGGREGATE

- A. Crushed aggregate shall be a durable crushed limestone conforming to AASHTO No. 57 size per ASTM C33 with the following particle-size distribution requirements per ASTM D422:

U.S. Standard Sieve Size	% Passing
1-½" (38 mm)	100
1" (25 mm)	95-100
½" (13 mm)	25-60
No. 4 (4.76 mm)	0-10
No. 8 (2.38 mm)	0-5

2.05 REINFORCED FILL

- A. Select off-site borrow material used as reinforced backfill material in the reinforced zone shall be a fine aggregate concrete sand of the gradation meeting the MDOT Standard Specifications Section 703.02. The backfill shall exhibit a minimum effective internal angle of friction (ϕ) of 33 degrees at a maximum 2% shear strain and meet the following particle-size distribution.

U.S. Standard Sieve Size	% Passing by Weight
1/2 inch	100
3/8 inch	97 – 100
No. 4	92 – 100
No. 8	75 – 100
No. 16	45 – 90
No. 30	25 – 70
No. 50	3 – 35
No. 100	0 – 10
No. 200	0 - 5

Where indicated on the plans, reinforced fill shall be a durable crushed aggregate conforming to AASHTO No. 57 size per ASTM C33 with the particle-size distribution requirements meeting Section 2.04 of these specifications.

- B. The reinforced fill material shall be free of sod, peat, roots or other organic or deleterious matter including, but not limited to, ice, snow or frozen soils. Materials passing the No. 40 (0.42 mm) sieve shall have a plasticity index less than 6 per ASTM D4318. Organic content in the backfill material shall be less than 1% per AASHTO T-267, and the pH of the backfill material shall be between 5 and 8.
- C. Soundness. The reinforced fill material coarser than No. 4 sieve shall exhibit a magnesium sulfate soundness loss of less than 30% after four (4) cycles, or sodium sulfate soundness loss of less than 15% after five (5) cycles as measured in accordance with AASHTO T-104.
- D. Reinforced fill shall not be comprised of crushed or recycled concrete, recycled asphalt, bottom ash, shale or any other material that may degrade, creep or experience a loss in shear strength or a change in pH over time.
- E. Prior to placement, test reinforced fill as follows:
 - 1. Soil gradation, Atterberg limits and standard Proctor (ASTM D698): minimum sampling and testing frequency of once every 10,000 cubic yards with at least one of each test type completed prior to beginning wall construction. Additional testing frequency shall be directed by the Inspection Engineer due to changes in material consistency or field compaction test testing results.
 - 2. Stockpiled onsite soil shall be evaluated by at least one determination of percent passing No. 200 sieve for every 1,000 cubic yards placed.
 - 3. Friction angle: Minimum sampling and testing frequency of once every 50,000 cubic yards with at least one test completed prior to beginning wall construction.
 - 4. At the discretion of Inspection Engineer or Owner's Representative, variation in testing frequency may be required if a variance in material gradation or composition is suspected.
 - 5. Contractor shall ensure that stockpile contamination does not occur after verification testing has been performed.

2.06 RETAINED FILL AND UNDERCUT BACKFILL

- A. Retained fill placed as backfill behind the reinforced fill zones and undercut backfill, if required, shall be the same as the reinforced fill. The retained fill shall be tested, placed, compacted and meet the compaction requirements of the reinforced fill and undercut fill, if required. The height of the first lift of undercut backfill shall be 18 in. or thinner.

2.07 LEVELING PAD

- A. The precast modular block units shall be placed on a leveling pad constructed from concrete. The leveling pad shall be constructed to the dimensions and limits shown on the retaining wall design drawings prepared by the Retaining Wall Design Engineer.
- B. Concrete used for construction of concrete leveling pad shall satisfy the criteria for MDOT Class B concrete (MDOT Standard Specifications, Section 804). The concrete should be cured a minimum of 12 hours prior to placement of the precast modular block wall retaining units and exhibit a

minimum compressive strength of 2,000 psi. A minimum 28-day concrete compressive strength of 3,500 psi is required

2.08 DRAINAGE

A. Drainage Pipe

1. Drainage collection pipe shall be a 6-in. (100 mm) diameter, perforated sewer pipe for underdrains, SDR 23.5 meeting MDOT Specifications Sections 605 and 708.18. 6-in. diameter nonperforated pipe for underdrains, SDR 23.5 shall be used to extend the pipe to the nearest roadway curb inlet.
2. All fittings (external joints, end caps, and appurtenances) shall be compatible.

PART 3 – EXECUTION

3.01 GENERAL

- A. All work shall be performed in accordance with OSHA safety standards, state and local building codes and manufacturer's requirements.
- B. The General Contractor is responsible for the geogrid reinforced PMB retaining wall alignment. The Retaining Wall Installation Contractor is responsible for the retaining wall layout in conformance with the shop drawings.
- C. The General Contractor is responsible for the location and protection of all existing underground utilities. Any new utilities proposed for installation in the vicinity of the retaining wall, shall be installed concurrent with retaining wall construction. The General Contractor shall coordinate the work of subcontractors affected by this requirement.
- D. New utilities installed below the retaining wall shall be backfilled and compacted to a minimum of 95% maximum dry density per ASTM D698 standard proctor.
- E. The General Contractor is responsible to ensure that safe excavations and embankments are maintained throughout the course of the project.
- F. All work shall be inspected by the Inspection Engineer as directed by the Owner.

3.02 EXAMINATION

- A. Prior to construction, the General Contractor, Owner's Representative, Retaining Wall Installation Contractor, and Inspection Engineer shall examine the areas in which the retaining wall will be constructed to evaluate compliance with the requirements for installation tolerances, worker safety and any site conditions affecting performance of the completed structure. Installation shall proceed only after unsatisfactory conditions have been corrected.

3.03 PREPARATION

A. Fill Soil.

1. The Inspection Engineer shall verify that reinforced backfill placed in the reinforced soil zone satisfies the criteria of this section.
2. The Inspection Engineer shall verify that any fill soil installed in the foundation, reinforced zones, and retained soil zones of the retaining wall satisfies the specifications as shown on the shop drawings and these specifications.

B. Excavation.

1. The Grading Contractor shall excavate to the lines and grades required for construction of the PMB retaining wall as shown on the construction shop drawings. Excavation support, if required, shall be the responsibility of the Grading Contractor.
2. Over-excavated soil shall be replaced with reinforced fill in conformance with these specifications and the construction shop drawings.
3. Embankment excavations shall be bench cut as directed by the project Geotechnical Engineer and inspected by the Inspection Engineer for compliance.

C. Foundation Preparation.

1. Prior to construction of the precast modular block retaining wall, the leveling pad area and undercut zone (if required) shall be cleared and grubbed. However, final excavation to wall bearing elevation shall be performed no more than three (3) days prior to construction of the concrete level pad and is confirmed as satisfactory to Inspection Engineer and Owner's Representative. All topsoil, brush, frozen soil and organic material shall be removed. Additional foundation soils found to be unsatisfactory shall be undercut and replaced with reinforced fill as directed by the Owner's Representative. The Inspection Engineer shall ensure that the undercut limits are consistent with the requirements of the Owner's Representative and that all soil fill material is properly compacted according to project specifications. The Inspection Engineer shall document the volume of undercut and replacement.
2. Following excavation for the leveling pad and undercut zone (if required), the Owner's Representative and the Inspection Engineer shall evaluate the in-situ soil in the foundation, reinforced fill and retained soil zones to verify that the soils exhibit sufficient ultimate bearing capacity to satisfy the requirements indicated on the retaining wall construction shop drawings per paragraph 1.06 of this section.
3. Undercut zones shall be limited to areas that can be backfilled within 24 hours of the undercut excavation.
4. An MDOT Type V woven geotextile shall be placed on the surface of undercut areas and before the first lift of undercut backfill.

D. Leveling Pad.

1. The concrete leveling pad shall be constructed to provide a level, hard surface on which to place the first course of precast modular block units. The concrete leveling pad shall be placed in the dimensions shown on the retaining wall construction drawings and extend to the limits indicated.
2. Concrete Leveling Pad. The concrete shall be placed to the dimensions indicated on the construction shop drawings. The Retaining Wall Installation Contractor shall erect proper forms as required to ensure the accurate placement of the concrete leveling pad according to the retaining wall construction shop drawings.

3.04 PRECAST MODULAR BLOCK WALL SYSTEM INSTALLATION

- A. The precast modular block structure shall be constructed in accordance with the construction shop drawings, these specifications, and the recommendations of the retaining wall system component manufacturers. Where conflicts exist between the manufacturer's recommendations and these specifications, these specifications shall prevail.
- B. Drainage components. Pipe, geotextile and drainage aggregate shall be installed as shown on the approved shop drawings.
- C. Precast Modular Block Installation
1. The first course of block units shall be placed with the front face edges tightly abutted together on the prepared leveling pad at the locations and elevations shown on the construction shop drawings. The Retaining Wall Installation Contractor shall take special care to ensure that the bottom course of block units is in full contact with the leveling pad, is set level and true and is properly aligned according to the locations shown on the approved shop drawings.
 2. Backfill shall be placed in front of the bottom course of blocks prior to placement of subsequent block courses. Geotextile fabric shall be placed in the V-shaped joints between adjacent blocks. Drainage aggregate shall be placed in the V-shaped joints between adjacent blocks to a minimum distance of 12" (300 mm) behind the block unit.
 3. Drainage aggregate shall be placed in 9-inch maximum lifts and compacted by a minimum of three (3) passes of a vibratory plate compactor capable exerting a minimum of 2,000 lb (8.9 kN) of centrifugal force.
 4. Unit core fill shall consist of drainage aggregate and be placed in the precast modular block unit vertical core slot. The core fill shall completely fill the slot to the level of the top of the block unit. The top of the block unit shall be broom-cleaned prior to placement of subsequent block courses. No additional courses of precast modular blocks may be stacked before the unit core fill is installed in the blocks on the course below.
 5. Geotextile fabric shall be placed between the drainage aggregate and the reinforced fill as required on the retaining wall construction shop drawings.
 6. Subsequent courses of block units shall be installed with a running bond (half block horizontal course-to-course offset). The shear channel of the upper block shall be fully engaged with the shear knobs of the block course below. The upper block course shall be pushed forward to fully engage the interface shear key between the blocks and to ensure consistent face batter and wall alignment. Geogrid, drainage aggregate, unit core fill, geotextile and properly compacted backfill shall be complete and in-place for each course of block units before the next course of blocks is stacked.
 7. The elevation of retained soil fill shall not be less than 1 block course (18" (457 mm)) below the elevation of the reinforced backfill throughout the construction of the retaining wall.
 8. Cap units shall be secured with an adhesive in accordance with the precast modular block manufacturer's recommendation.
- D. Geogrid Reinforcement Installation
1. Geogrid reinforcement shall be installed at the locations and elevations shown on the construction shop drawings on level fill compacted to the requirements of this specification.
 2. Reinforcement length (L) of the geogrid reinforcement is measured from the back of the precast modular block unit. The cut length (L_c) is two times the reinforcement length plus additional length through the block facing unit. The cut length is calculated as follows:

$$L_c = 2*L + 3 \text{ ft } (2*L + 0.9 \text{ m}) \text{ (28" (710 mm) block unit)}$$

3. The geogrid strip shall be continuous throughout its entire length and may not be spliced. The geogrid shall be furnished in nominal, prefabricated roll widths of 12" (300 mm) +/- 1/2" (13 mm). No field modification of the geogrid roll width shall be permitted.
 4. Geogrid material shall be pulled level and perpendicular to the block unit to which it is attached. Compaction shall begin at the back of the wall block unit and proceed to the embedment end of the geogrid. The geogrid strip shall be pulled taut to remove any slack, wrinkles or folds. The geogrid strip shall be pinned, staked, or secured by other method to keep the geogrid layer taut, as needed.
 5. Neither rubber tire nor track vehicles may operate directly on the geogrid. Construction vehicle traffic in the reinforced zone shall be limited to speeds of less than 5 mph (8 km/hr) once a minimum of 9 inches (230 mm) of compacted fill has been placed over the geogrid reinforcement. Sudden braking and turning of construction vehicles in the reinforced zone shall be avoided.
- E. Construction Tolerance. Allowable construction tolerance of the retaining wall shall be as follows:
1. Deviation from the design horizontal alignment, when measured along a 10' (3 m) straight wall section, shall not exceed 3/4" (19 mm).
 2. Deviation from the overall design vertical batter shall not exceed 1/2" (13 mm) per 10' (3 m) of wall height and the top of the wall horizontal offset for the centerline roadway shall not exceed 1" from the dimensions shown on the contract plans.
 3. The maximum allowable offset (horizontal bulge) of the face in any precast modular block joint shall be 1/2" (13 mm).
 4. The base of the precast modular block wall excavation shall be within 1" (25.4 mm) of the staked elevations, unless otherwise approved by the Inspection Engineer.
 5. Differential vertical settlement of the face shall not exceed 1' (300 mm) along any 200' (61 m) of wall length.
 6. The maximum allowable vertical displacement of the face in any precast modular block joint shall be 1/2" (13 mm).
 7. The wall face shall be placed within 2" (50 mm) of the horizontal location staked.

3.05 REINFORCED FILL AND RETAINED FILL PLACEMENT

- A. Backfill material shall be installed in loose lifts that do not exceed a thickness of 6 in. (155 mm) within 3 ft of the back of PMB block units and not exceeding 9 in (230 mm) within the retained and reinforced zones.
- B. Backfill material placed immediately behind the drainage aggregate shall be compacted as follows:
1. 95% of maximum dry density at $\pm 3\%$ optimum moisture content per ASTM D698 standard proctor or 80% relative density per ASTM D4254.
- C. Compactive effort within 3 ft (0.9 m) of the back of the precast modular blocks should be accomplished with walk-behind compactors. Compaction in this zone shall be within 95% of maximum dry density at $\pm 3\%$ optimum moisture content per ASTM D698 standard proctor or 80% relative density per ASTM D4254. Heavy equipment should not be operated within 3 ft (0.9 m) of the back of the precast modular blocks.
- D. At the end of each workday, the Retaining Wall Installation Contractor shall grade the surface of the last lift of the reinforced fill to a $3\% \pm 1\%$ slope away from the precast modular block wall face and compact it.

- E. The Retaining Wall Installation Contractor shall protect the precast modular block wall structure against surface water runoff at all times through the use of berms, diversion ditches, silt fence, temporary drains and/or any other necessary measures to prevent soil staining of the wall face, scour of the retaining wall foundation or erosion of the reinforced backfill or wall infill.

3.06 OBSTRUCTIONS IN THE REINFORCED FILL ZONE

- A. The Retaining Wall Installation Contractor shall make all required allowances for obstructions behind and through the wall face in accordance with the approved construction shop drawings. Utility obstructions shall be installed concurrent with the retaining wall construction and coordinated with the General Contractor. All reinforced fill zone utility construction shall be performed under the supervision of and coordination with the Retaining Wall Installation Contractor. Any damage to the PMB units, drainage system and geogrids shall be repaired or replaced immediately. All utility bedding and backfill placement and compaction shall be in accordance with these specifications.
- B. Should unplanned obstructions become apparent for which the approved construction shop drawings do not account, the affected portion of the wall shall not be constructed until the Owner's Representative can appropriately address the required procedures for construction of the wall section in question.

3.07 COMPLETION

- A. The unpaved areas at the face of the retaining wall shall be sloped away from the wall. Compacted low-permeability fill shall be placed to prevent ponding of water at the face of the completed retaining wall.
- B. Temporary erosion and control measures and grading at the top of the completed wall shall be coordinated between Owner's Representative, the General Contractor and the Retaining Wall Installation Contractor to prevent erosion and ponding. These measures and grading will be the responsibility of the Retaining Wall Installation Contractor. Maintenance of these measures shall remain with the General Contractor.
- C. The General Contractor shall confirm that the as-built precast modular block wall geometries conform to the requirements of this section. The General Contractor shall notify the Owner's Representative of any deviations.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-899-1

CODE: (SP)

DATE: 01/17/2017

SUBJECT: Railway-Highway Provisions

Section 907-899, Railway-Highway Provisions, is hereby added to and made a part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-899--RAILWAY-HIGHWAY PROVISIONS

907-899.01--Description. This special provision addresses the Contractor's involvement with railroad flagging, Contractor Safety Orientation, Contractor Background Investigation, Contractor Roadway Worker on Track Safety Program and Safety Action Plan, and any other requirements set forth by the Railroad and any attached Exhibits.

Prior to bidding, the Contractor shall read and comply with the requirements of the Railroad and any attached Exhibits. The Contractor shall contact the Railroad concerning insurance coverage requirements, Railroad flagging costs, Contractor Safety Orientation, Contractor Background Investigation, Contractor Roadway Worker on Track Safety Program and Safety Action Plan, and any other requirements set forth by the Railroad and any attached Exhibits. In case the railroad requires coverage over and above that required by the Standard Specifications, the railroad requirements shall be met.

If in the opinion of the RAILROAD, the presence of an authorized representative of the RAILROAD is required to supervise the same, the RAILROAD shall render bills to the Contractor for all expenses incurred by it for such supervision. This includes all labor costs for flagmen or cable locate supplied by the RAILROAD to protect RAILROAD operation, and for the full cost of furnishing, installation and later removal of any temporary supports for said tracks, as the RAILROAD's Chief Engineer's Office may deem necessary.

It will be the Contractor's responsibility to pay all bills associated with the Railroad requirements and any attached Exhibits.

A cable locate of RAILROAD owned facilities may be required to identify and protect Signal & Communication cables that have been installed to provide power, signal control, wayside communications. These cables are vital to a safe and reliable railway operation. The cable locate will be performed by a qualified RAILROAD employee.

Outside Contractors are prohibited from driving on, along, or across any track that does not have a RAILROAD installed crossing. They may utilize an existing public crossing. The practice of allowing rubber tired equipment to operate over track with no crossing has been banned.

The Contractor shall complete and process any required forms addressed by the Railroad or any attached Exhibits. The Contractor shall not commence or carry on any form of work on, under, above or within the designated distance from the Railroad track prior to getting approval from the Railroad.

907-899.02--Blank.

907-899.03--Construction Requirements. The Contractor shall read and comply with the requirements of the Railroad and any attached Exhibits.

907-899.04--Method of Measurement. Railway-highway provisions will be measured as a unit lump sum quantity. Measurement for payment will be in accordance with the following schedule:

- a) On the first estimate, twenty five percent (25%) of the amount bid for Railway Highway Provision will be paid.
- b) When twenty five percent (25%) of the original contract amount is earned from all direct pay items, fifty percent (50%) of the amount bid for Railway Highway Provision will be paid.
- c) When fifty percent (50%) of the original contract amount is earned from all direct pay items, one hundred percent (100%) of the amount bid for Railway Highway Provision will be paid.

907-899.05--Basis of Payment. Railway-highway provisions, measured as prescribed above, will be paid for at the contract lump sum price, which price shall be payment in full for all insurance coverage requirements, railroad flagging costs, Contractor safety orientation, Contractor background investigation, Contractor safety programs and plans, and any other requirements set forth by the Railroad and any attached Exhibits, and other incidentals necessary to complete the requirements of this work.

Payment will be made under:

907-899-A: Railway-Highway Provisions

- lump sum

SECTION 905 - PROPOSAL

Last Edited 6/12/2018

Date November 17, 2022

TO: City of Hattiesburg
Hattiesburg, Mississippi

Sirs: The following proposal is made on behalf of R & J Construction, Inc.
of Laurel, Mississippi

for constructing the following designated project(s) within the time(s) hereinafter specified.

The plans are composed of drawings and blue prints on file in the offices of City Clerk
City of Hattiesburg, 200 Forrest Street, Hattiesburg, Mississippi.

The Specifications are the current Standard Specifications of the Mississippi Department of Transportation approved by the Federal Highway Administration, except where superseded or amended by the plans, Special Provisions and Notice(s) to Bidders attached hereto and made a part thereof.

I (We) certify that I (we) possess a copy of said Standard and any Supplemental Specifications.

Evidence of my (our) authority to submit the Proposal is hereby furnished. The proposal is made without collusion on the part of any person, firm or corporation. I (We) certify that I (we) have carefully examined the Plans, the Specifications, including the Special Provisions and Notice(s) to Bidders, herein, and have personally examined the site of the work. On the basis of the Specifications, Special Provisions, Notice(s) to Bidders, and Plans, I (we) propose to furnish all necessary machinery, tools, apparatus and other means of construction and do all the work and furnish all the materials in the manner specified. I (We) understand that the quantities mentioned herein are approximate only and are subject to either increase or decrease, and hereby propose to perform any increased or decreased quantities of work at the unit prices bid, in accordance with the above.

I (We) acknowledge that this proposal will be found irregular and/or non-responsive unless a certified check, cashier's check, or Proposal Guaranty Bond in the amount as required in the Advertisement (or, by law) is submitted electronically with the proposal or is delivered to the office of City Clerk located at Hattiesburg, Mississippi prior to the bid opening time specified in the advertisement.

INSTRUCTION TO BIDDERS: Alternate and Optional Items on Bid Schedule.

1. Two or more items entered opposite a single unit quantity WITHOUT DEFINITE DESIGNATION AS "ALTERNATE ITEMS" are considered as "OPTIONAL ITEMS". Bidders may or may not indicate on bids the Optional Item proposed to be furnished or performed WITHOUT PREJUDICE IN REGARD TO IRREGULARITY OF BIDS.
2. Items classified on the bid schedule as "ALTERNATE ITEMS" and/or "ALTERNATE TYPES OF CONSTRUCTION" must be preselected and indicated on bids. However, "Alternate Types of Construction" may include Optional Items to be treated as set out in Paragraph 1, above.
3. Optional items not preselected and indicated on the bid schedule MUST be designated in accordance with Subsection 102.06 prior to or at the time of execution of the contract.
4. Optional and Alternate items designated must be used throughout the project.

I (We) further propose to perform all "force account or extra work" that may be required of me (us) on the basis provided in the Specifications and to give such work my (our) personal attention in order to see that it is economically performed.

I (We) further propose to execute the attached contract agreement (Section 902) as soon as the work is awarded to me (us), and to begin and complete the work within the time limit(s) provided for in the Specifications and Advertisement. I (We) also propose to execute the attached contract bond (Section 903) in an amount not less than one hundred (100) percent of the total of my (our) part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted.

SECTION 905 - PROPOSAL (CONTINUED)

I (We) shall submit electronically with our proposal or deliver prior to the bid opening time a certified check, cashier's check or bid bond for **five percent (5%) of total bid** and hereby agree that in case of my (our) failure to execute the contract and furnish bond within Ten (10) days after notice of award, the amount of this check (bid bond) will be forfeited to the State of Mississippi as liquidated damages arising out of my (our) failure to execute the contract as proposed. It is understood that in case I am (we are) not awarded the work, the check will be returned as provided in the Specifications.

I (We) hereby certify by conventional signature below of a paper bid submission, or by digital signature of an electronic submission via any authorized electronic submittal software, of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the owner. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the owner to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the owner's election upon award. Failure to so execute at the request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO. 1 DATED 10/31/2022 ADDENDUM NO. 3 DATED 11/8/2022
 ADDENDUM NO. 2 DATED 11/7/2022 ADDENDUM NO. _____ DATED _____

ADDENDUM NO. 1:

1. Replace sheet 905-2 in the Special Provision, Proposal and Contract Documents with attached 905-2.
2. Replace Drawings 8003 and 8004 with attached drawings 8003 and 8004.
3. Replace Table of Contents in the Proposal with attached Table of Contents.
4. Insert Notice to Bidders 9100 Pre-bid Conference Meeting Minutes with pre-bid meeting minutes and sign-in sheet.
5. Insert Special Provisions 907-106-1 and 907-700-1 into the Proposal.

ADDENDUM NO. 2:

1. Replace Table of Contents with attached Table of Contents.
2. Replace Section 905 - PROPOSAL in its entirety.
3. Replace Special Provision 907-809-10 Retaining Wall System in its entirety.
4. Replace Working Number SQ-1 through SQ-6 - Summary of Quantities (Sheet Numbers 11-16) in their entirety.
5. Replace Working Number TSI-EQ (2001), TSI-1 (2002), TSI-2 (2003), TSI-4 (2005), TSI-5 (2006) Sheets in their entirety.
6. Replace Working Number 35 of 60, Drawing Number 8037 - Retaining Wall Layout in its entirety.

ADDENDUM NO. 3:

1. Replace Table of Contents in its entirety.
2. Add Notice to Bidders 9999 - Bid Opening
3. Add Notice to Bidders 9200 - Fuel Adjustments.
4. Replace Section 905 - PROPOSAL in its entirety.

TOTAL ADDENDA: 2
 (Must agree with total addenda issued prior to opening of bids)

Respectfully submitted,

DATE: November 17, 2020

R & J Construction, Inc.

Contractor

BY: George Walters

TITLE: President

ADDRESS: P.O. Box 6

CITY: Laurel, MS 39441

PHONE: 601-426-1042

FAX: N/A

EMAIL: info@randjconst.com

Bid Schedule

Project Number FBLD-8769-00(001) / 108639 - 802000

County FORREST

Project Description Federal Build Project - Phase II - Hall Avenue West - Inters

I (We) agree to complete the entire project within the specified contract time.

SPECIAL NOTICE TO BIDDERS

BIDS WILL NOT BE CONSIDERED UNLESS BOTH UNIT PRICES AND ITEM TOTALS ARE ENTERED.

BIDS WILL NOT BE CONSIDERED UNLESS THE BID CERTIFICATE LOCATED AT THE END OF THE BID SHEET IS SIGNED.

Line No.	Adj. Code	Pay Item No.	Plan Quantity	Unit	Description	Unit Price	Item Total
10		201-A001	1	LS	Clearing and Grubbing	XXXXX	<i>\$1,741,000.00</i>
20		202-B019	15	LF	Removal of Box Culvert	<i>\$1,933.34</i>	<i>\$29,000.10</i>
30		202-B023	1	EA	Removal of Bridge	<i>\$48,000.00</i>	<i>\$48,000.00</i>
40		202-B052	1,235	SY	Removal of Concrete Driveways, All Depths	<i>\$9.00</i>	<i>\$11,115.00</i>
50		202-B063	346	SY	Removal of Concrete Paved Ditch	<i>\$49.13</i>	<i>\$16,998.98</i>
60		202-B080	1,165	SY	Removal of Concrete Sidewalk	<i>\$6.75</i>	<i>\$7,863.75</i>
70		202-B092	8,582	LF	Removal of Curb, All Types	<i>\$1.00</i>	<i>\$8,582.00</i>
80		202-B126	1,967	LF	Removal of Fence, All Types	<i>\$5.00</i>	<i>\$9,835.00</i>
90		202-B163	1	EA	Removal of Inlet Tops	<i>\$1,500.00</i>	<i>\$1,500.00</i>
100		202-B164	27	EA	Removal of Inlet and Junction Box, All Types & Sizes	<i>\$800.00</i>	<i>\$21,600.00</i>
110		202-B188	11,271	SY	Removal of Pavement, All Types and Depths	<i>\$4.50</i>	<i>\$50,719.50</i>
120		202-B191	1,558	LF	Removal of Pipe, 8" And Above	<i>\$5.00</i>	<i>\$7,790.00</i>
130		202-B219	33	EA	Removal of Sign, Ground Mounted with Posts	<i>\$200.00</i>	<i>\$6,600.00</i>
140		202-B244	37	EA	Removal of Trees	<i>\$800.00</i>	<i>\$29,600.00</i>
150	(E)	203-A001	4,000	CY	Unclassified Excavation, FM, AH	<i>\$16.10</i>	<i>\$64,400.00</i>
160	(E)	203-EX012	5,500	CY	Borrow Excavation, AH, FME, Class B3	<i>\$18.90</i>	<i>\$103,950.00</i>
170	(E)	203-EX020	6,000	CY	Borrow Excavation, AH, FME, Class B9	<i>\$18.90</i>	<i>\$113,400.00</i>
180	(E)	203-G001	8,500	CY	Excess Excavation, FM, AH	<i>\$13.80</i>	<i>\$117,300.00</i>
190	(S)	206-A001	3,300	CY	Structure Excavation	<i>\$13.80</i>	<i>\$45,540.00</i>
200	(E)	206-B001	2,000	CY	Select Material for Undercuts, Contractor Furnished, FM	<i>\$135.98</i>	<i>\$271,960.00</i>
210		209-A005	16,250	SY	Geotextile Stabilization, Type V, Non-Woven	<i>\$3.25</i>	<i>\$52,812.50</i>
220		211-A001	1,000	SY	Topsoil for Slope Treatment, From Right-of-Way	<i>\$7.50</i>	<i>\$7,500.00</i>
230	(E)	211-B001	2,500	CY	Topsoil for Slope Treatment, Contractor Furnished	<i>\$14.00</i>	<i>\$35,000.00</i>

240		211-C001	385	CY	Topsoil for Plant Holes, Contractor Furnished	<i>\$37.40</i>	<i>\$14,399.00</i>
250		216-B002	19,500	SY	Solid Sodding, Centipede	<i>\$7.70</i>	<i>\$150,150.00</i>
260		219-A001	390	KGAL	Watering	20.00	<i>\$7,800.00</i>
270		220-A001	4	ACRE	Insect Pest Control	30.00	<i>\$120.00</i>
280		223-A001	16	ACRE	Mowing	50.00	<i>\$800.00</i>
290		226-A001	1	ACRE	Temporary Grassing	<i>\$2,200.00</i>	<i>\$2,200.00</i>
300		227-A001	1	ACRE	Hydroseeding	<i>\$3,850.00</i>	<i>\$3,850.00</i>
310		230-A042	5	EA	Shrub Planting, Dwarf Yaupon Holly	<i>\$19.80</i>	<i>\$99.00</i>
320		230-A051	500	EA	Shrub Planting, Giant Liriope	<i>\$7.70</i>	<i>\$3,850.00</i>
330		230-A055	30	EA	Shrub Planting, Goldstrum Black Eyed Susan	<i>\$12.10</i>	<i>\$363.00</i>
340		230-A100	770	EA	Shrub Planting, Parsons Juniper	<i>\$6.60</i>	<i>\$5,082.00</i>
350		230-B027	93	EA	Tree Planting, Crape Mytle 'Watermelon Red'	<i>\$264.00</i>	<i>\$24,552.00</i>
360		230-B032	22	EA	Tree Planting, Drake Chinese Elm	<i>\$346.50</i>	<i>\$7,623.00</i>
370		230-B050	9	EA	Tree Planting, Live Oak	<i>\$421.66</i>	<i>\$3,794.94</i>
380		230-D001	5,600	SF	Bed Preparation	<i>\$1.71</i>	<i>\$9,576.00</i>
390		232-A003	3	K	Fertilizer for Woody Plant Material, Tablet, 21 gram	<i>\$385.00</i>	<i>\$1,155.00</i>
400		233-A003	18	CY	Tree Bark Mulch, Type III	<i>\$40.70</i>	<i>\$732.60</i>
410		233-A004	18	CY	Tree Bark Mulch, Type IV	<i>\$40.70</i>	<i>\$732.60</i>
420		907-234-A001	5,500	LF	Temporary Silt Fence	<i>\$5.00</i>	<i>\$27,500.00</i>
430		237-A002	1,200	LF	Wattles, 20"	<i>\$6.00</i>	<i>\$7,200.00</i>
440		907-242-A002	325	LF	Installation of Chain Link Fence, Per Plans	<i>\$27.50</i>	<i>\$8,937.50</i>
450		907-242-A002	235	LF	Installation of Wood Privacy Fence, Per Plans	<i>\$33.00</i>	<i>\$7,755.00</i>
460		907-242-A003	3	EA	Installation of Spread Footing, Lighting Foundation	<i>\$2,416.70</i>	<i>\$7,250.10</i>
470		246-B002	1,000	LF	Rockbags	<i>\$20.00</i>	<i>\$20,000.00</i>
480		907-258-K001	2	EA	Bollard Removable	<i>\$2,869.00</i>	<i>\$5,738.00</i>
490		907-259-F001	10	EA	Weatherproof GFCI Receptacle	<i>\$841.50</i>	<i>\$8,415.00</i>
500		907-262-A005	2	EA	Utility Work - Water, 6" Insertion Valve	<i>\$14,025.00</i>	<i>\$28,050.00</i>
510		907-262-A006	200	LF	Utility Work - Water, 6" Ductile Iron Water Main	<i>\$214.50</i>	<i>\$42,900.00</i>
520	(GY)	304-G001	4,500	CY	Size 3/4" and Down Crushed Stone Base, AEA	-----	-----
					OR		
530	(GY)	304-G002	4,500	CY	Size 610 Crushed Stone Base, AEA	<i>\$123.00</i>	<i>\$553,500.00</i>
					OR		
540	(GY)	304-G003	4,500	CY	Size 825B Crushed Stone Base, AEA	-----	-----
550	(M)	308-A001	75	TON	Cement	<i>\$209.50</i>	<i>\$15,712.50</i>
560	(M)	308-B002	5,000	SY	Soil-Cement-Water Mixing, Optional Mixers, Base	<i>\$4.00</i>	<i>\$20,000.00</i>
570	(BA1)	403-A002	2,000	TON	12.5-mm, MT, Asphalt Pavement	<i>\$169.40</i>	<i>\$338,800.00</i>
580	(BA1)	403-A005	2,800	TON	19-mm, MT, Asphalt Pavement	<i>\$166.10</i>	<i>\$465,080.00</i>

590	(BA1)	403-A014	6,500	TON	9.5-mm, MT, Asphalt Pavement	<i>\$128.70</i>	<i>\$836,550.00</i>
600	(BA1)	403-B011	1,100	TON	9.5-mm, MT, Asphalt Pavement, Leveling	<i>\$165.00</i>	<i>\$181,500.00</i>
610		406-D001	6,975	SY	Fine Milling of Bituminous Pavement, All Depths	<i>\$12.05</i>	<i>\$84,048.75</i>
620	(A2)	407-A001	3,500	GAL	Asphalt for Tack Coat	<i>\$3.74</i>	<i>\$13,090.00</i>
630		413-D003	3,000	LF	Cleaning and Filling Joints in PCC Pavement	<i>\$5.50</i>	<i>\$16,500.00</i>
640		907-417-A001	480	SY	Polymer Cement Surface System	<i>\$203.50</i>	<i>\$97,680.00</i>
650		501-K001	1,456	SY	Transverse Grooving	<i>\$2.82</i>	<i>\$4,105.92</i>
660	(C)	502-A001	113	SY	Reinforced Cement Concrete Bridge End Pavement	<i>\$440.00</i>	<i>\$49,720.00</i>
670	(S)	601-A001	380	CY	Class "B" Structural Concrete	<i>\$1,641.50</i>	<i>\$623,770.00</i>
680	(S)	601-B001	149	CY	Class "B" Structural Concrete, Minor Structures	<i>\$2,141.50</i>	<i>\$319,083.50</i>
690		602-A001	76,285	LBS	Reinforcing Steel	<i>\$3.50</i>	<i>\$266,997.50</i>
700	(S)	603-CA001	32	LF	12" Reinforced Concrete Pipe, Class III	<i>\$87.62</i>	<i>\$2,803.84</i>
710	(S)	603-CA004	24	LF	15" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	<i>\$90.03</i>	<i>\$2,160.72</i>
720	(S)	603-CA072	80	LF	42" Reinforced Concrete Pipe, Class V	<i>\$230.21</i>	<i>\$18,416.80</i>
730	(S)	603-CB002	2	EA	15" Reinforced Concrete End Section	<i>\$725.00</i>	<i>\$1,450.00</i>
740	(S)	603-CE001	1,688	LF	18" x 11" Concrete Arch Pipe, Class A III	<i>\$84.70</i>	<i>\$142,973.60</i>
750	(S)	603-CE003	848	LF	22" x 13" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets	<i>\$91.97</i>	<i>\$77,990.56</i>
760	(S)	603-CE009	256	LF	29" x 18" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets	<i>\$118.78</i>	<i>\$30,407.68</i>
770	(S)	603-CE014	1,256	LF	36" x 23" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets	<i>\$126.90</i>	<i>\$159,386.40</i>
780	(S)	603-CE019	88	LF	44" x 27" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets	<i>\$161.05</i>	<i>\$14,172.40</i>
790	(S)	603-PE009	10	LF	8" Corrugated Polyethylene Pipe	<i>\$66.96</i>	<i>\$669.60</i>
800	(S)	603-SB023	3	EA	22" x 13" Branch Connections, Stub into Box Culvert	<i>\$3,500.00</i>	<i>\$10,500.00</i>
810	(S)	603-SB032	3	EA	29" x 18" Branch Connections, Stub into Box Culvert	<i>\$3,500.00</i>	<i>\$10,500.00</i>
820		604-A001	30,907	LBS	Castings	<i>\$6.50</i>	<i>\$200,895.50</i>
830		604-B001	17,634	LBS	Gratings	<i>\$6.50</i>	<i>\$114,621.00</i>
840		907-607-PP001	290	LF	Safety Fence	<i>\$1,111.00</i>	<i>\$322,190.00</i>
850	(S)	608-A001	5,084	SY	Concrete Sidewalk, Without Reinforcement	<i>\$88.00</i>	<i>\$447,392.00</i>
860	(S)	608-B001	75	SY	Concrete Sidewalk, With Reinforcement	<i>\$195.25</i>	<i>\$14,643.75</i>
870	(S)	609-B002	30	LF	Concrete Curb, Header	<i>\$55.00</i>	<i>\$1,650.00</i>
880	(S)	609-D004	306	LF	Combination Concrete Curb and Gutter Type 2 Modified	<i>\$55.00</i>	<i>\$16,830.00</i>
890	(S)	609-D009	3,398	LF	Combination Concrete Curb and Gutter Type 3A Mod1	<i>\$23.65</i>	<i>\$80,362.70</i>
900	(S)	609-D010	8,932	LF	Combination Concrete Curb and Gutter Type 3A Mod2	<i>\$26.13</i>	<i>\$233,393.16</i>
910		612-B001	50	CY	Flowable Fill, Non-Excavatable	<i>\$391.50</i>	<i>\$19,575.00</i>
920		613-D005	12	EA	Adjustment of Manhole	<i>\$1,000.00</i>	<i>\$12,000.00</i>
930		613-D009	5	EA	Adjustment of Utility Appurtenance Fire Hydrant	<i>\$4,400.00</i>	<i>\$22,000.00</i>

940		613-D010	28	EA	Adjustment of Water Meter	<i>\$1,540.00</i>	<i>\$43,120.00</i>
950		613-D011	13	EA	Adjustment of Water Valve	<i>\$880.00</i>	<i>\$11,440.00</i>
960	(S)	614-B003	1,741	SY	Concrete Driveway, With Reinforcement, 6-inch Thickness	<i>\$104.50</i>	<i>\$181,934.50</i>
970	(S)	907-616-C001	1,005	SF	Colored and Imprinted Concrete Median and Island Pavement, 10-inch Thickness	<i>\$30.25</i>	<i>\$30,401.25</i>
980		618-A001	1	LS	Maintenance of Traffic	XXXXX	<i>\$41,796.00</i>
990		619-A2003	2,951	LF	Temporary Traffic Stripe, Continuous Yellow, Paint	<i>\$4.40</i>	<i>\$12,984.40</i>
1000		619-A3004	1,440	LF	Temporary Traffic Stripe, Skip White, Paint	<i>\$4.40</i>	<i>\$6,336.00</i>
1010		619-A5002	2,986	LF	Temporary Traffic Stripe, Detail, Paint	<i>\$4.40</i>	<i>\$13,138.40</i>
1020		619-A6003	88	SF	Temporary Traffic Stripe, Legend, Paint	<i>\$5.50</i>	<i>\$484.00</i>
1030		619-A6004	1,693	LF	Temporary Traffic Stripe, Legend, Paint	<i>\$4.40</i>	<i>\$7,449.20</i>
1040		619-D1001	353	SF	Standard Roadside Construction Signs, Less than 10 Square Feet	<i>\$11.00</i>	<i>\$3,883.00</i>
1050		619-D2001	103	SF	Standard Roadside Construction Signs, 10 Square Feet or More	<i>\$11.00</i>	<i>\$1,133.00</i>
1060		619-G4001	18	LF	Barricades, Type III, Double Faced	<i>\$20.90</i>	<i>\$376.20</i>
1070		619-G4005	240	LF	Barricades, Type III, Single Faced	<i>\$36.30</i>	<i>\$8,712.00</i>
1080		619-G5001	141	EA	Free Standing Plastic Drums	<i>\$77.00</i>	<i>\$10,857.00</i>
1090		619-G7001	4	EA	Warning Lights, Type "B"	<i>\$324.50</i>	<i>\$1,298.00</i>
1100		620-A001	1	LS	Mobilization	XXXXX	<i>\$1,961,938.00</i>
1110		626-A003	1,440	LF	6" Thermoplastic Traffic Stripe, Skip White	<i>\$5.50</i>	<i>\$7,920.00</i>
1120		626-E003	6,266	LF	6" Thermoplastic Traffic Stripe, Continuous Yellow	<i>\$6.60</i>	<i>\$41,355.60</i>
1130		626-G002	1,758	LF	Thermoplastic Detail Stripe, White	<i>\$6.60</i>	<i>\$11,602.80</i>
1140		626-G003	1,704	LF	Thermoplastic Detail Stripe, Yellow	<i>\$6.60</i>	<i>\$11,246.40</i>
1150		626-H004	804	SF	Thermoplastic Legend, White	<i>\$28.60</i>	<i>\$22,994.40</i>
1160		626-H005	2,782	LF	Thermoplastic Legend, White	<i>\$16.50</i>	<i>\$45,903.00</i>
1170		627-J001	12	EA	Two-Way Clear Reflective High Performance Raised Markers	<i>\$33.00</i>	<i>\$396.00</i>
1180		627-K001	103	EA	Red-Clear Reflective High Performance Raised Markers	<i>\$33.00</i>	<i>\$3,399.00</i>
1190		627-L001	296	EA	Two-Way Yellow Reflective High Performance Raised Markers	<i>\$33.00</i>	<i>\$9,768.00</i>
1200		630-A001	48	SF	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness	<i>\$29.70</i>	<i>\$1,425.60</i>
1210		630-A005	255	SF	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness	<i>\$40.70</i>	<i>\$10,378.50</i>
1220		630-C003	518	LF	Steel U-Section Posts, 3.0 lb/ft	<i>\$18.70</i>	<i>\$9,686.60</i>
1230		907-632-A007	1	EA	Solid State Traffic Cabinet Assembly, Type III Cabinet, Type 1 Controller	<i>\$25,113.00</i>	<i>\$25,113.00</i>
1240		907-632-J001	1	EA	Power Service Pedestal	<i>\$6,864.00</i>	<i>\$6,864.00</i>
1250		907-634-A230	1	EA	Traffic Signal Equipment Pole, Type III(L), 30' Shaft, 30' & 40' Arm	<i>\$27,670.50</i>	<i>\$27,670.50</i>

1260		907-634-A254	1	EA	Traffic Signal Equipment Pole, Type III(L), 30' Shaft, 40' & 40' Arm	<i>\$28,919.00</i>	<i>\$28,919.00</i>
1270		907-634-A545	1	EA	Traffic Signal Equipment Pole, Type VI, 8' Shaft	<i>\$1,578.50</i>	<i>\$1,578.50</i>
1280	(S)	907-634-C001	9	CY	Pole Foundations, Class "B" Concrete	<i>\$1,193.50</i>	<i>\$10,741.50</i>
1290		907-634-D002	70	LF	Slip Casing, 30" Diameter	<i>\$33.00</i>	<i>\$2,310.00</i>
1300		907-634-D003	30	LF	Slip Casing, 36" Diameter	<i>\$33.00</i>	<i>\$990.00</i>
1310		635-A059	8	EA	Traffic Signal Head, Type 1	<i>\$1,094.50</i>	<i>\$8,756.00</i>
1320		635-A065	2	EA	Traffic Signal Head, Type 2 FYA	<i>\$2,101.00</i>	<i>\$4,202.00</i>
1330		635-A076	4	EA	Traffic Signal Head, Type 6	<i>\$935.00</i>	<i>\$3,740.00</i>
1340		907-636-B003	165	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 10, 2 Conductor	<i>\$3.25</i>	<i>\$536.25</i>
1350		907-636-B014	415	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 5 Conductor	<i>\$3.14</i>	<i>\$1,303.10</i>
1360		907-636-B016	315	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 8 Conductor	<i>\$3.69</i>	<i>\$1,162.35</i>
1370		907-636-B028	10	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 8, 3 Conductor	<i>\$3.52</i>	<i>\$35.20</i>
1380		907-636-D001	80	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 10, 2 Conductor	<i>\$3.25</i>	<i>\$260.00</i>
1390		907-636-D006	40	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 5 Conductor	<i>\$3.14</i>	<i>\$125.60</i>
1400		907-636-D008	205	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 8 Conductor	<i>\$3.69</i>	<i>\$756.45</i>
1410		907-637-A002	2	EA	Pullbox Enclosure, Type 2	<i>\$1,694.00</i>	<i>\$3,388.00</i>
1420		907-637-A003	1	EA	Pullbox Enclosure, Type 3	<i>\$1,974.50</i>	<i>\$1,974.50</i>
1430		907-637-C028	35	LF	Traffic Signal Conduit, Underground, Type 4, 2"	<i>\$17.27</i>	<i>\$604.45</i>
1440		907-637-C030	30	LF	Traffic Signal Conduit, Underground, Type 4, 3"	<i>\$21.45</i>	<i>\$643.50</i>
1450		907-637-D003	130	LF	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 3"	<i>\$21.45</i>	<i>\$2,788.50</i>
1460		907-639-B001	3	EA	Type 1 Optical Detector	<i>\$1,210.00</i>	<i>\$3,630.00</i>
1470		907-639-C001	455	LF	Type 1 Optical Detector Cable	<i>\$2.42</i>	<i>\$1,101.10</i>
1480		907-639-D001	1	EA	Multimode Phase Selector	<i>\$3,833.50</i>	<i>\$3,833.50</i>
1490		907-643-A003	1	EA	Video Vehicle Detection Sensor, Type 3	<i>\$27,197.50</i>	<i>\$27,197.50</i>
1500		907-643-B001	60	LF	Video Vehicle Detection Cable	<i>\$1.93</i>	<i>\$115.80</i>
1510		907-645-B001	4	EA	Accessible Pedestrian Detection Assembly	<i>\$1,012.00</i>	<i>\$4,048.00</i>
1520		647-A001	1	LS	Removal of Existing Traffic Signal Equipment	XXXXX	<i>\$6,198.50</i>
1530		907-653-B001	24	SF	Street Name Sign	<i>\$138.60</i>	<i>\$3,326.40</i>
1540		907-663-A001	1	EA	Network Switch, Type A	<i>\$2,706.00</i>	<i>\$2,706.00</i>
1550		682-A010	5,630	LF	Underground Branch Circuit, AWG 10, 3 Conductor	<i>\$9.46</i>	<i>\$53,259.80</i>
1560		682-A018	1,145	LF	Underground Branch Circuit, AWG 2, 3 Conductor	<i>\$18.32</i>	<i>\$20,976.40</i>
1570		682-A034	3,115	LF	Underground Branch Circuit, AWG 6, 3 Conductor	<i>\$11.88</i>	<i>\$37,006.20</i>
1580		682-A039	1,060	LF	Underground Branch Circuit, AWG 8, 3 Conductor	<i>\$10.62</i>	<i>\$11,257.20</i>

1590		682-B010	275	LF	Underground Branch Circuit, Jacked or Bored, AWG 10, 3 Conductor	<i>\$15.51</i>	<i>\$4,265.25</i>
1600		682-B016	175	LF	Underground Branch Circuit, Jacked or Bored, AWG 2, 3 Conductor	<i>\$23.10</i>	<i>\$4,042.50</i>
1610		682-B032	121	LF	Underground Branch Circuit, Jacked or Bored, AWG 6, 3 Conductor	<i>\$17.88</i>	<i>\$2,163.48</i>
1620		682-B037	60	LF	Underground Branch Circuit, Jacked or Bored, AWG 8, 3 Conductor	<i>\$16.61</i>	<i>\$996.60</i>
1630		682-C015	1,165	LF	Structure Mounted Branch Circuit, AWG 2, 3 Conductor	<i>\$37.57</i>	<i>\$43,769.05</i>
1640		682-C028	25	LF	Structure Mounted Branch Circuit, AWG 6, 3 Conductor	<i>\$29.98</i>	<i>\$749.50</i>
1650		682-D002	24	EA	Structure Mounted Pull Box	<i>\$1,100.00</i>	<i>\$26,400.00</i>
1660		682-F001	3	EA	Secondary Power Controller	<i>\$10,884.50</i>	<i>\$32,653.50</i>
1670	(S)	684-A004	82	CY	Pole Foundation, 30" Diameter	<i>\$1,617.00</i>	<i>\$132,594.00</i>
1680		699-A001	1	LS	Roadway Construction Stakes	XXXXX	<i>\$115,000.00</i>
1690		699-B001	1	LS	Bridge Construction Stakes	XXXXX	<i>\$88,000.00</i>
1700	(S)	803-K004	675	LF	Drilled Shaft, 36" Diameter	<i>\$720.50</i>	<i>\$486,337.50</i>
1710	(S)	803-K006	1,425	LF	Drilled Shaft, 48" Diameter	<i>\$638.00</i>	<i>\$909,150.00</i>
1720	(S)	803-L002	1	EA	Test Shaft, 48" Diameter	<i>\$286,000.00</i>	<i>\$286,000.00</i>
1730	(S)	803-M005	80	LF	Trial Shaft, 48" Diameter	<i>\$940.50</i>	<i>\$75,240.00</i>
1740	(S)	803-N001	300	LF	Exploration	<i>\$1.10</i>	<i>\$330.00</i>
1750	(S)	803-O005	220	LF	Permanent Casing, 36" Diameter	<i>\$366.85</i>	<i>\$80,707.00</i>
1760	(S)	803-O018	200	LF	Temporary Casing, 48" Diameter	<i>\$284.90</i>	<i>\$56,980.00</i>
1770	(S)	907-804-A002	1,072	CY	Bridge Concrete, Class AA	<i>\$1,210.00</i>	<i>\$1,297,120.00</i>
1780	(S)	907-804-A004	1,101	CY	Bridge Concrete, Class BD	<i>\$1,430.00</i>	<i>\$1,574,430.00</i>
1790	(S)	804-C184	897	LF	150' Prestressed Concrete Beam, Type FIB-72	<i>\$605.00</i>	<i>\$542,685.00</i>
1800	(S)	804-C236	1,048	LF	105' Prestressed Concrete Beam, Type FIB-45	<i>\$511.50</i>	<i>\$536,052.00</i>
1810	(S)	804-C260	373	LF	75' Prestressed Concrete Beam, Type FIB-45	<i>\$511.50</i>	<i>\$190,789.50</i>
1820	(S)	804-C261	674	LF	135' Prestressed Concrete Beam, Type FIB-72	<i>\$605.00</i>	<i>\$407,770.00</i>
1830		805-A001	366,644	LBS	Reinforcement	<i>\$1.76</i>	<i>\$645,293.44</i>
1840		907-809-A001	19,494	SF	Retaining Wall System Geogrid Reinforced PMB	<i>\$136.40</i>	<i>\$2,658,981.60</i>
1850		907-809-A002	5,300	SF	Retaining Wall System, Gravity Type	<i>\$64.55</i>	<i>\$342,115.00</i>
1860	(S)	813-B001	2,253	LF	Concrete-Steel Railing	<i>\$268.40</i>	<i>\$604,705.20</i>
1870	(S)	815-D001	229	CY	Concrete Slope Paving	<i>\$13.20</i>	<i>\$3,022.80</i>
1880		907-899-A001	1	LS	Railway-Highway Provisions	XXXXX	<i>\$288,550.00</i>
1890		L00011 - 230-B500	45	EA	Tree Planting, Teddy Bear Magnolia	<i>\$366.66</i>	<i>\$16,499.70</i>
1900		L00016 - 683-B500	4	EA	Lighting Assembly, Low Mast, LED, Type 30-1-3-100, Bridge Mounted	<i>\$12,023.00</i>	<i>\$48,092.00</i>
1910		L00016 - 683-B500	6	EA	Lighting Assembly, Low Mast, LED, Type 32.5-1-3-100, Bridge Mounted	<i>\$12,375.00</i>	<i>\$74,250.00</i>
1920		L00016 - 683-B500	11	EA	Lighting Assembly, Low Mast, LED, Type 14-1-0-100	<i>\$7,991.50</i>	<i>\$87,906.50</i>
1930		L00016 - 683-B500	55	EA	Lighting Assembly, Low Mast, LED, Type 25-1-0-100	<i>\$9,201.50</i>	<i>\$506,082.50</i>

1940		L00018 - 907-258-PP502	35	LF	Handrail, Per Plans	<i>\$275.00</i>	<i>\$9,625.00</i>
1950		L00052 - 907-262-A504	2,400	LBS	Ductile Iron Fittings	<i>\$25.30</i>	<i>\$60,720.00</i>
1960		L00076 - 230-A500	300	EA	Shrub Planting, Drift Rose "Peach"	<i>\$27.50</i>	<i>\$8,250.00</i>
					Non-Participating		
1970		907-632-A007	1	EA	Solid State Traffic Cabinet Assembly, Type III Cabinet, Type 1 Controller	<i>\$25,113.00</i>	<i>\$25,113.00</i>
1980		907-632-J001	1	EA	Power Service Pedestal	<i>\$6,864.00</i>	<i>\$6,864.00</i>
1990		907-634-A365	1	EA	Traffic Signal Equipment Pole, Type III, 17' Shaft, 30' & 40' Arms	<i>\$21,433.50</i>	<i>\$21,433.50</i>
2000		907-634-A374	1	EA	Traffic Signal Equipment Pole, Type III, 17' Shaft, 35' & 40' Arms	<i>\$22,000.00</i>	<i>\$22,000.00</i>
2010		907-634-A545	2	EA	Traffic Signal Equipment Pole, Type VI, 8' Shaft	<i>\$1,578.50</i>	<i>\$3,157.00</i>
2020	(S)	907-634-C001	9	CY	Pole Foundations, Class "B" Concrete	<i>\$1,413.50</i>	<i>\$12,721.50</i>
2030		907-634-D003	30	LF	Slip Casing, 36" Diameter	<i>\$33.00</i>	<i>\$990.00</i>
2040		635-A059	8	EA	Traffic Signal Head, Type 1	<i>\$1,094.50</i>	<i>\$8,756.00</i>
2050		635-A065	1	EA	Traffic Signal Head, Type 2 FYA	<i>\$2,101.00</i>	<i>\$2,101.00</i>
2060		635-A076	8	EA	Traffic Signal Head, Type 6	<i>\$935.00</i>	<i>\$7,480.00</i>
2070		907-636-B014	410	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 5 Conductor	<i>\$3.14</i>	<i>\$1,287.40</i>
2080		907-636-B016	300	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 8 Conductor	<i>\$3.69</i>	<i>\$1,107.00</i>
2090		907-636-B028	15	LF	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 8, 3 Conductor	<i>\$3.52</i>	<i>\$52.80</i>
2100		907-636-D006	72	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 5 Conductor	<i>\$3.14</i>	<i>\$226.08</i>
2110		907-636-D008	197	LF	Electric Cable, Aerial Supported in Conduit, IMSA 20-1, AWG 14, 8 Conductor	<i>\$3.69</i>	<i>\$726.93</i>
2120		907-637-A002	3	EA	Pullbox Enclosure, Type 2	<i>\$1,694.00</i>	<i>\$5,082.00</i>
2130		907-637-A003	1	EA	Pullbox Enclosure, Type 3	<i>\$1,974.50</i>	<i>\$1,974.50</i>
2140		907-637-C028	65	LF	Traffic Signal Conduit, Underground, Type 4, 2"	<i>\$17.27</i>	<i>\$1,122.55</i>
2150		907-637-C030	40	LF	Traffic Signal Conduit, Underground, Type 4, 3"	<i>\$21.45</i>	<i>\$858.00</i>
2160		907-637-D003	200	LF	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 3"	<i>\$21.45</i>	<i>\$4,290.00</i>
2170		907-639-B001	4	EA	Type 1 Optical Detector	<i>\$1,210.00</i>	<i>\$4,840.00</i>
2180		907-639-C001	480	LF	Type 1 Optical Detector Cable	<i>\$2.42</i>	<i>\$1,161.60</i>
2190		907-639-D001	1	EA	Multimode Phase Selector	<i>\$3,833.50</i>	<i>\$3,833.50</i>
2200		907-643-A003	1	EA	Video Vehicle Detection Sensor, Type 3	<i>\$27,197.50</i>	<i>\$27,197.50</i>
2210		907-643-B001	110	LF	Video Vehicle Detection Cable	<i>\$1.93</i>	<i>\$212.30</i>

2220		907-645-B001	8	EA	Accessible Pedestrian Detection Assembly	<i>\$1,012.00</i>	<i>\$8,096.00</i>
2230		907-653-B001	23	SF	Street Name Sign	<i>\$138.60</i>	<i>\$3,187.80</i>
						Total Bid Amount	<i>\$24,292,480.68</i>

1. I/We agree that no less than 7.0 percent shall be expended with small business concerns owned and controlled by socially and economically disadvantaged individuals (DBE and WBE).

2. Classification of Bidder: Small Business (DBE) _____ Small Business(WBE) _____

3. A joint venture with a Small Business (DBE/WBE): YES _____

*** SIGNATURE STATEMENT ***

BIDDER ACKNOWLEDGES THAT HE/SHE HAS CHECKED ALL ITEMS IN THIS PROPOSAL FOR ACCURACY AND CERTIFY THAT THE FIGURES SHOWN THEREIN CONSTITUTE THEIR OFFICIAL BID.

George Walters
BIDDER'S SIGNATURE



AIA[®] Document A310[™] – 2010

Bid Bond

CONTRACTOR:

(Name, legal status and address)

R & J Construction, Inc.

P.O. Box 6

Laurel, MS 39441

SURETY:

(Name, legal status and principal place of business)

Westfield Insurance Company

P.O. Box 5001

Westfield Center, OH 44251-5001

OWNER:

(Name, legal status and address)

City of Hattiesburg

200 Forrest Street

Hattiesburg, MS 39401

This document has important legal consequences.

Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

BOND AMOUNT: Five Percent (5%) of the Amount Bid-----

PROJECT:

(Name, location or address, and Project number, if any)

Hall Avenue West Phase II - Roadway

Federal-Aid Project No. FBLD-8769-00(001) LPA/ 108639-802000

Hattiesburg, MS

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 17th day of November, 2022

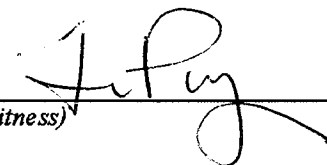

(Witness)

R & J Construction, Inc.

(Contractor as Principal)

(Seal)

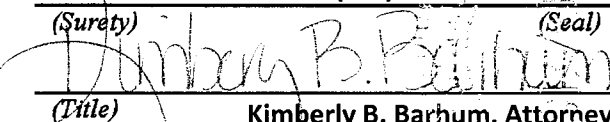

(Title) President


(Witness)

Westfield Insurance Company

(Surety)

(Seal)


(Title)

Kimberly B. Barhum, Attorney-in-Fact
MS Resident Agent

General
Power
of Attorney

Westfield Insurance Co.
Westfield National Insurance Co.
Ohio Farmers Insurance Co.
Westfield Center, Ohio

CERTIFIED COPY

Know All Men by These Presents, That WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, corporations, hereinafter referred to individually as a "Company" and collectively as "Companies," duly organized and existing under the laws of the State of Ohio, and having its principal office in Westfield Center, Medina County, Ohio, do by these presents make, constitute and appoint
DAVID R. FORTENBERRY, RICHARD T. JONES, MARY J. NORVAL, KIMBERLY B. BARHUM, JOINTLY OR SEVERALLY

of **HATTIESBURG** and State of **MS** its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings, or other instruments or contracts of suretyship.

LIMITATION: THIS POWER OF ATTORNEY CANNOT BE USED TO EXECUTE NOTE GUARANTEE, MORTGAGE DEFICIENCY, MORTGAGE GUARANTEE, OR BANK DEPOSITORY BONDS.

and to bind any of the Companies thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the applicable Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolution adopted by the Board of Directors of each of the WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY:

"Be It Resolved, that the President, any Senior Executive, any Secretary or any Fidelity & Surety Operations Executive or other Executive shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

The Attorney-in-Fact may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements of indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed by the President and sealed and attested by the Corporate Secretary."

"Be it Further Resolved, that the signature of any such designated person and the seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signatures or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached." (Each adopted at a meeting held on February 8, 2000).

In Witness Whereof, WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY have caused these presents to be signed by their National Surety Leader and Senior Executive and their corporate seals to be hereto affixed this 29th day of MARCH A.D., 2016.

Corporate
Seals
Affixed



WESTFIELD INSURANCE COMPANY
WESTFIELD NATIONAL INSURANCE COMPANY
OHIO FARMERS INSURANCE COMPANY

By:
Dennis P. Baus, National Surety Leader and
Senior Executive

State of Ohio
County of Medina ss.:

On this 29th day of MARCH A.D., 2016, before me personally came Dennis P. Baus to me known, who, being by me duly sworn, did depose and say, that he resides in Wooster, Ohio; that he is National Surety Leader and Senior Executive of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, the companies described in and which executed the above instrument; that he knows the seals of said Companies; that the seals affixed to said instrument are such corporate seals; that they were so affixed by order of the Boards of Directors of said Companies; and that he signed his name thereto by like order.

Notarial
Seal
Affixed



State of Ohio
County of Medina ss.:

David A. Kotnik, Attorney at Law, Notary Public
My Commission Does Not Expire (Sec. 147.03 Ohio Revised Code)

I, Frank A. Carrino, Secretary of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Companies, which is still in full force and effect; and furthermore, the resolutions of the Boards of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Westfield Center, Ohio, this 17th day of November A.D., 2022



Frank A. Carrino, Secretary

**Certification with regard to the Performance of Previous
Contracts or Subcontracts subject to the Equal Opportunity
Clause and the filing of Required Reports**

The Bidder A, proposed Subcontractor _____, hereby certifies that he has X, has not _____, participated in a previous contract or subcontract subject to the Equal Opportunity Clause, as required by Executive Orders 10925, 11114, or 11246, and that he has X, has not _____, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

R & J Construction, Inc.
(COMPANY)

BY _____

George Walters

President
(TITLE)

DATE: November 10, 2022

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the Equal Opportunity Clause. Contracts and Subcontracts which are exempt from the Equal Opportunity Clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime Contractors and Subcontractors who have participated in a previous contract or subcontract subject to the Executive orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such Contractors submit a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U. S. Department of Labor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION**NON-COLLUSION AFFIDAVIT**
(Execute in duplicate)

I, George Walters,
(Name of person signing affidavit)

individually, and in my capacity as President of
(Title)

R & J Construction, Inc. do hereby certify under
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that _____

R & J Construction, Inc., Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. FBLD-8769-00(001) LPA/108639-802000,

in Forrest County(ies), Mississippi, has not either

directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds:

- a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in (b) above; and
- d) Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Initial here "_____" if exceptions are attached and made a part thereof. Any exceptions shall address to whom it applies, initiating agency and dates of such action.

Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

The bidder further certifies that the certification requirements contained in Section XI of Form FHWA 1273, will be or have been included in all subcontracts, material supply agreements, purchase orders, etc. except those procurement contracts for goods or services that are expected to be less than the Federal procurement small purchase threshold fixed at 10 U.S.C. 2304(g) and 41 U.S.C. 253(g) (currently \$25,000) which are excluded from the certification requirements.

The bidder further certifies, to the best of his or her knowledge and belief, that:

- 1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000. The bidder shall include the language of the certification in all subcontracts exceeding \$100,000 and all subcontractors shall certify and disclose accordingly.

All of the foregoing and attachments (when indicated) is true and correct.

Executed on November 10, 2022

George Walters
Signature

MISSISSIPPI DEPARTMENT OF TRANSPORTATION**NON-COLLUSION AFFIDAVIT**
(Execute in duplicate)

I, George Walters,
(Name of person signing affidavit)

individually, and in my capacity as President of
(Title)

R & J Construction, Inc. do hereby certify under
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that _____

R & J Construction, Inc., Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. FBLD-8769-00(001) LPA/108639-802000,

in Forrest County(ies), Mississippi, has not either

directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds:

- a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in (b) above; and
- d) Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Initial here "_____" if exceptions are attached and made a part thereof. Any exceptions shall address to whom it applies, initiating agency and dates of such action.

Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

The bidder further certifies that the certification requirements contained in Section XI of Form FHWA 1273, will be or have been included in all subcontracts, material supply agreements, purchase orders, etc. except those procurement contracts for goods or services that are expected to be less than the Federal procurement small purchase threshold fixed at 10 U.S.C. 2304(g) and 41 U.S.C. 253(g) (currently \$25,000) which are excluded from the certification requirements.

The bidder further certifies, to the best of his or her knowledge and belief, that:

- 1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000. The bidder shall include the language of the certification in all subcontracts exceeding \$100,000 and all subcontractors shall certify and disclose accordingly.

All of the foregoing and attachments (when indicated) is true and correct.

Executed on November 10, 2022

George Walters
Signature

LOCAL PUBLIC AGENCY (LPA)

SECTION 902

CONTRACT FOR _____
LOCATED IN THE COUNTY OF _____
STATE OF MISSISSIPPI,

This contract entered into by and between the Local Public Agency _____
_____ (hereinafter "LPA") on one hand, and the undersigned contractor, on the other witnesseth;

That, in consideration of the payment by the LPA of the prices set out in the proposal hereto attached, to the undersigned contractor, such payment to be made in the manner and at the time of times specified in the specifications and the special provisions, if any, the undersigned contractor hereby agrees to accept the prices stated in the proposal in full compensation for the furnishing of all materials and equipment and the executing of all the work contemplated in this contract.

It is understood and agreed that the advertising according to law, the Advertisement, the instructions to bidders, the proposal for the contract, the specifications, the revisions of the specifications, the special provisions, and also the plans for the work herein contemplated, said plans showing more particularly the details of the work to be done, shall be held to be, and are hereby made a part of this contract by specific reference thereto and with like effect as if each and all of said instruments had been set out fully herein in words and figures.

It is further agreed that for the same consideration the undersigned contractor shall be responsible for all loss or damage arising out of the nature of the work aforesaid; or from the action of the elements and unforeseen obstructions or difficulties which may be encountered in the prosecution of the same and for all risks of every description connected with the work, exceptions being those specifically set out in the contract; and for faithfully completing the whole work in good and workmanlike manner according to the approved Plans, Specifications, Special Provisions, Notice(s) to Bidders and requirements of the LPA.

It is further agreed that the work shall be done under the direct supervision and to the complete satisfaction of the LPA or their authorized representatives, and when Federal Funds are involved subject to inspection at all times and approval by the Mississippi Department of Transportation or Federal Highway Administration, or its agents as the case may be, or the agents of any other Agency whose funds are involved in accordance with those Acts of the Legislature of the State of Mississippi approved by the Governor and such rules and regulations issued pursuant thereto by the Mississippi Transportation Commission and the authorized Federal Agencies.

The Contractor agrees that all labor as outlined in the Special Provisions may be secured from list furnished by

Manager, WIN Job Center nearest the project

It is agreed and understood that each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and this contract shall be read and enforced as though it were included herein, and, if through mere mistake or otherwise any such provision is not inserted, then upon the application of either party hereto, the contract shall forthwith be physically amended to make such insertion.

The Contractor agrees that he has read each and every clause of this Contract, and fully understands the meaning of same and that he will comply with all the terms, covenants and agreements therein set forth.

Witness our signatures this the _____ day of _____, 20____.

Contractor(s)

By _____

Title _____

Signed and sealed in the presence of:
(Names and address of witnesses)

By _____

LPA Official

LPA Clerk

Award authorized by the LPA in session on the _____ day of _____, 20____, as recorded _____

LOCAL PUBLIC AGENCY (LPA)

S E C T I O N 9 0 3
PERFORMANCE AND PAYMENT BOND

CONTRACT BOND FOR _____

LOCATED IN THE COUNTY OF _____

STATE OF MISSISSIPPI,

Know all men by these presents: that we, _____
(Contractor)

(hereinafter "Principal"), a _____

residing at _____ in the State of _____

and _____
(Surety)

residing at _____ in the State of _____

authorized to do business in the State of Mississippi, under the laws thereof, as surety, are held and firmly bound

unto the Local Public Agency _____, (hereinafter

"LPA"), in the sum of _____

(\$ _____) Dollars, lawful money of the United States of America, to be

paid to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors, or

assigns jointly and severally by these presents.

The conditions of this bond are such, that whereas the said Principal, has (have) entered into a contract with the

LPA, bearing the date of _____ day of _____ A.D. _____ hereto annexed, for the

construction of certain project(s) in the State of Mississippi as mentioned in said contract in accordance with the

Contract Documents therefor, on file in the offices of the LPA.

Now therefore, if the above bounden Principal in all things shall stand to and abide by and well and truly observe, do keep and perform all and singular the terms, covenants, conditions, guarantees and agreements in said contract, contained on his (their) part to be observed, done, kept and performed and each of them, at the time and in the manner and form and furnish all of the material and equipment specified in said contract in strict accordance with the terms of said contract which said plans, specifications and special provisions are included in and form a part of said contract and shall maintain the said work contemplated until its final completion and acceptance as specified in Subsection 109.11 of the approved specifications, and save harmless said LPA from any loss or damage arising out of or occasioned by the negligence, wrongful or criminal act, overcharge, fraud, or any other loss or damage whatsoever, on the part of said principal (s), his (their) agents, servants, or employees in the performance of said work or in any manner connected therewith, and shall be liable and responsible in a civil action instituted by the LPA at the instance of any officer of the LPA authorized in such cases, for double any amount in money or property, the LPA may lose or be overcharged or otherwise defrauded of, by reason of wrongful or criminal act, if any, of the

LOCAL PUBLIC AGENCY (LPA)

Contractor(s), his (their) agents or employees, and shall promptly pay the said agents, servants and employees and all persons furnishing labor, material, equipment or supplies therefor, including premiums incurred, for Surety Bonds, Liability Insurance, and Workmen's Compensation Insurance; with the additional obligation that such Contractor shall promptly make payment of all taxes, licenses, assessments, contributions, damages, any liquidated damages which may arise prior to any termination of said principal's contract, any liquidated damages which may arise after termination of the said principal's contract due to default on the part of said principal, penalties and interest thereon, when and as the same may be due this state, or any county, municipality, board, department, commission or political subdivision: in the course of the performance of said work and in accordance with Sections 31-5-51 et seq. Mississippi Code of 1972, and other State statutes applicable thereto, and shall carry out to the letter and to the satisfaction of the LPA Official, all, each and every one of the stipulations, obligations, conditions, covenants and agreements and terms of said contract in accordance with the terms thereof and all of the expense and cost and attorney's fee that may be incurred in the enforcement of the performance of said contract, or in the enforcement of the conditions and obligations of this bond, then this obligation shall be null and void, otherwise to be and remain in full force and virtue.

_____	_____
(Contractors) Principal	Surety
By _____	By _____
	(Signature) Attorney in Fact
	Address: _____

Title _____	_____
(Contractor's Seal)	(Printed) Mississippi Agent

	(Signature) Mississippi Agent
	Address: _____

	(Surety Seal)

	Mississippi Insurance ID Number

October 4, 2022
Date

**Guidance for Federal Spending Transparency:
Subaward and Executive Compensation Data
Reporting Requirements for FFATA Implementation**

Summary

1. Prime awardees and sub awardees of Federal financial assistance must report executive compensation data if they meet the statutory reporting thresholds. For the Federal-aid Highway Program, this means that the State, and any subawardees of Federal-aid funds through the State, is subject to the executive compensation reporting requirement.

- names and total compensation of the five most highly compensated officers of the entity if the entity in the preceding fiscal year received 80 percent or more of its annual gross revenues in Federal awards; and \$25,000,000 or more in annual gross revenues from Federal awards; and the public does not have access to this information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. See FFATA § 2(b)(1).

Background

Beginning October 1, 2010, guidance directs compliance with the Transparency Act to report prime and first-tier subaward data. Federal agencies and prime awardees will report to ensure disclosure of Federal contract and grant subaward and executive compensation data.

The Transparency Act requires information disclosure concerning entities receiving Federal financial assistance through Federal awards such as Federal contracts, sub-contracts, grants, and sub-grants.

Specifically, the Transparency Act's section 2(b)(1) requires the Office of Management and Budget ("OMB") to ensure the establishment of a publicly available website that contains the following information about each Federal award:

- name of the entity receiving the award;
- amount of the award;
- information on the award including transaction type, funding agency, the North American Industry Classification System code or Catalog of Federal Domestic Assistance number, program source, award title descriptive of the purpose of each funding action;

- location of the entity receiving the award and primary location of performance under the award, including city, State, congressional district, and country;
- unique identifier of the entity receiving the award and the parent entity of the recipient, should the entity be owned by another entity; and
- names and total compensation of the five most highly compensated officers of the entity if the entity in the preceding fiscal year received 80 percent or more of its annual gross revenues in Federal awards; and \$25,000,000 or more in annual gross revenues from Federal awards; and the public does not have access to this information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. See FFATA § 2(b)(1).

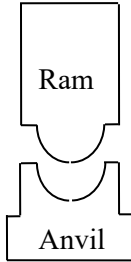
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PILE AND DRIVING EQUIPMENT DATA FORM

Project No.: _____ Bridge No.: _____

Termini: _____ Pile Driving Contractor: _____

County: _____

**Hammer**

Manufacture: _____ Model No.: _____

Hammer Type: _____ Serial No.: _____

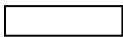
Manufacturers Maximum Rated Energy: _____ (Kip-ft.)

Stroke at Maximum Rated Energy: _____ (ft.)

Range in Operating Energy: _____ to _____ (Kip-ft.)

Range in Operating Stroke: _____ to _____ (ft.)

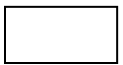
Modifications: _____

**Striker**

Weight: _____ (N) Diameter: _____ (in.)

Plate

Thickness: _____ (mm)

**Hammer****Cushion**Material #1

Name: _____

Area: _____ (in.²)

Thickness/Plate: _____ (in.)

No. of Plates: _____

Total Thickness of Hammer Cushion: _____ (in.)

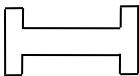
Material #2

Name: _____

Area: _____ (in.²)

Thickness/Plate: _____ (in.)

No. of Plates: _____

**Helmet
(Drive Head)**

Weight: _____ (lbs.)

**Pile****Cushion**

Material: _____

Area: _____ (in.²) Total Thickness: _____ (in.)**Pile****Submitted By:** _____ **Date:** _____**Telephone No.:** _____

LPA PROJECT

DISADVANTAGED BUSINESS ENTERPRISE LIST

PROJECT NUMBER :

NAME OF DBE FIRM:

☐ RACE CONSCIOUS ☐ RACE NEUTRAL

COUNTY:

CITY :

A	B	C
REFERENCE NUMBER OF ITEMS	PERCENT WORK SUBCONTRACTED , (SEE NOTE 4 & 5 BELOW)	VALUE OF ITEM (SUBCONTRACTED , MANUFACTURED OR SUPPLIED)
TOTAL		
PER CENT OF TOTAL BID		

*** I ACKNOWLEDGE AND COMMIT TO THE ITEMS AND PRICES STATED ABOVE. ***

SIGNATURE OF DBE

SIGNATURE OF PRIME

DATE

APPROVED:

Prime Contractor Firm Name

APPROVED BY:

LPA Project Director Name (Printed)

Submitted By Name

LPA Project Director (Signature)

TITLE

I AGREE TO SUBCONTRACT OR PURCHASE MATERIAL FROM THE DBE FIRM LISTED ABOVE AND I MAKE THIS COMMITMENT WITH THE UNDERSTANDING THAT IF I FAIL FOR GOOD REASON TO FULFILL THIS COMMITMENT I HAVE LISTED I WILL FULFILL THE TERMS OF MY CONTRACT AS LONG AS I REACH OR EXCEED THE CONTRACT GOAL OF %.

INSTRUCTIONS :

1. SUBMIT THIS FORM TO THE **LPA Project Director** ***FOR THEIR SIGNATURE*** NO LATER THAN THE THIRD (3) BUSINESS DAY AFTER THE OPENING OF THE BIDS.
2. 60 % CREDIT IS ALLOWED TOWARD THE DBE GOAL FOR SUPPLIERS.
3. THE ACTUAL SUBCONTRACT AGREEMENT MUST EQUAL OR EXCEED THE DOLLAR AMOUNT SHOWN IN COLUMN " C ".
4. IF THE DBE FIRM PERFORMS " ALL OF THE WORK " PERTAINING TO A SUBCONTRACTED ITEM ENTER 100 % IN COLUMN " B ".
5. IF THE DBE FIRM PERFORMS " A PORTION OF THE WORK " PERTAINING TO A SUBCONTRACTED ITEM THE PERCENTAGE IS CALCULATED BASED ON THE TOTAL VALUE OF THE ITEM AND ENTERED IN COLUMN " B ". A BREAKDOWN OF THE COST MUST ACCOMPANY THIS SITUATION.

LPA PROJECT

DISADVANTAGED BUSINESS ENTERPRISE LIST

PROJECT NUMBER :

NAME OF DBE FIRM:

☐ RACE CONSCIOUS ☐ RACE NEUTRAL

COUNTY:

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REFERENCE NUMBER OF ITEMS	PERCENT WORK SUBCONTRACTED , (SEE NOTE 4 & 5 BELOW)	VALUE OF ITEM (SUBCONTRACTED , MANUFACTURED OR SUPPLIED)
TOTAL		
PER CENT OF TOTAL BID		

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SIGNATURE OF DBE

SIGNATURE OF PRIME

DATE

APPROVED:

Prime Contractor Firm Name

APPROVED BY:

LPA Project Director Name (Printed)

Submitted By Name

LPA Project Director (Signature)

TITLE

I AGREE TO SUBCONTRACT OR PURCHASE MATERIAL FROM THE DBE FIRM LISTED ABOVE AND I MAKE THIS COMMITMENT WITH THE UNDERSTANDING THAT IF I FAIL FOR GOOD REASON TO FULFILL THIS COMMITMENT I HAVE LISTED I WILL FULFILL THE TERMS OF MY CONTRACT AS LONG AS I REACH OR EXCEED THE CONTRACT GOAL OF %.

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LPA PROJECT

DISADVANTAGED BUSINESS ENTERPRISE LIST

PROJECT NUMBER :

NAME OF DBE FIRM:

☐ RACE CONSCIOUS ☐ RACE NEUTRAL

COUNTY:

CITY :

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TOTAL		
PER CENT OF TOTAL BID		

*** I ACKNOWLEDGE AND COMMIT TO THE ITEMS AND PRICES STATED ABOVE. ***

SIGNATURE OF DBE

SIGNATURE OF PRIME

DATE

APPROVED:

Prime Contractor Firm Name

APPROVED BY:

LPA Project Director Name (Printed)

Submitted By Name

LPA Project Director (Signature)

TITLE

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LPA PROJECT

LIST OF FIRMS SUBMITTING QUOTES

I/we received quotes from the following firms on Project No: FBLD-8769-00(001)LPA/108639-802000
County: Forrest

Disadvantaged Business Enterprise (DBE) Regulations as stated in 49 CFR 26.11 require the Mississippi Department of Transportation (MDOT) to create and maintain a comprehensive list of all firms quoting/bidding subcontracts on prime contracts and quoting/bidding subcontracts on federally-funded transportation projects. For every firm, we require the following information:

Firm Name: Traffic Control Products Co., Inc.
Contact Name/Title: Danny Berry/Project Manager
Firm Mailing Address: P.O. Box 820 Brandon, MS 39043
Phone Number: 601-939-2415
XXX DBE Firm Non-DBE Firm

Firm Name: Cotton Creek Transportation, Inc.
Contact Name/Title: Drew Tanner/President
Firm Mailing Address: 102 Ellisville Boulevard Laurel, MS 39440
Phone Number: 601-477-3820
 DBE Firm XXX Non-DBE Firm

Firm Name: Webster Electric Co., LLC
Contact Name/Title: Chad Robertson/President
Firm Mailing Address: P.O. Box 8129 Meridian, MS 39303
Phone Number: 601-626-0200
 DBE Firm XXX Non-DBE Firm

Firm Name: Simmons Erosion Control, Inc.
Contact Name/Title: Chris Simmons/President
Firm Mailing Address: 6690 Steve Lee Drive Lake, MS 39092
Phone Number: 601-775-3305
XXX DBE Firm Non-DBE Firm

Firm Name: Warren Paving
Contact Name/Title: Jeremy Patterson/Project Manager
Firm Mailing Address: P.O. Box 572 Hattiesburg, MS 39403
Phone Number: 601-544-7811
 DBE Firm XXX Non-DBE Firm



SUBMITTED BY (Signature)

R & J Construction, Inc.

FIRM NAME

Submit this form to the LPA as a part of your bid package. If this form is not signed and included as part of the bid packet, your bid will be deemed irregular. For further information about this form, call Mississippi DOT's Office of Civil Rights at (601) 359-7466; FAX (601) 576-4504.

Please make copies of this form when needed and also add those copies to the bid package.

LPA PROJECT

LIST OF FIRMS SUBMITTING QUOTES

I/we received quotes from the following firms on Project No: FBLD-8769-00(001)LPA/108639-802000
County: Forrest

Disadvantaged Business Enterprise (DBE) Regulations as stated in 49 CFR 26.11 require the Mississippi Department of Transportation (MDOT) to create and maintain a comprehensive list of all firms quoting/bidding subcontracts on prime contracts and quoting/bidding subcontracts on federally-funded transportation projects. For every firm, we require the following information:

Firm Name: Four Seasons Lawn and Landscape, LLC
Contact Name/Title: Hunter McLeod/President
Firm Mailing Address: 1620 Bush Dairy Road Laurel, MS 39441
Phone Number: 601-425-5856
 DBE Firm xxx Non-DBE Firm

Firm Name: Clearpoint Consulting Engineers, P.A.
Contact Name/Title: John Anglin/President
Firm Mailing Address: 6652 U.S. Highway 98 Hattiesburg, MS 39402
Phone Number: 601-261-2609
 DBE Firm xxx Non-DBE Firm

Firm Name: W Geotechnical and Testing, Inc.
Contact Name/Title: Heath Williams/President
Firm Mailing Address: 301 Central Avenue East Wiggins, MS 39577
Phone Number: 601-928-9099
 DBE Firm xxx Non-DBE Firm

Firm Name: Road-Pro Safety, Inc.
Contact Name/Title: Peggy Miley/President
Firm Mailing Address: P.O. Box 54292 Jackson, MS 39288-4292
Phone Number: 601-932-8220
xxx DBE Firm Non-DBE Firm

Firm Name: Southern Fence Company
Contact Name/Title: Nathaniel Craven/President
Firm Mailing Address: 111 Industrial Boulevard Ellisville, MS 39437
Phone Number: 601-426-6878
 DBE Firm xxx Non-DBE Firm



SUBMITTED BY (Signature)

R & J Construction, Inc.

FIRM NAME

Submit this form to the LPA as a part of your bid package. If this form is not signed and included as part of the bid packet, your bid will be deemed irregular. For further information about this form, call Mississippi DOT's Office of Civil Rights at (601) 359-7466; FAX (601) 576-4504.

Please make copies of this form when needed and also add those copies to the bid package.

Please make copies of this form when needed and also add those copies to the bid package.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SAM.GOV Registration and Unique Entity ID

Bidders are advised that the Prime Contractor must register and maintain a current registration in the **System for Award Management** (<http://sam.gov>) at all times during the project. Upon registration, the Contractor will be assigned a SAM Unique Entity ID.

Bidders are advised that prior to the award of this contract, they **MUST** be registered in the System for Award Management.

I (We) acknowledge that this contract cannot be awarded if I (We) are not registered in the System for Award Management prior to the award of this contract. Yes (Yes / No)

I (We) have a SAM Unique Entity ID. Yes (Yes / No)

SAM Unique Entity ID: DJCEBCRACE65

Company Name: R & J Construction, Inc.

Company e-mail address: info@randjconst.com



AIA[®] Document A310[™] – 2010

Bid Bond

CONTRACTOR:

(Name, legal status and address)

R & J Construction, Inc.

P.O. Box 6

Laurel, MS 39441

SURETY:

(Name, legal status and principal place of business)

Westfield Insurance Company

P.O. Box 5001

Westfield Center, OH 44251-5001

OWNER:

(Name, legal status and address)

City of Hattiesburg

200 Forrest Street

Hattiesburg, MS 39401

This document has important legal consequences.

Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

BOND AMOUNT: Five Percent (5%) of the Amount Bid-----

PROJECT:

(Name, location or address, and Project number, if any)

Hall Avenue West Phase II - Roadway

Federal-Aid Project No. FBLD-8769-00(001) LPA/ 108639-802000

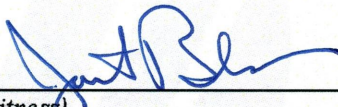
Hattiesburg, MS

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

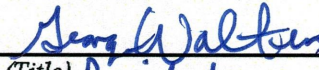
If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

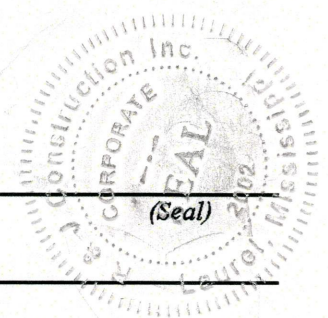
When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

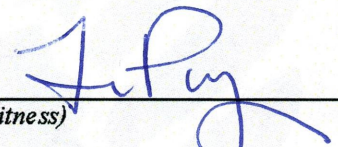
Signed and sealed this 17th day of November, 2022


(Witness)

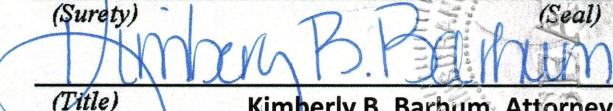
R & J Construction, Inc.
(Contractor as Principal)


(Title) President

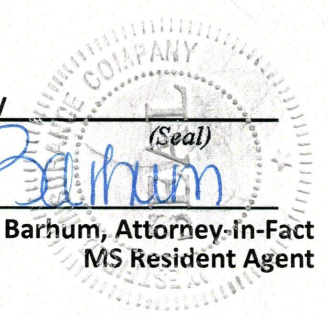



(Witness)

Westfield Insurance Company
(Surety)


(Title)

Kimberly B. Barhum, Attorney-in-Fact
MS Resident Agent



THIS POWER OF ATTORNEY SUPERCEDES ANY PREVIOUS POWER BEARING THIS SAME POWER # AND ISSUED PRIOR TO 03/29/16, FOR ANY PERSON OR PERSONS NAMED BELOW.

POWER NO. 2320202 13

General
Power
of Attorney

Westfield Insurance Co.
Westfield National Insurance Co.
Ohio Farmers Insurance Co.
Westfield Center, Ohio

CERTIFIED COPY

Know All Men by These Presents, That WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, corporations, hereinafter referred to individually as a "Company" and collectively as "Companies," duly organized and existing under the laws of the State of Ohio, and having its principal office in Westfield Center, Medina County, Ohio, do by these presents make, constitute and appoint
DAVID R. FORTENBERRY, RICHARD T. JONES, MARY J. NORVAL, KIMBERLY B. BARHUM, JOINTLY OR SEVERALLY

of **HATTIESBURG** and State of **MS** its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings, or other instruments or contracts of suretyship.

LIMITATION: THIS POWER OF ATTORNEY CANNOT BE USED TO EXECUTE NOTE GUARANTEE, MORTGAGE DEFICIENCY, MORTGAGE GUARANTEE, OR BANK DEPOSITORY BONDS.

and to bind any of the Companies thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the applicable Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolution adopted by the Board of Directors of each of the WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY:

"Be It Resolved, that the President, any Senior Executive, any Secretary or any Fidelity & Surety Operations Executive or other Executive shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

The Attorney-in-Fact may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements of indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed by the President and sealed and attested by the Corporate Secretary."

"Be It Further Resolved, that the signature of any such designated person and the seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signatures or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached." (Each adopted at a meeting held on February 8, 2000).

In Witness Whereof, WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY have caused these presents to be signed by their National Surety Leader and Senior Executive and their corporate seals to be hereto affixed this 29th day of MARCH A.D., 2016.

Corporate
Seals
Affixed



WESTFIELD INSURANCE COMPANY
WESTFIELD NATIONAL INSURANCE COMPANY
OHIO FARMERS INSURANCE COMPANY

By:
Dennis P. Baus, National Surety Leader and Senior Executive

State of Ohio
County of Medina ss.:

On this 29th day of MARCH A.D., 2016, before me personally came Dennis P. Baus to me known, who, being by me duly sworn, did depose and say, that he resides in Wooster, Ohio; that he is National Surety Leader and Senior Executive of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, the companies described in and which executed the above instrument; that he knows the seals of said Companies; that the seals affixed to said instrument are such corporate seals; that they were so affixed by order of the Boards of Directors of said Companies; and that he signed his name thereto by like order.

Notarial
Seal
Affixed



State of Ohio
County of Medina ss.:

David A. Kotnik, Attorney at Law, Notary Public
My Commission Does Not Expire (Sec. 147.03 Ohio Revised Code)

I, Frank A. Carrino, Secretary of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Companies, which is still in full force and effect; and furthermore, the resolutions of the Boards of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Westfield Center, Ohio, this 17th day of November A.D., 2022



Frank A. Carrino, Secretary

December 19, 2022
N-S Project No. 16214.000

Mayor Toby Barker
City of Hattiesburg
P O Box 1898
Hattiesburg, Mississippi 39403-1898

REFERENCE: HALL AVENUE WEST PHASE II - ROADWAY
FEDERAL AID PROJECT NO. FBLD-8769-00(001)LPA/108639-802000
HATTIESBURG, FORREST COUNTY

Dear Mayor Barker:

Enclosed for your records is one (1) copy of the Certified Bid Tabulation for the bids received for the referenced project. As you are aware, there were two (2) bids submitted, opened, and read at the bid opening on November 17, 2022, at 10:00 am. Upon review and tabulation of the bid received and opened, R & J Construction, Inc., was the apparent low bidder in the amount of \$24,292,480.68.

Neel-Schaffer therefore recommends that the City of Hattiesburg review the bid submitted by R & J Construction, Inc., and award the project, subject to the concurrence of the Mississippi Department of Transportation (MDOT), to the lowest and best bidder.

If you have any questions, please give me a call. Thank you for your time and attention to this matter.

Sincerely,
NEEL-SCHAFFER, INC.



Geoffrey Crosby, P.E.
Senior Project Manager

Enclosures



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ann Jones, Chief Administrative Officer
cc:
Date: Tuesday, December 20, 2022
Re: Acknowledge receipt of three fully executed and recorded deeds from the University of Southern Mississippi for Street Purposes, Permanent Drainage Easement and Utility Easement for property located on Classic Drive and more fully described in the attached deeds.
File Number: 2022-944
Minute Book #

Summary

Acknowledge receipt of three fully executed and recorded deeds from the University of Southern Mississippi for Street Purposes, Permanent Drainage Easement and Utility Easement for property located on Classic Drive and more fully described in the attached deeds.

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.



DEED

Bk:1408 Page:360-370

RCD: 11/09/2022 @11:20:24:AM

FORREST COUNTY, MS

LANCE C. REID CHANCERY CLERK

Prepared By and Return to:

Joe D. Stevens (MBN 9039)
Wise Carter Child & Caraway, P.A.
601 Adeline Street
Hattiesburg, MS 39401
(601) 582-5551

Indexing Instruction: Index under part
SW $\frac{1}{4}$ of NE $\frac{1}{4}$, part N $\frac{1}{2}$ of SE $\frac{1}{4}$ and part
S $\frac{1}{2}$ of SE $\frac{1}{4}$ Section 35, Township 5 North,
Range 14 West and part S $\frac{1}{2}$ of NW $\frac{1}{4}$, part
NW $\frac{1}{4}$ of SW $\frac{1}{4}$, and part SW $\frac{1}{4}$ of SW $\frac{1}{4}$
Section 36, Township 5 North, Range 14
West, all in Forrest County, Mississippi.

Grantor:

The University of Southern Mississippi
118 College Drive, Box 5079
Hattiesburg, MS 39406-5079
(601)266-4466

Grantee:

The City of Hattiesburg, Mississippi
200 Forrest Street
Hattiesburg, MS 39401
(601)545-4540

DEED FOR STREET PURPOSES

FOR AND IN CONSIDERATION of the sum of Ten Dollars (\$10.00), cash in hand paid,
and other good and valuable considerations, the receipt and sufficiency of which is hereby
acknowledged, the undersigned Grantor:

THE UNIVERSITY OF SOUTHERN MISSISSIPPI
118 College Drive, Box 5079
Hattiesburg, MS 39406-5079
(601)266-4466

which was originally and formerly known as Mississippi Normal College, prior to name changes to State Teachers College, Mississippi Southern College, and then its current name as reflected above, does hereby grant, sell, transfer, establish, convey and quitclaim unto the Grantee:

THE CITY OF HATTIESBURG, MISSISSIPPI

200 Forrest Street
Hattiesburg, MS 39401
(601)545-4540

the below described parcels of real property upon which have been constructed roadways more commonly known as Shelby Thames Boulevard, a portion of Classic Drive, a portion of West Hills Drive, a portion of Beverly Hills Drive and a portion of Everglades and appurtenances related thereto, either constructed or to be constructed, and to be dedicated and used as public streets, associated right-of-way, and related appurtenances, including, but not limited to, multi-use pathways and/or sidewalks, upon formal acceptance by appropriate action of the City Council and Mayor of The City of Hattiesburg, Mississippi.

The legal description of the real property comprising the subject of this deed is as follows:

See attached Exhibit A, incorporated herein for all purposes as if recited verbatim herein.

However, should at any time any of the above-described parcels of real property cease or fail to be used for public streets, associated rights-of-way, and related appurtenances, including, but not limited to, multi-use pathways and/or sidewalks, fee simple title to such parcel or parcels of real property shall automatically revert to Grantor.

The authority of the Grantor and its undersigned officer to enter into and execute this Deed for Street Purposes was granted by appropriate action of The Board of Trustees of State Institutions of Higher Learning of the State of Mississippi acting for and on behalf of The University of Southern Mississippi, in a meeting duly assembled and held on September 15, 2022.

IN WITNESS WHEREOF, the Grantor has executed this instrument as of the 8th day of NOVEMBER, 2022.

Grantor:

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

By:


Joseph S. Paul, Ph.D., President

STATE OF MISSISSIPPI
COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for the said County and State, on this the 8th day of November, 2022, within my jurisdiction, the within named Joseph S. Paul, Ph.D., who acknowledged to me that he is the President of The University of Southern Mississippi, a Mississippi institution of higher learning, and that for and on behalf of said university, and as its act and deed, he executed the above and foregoing instrument after first being duly authorized by The Board of Trustees of State Institutions of Higher Learning of the State of Mississippi to do so.


Notary Public, State of Mississippi

My Commission Expires:

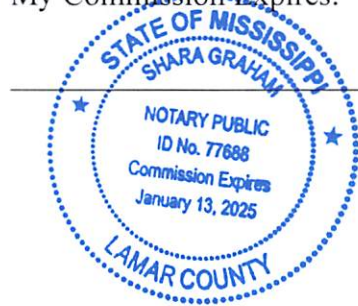


EXHIBIT A

Legal Description

PARCEL CLASSIC – Proposed Right of Way of Classic Drive

A part of the Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, and a part of the North $\frac{1}{2}$ of the Southeast $\frac{1}{4}$, all in Section 35, Township 5 North, Range 14 West, and a part of the South $\frac{1}{2}$ of the Northwest $\frac{1}{4}$, and a part of the Northwest $\frac{1}{4}$ of the Southwest $\frac{1}{4}$, all in Section 36, Township 5 North, Range 14 West, all lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997471 and a convergence angle of (minus) $-0^{\circ}16'51.82''$ at the Southwest Corner of said Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, Section 35:

- **Beginning** at a 2 Inch Round Iron Pin representing said Southwest Corner of the Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, and having a Grid Value of **N 674,664.58 feet** and **E 815,637.05 feet** on said East Zone Grid;
- thence run $N00^{\circ}11'41''E$ along the West Line of said Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$ for 91.11 feet to a 5/8 Inch Rebar,
- thence run $N89^{\circ}14'10''E$ for 79.03 feet to a 5/8 Inch Rebar,
- continue $N89^{\circ}14'10''E$ along said Proposed North Right of Way Line for 50.00 feet to a Concrete Monument having a Grid Value of **N 674,757.41 feet** and **E 815,766.37 feet** on said East Zone Grid,
- thence run Southeasterly along an Arc to the Right for 334.11 feet to a Concrete Monument, said Arc having a Radius of 2,109.12 feet, a Chord Bearing of $S85^{\circ}30'11''E$ and a Chord Distance of 333.76 feet,
- thence run $S81^{\circ}01'22''E$ for 567.36 feet to a Concrete Monument,
- thence run $S80^{\circ}56'11''E$ for 434.35 feet to a Concrete Monument,
- thence run Northeasterly along an Arc to the Left for 2,444.87 feet to a Concrete Monument, said Arc having a Radius of 3,381.10 feet, a Chord Bearing of $N78^{\circ}19'27''E$ and a Chord Distance of 2,391.95 feet,
- thence run $N56^{\circ}54'22''E$ for 80.44 feet to a Concrete Monument,

- thence run Northeasterly along an Arc to the Right for 1,405.57 feet to a Concrete Monument, said Arc having a Radius of 1,695.24 feet, a Chord Bearing of N80°25'08"E and a Chord Distance of 1,365.66 feet,
- thence run S76°05'21"E for 117.81 feet to a 5/8 Inch Rebar representing a Point on the East Line of the Southeast ¼ of said Northwest ¼, Section 36 and having a Grid Value of **N 675,301.25 feet** and **E 820,959.25 feet** on said East Zone Grid,
- thence run S00°16'14"W along said East Line of the Southeast ¼ of the Northwest ¼ for 134.38 feet,
- thence run N80°48'57"W for 529.67 feet to a 5/8 Inch Rebar,
- thence run Southwesterly along an Arc to the Left for 909.97 feet to a 5/8 Inch Rebar, said Arc having a Radius of 1,562.02 feet, a Chord Bearing of S73°31'37"W and a Chord Distance of 897.16 feet,
- thence run S56°50'16"W for 3.58 feet to a 5/8 Inch Rebar,
- thence run S57°00'49"W for 79.86 feet to a 5/8 Inch Rebar,
- thence run S58°29'05"W for 331.35 feet to a 5/8 Inch Rebar,
- thence run S67°14'28"W for 245.74 feet to a 5/8 Inch Rebar,
- thence run Westerly along an Arc to the Right for 1,968.42 feet to a 5/8 Inch Rebar, said Arc having a Radius of 3,512.75 feet, a Chord Bearing of S82°57'50"W and a Chord Distance of 1,942.77 feet,
- thence run N80°58'59"W for 1,001.75 feet to a 5/8 Inch Rebar,
- thence run Northwesterly along an Arc to the Left for 298.28 feet to a 5/8 Inch Rebar, said Arc having a Radius of 1,947.20 feet, a Chord Bearing of N85°22'17"W and a Chord Distance of 297.99 feet,
- thence run N75°56'58"W for 82.83 feet to a Concrete Monument,
- thence run S89°12'16"W for 64.38 feet to a 5/8 Inch Rebar representing a Point on the West Line of said Northwest ¼ of the Southeast ¼, Section 35,
- thence run N00°07'54"W along said West Line of the Northwest ¼ of the Southeast ¼ for 19.00 feet to the **Point of Beginning**,
- comprising **16.63 Acres**, more or less.

PARCEL ROW1 – Proposed Right of Way of Beverly Hills Drive

A part of the Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997471 and a convergence angle of (minus) $-0^{\circ}16'51.82''$ at the Southwest Corner of said Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, Section 35:

- **Commencing** at a 2 Inch Round Iron Pin representing said Southwest Corner of the Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, and having a Grid Value of **N 674,664.58 feet** and **E 815,637.05 feet** on said East Zone Grid;
- thence run $N00^{\circ}11'41''E$ along the West Line of said Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$ for 91.11 feet to a 5/8 Inch Rebar representing its Intersection with the Proposed Northern Right of Way Line of Classic Drive, a public roadway,
- thence run $N89^{\circ}14'10''E$ along said Proposed North Right of Way Line for 79.03 feet to a 5/8 Inch Rebar representing the **Point of Beginning** and having a Grid Value of **N 674,756.74 feet** and **E 815,716.38 feet** on said East Zone Grid;
- thence run $N00^{\circ}12'04''W$ for 92.15 feet to a Concrete Monument,
- thence run Northerly along an Arc to the Left for 958.65 feet to a 5/8 Inch Rebar, said Arc having a Radius of 6,665.66 feet, a Chord Bearing of $N04^{\circ}14'21''W$ and a Chord Distance of 957.82 feet,
- thence run $N08^{\circ}03'14''W$ for 30.20 feet to a 5/8 Inch Rebar representing a Point on said West Line and having a Grid Value of **N 675,834.00 feet** and **E 815,641.02 feet** on said East Zone Grid,
- thence run $N00^{\circ}11'41''E$ along said West Line for 151.35 feet to a Mag Nail in Pavement representing the Northwest Corner of said Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$,
- thence run $N89^{\circ}58'14''E$ along the North Line of said Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$ for 28.57 feet to a 5/8 Inch Rebar,
- thence run $S08^{\circ}03'14''E$ for 175.79 feet to a Concrete Monument,

- thence run Southerly along an Arc to the Right for 965.65 feet to a Concrete Monument, said Arc having a Radius of 6,802.18 feet, a Chord Bearing of S04°13'54"E and a Chord Distance of 964.84 feet,
- thence run S00°16'43"E for 91.69 feet to a Concrete Monument representing a Point on said Proposed North Right of Way Line,
- thence run S89°14'10"W along said Proposed North Right of Way Line for 50.00 feet to the **Point of Beginning**, comprising **1.37 Acres**, more or less.

RIGHT OF WAY PARCEL ROW1 – Existing Shelby Thames Drive & Everglades

A part of the South ½ of the Southeast ¼, and a part of the Northwest ¼ of the Southeast ¼, all in Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) - 0°16'51.59" at the Southwest Corner of the Southwest ¼ of said Southeast ¼:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest ¼ of the Southeast ¼, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid,
- thence run S89°05'03"E along the South Line of said Southwest ¼ of the Southeast ¼ for 134.94 feet to a 5/8 Inch Rebar;
- thence run Northeasterly along an Arc to the Left for 385.54 feet to a Concrete Monument representing the **Point of Beginning** having a Grid Value of **N 672,089.06 feet** and **E 816,140.31 feet** on said East Zone Grid, said Arc having a Radius of 1,020.05 feet, a Chord Bearing of N80°22'05"E and a Chord Distance of 383.26 feet;
- thence run N20°35'35"W for 110.72 feet to a 5/8 Inch Rebar,
- thence run Northeasterly along an Arc to the Left for 192.31 feet to a 5/8 Inch Rebar, said Arc having a Radius of 926.87 feet, a Chord Bearing of N63°45'04"E and a Chord Distance of 191.97 feet,
- thence run N57°48'26"E for 41.34 feet to a 5/8 Inch Rebar,

- thence run Northeasterly along an Arc to the Right for 466.51 feet to a Concrete Monument having a Grid Value of **N 672,515.66 feet** and **E 816,721.45 feet** on said East Zone Grid, said Arc having a Radius of 2,920.03 feet, a Chord Bearing of N62°23'02"E and a Chord Distance of 466.02 feet,
- thence run N22°20'41"W for 39.34 feet to a 5/8 Inch Rebar,
- thence run Northerly along an Arc to the Right for 315.62 feet to a 5/8 Inch Rebar, said Arc having a Radius of 939.69 feet, a Chord Bearing of N12°43'22"W and a Chord Distance of 314.13 feet,
- thence run S86°53'56"W for 35.00 feet to a 5/8 Inch Rebar,
- thence run N01°37'54"W for 50.00 feet to a 5/8 Inch Rebar,
- thence run N89°50'16"E for 35.00 feet to a 5/8 Inch Rebar,
- thence run Northerly along an Arc to the Right for 50.94 feet to a 5/8 Inch Rebar, said Arc having a Radius of 939.69 feet, a Chord Bearing of N01°23'30"E and a Chord Distance of 50.93 feet,
- thence run Northwesterly along an Arc to the Left for 1,264.59 feet to a Concrete Monument, said Arc having a Radius of 1,083.11 feet, a Chord Bearing of N30°26'59"W and a Chord Distance of 1,193.98 feet,
- thence run Northwesterly along an Arc to the Right for 654.32 feet to a Concrete Monument, said Arc having a Radius of 591.75 feet, a Chord Bearing of N32°02'49"W and a Chord Distance of 621.49 feet,
- thence run N00°22'11"W for 132.84 feet to a Concrete Monument representing its Intersection with the Proposed South Right of Way Line of Classic Drive, a public roadway,
- thence run S75°56'58"E along said Proposed South Right of Way Line for 82.83 feet to a 5/8 Inch Rebar having a Grid Value of **N 674,626.37 feet** and **E 815,781.82 feet** on said East Zone Grid,
- thence run S00°18'42"E for 111.83 feet to a Concrete Monument,
- thence run Southeasterly along an Arc to the Left for 566.76 feet to a Concrete Monument, said Arc having a Radius of 514.50 feet, a Chord Bearing of S31°52'10"E and a Chord Distance of 538.53 feet,

- thence run Southeasterly along an Arc to the Right for 831.07 feet to a Concrete Monument, said Arc having a Radius of 1,156.79 feet, a Chord Bearing of S43°29'34"E and a Chord Distance of 813.31 feet,
- thence run Southeasterly along an Arc to the Right for 526.47 feet to a 5/8 Inch Rebar, said Arc having a Radius of 1,169.99 feet, a Chord Bearing of S10°02'24"E and a Chord Distance of 522.04 feet,
- thence run Southerly along an Arc to the Left for 73.55 feet to a 5/8 Inch Rebar, said Arc having a Radius of 859.44 feet, a Chord Bearing of S00°25'33"W and a Chord Distance of 73.53 feet,
- thence run N87°58'27"E for 35.00 feet to a 5/8 Inch Rebar,
- thence run S03°45'48"E for 50.00 feet to a 5/8 Inch Rebar,
- thence run S84°29'57"W for 35.00 feet to a 5/8 Inch Rebar,
- thence run Southerly along an Arc to the Left for 253.66 feet to a Concrete Monument, said Arc having a Radius of 859.44 feet, a Chord Bearing of S13°57'23"E and a Chord Distance of 252.74 feet,
- thence run S21°55'28"E for 39.33 feet to a Concrete Monument having a Grid Value of **N 672,545.82 feet** and **E 816,796.06 feet** on said East Zone Grid,
- thence run Northeasterly along an Arc to the Right for 222.40 feet to a 5/8 Inch Rebar, said Arc having a Radius of 2,919.70 feet, a Chord Bearing of N70°43'20"E and a Chord Distance of 222.34 feet,
- thence run S17°05'44"E for 109.98 feet to a 5/8 Inch Rebar,
- thence run Southwesterly along an Arc to the Left for 700.53 feet to a 5/8 Inch Rebar having a Grid Value of **N 672,227.25 feet** and **E 816,401.14 feet** on said East Zone Grid, said Arc having a Radius of 2,809.71 feet, a Chord Bearing of S65°45'42"W and a Chord Distance of 698.71 feet,
- thence run S31°47'28"E for 107.65 feet to a Concrete Monument,
- thence run Southeasterly along an Arc to the Right for 133.37 feet to a 5/8 Inch Rebar representing a Point on the South Line of said Southwest ¼ of the Southeast ¼, Section 35, and having a Grid Value of **N 672,013.01 feet** and **E 816,508.49 feet** on said East Zone Grid, said Arc having a Radius of 407.55 feet, a Chord Bearing of S22°24'59"E and a Chord Distance of 132.77 feet,

- thence run N89°05'03"W along said South Line for 86.79 feet to a 5/8 Inch Rebar,
- thence run Northwesterly along an Arc to the Left for 90.22 feet to a Concrete Monument, said Arc having a Radius of 263.60 feet, a Chord Bearing of N21°59'11"W and a Chord Distance of 89.78 feet,
- thence run N31°47'28"W for 103.46 feet to a Concrete Monument and having a Grid Value of **N 672,185.60 feet** and **E 816,333.58 feet** on said East Zone Grid,
- thence run Southwesterly along an Arc to the Right for 216.45 feet to the **Point of Beginning**, said Arc having a Radius of 1,020.05 feet, a Chord Bearing of S63°27'41"W and a Chord Distance of 216.04 feet,
- comprising **7.55 Acres**, more or less.

RIGHT OF WAY PARCEL ROW4 – Existing West Hills Drive

A part of the Southwest ¼ of the Southwest ¼, Section 36, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997554 and a convergence angle of (minus) -0°16'27.59" at the Southeast Corner of said Southwest ¼ of the Southwest ¼:

- **Beginning** at a ¾ Inch Round Iron Pin representing said Southeast Corner of the Southwest ¼ of the Southwest ¼, and having a Grid Value of **N 671,988.84 feet** and **E 819,627.16 feet** on said East Zone Grid;
- thence run N89°28'53"W along the South Line of said Southwest ¼ of the Southwest ¼ for 55.00 feet to a 5/8 Inch Rebar having a Grid Value of **N 671,989.34 feet** and **E 819,572.15 feet** on said East Zone Grid,
- thence run N00°08'15"W and parallel to the East Line of said Southwest ¼ of the Southwest ¼ for 109.99 feet to a 5/8 Inch Rebar,
- thence continue N00°08'15"W and parallel to said East Line for 459.28 feet to a 5/8 Inch Rebar,
- thence run N89°51'45"E for 55.00 feet to a 5/8 Inch Rebar representing a Point on said East Line and having a Grid Value of **N 672,558.74 feet** and **E 819,625.79 feet** on said East Zone Grid,

- thence run S00°08'15"E along said East Line for 569.91 feet to the **Point of Beginning**,
- comprising **0.72 Acres**, more or less.



DEED

Bk:1408 Page:384-401

RCD: 11/09/2022 @11:23:01:AM

FORREST COUNTY, MS

LANCE C. REID CHANCERY CLERK

Prepared By and Return to:

Joe D. Stevens (MBN 9039)
Wise Carter Child & Caraway, P.A.
601 Adeline Street
Hattiesburg, MS 39401
(601) 582-5551

Indexing Instruction: Index under part W ½ of SE ¼, part N ½ of SE ¼, and part SW ¼ of NE ¼ Section 35, Township 5 North, Range 14 West and part N ½ of SW ¼ and part S ½ of NW ¼ Section 36, Township 5 North, Range 14 West, Forrest County, Mississippi.

Grantor:

The University of Southern Mississippi
118 College Drive, Box 5079
Hattiesburg, MS 39406-5079
(601)266-4466

Grantee:

The City of Hattiesburg, Mississippi
200 Forrest Street
Hattiesburg, MS 39401
(601)545-4540

UTILITY EASEMENT

FOR AND IN CONSIDERATION of the sum of Ten Dollars (\$10.00), cash in hand paid, and other good and valuable considerations, the receipt and sufficiency of which is hereby acknowledged, the undersigned Grantor:

THE UNIVERSITY OF SOUTHERN MISSISSIPPI
118 College Drive, Box 5079
Hattiesburg, MS 39406-5079
(601)266-4466

which was originally and formerly known as Mississippi Normal College, prior to name changes to State Teachers College, Mississippi Southern College, and then its current name as reflected above, does hereby grant, sell, transfer, establish, and convey unto the Grantee:

THE CITY OF HATTIESBURG, MISSISSIPPI
200 Forrest Street
Hattiesburg, MS 39401
(601)545-4540

an easement in, on, along, over, across, though or underneath the below described parcels of real property for utility purposes with regard to existing "as-built" utilities or for the construction of proposed underground utilities and in both instances ongoing maintenance of such utilities in, on, along, over, across, through or underneath the below described real property.

The Grantor does also grant unto the Grantee the right to take such reasonable action as is necessary to enjoy the easement rights granted herein, including the right of ingress and egress to access and repair/replace the utilities located or to be located within the Utility Easement and to maintain the surface of the easement area clear of impediments.

The utility easement granted hereby is irrevocable, perpetual and nonexclusive.

The legal description of the real property comprising the subject of this Utility Easement is as follows:

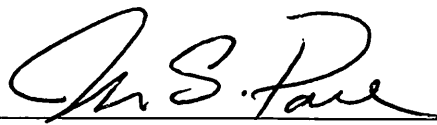
See attached Exhibit A, incorporated herein for all purposes as if recited verbatim herein.

The authority of the Grantor and its undersigned officer to enter into and execute this Utility Easement was granted by appropriate action of The Board of Trustees of The Institutions of Higher Learning of the State of Mississippi acting for and on behalf of The University of Southern Mississippi, in a meeting duly assembled and held on September 15, 2022.

IN WITNESS WHEREOF, the Grantor has executed this instrument as of the 8th day of NOVEMBER, 2022.

Grantor:

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

By: 
Joseph S. Paul, Ph.D., President

STATE OF MISSISSIPPI
COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for the said County and State, on this the 08 day of November, 2022, within my jurisdiction, the within named Joseph S. Paul, Ph.D., who acknowledged to me that he is the President of The University of Southern Mississippi, a Mississippi institution of higher learning, and that for and on behalf of said university, and as its act and deed, he executed the above and foregoing instrument after first being duly authorized by the Board of Trustees of The Institutions of Higher Learning of the State of Mississippi to do so.



Notary Public, State of Mississippi

My Commission Expires



EXHIBIT A

Legal Description

EASEMENT E1 – 10 Foot Utility Easement on the East Side of Everglades

A part of the Southwest ¼ of the Southeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) -0°16'51.59" at the Southwest Corner of said Southwest ¼ of the Southeast ¼, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest ¼ of the Southeast ¼, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run S89°05'03"E along the South Line of said Southwest ¼ of the Southeast ¼ for 881.07 feet to a 5/8 Inch Rebar representing its Intersection with the Proposed Eastern Right of Way Line of Everglades, a public roadway, and the **Point of Beginning**, said Intersection having a Grid Value of **N 672,013.01 feet** and **E 816,508.49 feet** on said East Zone Grid;
- thence run Northwesterly along said Proposed Eastern Right of Way Line and an Arc to the Left for 133.37 feet to a Concrete Monument, said Arc having a Radius of 407.55 feet, a Chord Bearing of N22°24'59"W and a Chord Distance of 132.77 feet,
- thence run N31°47'28"W along said Proposed Eastern Right of Way Line for 107.65 feet to a 5/8 Inch Rebar representing its Intersection with the Proposed Southern Right of Way Line of a Proposed unnamed public roadway, said Intersection having a Grid Value of **N 672,227.25 feet** and **E 816,401.14 feet** on said East Zone Grid,
- thence run N58°43'16"E along said Proposed Southern Right of Way Line for 10.00 feet to a ½ Inch Rebar,
- thence run S31°47'28"E and parallel to said Proposed Eastern Right of Way Line for 107.56 feet to a ½ Inch Rebar,

- thence run Southeasterly along an Arc to the Right and parallel to said Proposed Eastern Right of Way Line for 139.12 feet to ½ Inch Rebar representing a Point on said South Line, said Arc having a Radius of 417.55 feet, a Chord Bearing of S22°14'45"E and a Chord Distance of 138.48 feet,
- thence run N89°05'03"W along said South Line for 10.30 feet to the **Point of Beginning**,
- comprising **0.06 Acres (2,439 Square Feet)**, more or less.

EASEMENT E2 – 10 Foot Utility Easement on the North Side of the Proposed Southern Road and the West Side of Shelby Thames Drive

A part of the Southwest ¼ of the Southeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) -0°16'51.59" at the Southwest Corner of said Southwest ¼ of the Southeast ¼, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest ¼ of the Southeast ¼, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run East for 1,093.92 feet,
- thence run North for 488.56 feet to a Concrete Monument representing the Proposed Western Right of Way Line of Shelby Thames Drive, a public roadway, and Proposed Northern Right of Way Line of an unnamed Proposed Roadway and the **Point of Beginning**, said Intersection, having a Grid Value of **N 672,515.66 feet** and **E 816,721.45 feet** on said East Zone Grid;
- thence run Southwesterly along said Proposed Northern Right of Way Line and an Arc to the Left for 466.51 feet to a 5/8 Inch Rebar, said Arc having a Radius of 2,920.03 feet, a Chord Bearing of S62°23'02"W and a Chord Distance of 466.02 feet,
- thence run S57°48'26"W along said Proposed Northern Right of Way Line for 41.34 feet to a 5/8 Inch Rebar,

- thence run N32°11'34"W for 10.00 feet to a ½ Inch Rebar having a Grid Value of **N 672,286.07 feet and E 816,268.21 feet** on said East Zone Grid,
- thence run N57°48'26"E and parallel to said Proposed Northern Right of Way Line for 41.34 feet to a ½ Inch Rebar,
- thence run Northeasterly along an Arc to the Right and parallel to said Proposed Northern Right of Way Line for 458.23 feet to a ½ Inch Rebar, said Arc having a Radius of 2,930.03 feet, a Chord Bearing of N62°17'15"E and a Chord Distance of 457.76 feet,
- thence run N22°20'41"W and parallel to said Proposed Western Right of Way Line for 29.47 feet to a ½ Inch Rebar,
- thence run Northerly along an Arc to the Right for 318.97 feet to a ½ Inch Rebar representing a Point on said Proposed Western Right of Way Line, said Arc having a Radius of 949.71 feet, a Chord Bearing of N12°43'21"W and a Chord Distance of 317.48 feet,
- thence run N86°53'56"E along said Proposed Western Right of Way Line for 10.00 feet to a 5/8 Inch Rebar,
- thence run Southerly along an Arc to the Left for 315.62 feet to a 5/8 Inch Rebar, said Arc having a Radius of 939.69 feet, a Chord Bearing of S12°43'22"E and a Chord Distance of 314.13 feet,
- thence run S22°20'41"E for 39.34 feet to the **Point of Beginning**,
- comprising **0.20 Acres (8,554 Square Feet)**, more or less.

EASEMENT E3 – 20 Foot Utility Easement on the West Side of Shelby Thames Drive

A part of the West ½ of the Southeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) -0°16'51.59" at the Southwest Corner of said Southwest ¼ of the Southeast ¼, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest ¼ of the Southeast ¼, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run East for 1,008.41 feet,
- thence run North for 879.55 feet to a 5/8 Inch Rebar representing a Point on the Proposed Western Right of Way Line of Shelby Thames Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 672,906.64 feet** and **E 816,635.94 feet** on said East Zone Grid;
- thence run S89°50'16"W along said Proposed Western Right of Way Line for 20.00 feet to a ½ Inch Rebar,
- thence run Northerly along an Arc to the Right and parallel to said Proposed Western Right of Way Line for 52.04 feet to a ½ Inch Rebar, said Arc having a Radius of 959.73 feet, a Chord Bearing of N01°23'30"E and a Chord Distance of 52.04 feet,
- thence run Northwesterly along an Arc to the Left and parallel to said Proposed Western Right of Way Line for 907.60 feet to a ½ Inch Rebar having a Grid Value of **N 673,777.87 feet** and **E 816,295.16 feet** on said East Zone Grid, said Arc having a Radius of 1,063.11 feet, a Chord Bearing of N21°27'33"W and a Chord Distance of 880.29 feet,
- thence run N44°08'12"E for 20.00 feet to a ½ Inch Rebar representing a Point on said Proposed Western Right of Way Line,
- thence run Southeasterly along said Proposed Western Right of Way Line and an Arc to the Right for 924.66 feet to a 5/8 Inch Rebar, said Arc having a Radius of 1,083.11 feet, a Chord Bearing of S21°27'31"E and a Chord Distance of 896.83 feet,
- thence run Southerly along an Arc to the Left for 50.94 feet to the **Point of Beginning**, said Arc having a Radius of 939.69 feet, a Chord Bearing of S01°23'30"W and a Chord Distance of 50.93 feet,
- comprising **0.44 Acres (19,352 Square Feet)**, more or less.

EASEMENT E4 – 20 Foot X 40 Foot Utility Easement on the East Side of Shelby Thames Drive

A part of the Northwest ¼ of the Southeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) -0°16'51.59" at the Southwest Corner of the Southwest ¼ of said Southeast ¼, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest ¼ of the Southeast ¼, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run East for 661.06 feet,
- thence run North for 1,889.05 feet to a ½ Inch Rebar representing a Point on the Proposed Eastern Right of Way Line of Shelby Thames Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 673,916.15 feet** and **E 816,288.59 feet** on said East Zone Grid;
- thence run Northwesterly along said Proposed Eastern Right of Way Line and an Arc to the Left for 40.00 feet to a ½ Inch Rebar, said Arc having a Radius of 1,156.79 feet, a Chord Bearing N52°01'00"W and a Chord Distance of 40.00 feet,
- thence run N36°59'33"E for 20.00 feet to a ½ Inch Rebar having a Grid Value of **N 673,956.74 feet** and **E 816,269.09 feet** on said East Zone Grid,
- thence run Southeasterly along an Arc to the Right and parallel to said Proposed Eastern Right of Way Line for 40.69 feet to a ½ Inch Rebar, said Arc having a Radius of 1,176.78 feet, a Chord Bearing S52°01'01"E and a Chord Distance of 40.69 feet,
- thence run S38°58'26"W for 20.00 feet to the **Point of Beginning**,
- comprising **0.02 Acres (807 Square Feet)**, more or less.

EASEMENT E7 – 20 Foot Utility Easement running Between Shelby Thames Drive and Classic Drive

A part of the North $\frac{1}{2}$ of the Southeast $\frac{1}{4}$, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) $-0^{\circ}16'51.59''$ at the Southwest Corner of the Southwest $\frac{1}{4}$ of said Southeast $\frac{1}{4}$, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest $\frac{1}{4}$ of the Southeast $\frac{1}{4}$, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run East for 827.31 feet,
- thence run North for 1,724.05 feet to a $\frac{1}{2}$ Inch Rebar representing the Intersection of the Northwestern Right of Way Line of Dixie Pipeline and the Proposed Eastern Right of Way Line of Shelby Thames Drive, a public roadway, and the **Point of Beginning**, said Intersection having a Grid Value of **N 673,751.14 feet** and **E 816,454.84 feet** on said East Zone Grid;
- thence run Northwesterly along said Proposed Eastern Right of Way Line and an Arc to the Left for 10.05 feet to a $\frac{1}{2}$ Inch Rebar, said Arc having a Radius of 1,156.79 feet, a Chord Bearing $N39^{\circ}39'12''W$ and a Chord Distance of 10.05 feet,
- thence run $N45^{\circ}03'21''E$ and parallel to said Northwestern Right of Way Line for 641.63 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run $N85^{\circ}21'59''E$ for 343.59 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run $N05^{\circ}39'07''E$ for 180.98 feet to a $\frac{1}{2}$ Inch Rebar to a Point on the Proposed South Right of Way Line of Classic Drive, a public roadway, and having a Grid Value of **N 674,419.98 feet** and **E 817,262.85 feet** on said East Zone Grid,
- thence run Easterly along said Proposed South Right of Way Line and an Arc to the Left for 20.00 feet to a $\frac{1}{2}$ Inch Rebar, said Arc having a Radius of 3,512.75 feet, a Chord Bearing $S84^{\circ}20'53''E$ and a Chord Distance of 20.00 feet,
- thence run $S05^{\circ}39'07''W$ for 197.68 feet a $\frac{1}{2}$ Inch Rebar,
- thence run $S85^{\circ}21'59''W$ for 352.94 feet to a Spike Nail, (Witness Corner: from said Spike Nail, run $N85^{\circ}21'59''E$ for 46.37 feet to a $\frac{1}{2}$ Inch Rebar),

- thence run S45°03'21"W and parallel to said Northwestern Right of Way Line for 636.23 feet to a Spike Nail representing a Point on said Proposed Eastern Right of Way Line,
- thence run Northwesterly along said Proposed Eastern Right of Way Line and an Arc to the Left for 10.05 feet to the **Point of Beginning**, said Arc having a Radius of 1,156.79 feet, a Chord Bearing N39°09'20"W and a Chord Distance of 10.05 feet,
- comprising **0.54 Acres (23,532 Square Feet)**, more or less.

EASEMENT E9 – 20 Foot and varies Utility Easement on the South side of Classic Drive

A part of the Northeast ¼ of the Southeast ¼, Section 35, Township 5 North, Range 14 West and a part of the Northwest ¼ of the Southwest ¼, Section 36, Township 5 North, Range 14 West, all lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) -0°16'51.59" at the Southwest Corner of the Southwest ¼ of said Southeast ¼, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest ¼ of the Southeast ¼, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run East for 2,437.42 feet,
- thence run North for 2,403.27 feet to a ½ Inch Rebar representing a Point on the Proposed South Right of Way Line of Classic Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 674,430.36 feet** and **E 818,064.95 feet** on said East Zone Grid;
- thence run Easterly along said Proposed South Right of Way Line and an Arc to the Left for 20.06 feet to a ½ Inch Rebar, said Arc having a Radius of 3,512.75 feet, a Chord Bearing N82°32'20"E and a Chord Distance of 20.06 feet,
- thence run S11°47'41"E for 690.07 feet to a ½ Inch Rebar,
- thence run N73°39'51"E for 2.25 feet to a ½ Inch Rebar,
- thence run S16°20'09"E for 7.85 feet to a ½ Inch Rebar,

- thence run N62°54'31"E for 386.04 feet to a ½ Inch Rebar,
- thence run N70°07'14"E for 410.67 feet to a ½ Inch Rebar,
- thence run S19°52'46"E for 20.00 feet to a ½ Inch Rebar,
- thence run S70°07'14"W for 409.41 feet to a ½ Inch Rebar,
- thence run S62°54'31"W for 388.57 feet to a ½ Inch Rebar,
- thence run S16°20'09"E for 1.79 feet to a ½ Inch Rebar having a Grid Value of **N 673,729.31 feet and E 818,236.48 feet** on said East Zone Grid,
- thence run S73°39'51"W for 25.00 feet to a ½ Inch Rebar,
- thence run N16°20'09"W for 4.26 feet to a ½ Inch Rebar,
- thence run S84°19'47"W for 248.46 feet to a ½ Inch Rebar,
- thence run N05°40'13"W for 20.00 feet to a ½ Inch Rebar,
- thence run N84°19'47"E for 244.70 feet to a ½ Inch Rebar,
- thence run N16°20'09"W for 5.39 feet to a ½ Inch Rebar,
- thence run N73°39'51"E for 2.69 feet to a ½ Inch Rebar,
- thence run N11°47'41"W for 693.17 feet to the **Point of Beginning**,
- comprising **0.81 Acres (35,461 Square Feet)**, more or less.

EASEMENT E10 – 20 Foot Utility Easement on the East Side of Shelby Thames Drive

A part of the West ½ of the Southeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) -0°16'51.59" at the Southwest Corner of said Southwest ¼ of the Southeast ¼, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest ¼ of the Southeast ¼, and having a Grid Value of **N 672,027.09 feet and E 815,627.53 feet** on said East Zone Grid;
- thence run East for 1,052.26 feet,
- thence run North for 1,284.54 feet to a ½ Inch Rebar representing a Point on the Proposed Eastern Right of Way Line of Shelby Thames Drive, a public roadway,

and the **Point of Beginning**, said Point having a Grid Value of **N 673,311.63 feet** and **E 816,679.79 feet** on said East Zone Grid;

- thence run N81°22'33"E for 202.45 feet to a ½ Inch Rebar,
- thence run S08°37'27"E for 20.00 feet to a ½ Inch Rebar having a Grid Value of **N 673,322.22 feet** and **E 816,882.95 feet** on said East Zone Grid,
- thence run S81°22'33"W for 200.44 feet to a ½ Inch Rebar representing a Point on said Proposed Eastern Right of Way Line,
- thence run Northwesterly along said Proposed Eastern Right of Way Line and an Arc to the Left for 20.10 feet to the **Point of Beginning**, said Arc having a Radius of 1,169.99 feet, a Chord Bearing N14°22'53"W and a Chord Distance of 20.10 feet,
- comprising **0.09 Acres (4,028 Square Feet)**, more or less.

EASEMENT E11 – 10 Foot Wide Utility Easement along the North Side of Classic Drive, East of the Proposed North Access Road

A part of the South ½ of the Northwest ¼, Section 36, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997484 and a convergence angle of (minus) -0°16'20.00" at the Northeast Corner of the Southeast ¼ of said Northwest ¼, Section 36:

- **Commencing** at a Concrete Monument representing said Northeast Corner of the Southeast ¼ of the Northwest ¼, and having a Grid Value of **N 675,965.72 feet** and **E 820,962.39 feet** on said East Zone Grid;
- thence run S00°16'14"W along the East Line of said Southeast ¼ of the Northwest ¼ for 664.48 feet to a 5/8 Inch Rebar representing its Intersection with the Proposed Northern Right of Way Line of Classic Drive, a public roadway, and the **Point of Beginning**, said Intersection having a Grid Value of **N 675,301.25 feet** and **E 820,959.25 feet** on said East Zone Grid;
- thence run N76°05'21"W along said Proposed Northern Right of Way Line for 117.81 feet to a Concrete Monument,

- thence run Southwesterly along an Arc to the Left and said Proposed Northern Right of Way Line for 1,405.57 feet to a Concrete Monument representing its Intersection with the Proposed Eastern Right of Way Line of the Proposed North Access Road, an undeveloped public roadway, and having a Grid Value of **N 675,102.27 feet** and **E 819,498.28 feet** on said East Zone Grid, said Arc having a Radius of 1,695.24 feet, a Chord Bearing of S80°25'08"W and a Chord Distance of 1,365.66 feet,
- thence run N35°01'36"W along said Proposed Eastern Right of Way Line for 10.00 feet to a ½ Inch Rebar,
- thence run Northeasterly along an Arc to the Right and parallel to said Proposed Northern Right of Way Line for 1,414.14 feet to a ½ Inch Rebar, said Arc having a Radius of 1,705.24 feet, a Chord Bearing of N80°24'49"E and a Chord Distance of 1,373.96 feet,
- thence run S76°05'21"E and parallel to said Proposed Northern Right of Way Line for 115.36 feet to a ½ Inch Rebar representing a Point on said East Line of the Southeast ¼ of the Northwest ¼,
- thence run S00°16'14"W along said East Line for 10.29 feet to the **Point of Beginning**,
- comprising **0.35 Acres (15,264 Square Feet)**, more or less.

EASEMENT E12 – 10 Foot Wide Utility Easement along the North Side of Classic Drive, between Beverly Hills Drive and the Proposed North Access Road

A part of the North ½ of the Southeast ¼ and a part of the Southwest ¼ of the Northeast ¼, all in Section 35, and a part of the Southwest ¼ of the Northwest ¼ and a part of the Northwest ¼ of the Southwest ¼, all in Section 36, all in Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997471 and a convergence angle of (minus) -0°16'51.82" at the Southwest Corner of said Southwest ¼ of the Northeast ¼, Section 35:

- **Commencing** at a 2 Inch Round Iron Pin representing said Southwest Corner of the Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, and having a Grid Value of **N 674,664.58 feet** and **E 815,637.05 feet** on said East Zone Grid;
- thence run N00°11'41"E along the West Line of said Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$ for 91.11 feet to a 5/8 Inch Rebar representing its Intersection with the Proposed North Right of Way Line of Classic Drive, a public roadway,
- thence run N89°14'10"E along said Proposed North Right of Way Line for 79.03 feet to a 5/8 Inch Rebar representing its Intersection with the Proposed Western Right of Way Line of Beverly Hills Drive, a public roadway,
- thence continue N89°14'10"E along said Proposed North Right of Way Line for 50.00 feet to a Concrete Monument representing its Intersection with the Proposed Eastern Right of Way Line of said Beverly Hills Drive and the **Point of Beginning**, said Intersection having a Grid Value of **N 674,757.41 feet** and **E 815,766.37 feet** on said East Zone Grid;
- thence run N00°16'43"W along said Proposed Eastern Right of Way Line for 10.00 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run Southeasterly along an Arc to the Right and parallel to said Proposed North Right of Way Line for 335.73 feet to a $\frac{1}{2}$ Inch Rebar, said Arc having a Radius of 2,119.12 feet, a Chord Bearing of S85°30'14"E and a Chord Distance of 335.38 feet,
- thence run S81°01'22"E and parallel to said Proposed North Right of Way Line for 567.36 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run S80°56'11"E and parallel to said Proposed North Right of Way Line for 434.36 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run Northeasterly along an Arc to the Left and parallel to said Proposed North Right of Way Line for 2,437.18 feet to a $\frac{1}{2}$ Inch Rebar representing a Point on the Proposed Western Right of Way Line of the Proposed North Access Road, an undeveloped public roadway, said Arc having a Radius of 3,371.10 feet, a Chord Bearing of N78°19'41"E and a Chord Distance of 2,384.45 feet,
- thence run S34°58'47"E along said Proposed Western Right of Way Line for 10.01 feet to a Concrete Monument representing its Intersection with said Proposed

North Right of Way Line and having a Grid Value of **N 675,058.35 feet** and **E 819,430.90 feet** on said East Zone Grid,

- thence run Southwesterly along an Arc to the Right and said Proposed North Right of Way Line for 2,444.87 feet to a Concrete Monument, said Arc having a Radius of 3,381.10 feet, a Chord Bearing of S78°19'27"W and a Chord Distance of 2,391.95 feet,
- thence run N80°56'11"W along said Proposed North Right of Way Line for 434.35 feet to a Concrete Monument,
- thence run N81°01'22"W along said Proposed North Right of Way Line for 567.36 feet to a Concrete Monument,
- thence run Northwesterly along an Arc to the Left and said Proposed North Right of Way Line for 334.11 feet to the **Point of Beginning**, said Arc having a Radius of 2,109.12 feet, a Chord Bearing of N85°30'11"W and a Chord Distance of 333.76 feet,
- comprising **0.87 Acres (37,752 Square Feet)**, more or less.

EASEMENT E21 – 20 Foot Utility Easement on the South Side of Proposed Southern Road

A part of the Southwest ¼ of the Southeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) -0°16'51.59" at the Southwest Corner of said Southwest ¼ of the Southeast ¼:

- **Beginning** at a Concrete Monument representing said Southwest Corner of the Southwest ¼ of the Southeast ¼, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run N00°14'12"E along the West Line of said Southwest ¼ of the Southeast ¼ for 20.00 feet;
- thence run S89°05'03"E and parallel to the Proposed Southern Right of Way Line of a Proposed unnamed public roadway for 135.23 feet,

- thence run Northeasterly along an Arc to the Left and parallel to said Proposed Southern Right of Way Line for 377.99 feet to a Point on the Proposed Western Right of Way Line of an unnamed public roadway, said Arc having a Radius of 1,000.05 feet, a Chord Bearing of N80°22'15"E and a Chord Distance of 375.74 feet,
- thence run S20°35'35"E along said Proposed Western Right of Way Line for 20.00 feet to a Concrete Monument representing the Southwest Corner of said Proposed Western Right of Way Line and having a Grid Value of **N 672,089.06 feet** and **E 816,140.31 feet** on said East Zone Grid,
- thence run Southwesterly along an Arc to the Right and along said Proposed Southern Right of Way Line for 385.54 feet to a 5/8 Inch Rebar representing its Intersection with the South Line of said Southwest ¼ of the Southeast ¼, said Arc having a Radius of 1,020.05 feet, a Chord Bearing of S80°22'05"W and a Chord Distance of 383.26 feet,
- thence run N89°05'03"W along said Proposed Southern Right of Way Line and along said South Line of the Southwest ¼ of the Southeast ¼ for 134.94 feet to the **Point of Beginning**,
- comprising **0.24 Acres (10,337 Square Feet)**, more or less.

EASEMENT E22 – 20 Foot Utility Easement on the South Side of Proposed Golf Course Road and the East Side of Proposed East Access Road

A part of the Northeast ¼ of the Southwest ¼ and the South ½ of the Northwest ¼ of Section 36, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997432 and a convergence angle of (minus) -0°16'19.80" at the Southeast Corner of said Northeast ¼ of the Southwest ¼:

- **Commencing** at a Concrete Monument representing said Southeast Corner of the Northeast ¼ of the Southwest ¼ and having a Grid Value of **N 673,309.57 feet** and **E 820,949.84 feet** on said East Zone Grid;
- thence run N00°16'14"E along the East Line of said Northeast ¼ of the Southwest ¼ for 123.25 feet to a ¾ Inch Crimp Top Pin representing its Intersection with the

Existing and Proposed Northern Right of Way Line of Proposed Golf Course Road, an existing and proposed public roadway, and the **Point of Beginning**, said Intersection having a Grid Value of **N 673,432.82 feet** and **E 820,950.42 feet** on said East Zone Grid;

- thence run S00°16'14"W along said East Line for 20.42 feet,
- thence run S78°38'33"W and parallel to said Proposed Northern Right of Way Line for 265.50 feet,
- thence run Northwesterly along an Arc to the Right and parallel to said Proposed Northern Right of Way Line for 563.30 feet, said Arc having a Radius of 567.94 feet, a Chord Bearing of N72°56'37"W and a Chord Distance of 540.50 feet,
- thence run N44°31'47"W and parallel to said Proposed Northern Right of Way Line and its Northwesterly extension for 209.31 feet,
- thence run Northerly along an Arc to the Left and parallel to the Proposed Eastern Right of Way Line a Proposed unnamed roadway and its Southwesterly extension for 1,032.40 feet, said Arc having a Radius of 589.98 feet, a Chord Bearing of N05°08'43"W and a Chord Distance of 905.63 feet,
- thence run Northwesterly along an Arc to the Right and parallel to said Proposed Eastern Right of Way Line for 468.55 feet, said Arc having a Radius of 1,319.96 feet, a Chord Bearing of N45°06'23"W and a Chord Distance of 466.09 feet,
- thence run N34°52'34"W and parallel to said Proposed Eastern Right of Way Line for 104.03 feet to a Point on the Proposed Southern Right of Way Line of Classic Drive, a public roadway,
- thence run N57°00'49"E along said Proposed Southern Right of Way Line for 20.01 feet to a 5/8 Inch Rebar representing the Intersection of said Proposed Southern Right of Way Line and said Proposed Eastern Right of Way Line, said Intersection having a Grid Value of **N 674,995.05 feet** and **E 819,572.41 feet** on said East Zone Grid,
- thence run S34°52'34"E along said Proposed Eastern Right of Way Line for 103.36 feet to a 5/8 Inch Rebar,
- thence run Southeasterly along an Arc to the Left and along said Proposed Eastern Right of Way Line for 461.44 feet to a 5/8 Inch Rebar, said Arc having a Radius of

1,299.96 feet, a Chord Bearing of S45°06'24"E and a Chord Distance of 459.02 feet,

- thence run Southerly along an Arc to the Right and along said Proposed Eastern Right of Way Line for 1,047.56 feet to a 5/8 Inch Rebar representing its intersection with said Proposed Northern Right of Way Line of Golf Course Road, said Arc having a Radius of 609.98 feet, a Chord Bearing of S06°04'37"E and a Chord Distance of 923.49 feet,
- thence run S44°31'47"E along said Proposed Northern Right of Way Line for 189.80 feet to a 5/8 Inch Rebar,
- thence run Southeasterly along an Arc to the Left and along said Proposed Northern Right of Way Line for 543.47 feet to a 5/8 Inch Rebar, said Arc having a Radius of 547.94 feet, a Chord Bearing of S72°56'37"E and a Chord Distance of 521.46 feet,
- thence run N78°38'33"E along said Proposed Northern Right of Way Line for 269.62 feet to the **Point of Beginning**,
- comprising **1.21 Acres (52,582 Square Feet)**, more or less.
- 4879-8388-9453, v. 1



DEED

Bk:1408 Page:371-383

RCD: 11/09/2022 @11:21:17:AM

FORREST COUNTY, MS

LANCE C. REID CHANCERY CLERK

Prepared By and Return to:

Joe D. Stevens (MBN 9039)
Wise Carter Child & Caraway, P.A.
601 Adeline Street
Hattiesburg, MS 39401
(601) 582-5551

Indexing Instructions: Index under part
NW ¼ of SE ¼, part NE ¼ of SE ¼, and
part SW ¼ of NE ¼ Section 35, Township
5 North, Range 14 West and part SE ¼ of
NW ¼ and part SW ¼ of NW ¼ Section 36,
Township 5 North, Range 14 West, all in
Forrest County, Mississippi.

Grantor:

The University of Southern Mississippi
118 College Drive, Box 5079
Hattiesburg, MS 39406-5079
(601)266-4466

Grantee:

The City of Hattiesburg, Mississippi
200 Forrest Street
Hattiesburg, MS 39401
(601)545-4540

PERMANENT DRAINAGE EASEMENT

FOR AND IN CONSIDERATION of the sum of Ten Dollars (\$10.00), cash in hand paid,
and other good and valuable considerations, the receipt and sufficiency of which is hereby
acknowledged, the undersigned Grantor:

THE UNIVERSITY OF SOUTHERN MISSISSIPPI
118 College Drive, Box 5079
Hattiesburg, MS 39406-5079
(601)266-4466

which was originally and formerly known as Mississippi Normal College, prior to name changes to State Teachers College, Mississippi Southern College, and then its current name as reflected above, does hereby grant, sell, transfer, establish, and convey unto the Grantee:

THE CITY OF HATTIESBURG, MISSISSIPPI

200 Forrest Street
Hattiesburg, MS 39401
(601)545-4540

a permanent drainage easement in, on, along, through and across the below described parcels of real property upon which has been constructed or will be constructed appropriate drainage facilities.

The easement for drainage purposes granted hereby is irrevocable, perpetual and nonexclusive.

The legal description of the real property comprising the subject of this Permanent Drainage Easement is as follows:

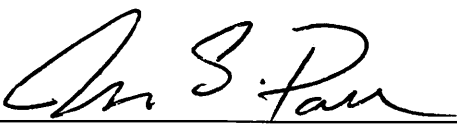
See attached Exhibit A, incorporated herein for all purposes as if recited verbatim herein.

The authority of the Grantor and its undersigned officer to enter into and execute this Permanent Drainage Easement was granted by appropriate action of The Board of Trustees of The Institutions of Higher Learning of the State of Mississippi acting for and on behalf of The University of Southern Mississippi, in a meeting duly assembled and held on September 15, 2022.

IN WITNESS WHEREOF, the Grantor has executed this instrument as of the 8th day of NOVEMBER, 2022.

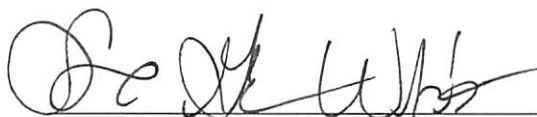
Grantor:

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

By: 
Joseph S. Paul, Ph.D., President

STATE OF MISSISSIPPI
COUNTY OF FORREST

Personally appeared before me, the undersigned authority in and for the said County and State, on this the 8th day of November, 2022, within my jurisdiction, the within named Joseph S. Paul, Ph.D., who acknowledged to me that he is the President of The University of Southern Mississippi, a Mississippi institution of higher learning, and that for and on behalf of said university, and as its act and deed, he executed the above and foregoing instrument after first being duly authorized by The Board of Trustees of The Institutions of Higher Learning of the State of Mississippi to do so.



Notary Public, State of Mississippi

My Commission Expires:



EXHIBIT A

Legal Description

EASEMENT E5 – 20 Foot X 20 Foot Drainage Easement on the West Side of Shelby Thames Drive

A part of the Northwest $\frac{1}{4}$ of the Southeast $\frac{1}{4}$, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) $-0^{\circ}16'51.59''$ at the Southwest Corner of the Southwest $\frac{1}{4}$ of said Southeast $\frac{1}{4}$, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest $\frac{1}{4}$ of the Southeast $\frac{1}{4}$, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run East for 288.74 feet,
- thence run North for 2,034.91 feet to a $\frac{1}{2}$ Inch Rebar representing a Point on the Proposed Western Right of Way Line of Shelby Thames Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 674,062.00 feet** and **E 815,916.27 feet** on said East Zone Grid;
- thence run $S40^{\circ}32'55''W$ for 20.00 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run Northwesterly along an Arc to the Right and parallel to said Proposed Western Right of Way Line for 20.00 feet to a $\frac{1}{2}$ Inch Rebar having a Grid Value of **N 674,059.83 feet** and **E 815,888.09 feet** on said East Zone Grid, said Arc having a Radius of 611.75 feet, a Chord Bearing $N49^{\circ}21'37''W$ and a Chord Distance of 20.00 feet,
- thence run $N40^{\circ}32'55''E$ for 20.00 feet to a $\frac{1}{2}$ Inch Rebar representing a Point on said Proposed Western Right of Way Line,
- thence Southeasterly along said Proposed Western Right of Way Line and an Arc to the Left for 20.00 feet to the **Point of Beginning**, said Arc having a Radius of 591.75 feet, a Chord Bearing $S49^{\circ}21'26''E$ and a Chord Distance of 20.00 feet,
- comprising **0.01 Acres (400 Square Feet)**, more or less.

EASEMENT E6 – 15 Foot X 30 Foot Drainage Easement on the West Side of Shelby Thames Drive

A part of the Northwest $\frac{1}{4}$ of the Southeast $\frac{1}{4}$, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) $-0^{\circ}16'51.59''$ at the Southwest Corner of the Southwest $\frac{1}{4}$ of said Southeast $\frac{1}{4}$, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest $\frac{1}{4}$ of the Southeast $\frac{1}{4}$, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run East for 201.53 feet,
- thence run North for 2,124.39 feet to a $\frac{1}{2}$ Inch Rebar representing a Point on the Proposed Western Right of Way Line of Shelby Thames Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 674,151.48 feet** and **E 815,829.05 feet** on said East Zone Grid;
- thence run $S51^{\circ}44'44''W$ for 15.00 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run Northwesterly along an Arc to the Right and parallel to said Proposed Western Right of Way Line for 30.77 feet to a $\frac{1}{2}$ Inch Rebar having a Grid Value of **N 674,166.54 feet** and **E 815,798.87 feet** on said East Zone Grid, said Arc having a Radius of 606.75 feet, a Chord Bearing $N36^{\circ}45'11''W$ and a Chord Distance of 30.76 feet,
- thence run $N54^{\circ}39'46''E$ for 15.00 feet to a $\frac{1}{2}$ Inch Rebar representing a Point on said Proposed Western Right of Way Line,
- thence Southeasterly along said Proposed Western Right of Way Line and an Arc to the Left for 30.00 feet to the **Point of Beginning**, said Arc having a Radius of 591.75 feet, a Chord Bearing $S36^{\circ}45'07''E$ and a Chord Distance of 30.00 feet,
- comprising **0.01 Acres (456 Square Feet)**, more or less.

EASEMENT E8 – 20 Foot Drainage Easement on the South side of Classic Drive

A part of the Northeast $\frac{1}{4}$ of the Southeast $\frac{1}{4}$, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997589 and a convergence angle of (minus) $-0^{\circ}16'51.59''$ at the Southwest Corner of the Southwest $\frac{1}{4}$ of said Southeast $\frac{1}{4}$, Section 35:

- **Commencing** at a Concrete Monument representing said Southwest Corner of the Southwest $\frac{1}{4}$ of the Southeast $\frac{1}{4}$, and having a Grid Value of **N 672,027.09 feet** and **E 815,627.53 feet** on said East Zone Grid;
- thence run East for 2,484.25 feet,
- thence run North for 2,409.59 feet to a $\frac{1}{2}$ Inch Rebar representing a Point on the Proposed South Right of Way Line of Classic Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 674,436.68 feet** and **E 818,111.78 feet** on said East Zone Grid;
- thence run Easterly along said Proposed South Right of Way Line and an Arc to the Left for 20.99 feet to a $\frac{1}{2}$ Inch Rebar, said Arc having a Radius of 3,512.75 feet, a Chord Bearing of $N81^{\circ}45'37''E$ and a Chord Distance of 20.99 feet,
- thence run $S09^{\circ}27'22''W$ for 86.26 feet to a $\frac{1}{2}$ Inch Rebar having a Grid Value of **N 674,354.60 feet** and **E 818,118.39 feet** on said East Zone Grid,
- thence run $N80^{\circ}32'38''W$ for 20.00 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run $N09^{\circ}27'22''E$ for 79.88 feet to the **Point of Beginning**,
- comprising **0.04 Acres (1,661 Square Feet)**, more or less.

EASEMENT E13 – 20 Foot x 20 Foot Drainage Easement along the North Side of Classic Drive, East of the Proposed North Access Road

A part of the Southeast $\frac{1}{4}$ of the Northwest $\frac{1}{4}$, Section 36, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997484 and a

convergence angle of (minus) $-0^{\circ}16'20.00''$ at the Northeast Corner of said Southeast $\frac{1}{4}$ of the Northwest $\frac{1}{4}$, Section 36:

- **Commencing** at a Concrete Monument representing said Northeast Corner of the Southeast $\frac{1}{4}$ of the Northwest $\frac{1}{4}$, and having a Grid Value of **N 675,965.72 feet** and **E 820,962.39 feet** on said East Zone Grid;
- thence run West for 20.39 feet,
- thence run South for 660.20 feet to a $\frac{1}{2}$ Inch Rebar representing a Point on the Proposed Northern Right of Way Line of Classic Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 675,305.53 feet** and **E 820,941.99 feet** on said East Zone Grid;
- thence run $N76^{\circ}05'21''W$ along said Proposed Northern Right of Way Line for 20.00 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run $N13^{\circ}54'39''E$ for 20.00 feet to a $\frac{1}{2}$ Inch Rebar having a Grid Value of **N 675,329.75 feet** and **E 820,927.39 feet** on said East Zone Grid,
- thence run $S76^{\circ}05'21''E$ and parallel to said Proposed Northern Right of Way Line for 20.00 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run $S13^{\circ}54'39''W$ for 20.00 feet to the **Point of Beginning**,
- comprising **0.01 Acres (400 Square Feet)**, more or less.

EASEMENT E14 – 20 Foot x 20 Foot Drainage Easement along the North Side of Classic Drive, East of the Proposed North Access Road

A part of the Southeast $\frac{1}{4}$ of the Northwest $\frac{1}{4}$, Section 36, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997484 and a convergence angle of (minus) $-0^{\circ}16'20.00''$ at the Northeast Corner of said Southeast $\frac{1}{4}$ of the Northwest $\frac{1}{4}$, Section 36:

- **Commencing** at a Concrete Monument representing said Northeast Corner of the Southeast $\frac{1}{4}$ of the Northwest $\frac{1}{4}$, and having a Grid Value of **N 675,965.72 feet** and **E 820,962.39 feet** on said East Zone Grid;
- thence run West for 854.72 feet,

- thence run South for 615.45 feet to a ½ Inch Rebar representing a Point on the Proposed Northern Right of Way Line of Classic Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 675,350.27 feet** and **E 820,107.67 feet** on said East Zone Grid;
- thence run Southwesterly along an Arc to the Left and said Proposed Northern Right of Way Line for 20.00 feet to a ½ Inch Rebar, said Arc having a Radius of 1,695.24 feet, a Chord Bearing of S78°42'23"W and a Chord Distance of 20.00 feet,
- thence run N11°17'37"W for 20.00 feet to a ½ Inch Rebar having a Grid Value of **N 675,365.97 feet** and **E 820,084.14 feet** on said East Zone Grid,
- thence run N78°42'23"E for 20.00 feet to a ½ Inch Rebar,
- thence run S11°17'37"E for 20.00 feet to the **Point of Beginning**,
- comprising **0.01 Acres (400 Square Feet)**, more or less.

EASEMENT E15 – 20 Foot x 20 Foot Drainage Easement along the North Side of Classic Drive, between Beverly Hills Drive and the Proposed North Access Road

A part of the Southwest ¼ of the Northwest ¼, Section 36, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997484 and a convergence angle of (minus) -0°16'20.00" at the Northeast Corner of the Southeast ¼ of said Northwest ¼, Section 36:

- **Commencing** at a Concrete Monument representing said Northeast Corner of the Southeast ¼ of the Northwest ¼, and having a Grid Value of **N 675,965.72 feet** and **E 820,962.39 feet** on said East Zone Grid;
- thence run West for 1,685.89 feet,
- thence run South for 999.65 feet to a ½ Inch Rebar representing a Point on the Proposed Northern Right of Way Line of Classic Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 674,966.07 feet** and **E 819,276.50 feet** on said East Zone Grid;

- thence run Southwesterly along an Arc to the Right and said Proposed Northern Right of Way Line for 19.93 feet to a ½ Inch Rebar, said Arc having a Radius of 3,381.10 feet, a Chord Bearing of S60°49'35"W and a Chord Distance of 19.93 feet,
- thence run N29°12'27"W for 20.00 feet to a ½ Inch Rebar having a Grid Value of **N 674,973.81 feet** and **E 819,249.34 feet** on said East Zone Grid,
- thence run N60°49'34"E for 20.00 feet to a ½ Inch Rebar,
- thence run S29°00'13"E for 20.00 feet to the **Point of Beginning**,
- comprising **0.01 Acres (399 Square Feet)**, more or less.

EASEMENT E16 – 75 Foot x 20 Foot Drainage Easement along the North Side of Classic Drive, between Beverly Hills Drive and the Proposed North Access Road

A part of the Northeast ¼ of the Southeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997471 and a convergence angle of (minus) -0°16'51.82" at the Southwest Corner of the Southwest ¼ of the Northeast ¼, said Section 35:

- **Commencing** at a 2 Inch Round Iron Pin representing said Southwest Corner of the Southwest ¼ of the Northeast ¼, and having a Grid Value of **N 674,664.58 feet** and **E 815,637.05 feet** on said East Zone Grid;
- thence run East for 1,980.11 feet,
- thence run South for 132.28 feet to a ½ Inch Rebar representing a Point on the Proposed Northern Right of Way Line of Classic Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 674,532.30 feet** and **E 817,617.16 feet** on said East Zone Grid;
- thence run N00°07'38"W for 75.00 feet to a ½ Inch Rebar,
- thence run N89°52'22"E for 20.00 feet to a ½ Inch Rebar having a Grid Value of **N 674,607.34 feet** and **E 817,637.00 feet** on said East Zone Grid,
- thence run S00°07'38"E for 75.00 feet to a ½ Inch Rebar representing a Point on said Proposed Northern Right of Way Line,

- thence run Westerly along an Arc to the Right and said Proposed Northern Right of Way Line for 20.00 feet to the **Point of Beginning**, said Arc having a Radius of 3,381.10 feet, a Chord Bearing of S89°52'22"W and a Chord Distance of 20.00 feet,
- comprising **0.03 Acres (1,500 Square Feet)**, more or less.

EASEMENT E17 – 20 Foot x 10 Foot Drainage Easement along the East Side of Beverly Hills Drive

A part of the Southwest ¼ of the Northeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997471 and a convergence angle of (minus) -0°16'51.82" at the Southwest Corner of said Southwest ¼ of the Northeast ¼, Section 35:

- **Commencing** at a 2 Inch Round Iron Pin representing said Southwest Corner of the Southwest ¼ of the Northeast ¼, and having a Grid Value of **N 674,664.58 feet** and **E 815,637.05 feet** on said East Zone Grid;
- thence run East for 125.56 feet,
- thence run North for 378.24 feet to a ½ Inch Rebar representing a Point on the Proposed Eastern Right of Way Line of Beverly Hills Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 675,042.82 feet** and **E 815,762.61 feet** on said East Zone Grid;
- thence run Northerly along an Arc to the Left and said Proposed Eastern Right of Way Line for 20.00 feet to a ½ Inch Rebar, said Arc having a Radius of 6,802.18 feet, a Chord Bearing of N01°52'52"W and a Chord Distance of 20.00 feet,
- thence run N88°08'30"E for 10.00 feet to a ½ Inch Rebar having a Grid Value of **N 675,063.13 feet** and **E 815,771.95 feet** on said East Zone Grid,
- thence run S01°52'52"E for 20.00 feet to a ½ Inch Rebar,
- thence run S88°08'30"W for 10.00 feet to the **Point of Beginning**,
- comprising **0.005 Acres (200 Square Feet)**, more or less.

EASEMENT E18 – 20 Foot x 10 Foot Drainage Easement along the West Side of Beverly Hills Drive

A part of the Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997471 and a convergence angle of (minus) $-0^{\circ}16'51.82''$ at the Southwest Corner of said Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, Section 35:

- **Commencing** at a 2 Inch Round Iron Pin representing said Southwest Corner of the Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$, and having a Grid Value of **N 674,664.58 feet** and **E 815,637.05 feet** on said East Zone Grid;
- thence run East for 75.83 feet,
- thence run North for 376.62 feet to a $\frac{1}{2}$ Inch Rebar representing a Point on the Proposed Western Right of Way Line of Beverly Hills Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 675,041.20 feet** and **E 815,712.88 feet** on said East Zone Grid;
- thence run $S88^{\circ}08'30''W$ for 10.00 feet to a $\frac{1}{2}$ Inch Rebar,
- thence run $N01^{\circ}51'30''W$ for 20.00 feet to a $\frac{1}{2}$ Inch Rebar having a Grid Value of **N 675,060.87 feet** and **E 815,702.23 feet** on said East Zone Grid,
- thence run $N88^{\circ}08'30''E$ for 10.00 feet to a $\frac{1}{2}$ Inch Rebar representing a Point on said Proposed Eastern Right of Way Line,
- thence run Southerly along an Arc to the Right and said Proposed Eastern Right of Way Line for 20.00 feet to the **Point of Beginning**, said Arc having a Radius of 6,665.66 feet, a Chord Bearing of $S01^{\circ}51'30''E$ and a Chord Distance of 20.00 feet,
- comprising **0.005 Acres (200 Square Feet)**, more or less.

EASEMENT E19 – 20 Foot x 10 Foot Drainage Easement along the East Side of Beverly Hills Drive

A part of the Southwest ¼ of the Northeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997471 and a convergence angle of (minus) -0°16'51.82" at the Southwest Corner of said Southwest ¼ of the Northeast ¼, Section 35:

- **Commencing** at a 2 Inch Round Iron Pin representing said Southwest Corner of the Southwest ¼ of the Northeast ¼, and having a Grid Value of **N 674,664.58 feet** and **E 815,637.05 feet** on said East Zone Grid;
- thence run East for 82.19 feet,
- thence run North for 960.80 feet to a ½ Inch Rebar representing a Point on the Proposed Eastern Right of Way Line of Beverly Hills Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 675,625.38 feet** and **E 815,719.24 feet** on said East Zone Grid;
- thence run Northerly along an Arc to the Left and said Proposed Eastern Right of Way Line for 20.00 feet to a ½ Inch Rebar, said Arc having a Radius of 6,802.18 feet, a Chord Bearing of N06°48'12"W and a Chord Distance of 20.00 feet,
- thence run N83°11'48"E for 10.00 feet to a ½ Inch Rebar having a Grid Value of **N 675,646.42 feet** and **E 815,726.80 feet** on said East Zone Grid,
- thence run S06°48'12"E for 20.00 feet to a ½ Inch Rebar,
- thence run S83°11'48"W for 10.00 feet to the **Point of Beginning**,
- comprising **0.005 Acres (200 Square Feet)**, more or less.

EASEMENT E20 – 30 Foot x 15 Foot Drainage Easement along the West Side of Beverly Hills Drive

A part of the Southwest ¼ of the Northeast ¼, Section 35, Township 5 North, Range 14 West, lying in the City of Hattiesburg, County of Forrest, State of Mississippi and being more particularly described using Mississippi State Plane Coordinate System, East Zone Grid, NAD 83(2011), US Survey Feet, with a combined scale factor of 0.99997471 and a convergence angle of (minus) -0°16'51.82" at the Southwest Corner of said Southwest ¼ of the Northeast ¼, Section 35:

- **Commencing** at a 2 Inch Round Iron Pin representing said Southwest Corner of the Southwest ¼ of the Northeast ¼, and having a Grid Value of **N 674,664.58 feet** and **E 815,637.05 feet** on said East Zone Grid;
- thence run East for 30.12 feet,
- thence run North for 976.35 feet to a ½ Inch Rebar representing a Point on the Proposed Western Right of Way Line of Beverly Hills Drive, a public roadway, and the **Point of Beginning**, said Point having a Grid Value of **N 675,640.93 feet** and **E 815,667.17 feet** on said East Zone Grid;
- thence run S82°53'03"W for 15.00 feet to a ½ Inch Rebar,
- thence run N07°04'22"W for 30.00 feet to a ½ Inch Rebar having a Grid Value of **N 675,668.84 feet** and **E 815,648.59 feet** on said East Zone Grid,
- thence run N82°53'03"E for 15.00 feet to a ½ Inch Rebar representing a Point on said Proposed Eastern Right of Way Line,
- thence run Southerly along an Arc to the Right and said Proposed Eastern Right of Way Line for 30.00 feet to the **Point of Beginning**, said Arc having a Radius of 6,665.66 feet, a Chord Bearing of S07°04'23"E and a Chord Distance of 30.00 feet,
- comprising **0.01 Acres (450 Square Feet)**, more or less.



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Cecilia Jones
cc: Kermas Eaton, City Clerk
Date: Tuesday, December 20, 2022
Re: Acknowledge receipt of the Privilege Tax License monthly report for November 2022.
File Number: 2022-928
Minute Book #

Summary

Acknowledge receipt of the Privilege Tax License monthly report for November 2022.

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.

PRIVILEGE LICENSE MONTHLY REPORT

11/01/2022 TO 11/30/2022

New Licenses

<u>License No.</u>	<u>Amount</u>	<u>Penalty</u>	<u>Owner, Name, & Address of Business</u>
LIC-02-22-023771	\$45.00		TELAGEN, LLC 2075 CENTRE POINTE BLVD STE 103 TALLAHASSEE FL 32308
LIC-03-22-023966	\$67.00		PINEBELT DERMATOLOGY AND SKIN CANCER CENTER 102 E HOSPITAL DR HATTIESBURG MS 39402
LIC-05-21-021500	\$20.00		GOODE'S POP UP BBQ 4 BURKETTS CREEK DR HATTIESBURG MS 39401
LIC-06-22-024476	\$0.00		RED ROOF LIQUOR 998 HARDY ST HATTIESBURG MS 39401
LIC-08-22-024854	\$88.00		COMPADRES MAIN STREET MARKET 1224 N MAIN ST HATTIESBURG MS 39401
LIC-08-22-024855	\$15.00		COMPADRES MAIN STREET MARKET 1224 N MAIN ST HATTIESBURG MS 39401
LIC-08-22-024892	\$1,865.00		TAYLOR RENTAL 4219 LINCOLN RD HATTIESBURG MS 39402
LIC-08-22-024897	\$10.00		TAYLOR RENTAL 4219 LINCOLN RD HATTIESBURG MS 39402
LIC-08-22-024919	\$325.00		ANDERSON DOWNTOWN P O BOX 16055 HATTIESBURG MS 39404
LIC-08-22-024954	\$55.00		ANDERSON DESIGN CENTER P O BOX 16055 HATTIESBURG MS 39404
LIC-09-22-025101	\$55.00		ANDERSON DESIGN CENTER 517 W SCOоба ST STE 10, 20 & 30 HATTIESBURG MS 39401
LIC-09-22-025140	\$45.00		TOGETHERNESS I 5317 OLD HWY 11 STE 1 HATTIESBURG MS 39402
LIC-09-22-025291	\$45.00		LAMAR DENTAL 6414 HWY 98 W STE 10 HATTIESBURG MS 39402
LIC-09-22-025335	\$55.00		NOOL COUNSELING CENTER, PLLC 516 W LAUREL AV HATTIESBURG MS 39401
LIC-09-22-025345	\$55.00		THE LOOP 1000 TURTLE CREEK DR STE K7 HATTIESBURG MS 39402
LIC-09-22-025381	\$45.00		SURGE STAFFING 4700 HARDY ST STE C HATTIESBURG MS 39402

LIC-09-22-025414	\$55.00	CHOICES COORDINATED CARE SOLUTIONS 1221 W 10TH ST LAUREL MS 39440
LIC-10-22-025505	\$20.00	VIRGINIA WRECKING CO., INC. P.O. BOX 2730 DAPHNE AL 36526
LIC-10-22-025508	\$55.00	INTERPINE 126 WESTOVER DR HATTIESBURG MS 39402
LIC-10-22-025566	\$45.00	DOPE 1000 TURTLE CREEK DR STE 800 HATTIESBURG MS 39402
LIC-10-22-025582	\$55.00	ALLIED UNIVERSAL JANITORIAL SERVICE 251 LITTLE FALLS DR WILMINGTON DE 19808
LIC-10-22-025661	\$55.00	HEALTHWORKS IMMUNIZATION CLINIC 415 S 28TH AV ATTN : S. PARKER HATTIESBURG MS 39401
LIC-10-22-025662	\$45.00	THA BURG NUTRITION 104 S 37TH AV STE 40 HATTIESBURG MS 39402
LIC-10-22-025721	\$45.00	SERENE SOUTHERN GIRL'S SOAPS AND CREAMS 100 W 4TH ST STE 30 HATTIESBURG MS 39401
LIC-11-22-025777	\$45.00	HAIRTIER 8 HARTLEY DR HATTIESBURG MS 39402
LIC-11-22-025802	\$20.00	BARA PROPERTIES LLC P O BOX 15126 HATTIESBURG MS 39404
LIC-11-22-025803	\$20.00	SOUTHERN LIVING INVESTMENTS P O BOX 15126 HATTIESBURG MS 39404
LIC-11-22-025835	\$45.00	MOTTO MORTGAGE SIGMA GROUP 119 MAYFAIR RD HATTIESBURG MS 39402
LIC-11-22-025837	\$45.00	RYANS TIRE 503 BROADWAY DR HATTIESBURG MS 39401
LIC-11-22-025896	\$20.00	HATTIESBURG BUILDING CONTRACTORS, LLC 5290 OLD HWY 11 HATTIESBURG MS 39401
LIC-11-22-025901	\$20.00	OAK LAWN CARE LLC 193 W M JOHNSON RD SUMRALL MS 39482
LIC-12-21-023303	\$45.00	BRAID BAR BY ASTRID 934 BROADWAY DR STE 20 HATTIESBURG MS 39401

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\$3,425.00

Renewed Licenses

<u>License No.</u>	<u>Amount</u>	<u>Penalty</u>	<u>Owner, Name, & Address of Business</u>
LIC-11-22-025749	\$20.00	\$2.20	MCSWAIN & MYERS 1317 HARDY STREET HATTIESBURG MS 39401-
LIC-11-22-025750	\$20.00		SOUTHFORK INVESTMENTS LLC 25 FAIR LAKE DRIVE HATTIESBURG MS 39402-

LIC-11-22-025751	\$20.00		LAB TEST DEPOT 6242 HWY 98 W STE 60 HATTIESBURG MS 39402-
LIC-11-22-025752	\$20.00		KNIGHT/WATTS INVESTMENT MANAGEMENT GROUP, LLC 32 MILBRANCH RD STE 10 HATTIESBURG MS 39402
LIC-11-22-025753	\$25.00		CLOUD 9 VAPORS 6086 HWY 98 STE 10 HATTIESBURG MS 39402
LIC-11-22-025754	\$20.00		DENTAL SERVICES OF SOUTH MS P.A. 2019 HARDY STREET HATTIESBURG MS 39401-
LIC-11-22-025755	\$20.00		QUICK CASH #3040 5891 HIGHWAY 49 STE 30 HATTIESBURG MS 39401
LIC-11-22-025756	\$30.00		ELEDENT 1904 HARDY STREET HATTIESBURG MS 39401-
LIC-11-22-025757	\$20.00		SOUTHERN COURT SERVICES, LLC PO BOX 16536 HATTIESBURG MS 39404
LIC-11-22-025758	\$20.00		EAGLE LABS I 4 WILLOW PT STE 40 HATTIESBURG MS 39402
LIC-11-22-025759	\$20.00	\$2.20	I KARE HEALTH CARE SERVICES LLC 1507 HARDY ST STE 207 HATTIESBURG MS 39401
LIC-11-22-025762	\$20.00	\$2.20	MONICA CARIBBEAN SEAFOOD RESTURANT, LLC 11 LAKE FORGETFUL HATTIESBURG MS 39401
LIC-11-22-025763	\$15.00	\$7.50	MONICA CARIBBEAN SEAFOOD RESTURANT, LLC 13401 NEWBERRY DR GULFPORT MS 39503
LIC-11-22-025764	\$20.00	\$2.20	BOSSI BOUTIQUE 6152 HWY 98 STE 10 HATTIESBURG MS 39402
LIC-11-22-025768	\$20.00		GO YOUNG FASHION 125 E PINE STREET HATTIESBURG MS 39401
LIC-11-22-025774	\$20.00	\$2.20	49 SUPER STOP 6497 HWY 49 HATTIESBURG MS 39402
LIC-11-22-025775	\$15.00	\$7.50	49 SUPER STOP 6497 HWY 49 HATTIESBURG MS 39402
LIC-11-22-025776	\$20.00	\$2.20	ELLE B'S 4700 HARDY ST STE R HATTIESBURG MS 39402
LIC-11-22-025778	\$93.00	\$10.23	ADCOCK POOL SPA AND BILLIARDS 6192 HIGHWAY 98 W HATTIESBURG MS 39402
LIC-11-22-025779	\$30.00		Manning Gross + Massenburg LLP 1700 S 28TH AV STE D HATTIESBURG MS 39402
LIC-11-22-025780	\$20.00		OUTBACK 98 WEST, LLC/SPACEBOX 112 SHEFFIELD LOOP HATTIESBURG MS 39402

LIC-11-22-025781	\$33.00		PINE BELT VETERINARY HOSPITAL 7436 HIGHWAY 49 N HATTIESBURG MS
LIC-11-22-025782	\$30.00	\$3.30	TONY CHINA EXPRESS, INC 3407 HARDY STREET HATTIESBURG MS 39402-1502
LIC-11-22-025785	\$30.00		EAGLE FLATTS 105 DOLEAC DRIVE HATTIESBURG MS 39401
LIC-11-22-025786	\$10.00	\$5.00	EAGLE FLATTS 105 DOLEAC DRIVE HATTIESBURG MS 39401
LIC-11-22-025787	\$30.00		ADVANCED BUILDING PRODUCTS 103 INDUSTRIAL DR HATTIESBURG 39401
LIC-11-22-025788	\$120.00		SOUTHERN CARE, INC. 4700 HARDY STREET STE Y HATTIESBURG MS 39401
LIC-11-22-025789	\$90.00		CHICK-FIL-A 6099 HIGHWAY 98 W HATTIESBURG MS 39402-
LIC-11-22-025790	\$50.00		DOLLAR TREE #345 500 VOLVO PARKWAY CHESAPEAKE VA 233201604
LIC-11-22-025793	\$20.00		PERKS TREE MASTERS LLC 2047 OLD HWY 24 HATTIESBURG MS 39402
LIC-11-22-025794	\$20.00		BOBBY AUTO 104 JC KILLINGSWORTH ST HATTIESBURG MS 39401
LIC-11-22-025795	\$20.00		A A A STRIPE RITE, LLC 1818 EDWARDS ST HATTIESBURG MS 39401
LIC-11-22-025796	\$20.00		ARMOR INSULATIONS LLC 1818 EDWARDS ST HATTIESBURG MS 39401
LIC-11-22-025797	\$20.00		CLEEN-COTE, INC. 1818 EDWARDS ST HATTIESBURG MS 39401
LIC-11-22-025799	\$200.00		HUGHES SUPPLY 2001 JOSHUA RD LAFAYETTE HILL PA 19444
LIC-11-22-025800	\$20.00		CHARLEY'S PHILLY STEAK 1000 TURTLE CREEK DR STE 310 HATTIESBURG MS 39402
LIC-11-22-025804	\$20.00		THE TAVERN 1825 HARDY STREET HATTIESBURG MS 39401-
LIC-11-22-025805	\$15.00		THE TAVERN 1825 HARDY STREET HATTIESBURG MS 39401-
LIC-11-22-025806	\$33.00		SYSCO FOOD SERVICES OF JACKSON, LLC 6413 HWY 98 STE C HATTIESBURG MS 39402
LIC-11-22-025813	\$75.00		HATTIESBURG PARTY STORE 47030 CONRAD E ANDERSON ST HAMMOND LA 70401

LIC-11-22-025814	\$20.00		SOAP N' SUDS 1900 HILL ST HATTIESBURG MS 39402
LIC-11-22-025815	\$20.00		THAMES CPA FIRM, PLLC PO BOX 15638 HATTIESBURG MS 39404-
LIC-11-22-025816	\$20.00	\$2.20	TEMPT U WARDROBE 1240 BEVERLY HILLS DR #2 C HATTIESBURG MS 39401
LIC-11-22-025817	\$20.00		GRANTS UNLIMITED LLC 602 ADELINE ST STE C HATTIESBURG MS 39401
LIC-11-22-025818	\$300.00		TRUCKPRO OF HATTIESBURG 1900 CHARLES BRYANT RD STE 100 CORDOVA TN 38016
LIC-11-22-025819	\$30.00		GRAND BANK FOR SAVINGS FSB 204 WESTOVER DRIVE HATTIESBURG MS 39402
LIC-11-22-025821	\$560.00		MISSISSIPPI AG CO., INC. 441 HALEY BARBOUR PKWY YAZOO CITY MS 39194
LIC-11-22-025822	\$20.00		HATTIESBURG TATTOO LLC 2201 HARDY ST HATTIESBURG MS 39401
LIC-11-22-025823	\$440.00		CORNER MARKET 9006 3720 HARDY ST STE 7 HATTIESBURG MS 39402
LIC-11-22-025824	\$15.00		CORNER MARKET 9006 3720 HARDY ST STE 7 HATTIESBURG MS 39402
LIC-11-22-025825	\$40.00		CORNER MARKET 9006 3720 HARDY ST STE 7 HATTIESBURG MS 39402
LIC-11-22-025826	\$33.00		BENJAMIN F. EDWARDS & COMPANY 1 N BRENTWOOD BLVD STE 850 ST LOUIS MO 63105
LIC-11-22-025827	\$20.00		SOUTHERN BEHAVIORAL MEDICINE ASSOC. PLLC 1 COMMERCE DR STE 106 HATTIESBURG MS 39402
LIC-11-22-025828	\$30.00		SUPERTALK MISSISSIPPI 5266 OLD HWY 11 STE 120 HATTIESBURG MS 39402
LIC-11-22-025829	\$30.00		LINCOLN DENTAL ARTS 4301 LINCOLN RD STE 20 HATTIESBURG MS 39402
LIC-11-22-025830	\$93.00		COWBOY MALONEY'S ELECTRIC CITY 1313 HARDING STREET JACKSON MS 392020000
LIC-11-22-025831	\$20.00	\$2.20	JD'S CHEAP TOW LLC P O BOX 1363 HATTIESBURG MS 39403
LIC-11-22-025833	\$20.00	\$2.60	COOLKUTZ BARBERSHOP 5912 HIGHWAY 49 STE H 5 HATTIESBURG MS 39401
LIC-11-22-025834	\$80.00		SUPER STUD BUILDING PRODUCTS SOUTH LLC 53 WL RUNNELS INDUSTRIAL DRIVE HATTIESBURG MS 39401-

LIC-11-22-025836	\$30.00	\$3.30	CLUTCH BEAUTY AND BARBER 28 MARKET CT STE 100 HATTIESBURG MS 39402
LIC-11-22-025838	\$50.00		GAMESTOP...AND MOVIES TOO #2575 625 WESTPORT PKWY GRAPEVINE TX 76051
LIC-11-22-025839	\$30.00		ALTRUISTIC CARE LLC 610 ADELINE ST STE 2 A HATTIESBURG MS 39402
LIC-11-22-025840	\$20.00	\$2.20	HEAVEN'S GATES MINI STORAGE 929 RICHBURG ROAD HATTIESBURG MS
LIC-11-22-025841	\$50.00		CIRCLE K STORE #2723395 4050 US HWY 11 HATTIESBURG MS 39403
LIC-11-22-025842	\$15.00		CIRCLE K STORE #2723395 25 W CEDAR STREET M PENSACOLA FL 32502-
LIC-11-22-025843	\$50.00		CIRCLE K STORE #2723385 7060 HWY 49 N HATTIESBURG MS 39403
LIC-11-22-025844	\$15.00		CIRCLE K STORE #2723385 7060 HWY 49 N HATTIESBURG MS 39403
LIC-11-22-025845	\$20.00	\$2.20	PETAL MUFFLER & GLASS 5383 HIGHWAY 42 HATTIESBURG MS 39401
LIC-11-22-025846	\$40.00		CIRCLE K STORE #2723399 25 W CEDAR STREET M PENSACOLA FL 32502-
LIC-11-22-025847	\$15.00		CIRCLE K STORE #2723399 4904 HARDY STREET HATTIESBURG MS 39403
LIC-11-22-025848	\$20.00	\$2.20	TIENDA USAMEX 1520.5 E HARDY ST HATTIESBURG MS 39401
LIC-11-22-025849	\$15.00	\$7.50	TIENDA USAMEX 1520.5 E HARDY ST HATTIESBURG MS 39401
LIC-11-22-025850	\$20.00		NEEDFUL THINGS 2413 W 4TH ST HATTIESBURG MS 39401
LIC-11-22-025852	\$20.00	\$2.20	BYPASS FOOD MART LLC 5386 OLD HWY 42 HATTIESBURG MS 39401-
LIC-11-22-025853	\$15.00	\$7.50	BYPASS FOOD MART LLC 5386 OLD HWY 42 HATTIESBURG MS 39401-
LIC-11-22-025854	\$20.00	\$2.40	HUB CITY BEERS PO BOX 2076 HATTIESBURG MS 39403
LIC-11-22-025855	\$15.00	\$7.50	HUB CITY BEERS PO BOX 2076 HATTIESBURG MS 39403
LIC-11-22-025856	\$20.00		MIRACLE NAILS, LLC 5266 OLD HWY 11 STE 90 HATTIESBURG MS 39401-

LIC-11-22-025857	\$30.00		SPORT CLIPS HAIR CUTS-MS 201 6101 HWY 98 STE 30 HATTIESBURG MS 39402
LIC-11-22-025858	\$69.00		LIL BUTCHER SHOPPE 1910 B BROADWAY DR HATTIESBURG MS 39401
LIC-11-22-025859	\$20.00		AMERICAN WOOD 2100 HARDY ST HATTIESBURG MS 39401
LIC-11-22-025860	\$30.00	\$6.00	MEADOWS ELECTRICAL CONTRACTING, INC 818 HOLCOMBE AV MOBILE AL 36606
LIC-11-22-025861	\$36.00		MS PAIN & MIGRAINE 4 WILLOW PT STE 1 HATTIESBURG MS 39402
LIC-11-22-025862	\$20.00		PAPA JOHN'S PIZZA 2902 HARDY STREET HATTIESBURG MS 39401
LIC-11-22-025863	\$33.00		REGIONS BANK 4800 HARDY STREET HATTIESBURG MS 39401
LIC-11-22-025864	\$920.00		AUTOZONE #139 305 BROADWAY DRIVE HATTIESBURG MS 39401
LIC-11-22-025865	\$30.00		CITIZENS NATIONAL BANK 4599 HARDY STREET HATTIESBURG MS 39402-
LIC-11-22-025866	\$20.00	\$2.40	TK QUICK STOP 5517 HWY 42 BYPASS HATTIESBURG MS 39401
LIC-11-22-025867	\$15.00	\$7.50	TK QUICK STOP 209 PINE DR HATTIESBURG MS 39401
LIC-11-22-025868	\$20.00		L & D PAINTING 28 SHARMONT DRIVE HATTIESBURG MS 39402-
LIC-11-22-025869	\$20.00		ASSOCIATED CONTRACTORS INC PO BOX 16521 HATTIESBURG MS 394040000
LIC-11-22-025870	\$20.00		HATTIESBURG URGENT CARE 6101 HWY 49 HATTIESBURG MS 39403
LIC-11-22-025871	\$20.00		CAMPER CITY 7166 HIGHWAY 49 N HATTIESBURG MS 39402-
LIC-11-22-025872	\$20.00		THE SHERWIN-WILLIAMS CO. PO BOX 6027 ATTN: TAX DEPARTMENT CLEVELAND OH 44101-
LIC-11-22-025873	\$30.00		CALIBER COLLISION CENTERS 1906 BROADWAY DR HATTIESBURG MS 39402
LIC-11-22-025874	\$20.00		GLAMOUR NAILS 6111 HWY 98 STE 40 HATTIESBURG MS 39402
LIC-11-22-025875	\$30.00		NEWK'S EXPRESS CAFE 4700 HARDY STREET AA HATTIESBURG MS 39402-

LIC-11-22-025876	\$1,360.00		DICK'S SPORTING GOODS 345 COURT ST TAX DEPT CORAOPOLIS PA 15108-
LIC-11-22-025877	\$100.00		DICK'S SPORTING GOODS 345 COURT ST TAX DEPT CORAOPOLIS PA 15108-
LIC-11-22-025878	\$87.00		PINE BELT CDJR INC 401 BROADWAY DR HATTIESBURG MS 39401
LIC-11-22-025879	\$30.00		MASSAGE ENVY SPA 6169 HWY 98 W STE 40 HATTIESBURG MS 39402
LIC-11-22-025880	\$30.00		WELLS REALTY LLC 12 COTTONWOOD DR HATTIESBURG MS 39402
LIC-11-22-025881	\$20.00		AISSA AFRICAN HAIR BRAIDING 1910 HARDY ST STE E HATTIESBURG MS 39402
LIC-11-22-025882	\$20.00		CAPITOL BUILDERS REMODELING 17 COUNTRY CLUB RD LAUREL MS 39940
LIC-11-22-025885	\$25.00		LOVE BIRDS BRIDAL BOUTIQUE 511 E PINE STREET HATTIESBURG MS 39401-
LIC-11-22-025886	\$20.00	\$3.80	SENIOR HELPERS 111 S 40TH AV STE 20 HATTIESBURG MS 39402
LIC-11-22-025887	\$20.00	\$2.20	JAMES & JAMES AUTO EXCHANGE, LLC 5748 HIGHWAY 49 HATTIESBURG MS 39401
LIC-11-22-025888	\$30.00	\$5.70	WHISPERING PINES ILF 300 WHISPERING PINES BLVD HATTIESBURG MS 39401-
LIC-11-22-025890	\$45.00		SMITH PAINTING & CONTRACTING INC 652 W 4TH STREET HATTIESBURG MS 39401-
LIC-11-22-025891	\$20.00		POSH 813 SIOUX LN HATTIESBURG MS 39402
LIC-11-22-025892	\$33.00		SUBWAY BROADWAY 826 BROADWAY DRIVE HATTIESBURG MS 39401-
LIC-11-22-025893	\$20.00		BARGAINS & BLESSINGS P O BOX 1994 HATTIESBURG MS 394010000
LIC-11-22-025894	\$84.00		CHAIN ELECTRIC COMPANY 1308 W PINE STREET HATTIESBURG MS 39402
LIC-11-22-025897	\$20.00		BY-PASS VARIETY 5448 OLD HIGHWAY 42 BYPASS HATTIESBURG MS 39401-
LIC-11-22-025898	\$20.00		HALL-FAIRLEY FUNERAL SERVICES 710 HALL AVENUE HATTIESBURG MS 39401-
LIC-11-22-025899	\$20.00		TRACTION SPORTS PERFORMANCE 105 MEDICAL PARK HATTIESBURG MS 39401

LIC-11-22-025900	\$20.00		CLIFF'S QUICK LUBE & AUTO REPAIR 6100 HWY 49 HATTIESBURG MS 39401
LIC-11-22-025902	\$20.00		FIRST COUSIN PROPERTIES, LLC 44 SWEET MAPLE TRC PETAL MS 39465
LIC-11-22-025903	\$0.00	\$0.00	DABBS STREET CENTER 926 DABBS STREET HATTIESBURG MS 39401
LIC-11-22-025904	\$0.00	\$0.00	DABBS STREET CENTER 926 DABBS STREET HATTIESBURG MS 39401
LIC-11-22-025905	\$0.00	\$0.00	DABBS STREET CENTER 926 DABBS STREET HATTIESBURG MS 39401
LIC-11-22-025906	\$0.00	\$0.00	DABBS STREET CENTER 926 DABBS STREET HATTIESBURG MS 39401
LIC-11-22-025907	\$80.00		KOHLER CO. 95 W L RUNNELS INDUSTRIAL DR HATTIESBURG MS 39401
LIC-11-22-025908	\$20.00	\$2.60	HWY 42 TIRE SHOP 5431 OLD HWY 42 BYPASS HATTIESBURG MS 39401
LIC-11-22-025909	\$150.00		HATTIESBURG MEDICAL PARK MGT CORP . 100 W PINE STREET HATTIESBURG MS 394010000
LIC-11-22-025910	\$30.00		ORANGE THEORY FITNESS 115 NORTHLAKE DR MADISON MS 39110
LIC-11-22-025911	\$75.00		BLENDCO, INC. 8 JM TATUM INDUSTRIAL DRIVE HATTIESBURG MS 394010000
LIC-11-22-025912	\$60.00		WHLT -22 NEXSTAR MEDIA GROUP 5412 HIGHWAY 49 A HATTIESBURG MS 39401
LIC-11-22-025913	\$30.00		H'BURG CLINIC PODIATRIC MEDICINE 1101 B S 28TH AVENUE HATTIESBURG MS 39402
LIC-11-22-025914	\$63.00		HATTIESBURG CLINIC,CCC,HYPERTENSION 415 S 28TH AV ATTN : S. PARKER HATTIESBURG MS 394017283
LIC-11-22-025916	\$30.00	\$3.60	JUTAMAS THAI RESTAURANT 910 TIMOTHY LANE HATTIESBURG MS 39401-
LIC-11-22-025917	\$15.00	\$7.50	JUTAMAS THAI RESTAURANT 910 TIMOTHY LANE HATTIESBURG MS 39401-
LIC-11-22-025918	\$20.00	\$2.80	JACKSON BEAUTY & BARBER 700 HALL AVENUE HATTIESBURG MS 39401
LIC-11-22-025920	\$63.00		HORNE LLP 15 THOMPSON PARK STE 10 HATTIESBURG MS 39401
LIC-11-22-025921	\$20.00		JAN W HAMMOND 112 SHEFFIELD LOOP D-1 HATTIESBURG MS 39402-

LIC-11-22-025922	\$25.00		TORRID 18501 E SAN JOSE AV ATTN : TAX DEPARTMENT CITY OF INDUSTRY CA 91748
LIC-11-22-025923	\$20.00		SLEEP NUMBER CORPORATION 6156 HWY 98 STE 90 HATTIESBURG MS 39402
LIC-11-22-025924	\$20.00		WILLIAMS LAWN & YARD SERVICE 8 ALDER LN HATTIESBURG MS 39401
LIC-11-22-025925	\$20.00		LIFE CHANGING CENTER 120 BARKLEY ROAD HATTIESBURG MS 39401-
LIC-11-22-025926	\$30.00		TERRY SERVICE INC 500 CAMPBELL LOOP STE 70 HATTIESBURG MS
LIC-11-22-025927	\$129.00		COMCAST OF SOUTHERN MISSISSIPPI, INC 2100 LINCOLN ROAD HATTIESBURG MS 39401
LIC-11-22-025929	\$20.00	\$2.80	THE GENTRY 4600 HARDY ST STE 24 HATTIESBURG MS 39401
LIC-11-22-025930	\$20.00		S & S BOUTIQUE 71 VICKERS CIR HATTIESBURG MS 39401
LIC-11-22-025934	\$30.00	\$3.60	CASA JALISCO MEXICAN 4400 HARDY ST HATTIESBURG MS 39402
LIC-11-22-025935	\$15.00	\$7.50	CASA JALISCO MEXICAN 4400 HARDY ST HATTIESBURG MS 39402
LIC-11-22-025936	\$25.00		VITAL CARE INFUSION SERVICES OF HATTIESBURG 163 TURTLE CREEK DR STE 130 HATTIESBURG MS 39402
LIC-11-22-025937	\$33.00		PEAVY CHIROPRACTIC CLINIC, P.A. 2409 MAMIE STREET HATTIESBURG MS 39401
-----	147	\$8,145.00	\$148.73

Total Collection for November

New Licenses	\$3,425.00
Renewed Licenses	\$8,145.00
Penalties	\$148.73
Grand Total	\$11,718.73



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Cecilia Jones
cc: Kermas Eaton, City Clerk
Date: Tuesday, December 20, 2022
Re: Acknowledge proofs of publications for Hub City Spokes for the month of November, 2022.
File Number: 2022-929
Minute Book #

Summary

Acknowledge Proofs of Publications for the Hub City Spokes for the month of November 2022.

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.

HUB CITY SPOKES

— A PUBLISHING COMPANY —

NEWSPAPERS | MAGAZINES | DIGITAL

525 N. Main St. Suite C - Hattiesburg, MS

Mailing: P.O. Box 1110 - Hattiesburg, MS 39403

Bill To:

City of Hattiesburg

ATTN: Cecilia Jones

P.O. Box 1898

Hattiesburg, MS 39403-1898

Month Ending

Invoice #

11/30/2022

101037

SIGNATURE
MAGAZINE



THE PineBeltNEWS

ATTENTION: We have a new address for submitting payments.

**Beginning immediately, please remit payments to:
HubCitySPOKES: P.O. Box 1110 - Hattiesburg, MS 39403-1110**

Due Date

P.O. No.

12/10/2022

Sales Rep

Tearsheets

H

Date	Description	Size of Ad	Total Inches	Rate	Publication	Amount
11/17/2022	Legals - BOA - Murphy's Billboard	1116 words		130.92		130.92
11/17/2022	Proof of Publication Fee			3.00		3.00
11/17/2022	Legal Notices - BOA - Underwood	389 words		46.68		46.68
11/17/2022	Proof of Publication Fee			3.00		3.00
11/17/2022	Legal Notices - HPC Conditional Use - Underwood Power	384 words		46.08		46.08
11/17/2022	Proof of Publication Fee			3.00		3.00
11/17/2022	Legal Notices - HPC - Edmonson CU	956 words		114.72		114.72
11/17/2022	Proof of Publication Fee			3.00		3.00
11/17/2022	Legal Notices - HPC Hwy 42 Alley Vacate	279 words		33.48		33.48
11/17/2022	Proof of Publication Fee			3.00		3.00
11/17/2022	Legal Notices - HPC William Carey Rezoning	909 words		109.08		109.08
11/17/2022	Proof of Publication Fee			3.00		3.00
11/17/2022	Legal Notices - Public Notice - HPC	199 words		23.88		23.88
11/17/2022	Proof of Publication Fee			3.00		3.00

**Did you know we now offer a variety of HELP WANTED solutions?
Call us today at (601) 268-2331 for more details.**

Total

\$525.84

Payments/Credits

\$0.00

Phone #

Fax #

Questions? E-Mail:

(601) 268-2331

601-268-2965

accounting@HubCitySPOKES.com

Outstanding balances will incur a 1.5% service charge monthly, calculated from due date of invoice.

Hattiesburg Publishing, Inc.

525 North Main Street, Suite C. • Hattiesburg, MS 39403
(601) 268-2331 tel • (601) 268-2965 fax

Proof of Publication

THE STATE OF MISSISSIPPI, LAMAR COUNTY, FORREST COUNTY
Personally appeared before me, the undersigned person, representing The PineBelt NEWS, a weekly newspapers published in Lamar County and Forrest County, Mississippi, who, being duly sworn, says that the notice, a true copy of which is hereto annexed, appeared in the issues of said newspapers as follows:

Total # of Words: 1,116 Published 1 times

Date 1st Published: Nov 17 Amt: 133.92

Date 2nd Published: _____ Amt: _____

Date 3rd Published: _____ Amt: _____

Date 4th Published: _____ Amt: _____

Date 5th Published: _____ Amt: _____

Subtotal Printer's Fee: 133.92

Proof of Publication Fee: 3.00

TOTAL: 136.92

(signed) [Signature]
The PineBelt NEWS

Sworn to and subscribed before me in my Presence, this 17th
day of November, 2022, a Notary Public in
and for the County of Lamar, State of Mississippi:

(signed) [Signature]

FOR OFFICE USE ONLY:

- ☐ Em P: _____
- ☐ App: _____
- ☐ File Name: COH - BOA - Murphy's - Billboard
- ☐ Invoice #: _____
- ☐ Inv. Crt/Mld: _____
- ☐ Pymt Rec.d: _____
- ☐ POP sent: _____

PUBLIC HEARING

NOTICE is hereby given that a petition has been filed by Estacado Interests, LLC, applicant, as required in the Land Development Code, Ord. No. 3209, to request a variance from section 10.6 Signs - Billboards "1000 lineal feet, measured radially, from any other off premise sign" and instead allow for a distance of "690 feet" from an off premise sign for a variance of 310 feet and to vary from the required side setback (section 10.6) of "15 feet" and instead allow for "0 feet" for a variance of 15 feet for a proposed billboard. The applicant also requests to vary from section 10.6 Signs - Pole Sign "Minimum 150' frontage on any premises freestanding sign" and instead allow for a minimum of "120 feet" frontage for a variance of 30 feet for a proposed on-premise pole sign. The applicant requests three (3) total variances for two (2) signs (one off-premise sign/billboard and one on premise sign) for the property located at 5032 Hardy St (Parcel No.: 051P-II-046.000; PPIN 18460, Lamar County, Ward 3). Said property being more particularly described as follows, to-wit:

EXHIBIT "A" LEGAL DESCRIPTION

Tract 1:

Apart of the NW1/4 of the SE1/4 of Section 11, Township 4 North, Range 14 West, in the County of Lamar, State of Mississippi being more particularly described as commencing at the SE Corner of said Forty, thence run North along the East line of said Forty for 474 feet to the Southern ROW line of U.S. Highway 98, thence run South 83°37'23" West along said southern ROW line for 380 feet to the Point of Beginning, thence run South 00°58'46" East for 190 feet, thence run South 89°01'14" West for 120 feet, thence run North 00°58'46" West for 178.66 feet to the said southern ROW line, thence run North 83°37'23" East along said Southern ROW line for 120.53 feet to the Point of Beginning, containing 0.508 acres, more or less.

Together with all improvements thereon situated and appurtenances thereto belonging.

Tract 2:

Commence at the Southeast corner of the NW1/4 of the SE1/4 of Section 11, Township 4 North, Range 14 West, Lamar County, Mississippi, and run North and along the East boundary of the NW1/4 of the SE1/4 of Section 11 a distance of 474.00 feet to a point on the South right of way boundary of Highway 98; thence run South 83 degrees, 37 minutes, 23 seconds West and along the South right of way boundary of Highway 98 a distance of 380.00 feet; thence run South 00 degrees, 58 minutes, 46 seconds East a distance 190.00 feet to the point of beginning; thence continue South 00 degrees, 58 minutes, 46 seconds East a distance of 120.00 feet; thence run South 89 degrees, 1 minutes, 14 seconds West a distance of 120.00 feet; thence run North 00 degrees, 58 minutes, 46 seconds West a distance of 120.00 feet; thence run North 89 degrees, 1 minutes, 14 seconds East a distance of 120.00 feet back to the point of beginning; being situated in the NW1/4 of the SE1/4 of Section 11, Township 4 North, Range 14 West, Lamar County, Mississippi and containing 1,440.00 square feet (0.03 acres).

Together with perpetual, non-exclusive easement for ingress and egress as created in Book 27A, Page 36 and more particularly described as follows:

Commence at the Southeast corner of the NW1/4 of the SE1/4 of Section 11, Township 4 North, Range 14 West, Lamar County, Mississippi, and run North along the East boundary of the NW1/4 of the SE1/4 of Section 11 a distance of 474.00 feet to a point on the South right of way boundary of Highway 98, thence run South 83 degrees, 37 minutes, 23 seconds West and along the South right of way boundary of Highway 98 a distance of 500.53 feet to the point of beginning; thence run South 00 degrees, 58 minutes, 46 seconds East a distance of 200.66 feet, thence run South 89 degrees, 1 minutes, 14 seconds West a distance of 50.00 feet; thence run North 00 degrees, 58 minutes, 46 seconds West a distance of 195.00 feet to a point of the South right of way boundary of Highway 98; thence run North 83 degrees, 37 minutes, 23 seconds East and along the South right of way boundary of Highway 98 a distance of 50.22 feet back to the point of beginning; being situated in the NW1/4 of the SE1/4 of Section 11, Township 4 North, Range 14 West, Lamar County, Mississippi; and containing 0.23 acres.

Together with perpetual, non-exclusive easement for ingress and egress as created in Book 27A, Page 36 and more particularly described as follows:

Commence at the Southeast corner of the NW1/4 of the SE1/4 of Section 11, Township 4 North, Range 14 West, Lamar County, Mississippi and run North and along the East boundary of the NW1/4 of the SE1/4 of Section 11 a distance of 474.00 feet to a point on the South right of way boundary of Highway 98; thence run South 83 degrees, 37 minutes, 23 seconds West a distance of 500.53 feet; thence run South

degrees, 58 minutes, 46 seconds East a distance of 200.66 feet to the point of beginning; thence run North 89 degrees, 1 minutes, 14 seconds East a distance of 80.00 feet; thence run North 00 degrees, 58 minutes, 51 seconds West a distance of 10.00 feet; thence run North 89 degrees, 1 minute, 14 seconds East a distance of 40.00 feet; thence run South 00 degrees, 58 minutes, 46 seconds East a distance of 50.00 feet; thence run South 89 degrees, 1 minutes, 14 seconds West a distance of 170.00 feet; thence run North 00 degrees, 58 minutes, 46 seconds West a distance of 40.00 feet; thence run North 89 degrees, 1 minute, 14 seconds East a distance of 50.00 feet back to the point of beginning; being situated in the NW1/4 of the SE1/4 of Section 11, Township 4 North, Range 14 West, Lamar County, Mississippi, and containing 0.17 acres.

END OF EXHIBIT

A PUBLIC HEARING in relation to the above-described petition will be held at 3:30 p.m., December 7th, 2022 in the Jackie Dole Sherrill Community Center, First Floor, Hattiesburg, Mississippi, before the Board of Adjustment of said City, at which time and at which hearing all parties of interest and citizens shall have an opportunity to be heard. Contact City Hall Planning Division for remote attendance options.

WITNESS my signature and the official seal of said City on this, the 10th day of November 2022.

CITY OF HATTIESBURG, MISSISSIPPI
BY: Kemas Eaton /s/

CITY CLERK
(SEAL)

Published November 17, 2022



Hattiesburg Publishing, Inc.

525 North Main Street, Suite C. • Hattiesburg, MS 39403
(601) 268-2331 tel • (601) 268-2965 fax

Proof of Publication

THE STATE OF MISSISSIPPI, LAMAR COUNTY, FORREST COUNTY
Personally appeared before me, the undersigned person, representing The PineBelt NEWS, a weekly newspapers published in Lamar County and Forrest County, Mississippi, who, being duly sworn, says that the notice, a true copy of which is hereto annexed, appeared in the issues of said newspapers as follows:

Total # of Words: 389 Published 1 times

Date 1st Published: Nov 17 Amt: 46.68

Date 2nd Published: _____ Amt: _____

Date 3rd Published: _____ Amt: _____

Date 4th Published: _____ Amt: _____

Date 5th Published: _____ Amt: _____

Subtotal Printer's Fee: 46.68

Proof of Publication Fee: 3.00

TOTAL: 49.68

(signed) [Signature]
The PineBelt NEWS

Sworn to and subscribed before me in my Presence, this 17th
day of November, 2022, a Notary Public in
and for the County of Lamar, State of Mississippi:

(signed) Katherine H Bullock

FOR OFFICE USE ONLY:

- ☐ Em P: _____
- ☐ App: _____
- ☐ File Name: COH - BOA - Underwood
- ☐ Invoice #: _____
- ☐ Inv. Crt/Mld: _____
- ☐ Pymt Rec.d: _____
- ☐ POP sent: _____

PUBLIC HEARING

NOTICE is hereby given that a petition has been filed by Michael Kent Myatt, owner, and Joel Ford, engineer, as required in the Land Development Code, Ord. No. 3209, to request a variance from section 7.12.10.4 "Maximum outdoor equipment storage space of 50%" to exceed the allowable amount to "64%" for a certain property located at 5566 Old Highway 42 (Parcel No.: 2-029A-03-031.00; PPIN 15065 Forrest County, Ward 2). Said property being more particularly described as follows, to-wit:

Commence at a 1/2" rebar at the Southwest corner of Block 10 of the A.R. Fairley Sr. Subdivision Second Survey, as per the map or plat thereof on file in the office of the Chancery Clerk in the Courthouse at Hattiesburg, Forrest County, Mississippi and the Point of Beginning; from the Point of Beginning run North

00°04'36" West for 15.80 feet to a 3/4" iron pipe; thence run South 88°09'23" West for 14.75 feet to a 3/4" iron pipe thence

run North 00°08'45" West for 209.75 feet to a 3/4" iron pipe; thence run

South 89°51'15" East for 181.30 feet to a 3/4" iron pipe thence run South 04°43'10" East for 149.42

feet to a 1/2" rebar and the North right of way line of U.S. Highway #11; thence run South 62°31'56"

West along said right of way for 164.12 feet to a 1/2" rebar; thence run West for

32.67 feet back to the Point of Beginning; said parcel of land is part of the A.R. Fairley Sr. Subdivision Second Survey as per the map or plat thereof on file in the office of the Chancery Clerk at the Courthouse in Hattiesburg, Forrest County, Mississippi, and contains 0.845 acres, more or less; all together with all improvements thereon and appurtenances thereunto belonging.

A PUBLIC HEARING in relation to the above-described petition will be held at 3:30 p.m., December 7th, 2022 in the Jackie Dole Sherrill Community Center, First Floor, Hattiesburg, Mississippi, before the Board of Adjustment of said City, at which time and at which hearing all parties of interest and citizens shall have an opportunity to be heard. Contact City Hall Planning Division for remote attendance options.

WITNESS my signature and the official seal of said City on this, the 10th day of November 2022.

CITY OF HATTIESBURG, MISSISSIPPI

BY: Kemas Eaton /s/

CITY CLERK

(SEAL)

Published November 17, 2022



Hattiesburg Publishing, Inc.

525 North Main Street, Suite C. • Hattiesburg, MS 39403
(601) 268-2331 tel • (601) 268-2965 fax

Proof of Publication

THE STATE OF MISSISSIPPI, LAMAR COUNTY, FORREST COUNTY
Personally appeared before me, the undersigned person, representing The PineBelt NEWS, a weekly newspapers published in Lamar County and Forrest County, Mississippi, who, being duly sworn, says that the notice, a true copy of which is hereto annexed, appeared in the issues of said newspapers as follows:

Total # of Words: 384 Published 1 times

Date 1st Published: Nov 17 Amt: 46.08

Date 2nd Published: _____ Amt: _____

Date 3rd Published: _____ Amt: _____

Date 4th Published: _____ Amt: _____

Date 5th Published: _____ Amt: _____

Subtotal Printer's Fee: 46.08

Proof of Publication Fee: 3.00

TOTAL: 49.08

(signed) [Signature]
The PineBelt NEWS

Sworn to and subscribed before me in my Presence, this 17th
day of November, 2022, a Notary Public in
and for the County of Lamar, State of Mississippi:

(signed) Katherine H. Bullock

FOR OFFICE USE ONLY:

- ☐ Em P: _____
- ☐ App: _____
- ☐ File Name: COH - HPC Conditional Use - Underwood
- ☐ Invoice #: _____
- ☐ Inv. Crt/Mld: _____
- ☐ Pymt Rec.d: _____
- ☐ POP sent: _____

PUBLIC HEARING

NOTICE is hereby given that a petition has been filed by Michael Kent Myatt, owner, and Joel Ford, engineer, as required in the Land Development Code, Ord. No. 3209, to request a conditional use for "gravel outdoor storage space" in an B-3 Zone (Section 7.12.10.4.iii) for a certain property located at 5566 Old Highway 42 (Parcel No.: 2-029A-03-031.00; PPIN 15065 Forrest County, Ward 2). Said property being more particularly described as follows, to-wit:

Commence at a 1/2" rebar at the Southwest corner of Block 10 of the A.R. Fairley Sr. Subdivision Second Survey, as per the map or plat thereof on file in the office of the Chancery Clerk in the Courthouse at Hattiesburg, Forrest County, Mississippi and the Point of Beginning; from the Point of Beginning run North

00°04'36" West for 15.80 feet to a 3/4" iron pipe; thence run South 88°09'23"

West for 14.75 feet to a 3/4" iron pipe thence run North 00°08'45" West for

209.75 feet to a 3/4" iron pipe; thence run South 89°51'15" East for 181.30 feet to a 3/4" iron pipe thence run South 04°43'10" East for 149.42 feet to a 1/2" rebar and the North right of way line of U.S. Highway #11; thence run South 62°31'56" West along said right of way for 164.12 feet to a 1/2" rebar; thence run West for

32.67 feet back to the Point of Beginning; said parcel of land is part of the A.R. Fairley Sr. Subdivision Second Survey as per the map or plat thereof on file in the office of the Chancery Clerk at the Courthouse in Hattiesburg, Forrest County, Mississippi, and contains 0.845 acres, more or less; all together with all improvements thereon and appurtenances thereunto belonging.

A PUBLIC HEARING in relation to the above-described petition will be held at 1:00 p.m., December 7th, 2022 in the Jackie Dole Sherrill Community Center, First Floor, Hattiesburg, Mississippi. Commission of said

WITNESS my signature and the official seal of said City on this, the 10th day of November 2022.

CITY OF HATTIESBURG, MISSISSIPPI
BY: Kemas Eaton /s/
CITY CLERK
(SEAL)
Published November 17, 2022



Hattiesburg Publishing, Inc.

525 North Main Street, Suite C. • Hattiesburg, MS 39403
(601) 268-2331 tel • (601) 268-2965 fax

Proof of Publication

THE STATE OF MISSISSIPPI, LAMAR COUNTY, FORREST COUNTY
Personally appeared before me, the undersigned person, representing The PineBelt NEWS, a weekly newspapers published in Lamar County and Forrest County, Mississippi, who, being duly sworn, says that the notice, a true copy of which is hereto annexed, appeared in the issues of said newspapers as follows:

Total # of Words: 956 Published 1 times

Date 1st Published: Nov 17 Amt: 114.72

Date 2nd Published: _____ Amt: _____

Date 3rd Published: _____ Amt: _____

Date 4th Published: _____ Amt: _____

Date 5th Published: _____ Amt: _____

Subtotal Printer's Fee: 114.72

Proof of Publication Fee: 3.00

TOTAL: 117.72

(signed) [Signature]
The PineBelt NEWS

Sworn to and subscribed before me in my Presence, this 17th
day of November, 2022, a Notary Public in
and for the County of Lamar, State of Mississippi:

(signed) [Signature]

FOR OFFICE USE ONLY:

- ☐ Em P: _____
- ☐ App: _____
- ☐ File Name: COH - HPC Edmonson CU
- ☐ Invoice #: _____
- ☐ Inv. Crt/Mld: _____
- ☐ Pymt Rec.d: _____
- ☐ POP sent: _____

PUBLIC HEARING

NOTICE is hereby given that a petition has been filed by Trace 4th Street, LLC., owner, as required in the Land Development Code, Ord. No. 3209, to request a conditional use for "restaurant, without drive-through" in an B-2 Zone (Neighborhood Business District) for a certain property located at 1001 Main St (Parcel No.: 2-0296-03-609.00, 2-0296-03-608.00; PPIN 18818, 18817 Forrest County, Ward 2). Said property being more particularly described as follows, to-wit:

PPIN 18817

A part of Lots Two (2) and Three (3) of Block One Hundred (100) of the KAMPER AND WHINNERY SURVEY NUMBER 2 of the City of Hattiesburg, County of Forrest, State of Mississippi, and particularly described as follows.

Begin at the intersection of the South line of the right of way of the Mississippi Central Railroad Company with the East line of Main Street said point being 20 feet from the center line of the track of said Mississippi Central Railroad; thence run Southeastwardly along the Eastern line of Main Street a distance of 70.4 feet; thence Eastwardly a distance of 136 feet, more or less, to a point on the dividing line between Lots 3 and 4 of said Block, said point being 72 feet North of the North line of Fourth Street, thence North along the dividing line between Lots 3 and 4 a distance of 50 feet, more or less, to the South line of the right of way of the said Mississippi Central Railroad Company, and thence westwardly along said right of way line a distance of 179 feet, more or less to said point of beginning, reserving and excepting from the operation of this conveyance that parcel of said description described as follows, to-wit:

Begin at an iron hub or stake on the Eastern line of Main Street at a point 82 feet Northward of from the intersection of the Eastern line of Main Street with the Northern line of Fourth Street, and run thence in an Easterly direction along the North property line of Pan American Petroleum Corporation a distance of 13 feet and 2 inches; thence in a Northerly direction a distance of one foot; thence in a Northwesterly direction along the North edge of concrete driveway slab a distance of 19 feet and 8 inches to the said Eastern boundary of Main Street, thence a Southeasterly direction along Eastern boundary line of Main Street a distance of 10 feet to said point of beginning, which point of beginning is 70.4 feet Southward from the point of intersection of the said Eastern line of Main Street with the Southern line of the right of way of the Mississippi Central Railroad Company; together with all improvements thereon and appurtenances thereunto belonging.

PPIN 18818

Tract I: A part of Lots Two (2), Three (3) and Four (4) in the Block One Hundred (100) of the Kamper & Whinnery Survey or Addition to the City of Hattiesburg, Mississippi, and more particularly described as beginning at the point where the Northern boundary line of East Fourth Street intersects with Main Street and run East along said Northern boundary line of East Fourth Street one hundred seven (107) feet; thence North to the right of way of the Mississippi Central Railroad Company; thence Westwardly along the Southern boundary line of said rail road right of way to the dividing line between said Lots Three (3) and Four (4); thence South along said dividing line between said Lots Three (3) and Four (4) to a point Seventy two (72) feet North of the Northern boundary line of East Fourth Street; thence West one hundred forty three (143) feet, more or less, to Main Street; thence along the Eastern boundary line of Main Street Eighty two (82) feet, more or less to the point of beginning, being a part of the South Half (S1/2) of the Southwest Quarter (SW 1/4) of Section Three (3), Township Four (4) North, Range Thirteen (13) West.

Tract 2: beginning at the point where the Northern boundary line of East Fourth Street intersects with the Eastern boundary line of Main Street, in Block 100 of the Kamper and Whinnery Survey or Addition to the City of Hattiesburg, Mississippi and running thence in a Northerly direction along said Eastern boundary line of Main Street 82' to iron hub at the Northwest corner of property of now or formerly Pan American Petroleum Corporation, which iron hub being designated as the point of beginning; thence in an easterly direction along the North property line now or formally of said Pan American Petroleum Corporation 13' 2"; thence in a northerly direction 1' 0"; thence in a Northwesterly direction along North edge of concrete driveway slab 19' 9" to the East boundary of Main Street; thence in a Southerly direction along said East boundary of Main Street 10' 0" to the point of beginning; It begin intended by above description to cover that parcel of land adjacent to and immediately North of Property now or formerly belonging to Pan American Petroleum Corporation that is covered by concrete and begin used for driveway purposes in the North approach to their property on said Main Street.

A PUBLIC HEARING in relation to the above-described petition will be held at 1:00 p.m., December 7th, 2022 in the Jackie Dole Sherrill Community Center, First Floor, Hattiesburg, Mississippi, before the Planning Commission of said City, at which time and at which hearing all parties of interest and citizens shall have an opportunity to be heard. Contact City Hall Planning Division for remote attendance options.

WITNESS my signature and the official seal of said City on this, the 10th day of November 2022.

CITY OF HATTIESBURG, MISSISSIPPI

BY: Kemas Eaton /s/

CITY CLERK

(SEAL)

Published November 17, 2022



Hattiesburg Publishing, Inc.

525 North Main Street, Suite C. • Hattiesburg, MS 39403
(601) 268-2331 tel • (601) 268-2965 fax

Proof of Publication

THE STATE OF MISSISSIPPI, LAMAR COUNTY, FORREST COUNTY
Personally appeared before me, the undersigned person, representing The PineBelt NEWS, a weekly newspapers published in Lamar County and Forrest County, Mississippi, who, being duly sworn, says that the notice, a true copy of which is hereto annexed, appeared in the issues of said newspapers as follows:

Total # of Words: 279 Published 1 times

Date 1st Published: Nov 17 Amt: 33.48

Date 2nd Published: _____ Amt: _____

Date 3rd Published: _____ Amt: _____

Date 4th Published: _____ Amt: _____

Date 5th Published: _____ Amt: _____

Subtotal Printer's Fee: 33.48

Proof of Publication Fee: 3.00

TOTAL: 36.48

(signed) [Signature]
The PineBelt NEWS

Sworn to and subscribed before me in my Presence, this 17th
day of November, 2022, a Notary Public in
and for the County of Lamar, State of Mississippi:

(signed) Katherine H. Bullock

PUBLIC HEARING

NOTICE is hereby given that a petition has been filed by Michael Kent Myatt, owner, and Joel

Ford, engineer, as required in the Land Development Code, Ord. No. 3209, to close and vacate a portion of an undeveloped street known as "Hill Street", which is located north of the intersection of Bouie St and Old Highway 42 between 5566 Old Highway 42 and 5560 Old Highway 42 (Ward 2). Said property being more particularly described as follows, to-wit:

Request to vacate a 36.5 foot wide platted undeveloped public right-of-way known as Hill Street adjoining blocks 1, 2, 3 and 4 of the Mrs. John Martin Subdivision, a resubdivision of block 7, and a portion of blocks 6 and 9 of the A.R. Fairley 2nd addition and also request to vacate an adjoining 15 foot undeveloped platted alley adjoining blocks 7, 8 and 10 in the A.R. Fairley Subdivision, located in the SW 1/4 of the NE 1/4 of Section 3, T-4-N, R-13-W, City of Hattiesburg, Forrest County, MS. The above herein described contains 0.79 acres, more or less.

A PUBLIC HEARING in relation to the above-described petition will be held at 1:00 p.m., December 7th, 2022 in the Jackie Dole Sherrill Community Center, First Floor, Hattiesburg, Mississippi, before the Planning Commission of said City, at which time and at which hearing all parties of interest and citizens shall have an opportunity to be heard. Contact City Hall Planning Division for remote attendance options.

WITNESS my signature and the official seal of said City on this, the 10th day of November 2022.

CITY OF HATTIESBURG, MISSISSIPPI

BY: Kermas Eaton /s/
CITY CLERK
(SEAL)

Published November 17, 2022

FOR OFFICE USE ONLY:

- ☐ Em P: _____
- ☐ App: _____
- ☐ File Name: COH - HPC HWY 42 Alley Vacate
- ☐ Invoice #: _____
- ☐ Inv. Crt/Mld: _____
- ☐ Pymt Rec.d: _____
- ☐ POP sent: _____



Hattiesburg Publishing, Inc.

525 North Main Street, Suite C. • Hattiesburg, MS 39403
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Proof of Publication

THE STATE OF MISSISSIPPI, LAMAR COUNTY, FORREST COUNTY
Personally appeared before me, the undersigned person, representing The PineBelt NEWS, a weekly newspapers published in Lamar County and Forrest County, Mississippi, who, being duly sworn, says that the notice, a true copy of which is hereto annexed, appeared in the issues of said newspapers as follows:

Total # of Words: 909 Published 1 times

Date 1st Published: Nov 17 Amt: 109.08

Date 2nd Published: _____ Amt: _____

Date 3rd Published: _____ Amt: _____

Date 4th Published: _____ Amt: _____

Date 5th Published: _____ Amt: _____

Subtotal Printer's Fee: 109.08

Proof of Publication Fee: 3.00

TOTAL: 112.08

(signed) [Signature]
The PineBelt NEWS

Sworn to and subscribed before me in my Presence, this 17th
day of November, 2022, a Notary Public in
and for the County of Lamar, State of Mississippi:

(signed) [Signature]

FOR OFFICE USE ONLY:

- ☐ Em P: _____
- ☐ App: _____
- ☐ File Name: COH - HPC William Carey Rezoning
- ☐ Invoice #: _____
- ☐ Inv. Cr/Mld: _____
- ☐ Pymt Rec.d: _____
- ☐ POP sent: _____

PUBLIC HEARING

NOTICE is hereby given that a petition has been filed by William Carey University, owner, Grant Guthrie, representative, and Ben Burnett, representative as required in the Land Development Code, Ord. No. 3209, to change the zoning classification for unimproved properties located at the intersection of Vernon Street and Magnolia Avenue from R-1A: Single-Family Residential, and R-2: Two-Family Residential (Section 4.5.3 and 4.5.6) to R-3: Multi-Family Residential (Section 4.5.7) (R-1A Parcels: 2-0386-15-126.00, 2-0386-15-127.00, 2-0386-15-125.00, 2-0386-15-128.00, 2-0386-15-173.00; PPIN: 13555, 13556, 13557, 13558, 13692; R-2 Zoned Parcels: 2-0386-15-171.00, 2-0386-15-187.00, 2-0386-15-172.00; PPIN: 13684, 13685, 13705, Forrest County, Ward 5). Said property being more particularly described as follows, to-wit:

PPIN 13555 and 13557:

The South 140 feet of the West 63 feet of Lot Seven (7), Block Ten (10), of BURKETT SURVEY, in the City of Hattiesburg, County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, together with the North 10 feet of Magnolia Avenue now vacated, lying and being South and adjacent to the South line of the above described Lot 7 in Block 10 and more particularly described as follows, to-wit:

Commencing at the southwest corner of Lot 7, Block 10 of the Burkett Survey of the City of Hattiesburg, Mississippi, and run thence North for a distance of 140 feet; run thence East for a distance of 63 feet; run thence South for a distance of 150 feet; run thence West for a distance of 63 feet; run thence North for a distance of 10 feet to the Point of Beginning; together with all improvements thereon and appurtenances thereunto belonging.

North 60 feet of Lot Seven (7) and Lot Eight (8) in Block Ten (10) of the Burkett Survey of the City of Hattiesburg, Mississippi.

PPIN: 13558

Lot 9, Block 10, BURKETT'S SUBDIVISION in the City of Hattiesburg, County of Forrest, State of Mississippi, as per map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, and also the North 10 feet of Magnolia Street lying South of said Lot 9, Block 10, Burkett's Subdivision vacated by City Ordinance No. 1376, dated February 17, 1960, in Book 217 at Page 615 of the Land Deed records of Forrest County, Mississippi, together with all improvements thereon and appurtenances thereunto belonging.

PPIN 13556:

The South 140 feet of Lot Eight (8) and the East 7 feet of the South 140 feet of Lot Seven (7), Block Ten (10) of the BURKETT SURVEY of the City of Hattiesburg, County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, and also the North 10 feet of Magnolia Avenue, now vacated, lying South of said parcel of land and more particularly described as follows, to-wit:

Commencing at the southwest corner of Lot 7, Block 10 of the Burkett Survey and run thence East and along the South line of Lot 7 for a distance of 63 feet to and for a Point of Beginning of the parcel herein described, thence at right angles run South for a distance of 10 feet, thence run East and parallel with the South lines of Lot 7 and 8 for a distance of 77 feet, thence run North to the southeast corner of Lot 8, thence continue North and along the East line of said Lot 8 for a distance of 150 feet, thence run West for a distance of 77 feet, thence run South for a distance of 140 feet to the Point of Beginning; together with all improvements thereon and appurtenances thereunto belonging.

PPIN 13685:

Lot 7, Block 23 of the BURKETT SUBDIVISION, in the City of Hattiesburg, County of Forrest, State of 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 thereunto belonging.

PPIN 13684:

Lots Five (5) and Lot Six (6), Block Twenty-three (23) of the BURKETT'S SUBDIVISION, in the County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi.

PPIN 13692:

The North 140 feet of Lots 1, 2, and 3 and all of Lots 4, 5, and 6 of Block 24 of the Burkett Subdivision of a part of the S 1/2 of Section 15, Township 4 North, Range 13 West, Forrest County, Mississippi, together with all improvements thereon and all appurtenances and hereditaments thereunto belonging.

PPIN 13705:

Southernmost Sixty (60) feet of Lots 1, 2, and 3, Block 24, Burkett Subdivision, City of Hattiesburg, County of Forrest, Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi, together

A PUBLIC HEARING in relation to the above-described petition will be held at 1:00 p.m., December 7th, 2022 in the Jackie Dole Sherrill Community Center, First Floor, Hattiesburg, Mississippi, before the Planning Commission of said City, at which time and at which hearing all parties of interest and citizens shall have an opportunity to be heard. Contact City Hall Planning Division for remote attendance options.

WITNESS my signature and the official seal of said City on this, the 10th day of November 2022.

CITY OF HATTIESBURG, MISSISSIPPI

BY: Kermas Eaton /s/

CITY CLERK

(SEAL)

Published November 17, 2022



Hattiesburg Publishing, Inc.

525 North Main Street, Suite C. • Hattiesburg, MS 39403
(601) 268-2331 tel • (601) 268-2965 fax

Proof of Publication

THE STATE OF MISSISSIPPI, LAMAR COUNTY, FORREST COUNTY
Personally appeared before me, the undersigned person, representing The PineBelt NEWS, a weekly newspaper published in Lamar County and Forrest County, Mississippi, who, being duly sworn, says that the notice, a true copy of which is hereto annexed, appeared in the issues of said newspapers as follows:

Total # of Words: 199 Published 1 times

Date 1st Published: Nov 17 Amt: 23.88

Date 2nd Published: _____ Amt: _____

Date 3rd Published: _____ Amt: _____

Date 4th Published: _____ Amt: _____

Date 5th Published: _____ Amt: _____

Subtotal Printer's Fee: 23.88

Proof of Publication Fee: 3.00

TOTAL: 26.88

(signed) [Signature]
The PineBelt NEWS

Sworn to and subscribed before me in my Presence, this 17th
day of November, 2022, a Notary Public in
and for the County of Lamar, State of Mississippi:

(signed) [Signature]

PUBLIC HEARING

NOTICE is hereby given that a petition has been filed by the City of Hattiesburg, with the Mayor and Council of the City of Hattiesburg, Mississippi, to adopt an amendment to the "Comprehensive Plan 2008-2028" and to amend the Comprehensive Zoning Ordinance No. 2330, as amended, and to amend the text of the Midtown Form Based Code, Ordinance 3105 as amended, of the City of Hattiesburg, Mississippi as follows: To amend the "Midtown Form-Based Code" to establish the "Hattiesburg Form-Based Code" and establish the area and further define, amend, add regulations for the "Longleaf Village in the Avenues Master Plan."

A PUBLIC HEARING in relation to the above-described petition will be held at 1:00 p.m., December 7th, 2022 in the Jackie Dole Sherrill Community Center, First Floor, Hattiesburg, Mississippi, before the Planning Commission of said City, at which time and at which hearing all parties of interest and citizens shall have an opportunity to be heard. Contact City Hall Planning Division for remote attendance options.

WITNESS my signature and the official seal of said City on this, the 10th day of November 2022.

CITY OF HATTIESBURG, MISSISSIPPI
BY: Kermas Eaton/s/
CITY CLERK
(SEAL)

Published November 17, 2022

FOR OFFICE USE ONLY:

- ☐ Em P: _____
- ☐ App: _____
- ☐ File Name: COH - Public Notice - HPC
- ☐ Invoice #: _____
- ☐ Inv. Crt/Mld: _____
- ☐ Pymt Rec.d: _____
- ☐ POP sent: _____





Memorandum

To: Mayor Toby Barker and Members of City Council
From: Wiley Quinn, Urban Development Director
cc: Kermas Eaton, City Clerk
Date: Tuesday, December 20, 2022
Re: Acknowledge receipt of the Quitclaim Deed for 1213 Putnam Street from Benita Conner.
File Number: 2022-932
Minute Book #

Summary

Acknowledge receipt of the Quitclaim Deed for 1213 Putnam Street from Benita Conner and authorize City Clerk to record the deed.

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.



*** CERTIFIED COPY PAGE ***

FORREST COUNTY, MS
I LANCE C. REID, CHANCERY CLERK OF THE ABOVE NAMED
COUNTY, AND STATE, DO CERTIFY THAT THE FOREGO IS A TRUE AND
CORRECT COPY OF THE ORIGINAL AS APPEARS IN
DEED - 1409 AT PAGE - 594 IN SAID COURT.
WITNESS MY HAND AND SEAL THIS Friday, December 2, 2022.

LANCE C. REID, CHANCERY CLERK



DEED

Bk:1409 Page:594-596

RCD: 12/02/2022 @11:16:13:AM

FORREST COUNTY, MS

LANCE C. REID CHANCERY CLERK

Prepared By, Record and

Return to:

Pope & Pope, P.A.

Moran M. Pope, III

MS Bar No. 4441

P.O. Box 17527

Hattiesburg, MS 39404

(601)268-9997

INDEXING INSTRUCTIONS: Lot 6, Block 18,
Omega Subdivision, City of Hattiesburg, Forrest
County, Mississippi.

STATE OF MISSISSIPPI

COUNTY OF FORREST

QUITCLAIM DEED

FOR AND IN CONSIDERATION of the sum of Ten Dollars (10.00), cash in hand paid,
and other good and valuable consideration, the receipt and sufficiency of which is hereby
acknowledged, the undersigned, **GRANTOR**,

BENITA CONNER

Address: (property) 1213 Putnam 39401 H'burg MS
(physical) 116 Collins St 39401 " " "
Phone: 601.951.8758

does hereby grant, bargain, sell, convey and quitclaim unto the **GRANTEE**,

THE CITY OF HATTIESBURG
a Mississippi Municipal Corporation
Post Office Box 1898
Hattiesburg, MS 39403-1898
(601) 545-4500

any and all of her right, title and interest in the following described real property, lying and being situate in Forrest County, Mississippi, described as follows, to-wit:

Lot Six (6), Block Eighteen (18) of the OMEGA SUBDIVISION of the City of Hattiesburg, County of Forrest, State of Mississippi, as per the map or plat thereof on file in the office of the Chancery Clerk of Forrest County, Mississippi.

WITNESS MY SIGNATURE, on this, the 23 day of November, A.D., 2022.

Benita Conner
BENITA CONNER

STATE OF MISSISSIPPI

COUNTY OF Lamar

Personally appeared before me, the undersigned authority in and for the said county and state, on this 23 day of November, A.D., 2022, within my jurisdiction, the within named **BENITA CONNER** who acknowledged that she executed the above and foregoing instrument.

(SEAL)

Sharon A. Newsom
NOTARY PUBLIC
My Commission Expires: 6-27-2026





Memorandum

To: Mayor Toby Barker and Members of City Council
From: Wiley Quinn, Urban Development Director
cc: Kermas Eaton, City Clerk
Date: Tuesday, December 20, 2022
Re: Approve and authorize issuance of manual checks for CDBG/HOME Program Claims per attached Memorandum. {CDBG Entitlement/HOME}
File Number: 2022-930
Minute Book #

Summary

Approve and authorize issuance of manual checks for CDBG/HOME Program Claims per attached Memorandum. {CDBG Entitlement/HOME}

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.

MEMORANDUM

TO: City of Hattiesburg Council Members

FROM: Wiley Quinn
Department of Urban Development

SUBJECT: Authorize issuance of manual check for CDBG/HOME Program claims

DATE: December 20, 2022

The following request for payment is being submitted for approval during the City Council's December 20, 2022 meeting. Please authorize and approve issuance of a manual check for the claims listed below:

Recipient: Starter Homes of Mississippi
Activity: Emergency Roof Repair
Program: CDBG
Project Site: 326 Gasaway Loop
Amount Requested: \$14,995.00
Purpose of Request: Reimbursement

Recipient: Starter Homes of Mississippi
Activity: Emergency Roof Repair
Program: CDBG
Project Site: 106 Lynnox Circle
Amount Requested: \$14,993.00
Purpose of Request: Reimbursement

Recipient: Starter Homes of Mississippi
Activity: Emergency Roof Repair
Program: CDBG
Project Site: 214 E 4th Street
Amount Requested: \$14,995.00
Purpose of Request: Reimbursement

STARTER HOMES OF MISSISSIPPI
57 CARTER DRIVE
SEMINARY, MS. 39479
PHONE: (601) 408-7120

RECEIVED
12/7/22
[Signature]

BILL TO:

PETRA WINGO
COMMUNITY DEVELOPMENT
P.O. BOX 1898
HATTIESBURG, MS. 39401
DECEMBER 7, 2022

DESCRIPTION	PRICE	TOTAL
<i>Labor & Materials to complete roof repair at 214 East 4th Street Limited access to roof. Removed 2 layers of shingles on back part of roof. Replaced more decking & rafters than originally expected.</i>		\$14,995.00

THANK YOU
FOR YOUR
BUSINESS!

TOTAL DUE: 14,995.00

STARTER HOMES OF MISSISSIPPI
57 CARTER DRIVE
SEMINARY, MS. 39479
PHONE: (601) 408-7120

PAID
12/7/22
DN

BILL TO:

PETRA WINGO
COMMUNITY DEVELOPMENT
P.O. BOX 1898
HATTIESBURG, MS. 39401
DECEMBER 7, 2022

DESCRIPTION	PRICE	TOTAL
<i>Labor & Materials to complete roof repair at 106 Lynnox Circle. Large roof.</i>		\$14,993.00

**THANK YOU
FOR YOUR
BUSINESS!**

TOTAL DUE: 14,993.00

STARTER HOMES OF MISSISSIPPI
57 CARTER DRIVE
SEMINARY, MS. 39479
PHONE: (601) 408-7120

PAID 12/1/22
DP

BILL TO:

PETRA WINGO
COMMUNITY DEVELOPMENT
P.O. BOX 1898
HATTIESBURG, MS. 39401
DECEMBER 7, 2022

DESCRIPTION	PRICE	TOTAL
<i>Labor & Materials to complete roof repair at 326 Gasaway Loop. Had some more plywood replacement than originally figured. Large roof.</i>		\$14,995.00

**THANK YOU
FOR YOUR
BUSINESS!**

TOTAL DUE: 14,995.00



Memorandum

To: Mayor Toby Barker and Members of City Council

From:

cc:

Date: Tuesday, December 20, 2022

Re: Approve specifications and authorize publication of one (1) New 2022 or newer bucket truck/rear mounted aerial unit for the Urban Forestry Division, Parks & Recreation Department for the City of Hattiesburg.
File Number: 2022-937
Minute Book #

Summary

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.

NOTICE TO BIDDERS

NOTICE is hereby given that the Mayor and Council of the City of Hattiesburg, Mississippi will receive bids in the following manner:

Proposals will be accepted until 10:00a.m. On Thursday, January 12, 2023, by electronic bid submission or in sealed envelopes at the Office of the City Clerk, 200 Forrest Street, Hattiesburg, MS 39401. Vendors must supply prices with their proposal. The bid form should be filled out and uploaded by the date and time stated above.

Specifications and procedures can be downloaded from Plan House at www.hattiesburgmsbids.com. All bids must comply with the specifications provided. The City of Hattiesburg reserves the right to amend the specifications, as necessary.

Submissions will be evaluated and vendors submitting acceptable offers will be invited to submit priced bids via reverse auction. Electronic bids and/or reverse auction bids can be submitted at www.hattiesburgmsbids.com. For any questions relating to the electronic process, please call PH Bidding at (662)407-0193.

Qualified bidders will be invited to participate in a reverse auction, which will take place on January 19, 2023 at 10:30a.m.

ONE (1) NEW OR NEWER BUCKET TRUCK/REAR MOUNTED AERIAL UNIT FOR THE URBAN FORESTRY DIVISION, PARKS & RECREATION DEPARTMENT, CITY OF HATTIESBURG.

The above shall bid upon and delivered as per detailed specifications on file in the Office of the City Clerk, P. O. Box 1898, 200 Forrest Street, Hattiesburg, Mississippi, 39403-1898, (601) 545-4552, which may be obtained upon request.

The lowest and best bid received will be accepted, subject to the provisions of Section 31-7-13 of the Mississippi Code of 1972, Annotated as Amended, and other applicable State law; but the Council reserves the right to reject any or all bids received and to waive informalities.

PUBLISHED by Order of the Council on this, the 20th day of December 2022.

CITY OF HATTIESBURG, MISSISSIPPI

BY: Kermas Eaton/s/
CITY CLERK

Publish 12-22-22 & 12-29-22

NOTICE TO BIDDERS

NOTICE is hereby given that the Mayor and Council of the City of Hattiesburg, Mississippi will receive bids for

ONE (1) OR MORE NEWER BUSES FOR MASS TRANSIT

in the following manner:

Unpriced Proposals will be accepted until 10:00a.m. local time on Thursday, September 29, 2022, by electronic bid submission at www.hattiesburgmsbids.com or in sealed envelopes at the Office of the City Clerk, 200 Forrest Street, Hattiesburg, MS 39401.

The bid response documents should be filled out and uploaded by the date and time stated above.

Specifications and procedures can be downloaded from www.hattiesburgmsbids.com. All responses must comply with the specifications provided. The City of Hattiesburg reserves the right to amend the specifications, as necessary.

Response submissions will be evaluated and vendors submitting acceptable offers will be invited to submit priced bids via reverse auction. Electronic bids and/or reverse auction bids can be submitted at www.hattiesburgmsbids.com. For any questions relating to the electronic process, please call PH Bidding at (662) 407-0193.

Qualified bidders will be invited to participate in a reverse auction, which will take place on October 6, 2022, at 10:30a.m. local time.

The lowest and best bid received will be accepted, subject to the provisions of Section 31-7-13 of the Mississippi Code of 1972, Annotated as Amended, and other applicable State law; but the Council reserves the right to reject any or all bids received and to waive informalities.

PUBLISHED by Order of the Council on this, the 6th day of September 2022.

CITY OF HATTIESBURG, MISSISSIPPI

BY: Kermas Eaton/s/
CITY CLERK

Publish 9-8-22 & 9-15-22



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Sid Gonsoulin
cc:
Date: Tuesday, December 20, 2022
Re: Approve Plans and Specifications for the Midtown Green project and authorize advertisement for bids.
File Number: 2022-954
Minute Book #

Summary

Approve Plans and Specifications for the Midtown Green project and authorize advertisement for bids.

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.

ADVERTISEMENT FOR BIDS

The City of Hattiesburg will receive sealed proposals at the City Council Chambers, Hattiesburg City Hall, at 200 Front Street, Hattiesburg Mississippi, until **10:00 am, Thursday, February 9, 2023**, for furnishing all labor, materials and equipment to perform construction of Midtown Green, located at 309 Crestmont Avenue, Hattiesburg, Mississippi as described in and reflected by the plans and specifications prepared by Landarc Consulting Group, Inc., Hattiesburg, Mississippi, dated December, 2022, immediately after which time said sealed proposals shall be publicly opened and read in the Council Chambers In Hattiesburg City Hall.

It is recommended all bidders attend a Pre-Bid meeting held **Tuesday, January 31, 2023**, 10:30 am local time at the Site, 309 Crestmont Avenue, Hattiesburg, located across from the rear parking lot of University Baptist Church (3200 Arlington Loop, Hattiesburg) to walk the project site and answer any questions.

A single contract shall be let for the complete project.

Detailed drawings and specifications are on file and may be examined at office of the Secretary of the Hattiesburg Engineering Department, 212 West Front Street, Hattiesburg, MS.

Bidders may obtain complete sets of drawings and specifications from Plan House by going to the Landarc Consulting Group Online Plan Room at www.landarcplans.com, Plan House is located at 1A Churchill Street, (near Buffalo Wild Wings, off I 59), Hattiesburg, Mississippi 39402 Phone 601 336-6378.

Proposals shall be submitted in duplicate only upon the blank bid forms provided with the drawings and general conditions and must be accompanied by bid security in the form of a certified check or acceptable bid bond in an amount equal to at least five percent (5%) of the base bid. Said security to be forfeited, as liquidated damages, not penalty, by a bidder who may be awarded the contract, but who fails to carry out the terms of the proposal, execute the contract and post the required performance and payment bonds in the form and amount, and within the time specified. The bid bond, or the certified check, if used in lieu thereof, shall be payable unconditionally to the City of Hattiesburg.

Bids on the project must be received on or before the time specified above, and no bid may be withdrawn after the scheduled closing time and date for the receipt of bids for a period of sixty (60) days. All bids submitted must comply with the requirements of Chapter 3, Title 31 (Sections 31-3-1, et. seq.) of the Mississippi Code of 1972, as amended, and the performance of any contract shall be bonded in accordance with Chapter 5, Title 31 of the Mississippi Code of 1972, as amended.

Bidders who are non-residents of the State of Mississippi must also comply with the provisions of Section 31-3-21(3) of the Mississippi Code of 1972, as amended.

The Hattiesburg City Council reserves the right to reject any and all bids and to waive informalities.

DATED this, the _____ day of _____, 2023.

HATTIESBURG CITY CLERK

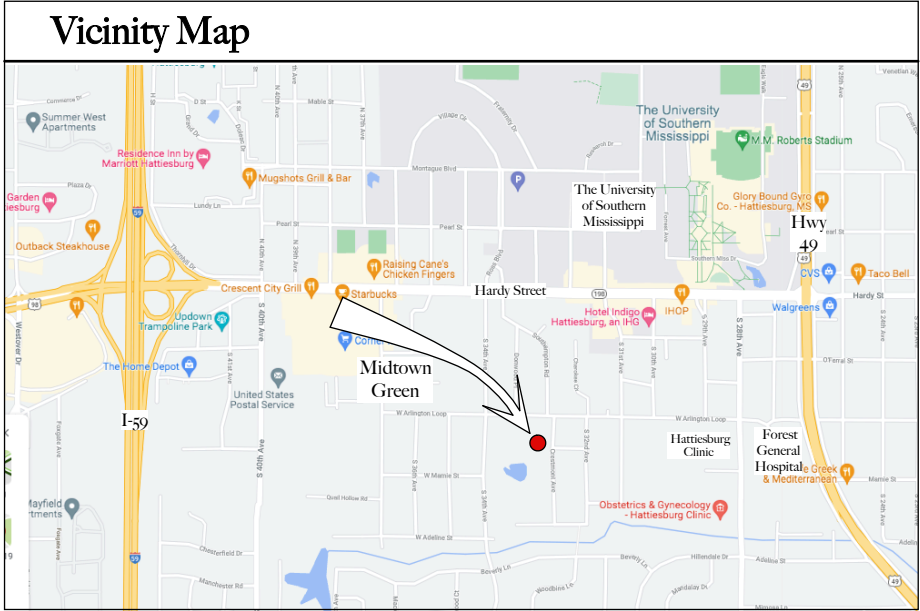
BY: /s/_____

Kermas Eaton

Dates of Publication:

January 11, 2023

January 18, 2023



Abbreviations

LP	Light Pole
WM	Water Meter
TW	Top of Wall
G	Grade
Inv.	Invert
Conc.	Concrete
PVC	Polyvinyl Chloride Pipe
CMP	Corrugated Metal Pipe
Req'd	Required
Bldg.	Building
Ret.	Retaining
R=	Radius



Project List

1. Site Work	LS
Fill material	
Fine Grading	
2. (6') 4" Concrete Path	12,200 SF
5-1/2" Conc. Parking & Event Access	2,214 SF
3. Parking Lot	5,673 SF
Curb & Gutter	332 LF
4. Fencing & Entry Gates	
6 Foot Vinyl Perimeter Fence	1,383 LF
5 Foot Orn. Iron Metal Fence (Front)	344 LF
(2) 5' T x 6' W Metal Pedestrian Gates	2
(1) 12' Double Metal Service Gate	1
5. Inclusive Playground	LS
Play Equipment	
Play Surface	
6. Exercise Area	LS
Equipment	
7. Pavilion	LS
(385 LF)-6" Sewer Service	
Water Service	
8. Landscaping	LS
Plants, Solid Sod	
8. Signage	
(1) Park Sign	1
(2) Rules & Regulation Sign	2
(1) Funding Partner's Sign	1

These quantities are a general check list only, contractor responsible for all construction items in plan

Public Utilities/Agencies

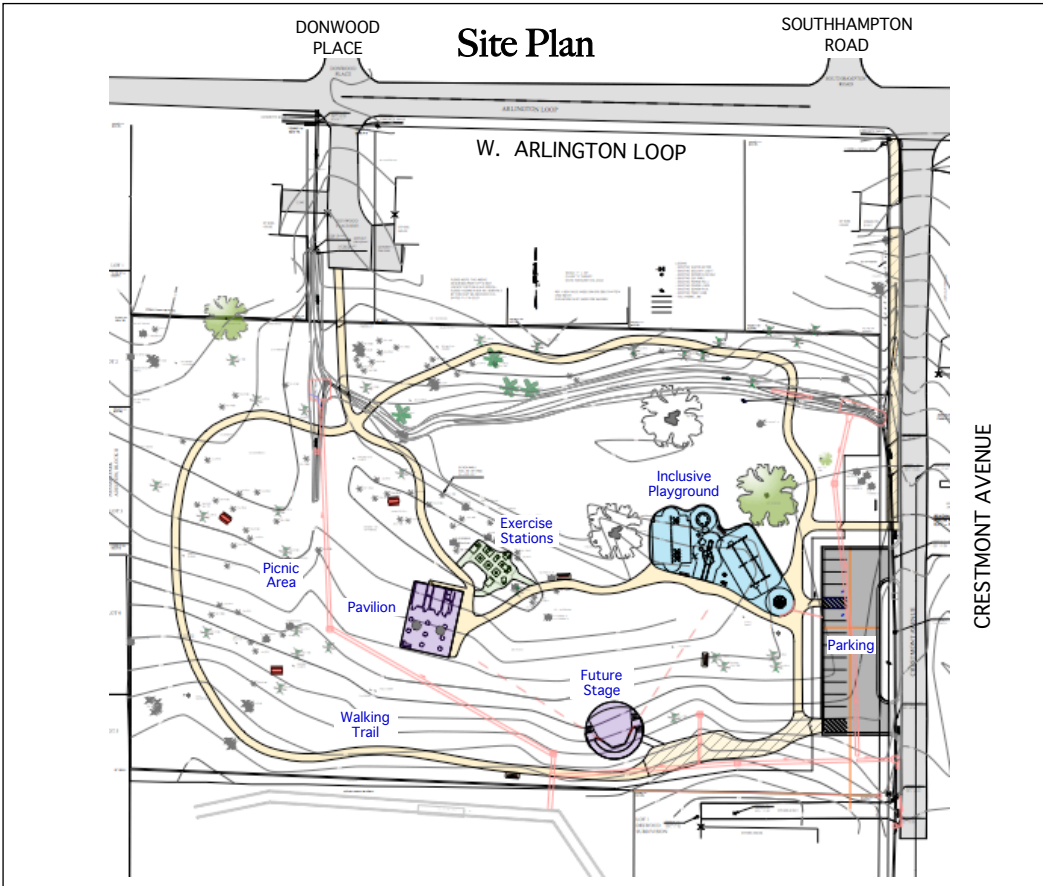
Dept of Planning & Development City of Hattiesburg, MS 601 545-4555	MS Dept of Transportation Hattiesburg, MS 39402 601 544-6511
Mississippi Power Company 5082 Old Hwy 42 Hattiesburg, MS 39401 601 545-4136	Comcast Cable 2100 Lincoln Road Hattiesburg, MS 39402 601 579-3967
AT&T P.O. Box 1191 Hattiesburg, MS 39401 601 583-8784	C-Spire Fiber 101B Highland Colony Parkway Suite 300 Ridgeland, MS 39157 855 277-4732
City of Hattiesburg Water & Sewer 900 James Street Hattiesburg, MS 39401 601 545-4530	Wilmut Gas P.O. Box 1649 Hattiesburg, MS 39403 601 544-6001

General Notes

1. All work shall be performed in accordance with all Local, State and Federal Codes.
2. All existing culvert cross-drains and side-drains shall be protected. No separate payment will be made for removal and replacement.
3. When existing pavement is required to be removed, the pavement shall be scored or saw-cut to a depth such that is straight and uniform vertical edge is established prior to removal.
4. Any disturbance to existing streets and parking lots shall be repaired in kind, unless otherwise noted.
5. Cost of clearing and grubbing/removal and disposal of clearing and grubbing material is to be included in the price of the demolition required for this project. Any off site disposal areas required are to be contractor furnished.
6. The contractor shall adhere to all current Mississippi Department of Environmental Quality Guidelines.
7. Protection of the Site from Erosion is a requirement of this contract. The contractor shall maintain all erosion control measures continuously during construction of the project. Maintenance shall be performed a maximum of 24 hours after silt accumulation.
8. The Erosion Control Devices referenced in these plans are a minimum requirement. It is the responsibility of the contractor to ensure that silt does not leave the construction site or contaminate waters of the U.S. during construction. The contractor shall maintain the plan during construction. The contractor will adhere to the provisions of the "Storm Water Pollution Prevention Plan".
9. After Clearing and Grubbing, but prior to placement of any fill, the site shall be proof-rolled to expose any soft areas, any yielding areas shall be undercut and recompacted as directed.
10. All areas beneath the proposed construction are required to be compacted to a minimum of 95% of standard dry density (ASTM D-698)
11. All disturbed areas that are not paved shall be sodded/seeded per the Planting Plan. The contractor shall be required to establish a full coverage of permanent grass growth prior to completion of the project.
12. All materials required to bring the site to finished grade shall be the responsibility of the contractor.
13. Deviations from these plans and notes without prior written consent of the City, his representative or the Landscape Architect may cause the work to be unacceptable. The contractor shall be responsible for the location and protection of all above ground and underground utilities within the working area. Any conflicts shall be coordinated between the contractor, the utility owner and the Landscape Architect.
14. Prior to excavation and embankment construction, all topsoil shall be stripped and stockpiled, after completion of excavation and embankment construction, all slopes shall be uniformly plated with the stockpiled topsoil.
15. All excavated trenches under pavements shall be backfilled with select fill and compacted in 9" lifts to 98% of the standard dry density, unless otherwise noted.
16. Materials submittals shall be made to owner through the Landscape Architect, prior to use, for approval.
19. Unless otherwise noted all concrete will have a minimum 28 day compressive strength of 4,000 P.S.I.

'A Neighborhood Park'

309 Crestmont Avenue Hattiesburg, Mississippi



Sheet Index

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Midtown Green
Hattiesburg, Mississippi



Construction
Drawings



Project: Midtown Green
Date: December, 2022
Scale: NTS

Cover Sheet
Sheet 1

Storm Water Pollution Notes:

1. Contractor is responsible for full compliance with the Storm Water Pollution Prevention Plan (SWPPP) for the project, and for following all local, state, and federal storm water regulations. The Contractor is responsible for installing erosion control measures shown on plans, as well as any additional erosion control measures required to prevent off-site sediment discharge. The Contractor shall be responsible for periodic maintenance of erosion control measures throughout the contract period. The Contractor is responsible for monitoring, and record keeping required by the SWPPP. All requirements specified in the SWPPP shall be included in the Contractor's scope of work under contract for the project.

2. Storm water controls should be installed before any ground disturbance, and must be maintained throughout the lifetime of the project. When capacity of erosion and sediment controls has been reduced by 50%, remove sediment and clean, or replace controls as necessary. Remove controls only when permanent stabilization.

3. Additional erosion and sediment controls may be required to prevent sediment from leaving site. These can be found in the latest version of the "Planning and Design Manual for the Control of Erosion, Sediment, and Storm Water" available from MDEQ.

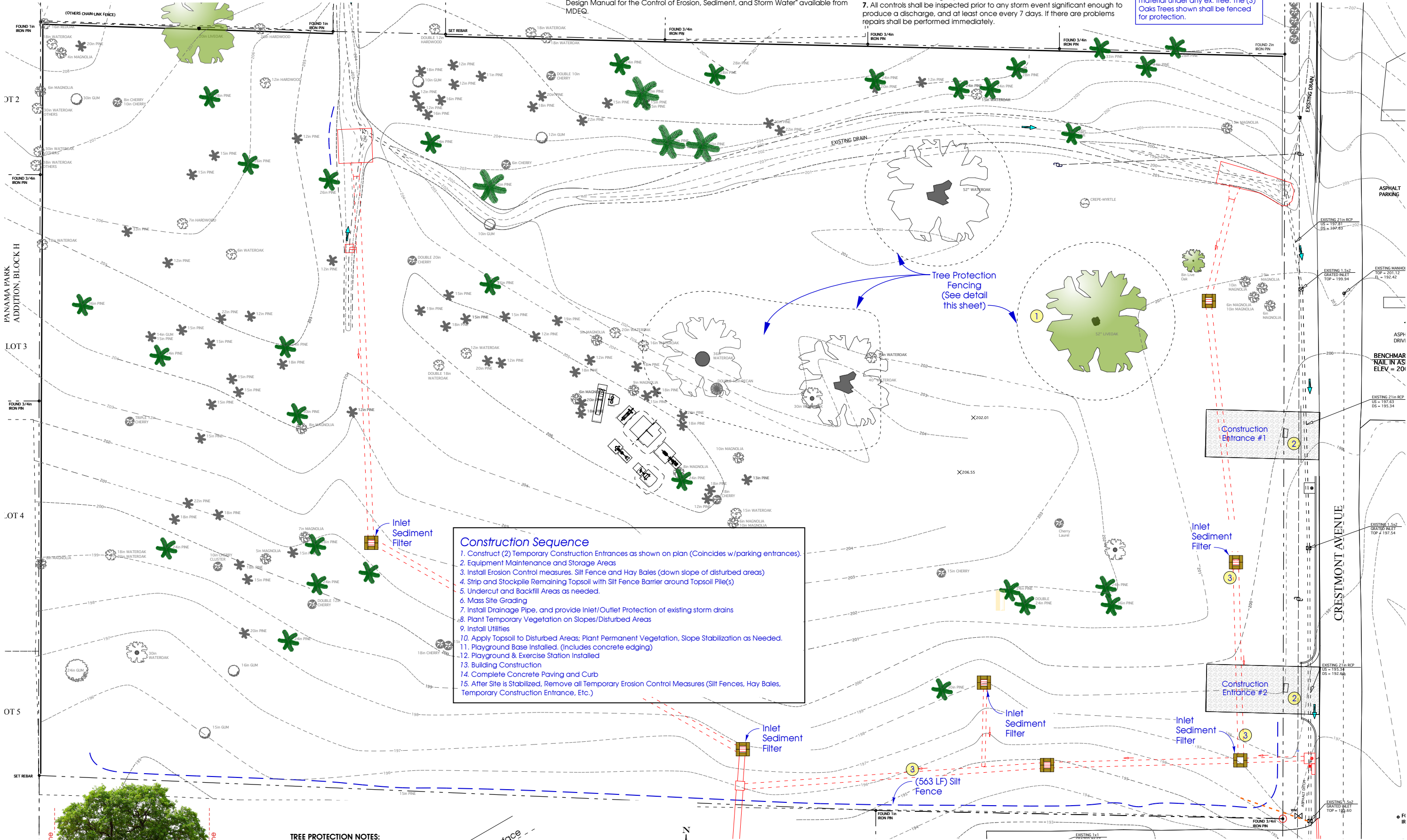
4. The construction entrance shall be 1.5 inch to 3.5 inch coarse aggregate, 25 feet wide, a minimum of 50 feet long, and a minimum of 5 inches thick laid on top of filter fabric. If needed, a vehicle washing rack shall be included.

5. All roadways are to be swept free of sediment and debris daily.

6. The site is to be cleaned daily for debris that may enter the roadway ditches or storm drainage system.

7. All controls shall be inspected prior to any storm event significant enough to produce a discharge, and at least once every 7 days. If there are problems repairs shall be performed immediately.

Tree Protection: Contractor shall take measures to protect all ex. trees. There will be no storing of equipment, material, debris, fill, gasoline, oil, paint or any other material under any ex. tree. The (3) Oaks Trees shown shall be fenced for protection.



- Construction Sequence**
1. Construct (2) Temporary Construction Entrances as shown on plan (Coincides w/parking entrances).
 2. Equipment Maintenance and Storage Areas
 3. Install Erosion Control measures. Silt Fence and Hay Bales (down slope of disturbed areas)
 4. Strip and Stockpile Remaining Topsoil with Silt Fence Barrier around Topsoil Pile(s)
 5. Undercut and Backfill Areas as needed.
 6. Mass Site Grading
 7. Install Drainage Pipe, and provide Inlet/Outlet Protection of existing storm drains
 8. Plant Temporary Vegetation on Slopes/Disturbed Areas
 9. Install Utilities
 10. Apply Topsoil to Disturbed Areas; Plant Permanent Vegetation, Slope Stabilization as Needed.
 11. Playground Base Installed. (Includes concrete edging)
 12. Playground & Exercise Station Installed
 13. Building Construction
 14. Complete Concrete Paving and Curb
 15. After Site is Stabilized, Remove all Temporary Erosion Control Measures (Silt Fences, Hay Bales, Temporary Construction Entrance, Etc.)

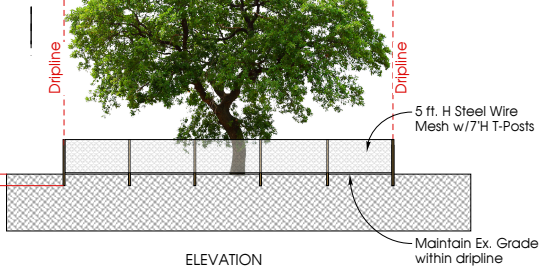
TREE PROTECTION NOTES:

1. Protective fencing shall be installed no closer to the trunk than the dipline, and far enough from the trunk to protect the integrity of the tree.

2. The fence shall be Steel Wire Mesh and a min. of 5 feet in Ht. Fence shall be supported by 7 foot steel T-Posts.

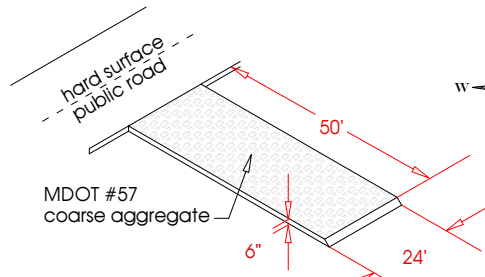
3. The ex. grade level around a tree shall normally be maintained out to the dipline of the tree. No signs, wires, or any other object shall be attached to the trees.

4. Trees that have been damaged by construction shall be repaired in accordance with accepted arboriculture methods.



2 Tree Protection Fence Detail

Scale: NTS



1 Construction Entrance/Exit

Scale: NTS



Demolition Plan

Scale: 1" = 20'

Tree Legend

- | | | |
|--------------------------|-------------------------|-------------------------------|
| Live Oak | Oak- 24" Trunk & Higher | Other (Magnolia, Cherry, Gum) |
| Pine- 24" Trunk & Higher | Pine | Oak |

Erosion/Landscape Note:

- 1 Before work begins, spread 32-0-0 Fertilizer on all areas that will be grassed
- 2 Add Tree Fence Protection.
- 3 Place Erosion Control Measures in.



Midtown Green
Hattiesburg, Mississippi



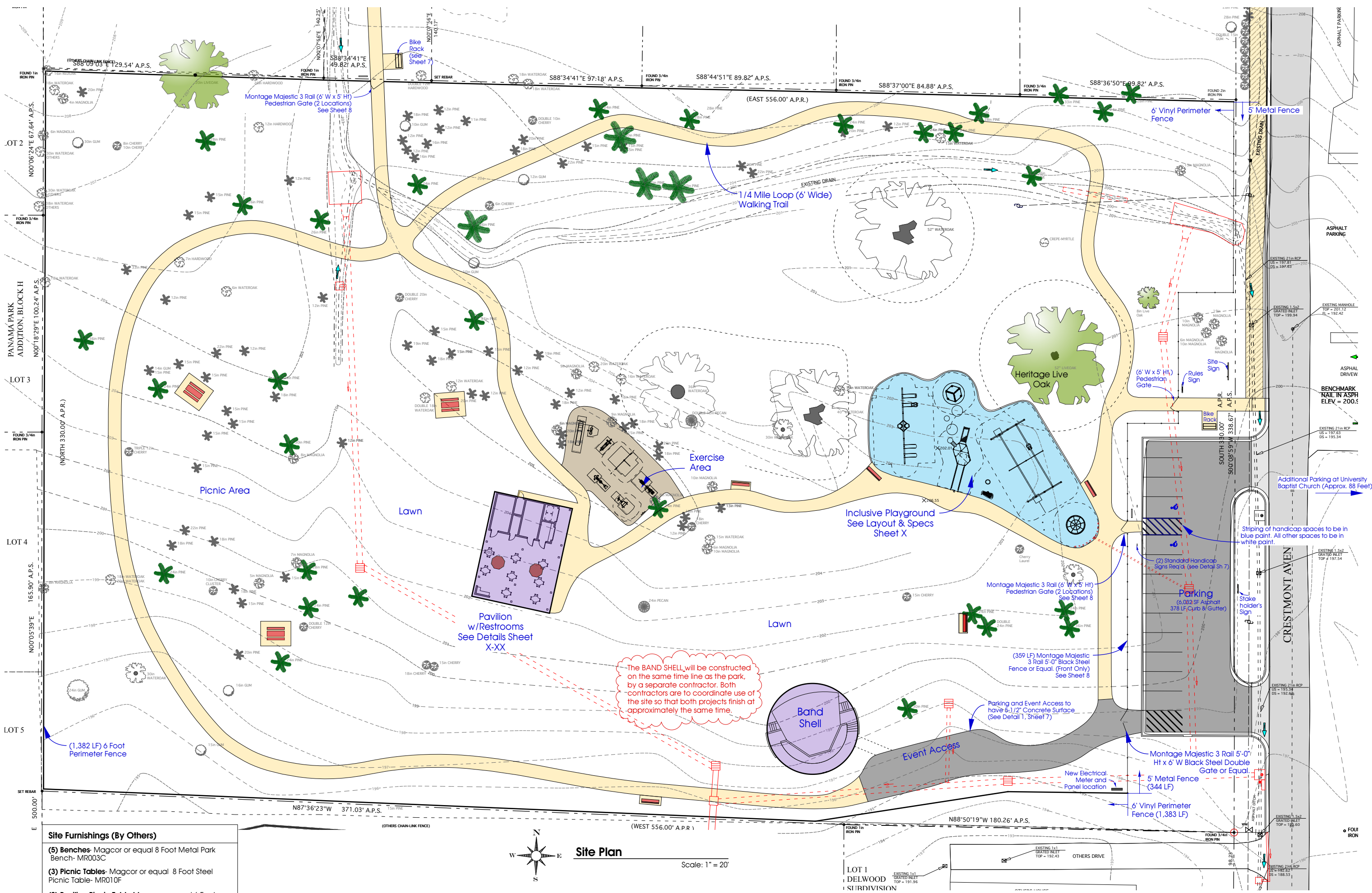
Construction Drawings



Project: Midtown Green
Date: December 2022
Scale: 1" = 20'

Demolition & Erosion Plan

Sheet 2



Site Furnishings (By Others)

- (5) Benches- Magcor or equal 8 Foot Metal Park Bench- MR003C
- (3) Picnic Tables- Magcor or equal 8 Foot Steel Picnic Table- MR010F
- (2) Pavilion Picnic Table Magcor or equal 6 Foot Hexagon Picnic Table MR-010G
- (4) Litter Receptacle- Magcor or equal Natchez Litter Receptacle- MR-164
- (2) Bike Rack- Magcor or equal 5 foot Classic Bike Rack- MR-062

Magcor - Amanda Hanks 769.798.6667

Site Signs

- (1) Site Sign- Located at walk off Crestmont.
- (2) Rules Sign- One at entrance gate off Crestmont Ave. and one at entry off W. Arlington Loop.
- (1) Funding Partners Sign- In front of Parking.

Tree Legend

- Live Oak
- Pine- 24" Trunk & Higher
- Oak- 24" Trunk & Higher
- Pine
- Other (Magnolia, Cherry, Gum)
- Oak

Legend

- Proposed Building
- Proposed Parking
- Proposed Walkway
- Proposed Sod
- Proposed Picnic Table
- Proposed Table (Pavilion)

landarc consulting group, inc.
 LANDSCAPE ARCHITECTURE - SITE PLANNING
 138 E. Main Street, Hattiesburg, MS 39401
 Phone: 601-556-0089 www.landarcgroup.net
 tom@landarcgroup.net

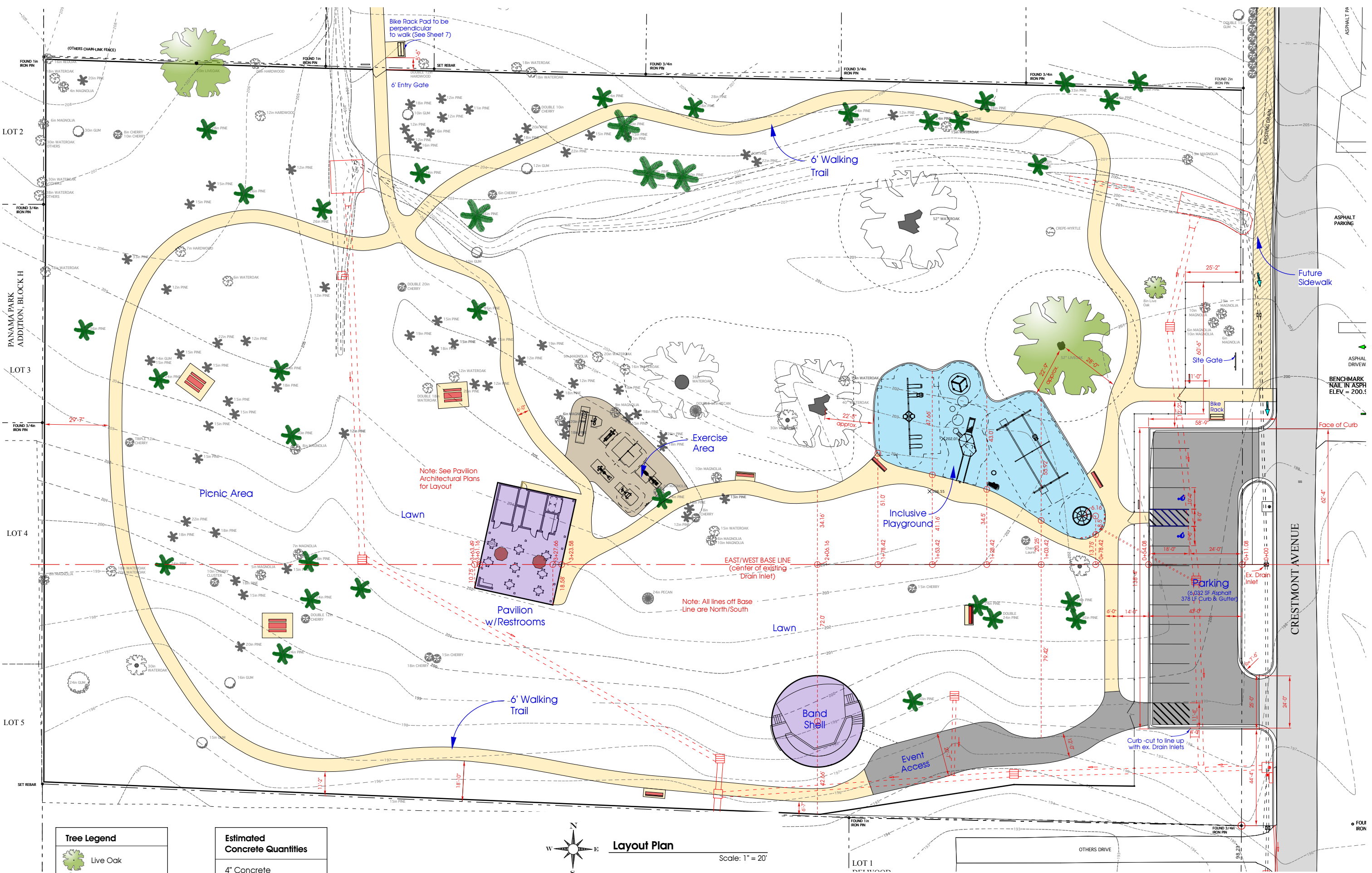
Midtown Green
 Hattiesburg, Mississippi

MIDTOWN
 MERCANTILE ASSOCIATION

Construction Drawings

Project: Midtown Green
 Date: December 2022
 Scale: 1" = 20'

Site Plan
 Sheet 3

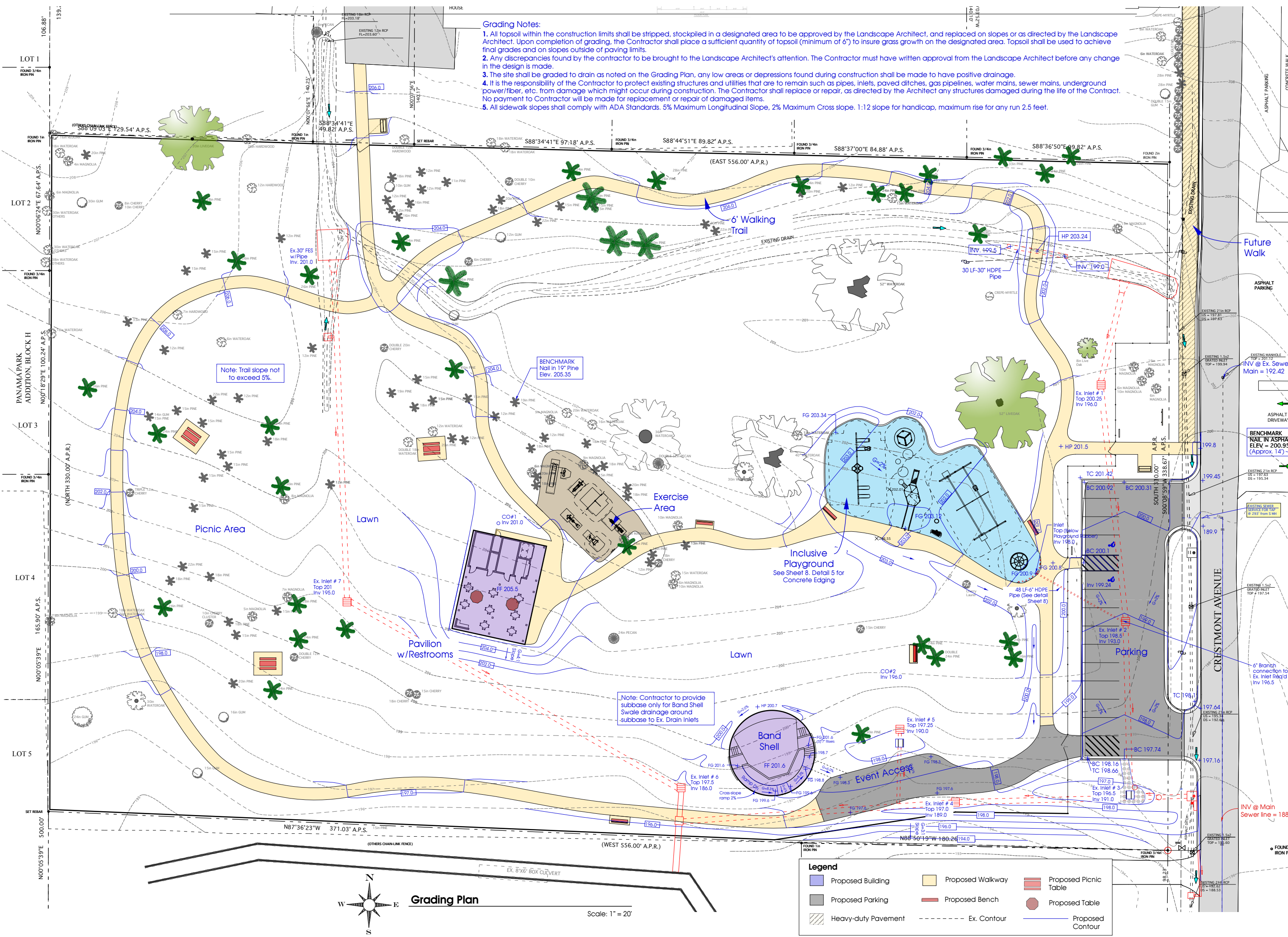


Tree Legend	
	Live Oak
	Pine- 24" Trunk & Higher
	Oak- 24" Trunk & Higher
	Pine
	Other (Magnolia, Cherry, Gum)
	Oak

Estimated Concrete Quantities	
4" Concrete	
Walks	12,199 SF
Ramp	37 SF
Bike Rack Pad	47 SF
Table Pads	480 SF
Bench Pad	72 SF
	12,835 SF
5-1/2" Concrete	
Event Access	2,215 SF
Parking	5,673 SF
	7,888 SF

Tree Legend		
	Live Oak	
	Pine- 24" Trunk & Higher	
	Oak- 24" Trunk & Higher	
	Pine	

Legend		
	Proposed Building	
	Proposed Parking	
	Proposed Picnic Table	



Grading Notes:

1. All topsoil within the construction limits shall be stripped, stockpiled in a designated area to be approved by the Landscape Architect, and replaced on slopes or as directed by the Landscape Architect. Upon completion of grading, the Contractor shall place a sufficient quantity of topsoil (minimum of 6") to insure grass growth on the designated area. Topsoil shall be used to achieve final grades and on slopes outside of paving limits.
2. Any discrepancies found by the contractor to be brought to the Landscape Architect's attention. The Contractor must have written approval from the Landscape Architect before any change in the design is made.
3. The site shall be graded to drain as noted on the Grading Plan, any low areas or depressions found during construction shall be made to have positive drainage.
4. It is the responsibility of the Contractor to protect existing structures and utilities that are to remain such as pipes, inlets, paved ditches, gas pipelines, water mains, sewer mains, underground power/fiber, etc. from damage which might occur during construction. The Contractor shall replace or repair, as directed by the Architect any structures damaged during the life of the Contract. No payment to Contractor will be made for replacement or repair of damaged items.
5. All sidewalk slopes shall comply with ADA Standards. 5% Maximum Longitudinal Slope, 2% Maximum Cross slope. 1:12 slope for handicap, maximum rise for any run 2.5 feet.

Legend

Proposed Building	Proposed Walkway	Proposed Picnic Table
Proposed Parking	Proposed Bench	Proposed Table
Heavy-duty Pavement	Ex. Contour	Proposed Contour

landarc consulting group, inc.
LANDSCAPE ARCHITECTURE - SITE PLANNING
138 E. Main St., Suite 100, Hattiesburg, MS 39401
Phone: (601) 556-0089 | www.landarcgroup.net
tom@landarcgroup.net

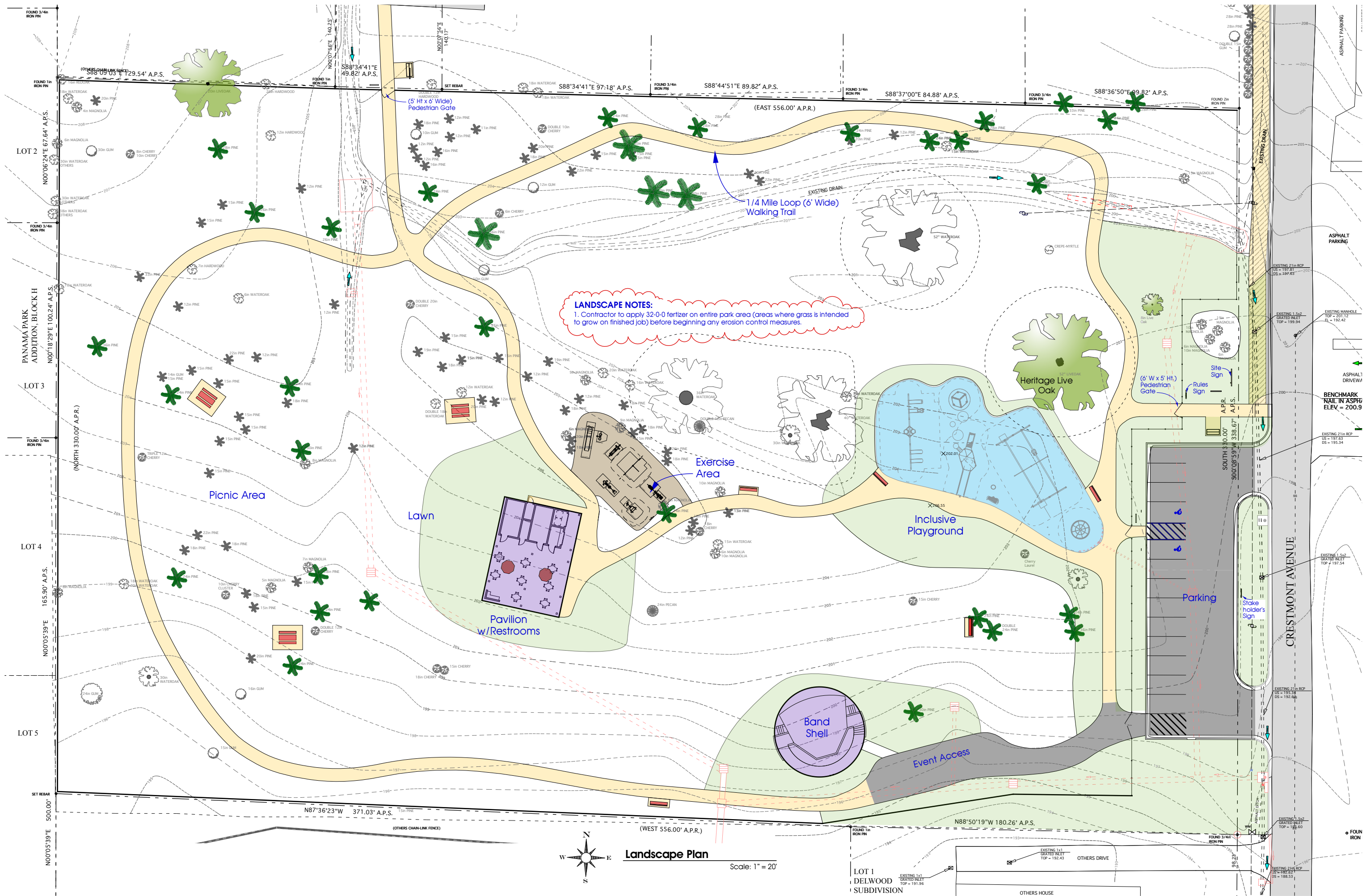
Midtown Green
Hattiesburg, Mississippi

Construction Drawings

Project: Midtown Green
Date: December 2022
Scale: 1" = 20'

Grading Plan

Sheet **5**



Tree Legend

	Live Oak		Oak- 24" Trunk & Higher		Other (Magnolia, Cherry, Gum)
	Pine- 24" Trunk & Higher		Pine		Oak

Legend			
	Proposed Building		Proposed Walkway
	Proposed Parking		Proposed Sod (2,682 SY)



Midtown Green
Hattiesburg, Mississippi



Construction
Drawings

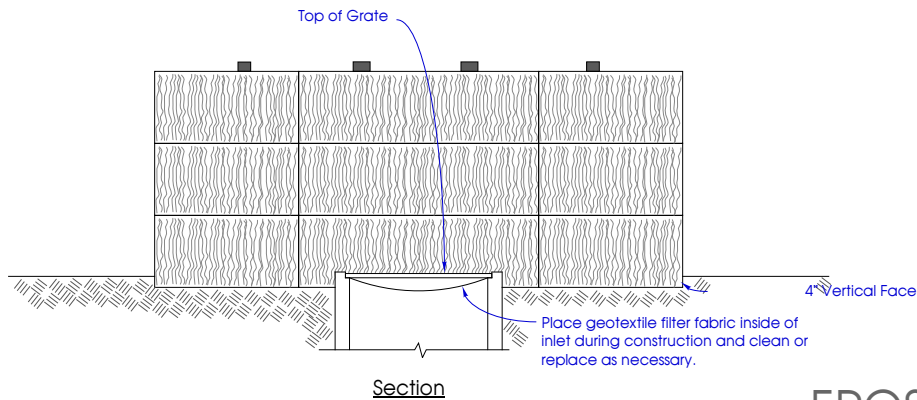


Project: Midtown Green
Date: December 2022
Scale: 1" = 20'

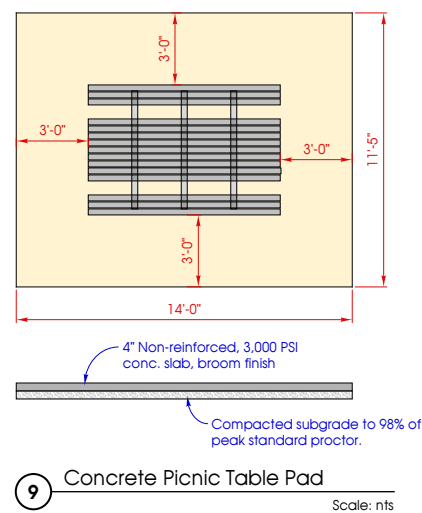
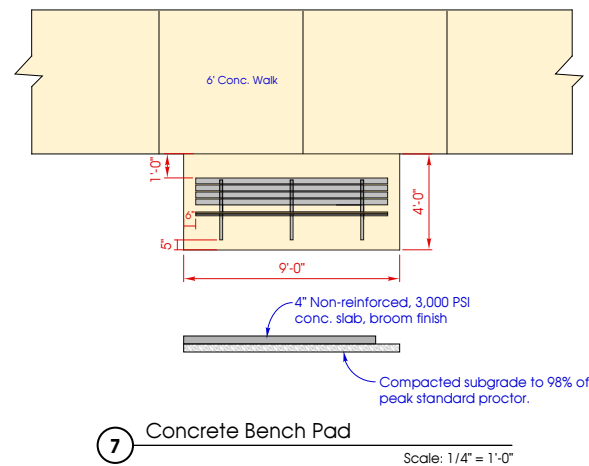
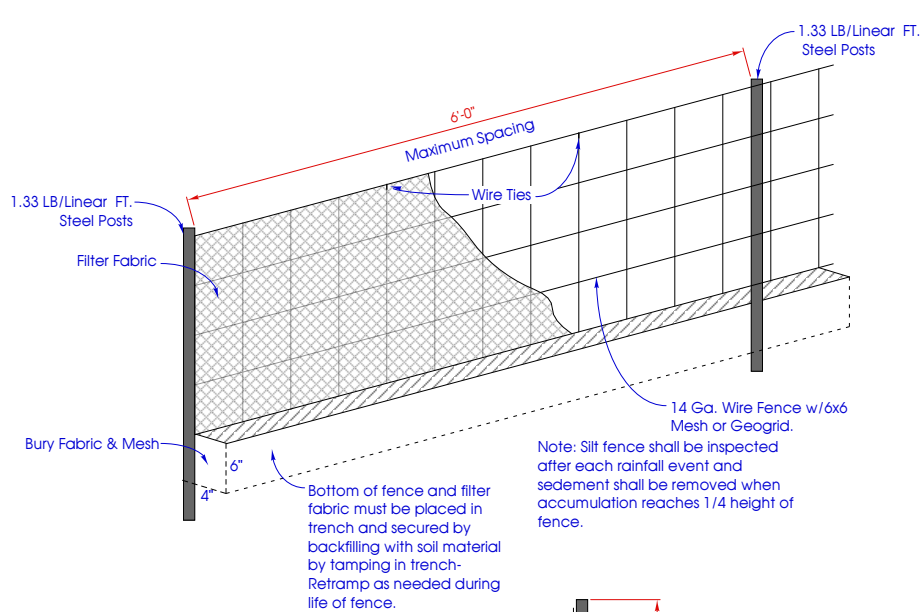
Landscape Plan

Sheet

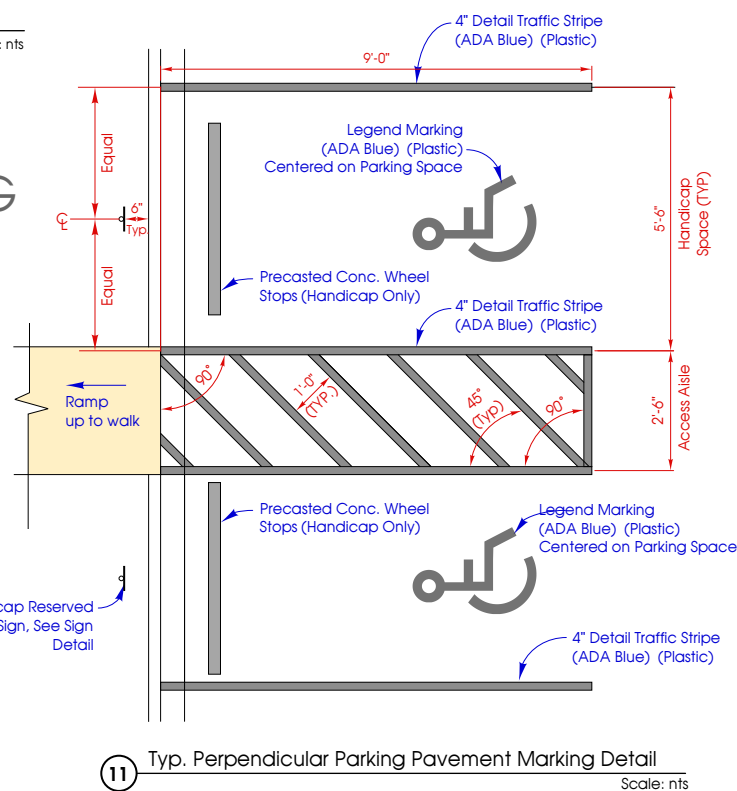
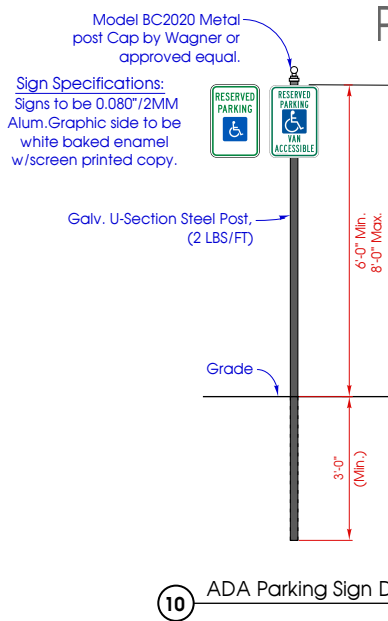
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EROSION CONTROL

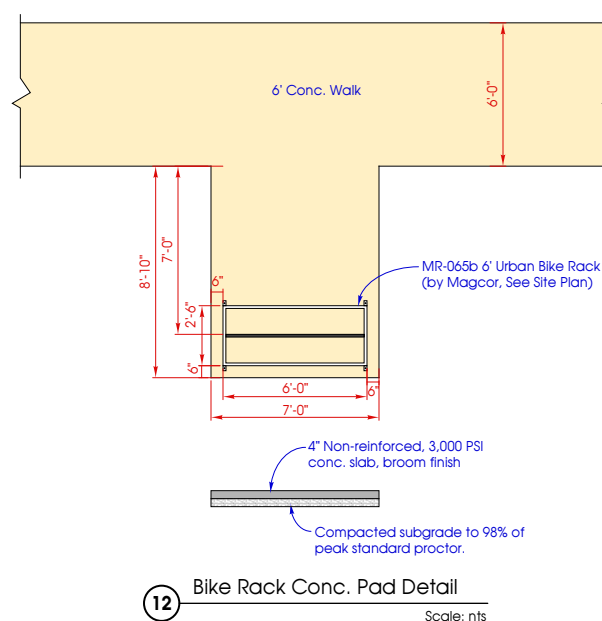


ADA PARKING

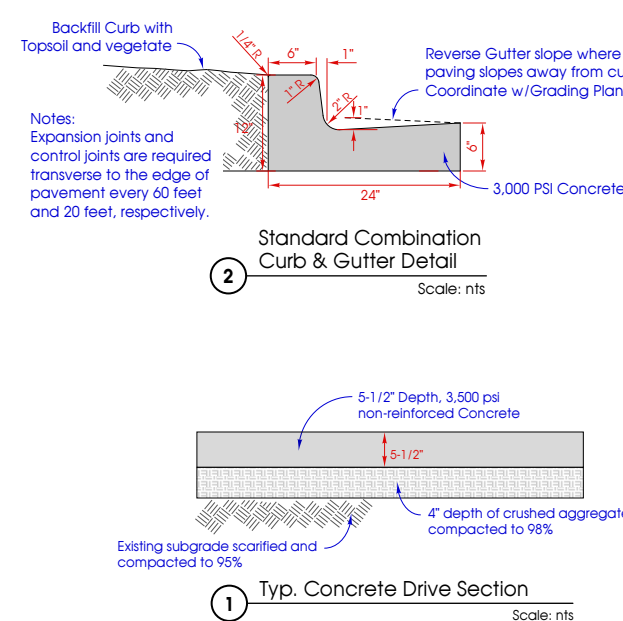
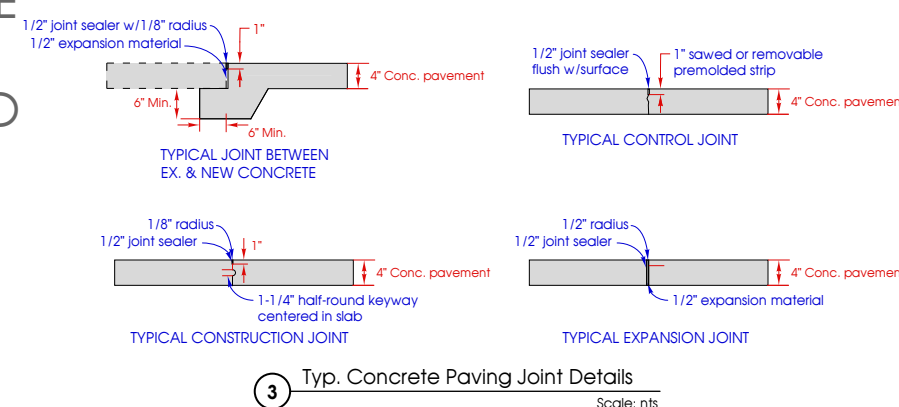
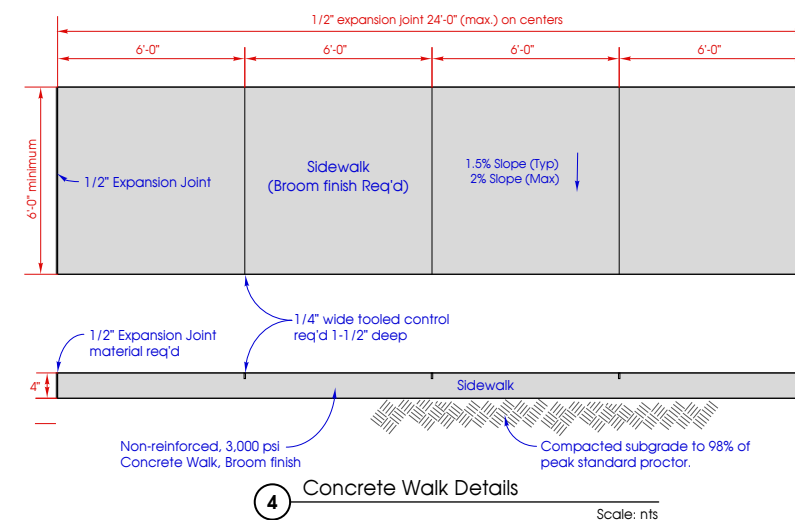
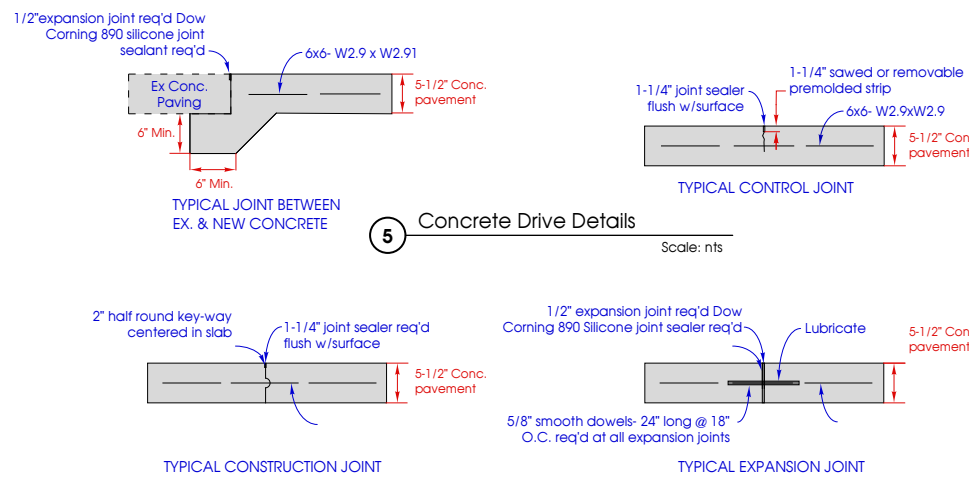
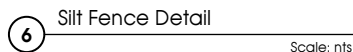


GENERAL PAVING, STRIPING NOTES:

1. The contractor will be responsible for all testing (concrete, earthwork densities, etc.) as required in the specifications and shall provide copies of all test results to the architect for approval.
2. All striping shall be 4 inches in width with a minimum thickness of 40 mils unless specified otherwise.
3. All striping with exception of handicap shall be the color selected by the owner.
4. All joints are control joints unless indicated otherwise.
5. Do not extend reinforcing thru control, expansion, or construction joints in paving.
6. All paving/sidewalk joints (control, expansion, and construction) shall be sealed as per the specifications.
7. Contractor shall utilize chairs/additional reinforcing as necessary to support the concrete pavement reinforcing.
8. Provide (2) parking bumpers in handicap parking places only.

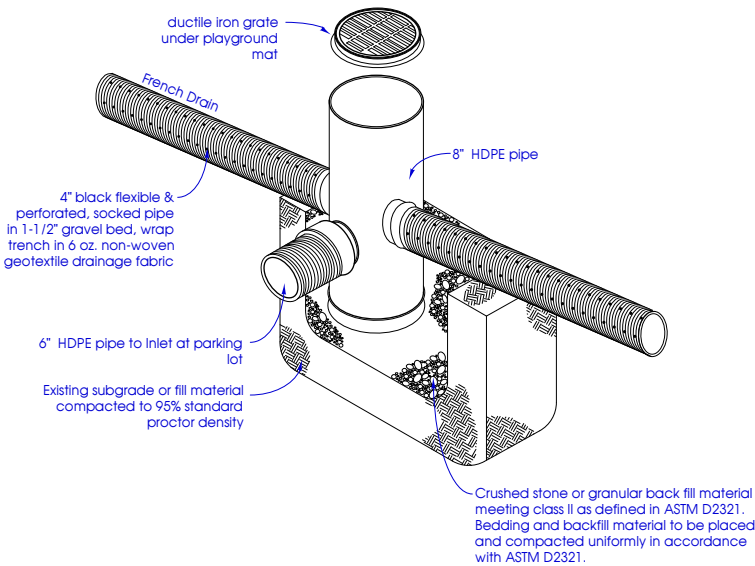


CONCRETE WALK, DRIVE, PAD



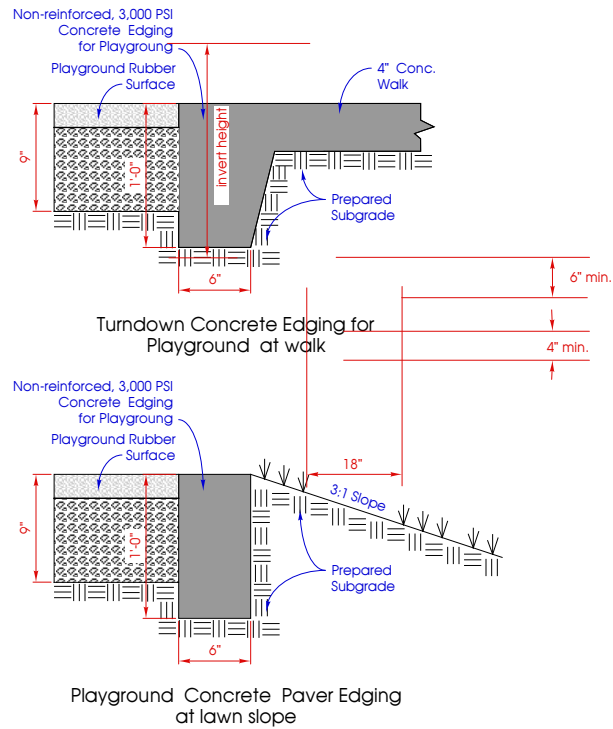
6' Vinyl Fence (Perimeter fencing) Details

Scale: nts



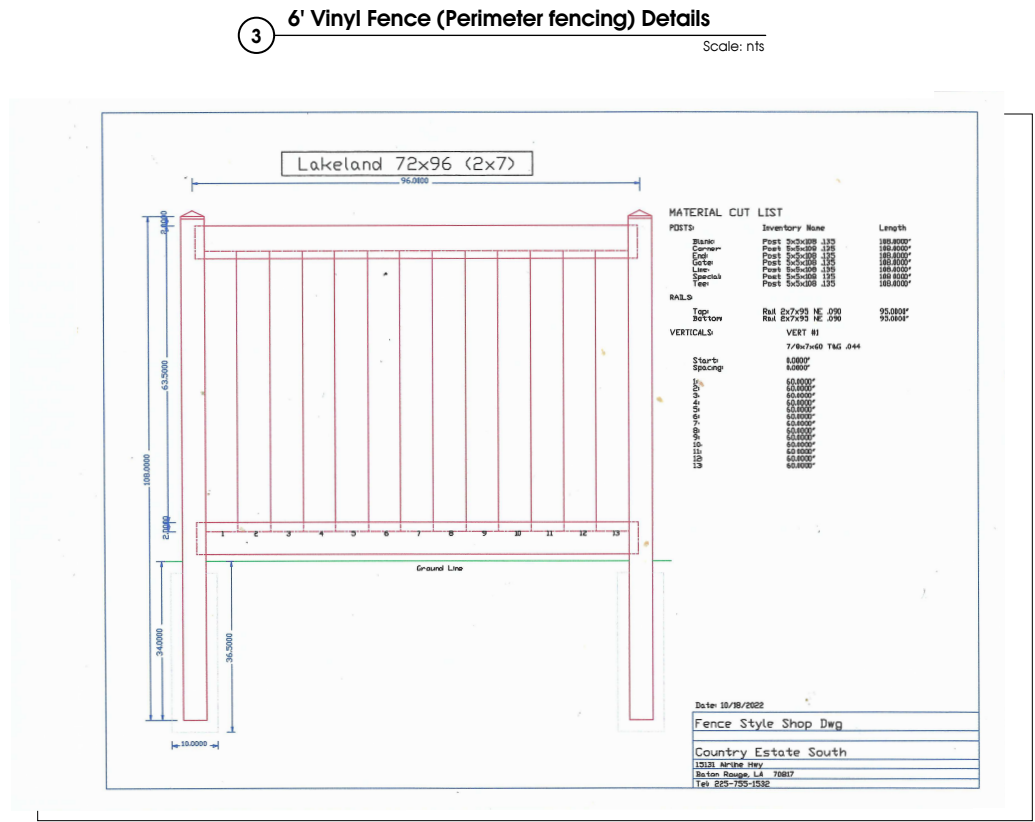
Neoplast Playground Drain Inlet

Scale: nts



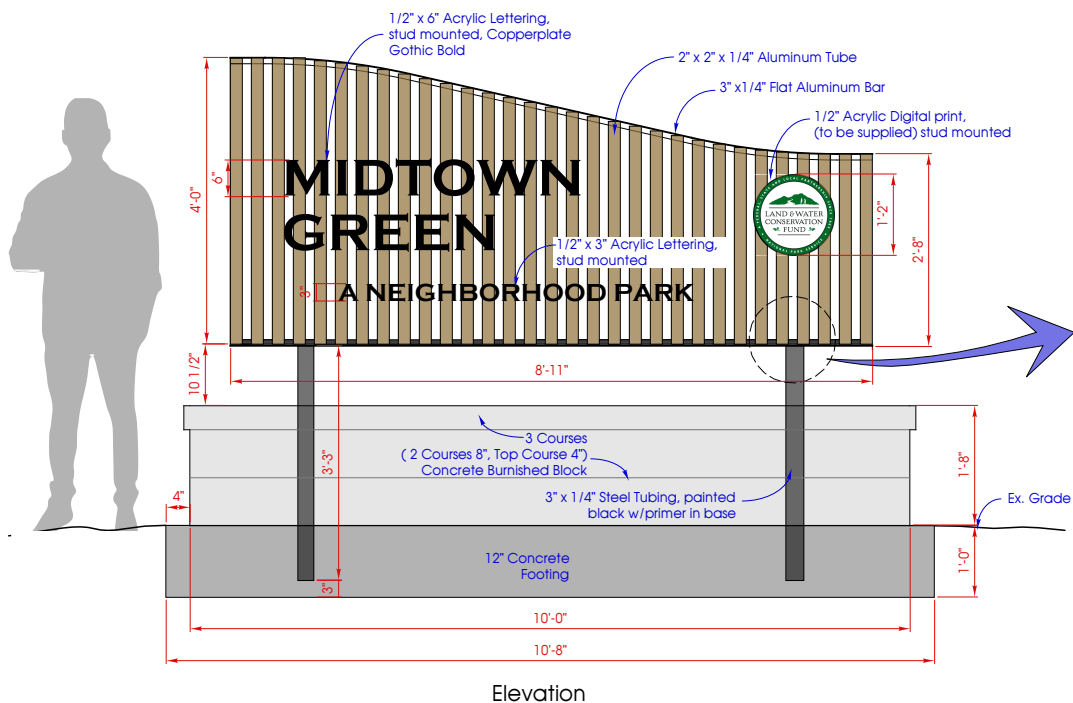
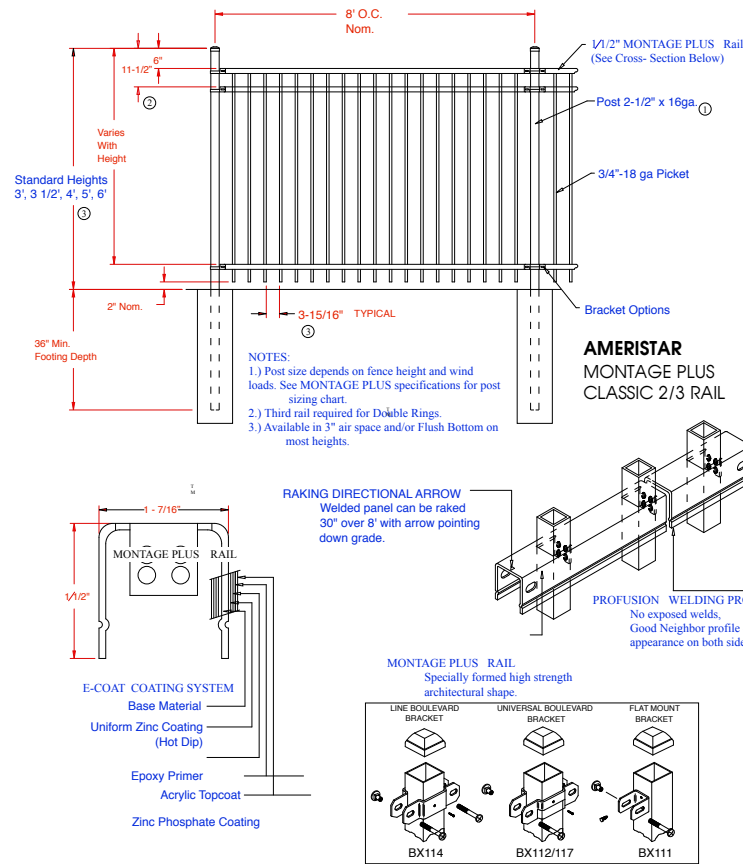
Concrete Edging for Inclusive Playground

Scale: nts

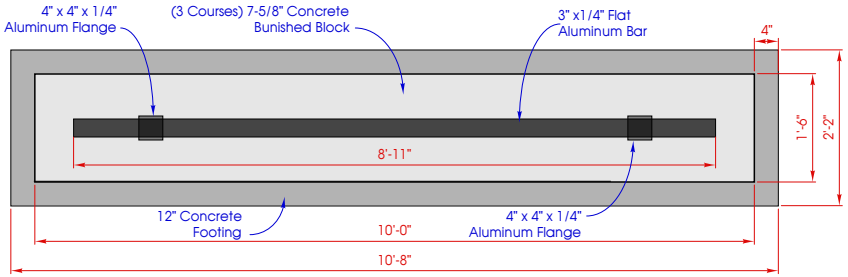


5' Metal Fence (along Cresmont Avenue) Details

Scale: nts



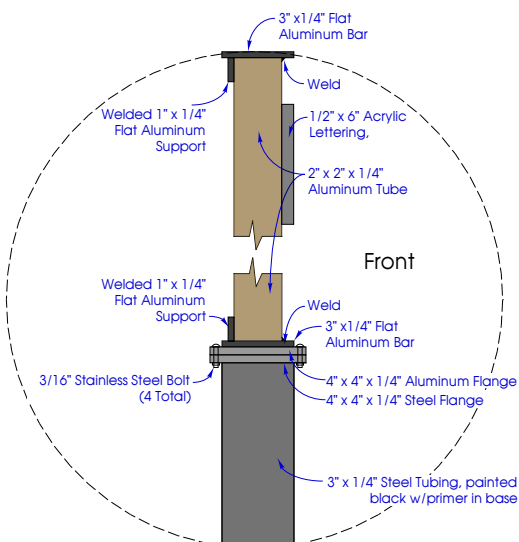
Elevation



Plan

Park Sign

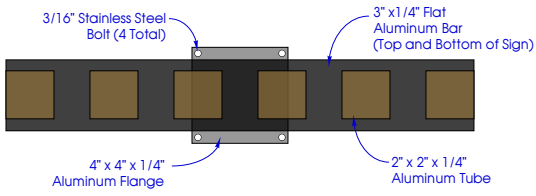
Scale: 3/4 inch = 1 foot



Enlarged Detail (Side View)

Scale: 3 inch = 1 foot

NOTE:
Paint Colors to be Selected



Enlarged Detail (Top View)

Scale: 3 inch = 1 foot

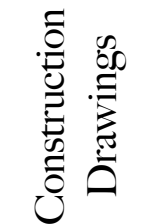
Park Rules

Scale: nts



Park Rules

- Adult Supervision Required for Children under 12
- All Pets Must be Kept on Leash
- No Drugs or Alcohol Permitted
- No Bikes or Skateboards on Walkway
- No Littering
- No Motorized Vehicles



Project: Midtown Green
Date: December 2022
Scale: NTS

Site Details

Sheet

8

GENERAL DEMOLITION NOTES:

- 1
- THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FULLY FAMILIAR AND AWARE OF ANY AND ALL EXISTING CONDITIONS AND SITUATIONS. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF PERFORMING WORK REQUIRED BY THE CONTRACT DOCUMENTS.
- 2
- CONTRACTOR SHALL EXERCISE AND TAKE APPROPRIATE PRECAUTIONARY MEASURES TO PREVENT ANY DAMAGE TO EXISTING STRUCTURES, EQUIPMENT, FURNISHINGS, INTERIORS, ETC. DURING THE PROJECT. CONTRACTOR SHALL CORRECT ALL DAMAGE CAUSED BY THE PERFORMANCE OF THE WORK.
- 3
- PATCH/REPAIR ANY AND ALL ADJACENT DAMAGED SURFACES CAUSED BY THE WORK WITH MATERIALS TO MATCH EXISTING OR NEW MATERIALS AS APPROVED BY THE ARCHITECT. PATCH/REPAIR SHALL BE MADE TO A NATURAL MATERIALS/ PRODUCT JOINT OR BREAK TO ENSURE SMOOTH AND UNDETECTABLE TRANSITION FROM EXISTING FINISH TO NEW FINISH.
- 4
- REFER TO FINISH SCHEDULE FOR FINISHES TO BE INSTALLED IN EACH AREA. WHERE NEW FINISHES ARE SCHEDULED TO BE INSTALLED OVER EXISTING CONSTRUCTION THE CONTRACTOR SHALL REMOVE EXISTING FINISH DOWN TO SUBSTRATE AND PREP AS REQUIRED TO RECIEVE NEW FINISHES. EXISTING FINISHES TO BE REMOVED AS REQUIRED TO INSTALL NEW WORK.
- 5
- EXISTING CEILING TO BE REMOVED ONLY AS REQUIRED TO INSTALL NEW WORK UNLESS OTHERWISE NOTED. CEILING MOUNTED ITEMS IN EXISTING LAY-IN CEILINGS TO BE REMOVED AS REQUIRED TO INSTALL NEW WORK. COORDINATE WORK WITH RESPECTIVE TRADES AS REQUIRED TO RECIEVE NEW FINISHES. EXISTING FINISHES TO BE REMOVED AS REQUIRED TO INSTALL NEW WORK.
- 6
- WHETHER OR NOT EXISTING MATERIALS ARE SHOWN OR SCHEDULED TO REMAIN, ANY MATERIAL DAMAGED BY OPERATIONS PERFORMED UNDER THIS CONTRACT SHALL BE REPAIRED OR REPLACED WITH NEW MATERIALS TO MATCH EXISTING MATERIALS BY THE CONTRACTOR.
- 7
- WHERE NEW MECHANICAL, ELECTRICAL AND PLUMBING ITEMS ARE TO BE INSTALLED IN EXISTING WALLS, PATCH/REPAIR AS REQUIRED TO INSTALL NEW WORK.
- 8
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO ORDERING MATERIALS OR LAY-OUT OF NEW CONSTRUCTION.
- 9
- THE DEMOLITION PLAN IS PROVIDED AS A CONVENIENCE TO THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION NECESSARY TO INSTALL NEW WORK, WHETHER SHOWN IN THE PLANS OR NOT.
- 10
- THE CONTRACTOR WILL COORDINATE POWER SHUT OFF WITH THE OWNER PRIOR TO DEMOLITION OF ELECTRICAL ITEMS. ELECTRICAL ITEMS WILL BE RELINQUISHED TO THE OWNER AND REINSTALLED IN THE RENOVATION PHASE AT THE DIRECTION OF THE OWNER.

GENERAL NEW WORK NOTES:

- 1
- THE CONTRACTOR SHALL INSTALL ALL NECESSARY BLOCKING AS REQUIRED TO ACCOMMODATE ALL WALL MOUNTED ITEMS. INSTALLATION OF BLOCKING MAY REQUIRE THE REMOVAL OF EXISTING FINISHES. PATCH/REPAIR AS REQUIRED TO INSTALL NEW WORK WITH MATERIAL TO MATCH EXISTING.
- 2
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO ORDERING OF MATERIALS OR LAY-OUT OF NEW CONSTRUCTION.
- 3
- NOT EVERY CONDTION HAS BEEN DETAILED. WHERE SPECIFIC DETAILING IS NOT SHOWN, EXECUTE THE CONSTRUCTION IN A SOUND, WORKMAN-LIKE MANNER CONSISTENT WITH ACCEPTED BUILDING PRACTICES AND WITH OTHER DETAILING SHOWN.
- 4
- ALL DOOR FRAMES WITHIN THE LIMITS OF WORK ARE TO BE PAINTED AS SCHEDULED AND SPECIFIED.
- 5
- IN ORDER TO COMPLETE THE WORK SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, SOME WORK MAY BE REQUIRED IN OTHER AREAS NOT SPECIFICALLY DEFINED IN THE BIDDING DOCUMENTS, SUCH AS WORK ABOVE OR BELOW THE AREA SHOWN ON THE PLAN OR BEYOND THE AREA SHOWN ON THE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE SCOPE OF SUCH WORK AND TO INCLUDE IN THEIR PROPOSALS THE COST OF ALL WORK REQUIRED FOR A COMPLETE AND OPERABLE FACILITY.
- 6
- WHERE NEW PARTITIONS ARE SHOWN ALIGNED WITH AND FORM A CONTINUATION OF EXISTING PARTITIONS, THEY SHALL BE THE SAME THICKNESS AS EXISTING UNLESS OTHERWISE NOTED.
- 7
- WHETHER OR NOT EXISTING MATERIALS ARE SHOWN OR SCHEDULED TO REMAIN, ANY MATERIAL DAMAGED BY OPERATIONS PERFORMED UNDER THIS CONTRACT SHALL BE REPAIRED OR REPLACED WITH NEW MATERIALS TO MATCH ADJACENT MATERIALS AND WORK AS APPROVED BY THE ARCHITECT.
- 8
- PREPARATION OF NEW WORK: INTERIOR DIMENSIONS ARE GENERALLY TO FACE OF FINISH UNLESS NOTED OTHERWISE. WHERE NEW WALLS ARE TO BUTT INTO EXISTING, FLUSH NEW FINISH WITH EXISTING FINISH FACE EACH SIDE OF WALL. PLAN DIMENSIONS SHOWN ON NEW WORK WHERE WALLS ARE INTENDED TO BE FLUSH MAY BE ADJUSTED AS REQUIRED. ANY UNAVOIDABLE OFFSETS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT FOR A FIELD DETERMINATION AT TIME OF INTIAL WALL LAYOUT (CHALK LINE). NO OFFSETS WILL BE PERMITTED UNLESS THEY ARE ABSOLUTELY UNAVOIDABLE AND HAVE PRIOR APPROVAL FROM ARCHITECT AT TIME OF LAYOUT. A 1/4" OR 3/8" THICKNESS OF GYPSUM BOARD MAY BE USED AS A PARTITION OVERLAY AS REQUIRED TO FACILITATE THIS TRANSITION.
- 9
- WHERE NEW MECHANICAL, ELECTRICAL AND PLUMBING ITEMS ARE TO BE INSTALLED IN EXISTING WALLS, PATCH/REPAIR AS REQUIRED TO INSTALL NEW WORK.
- 10
- PARTIAL DEMOLITION OF EXISTING WALL PARTITIONS TO RECONFIGURE THE SPACE MAY RESULT IN EXPOSED WALL END FRAMING. PATCH/REPAIR EXISTING WALL PARTITIONS AS REQUIRED WITH MATERIALS TO MATCH EXISTING AND/OR ADJACENT NEW FRAMING.
- 11
- CONTRACTOR TO PREPARE FLOOR AS REQUIRED TO FOR NEW FINISHES. WORK TO INCLUDE BUT NOT LIMITED TO LEVELING FLOOR AS REQUIRED, GRINDING BOLTS, REMOVING FLOOR OUTLETS, REMOVING LEFTOVER GROUT/MORTAR, ETC. CONTRACTOR TO VISIT SITE TO VERIFY FULL EXTENT OF PREPARATION REQUIRED.
- 12
- WALLS SHALL EXTEND A MINIMUM OF 6" ABOVE THE SCHEUDLED CEILING AND SHALL BE BRACED TO STRUCTURE ABOVE AT 48" O.C.; ALL WALLS REQUIRING A UL ASSEMBLY SHALL EXTEND AND SEAL TO THE DECK ABOVE.
- 13
- NOT EVERY CONDITION HAS BEEN DETAILED. WHERE SPECIFIC DETAILING IS NOT SHOWN, EXECUTE THE CONSTRUCTION IN A SOUND, WORKMAN-LIKE MANNER CONSISTENT WITH ACCEPTED BUILDING PRACTICES AND WITH OTHER DETAILING SHOWN.
- 14
- "NIC" INDICATES NOT IN CONTRACT.

GENERAL CEILING NOTES:

- 1
- SEE FINISH SCHEDULE FOR CEILING TYPES AND HEIGHTS.
- 2
- GRID INDICATED REPRESENTS 2X2 LAY-IN ACOUSTICAL TILE GRID. NO CUT PIECES LESS THAN 6" WILL BE PERMITTED.
- 3
- THIS PLAN IS INTENDED TO COORDINATE WORK. REFER TO FURRING DETAILS AS WELL AS MECHANICAL AND ELECTRICAL DRAWINGS FOR OTHER WORK APPLICABLE.
- 4
- INSTALL NEW LAY-IN ACOUSTICAL TILE CEILING IN ALL SPACES AS SCHEDULED. VERIFY BSTRUCTIONS PRIOR TO INSTALLING THE GRID. IF ANY OBSTRUCTIONS ARE LOCATED THAT WOULD ALTER THE DEISGN NOTIFY THE ARCHITECT IMMEDIATELY. ADJUST OTHER DIMENSIONS AS REQUIRED TO FOLLOW CEILING HEIGHT.
- 5
- SOME PORTIONS OF THE WORK MAY REQUIRE TEMPORARY REMOVAL OF EXISTING CEILING TILE R GRID IN LOCATIONS ADJACENT TO THE WORK. REMOVE AS REQUIRED AND PATCH/REPAIR ANY CEILINGS AFFECTED BY THE WORK TO MATCH EXISTING.
- 6
- ALL CEILING AND WALL MOUNTED ITEMS FINAL LOCATION TO BE VERIFIED WITH AND APPROVED BY THE ARCHITECT.

GENERAL ROOFING NOTES:

- 1
- INSTALL ROOF AS PER MANUFACTURERS STANDARD DETAILS AND RECOMMENDATIONS AND PROVIDE AND INSTALL ALL NECESSARY FLASHING, BOOTS, SEALANTS, ETC. AS REQUIRED TO ENSURE WATER TIGHT SEAL OF ENTIRE ROOF SYSTEM.
- 2
- COLOR OF ALL ITEMS TO BE APPROVED BY ARCHITECT PRIOR TO ORDERING/INSTALLING INCLUDING BUT NOT LIMITED TO FLASHING, TRIM, FASCIA, SOFFIT, DOWNSPOUT, GUTTER, ETC.
- 3
- NOT ALL ROOF PENETRATIONS HAVE BEEN SHOWN. SEE MECH AND PLUMB DRAWINGS FOR ADDITIONAL INFORMATION.
- 4
- NOT ALL CONDITIONS HAVE BEEN DETAILED. INSTALL FLASHING, COUNTER FLASHING, TERMINATION BARS, AND OTHER ROOFING COMPONENTS AS RECOMMENDED BY ROOF MANUFACTURER AND AS REQUIRED TO ENSURE WATERTIGHT SEAL OF ROOF.

GENERAL FINISH NOTES:

- 1
- SEE PROJECT MANUAL FOR SPECIFICATIONS ON MATERIALS AND RESPECTIVE TYPES LISTED AND FOR ALLOWANCES AS APPLICABLE.
- 2
- WHERE PAINT IS CALLED FOR AT WALLS, ARCHITECT MAY SELECT UP TO TWO COLORS FOR USE IN EACH SPACE. (MAIN COLOR PLUS AN ACCENT COLOR FOR ONE OR MORE WALLS OR FEATURES)
- 3
- WHERE LVT IS CALLED FOR, ARCHITECT MAY SELECT UP TO THREE (3) COLORS FOR USE IN EACH SPACE CONSIST OF A FIELD COLOR, BORDER COLOR AND ACCENT COLOR. EXACT PATTERN TO BE SELECTED BY OWNER.
- 4
- TRANSITION STRIPS (IF REQUIRED) TO BE PROVIDED AS FOLLOWS: INSTALLATION MUST MEET ADA TRANSITION GUIDELINES. SUBMIT MANUFACTURER'S FULL RANGE TO ARCHITECT FOR COLOR SELECTION.
- 5
- FINISH AT BOTTOM OF GYPSUM BOARD CEILING TO BE SMOOTH FINISH. PAINT COLOR TO BE SELECTED BY ARCHITECT.
- 6
- ALL FLOORING CHANGES TO OCCUR AT CENTER OF DOOR LEAF IF THERE IS NO DOOR THEN MATERIAL CHANGE TO OCCUR AT MIDPOINT OF JAMB WIDTH.

CODE REVIEW SUMMARY

ARCHITECT OF RECORD:

ARCHITECT: FIRM NAME / ARCHITECT NAME

DESIGN TEAM:

CIVIL:	FIRM NAME / ENGINEER NAME
STRUCTURAL:	FIRM NAME / ENGINEER NAME
PLUMBING:	FIRM NAME / ENGINEER NAME
MECHANICAL:	FIRM NAME / ENGINEER NAME
ELECTRICAL:	FIRM NAME / ENGINEER NAME
LANDSCAPE:	FIRM NAME / ENGINEER NAME
INTERIOR:	FIRM NAME / ENGINEER NAME

PROJECT INFORMATION:

APPLICABLE CODES:	2009 NFPA, 2018 IBC, 2010 ADA
PROJECT TYPE:	-
ORIGINAL OCCUPANCY:	-
PROPOSED OCCUPANCY:	-
AUTOMATIC SPRINKLER:	-
STANDPIPES:	-
MEZZANINE:	-
EMERGENCY LIGHTING:	-
EXIT SIGNS:	-
FIRE ALARM:	-
SMOKE DETECTION:	-
PANIC HARDWARE:	-
MIXED OCCUPANCY:	-
SEPARATION REQUIRED:	-
INCIDENTAL USES:	-
CONSTRUCTION TYPE:	TYPE -
ALLOWABLE HEIGHT:	- STORIES / - FT
ALLOWABLE AREA:	- SF PER STORY
OCCUPANT LOAD:	- SF / - SF = - OCCUPANTS
NUMBER OF EXITS REQUIRED:	-
NUMBER OF EXITS PROVIDED:	-
MAX EGRESS TRAVEL:	- FT
MAX COMMON PATH TRAVEL:	- FT

GROSS BUILDING AREA:

NEW CONSTRUCTION SF:	- SF
ADDITION SF:	- SF
RENOVATION SF:	- SF
EXISTING SF:	- SF
TOTAL BUILDING SF:	- SF

REQUIRED FIRE RATINGS:

LOAD BEARING EXT. WALLS:	0 HR.
LOAD BEARING INT. WALLS:	0 HR.
NON-BEARING EXT. WALLS:	0 HR.
NON-BEARING INT. WALLS:	0 HR.
STRUCTURAL FRAMING:	0 HR.
STRUCTRAL COLUMNS:	0 HR.
FLOOR ASSEMBLY:	0 HR.
CEILING ASSEMBLY:	0 HR.
ROOF ASSEMBLY:	0 HR.
SHAFTS:	0 HR.
CORRIDOR SEPARATION:	N/A
TENANT SEPARATION:	N/A
OCCUPANCY SEPARATION:	N/A
PARTY/FIRE WALL:	N/A
INCIDENTAL USE:	N/A
DWELLING/SLEEPING UNIT:	N/A
SMOKE BARRIER:	N/A

PLUMBING REQUIREMENTS:

WATER CLOSETS:	1 PER - FOR -; THEN 1 PER -
REQUIRED:	-
PROVIDED:	-
URINALS:	NOT REQUIRED
REQUIRED:	0
PROVIDED:	0
LAVATORIES:	1 PER - FOR -; THEN 1 PER -
REQUIRED:	-
PROVIDED:	-
SHOWERS:	NOT REQUIRED
REQUIRED:	0
PROVIDED:	0
DRINKING FOUNTAINS:	1 PER -
REQUIRED:	-
PROVIDED:	-
SERVICE SINKS:	1 SERVICE SINK
REQUIRED:	-
PROVIDED:	-

PARKING REQUIREMENTS:

PARKING FACTOR:	-
REQUIRED PARKING SPACES:	-
PROVIDED PARKING SPACES:	-
MINIMUM HANDICAP ACCESSIBLE:	-
PROVIDED:	-

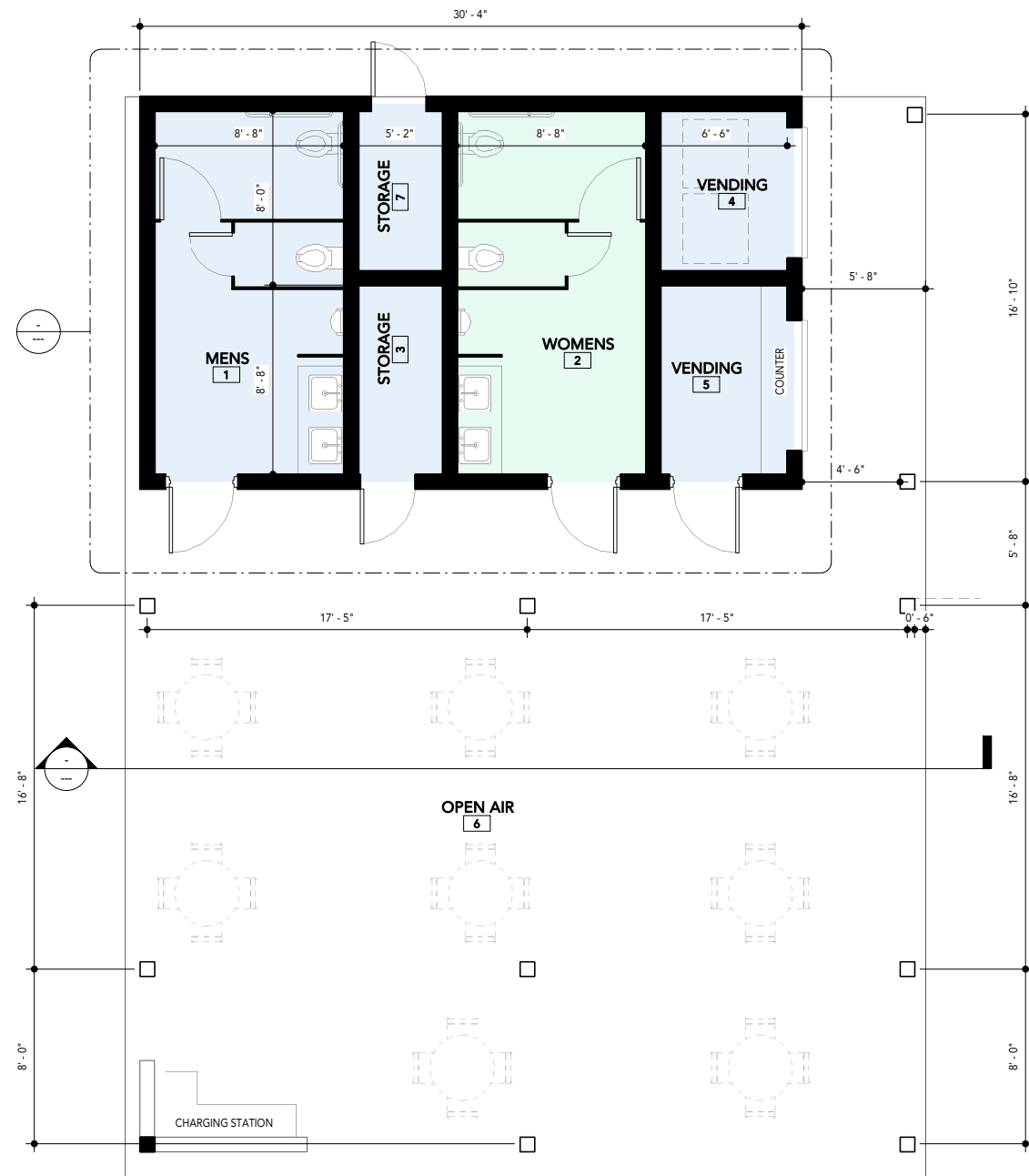


Construction
Drawings

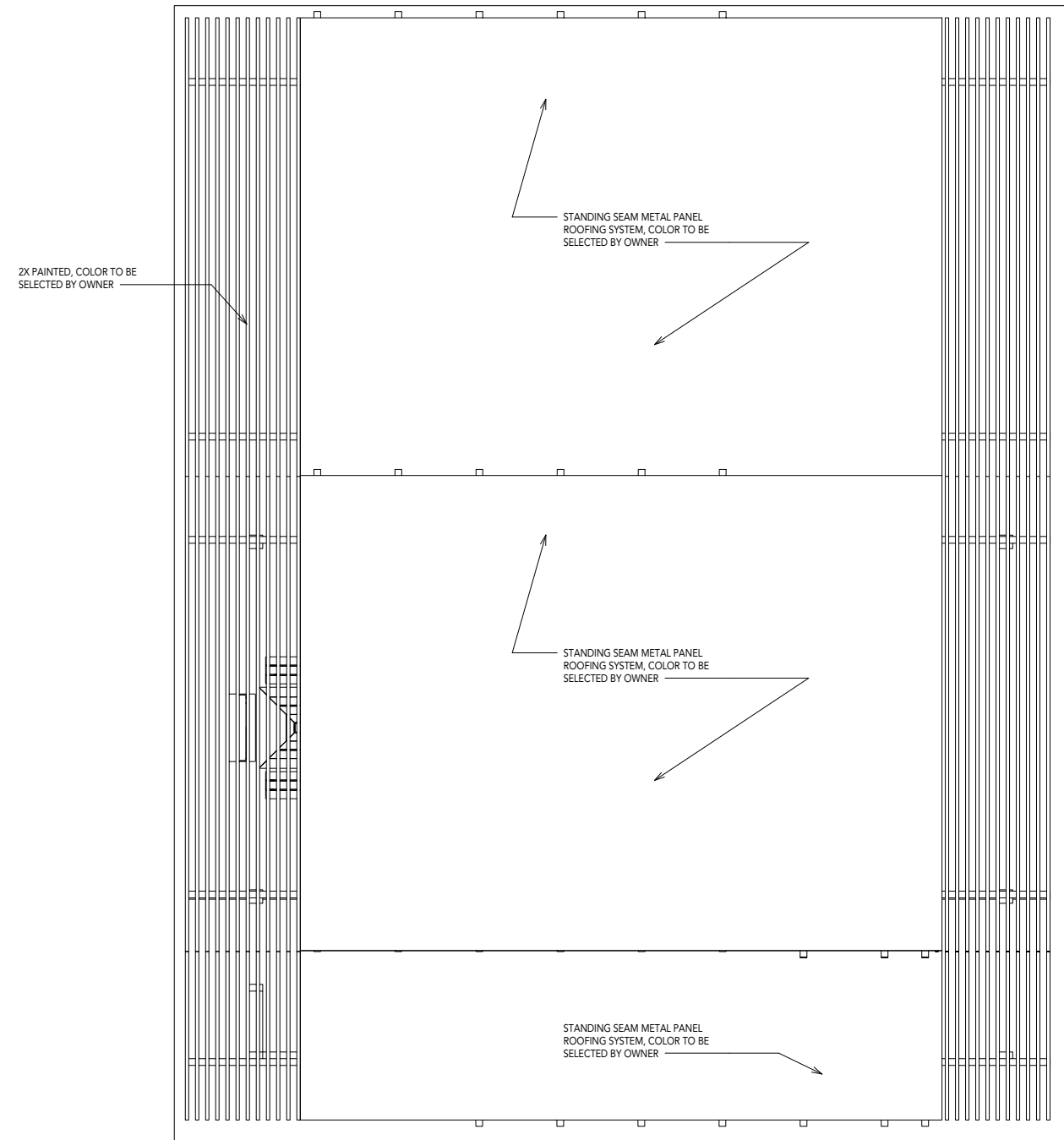


General Notes &
Code Review

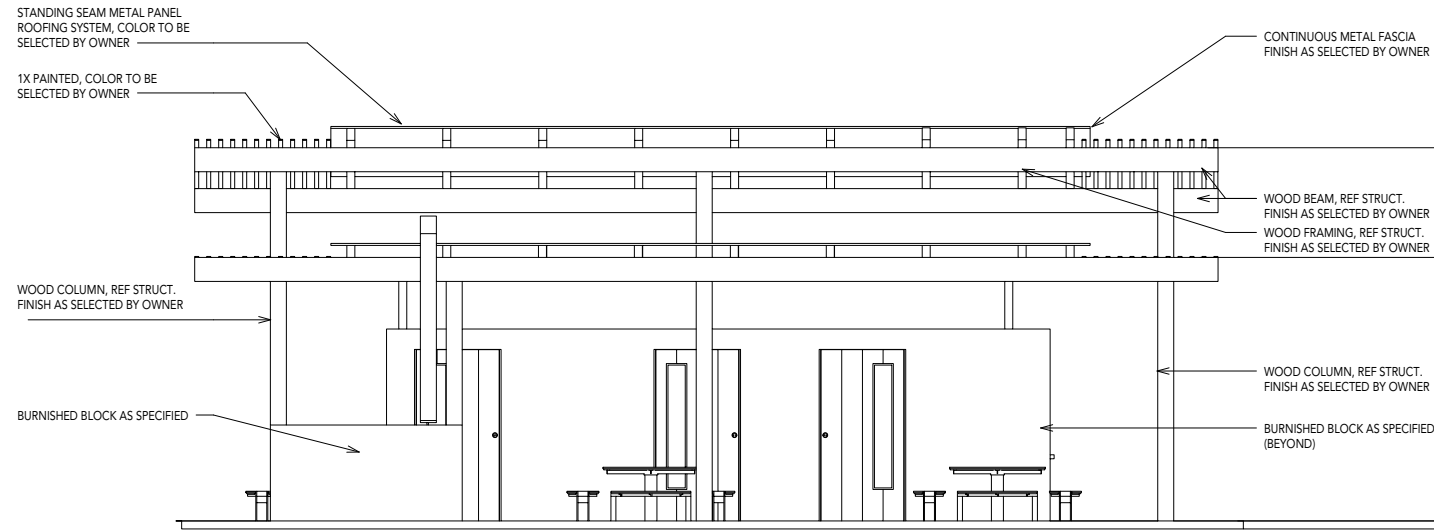
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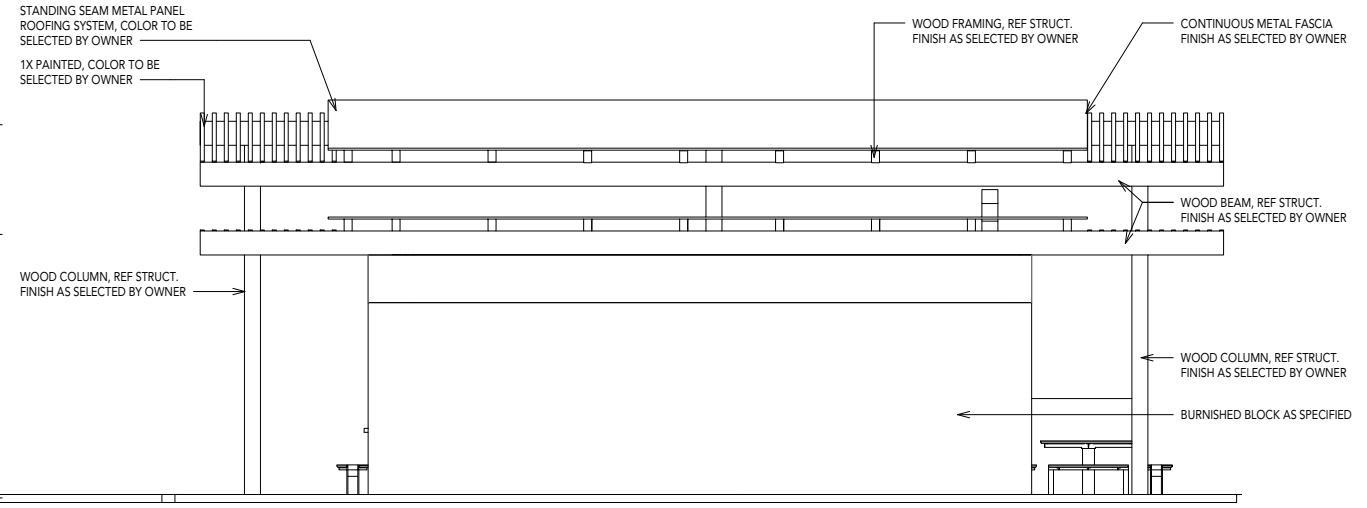
1 PROPOSED PLAN
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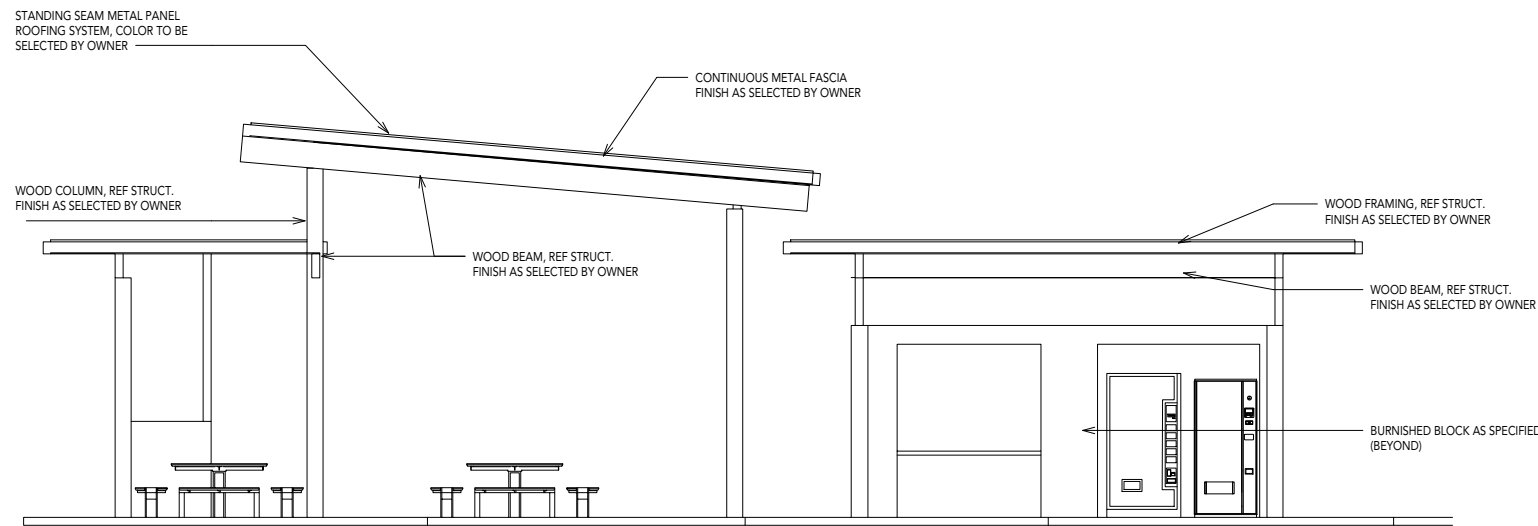
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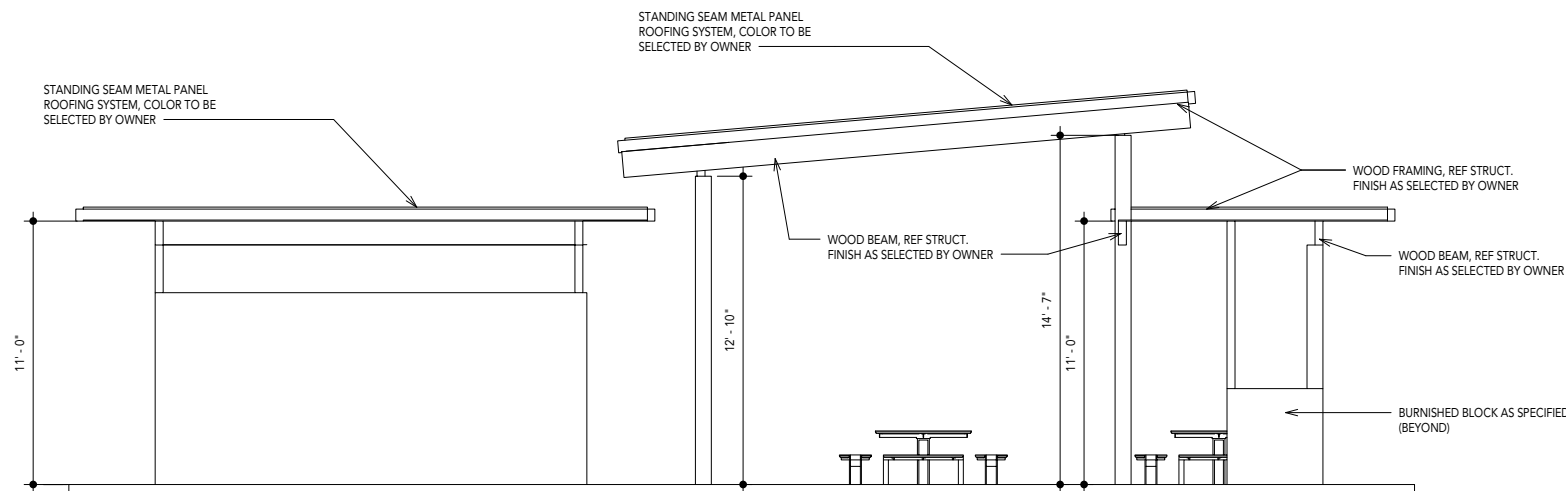
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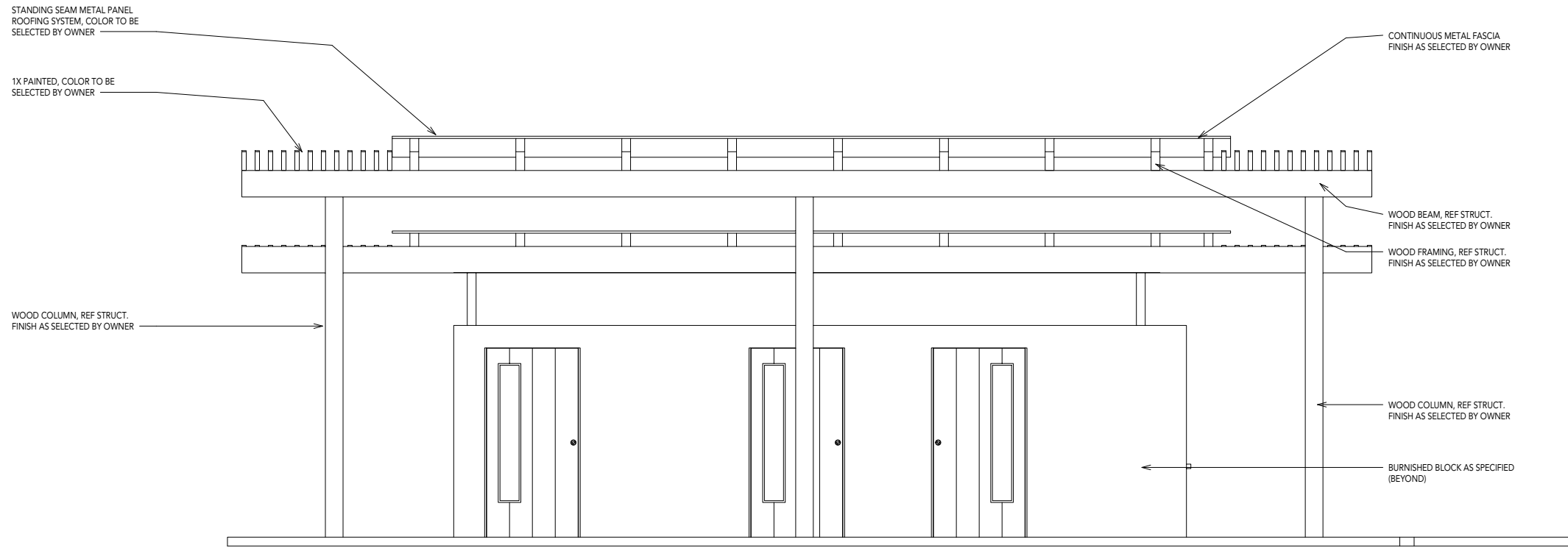
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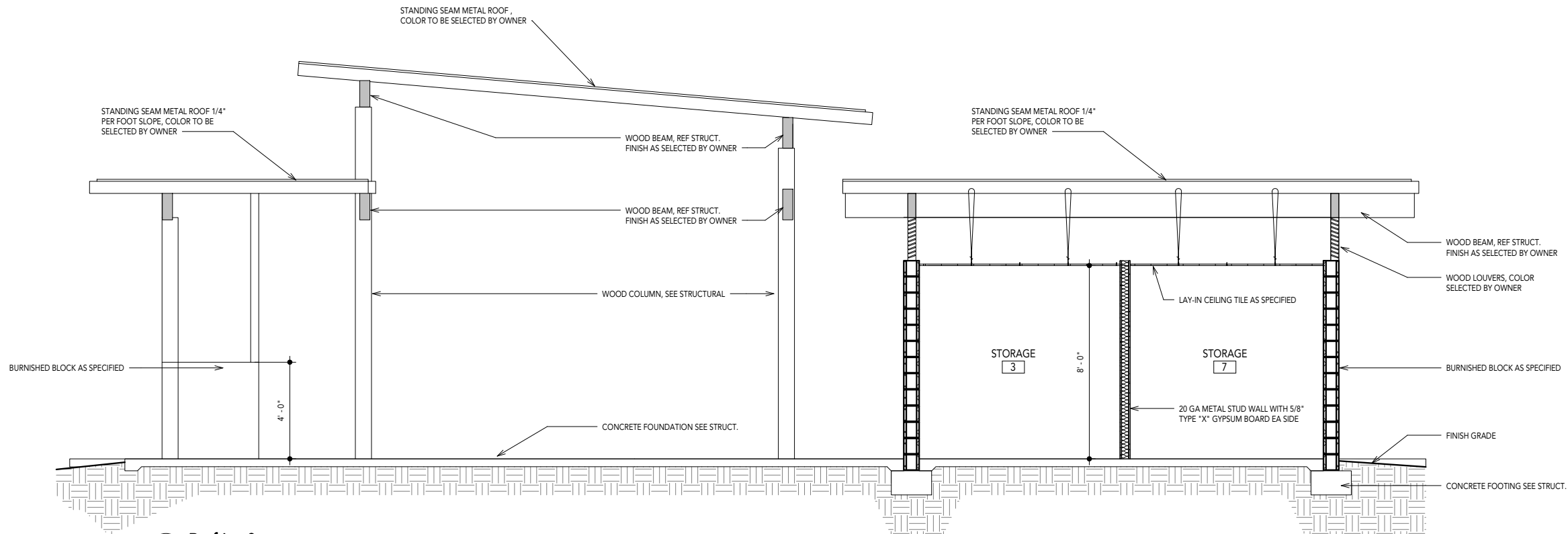
2 Drafting 3
SCALE: 1/4" = 1'-0"



4 Drafting 5
SCALE: 1/4" = 1'-0"



1 Drafting 7
SCALE: 3/8" = 1'-0"



2 Drafting 8
SCALE: 3/8" = 1'-0"



Midtown Green

City of Hattiesburg, Mississippi

309 Crestmont Avenue, Hattiesburg, Mississippi

SPECIFICATIONS

December, 2022

'A Neighborhood Park'

CONTRACT DOCUMENTS

FOR

MIDTOWN GREEN

A Neighborhood Park

Prepared for:

The City of Hattiesburg

Mississippi

DECEMBER 2022

For information regarding this Contract, Contact:

THOMAS H. EAVES, LANDSCAPE ARCHITECT

LANDARC CONSULTING GROUP, INC.

308 FOURTH AVENUE

HATTIESBURG, MS

PHONE: 601-582-1198 (OFFICE)

601-606-0089 (CELL)

tom@landarcgroup.net

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ADVERTISEMENT FOR BIDS

The City of Hattiesburg will receive sealed proposals at the City Council Chambers, Hattiesburg City Hall, at 200 Front Street, Hattiesburg Mississippi, until **10:00 am, Thursday, February 9, 2023**, for furnishing all labor, materials and equipment to perform construction of Midtown Green, located at 309 Crestmont Avenue, Hattiesburg, Mississippi as described in and reflected by the plans and specifications prepared by Landarc Consulting Group, Inc., Hattiesburg, Mississippi, dated December, 2022, immediately after which time said sealed proposals shall be publicly opened and read in the Council Chambers In Hattiesburg City Hall.

It is recommended all bidders attend a Pre-Bid meeting held **Tuesday, January 31, 2023**, 10:30 am local time at the Site, 309 Crestmont Avenue, Hattiesburg, located across from the rear parking lot of University Baptist Church (3200 Arlington Loop, Hattiesburg) to walk the project site and answer any questions.

A single contract shall be let for the complete project.

Detailed drawings and specifications are on file and may be examined at office of the Secretary of the Hattiesburg Engineering Department, 212 West Front Street, Hattiesburg, MS.

Bidders may obtain complete sets of drawings and specifications from Plan House by going to the Landarc Consulting Group Online Plan Room at www.landarcplans.com, Plan House is located at 1A Churchill Street, (near Buffalo Wild Wings, off I 59), Hattiesburg, Mississippi 39402 Phone 601 336-6378.

Proposals shall be submitted in duplicate only upon the blank bid forms provided with the drawings and general conditions and must be accompanied by bid security in the form of a certified check or acceptable bid bond in an amount equal to at least five percent (5%) of the base bid. Said security to be forfeited, as liquidated damages, not penalty, by a bidder who may be awarded the contract, but who fails to carry out the terms of the proposal, execute the contract and post the required performance and payment bonds in the form and amount, and within the time specified. The bid bond, or the certified check, if used in lieu thereof, shall be payable unconditionally to the City of Hattiesburg.

Bids on the project must be received on or before the time specified above, and no bid may be withdrawn after the scheduled closing time and date for the receipt of bids for a period of sixty (60) days. All bids submitted must comply with the requirements of Chapter 3, Title 31 (Sections 31-3-1, et. seq.) of the Mississippi Code of 1972, as amended, and the performance of any contract shall be bonded in accordance with Chapter 5, Title 31 of the Mississippi Code of 1972, as amended.

Bidders who are non-residents of the State of Mississippi must also comply with the provisions of Section 31-3-21(3) of the Mississippi Code of 1972, as amended.

The Hattiesburg City Council reserves the right to reject any and all bids and to waive informalities.

DATED this, the ____ day of _____, 2023.

HATTIESBURG CITY CLERK

BY: /s/_____

Kermas Eaton

Dates of Publication:

January 11, 2023

January 18, 2023

PRE-BID MEETING

A pre-bid meeting will be held **January, 31, 2023 at 10:30** am local time at the Parking lot of University Baptist Church (3200 Arlington Loop, Hattiesburg) located across the street from the Midtown Green location to walk the site so that any questions or comments can be addressed.

INSTRUCTIONS TO BIDDERS

1. GENERAL DESCRIPTION OF THE PROJECT

A general description of the work to be done is contained in the Invitation to Bid. The scope is indicated on the accompanying Drawings and specified in applicable parts of these Contract Documents.

2. QUALIFICATION OF CONTRACTORS

The prospective Bidders must meet the statutorily prescribed requirements of the Owner before award of Contract.

3. DOCUMENT INTERPRETATION

The Contract Documents governing the work proposed herein consist of the Bidding Requirements, Contract Forms, Conditions of the Contract, Specifications, and Drawings. All parts of the Contract Documents are intended to be compatible and to provide all details reasonably required for the execution of the proposed work. Any person contemplating the submission of a Bid shall thoroughly examine all parts of these Contract Documents and, should there be any doubt as to the meaning or intent of said Contract Documents, the Bidder should request an interpretation thereof from the Project Landscape Architect at least 10 days prior to the bid opening. Any interpretation or change in said Contract shall be made only in the form of Addendum to the Contract Documents, which will be furnished to all Plan holders. The Owner will not be responsible for any other explanation or interpretations of said Contract Documents. Bidders shall submit with their Bids, or indicate in the space provided on the Bid Form, receipt of all Addenda. Failure to submit or acknowledge receipt of Addenda with the Bid may result in rejection of a Bid as non-responsive.

Pre-qualification of material and equipment and proposed substitutions will not be considered prior to Bid opening.

4. BIDDER'S UNDERSTANDING

Each bidder must inform himself of the conditions relating to the execution of the work, inspect the site, and make himself thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful Bidder of his obligation to enter into a Contract and complete the contemplated work in strict accordance with the Contract Documents. It shall be the Bidder's obligation to verify for himself and to his complete satisfaction all information concerning site and subsurface conditions. The Owner will make available to prospective Bidders upon request and at the office of the Landscape Architect, prior to bid opening, any information that he may have as to subsurface conditions and surface topography at the worksite.

Logs of test borings or topographic maps showing a record of the data obtained by the Landscape Architect's investigations of surface and subsurface conditions have not been utilized in preparation of the Contract Documents. The Bidder may rely upon the accuracy of the technical data contained

in such reports but not upon non-technical data interpretations, or opinions contained therein or for the completeness thereof for the purpose of bidding or construction.

Information derived from inspection of logs of test borings, or topographic maps, or from Drawings showing location of utilities and structures will not in any way relieve the Contractor from any risk, or from properly examining the site and making such additional investigations as he may elect, or from properly fulfilling all the terms of the Contract Documents.

Each Bidder shall inform himself of, and the Bidder awarded a Contract shall comply with, federal, state, and local laws, statutes, and ordinances relative to the execution of work.

5. TYPE OF BID

A. General

Types of bids for the work specified in these Contract Documents will be unit price, lump sum, or a combination of unit price and lump sum as set forth on the Bid Form.

B. Unit Price

When the Bid for the work is to be submitted on a unit price basis, unit prices shall be inserted in the appropriate places. The estimate of quantities of work to be done as tabulated on the Bid Form is approximate and is for the basis of calculation upon which the award of Contract may be made. Payment to the Contractor will be made on the measurement of the work actually performed by the Contractor. The Owner reserves the right to increase or diminish the amount of any class of work as may be deemed necessary.

C. Lump Sum

When the Bid for all or part of the work is to be submitted on a lump sum basis, a lump sum price shall be submitted in the appropriate place. The total amount to be paid the Contractor shall be the amount of the lump sum bid as adjusted for additions or deletions resulting from approved changes in the project.

D. Breakdown of Lump Sum Prices

Bidders shall provide a detailed breakdown of the lump sum prices if required in the Bid.

E. Special Bidding Requirements

Special bidding procedures or requirements, if applicable, are set forth in the Supplementary Conditions.

6. PREPARATION OF BIDS

All blank spaces in the Bid Form must be filled in, as required, preferably in BLACK ink. All price information will be shown in both words and figures where required. No changes will be made in

the wording or numbers on the forms. Amounts stated in words shall govern in case of discrepancy between amounts stated in words and the amounts stated in figures.

Any Bid shall be deemed informal, which contains material omissions, or irregularities, or which in any manner shall fail to conform to the conditions of the published Invitation to Bid.

Only one Bid from any individual, firm, partnership, or corporation, under the same or different names, will be considered. Should it appear to the Owner that any Bidder is interested in more than one Bid for work contemplated, all Bids in which such Bidder is interested will be rejected.

The Bidder shall sign his Bid in the blank space provided. If Bidder is a corporation, the legal name of the corporation shall be set forth in the Bid, together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation. If Bidder is a partnership, the true name of the firm shall be set forth in the Bid, together with the signature of the partner or partners authorized to sign Contracts in behalf of the partnership. If the signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with the Owner prior to opening of Bids or submitted with the Bid.

7. CHANGES IN QUANTITIES

The Owner reserves the right to increase or decrease the amount of any class of unit price work that may be deemed necessary, except that such increases or decreases in amounts shall not be more than 15 percent of the quantities shown on the Drawings and Specifications without a negotiated Change Order.

8. STATE AND LOCAL SALES AND USE TAXES

Unless the Supplementary Conditions contains a statement that the Owner is exempt from state sales tax on materials incorporated into the work due to the qualification of the work under this Contract, all state and local sales and use taxes required by the laws and statutes of the state and its political subdivisions, shall be paid by the Contractor. Prices quoted in the Bid shall include all nonexempt sales and use taxes, unless provision is made in the Bid Form to separately itemize the tax.

9. SUBMISSION OF BIDS

All Bids must be submitted not later than the time prescribed, at the place, and in the manner set forth in the Invitation to Bid. Bids must be made on the Bid Forms provided herein. Each Bid must be submitted in a sealed envelope, so marked as to indicate its contents without being opened, and addressed in conformance with the instructions in the Invitation to Bid. Contractor's Certificate of Responsibility Number from the State Board of Public Contractors must be clearly printed on the outside of the Bid envelope. No Bid will be considered unless the current certificate number appears on the envelope.

10. TELEGRAPHIC OR WRITTEN MODIFICATION OF BID

Telegraphic or written modifications of a Bidder's Bid will not be accepted or considered.

11. WITHDRAWAL OF BID

Any Bid may be withdrawn prior to the scheduled time for the opening of Bids either by telegraphic or written request, or in person.

12. BID SECURITY

Bids must be accompanied by cash, a certified check, or cashier's check drawn on a bank in good standing, or a bid bond issued by a Surety authorized to issue such bonds in the state where the work is located, in the amount of 5 percent of the total amount of the Bid submitted. This bid security shall be given as a guarantee the Bidder will not withdraw his Bid for a period of 90 days after Bid opening, and that if awarded the Contract, the successful Bidder will execute the attached Contract and furnish properly executed Performance and Payment Bonds, each in the full amount of the Contract price within the time specified.

The Attorney-in-Fact who executes this bond on behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond.

If the Bidder elects to furnish a bid bond, he shall use the Bid Bond form bound herewith, or one conforming substantially thereto in form and content.

13. BIDDER QUALIFICATION

Before a Contract will be awarded for the work contemplated herein, the Owner will conduct such investigation as is necessary to determine the performance record and ability of the apparent low Bidder to perform the size and type of work specified under this Contract. Upon request, the Bidder shall submit such additional information not specifically requested herein, as deemed necessary by the Owner to evaluate the Bidder's qualifications.

14. RETURN OF BID SECURITY

Within 15 days after the award of the Contract, the Owner will return the bid securities to all Bidders whose Bids are not to be further considered in awarding the Contract. Retained bid securities will be held until the Contract has been executed, after which all bid securities, other than Bidders' bonds and any guarantees, which have been forfeited, will be returned.

15. BASIS OF AWARD

Within 90 calendar days after the opening of Bids, unless otherwise stated in the Invitation to Bid or Supplementary Conditions of these Documents, award of the Contract will be made to the lowest responsible and responsive Bidder complying with the Invitation to Bid. A written Notice of Award will be mailed or delivered to the office designated in the Bid. In the event of failure of the lowest responsible and responsive qualified Bidder to sign and return the Contract with acceptable

Performance and Payment Bonds, as prescribed herein, the Owner may award the Contract to the next lowest and best Bidder.

In order to be considered responsive with the Invitation to Bid, a Bid must:

- A. Be completed, signed, and notarized and be compliance in all respects to the conditions of the Invitation to Bid and Instructions to Bidders.
- B. Be made on the Bid Forms provided and submitted intact as part of the Contract Documents.
- C. Be accompanied by the required bid security.
- D. Contain no alterations to the terms or conditions of these Contract Documents except as specifically directed in these Contract Documents.

In order to be considered responsible, a Bidder must establish to the complete satisfaction of the Owner, as a minimum, that he has:

- A. A permanent place of business.
- B. Adequate financial resources to meet his Contract obligations and will maintain same for the Contract period.
- C. Adequate equipment to perform the work properly and within the time prescribed in the Contract.
- D. The necessary experience and technical qualifications in the type of work provided for in the Contract.

The Owner reserves the right to reject all Bids, or any Bid not in compliance with the Contract Documents, and to waive any informalities or irregularities in Bids received.

16. EXECUTION OF CONTRACT

The successful Bidder shall, within 10 days, not including Sundays and legal holidays, after receiving Notice of Award, sign and deliver to the Owner the Contract hereto attached together with the Performance and Payment Bonds and the Certificate of Insurance. Within 5 days, not included Sundays and legal holidays, after receiving the properly signed Contract with acceptable bonds and Certificate of Insurance for this project, the Owner's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract. Within 30 days of execution, the Owner will issue the Notice to Proceed.

17. PLANS FOR CONSTRUCTION

The successful Bidder will be furnished two sets of full-size Documents without charge. Any additional copies required will be furnished to the Contractor at reproduction cost.

18. PERFORMANCE AND PAYMENT BOND

The successful Bidder shall file with the Owner a Performance Bond and Payment Bond on the form bound herewith in the full amount of the Contract price in accordance with the requirements of Mississippi Statutes Code Section 31-5-51, as applicable, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the construction of the work, and cover all guarantees against defective workmanship or materials, or both, for a period of one year after the date of final acceptance of the various work items completed during the construction program. The Contractor shall refer to the Technical Specifications for required warranty periods on specific equipment items. The Surety furnishing this bond shall have a sound financial standing and a record of service satisfactory to the Owner, and shall be authorized to do business in the State of Mississippi. The Attorney-in-Fact (Resident Agent) who executes this Performance Bond and Payment Bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the Bond. All Contracts, Performance and Payment Bonds, will have the same date

19. FAILURE TO EXECUTE CONTRACT AND FURNISH BONDS AND CERTIFICATE OF INSURANCE

The Bidder who has a Contract awarded to him and who fails to sign the Contract and furnish the Performance Bond, Payment Bond, and Certificate of Insurance shall forfeit the bid security and it shall be retained as liquidated damages by the Owner. It is agreed that this said sum is a fair estimate of the amount of damages the Owner will sustain in case the Bidder fails to enter into a Contract and furnish the bond as hereinbefore provided. Bid security deposited in the form of cash, a certified check, or cashier's check shall be subject to the same requirement as a bid bond.

20. TIME OF COMPLETION

The time of completion of the work to be performed under this Contract is the essence of the Contract. Delays and extensions of time may be allowed in accordance with the provisions stated in the General Conditions. The time allowed for the completion of the work is stated in the Bid.

SURETY

If the Bidder is awarded a Contract(s) based on this Bid, the Surety who provides the Performance Bond and Payment Bond will be _____

Whose address is _____

City State Zip

Bidder

The name of the Bidder submitting this Bid is _____

Headquarters Address _____

City State Zip

Local Mailing Address _____

(If different than above):

City State Zip

Address to which all communications concerned with this Bid and with the resulting Contract shall be sent:

Name _____ Street or P.O. Box _____

City _____ State _____ Zip _____

Attention: _____

Name

Title

The names of the Principal officers of the entity submitting this Bid, or of all persons interested in this Bid as Principals are:

Name _____	Company _____
------------	---------------

Name _____	Company _____
------------	---------------

Name _____	Company _____
------------	---------------

Name _____	Company _____
------------	---------------

If the Bidder is a joint venture or partnership the names and business addresses of the participants are:

Name _____

Address _____

Name _____

Address _____

BIDDER'S AFFIDAVIT AND SWORN STATEMENT

STATE OF _____

COUNTY OF _____

I hereby certify that I am submitting this Bid on behalf of

a (check one): ☐ Corporation ☐ Partnership
 ☐ Sole Proprietorship ☐ Joint Venture
 ☐ Other (Describe)

of the City of _____ State of _____

that I have examined and prepared the foregoing Bid(s) based on the information contained in the Contract Documents provided with the Bid; and I have checked the same in detail before submitting this Bid; that I have full authority to make such statements and submit this Bid in (its) (their) (my) behalf; and that these statements are true and correct.

Addenda

The Bidder hereby acknowledges that he has received Addenda No.(s) __, __, __, __, to these Contract Documents. (Bidder insert No. of each Addendum received.)

Signature

Title _____ Corporate Seal)

Subscribed and sworn to before me this ____ day of _____, 20_____

Notary Public - State of _____

(Notary Seal)

My commission expires: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ as Principal, and
as Surety, are hereby held and firmly bound unto _____ as OWNER in the penal
sum of _____ for the payment of which, well and truly to be made,
we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this _____ day of _____, 20_____

The Condition of the above obligation is such that whereas the Principal has submitted to

_____ a certain BID, attached hereto and hereby made a part thereof to enter into a
contract in writing, for the _____

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 attachment hereto (properly completed in accordance with said BID) and shall furnish a BOND for faithful performance of said contract, and for the payment of all persons performing labor and 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 full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____. L.S.

Principal

Surety

By:

NOTE TO BIDDERS: All blank spaces requiring input below must be filled in, preferably in BLACK INK. (All proposals are to be submitted in duplicate.)

PROPOSAL

To: CITY OF HATTIESBURG

Address: P. O. Box 16389
Hattiesburg, Mississippi 39404

Project Title: CITY OF HATTIESBURG MIDTOWN GREEN

Bidder: _____

Address: _____

Date: _____

Bidder's person to contact for additional information on this Bid:

Name: _____

Telephone: _____

BIDDERS' DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another bid on this Contractor.

The Bidder further declares that he has carefully examined the Contract Documents for the project, that he has personally inspected the site, that he has satisfied himself as to the nature of the work involved, including equipment required, and conditions of work involved, and that this Bid is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Bid.

The Bidder further agrees that he has exercised his own judgment regarding the interpretation of the work and has utilized all data, which he believes pertinent from the Landscape Architect, Owner, and other sources in arriving at his conclusions.

CONTRACT EXECUTION AND BONDS

The Bidder agrees that if this Bid is accepted, he will, within 10 days, not including Sundays and legal holidays after Notice of Award, sign and deliver the Contract to the Owner together with the required Performance Bond, Payment Bond, and Certificate of Insurance, and will, to the extent of his Bid, furnish all machinery, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete the work as specified or indicated in the Contract Documents.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIME

The Bidder further agrees to begin work within 10 calendar days after the date stated in the Notice to Proceed issued by the Owner to the Contractor and shall complete the construction of the project in all respects within 300 calendar days from the date the Owner issues the Notice to Proceed.

Submittals required under this Contract that would affect the start of actual construction can be submitted by the Contractor any time after the Owner issues the Notice of Award, notwithstanding the fact that the Contract has not been executed nor the Notice to Proceed issued. Notwithstanding the Contractor's right to make early submittals, no cause for a delay or time extension shall arise under the Contract unless the Landscape Architect fails to respond to such submittals within 20 days after issuance of the Notice to Proceed and the delay impacts the Contract completion date. The time for completion of this Contract shall begin the day the Notice to Proceed is issued by the Owner.

DAMAGES FOR DELAY

In the event the Bidder is awarded the Contract and shall fail to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid to the Owner at the rate stated below per calendar day until the work shall have been satisfactorily completed as provided by the Contract Documents:

Contract Completion: \$225.00 per day

Liquidated damage shall be cumulative for work not completed on schedule.

SALES AND USE TAXES

The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated bid prices for the work.

BIDDER BREAKDOWN OF TOTAL BID

Bidder(s) being considered for award may be required to provide further detailed breakdown of the work within 72 hours following receipt of the request from the Owner. The price breakdown shall be fairly apportioned to the items listed. If so requested, the Bidder shall substantiate any price or prices with additional detailed price breakdown.

LUMP SUM WORK

The following items are to be provided and/or completed, as herein specified and as shown on the Drawings, based upon the undersigned's own estimate of quantity and costs, for the lump sum amounts specified for each line item indicated. If requested by the Landscape Architect, the Contractor shall substantiate any price or prices with additional detailed price breakdown.

UNIT PRICE WORK

The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following unit price amounts. It being expressly understood that the unit prices are independent of the exact quantities involved. The Bidder agrees that the unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents. The amounts shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern.

BASE BID Midtown Green and all Park Amenities.

All labor, materials and equipment to build the Midtown Green Park including, Site Work, Grading, Six Foot Path, Parking Lot, Pavilion, Inclusive Playground, Exercise Station, Fencing, Landscaping, Signage and Lighting, as shown in plans and specifications:

_____ Dollars (\$) _____

TOPSOIL installed per Cubic Yard

_____ Dollars \$ (_____)

CENTIPEDE Sod installed per Square Yard

_____ Dollars \$ (_____)

ADD ALTERNATE # 1

Concrete Walking Trail Changed from Six feet to Eight feet wide.

_____ Dollars \$ (_____)

Respectfully submitted,

By: _____

Contractor

Title: _____

Address: _____

Date: _____, 20 ____

(To be filled in if a corporation)

Our Corporation is chartered under the Laws of the State of _____

and the names, titles and business addresses of the executives are as follows:

President _____ Address _____

Secretary _____ Address _____

Treasurer _____ Address _____

ADDENDUM

The Bidder is required to acknowledge receipt of all Addenda.

NOTICE OF AWARD

TO:

Project Description: MIDTOWN GREEN

The Owner has considered the bid submitted by you for the above-described Work in response to its Advertisement for Bids published _____, 2022 and _____, 2022 and Information for Bidders.

You are hereby notified that your Bid has been accepted for items identified as Base Bid in the amount of

\$_____.

You are required under the terms of the Notice Inviting Bids and the Information for Bidders to execute the Agreement and furnish the required bonds and certificates of insurance within 10 calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said bonds and certificates of insurance within 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 to be abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the Owner.

Dated this _____ day of _____, 2022.

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the foregoing Notice of Award is hereby acknowledged by _____ this
the _____ day of _____, 20____.

By: _____

Title: _____

CONTRACT

THIS AGREEMENT made and entered into, this the _____ day of _____ in the year _____ by and between:

(Firm or Corporation, Name and Address)

Duly authorized and qualified to do business in the State of Mississippi, hereinafter called the CONTRACTOR, and CITY OF HATTIESBURG, MISSISSIPPI, hereinafter called the OWNER.

WITNESSETH, that CONTRACTOR and the OWNER for considerations hereinafter named agree as follows:

SCOPE OF WORK

CONTRACTOR shall furnish all labor, materials, supervision, tools, equipment, supplies, and appurtenances, and perform all work on the Contract Drawings entitled MIDTOWN GREEN, as prepared by Landarc Consulting Group, Inc. Landscape Architects-Planners-Designers, and shall do everything required by this CONTRACT AGREEMENT and the Contract Documents, all to the satisfaction of the OWNER in accordance and compliance with the Contract Documents.

CONTRACT DOCUMENTS

It is understood and agreed that the Advertisement for Bids, Information for Bidders, Addenda, Bid, Bid Bond, Notice of Award, Contract, Contract Bond, Certificate of Owner's Attorney, Notice to Proceed, General Conditions, Special Conditions, Technical Specifications, Change Order, and Plans, said plans showing more particularly the details of the work to be done, shall be held to be and are hereby made a part of this contract by specific reference thereto and with like effect as if each and all of said instruments had been set out fully herein in words and figures.

TIME OF COMPLETION

The CONTRACTOR shall begin work within ten (10) days from the date of this Contract and shall complete all work within 90 calendar days after the date specified in the Notice to Proceed.

In case of failure on the part of the CONTRACTOR to complete the work within the calendar days specified, or any OWNER approved extensions, thereof, then the CONTRACTOR shall pay to the OWNER the sum of \$225.00 for each calendar day thereafter that the work remains incomplete. Such sums are agreed upon as the proper measures of liquidated damages that the OWNER will sustain by the failure of the CONTRACTOR to complete the work within the time(s) stipulated and those sums are not to be construed in any sense as penalties. The CONTRACTOR shall not be liable for the aforementioned damages or forfeiture of this CONTRACT by reason of delay due to acts of GOD or of the public enemy, acts or neglects of the OWNER, acts or neglects of any other contractor employed by the OWNER, or by LANDARC CONSULTING GROUP, INC. City of Hattiesburg Midtown Green

changes ordered in the work, delay in procurement of material beyond the CONTRACTOR'S control, or any other causes beyond the CONTRACTOR'S control.

PROGRESS PAYMENTS

The OWNER shall make monthly progress payments to the CONTRACTOR on the basis of duly certified and approved estimated percentage of work completed by the Contractor (for each component of the Project) during the preceding calendar month, but the OWNER shall retain ten percent (10%) of the amount of each such estimate until final completion and acceptance of the work covered by this Contract.

ACCEPTANCE AND FINAL PAYMENT

Upon receipt of written notice from the CONTRACTOR that the work is ready for final inspection and acceptance, the OWNER 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 its authorized signature, stating that the work provided for in this Contract has been completed and is accepted by him under the terms and conditions thereof, and the entire amount found to be due the CONTRACTOR shall be paid to the CONTRACTOR at the office of the OWNER within 30 days after the date of said final certificate.

Before issuance of final certificate, the CONTRACTOR shall submit evidence satisfactory to the OWNER that all payrolls, bills and/or claims, and other indebtedness connected with the work have been paid so as to save the OWNER harmless from any damage that may arise from the prosecution of this Contract.

The making and acceptance of the final payment shall constitute a waiver of all claims by the OWNER against the CONTRACTOR, other than those arising from unsettled liens, from faulty or defective work appearing after final payment, or from failure to comply with the requirements of the Contract Documents, or the terms of any special guarantee specified herein, and a waiver of all claims by the CONTRACTOR against the OWNER other than those previously made in writing and still unsettled.

If, after the work has been substantially completed, the full completion is materially delayed through no fault of the CONTRACTOR, the OWNER shall, and without terminating the Contract, make payment for the balance due for that portion of the work fully complete, except that it shall not constitute a waiver of claims.

TERMINATION OF CONTRACT

If the CONTRACTOR should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistently or repeatedly refuse, or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen, equipment, or proper materials, or if he should fail to make prompt payment to subcontractor or for materials or labor, or persistently disregard laws, ordinances or the instruction of the OWNER or otherwise be guilty of a substantial violation of any provisions of the Contract, then the OWNER may without prejudice to any other right or remedy and after giving the CONTRACTOR written notice, terminate the engagement of the CONTRACTOR and take possession of the premises and of all materials, tools, and appliances thereon and finish the work by whatever method

the OWNER may deem expedient. In such case, the CONTRACTOR, shall not be entitled to receive any payment until the work is finished. If the amount owed to CONTRACTOR for work completed by him shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the CONTRACTOR. If such expense shall exceed the amount owed to the CONTRACTOR, the CONTRACTOR shall pay the difference to the OWNER as herein provided.

In the event of termination of Contract before completion of the work, due to abandonment of the Project or discontinuance thereof, the CONTRACTOR will be paid in proportion to the work completed and in progress.

LAWS, REGULATIONS, INSURANCE

The CONTRACTOR shall comply with the pertinent provisions of all local, state and federal laws, rules or regulations applicable to said work being performed, and shall carry all required Workmen's Compensation, casualty, or other liability insurance, and shall generally keep the OWNER indemnified against all fines, penalties, and losses incurred by reason of any breach of this stipulation.

INDEMNIFICATION

The CONTRACTOR shall be solely responsible for and shall protect and indemnify and save harmless the OWNER, OWNER'S employees, and LANDSCAPE ARCHITECT from and against all damages, losses and all claims, demands, payments, suit actions, recoveries, and judgments of every nature and description brought or recovered against the OWNER, OWNER'S employees, and LANDSCAPE ARCHITECT reason of any act or commission of the CONTRACTOR, his agents, employees, or sub-contractors in the execution of the work or in the guarding of it.

WORKMANSHIP

It is understood and agreed that all work shall be done in a thorough and workmanlike manner under the supervision and direction of the Landscape Architect and to the satisfaction of the OWNER.

SUBLETTING

Neither party of this Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the CONTRACTOR assign any monies due or to become due to him hereunder without written consent of the OWNER.

EXTRA WORK

If it becomes necessary for the CONTRACTOR to do work not specifically called for by this Contract, the OWNER and CONTRACTOR shall come to an agreement as to the amount of additional work to be done, and as to the cost of the additional work before the work is initiated.

The CONTRACTOR agrees that he has read each and every clause of this Contract and fully understands the meaning of same and that he will comply with all the terms, covenants, and agreements therein set forth.

IN WITNESS WHEREOF the parties hereby have executed this CONTRACT on the day and year first above written:

ATTEST:

OWNER:

_____ By: _____

ATTEST:

CONTRACTOR:

_____ By: _____

Title: _____

CONTRACT BOND

CONTRACT BOND FOR MIDTOWN GREEN

LOCATED IN THE COUNTY OF FORREST

STATE OF MISSISSIPPI

Know all men by these presents: That we, _____, Principal, a _____
residing at _____ in the State of _____ and
residing at _____.

to do business in the State of Mississippi, under the laws thereof, as surety, are held and firmly bound unto CITY OF HATTIESBURG, MISSISSIPPI, herein referred to as OWNER, in the sum of _____ Dollars, lawful money of the United States of America, to be paid to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors, or assigns jointly and severally by these presents.

Signed and sealed this the _____ day of _____, A.D., 2022.

The conditions of the bond are such, that whereas the said _____ principal, has (have) entered into a contract with OWNER, of the State of Mississippi, bearing the date of _____ day of _____, A.D., 2022 hereunto annexed, for the construction of a certain project in the State of Mississippi as mentioned in said contract in accordance with the plans, specifications and special provisions therefore, on file in the office of OWNER.

Now, therefore, if the above bounden _____ in all things shall stand to and abide by and truly observe, do keep and perform all and singular the terms, covenants, conditions, guarantees and agreements in said contract, contained on his (their) part to be observed, done, kept and performed and each of them, at the time and in the manner and form and furnish all of the material and equipment specified in said contract in strict accordance with the term of said contract which said plans, specifications and special provisions are included in and form a part of said contract and shall maintain the said work contemplated until its final completion and acceptance as specified in the approved specifications, and save harmless said OWNER and the Landscape Architect from any loss or damage arising out of or occasioned by the negligence, wrongful or criminal act, overcharge, fraud, or any other loss or damage whatsoever, on the part of said principal(s), his (their) agents, servants, or employees in the performance of said work or in any manner connected therewith, and shall be liable and responsible in a civil action instituted by OWNER at the instance of OWNER, or any officer of OWNER authorized in such cases, for double any amount in money or property, OWNER may lose or be overcharged or otherwise defrauded of, by reason of any wrongful or criminal act, if any, of the Contractor(s), his (their) agents or employees, and shall promptly pay the said agents, servants and employees, and all persons furnishing labor, material, equipment or supplies therefore, including premiums incurred, for Surety Bonds, Liability Insurance, and Workmen's Compensation Insurance; payment of all taxes, licenses, assessments, contributions, damages, penalties and interest thereon, when and as the same may be due this state, or any county, municipality, board, department, commission or political subdivision; in the course of the performance of said work and subject to the provisions of Title

LANDARC CONSULTING GROUP, INC.

City of Hattiesburg Midtown Green

31, Chapter 5, Section 31-5-1 et. seq. Mississippi Code of 1972, and other State statutes applicable thereto, and shall carry out to the letter and to the satisfaction of OWNER all, each and every one of the stipulations, obligations, conditions, covenants and agreements and terms of said contract in accordance with all terms thereof and all of the expense and cost and attorney's fees that may be incurred in the enforcement of the conditions and obligations of this bond, then this obligation shall be null and void, otherwise to be and remain in full force and virtue.

Witness our signatures this the _____ day of _____, A.D., 20____.

(CONTRACTOR) Principal

SURETY

BY: _____

BY: _____

(Signature) ATTORNEY-IN-FACT

TITLE _____

(Contractor's Seal)

Name and Address of Local

(Mississippi) Representative

(Surety Seal)

CERTIFICATE OF OWNER'S ATTORNEY

I, the undersigned, _____, the duly authorized and acting legal
representative of _____

do hereby certify as of follows:

I have examined the attached contract(s) and Contract Bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon: and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions, and provisions thereof.

DATE: _____

NOTICE TO PROCEED

To:

Date:

Project: **Midtown Green**

Your are hereby notified to commence WORK in accordance with the Agreement dated _____, 2022 on or before _____, 2023, and you are to complete the WORK within **90** consecutive calendar days thereafter. The date of completion of all WORK is therefore _____, 2023.

Owner City of Hattiesburg, Mississippi

By _____

Title Mayor, City of Hattiesburg

ACCEPTANCE OF NOTICE

Receipt of above NOTICE TO PROCEED is hereby acknowledged by, _____
this the _____ day of _____, 20____.

By _____

Title _____

GENERAL CONDITIONS

ARTICLE 1 DEFINITION OF TERMS

Whenever used in these General Conditions or in the other Contract Documents, the following terms shall have the meanings indicated, and shall be applicable to both the singular and plural thereof:

ADDENDUM. Written or graphic instructions issued prior to the opening of Bids, which clarify, correct or change the bidding documents or the Contract Documents.

AGREEMENT. The written agreement between the OWNER and the CONTRACTOR, covering the work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided herein.

APPLICATION FOR PAYMENT. The form accepted by the LANDSCAPE ARCHITECT which is to be used by the CONTRACTOR in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

BID. The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the work to be performed.

BIDDER. Any person, firm or corporation submitting a Bid for the work.

BONDS. Bid, performance, and payment bonds and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the Contract Documents.

CHANGE ORDER. A document recommended by LANDSCAPE ARCHITECT, which is signed by the CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time, issued after the effective date of the Agreement.

CONTRACT DOCUMENTS. The Agreement, Specifications, Drawings, Addenda (whether or not issued prior to opening of bids or execution if the Agreement), Bonds, General Conditions, and Modifications.

CONTRACT PRICE. The total moneys payable by the OWNER to the CONTRACTOR under the Contract Documents as stated in the Agreement.

CONTRACT TIME. The number of calendar days stated in the Agreement for the completion of the Work.

CONTRACTOR. The person, firm or corporation with whom the OWNER has entered into the Agreement.

DRAWINGS. The drawings and plans which show the character and scope of the Work to be performed and which have been prepared or approved by the LANDSCAPE ARCHITECT and are referred to in the Contract Drawings. LANDSCAPE ARCHITECT. The person, firm or corporation named as such in the Agreement.

FIELD ORDER. A written order issued by the LANDSCAPE ARCHITECT which clarifies or interprets the Contract Documents in accordance with Article 14.1 or orders minor changes in the Work in accordance with Article 20.2.

MODIFICATION. (a) A written amendment of the Contract Documents signed by both parties, (b) a Change Order, (c) a written clarification or interpretation issued by LANDSCAPE ARCHITECT in accordance with Article 14.1 or (d) a written order for a minor change or alteration in the work issued by the LANDSCAPE ARCHITECT pursuant to Article 20.2. A modification may only be issued after execution of the Agreement.

NOTICE OF AWARD. The written notice by OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

NOTICE TO PROCEED. A written notice given by OWNER to CONTRACTOR

(with a copy to LANDSCAPE ARCHITECT) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR'S obligations under the Contract Documents.

OWNER. The public body or authority, corporation, association, partnership, or individual with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.

PROJECT. The entire construction to be performed as provided in the Contract Documents.

RESIDENT PROJECT REPRESENTATIVE. The authorized representative of the LANDSCAPE ARCHITECT who is assigned to the Project or any parts thereof.

SHOP DRAWINGS. All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a Subcontractor, manufacturer, supplier or distributor and which illustrate the equipment, material or some portion of the Work.

SPECIFICATIONS. Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

SUBCONTRACTOR. An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

SUBSTANTIAL COMPLETION. The date as certified by the LANDSCAPE ARCHITECT when the construction of the Project or a specified part thereof is sufficiently complete, in accordance with the Contract Documents, so that the Project or specified part can be utilized for the purposes for which it was intended; or if there can be no such certification, the date when final payment is due.

SUPERINTENDENT. Contractor's representative.

WORK. Any and all obligations, duties, and responsibilities necessary to the successful completion of the Project assigned to or undertaken by the CONTRACTOR under the Contract Documents, usually including the furnishing of all labor, materials, equipment, and other incidentals.

ARTICLE 2 - AWARD, EXECUTION OF DOCUMENTS, DELIVERY OF BONDS

- 2.1 THE AWARD OF THE CONTRACT, if it is awarded, will be to the lowest responsible Bidder whose qualifications indicate that the award will be in the best interest of the OWNER and whose proposal complies with all the prescribed requirements. No award will be made until the OWNER has concluded such investigations as he deems necessary to establish the responsibility, qualifications and financial ability of the Bidders to do the Work in accordance with the Contract Documents to the satisfaction of the OWNER within the time prescribed. The OWNER reserves the right to reject the Bid of any Bidder who does not meet such qualifications to the OWNER'S satisfaction. In analyzing Bids, the OWNER may take into consideration alternatives and unit prices, if requested by the Bid forms. If the contract is awarded, the OWNER shall give the successful Bidder written notice of the award within thirty days after the opening of the Bids.
- 2.2 At least three counterparts, of the Agreement and of such other Contract Documents as practicable shall be signed by the OWNER and the CONTRACTOR. The OWNER shall identify those portions of the Contract Documents not to be signed and such identification shall be binding on both the Owner and the CONTRACTOR shall each receive an executed counterpart of the Contract Documents.
- 2.3 Simultaneously with the execution of the Agreement, the CONTRACTOR shall deliver to the OWNER the required Bonds.
- 2.4 Failure of the successful Bidder to execute the Agreement and deliver the required Bonds within ten days of the Notice of Award shall be just cause for the Owner to annul the award and declare the Bid and any guarantee thereof forfeited.

ARTICLE 3 - PROGRESS AND SUBMISSION SCHEDULES; PRECONSTRUCTION CONFERENCE; TIME FOR STARTING THE WORK

- 3.1 Within ten days after execution of the Agreement, the CONTRACTOR shall submit to the LANDSCAPE ARCHITECT for approval, an estimated progress schedule indicating the starting and completion dates of the various stages of the Work, and a schedule of Shop Drawing submissions. At least ten days prior to submitting the first Application for Payment he shall also submit a schedule of values as required by Article 26.1.
- 3.2 Before starting the Work, a conference will be held to review the above plans and schedules, to establish procedures for handling Shop Drawings and other submissions; for processing Applications for Payment; and to establish a working understanding between parties as to the conduct of the Project. Present at the conference will be the OWNER, the LANDSCAPE

ARCHITECT, the resident PROJECT REPRESENTATIVE, the CONTRACTOR and the Superintendent.

- 3.3 Prior to starting the Work the Contractor shall furnish the OWNER and LANDSCAPE ARCHITECT certificates of insurance as indicated in Article 32.
- 3.4 The CONTRACTOR shall start the Work within ten days of the date on which the Agreement is executed and delivered or on such other date, as may be specified in the Agreement. However, at the time of the execution and delivery of the Agreement the LANDSCAPE ARCHITECT may give the CONTRACTOR a written notice to proceed, stating a different date on which it is expected that the CONTRACTOR will start Work, but such date shall not be more than thirty days after the date of execution and delivery of the Agreement.
- 3.5 The Contract Time shall commence on the date the work is to start as provided in Article 3.4 unless work begins at an earlier date.

ARTICLE 4 - CORRELATION, INTERPRETATION AND INTENT OF CONTRACT DOCUMENTS

- 4.1 It is the intent of the Specifications and Drawings to describe the complete Project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Agreement between the OWNER and the CONTRACTOR. They may be altered only by a Modification.
- 4.2 The Contract Documents are complementary: what is called for by one is as binding as if called for by all. If the CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, he shall call it to the Owner and Landscape Architect's attention in writing before proceeding with the Work affected thereby. In resolving such conflicts, errors and discrepancies, the documents shall be given precedence in the following order: Agreement, Specifications, and Drawings. Within the Specifications the order of precedence shall be as follows: Special Conditions, Instructions to Bidders, General Conditions, Technical Provisions. Figure dimensions on Drawings shall govern over scale dimensions, and detailed Drawings shall govern over general Drawings. Any work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials or equipment described in words which when so applied have a well-known technical or trade meaning shall be deemed to refer to such recognized standards. The CONTRACTOR assumes full responsibility for having familiarized himself with the nature and extent of the Contract Documents, Work, locality, and local conditions that may in any manner affect the Work to be done.

ARTICLE 5 - OWNERSHIP AND COPIES OF DOCUMENTS; RECORD DOCUMENTS

- 5.1 All specifications, Drawings and copies thereof furnished by the LANDSCAPE ARCHITECT shall remain his property. They shall not be used on another Project, and with the exception of

those sets, which have been furnished in connection with the execution of the Agreement, shall be returned to him on request upon completion of the Project.

- 5.2 The LANDSCAPE ARCHITECT shall furnish to the CONTRACTOR up to three copies of the Specifications and Drawings as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.
- 5.3 The CONTRACTOR shall keep one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to the LANDSCAPE ARCHITECT and shall be delivered to him for the OWNER upon completion of the Project.

ARTICLE 6 - WORK BY OTHERS

- 6.1 The OWNER may perform additional work related to the Project by himself, or he may let other direct contracts thereof, which shall contain General Conditions similar to these. The CONTRACTOR shall afford the other contractors who are parties to such direct contracts (or the owner, if he is performing the additional work himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of work, and properly connect and coordinate his Work with theirs.
- 6.2 If any part of the CONTRACTOR'S Work depends for proper execution or results upon the work of any other contractor or the OWNER, the CONTRACTOR shall inspect and promptly report to the LANDSCAPE ARCHITECT in writing any defects or deficiencies in such work that render it unsuitable for proper execution and results. His failure to so report shall constitute an acceptance of the work as fit and proper for the relationship of his Work except as to defects and deficiencies which may appear in the other work after the execution of his work.6.3
The CONTRACTOR shall do all cutting, fitting and patching of his Work that may be required to make its several parts come together properly and fit to receive or be received by such other work. The CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of the LANDSCAPE ARCHITECT.
- 6.4 If the performance of additional work by other contractors or the OWNER is not noted in the Contract Documents prior to the award of the contract, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional work by the OWNER. If the Contractor believes that the performance of such additional work by the Owner or others involves him in additional expense or entitles him to an extension of the Contract Time, he may make a claim therefor as provided in Article 21 and 23.

ARTICLE 7 - SUBCONTRACTS

- 7.1 Prior to the execution and delivery of the Agreement, the successful Bidder will submit to the OWNER or LANDSCAPE ARCHITECT for acceptance a list of the names of Subcontractors and

such other persons and organizations deemed appropriate by the Owner or Landscape Architect. Prior to the execution and delivery of the Agreement, the OWNER or LANDSCAPE ARCHITECT shall notify the successful bidder in writing if the OWNER or LANDSCAPE ARCHITECT, after due investigation, has reasonable objection to any Subcontractor person or organization on such list. The failure of the OWNER or LANDSCAPE ARCHITECT to make objection to any Subcontractor, person or organization on the list prior to the execution and delivery of the Agreement shall constitute an acceptance of such Subcontractor, person or organization. Acceptance of any such Subcontractor, person or organization shall not constitute a waiver of any right of the OWNER or LANDSCAPE ARCHITECT to reject defective Work, material or equipment not in conformance with the requirements of the Contract Documents.

- 7.2 The CONTRACTOR shall not employ any Subcontractor (whether initially or as a substitute) against whom the OWNER or LANDSCAPE ARCHITECT may have reasonable objection, nor shall the CONTRACTOR be required to employ any Subcontractor against whom he has reasonable objection. The CONTRACTOR shall not make any substitution for any Subcontractor who has been accepted by the OWNER or LANDSCAPE ARCHITECT unless the OWNER or LANDSCAPE ARCHITECT determines that there is good cause for doing so.
- 7.3 The CONTRACTOR shall be fully responsible for all acts and omissions of his Subcontractor and of persons directly or indirectly employed by them and of persons for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between any Subcontractor and OWNER or any obligation on the part of the OWNER to pay or to see to the payment of any Moneys due any Subcontractor, except as may otherwise be required by law. The OWNER may furnish to any Subcontractor, to the extent practicable, evidence of amounts paid to the CONTRACTOR on accounts of specific work done in accordance with the schedule of values.
- 7.4 The divisions and sections of the Specifications and the identifications of any drawings shall not control the Contractor in dividing the Work among Subcontractors or delineating the Work to be performed by any trade.
- 7.5 The CONTRACTOR agrees to specifically bind every Subcontractor to all of the applicable terms and conditions of the Contract Documents. Every Subcontractor, by undertaking to perform any of the Work, shall thereby automatically be deemed bound by such terms and conditions.
- 7.6 All Work performed for the CONTRACTOR by a Subcontractor shall be pursuant to an appropriate agreement between the CONTRACTOR and the Subcontractor.

ARTICLE 8 - MATERIALS, EQUIPMENT AND LABOR: SUBSTITUTE MATERIAL AND EQUIPMENT

- 8.1 The CONTRACTOR shall provide and pay for materials, equipment, labor, transportation, construction equipment, and machinery, tools, appliances, fuel, power, light, heat, telephone,

water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of the Work.

- 8.2 All materials and equipment furnished under the contract shall be new. If required by the OWNER or LANDSCAPE ARCHITECT, the CONTRACTOR will furnish satisfactory evidence as to the kind and quality of materials and equipment.
- 8.3 Except for items where no substitution is clearly specified, whenever any material, article, device, product fixture, form, type of construction, or process is indicated or specified by patent or proprietary name, by name of manufacturer, or by catalog number, such specifications shall be deemed to be used for the purpose of establishing a standard of quality and facilitating a description of the material or process desired. This procedure is not to be construed as eliminating from competition other products of equal or better quality by other manufacturers where fully suitable in design, and shall be deemed to be followed by the words "Or Equal". The Contractor may, in such cases, submit complete comparative data to the Landscape Architect for consideration of another material, type, or process, which shall be substantially equal in every respect to that so indicated or specified. Materials or equipment covered by this Article shall not be ordered, delivered to the site, or used in the work unless approved in writing. The Landscape Architect will be the sole judge of the equivalency of proposed material or equipment.

Requests for review of equivalency will not be accepted from anyone except the Contractor. Whenever, it is indicated in the Drawings or Specifications that a substitute or "or equal" may be furnished or used by the Contractor, if acceptable to the Landscape Architect. Application for such acceptance will not be considered by Landscape Architect until after the effective date of the Agreement.

Responsibility for the adequacy and performance of an "Or Equal" substitution lies solely with the Contractor. All requests from the Contractor for consideration of an "Or Equal" substitution shall clearly state any deviation for the Contract and all guarantee details.

When an "Or Equal" substitution is accepted, and it is found that such substitution alters the design or space requirements indicated on the Drawings, the Contractor shall be responsible for the costs involved to revise the design and construction, including the costs associated with the work of other contractors due to such substitution.

ARTICLE 9 - PATENT FEES AND ROYALTIES

The CONTRACTOR shall pay all license fees and royalties and assume all costs incidental to the use of any invention, design, process or device, which is the subject of patent rights or copyrights, held by others. He shall indemnify and hold harmless the OWNER and LANDSCAPE ARCHITECT and anyone directly or indirectly employed by them from and against all claims, damages, losses, and expenses (including attorneys' fees) arising out of any infringement of such rights during or after completion of the Work, and shall defend all such claims in connection with any alleged infringement of such rights.

ARTICLE 10 - PERMITS, LAWS, TAXES AND REGULATIONS

- 10.1 The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules, and regulations applicable to the Work. If the CONTRACTOR observes that the Specifications or Drawings are at variance therewith, he shall give the LANDSCAPE ARCHITECT prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate Modification. If the CONTRACTOR performs any Work knowing it to be contrary to such laws, ordinances rules, and regulations, and without such notice to the LANDSCAPE ARCHITECT, he shall bear all costs arising therefrom.
- 10.2 The CONTRACTOR shall pay all sales, consumer, use and other similar taxes required by the law of the place where the Work is to be performed

ARTICLE 11 - AVAILABILITY OF LANDS; PHYSICAL AND SUBSURFACE CONDITIONS; REFERENCE POINTS

- 11.1 The OWNER shall provide, as indicated in the Contract Documents and not later than the date when needed by the CONTRACTOR, the lands upon which the Work is to be done, rights-of-way for access thereto, and such other lands which are designated for the use of the CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be secured and paid for by the OWNER, unless otherwise specified in the Contract Documents. If the CONTRACTOR believes that any delay in the OWNER'S furnishing these lands or providing such easements entitles him to an extension of the Contract Time, he may make a claim therefore as provided in Article 23. The CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.
- 11.2 The OWNER shall furnish to the CONTRACTOR copies of all available boundary surveys and subsurface tests and other appropriate data that he may possess.
- 11.3 The CONTRACTOR shall promptly notify the OWNER or LANDSCAPE ARCHITECT in writing of any subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents. The LANDSCAPE ARCHITECT shall promptly investigate those conditions and advise the OWNER in writing if further surveys or subsurface tests are necessary. Promptly thereafter, the OWNER shall obtain the necessary additional surveys and test and furnish copies to the CONTRACTOR. If the OWNER finds that the results of such surveys or test indicate subsurface or latent physical conditions differing significantly from those indicated in the Contract Documents, a Change Order shall be issued incorporating the necessary revisions.
- 11.4 REFERENCE POINTS. OWNER shall provide Landscape Architecting surveys to establish reference points for construction, which in LANDSCAPE ARCHITECT'S judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work (unless otherwise specified in the General Requirements), shall protect and preserve the established reference points and shall make no changes or relocations

without the prior written approval of OWNER. CONTRACTOR shall report to LANDSCAPE ARCHITECT whenever any reference point 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 by professionally qualified personnel.

ARTICLE 12 - USE OF PREMISES

- 12.1 The CONTRACTOR shall confine his equipment, storage of materials and equipment, and the operations of his employees to areas permitted by law, ordinances, permits or the requirements of the Contract Documents, and shall not unreasonably encumber the premises with materials or equipment.
- 12.2 The CONTRACTOR shall not load or permit any part of the structure to be loaded with weights that will endanger the structure, nor shall he subject any part of the Work to stress or pressures that will endanger it.
- 12.3 The OWNER at any time may request the CONTRACTOR, in writing, to permit the OWNER to use any part of the work which the OWNER may require and which may be used without significant interference with construction of the other parts of the work. Within a reasonable time thereafter, the OWNER, the CONTRACTOR, and the LANDSCAPE ARCHITECT shall make an inspection of that part of the work to determine its status of completion. If the LANDSCAPE ARCHITECT does not consider that part of the work to be substantially complete, the LANDSCAPE ARCHITECT will notify the OWNER and the CONTRACTOR in writing, giving his reasons therefor. If the LANDSCAPE ARCHITECT considers that part of the work is substantially complete, the LANDSCAPE ARCHITECT will execute and deliver to the OWNER and the CONTRACTOR a Certificate of Substantial Completion for that part of the work.

In lieu of the issuance of a Certificate of Substantial Completion, the OWNER may occupy and operate a facility constituting part of the work, whether or not it is substantially complete, if such facility is functionally and separately usable; provided that prior to any such takeover, the OWNER and the CONTRACTOR have agreed as to the division of responsibilities between the OWNER and the CONTRACTOR for security, operation, safety, maintenance, correction period, heat, utilities, and insurance with respect to such facility.

Such use shall not be considered as final acceptance of any portion of the work, nor shall such use be considered as cause for an extension of the Contract completion time, unless authorized by a Change Order issued by the OWNER.

ARTICLE 13 - OWNER'S STATUS DURING CONSTRUCTION

- 13.1 The OWNER and the CONTRACTOR are those persons or organizations identified as such in the Agreement and are referred to throughout the Contract Documents as if singular in number and masculine in gender.

- 13.2 The LANDSCAPE ARCHITECT shall be the OWNER'S representative during the construction period. All instructions of the OWNER to the CONTRACTOR shall be issued through the LANDSCAPE ARCHITECT. The duties and responsibilities and the limitations of authority of the LANDSCAPE ARCHITECT as the OWNER'S representative during construction are set forth in Articles 1 through 42 of these General Conditions and shall not be extended without written consent of the OWNER.
- 13.3 The LANDSCAPE ARCHITECT or his representative shall make periodic visits to the site to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. He shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work nor will he be responsible for the construction means, methods, techniques, sequences or procedures, or the safety precautions incidental thereto. His efforts shall be directed toward providing assurance for the OWNER that the completed Project will conform to the requirements of the Contract Documents, but he shall not be responsible for the CONTRACTOR'S failure to perform the Work in accordance with the Contract Documents. On the basis of his on-site observations as an experienced and qualified professional, he shall keep the OWNER informed of the progress of the work and shall endeavor to guard the OWNER against defects and deficiencies in the Work of contractors.
- 13.4 The OWNER or LANDSCAPE ARCHITECT shall have authority to disapprove of or reject Work which is defective; i.e., it is unsatisfactory, faulty or defective, or does not conform to the requirements of the Contract Documents or does not meet the requirements of any inspection, test or approval procedure referred to in Article 16.1. He shall also have authority to require special inspection or testing of the Work as provided in Article 19.3, whether or not the Work is fabricated, installed or completed.
- 13.5 If the OWNER and LANDSCAPE ARCHITECT agree, LANDSCAPE ARCHITECT shall provide Resident Project Representatives to assist the LANDSCAPE ARCHITECT in observing the performance of the work. The duties, responsibilities and limitations of authority of any such Resident Project Representative shall be set forth in an exhibit to be incorporated in the Contract Documents. In the event that his duties and responsibilities are not set forth in the Contract Documents, they shall be as specified herein for the OWNER.
- 13.6 Neither the LANDSCAPE ARCHITECT'S authority to act under this Article nor any decision made by him in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the OWNER to the CONTRACTOR, any Subcontractor, any of their agents or employees or any other person performing any of the work.

ARTICLE 14 - LANDSCAPE ARCHITECT'S INTERPRETATIONS AND DECISIONS

- 14.1 The LANDSCAPE ARCHITECT shall issue with reasonable promptness such written clarifications or interpretations (in the form of drawings or otherwise) as he may deem necessary for the proper execution of the Work, such clarifications and interpretations to be consistent with or

reasonably inferable from the overall intent of the Contract Documents. If the CONTRACTOR believes that a written clarification and interpretation entitles him to an increase in the Contract Price, he may make a claim therefor as provided in Article 21.

- 14.2 The LANDSCAPE ARCHITECT shall be the initial interpreter of the terms and conditions of the Contract Documents and the judge of the performance thereunder. In his capacity as interpreter and judge he will exercise his best efforts to insure faithful performance by both the OWNER and the CONTRACTOR. He will not show partiality to either and shall not be liable for the result of any interpretation or decision rendered in good faith. Claims, disputes, and other matters relating to the execution and progress of the work or the interpretation thereof or performance under the Contract Documents shall be referred initially to the OWNER for decision, which he shall render in writing within a reasonable time.

ARTICLE 15 - SHOP DRAWINGS AND SAMPLES

- 15.1 After checking and verifying all field measurements, the CONTRACTOR shall submit to the LANDSCAPE ARCHITECT for approval, in accordance with the accepted schedule of Shop Drawings submissions, five copies of all Shop Drawings, which shall have been checked by and stamped with the approval of the CONTRACTOR and identified as the LANDSCAPE ARCHITECT may require. The data shown on the Shop Drawings shall be complete with respect to dimensions, design criteria, materials of construction, and the like to enable the LANDSCAPE ARCHITECT to review the information as required.
- 15.2 The CONTRACTOR shall also submit to the LANDSCAPE ARCHITECT for approval, with such promptness as to cause no delay in the Work, all samples required by the Contract Documents. All samples shall have been checked by and stamped with the approval of the CONTRACTOR, identified clearly as to material, manufacturer, pertinent catalog numbers, and the use for which intended.
- 15.3 At the time of each submission, the CONTRACTOR shall, in writing, call the LANDSCAPE ARCHITECT'S attention to any deviations that the Shop Drawings or sample may have from the requirements of the Contract Documents.
- 15.4 The LANDSCAPE ARCHITECT shall check and approve with reasonable promptness Shop Drawings and samples, but his checking and approval shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The approval of a separate item, as such, will not indicate approval of the assembly in which the item functions. The CONTRACTOR shall make any corrections required by the LANDSCAPE ARCHITECT and shall return the required number of corrected copies of Shop Drawings and resubmit new samples until approved. The CONTRACTOR shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than those called for by the LANDSCAPE ARCHITECT on previous submissions.

- 15.5 No work requiring a Shop Drawing or sample submission shall be commenced until the submission has been approved by the LANDSCAPE ARCHITECT.
- 15.6 The LANDSCAPE ARCHITECT'S approval of Shop Drawings or samples shall not relieve the CONTRACTOR from his responsibility for any deviations from the requirements of the Contract Documents unless the CONTRACTOR has in writing called the LANDSCAPE ARCHITECT'S attention to such deviations at the time of submission and the LANDSCAPE ARCHITECT has given written approval to the specific deviation, nor shall any approval by the LANDSCAPE ARCHITECT relieve the CONTRACTOR from responsibility for errors or omissions in the Shop Drawings.

ARTICLE 16 - TESTS AND INSPECTIONS

- 16.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR shall give the LANDSCAPE ARCHITECT timely notice of readiness therefor. The CONTRACTOR shall furnish the LANDSCAPE ARCHITECT the required certificates of inspection, testing or approval. All such tests, will be in accordance with the methods prescribed by the American Society for Testing and Materials or such other applicable organization as may be required by law or the Contract Documents. If any such Work required so to be inspected, tested or approved is covered up without written approval or consent of the LANDSCAPE ARCHITECT, it must, if directed by the LANDSCAPE ARCHITECT, be uncovered for observation at the CONTRACTOR'S expense. The cost of all such inspections, tests and approvals shall be borne by the CONTRACTOR unless otherwise provided.
- 16.2 Any Work which fails to meet the requirements of any such test, inspection or approval and any Work which meets the requirements of any such test or approval but does not meet the requirements of the Contract Documents shall be considered defective. Such defective Work may be rejected, corrected or accepted as provided in Article 25.
- 16.3 Neither observations by the LANDSCAPE ARCHITECT, or inspections, tests or approvals by persons other than the CONTRACTOR shall relieve the CONTRACTOR from his obligations to perform the Work in accordance with the requirements of the Contract Documents.

ARTICLE 17 - CONTRACTOR'S SUPERVISION AND SUPERINTENDENCE

- 17.1 The CONTRACTOR shall supervise and direct the Work efficiently and with his best skill and attention. He shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Before undertaking the Work he shall carefully study and compare the Contract Documents and check and verify all figures shown thereon and all field measurements. He shall at once report in writing to the LANDSCAPE ARCHITECT any conflict, error or discrepancy, which he may discover. The CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

- 17.2 The CONTRACTOR shall keep on the Work at all times during its progress a resident superintendent satisfactory to the OWNER and LANDSCAPE ARCHITECT. The superintendent will be the CONTRACTOR'S representative at the site and shall have the authority to act on behalf of the CONTRACTOR. All communications given to the superintendent shall be as binding as if given to the CONTRACTOR.
- 17.3 The CONTRACTOR shall provide competent, suitable qualified personnel to survey and layout the Work and perform construction as required by the Contract Documents. He will at all times maintain good discipline and order among his employees at the site.
- 17.4 The OWNER and LANDSCAPE ARCHITECT shall not be responsible for the acts or omissions of the CONTRACTOR, or any Subcontractors, or any of his or their agents or employees, or any other persons performing any of the Work.

ARTICLE 18 - SAFETY AND PROTECTION; EMERGENCIES

- 18.1 The CONTRACTOR shall be responsible for initially, maintaining and supervising all safety precautions and programs in connection with the Work. He shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
- 18.1.1 All employees on the Work and other persons who may be affected thereby.
- 18.1.2 All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and,
- 18.1.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

The CONTRACTOR shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. He shall erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection, including posting danger signs and other warnings against hazards and promulgating safety regulations. He shall notify owners of adjacent utilities when prosecution of the Work may affect them. When the use of explosives or other hazardous materials is necessary for the prosecution of the Work, the CONTRACTOR shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel. All damage, injury or loss to any property referred to in Article 18.1.2 or 18.1.3 caused, directly or indirectly, in whole or in part, by the CONTRACTOR, a Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by the CONTRACTOR, except damage or loss attributable to the fault of drawings or specifications or to the acts or

omissions of the OWNER or any one employed by either of them or for whose acts either of them may be liable, and not attributable to the fault or negligence of the CONTRACTOR.

- 18.2 The CONTRACTOR shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the CONTRACTOR'S superintendent unless otherwise designated in writing by the CONTRACTOR to the OWNER or LANDSCAPE ARCHITECT. 18.3 In emergencies affecting the safety of persons or the Work on property at the site of adjacent thereto, the CONTRACTOR, without special instruction or authorization from the OWNER or LANDSCAPE ARCHITECT, is obligated to act, at his discretion, to prevent threatened damage, injury or loss.

ARTICLE 19 - ACCESS TO THE WORK; UNCOVERING FINISHED WORK

- 19.1 The OWNER and LANDSCAPE ARCHITECT and their representatives shall at all times have access to the Work. The CONTRACTOR shall provide proper facilities for such access and observation of the Work and also for any inspection, or testing thereof by others.
- 19.2 If any Work is covered contrary to the request of the LANDSCAPE ARCHITECT, it must, if requested by the LANDSCAPE ARCHITECT, be uncovered for his observation and replaced at the CONTRACTOR'S expense.
- 19.3 If any work has been covered which the LANDSCAPE ARCHITECT has not specifically requested to observe prior to its being covered, or if the LANDSCAPE ARCHITECT considers it necessary or advisable that covered Work be inspected or tested by others, the CONTRACTOR, at the Landscape Architect's request, will uncover, expose or otherwise make available for observation, inspection or testing as the Landscape Architect may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such work is defective or does not meet requirements of the CONTRACT DOCUMENTS the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection, and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate Change Order shall be issued deducting all such costs from the Contract Price

ARTICLE 20 - CHANGES IN THE WORK

- 20.1 Without invalidating the Agreement, the Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work; these will be authorized by Change Orders. Upon receipt of a Change Order the CONTRACTOR will proceed with the Work involved. All such Work shall be executed under applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment shall be made as provided in Article 21 or Article 23.

- 20.2 The OWNER may authorize minor changes or alterations in the Work not involving extra cost and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order. If the CONTRACTOR believes that any minor change or alteration authorized by the OWNER entitles him to an increase in the Contract Price, he may make a claim therefor as provided in Article 21.
- 20.3 Additional work performed by the CONTRACTOR without authorization of a Change Order shall not entitle him to an increase in the Contract Price or an extension of the Contract Time.
- 20.4 The OWNER shall execute any appropriate Change Order prepared by the LANDSCAPE ARCHITECT covering changes in the Work to be performed as provided in Article 11.3 and any other claim of the CONTRACTOR for a change in the Contract Time or the Contract Price which is approved by the LANDSCAPE ARCHITECT.
- 20.5 It is the CONTRACTOR'S responsibility to notify his surety of any changes affecting the general scope of Work or change in the Contract Price and the amount of the applicable Bonds shall be adjusted accordingly. The CONTRACTOR will furnish proof of such adjustment to the OWNER.

ARTICLE 21 - CHANGE OF CONTRACT PRICE

- 21.1 The Contract Price constitutes the total compensation payable to the CONTRACTOR for performing the Work. All duties, responsibilities, and obligations assigned to or undertaken by the CONTRACTOR shall be at his expense without change in the Contract Price.
- 21.2 The Contract Price may only be changed by a Change Order. If the CONTRACTOR is entitled by the Contract Documents to make a claim for an increase in the Contract Price, his claim shall be in writing and delivered to the OWNER within fifteen days of the occurrence of the event giving rise to the claim. All claims for adjustments in the Contract Price shall be determined by the LANDSCAPE ARCHITECT if involved. Any change in the Contract Price resulting from any such claim shall be incorporated in a Change Order.
- 21.3 The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:
- 21.3.1 where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.
- 21.3.2 by mutual acceptance of a lump sum.
- 21.3.3 by cost and a mutually acceptable fixed amount for overhead and profit.
- 21.3.4. If none of the above methods is agreed upon, the value shall be determined by the Owner on the basis of costs and a percentage for overhead and profit. Costs shall only include labor (payroll, payroll taxes, fringe benefits, workman's compensation, etc.), materials, equipment, and other incidentals directly related to the Work involved. The maximum percentage, which

shall be allowed for, the CONTRACTOR'S combined overhead and profit, shall be as follows:

21.3.4.1 for all such Work done by his own organization, the CONTRACTOR may add up to twenty-five percent of his actual net increase in cost, and 21.3.4.2 for all such Work done by Subcontractors, each Subcontractor may add up to fifteen percent of his actual net increase in costs for combined overhead and profit and the CONTRACTOR may add up to ten percent of the Subcontractor's total for his combined overhead and profit; provided that no overhead or profit shall be allowed on costs incurred in connection with premiums for public liability insurance or other special insurance directly related to such work. In such case and also under Article 21.3.3. the CONTRACTOR shall submit in form prescribed by the OWNER an itemized cost breakdown together with supporting data.

ARTICLE 22 - CASH ALLOWANCES

The CONTRACTOR shall include in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such suppliers or Subcontractors and for such sums within the limit of the allowances that the OWNERS may approve. Upon final payment, the Contract Price shall be decreased as required and an appropriate Change Order issued. The CONTRACTOR agrees that the original Contract Price includes such sums as he deems proper for costs and profit on account of cash allowances. No demand for additional cost or profit in connection therewith will be allowed.

ARTICLE 23 - CHANGE OF CONTRACT TIME

- 23.1 The contract time may only be changed by a Change Order. If the CONTRACTOR is entitled by the Contract Documents to make a claim for an extension in the Contract Time, his claim shall be in writing delivered to the OWNER within ten days of the occurrence to the claims. All claims for adjustment in the Contract Time shall be determined by the LANDSCAPE ARCHITECT if the OWNER and the CONTRACTOR cannot otherwise agree. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order.
- 23.2 The Contract Time shall be extended in an amount equal to time lost due to delays beyond the control of the CONTRACTOR if he makes a claim therefor as provided in Article 23.1. Such delays shall include, but not be restricted to, acts of neglect by any separate contractor employed by the OWNER, fires, floods, labor disputes, epidemics, abnormal weather conditions, or so called ACTS OF GOD.

ARTICLE 24 - NEGLECTED WORK

If the CONTRACTOR should neglect to prosecute the Work in accordance with the Contract Documents, including any requirements of the progress schedule, the OWNER, after ten day written notice to the CONTRACTOR may, without prejudice to any other remedy he may have, make good such deficiencies and the cost thereof (including compensation for additional professional services) shall be charged against the CONTRACTOR if the OWNER approves such action. In this event a Change Order shall be issued incorporating the necessary revisions in the Contract Documents including an appropriate

reduction in the Contract Price. If the payments then or thereafter due the CONTRACTOR are not sufficient to cover such amount, the CONTRACTOR will pay the difference to the OWNER.

ARTICLE 25 - WARRANTY AND GUARANTEE; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

- 25.1 The CONTRACTOR warrants and guarantees to the OWNER that all materials and equipment shall be new unless otherwise specified and that all Work shall be of good quality and free from faults or defects and in accordance with the requirements of the Contract Documents and of any inspections, tests, or approvals referred to in Article 16.2. All unsatisfactory work, all faulty or defective work and all work not conforming to the requirements of the Contract Documents or of such inspections, tests, or approvals shall be considered defective. Prompt notice of all defects shall be given to the CONTRACTOR. All defective work, whether or not in place, may be rejected.
- 25.2 If required by the OWNER prior to approval of final payment, the CONTRACTOR shall promptly, without cost to the OWNER either correct any defective Work, whether or not fabricated, installed or completed, or if the Work has been rejected by the OWNER, remove it from the site and replace it with non-defective work. If the CONTRACTOR does not correct such defective Work or remove and replace such rejected Work within a reasonable time, as required by written notice from the LANDSCAPE ARCHITECT, the OWNER may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement, including compensation for additional professional services shall be paid by the CONTRACTOR, and an appropriate Change Order shall be issued deducting all such costs from the Contract Price. The CONTRACTOR shall also bear the expense of making good all work of others destroyed or damaged by the correction, removal or replacement of his defective Work.
- 25.3 If, after the approval of final payment and prior to the expiration of one year after the date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, the CONTRACTOR shall, promptly and without cost to the OWNER, and in accordance with the OWNER'S written instructions, either correct such defective Work, or if it has been rejected by the OWNER, remove it from site and replace it with non-defective Work. If the CONTRACTOR does not promptly comply with the terms of such instructions, the Owner may have the defective work corrected or the rejected work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be paid by the CONTRACTOR.

ARTICLE 26 - APPLICATION FOR PROGRESS PAYMENTS

- 26.1 At least ten days prior to submitting the first Application for a progress payment, the CONTRACTOR shall submit a schedule of values of the Work including quantities and unit

prices aggregating the Contract Price. This schedule shall be satisfactory in form and substance to the LANDSCAPE ARCHITECT and shall subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Upon approval of the schedule of values by the LANDSCAPE ARCHITECT it shall be incorporated into the form of an Application for Payment approved by the LANDSCAPE ARCHITECT.

- 26.2 At least ten days before each progress payment falls due (but not more often than once a month), the CONTRACTOR shall submit to the LANDSCAPE ARCHITECT for review the Application for Payment filled out and signed by the CONTRACTOR covering the Work completed as of the date of the Application and supported by such data as the LANDSCAPE ARCHITECT may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by such supporting data, satisfactory to the OWNER as will establish the OWNER'S title to the material and equipment and protect his interests therein, including applicable insurance.
- 26.3 The CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by an Application for Payment, whether incorporated in the Project or not, shall have passed to the OWNER prior to the making of the Application for Payment, free and clear of all liens, claims, security interests and encumbrances (hereafter in the General Conditions referred to as "Liens"); and that no Work, materials or equipment covered by an Application for Payment shall have been acquired by the CONTRACTOR or any other person performing the Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the CONTRACTOR or such other person.
- 26.4 The LANDSCAPE ARCHITECT shall, within ten days after receipt of each Application for Payment, either indicate in writing his approval of payment and present the Application to the OWNER, or return the Application to the CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the Application.

ARTICLE 27 - APPROVAL OF PAYMENTS

- 27.1 The LANDSCAPE ARCHITECT'S approval of payment requested in application for Payment shall constitute a representation by him to the OWNER, based on the LANDSCAPE ARCHITECT'S on-site observations of the Work in progress as an experienced and qualified design professional on his review of the Application for Payment and the supporting data, that the Work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning Project upon Substantial Completion, and to the results of any subsequent tests called for in the Contract Documents and any qualifications stated in his approval); and that the CONTRACTOR is entitled to payment of the

amount approved. However, by approving any such payment the LANDSCAPE ARCHITECT shall not thereby be deemed to have represented that he made exhaustive or continuous on-site inspections to check the quality or the quantity of the Work, or that he has reviewed the means, methods, techniques, sequences, and procedures of construction or that he has made an examination to ascertain how or for what purpose the CONTRACTOR has used the moneys paid to him on account of the Contract Price.

- 27.2 The LANDSCAPE ARCHITECT'S approval of final payment shall constitute an additional representation by him to the OWNER that the conditions precedent to the CONTRACTOR'S being entitled to final payment have been fulfilled.
- 27.3 The LANDSCAPE ARCHITECT'S may refuse to approve the whole or any part of the payment if, in his opinion, he is unable to make such representations to the OWNER. He may also refuse to approve any such payment, or because of subsequently discovered evidence or the results of subsequent inspection or tests, nullify any such payment previously approved, to such extent as may be necessary in his opinion to protect the OWNER from loss because:
- 27.3.1 the Work is defective,
- 27.3.2 claims have been filed or there is reasonable evidence indicating the probable filing thereof,
- 27.3.3 the Contract Price has been reduced because of Modifications,
- 27.3.4 the OWNER has been required to correct defective Work in accordance with Article 25, or 27.3.5 unsatisfactory prosecution of the Work, including failure to clean up as required by Article 33.

ARTICLE 28 - FINAL PAYMENT

- 28.1 Upon written notice from the CONTRACTOR that the Project is complete, the LANDSCAPE ARCHITECT shall make a final inspection with the OWNER and CONTRACTOR, and will notify the CONTRACTOR in writing of any articles in which this inspection reveals that the Work is defective. The CONTRACTOR shall immediately make such corrections as are necessary to remedy such defects.
- 28.2 After the CONTRACTOR has completed any such corrections to the satisfaction of the OWNER and LANDSCAPE ARCHITECT and delivered all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection and other documents--all as required by the Contract Documents, he may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by such supporting data as the LANDSCAPE ARCHITECT may require, together with complete and legally effective releases or waivers (satisfactory to the OWNER) of all Liens arising out of the Contract Documents and the labor and services performed and the material and equipment furnished thereunder. In lieu thereof and as approved by the OWNER, the CONTRACTOR may furnish receipts or releases in full; an affidavit of the

CONTRACTOR that the release and receipts include all labor, services, material and equipment for which a lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which the OWNER or his property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment.

If any Subcontractor or supplier fails to furnish a release or receipt in full, the CONTRACTOR may furnish a bond satisfactory to the OWNER to indemnify him against any Lien.

- 28.3 On the basis of his observation and review of the Work during construction, his final inspection and his review of the final Application for Payment--all as required by the Contract Documents, the LANDSCAPE ARCHITECT shall, within ten days after receipt of the final Application for payment, indicate in writing his approval of payment and present the Application to the OWNER for payment. Otherwise, he shall return the Application to the CONTRACTOR, indicating in writing his reasons for refusing to approve the final payment, in which case the CONTRACTOR shall make the necessary corrections and resubmit the Application.
- 28.4 If after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the CONTRACTOR, and the LANDSCAPE ARCHITECT so confirms, the OWNER shall, upon certification by the LANDSCAPE ARCHITECT, and without terminating the Agreement, make payment of the balance due for the portion of the Work fully completed and accepted. If the remaining balance 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 Article 31, 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 the CONTRACTOR to the LANDSCAPE ARCHITECT prior to certification of 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.

ARTICLE 29 - WAIVERS OF CLAIMS AND CONTINUING OBLIGATIONS

- 29.1 The CONTRACTOR'S obligation to perform the Work and complete the Project in accordance with the Contract Documents shall be absolute. Neither approval of any progress or final payment by the LANDSCAPE ARCHITECT, nor the issuance of certificate of Substantial Completion, nor any payment by the OWNER to the CONTRACTOR under the Contract Documents, nor any use or occupancy of the Project or any part thereof by the OWNER, nor any act of acceptance by the OWNER or any failure to do so, nor any correction of faulty or defective work by the OWNER shall constitute an acceptance of Work not in accordance with the Contract Documents.
- 29.2 The making and acceptance of final payment shall constitute:

- 29.3 a waiver of all claims by the OWNER against the CONTRACTOR other than those arising from unsettled Liens, from faulty or defective work appearing after final payment, or from failure to comply with the requirements of the Contract Documents, or the terms of any special guarantees specified therein, and
- 29.4 a waiver of all claims by the CONTRACTOR against the OWNER other than those previously made in writing and still unsettled.

ARTICLE 30 - INDEMNIFICATION

The CONTRACTOR shall indemnify and hold harmless the OWNER and LANDSCAPE ARCHITECT and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claim, damage, loss or expense (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom and (b) is caused in whole or in part by any negligent act or omission of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

ARTICLE 31 - CONTRACT BONDS

The CONTRACTOR shall furnish performance and payment Bonds as security for the faithful performance and payment of all his obligations under the Contract Documents. These Bonds shall be in amounts at least equal to the Contract Price and in such form and with such sureties as are acceptable to the OWNER. Prior to execution of the Contract Documents the OWNER may require the CONTRACTOR to furnish such other Bonds, in such form and with such sureties as he may require. If such Bonds are required by written instructions given prior to opening of Bids, the premiums shall be paid by the CONTRACTOR; if subsequent thereto, they shall be paid by the OWNER.

ARTICLE 32 - CONTRACTOR'S LIABILITY INSURANCE

- 32.1 GENERAL. The Contractor shall provide, from insurance companies acceptable to the Owner, insurance to protect himself, his employees, his subcontractors, the public, and the interests of the Owner, Landscape Architect, and their authorized agents against all hazards or risk of loss. The Contractor shall also include the Owner and Landscape Architect as additional insured in all his liability policies required by the Contract Documents with the exception of Worker's Compensation and Employer's Liability. At a minimum, the types and amount of such insurance shall be as set forth herein.

The Contractor shall deliver the Certificate of Insurance to the Owner at the same time he submits the signed Contract and Performance and Payment Bonds.

The Contractor shall require each subcontractor, prior to commencing work of any type, to provide and maintain adequate insurance.

It shall be the responsibility of the Contractor to maintain adequate insurance coverage. Failure of the Contractor to maintain adequate coverage shall not relieve him of any contractual responsibility or obligation.

32.2 WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY. The Contractor shall maintain during the life of the Contract the statutory Workmen's Compensation, in addition, Employer's Liability Insurance in an amount not less than \$500,000 for each occurrence, for all his employees to be engaged in work on the project under this Contract and, in case any such work is subcontracted, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation and Employer's Liability Insurance for all of the latter's employees to be engaged in such work. Where work under this Contract includes any water or navigational exposure, coverage shall be included to cover the Federal Longshoremen's and Harborworker's Act and the Federal Jones Act. When the work under this Contract includes any railroad hazards, coverage shall be included for the Federal Employee Liability Act. The Contractor shall also maintain insurance covering him against claims for injury, disease, or death of employees which, for a reason, may not fall within the provisions of a worker's compensation law. Policies hereunder shall include an "all states" endorsement.

32.3 MOTOR VEHICLE LIABILITY. The Contractor shall maintain during the life of the Contract, Motor Vehicle Liability insurance written in Business Auto Policy form to protect himself and his subcontractors performing work covered by this Contract against all claims for injuries, including accidental death to members of the public and damage to property of others arising from such use of motor vehicles, and shall cover the operation on or off site of all motor vehicles licensed for highway use whether they are owned, nonowned, or hired. The liability limit shall not be less than \$500,000 per occurrence.

32.4 COMPREHENSIVE GENERAL LIABILITY. The Contractor shall maintain during the life of the Contract, Comprehensive General Liability written in comprehensive form to protect himself and his subcontractors against all claims arising from injuries to members of the public or damage to property of others arising out of any act or omission of the Contractor or his agents, employees, or subcontractors. In addition, this policy shall specifically insure the contractual liability assumed by the Contractor under Article "INDEMNIFICATION".

The scope of this coverage shall also include the Personal Injury Hazards, including "a", "b", and "c". "a" includes false arrest, malicious prosecution, and unwillful detention or imprisonment. "b" includes libel, slander, and defamation of character. "c" includes wrongful eviction, invasion of privacy, and wrongful entry. Employee exclusion shall be removed.

Comprehensive General Liability coverage shall contain no exclusions for explosion, collapse, or underground work (X, C, or U).

The liability limits shall be not less than:

- | | |
|-----------------------|---|
| 1. Personal Liability | \$1,000,000 per occurrence, \$2,000,000 aggregate |
| 2. Bodily Injury | \$1,000,000 per occurrence \$2,000,000 aggregate |
| 3. Property Damage | \$500,000 per occurrence |

32.5 UMBRELLA EXCESS LIABILITY. The Contractor shall maintain during the life of this Contract, in addition to the individual limits set forth herein, Umbrella Excess Liability coverage in excess of all other required coverage in an amount not less than \$1,000,000 per occurrence.

32.6 ALL RISKS BUILDERS RISK INSURANCE. Unless otherwise modified in any Supplementary Conditions, the Contractor shall secure and maintain during the life of this Contract, Builders Risk All Risk Insurance coverage in an amount equal to the full replacement value of structures, equipment, electrical, and mechanical systems only. Such insurance shall not exclude coverage for earthquake, landslide, flood, collapse, or loss due to the results of faulty workmanship, and shall provide for losses to be paid to the Contractor and the Owner as their interests may appear.

32.7 INSURANCE COVERAGE FOR SPECIAL CONDITIONS. When the construction is to be accomplished within a public or private right-of-way requiring special insurance coverage, the Contractor shall conform to the particular requirements and provide the required insurance. The Contractor shall include in his liability policy all endorsements that the said authority may require for the protection of the authority, its officers, agents, and employees. Insurance coverage for special conditions, when required, shall be provided as set forth in the Supplementary Conditions.

32.8 OTHER INSURANCE COVERAGE. Other insurance coverage, required for work on this Contract, shall be provided as set forth in any Supplementary Conditions.

ARTICLE 33 - CLEANING UP

The CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work, and at the completion of the Work, he shall remove all waste materials, rubbish and debris from and about the premises as well as tools, construction equipment and machinery, and surplus materials, and leave the site clean and ready for occupancy by the OWNER. The CONTRACTOR shall restore to their original condition those portions of the site not designated for alteration by the Contract Documents.

ARTICLE 34 - OWNER'S RIGHT TO STOP OR SUSPEND WORK

34.1 If the Work is defective, or the CONTRACTOR fails to supply sufficient skilled workmen or suitable materials or equipment, or if the CONTRACTOR fails to make prompt payments to subcontractors or for labor, materials or equipment, the OWNER may order the CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated.

- 34.2 The OWNER, may, at any time and without cause suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to the CONTRACTOR and the LANDSCAPE ARCHITECT, which shall fix the date on which work shall be resumed. The CONTRACTOR shall resume the Work on the date so fixed. The CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time directly attributable to any suspension if he makes a claim therefor as provided in Articles 21 and 22.

ARTICLE 35 - OWNER'S RIGHT TO TERMINATE

- 35.1 If the CONTRACTOR is adjudged bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors without the approval of the OWNER, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtors' act, or to reorganize under the bankruptcy or similar laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to Subcontractors or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction, or if he disregards the authority of the LANDSCAPE ARCHITECT, or if he otherwise violates any provision of the Contract Documents, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his surety ten days from the receipt of the written notice, terminate the services of the CONTRACTOR and take possession of the Project and all materials to be incorporated therein, and finish the Work by whatever method he may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Project, including compensation for additional professional services, such excess shall be paid to the CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR shall pay the difference to the OWNER. Such costs incurred by the OWNER shall be determined by the LANDSCAPE ARCHITECT and incorporated in a Change Order.
- 35.2 Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any rights to the OWNER against the CONTRACTOR nor any rights of the CONTRACTOR against the OWNER, then existing or which may thereafter accrue.
- 35.3 Upon seven days written notice to the CONTRACTOR and the LANDSCAPE ARCHITECT, the OWNER may, without cause and without prejudice to any right or remedy, elect to abandon the Project and terminate the Agreement. In such case, the CONTRACTOR shall be paid for all Work executed any expense sustained plus a reasonable profit.

ARTICLE 36 - FAILURE TO COMPLETE THE WORK ON TIME

If any work shall remain uncompleted after elapse of the time specified in the proposal and contract as adjusted by the Landscape Architect for the completion of the work provided for in the contract, there shall be deducted from the monies due the Contractor, not as a penalty, but as liquidated damages, as follows:

ORIGINAL CONTRACT AMOUNT

From more <u>than</u>	To and <u>including</u>	Daily charge per <u>calendar day</u>
0	25,000	\$100
25,000	100,000	\$150
100,000	1,000,000	\$225
1,000,000	or more	\$300

ARTICLE 37 - DISPUTES AND REMEDIES

- 37.1 All claims by the Contractor arising from interpretation of or performance under the Contract Documents shall be submitted to the Landscape Architect, who shall issue his determination. If the Contractor considers that a determination made by the Landscape Architect is not in accord with the meaning and intent of the Contract, the Contractor may, within 15 days from the receipt of the Landscape Architect's determination, file with the Landscape Architect a written request for reconsideration. The Landscape Architect shall reconsider this initial determination and render a final determination on the issue. Within 15 days of the determination by the Landscape Architect on the reconsideration, the Contractor may appeal the decision to the Owner. The Owner shall render a decision which shall be final and conclusive under this Contract. Failure to file either request for reconsideration or for appeal within the required 15 days shall render the determination issued final.

The Contractor shall carry on the work and maintain his progress schedule during all disputes or disagreements with the Owner. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as the Contractor and the Owner may otherwise agree in writing.

- 37.2 Arbitration shall not be used to settle disputes between the Contractor and the Owner and Landscape Architect.

Unless otherwise provided in this Contract, all claims, counterclaims, disputes, and other matters in question between the Owner and the Contractor arising out of or relating to this

Contract or the breach of it will be decided in a court of competent jurisdiction within the State of Mississippi.

ARTICLE 38 - MISCELLANEOUS

- 38.1 Whenever any provisions of the Contract documents requires the giving of written notice it shall be deemed to have been validly given if delivered in person to the individual or to member of the firm or to an officer of the corporation for whom it is intended, or is sent by

LANDARC CONSULTING GROUP, INC.

City of Hattiesburg Midtown Green

registered or certified mail, postage prepaid, to the business address used in the advertisement for bids or in the contract documents.

- 38.2 All monies not paid when due hereunder shall bear interest at the legal rate in force at the place of the Project.
- 38.3 The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder, and, in particular but without limitation, the guarantee and obligations imposed upon the CONTRACTOR by Articles 25 and 32 and the rights and remedies available to the OWNER thereunder, shall be in addition to and not a limitation of any otherwise imposed or available by law, by special guarantee of other provisions of the Contract Documents.
- 38.4 Should the OWNER or the CONTRACTOR suffer injury or damage to his person or property because of an error, omission or act of the other or of any of his employees or agents or others for whose acts he is legally liable, claims shall be made in writing to the other party within a reasonable time of the first observance of such injury or damage.
- 38.5 The Contract Documents shall be governed by the law of the place of the Project.
- 38.6 The full responsibility for design shall be born by this OWNER unless specific design

SUPPLEMENTARY CONDITIONS

REVISIONS AND ADDITIONS TO THE GENERAL CONDITIONS

The General Conditions are hereby revised as follows:

After the definition for "Landscape Architect", add the following:

Wherever in these Documents the word "Landscape Architect" appears, it shall be understood to mean the Landscape Architect, Landarc Consulting Group, Inc., Landscape Architects-Planners- Designers, and their authorized representatives, acting either directly or indirectly as authorized agents of the Owner.

After the definition for "SPECIFICATIONS", add the following:

FEDERAL, STATE, COUNTY, AND LOCAL STANDARD SPECIFICATIONS

Where portions of the work traverse or cross federal, state, county, or local highways, roads, streets, or private railroads, and the agency in control of such property has established standard specifications governing items of work that differ from these Specifications, the most stringent requirements shall apply

ARTICLE 10 - "PERMITS, LAWS, TAXES, AND REGULATIONS"

Add the following:

10.3 The building permits, if required, for the permanent structures shall be obtained by the Contractor.

PERMIT FOR WORK WITHIN THE FEDERAL, COUNTY, STATE, AND/OR PRIVATE RIGHTS-OF-WAY

The Contractor will obtain any necessary permits for work within the rights-of-way. The Contractor shall abide by all regulations and conditions stipulated in the permits, and such conditions and requirements are hereby made a part of these Supplementary Conditions, as fully and completely as though the same were fully set forth herein. The Contractor shall examine and abide by the permits granted. Failure to do so will not relieve the Contractor from compliance with the requirements stated herein.

The Contractor shall, if required by the county or state, provide a bond in the amount and form designated before commencing work.

ARTICLE 32 "CONTRACTOR'S LIABILITY INSURANCE"

The Contractor shall also indemnify and show as an additional insured Landarc Consulting Group, Inc., its agents and employees, and Forrest County General Hospital.

SPECIAL CONDITIONS

TEMPORARY UTILITIES:

- A. The CONTRACTOR shall make all arrangements for and furnish at his own expense, all water, electricity (lighting and power), and other utilities necessary for his construction purposes.
- B. Any electric services, both lighting and power required by the Contractor or his respective Subcontractor, shall be obtained through mutual agreement between all parties, saving the Owner harmless of any cost or responsibility.
- C. Same arrangements shall be maintained for water and other utilities.
- D. Contractor shall provide at own cost or make satisfactory arrangements for extensions of utility services to all points required.
- E. Contractors installing temporary water piping or hose for their own use shall be wholly responsible for its maintenance and protection from damage and freezing and also for the cost of damage to construction materials or equipment due to breaks or leaks in his lines.

TEMPORARY TOILETS

- A. The Contractor shall provide and maintain sanitary temporary toilets located where directed by the Landscape Architect and subject to any and all Sanitary Codes having general jurisdiction thereon.
- B. The temporary toilets shall be enclosed, weatherproofed, and kept in a sanitary condition at all times.
- C. These toilets shall be equipped with temporary water closets and connections to sewer water supply where available.

CONTRACTOR'S TITLE TO MATERIALS

No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies for which he accepts partial payment.

INTERPRETATION OF CONTRACT DOCUMENTS:

- A. If any person contemplating submitting a bid for the proposed contract is in doubt as to the meaning of any part of the plans, specifications or other documents, he may submit to the Project Landscape Architect a written request for interpretation thereof.

- B. Any interpretation of the proposed documents will be made only by addenda duly issued and a copy of such addenda will be mailed or delivered to each person who has received a set of such documents.
- C. The Contractor shall be responsible for discrepancies in plans or specifications which are not called to the attention of the Project Landscape Architect prior to receipt of bids.

RESPONSIBILITY REGARDING EXISTING UTILITIES AND STRUCTURES:

The existence and location of underground utilities indicated on the plans are not guaranteed and shall be investigated and verified in the field by the Contractor before starting work.

RIGHT OF ACCESS

Representatives of the Owner and the Landscape Architect shall have access to the project records at all times.

GUARANTEE OF WORK

- A. Except as otherwise specified, all work shall be guaranteed by the Contractor against defects resulting from the use of materials, equipment or workmanship which may prove to be inferior, for one year from date of final completion and acceptance of the contract.
- B. If, within any guarantee period, repairs or changes are required in connection with guaranteed work, which in the opinion of the Project Landscape Architect, is rendered necessary as the result of the use the material, equipment or workmanship which are inferior, defective or not in accordance with the terms of the contract, the Contractor shall promptly upon receipt of notice from the Project Landscape Architect and without expense to the Owner: (1) place in satisfactory condition in every particular all of such guaranteed work, correct all defects therein, and (2) make good all damage to the building or site or equipment or contents thereof, which, in the opinion of the Project Landscape Architect, is the result of the use of material, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the contract, and make good any work or materials or equipment and contents of said building or site disturbed in fulfilling any such guarantee.
- C. If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, the Owner may have the defects corrected and the Contractor and his sureties shall be liable for all expenses incurred.
- D. All special guarantees applicable to definite parts of the work that may be stipulated in the specifications or other papers forming a part of the contract shall be subject to the terms of this paragraph, during the first year of the life of such special guarantee.

SECTION 1 – SITE CLEARING

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- a. This Section includes the following:
 - 1. Protecting existing trees and vegetation to remain.
 - 2. Removing trees and other vegetation.
 - 3. Clearing and grubbing.
- b. Related Sections include the following:
 - 1. Division 2 Section “Earthwork” for soil materials, excavating, backfilling, and site grading.
 - 2. Division 2 Section “Landscaping” for finish grading, including placing and preparing topsoil for lawns and planting.

1.03 MATERIALS OWNERSHIP

- a. Except for materials indicated to be stockpiled or to remain Owner’s property, cleared materials shall become Contractor’s property and shall be removed from the site.

1.04 SUBMITTALS

- a. Photographs or videotape, sufficiently detailed, of existing conditions of trees and plantings, adjoining construction, and site improvements that might be misconstrued as damage caused by site clearing.

1.05 PROJECT CONDITIONS

- (1) Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - a. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - b. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.

- B. Notify utility locator service for area where Project is located before site clearing.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Provide erosion-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Locate and clearly flag trees and vegetation to remain or to be relocated.
- D. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.02 UTILITIES

- A. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.
 - 1. Owner will arrange to shut off indicated utilities when requested by Contractor.
- B. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Landscape Architect not less than two days in advance of proposed utility interruptions
- C. Excavate for and remove underground utilities indicated to be removed.

3.03 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, grass, and other vegetation to permit installation of new construction. Removal includes digging out stumps and obstructions and grubbing roots.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated or directed to remain by the Landscape Architect.
 - 2. Cut minor roots and branches or trees indicated to remain in a clean and careful manner where such roots and branches obstruct installation of new construction.
 - 3. Grind down stumps and remove roots, obstructions, and debris extending to a depth of 18 inches below exposed subgrade.
 - 4. Use only hand methods for grubbing within drip line of remaining trees.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.
 - 1. Please fill material in horizontal layers not exceeding 8-inch loose depth, and compact each layer to a density equal to adjacent original ground.

3.04 DISPOSAL

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off Owner's property.

3.05 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
 - 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.

3.06 DISPOSAL

A. Remove and legally dispose of any surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 1, SITE CLEARING

SECTION 2 – EARTHWORK

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This section includes the following:
 - 1. Preparing subgrades for slabs-on-grade, walks, pavements, lawns, and plantings.
 - 2. Subbase course for concrete walks and pavements.
- B. Related Sections include the following:
 - 1. Division 2 Section "Site Clearing" for site stripping, grubbing, removing topsoil, and protecting trees to remain.

1.03 DEFINITIONS

- A. Backfill: Soil materials used to fill an excavation.
- B. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.
- C. Excavation: Removal of material encountered above subgrade elevations.
- D. Fill: Soil materials used to raise existing grades in lawns and areas not requiring excessive compaction.
- E. Select Fill: Structural fill for use under walks and paved areas.
- F. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, draining fill, or

topsoil materials.

- G. Utilities include on-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.04 PROJECT CONDITIONS

- A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Landscape Architect and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Landscape Architect not less than two days in advance of proposed utility interruptions.
 - 2. Contact utility-locator service for area where Project is located before excavating.
- B. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies to shut off services if lines are active.

PART 2 – PRODUCTS

2.01 SOIL MATERIALS

- A. General: Soil Materials sufficient to satisfactory complete required grading are available from excavated material and suitable for compaction requirements.

PART 3 – EXECUTION

3.01 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.02 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

3.03 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavation to subgrade elevations regardless of the character of surface and subsurface conditions encountered, soil materials and obstructions.
- 3.04 EXCAVATION FOR WALLS AND OTHER STRUCTURAL ELEMENTS
 - A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. Extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
- 3.05 EXCAVATION FOR WALKS AND PAVEMENTS
 - A. Excavate surfaces under walks and pavements to indicated cross sections, elevations, and grades.
- 3.06 EXCAVATION FOR UTILITY TRENCHES
 - A. Excavate trenches to indicated gradients, lines, depths, and elevations.
- 3.07 APPROVAL OF SUBGRADE
 - A. Notify Landscape Architect when excavations have reached required subgrade.
 - B. If Landscape Architect determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
 - 1. Additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
- 3.08 UNAUTHORIZED EXCAVATION
 - A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without alerting top elevation. Lean concrete fill may be used when approved by Landscape Architect.
- 3.09 STORAGE OF SOIL MATERIALS
 - A. Stockpile soil materials if required without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.
- 3.10 BACKFILL
 - A. Place and compact backfill in excavations promptly.
- 3.11 UTILITY TRENCH BACKFILL
 - A. Backfill trenches excavated under footings and within 18 inches of bottom of footings; fill with concrete to elevation of bottom of footings.
 - B. Place and compact initial backfill of subbase material, free of particles larger than 1 inch, to a height of 12 inches over the utility pipe or conduit.
 - C. Place and compact final backfill of satisfactory soil material to final subgrade.
- 3.12 FILL

- A. Preparation: Remove vegetation, topsoil, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface before placing fills.
- B. Place and compact fill material in layers to required elevations.

3.13 MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill material on surfaces that are muddy.
 - 2. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.14 COMPACTION OF BACKFILLS AND FILLS

- A. Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- C. Compact soil to not less than the following percentages of maximum dry unit weight according to ASTM D 698:
 - 1. Under structures, building slabs, steps, and pavements, scarify and re-compact top 12 inches of existing subgrade and each layer of backfill or fill material at 95 percent.
 - 2. Under walkways, scarify and re-compact top 6 inches below subgrade and compact each layer of backfill or fill material at 92 percent.
 - 3. Under lawn or unpaved areas, scarify and re-compact top 6 inches below subgrade and compact each layer of backfill or fill material at 85 percent.

3.15 GRADING

- A. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
 - 1. Lawn or Unpaved Areas: Plus or minus 1 inch.
 - 2. Pavements: Plus or minus ½ inch.

3.16 SUBBASE AND BASE COURSES

- A. Under pavements and walks, place subbase course on prepared subgrade and as follows:
 - 1. Place base course material over subbase.

2. Compact subbase and base courses at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.
3. Shape subbase and base to required crown elevations and cross-slope grades.
4. When thickness of compacted subbase or base course is 6 inches or less, place materials in a single layer.

3.17 FIELD QUALITY CONTROL

- A. Testing Agency: The contractor will engage a qualified independent geotechnical engineering testing agency to perform field quality-control testing although testing is not anticipated for earthwork operations.
- B. Contact testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earthwork only after the test results for previously completed work comply with requirements.
- C. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; re-compact and retest until specified compaction is obtained.

3.18 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 1. Scarify or remove and replace soil material to depth as directed by Landscape Architect; reshape and re-compact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

3.19 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove and legally dispose of surplus waste material, including soil, trash, and debris off Owner's property.

END OF SECTION 2, EARTHWORK

SECTION 3 - CEMENT CONCRETE PAVEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Walks.

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, and ground granulated blast-furnace slag.

1.4 SUBMITTALS

- A. Submit name of concrete plant meeting qualifications:
 - 1. Design Mixtures and material certificates will not be required, provided that concrete materials are provided by approved concrete plant. Concrete must pass all strength testing.

1.5 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
 - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").
- B. Testing Agency Qualifications: Qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
 - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

- C. Concrete Testing Service: Engage a qualified testing agency to perform material evaluation tests and to design concrete mixtures.
- D. ACI Publications: Comply with ACI 301 unless otherwise indicated.

1.6 PROJECT CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

PART 2 - PRODUCTS

2.1 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
 - 1. Use flexible or uniformly curved forms for curves with a radius of 100 feet.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

- A. Plain-Steel Welded Wire Reinforcement: ASTM A 185. Deformed-Steel Welded Wire Reinforcement: ASTM A 497/A 497M, flat sheet.
- B. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420); deformed.
- C. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete specified, and as follows:
 - 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.
- D. Fiber Reinforcement: Synthetic Fiber: Uniformly Disperse in concrete mix at manufacturer's recommended rate, but not less than 1.5 lb/cu. yd. (0.9 kg/cu.m).

2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of same type, brand, and source throughout Project:

1. Portland Cement: ASTM C 150 Type I or Type II.
- B. Normal-Weight Aggregates: ASTM C 33, , uniformly graded. Provide aggregates from a single source
 1. Maximum Coarse-Aggregate Size: 1 inch nominal.
 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: Potable and complying with ASTM C 94/C 94M.
- D. RELATED MATERIALS
- E. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber

2.4 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301 (ACI 301M), for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.
- B. Proportion mixtures to provide normal-weight concrete with the following properties:
 1. Compressive Strength (28 Days): 3000 psi (20.7 MPa)
 2. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.50 Slump Limit: 4 inches.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
 1. Air Content: 2-1/2 to 4 1/2 percent
- D. Cementitious Materials: Limit percentage by weight of cementitious materials other than portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals.

2.5 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94 and ASTM C 1116.
 1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.
- B. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.

1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.
 2. Provide tie bars at sides of paving strips where indicated.
 3. Keyed Joints: Provide preformed keyway-section forms or bulkhead forms with keys unless otherwise indicated. Embed keys at least 1-1/2 inches (38 mm) into concrete.
 4. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.
1. Locate expansion joints at intervals of 50 feet unless otherwise indicated.
 2. Extend joint fillers full width and depth of joint.
 3. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
 4. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows:
1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate grooving-tool marks on concrete surfaces.
- E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 1/4-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate edging-tool marks on concrete surfaces.
- 3.6 CONCRETE PLACEMENT
- A. Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast-in.
- B. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.

- C. Comply with ACI 301 (ACI 301M) requirements for measuring, mixing, transporting, and placing concrete.
- D. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.
- E. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- F. Consolidate concrete according to ACI 301 (ACI 301M) by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
 - 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement dowels and joint devices.
- G. Screed paving surface with a straightedge and strike off.
- H. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.
- I. Slip-Form Paving: Use design mixture for automatic machine placement. Produce paving to required thickness, lines, grades, finish, and jointing.
 - 1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations.
- J. Hot-Weather Placement: Comply with ACI 301 (ACI 301M) and as follows when hot-weather conditions exist:
 - 1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 - 3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.7 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-

driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.

1. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

3.8 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.
- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure concrete by moisture curing moisture-retaining-cover curing [curing compound or a combination of these as follows:
 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.

3.9 PAVING TOLERANCES

- A. Comply with tolerances in ACI 117 and as follows:
 1. Elevation: 1/4 inch.
 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 3. Surface: Gap below 10-foot- long, unleveled straightedge not to exceed 1/4 inch.
 4. Alignment of Tie-Bar End Relative to Line Perpendicular to Paving Edge: 1/2 inch of tie bar.
 5. Lateral Alignment and Spacing of Dowels: 1 inch .
 6. Vertical Alignment of Dowels: 1/4 inch.
 7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4 inch per 12 inches of dowel.
 8. Joint Spacing: 3 inches .
 9. Contraction Joint Depth: Plus 1/4 inch , no minus.

10. Joint Width: Plus 1/8 inch , no minus.

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

3.11 REPAIRS AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section.
- B. Drill test cores, where directed by Landscape Architect, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with portland cement concrete bonded to paving with epoxy adhesive.
- C. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 3, CEMENT CONCRETE PAVEMENT

SECTION 4 - TURF AND GRASSES

PART 4 - GENERAL

SCHEDULE 0 - RELATED DOCUMENTS

PRODUCT DATA SHEET 0 - Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

SCHEDULE 1 - SUMMARY

PRODUCT DATA SHEET 0 - Section Includes:

- 4.1 Sodding.
- 4.2 Erosion-control material.

PRODUCT DATA SHEET 1 - Related Sections:

- 4.1 Division31 Section "Site Clearing" for topsoil stripping and stockpiling.
- 4.2 Division31 Section "Earth Moving" for excavation, filling and backfilling, and rough grading.
- 4.3 Division32 Section "Planting Irrigation " for turf irrigation.
- 4.4 Division32 Section "Plants" for border edgings.
- 4.5 Division33 Section "Subdrainage" for subsurface drainage.

SCHEDULE 2 - DEFINITIONS

PRODUCT DATA SHEET 0 - Duff Layer: The surface layer of native topsoil that is composed of mostly decayed leaves, twigs, and detritus.

PRODUCT DATA SHEET 1 - Finish Grade: Elevation of finished surface of planting soil.

PRODUCT DATA SHEET 2 - Manufactured Topsoil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.

PRODUCT DATA SHEET 3 - Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.

PRODUCT DATA SHEET 4 - Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. These include insects, mites, grubs, mollusks

(snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

PRODUCT DATA SHEET 5 - Planting Soil: Standardized topsoil; existing, native surface topsoil; existing, in-place surface soil; imported topsoil; or manufactured topsoil that is modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.

PRODUCT DATA SHEET 6 - Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or top surface of a fill or backfill before planting soil is placed.

PRODUCT DATA SHEET 7 - Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

PRODUCT DATA SHEET 8 - Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil, but in disturbed areas such as urban environments, the surface soil can be subsoil.

SCHEDULE 3 - SUBMITTALS

PRODUCT DATA SHEET 0 - Product Data: For each type of product indicated.

4.1 Pesticides and Herbicides: Include product label and manufacturer's application instructions specific to this Project.

PRODUCT DATA SHEET 1 - Qualification Data: For qualified landscape Installer.

PRODUCT DATA SHEET 2 - Product Certificates: For soil amendments and fertilizers, from manufacturer.

PRODUCT DATA SHEET 3 - Material Test Reports: For imported or manufactured topsoil..

PRODUCT DATA SHEET 4 - Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of turf during a calendar year. Submit before expiration of required initial maintenance periods.

SCHEDULE 4 - QUALITY ASSURANCE

PRODUCT DATA SHEET 0 - Installer Qualifications: A qualified landscape Installer whose work has resulted in successful turf establishment.

PRODUCT DATA SHEET 1 - Soil-Testing Laboratory Qualifications: An independent laboratory or university laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

PRODUCT DATA SHEET 2 - Soil Analysis: For each unamended soil type, furnish soil analysis and a written report by a qualified soil-testing laboratory stating percentages of organic matter;

gradation of sand, silt, and clay content; cation exchange capacity; deleterious material; pH; and mineral and plant-nutrient content of the soil.

- 4.1 Testing methods and written recommendations shall comply with USDA's Handbook No.60.
- 4.2 The soil-testing laboratory shall oversee soil sampling, with depth, location, and number of samples to be taken per instructions from Landscape Architect. A minimum of three representative samples shall be taken from varied locations for each soil to be used or amended for planting purposes.
- 4.3 Report suitability of tested soil for turf growth.
 - A. Based on the test results, state recommendations for soil treatments and soil amendments to be incorporated. State recommendations in weight per 1000 sf or volume per cu yd for nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants.
 - B. Report presence of problem salts, minerals, or heavy metals, including aluminum, arsenic, barium, cadmium, chromium, cobalt, lead, lithium, and vanadium. If such problem materials are present, provide additional recommendations for corrective action.

PRODUCT DATA SHEET 3 - Preinstallation Conference: Conduct conference at Project site.

SCHEDULE 5 - DELIVERY, STORAGE, AND HANDLING

PRODUCT DATA SHEET 0 - Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod in time for planting within 24 hours of harvesting. Protect sod from breakage and drying.

PRODUCT DATA SHEET 1 - Bulk Materials:

- 4.1 Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
- 4.2 Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
- 4.3 Accompany each delivery of bulk fertilizers and soil amendments with appropriate certificates.

SCHEDULE 6 - PROJECT CONDITIONS

PRODUCT DATA SHEET 0 - Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of planting completion.

- 4.1 Planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

SCHEDULE 7 - MAINTENANCE SERVICE

PRODUCT DATA SHEET 0 - Initial Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in Part 3. Begin maintenance immediately after each area is planted and continue until acceptable turf is established but for not less than the following periods:

- 4.1 Sodded Turf: 90 days from date of planting completion.

PRODUCT DATA SHEET 1 - Turfgrass Sod: Certified, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture, strongly rooted, and capable of vigorous growth and development when planted.

PRODUCT DATA SHEET 2 - Turfgrass Species: Centipedegrass (*Eremochloa ophiuroides*).

SCHEDULE 8 - INORGANIC SOIL AMENDMENTS

PRODUCT DATA SHEET 0 - Lime: ASTM C602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent and as follows:

- 4.1 Class: T, with a minimum of 99 percent passing through no. 8 sieve and a minimum of 75 percent passing through No. 60 sieve.
- 4.2 Class: O, with a minimum of 95 percent passing through No. 8 sieve and a minimum of 55 percent passing through No. 60 sieve.
- 4.3 Provide lime in form of ground dolomitic limestone.

PRODUCT DATA SHEET 1 - Sulfur: Granular, biodegradable, containing a minimum of 90 percent sulfur, and with a minimum of 99 percent passing through No. 6 sieve and a maximum of 10 percent passing through No. 40 sieve.

PRODUCT DATA SHEET 2 - Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.

PRODUCT DATA SHEET 3 - Aluminum Sulfate: Commercial grade, unadulterated.

PRODUCT DATA SHEET 4 - Perlite: Horticultural perlite, soil amendment grade.

PRODUCT DATA SHEET 5 - Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through No. 50 sieve.

PRODUCT DATA SHEET 6 - Sand: Clean, washed, natural or manufactured, and free of toxic materials.

PRODUCT DATA SHEET 7 - Diatomaceous Earth: Calcined, 90 percent silica, with approximately 140 percent water absorption capacity by weight.

PRODUCT DATA SHEET 8 - Zeolites: Mineral clinoptilolite with at least 60 percent water absorption by weight.

SCHEDULE 9 - ORGANIC SOIL AMENDMENTS

PRODUCT DATA SHEET 0 - Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1 inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

- 4.1 Organic Matter Content: 50 to 60 percent of dry weight.
- 4.2 Feedstock: Agricultural, food, or industrial residuals; biosolids; yard trimmings; or source-separated or compostable mixed solid waste.

PRODUCT DATA SHEET 1 - Sphagnum Peat: Partially decomposed sphagnum peat moss, finely divided or of granular texture, with a pH range of 3.4 to 4.8.

PRODUCT DATA SHEET 2 - Muck Peat: Partially decomposed moss peat, native peat, or reed-sedge peat, finely divided or of granular texture, with a pH range of 6 to 7.5, and having a water-absorbing capacity of 1100 to 2000 percent.

PRODUCT DATA SHEET 3 - Wood Derivatives: Decomposed, nitrogen-treated sawdust, ground bark, or wood waste; of uniform texture and free of chips, stones, sticks, soil, or toxic materials.

- 4.1 In lieu of decomposed wood derivatives, mix partially decomposed wood derivatives with ammonium nitrate at a minimum rate of 0.15 lb cu ft of loose sawdust or ground bark, or with ammonium sulfate at a minimum rate of 0.25 lb cu ft of loose sawdust or ground bark.

PRODUCT DATA SHEET 4 - Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, and material harmful to plant growth.

SCHEDULE 10 - FERTILIZERS

PRODUCT DATA SHEET 0 - Bonemeal: Commercial, raw or steamed, finely ground; a minimum of [1] [4] percent nitrogen and [10] [20] percent phosphoric acid.

PRODUCT DATA SHEET 1 - Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.

PRODUCT DATA SHEET 2 - Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural

organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:

- 4.1 Composition: 1 lb/1000 sf of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
- 4.2 Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

PRODUCT DATA SHEET 3 - Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

- 4.1 Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.
- 4.2 Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

SCHEDULE 11 - PLANTING SOILS

PRODUCT DATA SHEET 0 - Planting Soil : ASTM D5268 topsoil, with pH range of 5.5 to 7, a minimum of 2 percent organic material content; free of stones 1 in or larger in any dimension and other extraneous materials harmful to plant growth.

- 4.1 Planting Soil : Existing, native surface topsoil formed under natural conditions with the duff layer retained during excavation process. Verify suitability of native surface topsoil to produce viable planting soil. Clean soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.
- 4.2 Supplement with planting soil when quantities are insufficient.

PRODUCT DATA SHEET 1 - Planting Soil Existing, in-place surface soil. Verify suitability of existing surface soil to produce viable planting soil. Remove stones, roots, plants, sod, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth.

PRODUCT DATA SHEET 2 - Planting Soil >: Imported topsoil or manufactured topsoil from off-site sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.

- 4.1 Additional Properties of Imported Topsoil or Manufactured Topsoil: Screened and free of stones 1 inch or larger in any dimension; free of roots, plants, sod, clods, clay lumps, pockets of coarse sand, paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials harmful to plant growth; free of obnoxious weeds and invasive plants including quackgrass, Johnsongrass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and brome grass; not infested with nematodes, grubs, other pests, pest eggs, or other undesirable organisms and disease-causing plant pathogens; friable and with sufficient structure to give good tilth and aeration. Continuous, air-filled, pore-space content on a volume/volume basis shall be at least 15 percent when moisture is

present at field capacity. Soil shall have a field capacity of at least 15 percent on a dry weight basis.

PRODUCT DATA SHEET 3 - PESTICIDES

PRODUCT DATA SHEET 4 - General: Pesticide, registered and approved by EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

PRODUCT DATA SHEET 5 - Pre-Emergent Herbicide (Selective and Non-Selective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.

PRODUCT DATA SHEET 6 - Post-Emergent Herbicide (Selective and Non-Selective): Effective for controlling weed growth that has already germinated.

SCHEDULE 12 - .EXECUTION

SCHEDULE 13 - EXAMINATION

PRODUCT DATA SHEET 0 - Examine areas to be planted for compliance with requirements and other conditions affecting performance.

- 4.1 Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
- 4.2 Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.
- 4.3 Suspend soil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
- 4.4 Uniformly moisten excessively dry soil that is not workable and which is too dusty.

PRODUCT DATA SHEET 1 - Proceed with installation only after unsatisfactory conditions have been corrected.

PRODUCT DATA SHEET 2 - If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Landscape Architect and replace with new planting soil.

SCHEDULE 14 - PREPARATION

PRODUCT DATA SHEET 0 - Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.

- 4.1 Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray.
- 4.2 Protect grade stakes set by others until directed to remove them.

PRODUCT DATA SHEET 1 - Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

SCHEDULE 15 - TURF AREA PREPARATION

PRODUCT DATA SHEET 0 - Limit turf subgrade preparation to areas to be planted.

PRODUCT DATA SHEET 1 - Newly Graded Subgrades: Loosen subgrade to a minimum depth of 8 inches. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.

- 4.1 Spread planting soil to a depth of 4 inches but not less than required to meet finish grades after light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.
 - A. Spread approximately 1/2 the thickness of planting soil over loosened subgrade. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil.
 - B. Reduce elevation of planting soil to allow for soil thickness of sod.

PRODUCT DATA SHEET 2 - Unchanged Subgrades: If turf is to be planted in areas unaltered or undisturbed by excavating, grading, or surface-soil stripping operations, prepare surface soil as follows:

- 4.1 Remove existing grass, vegetation, and turf. Do not mix into surface soil.
- 4.2 Loosen surface soil to a depth of at least 4 inches. Apply soil amendments and fertilizers according to planting soil mix proportions and mix thoroughly into top 4 inches of soil. Till soil to a homogeneous mixture of fine texture. Remove stones larger than 1 inch in any dimension and sticks, roots, trash, and other extraneous matter.
- 4.3 Legally dispose of waste material, including grass, vegetation, and turf, off Owner's property.

PRODUCT DATA SHEET 3 - Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit finish grading to areas that can be planted in the immediate future.

PRODUCT DATA SHEET 4 - Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

PART 5 - Before planting, obtain Landscape Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

SCHEDULE 0 - SODDING

PRODUCT DATA SHEET 0 - Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.

PRODUCT DATA SHEET 1 - Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to subgrade or sod during installation. Tamp and roll lightly to ensure contact with subgrade, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.

- 5.1 Lay sod across angle of slopes exceeding 1:3.
- 5.2 Anchor sod on slopes exceeding 1:6 with wood pegs or steel staples spaced as recommended by sod manufacturer but not less than 2 anchors per sod strip to prevent slippage.

PRODUCT DATA SHEET 2 - Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1- ½ INCHES below sod.

SCHEDULE 1 -

PART 6 -

PRODUCT DATA SHEET 0 - TURF MAINTENANCE

PRODUCT DATA SHEET 1 - Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.

- 6.1 Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
- 6.2 In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.
- 6.3 Apply treatments as required to keep turf and soil free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.

PRODUCT DATA SHEET 2 - Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 INCHES.

- 6.1 Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.

- 6.2 Water turf with fine spray at a minimum rate of 1 INCH per week unless rainfall precipitation is adequate.

PRODUCT DATA SHEET 3 - Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 1/3 of grass height. Remove no more than 1/3 of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:

- 6.1 Mow centipedegrass to a height of 1 to 2 inches.

PRODUCT DATA SHEET 4 - Turf Post fertilization: Apply fertilizer after initial mowing and when grass is dry.

- 6.1 Use fertilizer that will provide actual nitrogen of at least 1 lb/1000 sf to turf area.

SCHEDULE 1 - SATISFACTORY TURF

PRODUCT DATA SHEET 0 - Turf installations shall meet the following criteria as determined by Architect:

- 6.1 Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.

PRODUCT DATA SHEET 1 - Use specified materials to reestablish turf that does not comply with requirements and continue maintenance until turf is satisfactory.

SCHEDULE 2 - PESTICIDE APPLICATION

PRODUCT DATA SHEET 0 - Apply pesticides and other chemical products and biological control agents in accordance with requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.

PRODUCT DATA SHEET 1 - Post-Emergent Herbicides (Selective and Non-Selective): Apply only as necessary to treat already-germinated weeds and in accordance with manufacturer's written recommendations.

SCHEDULE 3 - CLEANUP AND PROTECTION

PRODUCT DATA SHEET 0 - Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

PRODUCT DATA SHEET 1 - Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.

PRODUCT DATA SHEET 2 - Remove nondegradable erosion-control measures after grass establishment period.

END OF SECTION 4, TURF AND GRASSES

SECTION 5 - PLANTS

PART 7 - GENERAL

SCHEDULE 0 - RELATED DOCUMENTS

PRODUCT DATA SHEET 0 - Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

SCHEDULE 1 - SUMMARY

PRODUCT DATA SHEET 0 - Section Includes:

- 7.1 Plants.
- 7.2 Planting soils.
- 7.3 Tree stabilization.

PRODUCT DATA SHEET 1 - Related Sections:

- 7.1 Division 01 Section "Temporary Tree and Plant Protection" for protecting, trimming, pruning, repairing, and replacing existing trees to remain that interfere with, or are affected by, execution of the Work.
- 7.2 Division 12 Section "Site Furnishings" for exterior unit planters.
- 7.3 Division 31 Section "Site Clearing" for protection of existing trees and plantings, topsoil stripping and stockpiling, and site clearing.
- 7.4 Division 31 Section "Earth Moving" for excavation, filling, and rough grading and for subsurface aggregate drainage and drainage backfill materials.
- 7.5 Division 32 Section "Turf and Grasses" for turf (lawn) and meadow planting, hydroseeding, and erosion-control materials.
- 7.6 Division 33 Section "Subdrainage" for below-grade drainage of landscaped areas, paved areas, and wall perimeters.

SCHEDULE 2 - DEFINITIONS

PRODUCT DATA SHEET 0 - Backfill: The earth used to replace or the act of replacing earth in an excavation.

PRODUCT DATA SHEET 1 - Balled and Burlapped Stock: Plants dug with firm, natural balls of earth in which they were grown, with ball size not less than diameter and depth recommended by ANSIZ60.1 for type and size of plant required; wrapped with burlap, tied, rigidly supported, and drum laced with twine with the root flare visible at the surface of the ball as recommended by ANSIZ60.1.

PRODUCT DATA SHEET 2 - Balled and Potted Stock: Plants dug with firm, natural balls of earth in which they are grown and placed, unbroken, in a container. Ball size is not less than diameter and depth recommended by ANSIZ60.1 for type and size of plant required.

PRODUCT DATA SHEET 3 - Bare-Root Stock: Plants with a well-branched, fibrous-root system developed by transplanting or root pruning, with soil or growing medium removed, and with not less than minimum root spread according to ANSI Z60.1 for type and size of plant required.

PRODUCT DATA SHEET 4 - Container-Grown Stock: Healthy, vigorous, well-rooted plants grown in a container, with a well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSIZ60.1 for type and size of plant required.

PRODUCT DATA SHEET 5 - Duff Layer: The surface layer of native topsoil that is composed of mostly decayed leaves, twigs, and detritus.

PRODUCT DATA SHEET 6 - Fabric Bag-Grown Stock: Healthy, vigorous, well-rooted plants established and grown in-ground in a porous fabric bag with well-established root system reaching sides of fabric bag. Fabric bag size is not less than diameter, depth, and volume required by ANSIZ60.1 for type and size of plant.

PRODUCT DATA SHEET 7 - Finish Grade: Elevation of finished surface of planting soil.

PRODUCT DATA SHEET 8 - Manufactured Topsoil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.

PRODUCT DATA SHEET 9 - Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.

PRODUCT DATA SHEET 10 - Pests: Living organisms that occur where they are not desired, or that cause damage to plants, animals, or people. These include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

PRODUCT DATA SHEET 11 - Planting Area: Areas to be planted.

PRODUCT DATA SHEET 12 - Planting Soil: Standardized topsoil; existing, native surface topsoil; existing, in-place surface soil; imported topsoil; or manufactured topsoil that is modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.

PRODUCT DATA SHEET 13 - Plant; Plants; Plant Material: These terms refer to vegetation in general, including trees, shrubs, vines, ground covers, ornamental grasses, bulbs, corms, tubers, or herbaceous vegetation.

PRODUCT DATA SHEET 14 - Root Flare: Also called "trunk flare." The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.

PRODUCT DATA SHEET 15 - Stem Girdling Roots: Roots that encircle the stems (trunks) of trees below the soil surface.

PRODUCT DATA SHEET 16 - Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

PRODUCT DATA SHEET 17 - Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

PRODUCT DATA SHEET 18 - Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.

SCHEDULE 3 - SUBMITTALS

PRODUCT DATA SHEET 0 - Product Data: For each type of product indicated, including soils.

- 7.1 Plant Materials: Include quantities, sizes, quality, and sources for plant materials.
- 7.2 Pesticides and Herbicides: Include product label and manufacturer's application instructions specific to the Project.
- 7.3 Plant Photographs: Include color photographs in digital format of each required species and size of plant material as it will be furnished to the Project. Take photographs from an angle depicting true size and condition of the typical plant to be furnished. Include a scale rod or other measuring device in each photograph.

PRODUCT DATA SHEET 1 - Qualification Data: For qualified landscape Installer. Include list of similar projects completed by Installer demonstrating Installer's capabilities and experience. Include project names, addresses, and year completed, and include names and addresses of owners' contact persons.

PRODUCT DATA SHEET 2 - Product Certificates: For each type of manufactured product, from manufacturer, and complying with the following:

- 7.1 Manufacturer's certified analysis of standard products.

- 7.2 Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.

PRODUCT DATA SHEET 3 - Material Test Reports: For imported or manufactured topsoil.

PRODUCT DATA SHEET 4 - Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of plants during a calendar year. Submit before start of required maintenance periods.

PRODUCT DATA SHEET 5 - Warranty: Sample of special warranty.

SCHEDULE 4 - QUALITY ASSURANCE

PRODUCT DATA SHEET 0 - Installer Qualifications: A qualified landscape Installer whose work has resulted in successful establishment of plants.

- 7.1 Professional Membership: Installer shall be a member in good standing of either the Professional Land care Network or the American Nursery and Landscape Association.
- 7.2 Experience: Five years' experience in landscape installation in addition to requirements in Division 01 Section "Quality Requirements."
- 7.3 Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.

PRODUCT DATA SHEET 1 - Soil-Testing Laboratory Qualifications: An independent or university laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

PRODUCT DATA SHEET 2 - Soil Analysis: For each unamended soil type, furnish soil analysis and a written report by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; deleterious material; pH; and mineral and plant-nutrient content of the soil.

- 7.1 Testing methods and written recommendations shall comply with USDA's Handbook No. 60.
- 7.2 The soil-testing laboratory shall oversee soil sampling; with depth, location, and number of samples to be taken per instructions from Architect. A minimum of three representative samples shall be taken from varied locations for each soil to be used or amended for planting purposes.
- 7.3 Report suitability of tested soil for plant growth.
 - A. Based upon the test results, state recommendations for soil treatments and soil amendments to be incorporated. State recommendations in weight per 1000 sf or volume per cu yd for nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants.

- B. Report presence of problem salts, minerals, or heavy metals, including aluminum, arsenic, barium, cadmium, chromium, cobalt, lead, lithium, and vanadium. If such problem materials are present, provide additional recommendations for corrective action.

PRODUCT DATA SHEET 3 - Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSIZ60.1.

- 7.1 Selection of plants purchased under allowances will be made by Architect, who will tag plants at their place of growth before they are prepared for transplanting.

PRODUCT DATA SHEET 4 - Measurements: Measure according to ANSIZ60.1. Do not prune to obtain required sizes.

- 7.1 Trees and Shrubs: Measure with branches and trunks or canes in their normal position. Take height measurements from or near the top of the root flare for field-grown stock and container grown stock. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip to tip. Take caliper measurements 6 inches above the root flare for trees up to 4 inch caliper size, and 12 inches above the root flare for larger sizes.
- 7.2 Other Plants: Measure with stems, petioles, and foliage in their normal position.

PRODUCT DATA SHEET 5 - Plant Material Observation: Landscape Architect may observe plant material either at place of growth or at site before planting for compliance with requirements for genus, species, variety, cultivar, size, and quality. Architect retains right to observe trees and shrubs further for size and condition of balls and root systems, pests, disease symptoms, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.

- 7.1 Notify Architect of sources of planting materials seven days in advance of delivery to site.

PRODUCT DATA SHEET 6 - Preinstallation Conference: Conduct conference at Project site

SCHEDULE 5 - DELIVERY, STORAGE, AND HANDLING

PRODUCT DATA SHEET 0 - Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws if applicable.

PRODUCT DATA SHEET 1 - Bulk Materials:

- 7.1 Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
- 7.2 Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
- 7.3 Accompany each delivery soil amendments with appropriate certificates.

PRODUCT DATA SHEET 2 - Do not prune trees and shrubs before delivery. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.

PRODUCT DATA SHEET 3 - Handle planting stock by root ball.

PRODUCT DATA SHEET 4 - Deliver plants after preparations for planting have been completed, and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.

- 7.1 Set balled stock on ground and cover ball with soil, peat moss, sawdust, or other acceptable material.
- 7.2 Do not remove container-grown stock from containers before time of planting.
- 7.3 Water root systems of plants stored on-site deeply and thoroughly with a fine-mist spray. Water as often as necessary to maintain root systems in a moist, but not overly-wet condition.

SCHEDULE 6 - PROJECT CONDITIONS

PRODUCT DATA SHEET 0 - Field Measurements: Verify actual grade elevations, service and utility locations, irrigation system components, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting work.

PRODUCT DATA SHEET 1 - Interruption of Existing Services or Utilities: Do not interrupt services or utilities to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary services or utilities according to requirements indicated:

- 7.1 Notify Construction Manager no fewer than two days in advance of proposed interruption of each service or utility.
- 7.2 Do not proceed with interruption of services or utilities without Construction Manager's written permission.

PRODUCT DATA SHEET 2 - Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.

PRODUCT DATA SHEET 3 - Coordination with Turf Areas (Lawns): Plant trees, shrubs, and other plants after finish grades are established and before planting turf areas unless otherwise indicated.

- 7.1 When planting trees, shrubs, and other plants after planting turf areas, protect turf areas, and promptly repair damage caused by planting operations.

SCHEDULE 7 - WARRANTY

PRODUCT DATA SHEET 0 - Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.

7.1 Failures include, but are not limited to, the following:

- A. Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner, or incidents that are beyond Contractor's control.
- B. Structural failures including plantings falling or blowing over.
- C. Faulty performance of tree stabilization.
- D. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

7.2 Warranty Periods from Date of Substantial Completion:

- A. Trees, Shrubs, Vines, and Ornamental Grasses: One Year.
- B. Ground Covers, Biennials, Perennials, and Other Plants: One Year.
- C. Annuals: One Year.

7.3 Include the following remedial actions as a minimum:

- A. Immediately remove dead plants and replace unless required to plant in the succeeding planting season.
- B. Replace plants that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
- C. A limit of one replacement of each plant will be required except for losses or replacements due to failure to comply with requirements.
- D. Provide extended warranty for period equal to original warranty period, for replaced plant material.

SCHEDULE 8 - MAINTENANCE SERVICE

PRODUCT DATA SHEET 0 - Initial Maintenance Service for Trees and Shrubs: Provide maintenance by skilled employees of landscape Installer. Maintain as required in Part3. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established but for not less than maintenance period below.

7.1 Maintenance Period: Three months from date of Substantial Completion.

PRODUCT DATA SHEET 1 - Initial Maintenance Service for Ground Cover and Other Plants: Provide maintenance by skilled employees of landscape Installer. Maintain as required in Part3. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established but for not less than maintenance period below.

Maintenance Period: Three months from date of Substantial Completion. Retain paragraph below if needed. Revise starting date if required.

PART 8 - PRODUCTS

SCHEDULE 0 - PLANT MATERIAL

PRODUCT DATA SHEET 0 - General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant Schedule or Plant Legend shown on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.

- 8.1 Trees with damaged, crooked, or multiple leaders; tight vertical branches where bark is squeezed between two branches or between branch and trunk ("included bark"); crossing trunks; cut-off limbs more than ¾ inch in diameter; or with stem girdling roots will be rejected.
- 8.2 Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery unless otherwise indicated.

PRODUCT DATA SHEET 1 - Provide plants of sizes, grades, and ball or container sizes complying with ANSI Z60.1 for types and form of plants required. Plants of a larger size may be used if acceptable to Architect, with a proportionate increase in size of roots or balls.

PRODUCT DATA SHEET 2 - Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which shall begin at root flare according to ANSI Z60.1. Root flare shall be visible before planting.

PRODUCT DATA SHEET 3 - Labeling: Label each plant of each variety, size, and caliper with a securely attached, waterproof tag bearing legible designation of common name and full scientific name, including genus and species. Include nomenclature for hybrid, variety, or cultivar, if applicable for the plant as shown on Drawings.

PRODUCT DATA SHEET 4 - If formal arrangements or consecutive order of plants is shown on Drawings, select stock for uniform height and spread, and number the labels to assure symmetry in planting.

PRODUCT DATA SHEET 5 - Annuals: Provide healthy, disease-free plants of species and variety shown or listed, with well-established root systems reaching to sides of the container to maintain a firm ball, but not with excessive root growth encircling the container. Provide only plants that are acclimated to outdoor conditions before delivery and that are in bud but not yet in bloom.

SCHEDULE 1 - INORGANIC SOIL AMENDMENTS

PRODUCT DATA SHEET 0 - Lime: ASTM C602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent and as follows:

- 8.1 Class: T, with a minimum of 99 percent passing through No. 8 sieve and a minimum of 75 percent passing through No. 60 sieve.

8.2 Provide lime in form of ground dolomitic limestone .

PRODUCT DATA SHEET 1 - Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.

PRODUCT DATA SHEET 2 - Aluminum Sulfate: Commercial grade, unadulterated.

PRODUCT DATA SHEET 3 - Perlite: Horticultural perlite, soil amendment grade.

PRODUCT DATA SHEET 4 - Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through No. 50 sieve.

PRODUCT DATA SHEET 5 - Sand: Clean, washed, natural or manufactured, and free of toxic materials.

PRODUCT DATA SHEET 6 - Diatomaceous Earth: Calcined, 90 percent silica, with approximately 140 percent water absorption capacity by weight.

PRODUCT DATA SHEET 7 - Zeolites: Mineral clinoptilolite with at least 60 percent water absorption by weight.

SCHEDULE 2 - ORGANIC SOIL AMENDMENTS

PRODUCT DATA SHEET 0 - Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

8.1 Organic Matter Content: 50 to 60 percent of dry weight.

8.2 Feedstock: Agricultural, food, or industrial residuals; biosolids; yard trimmings; or source-separated or compostable mixed solid waste.

PRODUCT DATA SHEET 1 - Sphagnum Peat: Partially decomposed sphagnum peat moss, finely divided or granular texture, with a pH range of 3.4 to 4.8.

PRODUCT DATA SHEET 2 - Muck Peat: Partially decomposed moss peat, native peat, or reed-sedge peat, finely divided or of granular texture, with a pH range of 6 to 7.5, and having a water-absorbing capacity of 1100 to 2000 percent.

PRODUCT DATA SHEET 3 - Wood Derivatives: Decomposed, nitrogen-treated sawdust, ground bark, or wood waste; of uniform texture and free of chips, stones, sticks, soil, or toxic materials.

8.1 In lieu of decomposed wood derivatives, mix partially decomposed wood derivatives with ammonium nitrate at a minimum rate of .15 lb/cu ft of loose sawdust or ground bark.

PRODUCT DATA SHEET 4 - Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, debris, and material harmful to plant growth.

SCHEDULE 3 - FERTILIZERS

PRODUCT DATA SHEET 0 - Bonemeal: Commercial, raw or steamed, finely ground.

PRODUCT DATA SHEET 1 - Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.

PRODUCT DATA SHEET 2 - Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:

- 8.1 Composition: 1lb/1000 of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
- 8.2 Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

PRODUCT DATA SHEET 3 - Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

- 8.1 Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.
- 8.2 Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

PRODUCT DATA SHEET 4 - Planting Tablets: Tightly compressed chip type, long-lasting, slow-release, commercial-grade planting fertilizer in tablet form. Tablets shall break down with soil bacteria, converting nutrients into a form that can be absorbed by plant roots.

- 8.1 Nutrient Composition: 20 percent nitrogen, 10 percent phosphorous, and 5 percent potassium, by weight plus micronutrients.

PRODUCT DATA SHEET 5 - Chelated Iron: Commercial-grade FeEDDHA for dicots and woody plants, and commercial-grade FeDTPA for ornamental grasses and monocots.

SCHEDULE 4 - PLANTING SOILS

PRODUCT DATA SHEET 0 - Planting Soil : ASTM D5268 topsoil, with pH range of 5.5 to 7, a minimum of 6 percent organic material content; free of stones 1 in or larger in any dimension and other extraneous materials harmful to plant growth. Mix ASTM D5268 topsoil with the following soil amendments and fertilizers in the following quantities to produce planting soil:

- 8.1 Ratio of Loose Compost to Topsoil by Volume: 1:4.
- 8.2 Volume of Sand Plus 10 Percent per 1000 sf: .
- 8.3 Planting Soil Imported topsoil or manufactured topsoil from off-site sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 in deep; do not obtain from marshes.

- 8.4 Additional Properties of Imported Topsoil or Manufactured Topsoil: Screened and free of stones 1 in or larger in any dimension; free of roots, plants, sod, clods, clay lumps, pockets of coarse sand, paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials harmful to plant growth; free of obnoxious weeds and invasive plants including quackgrass, Johnsongrass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and brome grass; not infested with nematodes; grubs; or other pests, pest eggs, or other undesirable organisms and disease-causing plant pathogens; friable and with sufficient structure to give good tilth and aeration. Continuous, air-filled pore space content on a volume/volume basis shall be at least 15 percent when moisture is present at field capacity. Soil shall have a field capacity of at least 15 percent on a dry weight basis.

PRODUCT DATA SHEET 1 - MULCHES

PRODUCT DATA SHEET 2 - Organic Mulch: Free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of one of the following:

- 8.1 Type: **Pine straw**
8.2 Size Range: 3 inches maximum, ½ inch minimum.

PRODUCT DATA SHEET 3 - Compost Mulch: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1- inch sieve.

PRODUCT DATA SHEET 4 - PESTICIDES

PRODUCT DATA SHEET 5 - General: Pesticide registered and approved by EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

PRODUCT DATA SHEET 6 - Pre-Emergent Herbicide (Selective and Non-Selective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.

PRODUCT DATA SHEET 7 - Post-Emergent Herbicide (Selective and Non-Selective): Effective for controlling weed growth that has already germinated.

SCHEDULE 5 - TREE STABILIZATION MATERIALS

PRODUCT DATA SHEET 0 - Stakes and Guys:

- 8.1 Proprietary Staking-and-Guying Devices: Proprietary stake and adjustable tie systems to secure each new planting by plant stem; sized as indicated and per manufacturer's written recommendations.

- A. Products: Subject to compliance with requirements, [provide the following] [provide one of the following] [available products that may be incorporated into the Work include, but are not limited to, the following]:
1. Arborbrace; ArborBrace Tree Guying System. Retain first two subparagraph below for nonproprietary devices.

SCHEDULE 6 - MISCELLANEOUS PRODUCTS

PRODUCT DATA SHEET 0 - Wood Pressure-Preservative Treatment: AWPAC2, with waterborne preservative for soil and freshwater use, acceptable to authorities having jurisdiction, and containing no arsenic; including ammoniacal copper arsenate, ammoniacal copper zinc arsenate, and chromated copper arsenate.

PRODUCT DATA SHEET 1 - Root Barrier: Black, molded, modular panels manufactured with 50 percent recycled polyethylene plastic with ultraviolet inhibitors, 85 mils thick, with vertical root deflecting ribs protruding 3/4 inch out from panel, and each panel 18 inches wide.

PRODUCT DATA SHEET 2 - Antidesiccant: Water-insoluble emulsion, permeable moisture retarder, film forming, for trees and shrubs. Deliver in original, sealed, and fully labeled containers and mix according to manufacturer's written instructions.

PRODUCT DATA SHEET 3 - Burlap: Non-synthetic, biodegradable.

PRODUCT DATA SHEET 4 - Mycorrhizal Fungi: Dry, granular inoculant containing at least 5300 spores per lb of vesicular-arbuscular mycorrhizal fungi and 95 million spores per lb of ectomycorrhizal fungi, 33 percent hydrogel, and a maximum of 5.5 percent inert material.

PART 9 - EXECUTION

SCHEDULE 0 - EXAMINATION

PRODUCT DATA SHEET 0 - Examine areas to receive plants for compliance with requirements and conditions affecting installation and performance.

- 9.1 Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
- 9.2 Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.
- 9.3 Suspend soil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
- 9.4 Uniformly moisten excessively dry soil that is not workable and which is too dusty.

PRODUCT DATA SHEET 1 - Proceed with installation only after unsatisfactory conditions have been corrected.

PRODUCT DATA SHEET 2 - If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Architect and replace with new planting soil.

SCHEDULE 1 - PREPARATION

PRODUCT DATA SHEET 0 - Protect structures, utilities, sidewalks, pavements, and other facilities and turf areas and existing plants from damage caused by planting operations.

PRODUCT DATA SHEET 1 - Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

PRODUCT DATA SHEET 2 - Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations, outline areas, adjust locations when requested, and obtain Architect's acceptance of layout before excavating or planting. Make minor adjustments as required.

PRODUCT DATA SHEET 3 - Lay out plants at locations directed by Architect. Stake locations of individual trees and shrubs and outline areas for multiple plantings.

PRODUCT DATA SHEET 4 - Apply antidesiccant to trees and shrubs using power spray to provide an adequate film over trunks (before wrapping), branches, stems, twigs, and foliage to protect during digging, handling, and transportation.

9.1 If deciduous trees or shrubs are moved in full leaf, spray with antidesiccant at nursery before moving and again two weeks after planting.

PRODUCT DATA SHEET 5 - Wrap trees and shrubs with burlap fabric over trunks, branches, stems, twigs, and foliage to protect from wind and other damage during digging, handling, and transportation.

SCHEDULE 2 - PLANTING AREA ESTABLISHMENT

PRODUCT DATA SHEET 0 - Loosen subgrade of planting areas to a minimum depth of 12 inches. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.

9.1 Apply superphosphate fertilizer directly to subgrade before loosening.

9.2 Spread planting soil to a depth of 12 inches but not less than required to meet finish grades after natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.

- A. Spread approximately one-half the thickness of planting soil over loosened subgrade. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil.

PRODUCT DATA SHEET 1 - Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

PRODUCT DATA SHEET 2 - Before planting, obtain Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

PRODUCT DATA SHEET 3 - Application of Mycorrhizal Fungi: At time directed by Landscape Architect, broadcast dry product uniformly over prepared soil at mfg recommended rate.

SCHEDULE 3 - EXCAVATION FOR TREES AND SHRUBS

PRODUCT DATA SHEET 0 - Planting Pits and Trenches: Excavate circular planting pits with sides sloping inward at a 45-degree angle. Excavations with vertical sides are not acceptable. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.

- 9.1 Excavate approximately three times as wide as ball diameter for balled and burlapped and container-grown stock.
- 9.2 Excavate at least 12 inches wider than root spread and deep enough to accommodate vertical roots for bare-root stock.
- 9.3 Do not excavate deeper than depth of the root ball, measured from the root flare to the bottom of the root ball.
- 9.4 If area under the plant was initially dug too deep, add soil to raise it to the correct level and thoroughly tamp the added soil to prevent settling.
- 9.5 Maintain required angles of repose of adjacent materials as shown on the Drawings. Do not excavate subgrades of adjacent paving, structures, hardscapes, or other new or existing improvements.
- 9.6 Maintain supervision of excavations during working hours.
- 9.7 Keep excavations covered or otherwise protected overnight.
- 9.8 If drain tile is shown on Drawings or required under planting areas, excavate to top of porous backfill over tile.

PRODUCT DATA SHEET 1 - Subsoil and topsoil removed from excavations may be used as planting soil.

PRODUCT DATA SHEET 2 - Obstructions: Notify Architect if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.

- 9.1 Hardpan Layer: Drill 6 inch diameter holes into free-draining strata or to a depth of 10 feet, whichever is less, and backfill with free-draining material.

PRODUCT DATA SHEET 3 - Drainage: Notify Architect if subsoil conditions evidence unexpected water seepage or retention in tree or shrub planting pits.

PRODUCT DATA SHEET 4 - Fill excavations with water and allow to percolate away before positioning trees and shrubs.

SCHEDULE 4 - TREE, SHRUB, AND VINE PLANTING

PRODUCT DATA SHEET 0 - Before planting, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.

PRODUCT DATA SHEET 1 - Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.

PRODUCT DATA SHEET 2 - Set balled and burlapped stock plumb and in center of planting pit or trench with root flare 2 inches adjacent finish grades.

- 9.1 Use planting soil for backfill.
- 9.2 After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
- 9.3 Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
- 9.4 Place planting tablets in each planting pit when pit is approximately one-half filled; in amounts recommended in soil reports from soil-testing laboratory. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
- 9.5 Continue backfilling process. Water again after placing and tamping final layer of soil.

PRODUCT DATA SHEET 3 - Set all plant stock plumb and in center of planting pit or trench with root flare 1 inch adjacent finish grades.

- 9.1 Use planting soil for backfill.
- 9.2 Carefully remove root ball from container without damaging root ball or plant.
- 9.3 Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
- 9.4 Place planting tablets in each planting pit when pit is approximately one-half filled; in amounts recommended in soil reports from soil-testing laboratory. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
- 9.5 Continue backfilling process. Water again after placing and tamping final layer of soil.

SCHEDULE 5 - When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.

SCHEDULE 6 - TREE, SHRUB, AND VINE PRUNING

PRODUCT DATA SHEET 0 - Remove only dead, dying, or broken branches. Do not prune for shape.

PRODUCT DATA SHEET 1 - Prune, thin, and shape trees, shrubs, and vines as directed by Landscape Architect.

PRODUCT DATA SHEET 2 - Prune, thin, and shape trees, shrubs, and vines according to standard professional horticultural and arboricultural practices. Unless otherwise indicated by Landscape Architect, do not cut tree leaders; remove only injured, dying, or dead branches from trees and shrubs; and prune to retain natural character.

PRODUCT DATA SHEET 3 - Do not apply pruning paint to wounds.

SCHEDULE 7 - TREE STABILIZATION

PRODUCT DATA SHEET 0 - Install trunk stabilization as follows unless otherwise indicated:

- 9.1 Upright Staking and Tying: Stake trees of 2 inch and above caliper. Stake trees of less than 2-inch caliper only as required to prevent wind tip out. Use a minimum of two stakes of length required to penetrate at least 18 inches below bottom of backfilled excavation and to extend at least 72 inches above grade. Set vertical stakes and space to avoid penetrating root balls or root masses.
- 9.2 Use two stakes for trees up to 12 feet high and 2 ½ inches or less in caliper; three stakes for trees less than 14 feet high and up to 4 inches in caliper. Space stakes equally around trees.
- 9.3 Support trees with bands of flexible ties at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree.
- 9.4 Support trees with two strands of tie wire, connected to the brass grommets of tree-tie webbing at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree.

Retain first paragraph below for tree trunk stabilization by staking and guying.

PRODUCT DATA SHEET 1 - Staking and Guying: Stake and guy trees more than 14 feet in height and more than 3 inches in caliper unless otherwise indicated. Securely attach no fewer than three guys to stakes 30 inches long, driven to grade.

- 9.1 Site-Fabricated Staking-and-Guying Method:
 - A. Proprietary Staking and Guying Device: Install staking and guying system sized and positioned as recommended by manufacturer unless otherwise indicated and according to manufacturer's written instructions.
- 9.2 Proprietary Root-Ball Stabilization Device: Install root-ball stabilization system sized and positioned as recommended by manufacturer unless otherwise indicated and according to manufacturer's written instructions.

SCHEDULE 8 - GROUND COVER AND PLANT PLANTING

PRODUCT DATA SHEET 0 - Set out and space ground cover and plants other than trees, shrubs, and vines 24 inches in even rows with triangular spacing.

PRODUCT DATA SHEET 1 - Use planting soil for backfill.

PRODUCT DATA SHEET 2 - Dig holes large enough to allow spreading of roots.

PRODUCT DATA SHEET 3 - For rooted cutting plants supplied in flats, plant each in a manner that will minimally disturb the root system but to a depth not less than two nodes.

PRODUCT DATA SHEET 4 - Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.

PRODUCT DATA SHEET 5 - Water thoroughly after planting, taking care not to cover plant crowns with wet soil.

PRODUCT DATA SHEET 6 - Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

SCHEDULE 9 - PLANTING AREA MULCHING

PRODUCT DATA SHEET 0 - Mulch backfilled surfaces of planting areas and other areas indicated.

- 9.1 Trees in Turf Areas: Apply organic mulch ring of 3-inch average thickness, with 36-inch radius around trunks or stems. Do not place mulch within 3 inch of trunks or stems.
- 9.2 Organic Mulch in Planting Areas: Apply 3 inch average thickness of organic mulch over whole surface of planting area, and finish level with adjacent finish grades. Do not place mulch within 3 inches of trunks or stems.

PRODUCT DATA SHEET 1 - Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, adjusting and repairing tree-stabilization devices, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings. Spray or treat as required to keep trees and shrubs free of insects and disease.

PRODUCT DATA SHEET 2 - Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.

PRODUCT DATA SHEET 3 - Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.

SCHEDULE 10 - PESTICIDE APPLICATION

PRODUCT DATA SHEET 0 - Apply pesticides and other chemical products and biological control agents in accordance with authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.

PRODUCT DATA SHEET 1 - Pre-Emergent Herbicides (Selective and Non-Selective): Apply to tree, shrub, and ground-cover areas in accordance with manufacturer's written recommendations. Do not apply to seeded areas.

SCHEDULE 11 - Post-Emergent Herbicides (Selective and Non-Selective): Apply only as necessary to treat already-germinated weeds and in accordance with manufacturer's written recommendations. **CLEANUP AND PROTECTION**

PRODUCT DATA SHEET 0 - During planting, keep adjacent paving and construction clean and work area in an orderly condition.

PRODUCT DATA SHEET 1 - Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.

PRODUCT DATA SHEET 2 - After installation and before Substantial Completion, remove nursery tags, nursery stakes, tie tape, labels, wire, burlap, and other debris from plant material, planting areas, and Project site.

SCHEDULE 12 - DISPOSAL

PRODUCT DATA SHEET 0 - Remove surplus soil and waste material including excess subsoil, unsuitable soil, trash, and debris and legally dispose of them off Owner's property.

END OF SECTION 5, PLANTS

SECTION 6 – CONCRETE MASONRY

SECTION 04 22 00 – CONCRETE UNIT MASONRY

AMCON CONCRETE PRODUCTS

Conditions of the Contract and Division 1 General Requirements are a part of this Section

PART 1 GENERAL

1.01 SUMMARY

Provide materials, labor and equipment necessary for the completion of concrete masonry work as indicated on the drawings and specified herein.

1.02 RELATED WORK SPECIFIED IN OTHER SECTIONS

Section 09 97 23, Concrete and Masonry Coating < Specifiers note: select this option if Burnished units are used.

1.03 CODES AND STANDARDS

Perform work with materials complying with ASTM and ACI specifications.

1.04 INSPECTION

Conform to the requirements of Section 01401-Testing and Inspections.

1.05 SUBMITTAL

A. Submittal procedures and quantities are specified in Section 01300-Submittal.

B. Submit copies of manufacturer's product information and installation instructions for each item and accessory.

C. Submit samples of exposed masonry units, indicating special shapes, textures and colors.

1.06 QUALITY ASSURANCE

A. Before installation of concrete masonry, a sample panel must be set up and cleaned by the mason, then approved by the architect.

B. The panel shall be at least 4 feet long by 4 feet high and shall show the proposed color, texture, bond pattern, mortar joints and workmanship for concrete masonry. The panel shall be cleaned according to Section 3.05 Final Clean Down; the same methods and materials used to clean the sample panel shall be used to clean the building.

C. Upon approval by the Architect, the sample panels shall become the standard of comparison for concrete masonry construction on the project and shall not be taken down without written permission from the architect.

PART 2 PRODUCTS

2.01 CONCRETE UNIT MASONRY

A. Load bearing concrete masonry units shall comply with ASTM C90 (latest edition) and provide required shapes such as double ends, bullnose, bond beams, lintels, sills, etc. as required by the project.

B. Provide concrete masonry units as manufactured and supplied by AMCON CONCRETE PRODUCTS, LLC, 2211 Highway 10 South St. Cloud, MN 56304, Phone: 888-251-6030; Fax: 320-529-6970. www.amconconcreteproducts.com Provide the following type of concrete masonry units as indicated on drawings: Specifiers note: select from the following.

Specifiers note: First select a Mix Design. All Mix designs listed below meet or exceed ASTM C90 requirements

If a "GREEN" or "LEED" type mix design is desired, specify AMCON Concrete Products manufactured with a "Sustainable Solutions Mix Design" containing a specific content of Pre Consumer waste materials. This mix design can contain from 30% to 50% Pre Consumer Waste content, and is available in most Architectural finishes listed below (with some restrictions). Please contact your AMCON representative to discuss colors, finishes and recycled content.

If a regular high strength mix design is desired no specific language needs to be inserted regardless of product.

If an Ultra-Fine Finish Mix Design is desired for a superior paintable surface or smooth face integrally colored units, then Ultra-Fine Finish Mix Design should be specified along with the specific color (if any).

If lightweight units are required, it should be stated after the product name. Lightweight units can be pigmented, split or ground. Specialty colored aggregates are not available however because lightweight aggregates must be used.

If a premium high strength mix design is desired it should be stated right after the product name. This mix design is required if the project requires prism strengths in excess of f'm 2,750 psi.

1. SPEC-BRIK STRUCTURAL SERIES units –SPEC-BRIK color. <Specifiers note: Concrete brick units in 3 5/8" high by 15 5/8" long face dimensions are available in 4", 6", 8" and 12" widths. All SPEC-BRIK units should be specified and manufactured with BASF Master Pel 240 integral water repellent; Master Pel 240 MA should be specified for the mortar. In addition, for single wythe exterior CMU (including Spec-Brik) a field coat of Pro-Spec Siloxane Sealer water repellent should also be applied in accordance with manufacturers recommendations.

SPEC-BRIK is Concrete Masonry and should be detailed as such with regard to such items as Control Joints and Horizontal Joint Reinforcement. Horizontal joint reinforcement should be used on all SPEC-BRIK sizes including veneer depth SPEC-BRIK. SPEC-BRIK should be laid from a minimum of two different pallets at once to assure an optimum color blend -see AMCON BLOCK NOTES TO ARCHITECTS AND SPECIFIERS. SPEC-BRIK is available in a range of blends –see Architectural Product Guide

2. STONE MASON SERIES units –AMCON CONCRETE PRODUCTS color _____. <Specifiers note: Smooth undulating (not split) face reminiscent of traditional hand dressed stone. The Stone Mason Series available sizes include 3 5/8" veneer depth and 7 5/8" depth structural units. The Stone Mason Series comes in 5 lengths; 5 5/8", 11 5/8", 15 5/8", 17 5/8" and 23 5/8". In addition to Full High units, Half High units are also available in several sizes. All Stone Mason Series units should be specified and manufactured with BASF Master Pel 240 integral water repellent; Master Pel 240 MA should be specified for the mortar. The Stone Mason Series is Concrete Masonry and should be detailed as such with regard to such items as Control Joints and Horizontal Joint Reinforcement. Horizontal joint reinforcement should be used on all Stone Mason sizes including veneer depth Stone Mason. The Stone Mason Series should be laid from a minimum of two different pallets at once to assure an optimum color blend -see AMCON BLOCK NOTES TO ARCHITECTS AND SPECIFIERS.

The Stone Mason Series should be laid neatly and cleaned at the end of each days work; acidic cleaners and high pressure cleaning is not recommended with this finish. Detail as you would conventional Concrete Masonry Units>

3. MAMMOTH STONE SERIES units –AMCON CONCRETE PRODUCTS color _____. Specifiers note: full face split units for veneer applications, sizes range from 4x4x16 to 4x16x24; for exterior applications, they should be specified and manufactured with BASF Master Pel 240 integral water repellent; Master Pel 240 MA should be specified for the mortar. Mammoth Stone Series is Concrete Masonry and should be detailed as such with regard to such items as Control Joints and Horizontal Joint Reinforcement. Horizontal joint reinforcement should be used on all Mammoth Stone sizes including veneer depth

Mammoth Stone. Mammoth Stone Series in variegated colors should be laid from a minimum of two different pallets at once to assure an optimum color blend -see AMCON CONCRETE PRODUCTSNOTES TO ARCHITECTS AND SPECIFIERS.

4. ROCKFACE SERIES units -AMCON CONCRETE PRODUCTS color _____. Specifiers note: full face split units are available in a wide range of sizes; for exterior applications, they should be specified and manufactured with BASF Master Pel 240 integral water repellent; Master Pel 240 MA should be specified for the mortar. In addition, for single wythe exterior CMU afield coat of Pro-Spec Siloxane Sealer water repellent should be applied in accordance with manufacturers recommendations. The Rock Face Series is Concrete Masonry and should be detailed as such with regard to such items as Control Joints and Horizontal Joint Reinforcement. Horizontal joint reinforcement should be used on all Rock Face sizes including veneer depth Rock Face units. Rock Face units in variegated colors should be laid from a minimum of two different pallets at once to assure an optimum color blend -see AMCONCONCRETE PRODUCTSNOTES TO ARCHITECTS AND SPECIFIERS.

5. BURNISHED SERIES units –AMCON CONCRETE PRODUCT Scolor _____. Specifiers note: If Burnished units are to be used in exterior applications, they should be specified and manufactured with BASF Master Pel 240 integral water repellent; Master Pel 240 MA should be specified for the mortar ;The Burnished Series is Concrete Masonry and should be detailed as such with regard to such items as Control Joints and Horizontal Joint Reinforcement. Horizontal joint reinforcement should be used on all Burnished Series sizes including veneer depth Burnished units.

BURNISHED SERIES units shall have a factory-applied highlighter on each ground surface to facilitate cleaning on the job site. Recommended factory applied highlighter to be Pro Spec Burnished Block Sealer WB. For exterior applications, Burnished Concrete Masonry Units shall be manufactured with BASF Master Pel 240 integral water repellent and shall have a factory-applied coat of Pro-Spec Burnished Block Sealer WB. After final clean down for interior and exterior applications, a field coat of Pro-Spec Burnished Block Sealer WB or SB shall be applied to the wall. Recommended coverage rate shall be 350 square feet per gallon. If Pro Spec Burnished Block Sealer SB is used on exterior applications, then an additional coat of Pro-Spec Final Seal Siloxane shall also be applied when the wall is clean and dry. Specifiers note: Pro Spec Burnished Block Sealer WB (for application temperatures of 50 degrees F and above) or Pro Spec Burnished Block Sealer SB (for application temperatures below 50 degrees F); select one. If Pro Spec Burnished Block Sealer SB is used on exterior applications, then an additional coat of Pro-Spec Final Seal Siloxane shall also be applied when the wall is clean and dry.

6. TRAVERTINA SERIES units –AMCON CONCRETE PRODUCTS color _____. Specifiers note: If Travertina units are to be used in exterior applications, they should be specified and manufactured with BASF Master Pel 240 integral water repellent; Master Pel 240 MA should be specified for the mortar. The Travertina Series is Concrete Masonry and should be detailed as such with regard to such items as Control Joints and Horizontal Joint Reinforcement. Horizontal joint reinforcement should be used on all Travertina Series sizes including veneer depth Burnished units.

TRAVERTINA SERIES units shall have a factory-applied highlighter on each ground surface to facilitate cleaning on the job site. Recommended factory applied highlighter to be Pro Spec Burnished Block Sealer WB. For exterior applications, Travertina Series Units shall be manufactured with BASF Master Pel 240 integral water repellent and shall have a factory-applied coat of Pro-Spec Burnished Block Sealer WB. After final clean down for interior and exterior applications, a field coat of Pro-Spec Burnished Block Sealer WB or SB shall be applied to the wall. Recommended coverage rate shall be 350 square feet per

gallon. If Pro Spec Burnished Block Sealer SB is used on exterior applications, then an additional coat of Pro-Spec Final Seal Siloxane shall also be applied when the wall is clean and dry. Specifiers note: Pro Spec Burnished Block Sealer WB (for application temperatures of 50 degrees F and above) or Pro Spec Burnished Block Sealer SB (for application temperatures below 50 degrees F); select one. If Pro Spec Burnished Block Sealer SB is used on exterior applications, then an additional coat of Pro-Spec Final Seal Siloxane shall also be applied when the wall is clean and dry.

7. SOUNDBLOX units –AMCON CONCRETE PRODUCTS color _____. Specifiers note: If sound absorptive masonry units are to be used in exterior applications, units should be manufactured with BASF MasterPel 240 integral water repellent; MasterPel 240 MA should be specified for the mortar. Soundblox units are Concrete Masonry and should be detailed as such with regard to such items as Control Joints and Horizontal Joint Reinforcement. Horizontal joint reinforcement should be used on all Soundblox sizes including veneer depth Sound Blox.

8. OTHER

2.02 MORTAR AND GROUT MIXES

A. For color consistency and quality consistency Amcon Concrete Products recommends Spec-Mix Premixed Mortar for use with all Amcon CMU's. <Specifiers note: Amcon Concrete Products recommends the use of 2% color or greater in premixed cementitious mixes due to the potential of color inconsistencies which can occur when using mixes with 1% color, especially in buff colored mortar. The pigment in the mix can be greatly affected by installation practices in the field when there is not enough pigment to compensate for manipulation of the joint. For best results, we recommend using/specifying only premixed colored mortars and grouts and only premixed colored mortars and grouts with 2% color or greater.

B. When using concrete masonry units that contain integral water repellent, the installer shall use only mortar containing integral water repellent mortar admixture at the manufacturer's recommended addition rate and mix according to the manufacturer's recommended instructions.

PART 3 EXECUTION

3.1 GENERAL ERECTION REQUIREMENTS

A. Install units level, aligned, plumb and true unless otherwise indicated. Install only quality units; reject all defective units.

B. In order to assure optimum blending of product when using variegated (blended) color units of any type including Rock Face Series, Mammoth Stone Series, Burnished Series, SPEC-BRIK, Stone Mason Series or Smooth Face units, stage cubes so that two or more cubes can be worked off of at the same time. Mason is to lay wall off of at least two cubes of variegated (blended color) product at the same time for even distribution of color. Avoid constructing walls that have a "spotty" visual effect.

C. Neatly cut units utilizing a power masonry saw to obtain crisp, sharp edges that fit neatly with all adjoining work.

D. Place adequate lighting a reasonable distance from the masonry work to ensure even illumination of the area. Do not use trough lighting.

E. Lay units with full mortar coverage on head and bed joints, taking care not to obstruct or fill cores to be grouted or insulated. Keep cavity areas free of debris.

F. Tuck-point the joints of rake scored units and tool with a _____ finish to match surrounding units <Specifiers note: select either concave profile or “V” profile. Rake finish joints are not recommended.

G. Tool all mortar joints when thumb print hard. Remove all excess mortar from the face of masonry units before it sets; **remember this is the finished surface!**

H. Cover and keep dry all materials stored at the jobsite. At the end of work each day cover the top of the wall in such a way that rain or snow will not get into the cores or wall cavity!!

3.2 CONTROL JOINTS AND HORIZONTAL JOINT REINFORCEMENT

A. Do not continue Bond Beam Reinforcement or Horizontal Joint Reinforcement across control joints unless otherwise shown on plans as indicated by the Structural Engineer.

B. Install preformed joint filler material at locations indicated on drawings. Space control joints as shown on drawings; spacing however should not exceed 1 ½ times the height of the building or 25 feet (whichever is less) for structural walls or 1 ½ times the height or 20 feet (whichever is less) for veneer walls.

C. Install horizontal joint reinforcement at 16” vertical spacing except space at 8” below finished floors and in parapet walls and where otherwise indicated on drawings. Horizontal Joint Reinforcement should always be overlapped a minimum of 6 inches and should be used on all depths of Concrete Masonry including Veneer Depth units. Do not extend horizontal reinforcement through control joints unless dictated by the Structural Engineer.

3.3 FLASHING AND WEEP HOLES

A. Install flashing and end dams at all locations shown in the plans. Keep flashing free of mortar debris. Install flashing in strict accordance with the details shown. Flashing for single wythe walls shall be “Blok Flash” by Mortar Net.

B. Install weep holes (32” O.C. recommended spacing) at courses above grade, above flashing and at waterstops over doors, windows and beam areas.

C. If weep holes are used, only 100% cotton rope is to be used in weep holes; synthetic materials (nylon, etc.) is specifically prohibited.

3.4 DAILY CLEANING

Clean completed work daily using brushes, clean rags or burlap. DO NOT allow excess mortar to dry and harden on the face of the wall; **this is a finished surface!**

3.5 FINAL CLEAN DOWN

Job site mixed muriatic acid is specifically prohibited; use Eaco Chem NMD 80 in strict accordance with manufacturer's recommendations. Thoroughly pre-wet the area to be cleaned. Allow product to work and thoroughly rinse with clean potable water when complete. All work is to be done in accordance with manufacturers recommendations. Job site sample panel must first be cleaned (using the same methods that will be used on the rest of the project) and approved by the architect before proceeding with the cleaning of the building. Job site sample panel will not be discarded or destroyed unless specifically approved by the architect.

3.6 INSPECTION

The face of the finished wall shall be free of chips, cracks, or other imperfections that would detract from the overall appearance of the wall when viewed from a right angle at a distance of 20 feet under normal diffused lighting.

END OF SECTION 6, CONCRETE MASONRY

SECTION 7 - CAST-IN-PLACE CONCRETE

PART 10 - GENERAL

10.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

10.2 SUMMARY

- A. This Section specifies cast-in place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:

10.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash and other pozzolans, ground granulated blast furnace slag, and silica fume; subject to compliance with requirements.

10.4 SUBMITTALS

- A. Product Data: For each type of product indicated.

- B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

- 1. Indicate amounts of mixing water to be withheld for later addition at Project site.

10.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.
- B. Testing Agency Qualifications: An independent agency, acceptable to the Architect, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated, as documented according to ASTM E 548.
 - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-01 or an equivalent certification program.
 - 2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician - Grade I. Testing Agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician - Grade II.
- C. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from one source, and obtain admixtures through one source from a single manufacturer.

ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:

ACI 301, "Specification for Structural Concrete,"

- 1. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

10.6 DELIVERY, STORAGE, AND HANDLING

- A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.

PART 11 - PRODUCTS

11.1 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 - 1. Plywood, metal, or other approved panel materials.

2. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:
 - a. High-density overlay, Class 1 or better.
 - b. Medium-density overlay, Class 1 or better; mill-release agent treated and edge sealed.
 - c. Structural 1, B-B or better; mill oiled and edge sealed.
 - d. B-B (Concrete Form), Class 1 or better; mill oiled and edge sealed.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.

11.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
- B. Plain-Steel Wire: ASTM A 82.
- C. Plain-Steel Welded Wire Reinforcement: ASTM A 185, plain, fabricated from as-drawn steel wire into flat sheets.

11.3 REINFORCEMENT ACCESSORIES

- A. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows: For concrete surfaces exposed to view where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.

11.4 CONCRETE MATERIALS

1. Portland Cement: ASTM C 150, Type I/II
- B. Normal-Weight Aggregates: ASTM C 33, Class 3S coarse aggregate or better, graded. Provide aggregates from a single source.
 1. Maximum Coarse-Aggregate Size 1 inch nominal.
 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: ASTM C 94/C 94M and potable.

ADMIXTURES

A. Air-Entraining Admixture: ASTM C 260.

B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.

2. Retarding Admixture: ASTM C 494/C 494M, Type B.

3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.

4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.

5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.

6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

C. ACCEPTABLE MANUFACTURER

a. SCOFIELD, A business unit of Sika Corporation (herein referred to as SCOFIELD), Douglasville, Georgia (800) 800-9900 or the appropriate local contact.

D. MATERIALS

a. Colored Admixture for Integrally Colored Concrete; CHROMIX, Admixtures for Color-Conditioned Concrete including CHROMIX P Admixtures, CHROMIX G Admixtures, CHROMIX ML Admixtures or CHROMIX L Admixtures; SCOFIELD.

1. Admixture shall be a colored, water-reducing, admixture containing no calcium chloride with coloring agents that are lime-proof and ultra-violet resistant.

2. Color admixture shall conform to the requirements of ACI 303.1, ASTM C979, ASTM C494, and ASSHTO M194.

3. Raw pigments are not an equivalent and may not be substituted.

b. Curing Compound for Integrally Colored Concrete: Curing compound shall comply with ASTM C309 and be of same manufacturer as color admixture, for use with integrally colored concrete.

1. Exterior Integrally Colored Concrete: LITHOCHROME, Colorwax, SCOFIELD. Use to cure exterior flatwork that will be allowed to cure naturally with only occasional maintenance.

2. Interior Integrally Concrete: COLORCURE Colorwax, Concrete Sealer (Pigmented) or CEMENTONE, Clear Sealer (Clear); SCOFIELD. Use to cure interior flatwork that will receive regular maintenance.

E. COLORS

- a. Concrete Color
 - 1. Scofield Color Chart C-11 Desert Sand
 - 2. Curing Compound- Color to match Integrally Color Concrete.

11.5 WATERSTOPS

- A. Self-Expanding Butyl Strip Waterstops: Manufactured rectangular or trapezoidal strip, butyl rubber with sodium bentonite or other hydrophilic polymers, for adhesive bonding to concrete, 3/4 by 1 inch.

1. Products:

- a. Colloid Environmental Technologies Company; Volclay Waterstop-RX.
- b. Concrete Sealants Inc.; Conseal CS-231.
- c. Greenstreak; Swellstop.
- d. Henry Company, Sealants Division; Hydro-Flex.
- e. JP Specialties, Inc.; Earthshield Type 20.
- f. Progress Unlimited, Inc.; Superstop.
- g. TCMiraDRI; Mirastop.

- B. Plastic Vapor Retarder: Polyethylene sheet, ASTM D 4397, not less than 10 mils. Include manufacturer's recommended adhesive or pressure-sensitive joint tape.

1. Products:

- a. Fortifiber Corporation; Moistop Plus.
- b. Raven Industries Inc.; Dura Skrim
- c. Reef Industries, Inc.; Griffolyn Type
- d. Stego Industries, LLC; Stego Wrap, 10 mils.

- C. Granular Fill: Clean mixture of crushed stone or crushed or uncrushed gravel; ASTM D 448, Size 57, with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve.

- D. Fine-Graded Granular Material: Clean mixture of crushed stone, crushed gravel, and manufactured or natural sand; ASTM D 448, Size 10, with 100 percent passing a 3/8-inch sieve, 10 to 30 percent passing a No. 100 sieve, and at least 5 percent passing No. 200 sieve; complying with deleterious substance limits of ASTM C 33 for fine aggregates.

11.6 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.

- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

- C. Water: Potable.

11.7 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.
- B. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.
- C. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade to suit requirements, and as follows:
 - 1. Types I and II, non-load bearing, IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.

11.8 REPAIR MATERIALS

- A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch and that can be feathered at edges to match adjacent floor elevations.
 - 1. Cement Binder: ASTM C 150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
 - 2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
 - 3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by underlayment manufacturer.
 - 4. Compressive Strength: Not less than 4000 psi at 28 days when tested according to ASTM C 109/C 109M.
- B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch and that can be feathered at edges to match adjacent floor elevations.
 - 1. Cement Binder: ASTM C 150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
 - 2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.
 - 3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by topping manufacturer.
 - 4. Compressive Strength: Not less than 5000 psi at 28 days when tested according to ASTM C 109/C 109M.

11.9 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.
- B. Cementitious Materials:
 - 1. Ground Granulated Blast-Furnace Slag: 50 percent.
 - 2. Combined Fly Ash or Pozzolan and Ground Granulated Blast-Furnace Slag: 50 percent portland cement minimum, with fly ash or pozzolan not exceeding 25 percent.
 - 3. Silica Fume: 10 percent.
 - 4. Combined Fly Ash, Pozzolans, and Silica Fume: 35 percent with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
 - 5. Combined Fly Ash or Pozzolans, Ground Granulated Blast-Furnace Slag, and Silica Fume: 50 percent with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
- C. Limit water-soluble, chloride-ion content in hardened concrete to 1.0 percent by weight of cement.
- D. Admixtures: Use admixtures according to manufacturer's written instructions.
 - 1. Use admixture in concrete, as required, for placement and workability.
 - 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 - 3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.

11.10 FIBER REINFORCEMENT

- A. Synthetic Fiber: Fibrillated or monofilament polypropylene fibers engineered and designed for use in concrete, complying with ASTM C 1116, Type III, 1.2 to 1-1/2 inches long.
- B. Available Products: Subject to compliance with requirements, products that may be incorporated into the work include, but are not limited to, the following:
- C. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Fibrillated Fibers:
 - a. Fibrasol F; Axim Concrete Technologies
 - b. Fibermesh; Fibermesh, Div. of Synthetic Industries
 - c. Forta; Forta Corporation.

d. Grace Fibers; W.R. Grace & Co., Construction Products Div

11.11 FABRICATING REINFORCEMENT

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

11.12 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94 and furnish batch ticket information.
 - 1. When air temperature is between 85 and 90 deg F reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F reduce mixing and delivery time to 60 minutes.

PART 12 - EXECUTION

12.1 FORMWORK

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Limit concrete surface irregularities, designated by ACI 347R as abrupt or gradual, as follows:
 - 1. Class B, 1/4 inch for rough-formed finished surfaces.
- D. Construct forms tight enough to prevent loss of concrete mortar.
- E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
 - 1. Do not use rust-stained steel form-facing material.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.

- H. Chamfer exterior corners and edges of permanently exposed concrete.
- I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

12.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 1. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC's "Code of Standard Practice for Steel Buildings and Bridges."
 - 2. Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.
 - 3. Install dovetail anchor slots in concrete structures as indicated.

12.3 REMOVING AND REUSING FORMS

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F (10 deg C) for 24 hours after placing concrete, if concrete is hard enough to not be damaged by form-removal operations and curing and protection operations are maintained.
- B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.

12.4 VAPOR RETARDERS

- A. Plastic Vapor Retarders: Place, protect, and repair vapor retarders according to ASTM E 1643 and manufacturer's written instructions.

12.5 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
 - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that would reduce bond to concrete.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- E. Install welded wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

12.6 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
 - 1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
- C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
- D. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt coat one-half of dowel length to prevent concrete bonding to one side of joint.

12.7 WATERSTOPS

- A. Flexible Waterstops: Install in construction joints and at other joints indicated to form a continuous diaphragm. Install in longest lengths practicable. Support and protect exposed waterstops during progress of the Work. Field fabricate joints in waterstops according to manufacturer's written instructions.
- B. Self-Expanding Strip Waterstops: Install in construction joints and at other locations indicated, according to manufacturer's written instructions, adhesive bonding, mechanically fastening, and firmly pressing into place. Install in longest lengths practicable.

12.8 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect.
- C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.
 - 1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
- E. Hot-Weather Placement: Comply with ACI 301 and as follows:
 - 1. Maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

12.9 FINISHING FORMED SURFACES

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
 - 1. Apply to concrete surfaces not exposed to public view.

- B. Rubbed Finish: Apply the following to smooth-formed finished as-cast concrete where indicated:
1. Smooth-Rubbed Finish: Not later than one day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
 2. Grout-Cleaned Finish: Wet concrete surfaces and apply grout of a consistency of thick paint to coat surfaces and fill small holes. Mix one part portland cement to one and one-half parts fine sand with a 1:1 mixture of bonding admixture and water. Add white portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Scrub grout into voids and remove excess grout. When grout whitens, rub surface with clean burlap and keep surface damp by fog spray for at least 36 hours.
- C. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

12.10 FINISHING FLOORS AND SLABS

- A. General: Comply with ACI 302.1R recommendations for screeding, restraighening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Scratch Finish: While still plastic, texture concrete surface that has been screeded and bull-floated or darbied. Use stiff brushes, brooms, or rakes to produce a profile amplitude of 1/4 inch in 1 direction.
1. Apply scratch finish to surfaces indicated.
- C. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraighening until surface is left with a uniform, smooth, granular texture.
1. Apply float finish to surfaces indicated.
- D. Trowel Finish: After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.
1. Apply a trowel finish to surfaces indicated.
 2. Finish surfaces to the following tolerances, according to ASTM E 1155, for a randomly trafficked floor surface:

- a. Specified overall values of flatness, F(F) 25; and of levelness, F(L) 20; with minimum local values of flatness, F(F) 17; and of levelness, F(L) 15.
- E. Trowel and Fine-Broom Finish: Apply a first trowel finish to surfaces indicated. While concrete is still plastic, slightly scarify surface with a fine broom.
 - 1. Comply with flatness and levelness tolerances for trowel finished floor surfaces.
- F. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, and ramps, and elsewhere as indicated.
 - 1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with Architect before application.

12.11 MISCELLANEOUS CONCRETE ITEMS

- A. Filling In: Fill in holes and openings left in concrete structures, unless otherwise indicated, after work of other trades is in place. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete the Work.
- B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.

12.12 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for the remainder of the curing period.
- D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.
- E. Cure concrete according to ACI 308.1, by one or a combination of the following methods:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 - a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.
 - b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
 - c. Cure concrete surfaces to receive floor coverings with either a moisture-retaining cover or a curing compound that the manufacturer certifies will not interfere with bonding of floor covering used on Project..
3. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

12.13 JOINT FILLING

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
 1. Defer joint filling until concrete has aged at least one month(s). Do not fill joints until construction traffic has permanently ceased.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.

12.14 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.

- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension in solid concrete, but not less than 1 inch in depth. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
 2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
 3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.
- D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
 2. After concrete has cured at least 14 days, correct high areas by grinding.
 3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
 4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.
 5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
 6. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
 7. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and

loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.

- E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.
- F. Repair materials and installation not specified above may be used, subject to Architect's approval.

12.15 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Contractor shall engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.
- B. Inspections:
 - 1. Verification of use of required design mixture.
 - 2. Concrete placement, including conveying and depositing.
 - 3. Verification of concrete strength before removal of shores and forms from beams and slabs.
- C. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 - 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
 - 2. Testing Frequency: Obtain at least one composite sample for each 50 cu. yd. or fraction thereof of each concrete mixture placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 - 3. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
 - 4. Air Content: ASTM C 231, pressure method, for normal-weight concrete; ASTM C 173/C 173M, volumetric method, for structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 - 5. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.
 - 6. Unit Weight: ASTM C 567, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 - 7. Compression Test Specimens: ASTM C 31/C 31M.

- a. Cast and laboratory cure one set of two standard cylinder specimens for each composite sample.
 - b. Cast and field cure one set of two standard cylinder specimens for each composite sample.
 - 8. Compressive-Strength Tests: ASTM C 39/C 39M; test one set of two laboratory-cured specimens at 7 days and one set of two specimens at 28 days.
 - a. Test one set of two field-cured specimens at 7 days and one set of two specimens at 28 days.
 - b. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
 - 9. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
 - 10. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
 - 11. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
 - 12. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
 - 13. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Architect.
 - 14. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
 - 15. Correct deficiencies in the Work that test reports and inspections indicate dos not comply with the Contract Documents.
- D. Measure floor and slab flatness and levelness according to ASTM E 1155 within 48 hours of finishing.

END OF SECTION 7, CAST-IN-PLACE CONCRETE

SECTION 8 – FENCING

FENCING 1

AMERISTAR FENCE PRODUCTS

Montage Plus® - Steel Ornamental Fence System – Fusion Welded and Rackable

PART 1 - GENERAL

1.01 WORK INCLUDED

The contractor shall provide all labor, materials and appurtenances necessary for installation of the welded ornamental steel fence system defined herein at (specify project site).

1.02 RELATED WORK

Section ____ - Earthwork

Section ____ - Concrete

1.03 SYSTEM DESCRIPTION

The manufacturer shall supply a total fence system of (specify Montage Plus® standard picket space or Montage Plus® Pool, Pet & Play® 3" air space) **Welded and Rackable** (ATF – All Terrain Flexibility) Ornamental Steel (for standard picket space, specify Classic™, Majestic™, or Genesis™; for 3" air space, specify Classic™, Majestic™, or Genesis™) design. The system shall include all components (i.e., panels, posts, gates and hardware) required.

1.04 QUALITY ASSURANCE

The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.

1.05 REFERENCES

- ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process.
- ASTM B117 - Practice for Operating Salt-Spray (Fog) Apparatus.
- ASTM D523 - Test Method for Specular Gloss
- ASTM D714 - Test Method for Evaluating Degree of Blistering in Paint.
- ASTM D822 - Practice for Conducting Tests on Paint and Related Coatings and Materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
- ASTM D1654 - Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
- ASTM D2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.

- ASTM D2794 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
- ASTM D3359 - Test Method for Measuring Adhesion by Tape Test.
- ASTM F2408 – Ornamental Fences Employing Galvanized Steel Tubular Pickets.

1.06 SUBMITTAL

The manufacturer's literature shall be submitted prior to installation.

1.07 PRODUCT HANDLING AND STORAGE

Upon receipt at the job site, all materials shall be checked to ensure that no damage occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism and theft.

PART 2 - MATERIALS

2.01 MANUFACTURER

The fence system shall conform to (specify Montage Plus standard picket space or Montage Plus Pool, Pet & Play 3" air space) ***Welded and Rackable*** (ATF – All Terrain Flexibility) Ornamental Steel, (for standard picket space, specify Classic, Majestic, or Genesis; for 3" air space, specify Classic, Majestic, or Genesis) design, (specify extended picket or flush) bottom rail treatment, (specify 2-Rail, 3-Rail or 3-Rail with Double Rings) style manufactured by Ameristar Fence Products, Inc., in Tulsa, Oklahoma.

2.02 MATERIAL

A. Steel material for fence panels and posts shall conform to the requirements of ASTM A653/A653M, with a minimum yield strength of 45,000 psi (310 MPa) and a minimum zinc (hot-dip galvanized) coating weight of 0.60 oz/ft² (184 g/m²), Coating Designation G-60.

B. Material for pickets shall be 3/4" square x 18 Ga. tubing. The rails shall be steel channel, 1.5" x 1.4375" x 14 Ga. Picket holes in the rail shall be spaced (specify 4.675" o.c. for standard picket space or 3.500" o.c. for 3" air space). Fence posts and gate posts shall meet the minimum size requirements of Table 1.

2.03 FABRICATION

A. Pickets, rails and posts shall be pre-cut to specified lengths. Rails shall be pre-punched to accept pickets.

B. Pickets shall be inserted into the pre-punched holes in the rails and shall be aligned to standard spacing using a specially calibrated alignment fixture. The aligned pickets and rails shall be joined at each picket-to-rail intersection by Ameristar's proprietary fusion welding process, thus completing the rigid

panel assembly (Note: The process produces a virtually seamless, spatter-free good-neighbor appearance, equally attractive from either side of the panel).

C. The manufactured panels and posts shall be subjected to an inline electrode position coating (E-Coat) process consisting of a multi-stage pretreatment/wash (with zinc phosphate), followed by a duplex application of an epoxy primer and an acrylic topcoat. The minimum cumulative coating thickness of epoxy and acrylic shall be 2 mils (0.058 mm). The color shall be (specify Black or Bronze). The coated panels and posts shall be capable of meeting the performance requirements for each quality characteristic shown in Table 2 (Note: The requirements in Table 2 meet or exceed the coating performance criteria of ASTM F2408).

D. The manufactured fence system shall be capable of meeting the vertical load, horizontal load, and infill performance requirements for Industrial weight fences under ASTM F2408.

E. Gates shall be fabricated using fusion welded ornamental panel material and 1-3/4" sq. x 14ga. gate ends. All rail and upright intersections shall be joined by welding. All picket and rail intersections shall also be joined by welding

PART 3 - EXECUTION

3.01 PREPARATION

All new installation shall be laid out by the contractor in accordance with the construction plans.

3.02 INSTALLATION

Fence post shall be spaced according to Table 3, plus or minus ½". For installations that must be raked to follow sloping grades, the post spacing dimension must be measured along the grade. Fence panels shall be attached to posts with brackets supplied by the manufacturer. Posts shall be set in concrete footers having a minimum depth of 36" (Note: In some cases, local restrictions of freezing weather conditions may require a greater depth). The "Earthwork" and "Concrete" sections of this specification shall govern material requirements for the concrete footer. Posts setting by other methods such as plated posts or grouted core-drilled footers are permissible only if shown by engineering analysis to be sufficient in strength for the intended application.

3.03 FENCE INSTALLATION MAINTENANCE

When cutting/drilling rails or posts adhere to the following steps to seal the exposed steel surfaces; 1) Remove all metal shavings from cut area. 2) Apply zinc-rich primer to thoroughly cover cut edge and/or drilled hole; let dry. 3) Apply 2 coats of custom finish paint matching fence color. Failure to seal exposed surfaces per steps 1-3 above will negate warranty. Ameristar spray cans or paint pens shall be used to prime and finish exposed surfaces; it is recommended that paint pens be used to prevent overspray. Use of non-Ameristar parts or components will negate the manufactures' warranty.

3.04 GATE INSTALLATION

Gate posts shall be spaced according to the manufacturers' gate drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected. Type and quantity of gate hinges shall be based on the application; weight, height, and number of gate cycles. The manufacturers' gate drawings shall identify the necessary gate hardware required for the application. Gate hardware shall be provided by the manufacture of the gate and shall be installed per manufacturer's recommendations.

3.05 CLEANING

The contractor shall clean the jobsite of excess materials; post-hole excavations shall be scattered uniformly away from posts.

Table 1 – Minimum Sizes for Montage Plus Posts		
<u>Fence Posts</u>	<u>Panel Height</u>	
2-1/2" x 16 Ga.	Up to & Including 6' Height	
<u>Gate Leaf</u>	<u>Gate Height</u>	
	<u>Up to & Including 4'</u>	<u>Over 4' Up to & Including 6'</u>
Up to 4'	2-1/2" x 14 Ga.	3" x 12 Ga.
4'1" to 6'	3" x 12Ga.	3" x 12 Ga.
6'1" to 8'	3" x 12 Ga.	4" x 12 Ga.

Table 2 – Coating Performance Requirements		
<u>Quality Characteristics</u>	<u>ASTM Test Method</u>	<u>Performance Requirements</u>
Adhesion	D3359 – Method B	Adhesion (Retention of Coating) over 90% of test area (Tape and knife test).
Corrosion Resistance	B117, D714 & D1654	Corrosion Resistance over 1,500 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters).
Impact Resistance	D2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).

Weathering Resistance	D822 D2244, D523 (60° Method)	Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).
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Table 3 – Montage Plus – Post Spacing By Bracket Type						
Span	For CLASSIC, GENESIS, & MAJESTIC 8' Nominal (91.95" Rail)					
Post Size	2-1/2"	2-1/2"	2-1/2"	3"	2-1/2"	3"
Bracket Type	Montage Commercial Universal (BB112)	Montage Commercial Line Blvd. (BB114)	Montage Commercial Flat Mount (BB111)		Montage Commercial Swivel (BB113)*	
Post Settings ± ½" O.C.	95-1/2"	95-1/2"	95-1/2"	96"	*95-1/2"	*96"
*Note: When using BB113 swivel brackets on either or both ends of a panel installation, care must be taken to ensure the spacing between post and adjoining pickets meets applicable codes. This will require trimming one or both ends of the panel.						

FENCING 2

VINYL FENCING

End of Section 8, FENCING

SECTION 9 PLAYGROUND/EXERCISE EQUIPMENT & SURFACING

BID SPECIFICATIONS

The following specifications were developed to ensure the purchase of a safe, accessible, high capacity, and durable play structure. Play equipment components bid shall be in accordance with the drawings and specifications contained in this document

Details and specifications representing the minimum acceptable standard of performance and quality have been based on playground products by Landscape Structures, Incorporated, Delano, MN 800-328-0035.

SECTION 02881 PLAYGROUND EQUIPMENT SPECIFICATIONS

1.01 GENERAL REQUIREMENTS

The provisions of the entire contract documents are hereby made a part of this section.

1.02 STANDARDS

All proposals for the playground design construction and installation shall meet the requirements and recommendations of the applicable portions of the latest edition of Guidelines by the Consumer Product Safety Commission Publication No. 325, Standards by the American Society for Testing and Materials (ASTM Standard F1487-93) and the Americans with Disabilities Act Architectural Guidelines (ADAAG) as set forth in the Federal Register. Manufacturers of play equipment must be certified by the International Organization for Standardization (ISO) for 9001:2015 – Quality Standards certifying manufacturer's processes and 14001:2015 – Standards for Environmental Protection and Natural Resource Preservation. Playground equipment must be installed by a Landscape Structures, Inc. Certified playground installer and must be a NRPA Certified installer.

1.03 SUBMITTALS

- A. Submit product data on all materials specified herein.
- B. Submit complete shop drawings showing all dimensions, details, and specifications of equipment.
- C. Submit colored 3-D drawings
- D. Submit proof of warranty as specified herein.
- E. Submit a detailed list of any deviations from the specified product.

- F. Submit IPEMA certification showing compliance with all applicable portions of the current ASTM F-1487-93 Standard.
- G. Submit documentation that the Playground Equipment Manufacturer is **ISO 9001:2015** certified (Quality Management Standard)
- H. **Submit documentation that the Playground Equipment Manufacturer is ISO 14001:2015** certified (Environmental Management Standard)

PART 2 - PRODUCTS

2.01 MANUFACTURER

Playground equipment shall be manufactured by Landscape Structures, Inc.

2.02 SCOPE

This section includes all materials, components, and associated accessories to complete and install the playground equipment as specified. NOTE: the General Contractor will prepare the site for each area prior to installation of equipment. In addition, the City will install the sidewalks and curbs in and around the play area shown on the renderings.

2.03 GENERAL SPECIFICATIONS

All the materials used in the manufacturing of Landscape Structures PlayBooster equipment have a proven track record of durability and are widely used in the playground industry. All playstructures have been certified and validated to be in conformance with the ASTM F1497 Standard.

- A. **MATERIAL:** All materials shall be structurally sound and suitable for safe play. Durability shall be insured on all steel parts by the use of time-tested coatings such as zinc plating, galvanizing, ProShield® finish, Tendertuff™ (PVC) coating, etc. Color shall be specified.
- B. **HARDWARE (FASTENERS):** Primary fasteners shall be socketed and pinned tamper-proof in design, stainless steel (SST) per ASTM #F879 unless otherwise indicated. All primary fasteners shall include a locking patch type material that will meet the minimum torque requirements of IFI-125. Manufacturer to provide special tools for pinned hex fasteners. **NOTE: HARDWARE THAT IS NOT VANDAL RESISTANT AS STATED ABOVE, SHALL NOT BE ACCEPTABLE.**
- C. **TENDERTUFF COATING:** All metal components to be Tendertuff-coated shall be thoroughly cleaned in a hot phosphatizing pressure washer, and then primed with a water-based thermosetting solution. Primed parts shall be preheated prior to dipping in U.V. stabilized, liquid poly vinyl chloride (PVC), and then salt cured at approximately 400 degrees. The finished coating shall be approximately .080" thick plus or minus .020", at

an 85-durometer hardness and have a matte finish. Decks in Brown or Gray. Wiggle Ladders, Loop Ladders and Steering Wheels available in standard colors.

- D. **PROSHIELD FINISH:** All metal components with ProShield finish shall be thoroughly cleaned and pretreated through a multi-stage wash system. Parts are then thoroughly dried, preheated and processed through a set of powder spray guns where a minimum .002" of epoxy primer is applied. A minimum .004" of architectural-grade Super Durable polyester TGIC powder is applied. The average ProShield film thickness is .006".:

ProShield is formulated and tested per the following ASTM standards. Each color must meet or exceed the ratings listed below:

1. Hardness (D-3363) rating 2H
2. Flexibility (D522) pass 1/8" mandrel
3. Impact (D2794) rating minimum 80 inch-pounds
4. Salt Fog Resistance (B-117 & D1654) 4,000 hrs; rating 6 or greater
5. UV Exposure (G154, 340 bulb) 3,000 hrs; rating delta E of 2 and 90% gloss retention
6. Adhesion (D-3359, method B) rating 5B

Paint line shall employ a "checkered" adhesion test daily.

(38) standard colors are available.

- E. **DECKS:** All decks shall be of modular design and have 5/16" diameter holes on the standing surface. There shall be minimum of (4) slots in each face to accommodate face mounting of components. Decks shall be manufactured from a single piece of low carbon 12 gauge (.105") sheet steel conforming to ASTM specification A-1011. The sheet shall be perforated with a return flange on the perimeter to provide the reinforcement necessary to ensure structural integrity. There shall be no unsupported area larger than 3.5 square feet. The unit shall then be Tendertuff coated brown or gray only. Decks shall be designed so that all sides are flush with the outside edge of the supporting posts.
- F. **ROTATIONALLY MOLDED POLYETHYLENE PARTS:** These parts shall be molded using prime natural linear low-density polyethylene with a tensile strength of 2400 psi per ASTM D638. Rotational molding resin is compounded with color and UV-stabilizing additives with a nominal wall thickness typically 1/4" with some variation depending upon product type. Standard colors are available.

- G. **RECYCLED PERMALENE® PARTS:** These parts shall be manufactured from 3/4" high-density polyethylene that has been specially formulated for optimum UV stability and color retention. Available in a three-layer product with (2) .100" thick colored exterior layers over a .550" thick recycled Black interior core. Standard colors are available.
- H. **FOOTINGS:** Unless otherwise specified, the bury on all footings shall be 34" below Finished Grade (FG) on all in-ground play events/posts.
- I. **HARDWARE PACKAGES:** Each hardware package shall be labeled with the part number, description, package weight, a bar code linking the hardware package to the job number, assembler's name, date and time the package was assembled, work center number, and work order number. Installation Documentation: All shipments shall include a packet of order-specific, step-by-step instructions for assembly of each component, including equipment assembly diagrams, estimated hours for assembly, footing dimensions, concrete quantity for direct bury components, fall height information, and area required information.
- I. **PACKING LIST:** All shipments shall include a packing list for each skid/container, specifying the part numbers and quantities on each skid or within each container.
- J. **PACKAGING:** Components shall be individually wrapped or bulk wrapped to provide protection during shipment. Small parts and hardware packages will be placed in crates for shipment. The components and crates are then shrink-wrapped to skids (pallets) to ensure secure shipping.
- K. **MAINTENANCE KIT:** A maintenance kit shall be provided for each design ordered. The kit will include a maintenance document with recommendations on how often to inspect, what to look for and what to do to keep the equipment in like-new condition. The kit also includes appropriate color touch-up paint and additional installation tools for the tamperproof fasteners.

2.04 COMPONENTS AND PLAY EVENTS

- A. The Mid-Town Green Playground shall include the following items as manufactured by Landscape Structures;
 - 1. Design 1167137-02-04
 - a) We-Go-Round w Nature Digifuse or Custom Panels
 - b) ZipKrooz 34' with additional bay with assisted seat
 - c) Rhapsody Kettle Drum
 - d) Rhapsody Vivo Metallophone
 - e) Custom Arched Sign with Posts – on Digifuse Panel
 - f) 3 Bays Single Post Swings
 - (1) 2 belt seats
 - (2) 1 friendship swing for all ages
 - (3) 1 bucket seat

- (4) 1 molded bucket seat with harness
- g) Geoplex 3 Spoke Tower w/ Cables
- h) 12' Ramp w/ Guardrails and curbs
 - (1) Rollerslide
 - (2) Step Ladder
 - (3) Hexagon Deck
 - (4) Navigator Reach Panel
 - (5) Trail Tracker Reach Panel
 - (6) Zoo Panel
 - (7) Grab bar
 - (8) Transfer from deck to deck for access to rollerslide
- i) Independent Panel with Custom Artwork and Face Hole double sided

2.05 SAFETY SURFACING

- A. Protective Playground Surfacing to consist of Unitary Rubber Surfacing meeting the correct fall heights of proposed equipment.
- B. Installation of all safety surfacing

2.06 OUTDOOR EXERCISE EQUIPMENT

- A. The Mid-Town Green Park shall include the following Outdoor Exercise items as manufactured by Landscape Structures;
 - 1. Design 1169497-01-02
 - a. Mobility & Tai Chi Wheels (Surface Mounted) with shared post
 - b. Elliptical (Surface Mounted)
 - c. Assisted Row/Push-Up (Surface Mounted)
 - d. Cardio Stepper & Ab Crunch/Leg Lift (Surface Mounted) with shared post
 - e. Chest/Back Press & Squat Press (Surface Mounted) with shared post
 - f. Hand Cyclor & Pull-Up/Dip (Surface Mounted) with shared post
 - g. Intro Sign (Surface Mounted)

PART 3 - INSTALLATION

Install all materials in strict accordance with manufacturer's recommendations and instructions.

The installation shall be by a FACTORY CERTIFIED INSTALLER holding NPSI certificate for playground installation.

PART 4 – WARRANTY

Landscape Structures Inc. warrants that all play structures and/ or equipment sold will conform in kind and in quality to the specifications manual for the products identified in the Acknowledgment of Order and will be free of defects in manufacturing and material. Manufacturer further warrants:

- **100-Year Limited Warranty** on all Playbooster® and Playshaper® aluminum posts, stainless steel fasteners, clamps, beams and caps, against structural failure due to corrosion/natural deterioration or manufacturing defects, and on Playbooster® steel posts against structural failure due to material or manufacturing defects.

- **15-Year Limited Warranty** on all plastic components, edging, all steel and aluminum components not covered above, Mobius® climbers, Rhapsody Outdoor Musical Instruments, decks, TenderTuff™ coatings (Except Wiggle Ladders, Chain Ladders and Swing Chain) against structural failure due to material or manufacturing defects. TuffTurf® tiles against material or manufacturing defects.

8-YEAR LIMITED WARRANTY

On Aeronet® climbers and climbing cables against defects in materials or manufacturing defects.

- **5-Year Limited Warranty** on Rhapsody® cables and mallets against defects in materials or manufacturing defects, on polycarbonate panels against defects in materials or manufacturing defects, and on bamboo panels against delamination due to defects in materials or manufacturing defects. Does not cover damage which may be associated with the natural characteristics of bamboo aging, including but not limited to discoloration, splitting, cracking, warping or twisting, nor the formation of algae, mold and other forms of fungal-type bodies on bamboo.
- **3-Year Limited Warranty** on all other parts, i.e.: all swing seats and hangers, Mobius climber handholds, Wiggle Ladders, Chain Ladders and ProGuard Swing Chain, Track Ride trolleys and bumpers, all rocking equipment including Sway Fun® gliders, belting material, HealthBeat® resistance mechanism, Seesaws, etc., against failure due to corrosion/ natural deterioration or manufacturing defects.

The environment near a saltwater coast can be extremely corrosive. Some corrosion and/or deterioration is considered normal wear in this environment. Product installed within 500 yards (457 meters) of a saltwater shoreline will only be covered for half the period of the standard product warranty, up to a maximum of five years, for defects caused by corrosion. Products installed in direct contact with saltwater or that are subjected to salt spray are not covered by the standard warranty for any defects caused by corrosion.

This warranty does not include any cosmetic issues or wear and tear from normal use of the product, or misuse or abuse of the product. It is valid only if the playstructures and/or equipment are erected to conform with Landscape Structures™ installation instructions and maintained according to the maintenance procedures furnished by Landscape Structures Inc.

PART 5 - MANUFACTURER REQUIREMENTS

The manufacturer must have product liability insurance of at least \$10,000,000 from a reputable insurance company and must have manufactured the specified products for at least 15 years.

Material Specifications

Quote: 1167137-02-04 PlayBooster® (5-12 years)
12/9/2022

120325A Ramp Berm Exit Plate Concrete Wall

Ramp Plate: Fabricated from 10 GA (.135") (3,43 mm) HRPO steel plate with 3/8" x 1" (9,53 mm x 25 mm) stainless steel mounting stud. Finish: TenderTuff, brown in color.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

174815A 12' Ramp w/Guardrails and Curbs

Clamps: Cast aluminum. Finish: ProShield, color specified.

Curb Panel: Permalene, color specified.

Bridge/Ramp: Weldment comprised of 12 GA (.105") (2,66 mm) sheet HRPO steel conforming to ASTM A1011 and 3/16" (4,75 mm) HR flat steel. Standing surface is perforated with 5/16" (7,92 mm) diameter holes. Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Guardrail: Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080"-.090") (2,03 mm-2,29 mm) wall galvanized steel tube, 1.900" (48,26 mm) O.D. RS20 (.085" - .095") (2,16 mm-2,41 mm) wall galvanized steel tube, 3/16" (4,75 mm) HRPO flat steel, 1/4" (6,35 mm) HRPO flat steel and 1/4" (6,35 mm) HRPO flat steel. Finish: ProShield, color specified.

116246A Step Ladder 32"Dk DB

Step Ladder Support: Weldment comprised of 1.660" (42,16 mm) O.D. RS-20 (.085" - .095") (2,16 mm-2,41 mm) galvanized steel tubing and 1/4" x 2" (6,35 mm x 51 mm) zinc plated steel strap. Finish: ProShield, color specified.

Handrail: Formed from 1.125" (28,58 mm) O.D. x 11 GA (.120") (3,04 mm) galvanized steel tubing. Finish: TenderTuff, color specified.

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Handhold Panel: Permalene, color specified.

Spacer Tube: Made from 6061-T6 aluminum 7/8" (22,23 mm) O.D. x 1 11/16" (42,85 mm). Finish: ProShield, color specified.

Step Ladder: Fabricated and formed from 14 GA (.075") (1,91 mm) HRPO sheet steel with 5/16" (7,92 mm) perforated holes for steps and welded 12 GA (.105") (2,66 mm) HRPO sheet steel for sides. Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

No Material Spec for 008984

No Material Spec for 030181

111231A Triangular Tenderdeck

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Triangular Deck: Flange formed from 12 GA (.105") (2,66 mm) sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" (7,92 mm) diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 37 3/4" (66,68 mm x 958,85 mm). Finish: TenderTuff, color specified.

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

119646A Tri-Deck Extension

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Triangular Deck Extension: Flange formed from 12 GA (.105") (2,66 mm) sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" (7,92 mm) diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size of two of the three sides measures 2 5/8" x 37 7/8" (66,68 mm x 962,03 mm) on the face of the deck and the other side measures 2 5/8" x 43 3/4" (66,68 mm x 1111,25 mm). Finish: TenderTuff, color specified.

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

121948A Kick Plate 8" Rise

Kick Plate: Fabricated from 11 GA (.120") (3,04 mm) HR flat steel. Finish: TenderTuff, brown or gray in color.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

178710A Hexagon Tenderdeck

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Deck Brace: Fabricated from 3/8" x 1 3/4" x 28 1/2" long zinc plated steel strap. Finish: ProShield®, silver in color.

Hex Deck: Flange formed from 12 GA (.105") (2,66 mm) sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" (7,92 mm) diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 36 3/4" (66,68 mm x 933,45 mm) per each of the six sides for an overall dimension of 77 5/8" (1971,68 mm) face to face. Finish: TenderTuff, color specified.

115227A Zoo Panel Above Deck

Panels: Permalene, color specified.

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Spacer Tube: Made from 6061-T6 aluminum 7/8" (22,23 mm) O.D. x 1 11/16" (42,85 mm). Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Angled Panel Bracket: Weldment comprised of .190" (4,83 mm) thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" (28,58 mm) O.D. x 1 1/2" (38,1 mm) long. Finish: ProShield, color specified.

127439A Navigator Reach Panel Above Deck

Angle: Fabricated from formed 11 GA (.120") (3,04 mm) HRPO sheet steel. Finish: ProShield, color specified.

Wheel: 12" (305 mm) diameter cast A319.1 aluminum alloy. Shaft-303 stainless steel. Finish: TenderTuff, color specified.

Wheel Bracket: Weldment comprised of formed 3/16" (4,75 mm) plate and 5/8" (15,88 mm) O.D. stainless steel shaft. Finish: ProShield, Black in color.

Access Clamp: Weldment comprised of 3/8" (9,53 mm) HRPO steel plate and 1/4" x 1 3/4" (6,35 mm x 44,45 mm) wide steel clamp. Finish: ProShield, color specified.

Permalene Panel: Two color panel measures 34" (864 mm) wide x 13" (330 mm) high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Hub: One-color Permalene, color specified.

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

127440A Trail Tracker Reach Panel Above Deck

Angle: Fabricated from formed 11 GA (.120") (3,04 mm) HRPO sheet steel. Finish: ProShield, color specified.

Access Clamp: Weldment comprised of 3/8" (9,53 mm) HRPO steel plate and 1/4" x 1 3/4" (6,35 mm x 44,45 mm) wide steel clamp. Finish: ProShield, color specified.

Permalene Panel: Two color panel measures 34" (864 mm) wide x 13" (330 mm) high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

191031A Accessible Panel Curb

Curb Panel: Permalene, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

222231A GeoPlex 3-Spoke Tower w/Cables Steel Post Included DB

Climbing Wall: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Brace: Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,81 mm-3,07 mm) wall galvanized steel tubing, 1/4" (6,35 mm) thick HRPO steel plate and 7 GA. (.179") (4,54mm) thick HRPO steel plate. Finish: ProShield®, black in color.

Locking Clamp: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified. Wall measures 37" (939 mm) wide x 34" (863 mm) High.

Clamp: 369.1 Aluminum. Finish: ProShield®, color specified.

Cable Assy.: (Cable) Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. (Cable Connectors) 6063-T6 aluminum.

Post: See PlayBooster (PB) General Specifications.

120901A Grab Bar

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

Grab Bar: Weldment comprised of formed 7/8" (22,23 mm) O.D. x 11 GA (.120") (3,04 mm) and 1/4" x 1 3/4" (6,35 mm x (44,45 mm) stainless steel half clamps. Finish: TenderTuff, color specified.

194663A ZipKrooz 34' w/Steel Posts DB

Chain w/Rubber Cover Assy.: (Chain) Steel 1/4" (6,35 mm) straight link chain, 3,150 lbs. (1428,82 kilograms) working load limit. Finish: ProGuard. (Cover) High pressure Buna-N Rubber hose, black in color. (Connector) Aluminum.

Clamps: Cast aluminum. Finish: ProShield, color specified.

E-Pod: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Bumper: Urethane, black in color.

ZipKrooz Crossover: Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,55 mm) wall galvanized steel tubing, 3/8" (9,52 mm) thick HRPO steel plate and 1/4" (6,35 mm) thick HRPO steel. Finish: ProShield®, color specified.

Spacer: .190"(4,82 mm) Thick aluminum sheet.

Track: Extruded from 6005-T4 aluminum alloy. Finish: ProShield®, color specified.

Trolley Assy.: Steel body with urethane rollers. Completely assembled. Steel Body Finish: ProShield®, black in color.

Deck: Flange formed from 12 GA (.105") (2,66 mm) sheet steel conforming to ASTM A1011, 1/4" (6,35 mm) HRPO flat steel and 3/8" (9,53 mm) HRPO flat steel. Standing surface is perforated with 5/16" (7,94 mm) diameter holes. The finished size measures 2 1/8" x 38 1/2" x 38 1/2" (53,98 mm x 977 mm x 977 mm). Finish: TenderTuff™, color specified.

Deck Support: Weldment comprised of 5" (127 mm) O.D. x 7 GA. (.179") (4,54 mm) wall galvanized steel tube, and 1/2" (12,7 mm) HRPO steel plate. Finish: ProShield®, color specified.

Crossover: Weldment comprised of tee clamps and a 5" (127 mm) O.D. extruded 6005-T5 aluminum alloy tube with a .125" (3,17 mm) wall. Finish: ProShield, color specified.

Post: See PlayBooster (PB) General Specifications.

LANDARC CONSULTING GROUP, INC.

City of Hattiesburg Midtown Green

196213A ZipKrooz Assisted Additional Bay 34' w/Steel Posts DB

Clamps: Cast aluminum. Finish: ProShield, color specified.

Bumper: Urethane, black in color.

ZipKrooz Crossover: Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,55 mm) wall galvanized steel tubing, 3/8" (9,52 mm) thick HRPO steel plate and 1/4" (6,35 mm) thick HRPO steel. Finish: ProShield®, color specified.

Spacer: .190"(4,82 mm) Thick aluminum sheet.

Track: Extruded from 6005-T4 aluminum alloy. Finish: ProShield®, color specified.

Trolley Assy.: Steel body with urethane rollers. Completely assembled. Steel Body Finish: ProShield®, black in color.

Cable Assy.: (Cable) Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. (Cable Connectors) 6063-T6 aluminum.

Bumper: Molded from U.V. stabilized black EPDM rubber encapsulating 11 GA (.120") (3,04 mm) HRPO steel sheet.

Bucket Seat Mount: Weldment comprised of 1.42" (36,06 mm) diameter stainless steel, 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) wall galvanized steel tubing, 3/8" (9,53 mm) thick HRPO steel plate and 1/4" (6,35 mm) HRPO steel plate. Finish: ProShield®, color specified.

Bucket Seat Assy: (Bucket Seat & Yoke) Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified. (Pipebolt) Made from 1.125" (28,58 mm) O.D. 6005-T5 threaded anodized aluminum tube. (Bearings) UHMW PE lubricated. (Brackets) Made from 356-T6 aluminum.

Crossover: Weldment comprised of tee clamps and a 5" (127 mm) O.D. extruded 6005-T5 aluminum alloy tube with a .125" (3,17 mm) wall. Finish: ProShield, color specified.

Post: See PlayBooster (PB) General Specifications.

249558A We-Go-Round w/Nature DigiFuse Panels 2 Seats DB Only

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Bottom Rib: 7GA. (.179") (4,54 mm) thick HRPO steel sheet. Finish: ProShield, Black in color.

DigiFuse Panel: Made from .120" thick aluminum sheet. Dye sublimation printed digital artwork is fused onto the powdercoated substrate.

Drain Pipe: Comprised of 4" x 25' polypropylene perforated pipe.

Weldment comprised of 2.375" (60,32 mm) O.D. RS20 (.095" - .105") (2,41 mm-2,66 mm) wall galvanized steel tubing, 1/4" (6,35 mm) thick HRPO steel plate and 3/8" (9,52 mm) stainless steel tab. Finish: ProShield, color specified.

Mounting Hub Assembly: Comprised of 1/2" (12,7 mm) thick stainless steel plate, 11 GA (.120") (3,05 mm) stainless steel sheet, steel bearing shaft.

Seat Frame: Comprised of 7GA (.179") (4,54 mm) thick HRPO steel plate. Finish: ProShield, specify color

Seat Permalene Panel: 3/4" thick Recycled Permalene®, color specified.

Spinner Top: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.

GripX Tread: 3/4" (19,05 mm) Thick Permalene®, black in color.

Brake Cover: Recycled Permalene, black in color.

Bottom Mount: Weldment comprised of 7.000" (177 mm) O.D. x .188" (4,77 mm) wall stainless steel tube and 1/4" (6,35 mm) thick HRPO steel plate. Finish: ProShield, black in color.

Base Bushing: Oil-Filled UHMW PE.

Center Post: 6.000" (152 mm) O.D. (.250") (6,35 mm) wall HR Black D.O.M. Steel Tube. Finish: ProShield®, color specified.

Shock: 70 Series.

Rib: Weldment comprised of 1.5" (38,1 mm) x 3.0" (76,2 mm) x .180" (4,57 mm) wall HRPO steel tube, 3/8" (9,52 mm) thick stainless steel tab, 3/8" (9,52 mm) O.D. stainless steel pin, 3/8" (9,52 mm) thick HRPO steel plate and 1/4" (6,35 mm) thick HRPO steel plate. Finish: ProShield®, color specified.

111404V 76"Steel Post DB

Post: See PlayBooster (PB) General Specifications.

111404T

92"Steel Post DB

Post: See PlayBooster (PB) General Specifications.

111404S

100"Steel Post DB

Post: See PlayBooster (PB) General Specifications.

111404R 108"Steel Post DB

Post: See PlayBooster (PB) General Specifications.

111404Q 116"Steel Post DB

Post: See PlayBooster (PB) General Specifications.

214441A Rhapsody Vivo Metallophone DB

Mallet: Comprised of 2" (50,8 mm) diameter grey or black polyurethane, 1/2" (12,7 mm) diameter aluminum handle and 3/16" (4,74 mm) diameter **stainless steel cable with nylon coating.**

Cradle Bracket: Made from 1/4" (6,35 mm) thick HRPO steel sheet. Finish: ProShield®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Tubes: Made from 1.250" (31,75 mm) diameter x .125" (3,17 mm) wall aluminum tube.

Top & Bottom Panels: Permalene®, color specified.

214445A Rhapsody Kettle Drum DB

Trim: Permalene®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Kettle Drum Assy.: Weldment comprised of 3.500" (88,9 mm) O.D. RS20 (.125")(3,17 mm) wall galvanized steel tubing and 11 GA. (.120")(3,05 mm) flat steel. Finish: ProShield®, color specified.

Drum Head: Translucent, UV stabilized polycarbonate with a matte textured surface on one side.

Drum Leg: Made from 3.500" (88,9 mm) O.D. RS20 (.125")(3,17 mm) wall galvanized steel tubing. Finish: ProShield®, color specified.

182503C Welcome Sign (LSI Provided) Ages 5-12 years Direct Bury

Sign Panel: Panel is fabricated from 1/8" (.125")(3,17 mm) aluminum plate. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a 1/8" (.125")(3,17 mm) ProShield coated aluminum plate, then infused into the ProShield.

Post: Weldment comprised 2.375" (60,33 mm) O.D. RS20 (.095-.105) (2,41 mm-2,67 mm) wall galvanized tube, 1/4" (6,35 mm) HRPO steel sheet and aluminum post cap. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

No Material Spec for 217914A

123333A Rollerslide 40"Dk DB

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Rail: 1 1/8" (28,58 mm) O.D. 6061-T6 aluminum extrusion with 5/16" (7,92 mm) walls. Finish: ProShield, color specified.

Rollers: Fabricated from 1.900" (48,26 mm) O.D. x 16 GA (.060") (1,52 mm) galvanized steel tubing. Finish: TenderTuff, color specified. [rollers coated in pvc "tendertuff" coating is unique in the industry. Other rollerslides are all metal not coated. The coating allows kids with cochlear implants to slide without worrying about static build up and blowing out their device].

Rails: Extruded from 6005-T1 aluminum. Finish: ProShield, color specified.

Roller Shafts: Fabricated from 1/2" (305 mm) diameter CRS zinc-plated with yellow chromate finish.

Support Leg: Fabricated from 1.900" (48,26 mm) O.D. RS-20 (.090" - .100") (2,28 mm-2,54 mm) galvanized steel tubing. Finish: ProShield, color specified.

Top Plate: Formed from 10 GA (.135") (3,43 mm) 304-2B SST. Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Rail Spacer: Fabricated from 1.312" (33,32 mm) O.D. x 16 GA (.065") (1,65 mm) steel tubing. Finish: ProShield, color specified.

Tube: 1 1/8" O.D. x 1 5/8" long aluminum tube. Finish: ProShield, color specified.

Hood: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.

174018A Belt Seat ProGuard Chains for 8' Beam Height

Bolt Link: Stainless Steel

Belt Seat: Molded from UV stabilized black EPDM rubber encapsulating a weldment comprised of a 22 GA (.029") (0,74 mm) spring stainless steel sheet and (4) .105" (2,67 mm) thick stainless steel washers. The belt seat elliptical shape measures 7" (178 mm) wide x 26" (660 mm) long x .700" (17,78 mm) thick.

Chain/ProGuard: Steel 3/16" (4,75 mm) straight link chain, 800 lb. (362,87 kilograms) working load limit. Finish: ProGuard.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

176038A Full Bucket Seat ProGuard Chains for 8' Beam Height

Full Bucket Seat: Made of U.V. stabilized high-quality black rubber encapsulating a 24 GA (.024") (0,61 mm) stainless steel reinforcement plate. Handles cast from 356-T6 aluminum alloy with black polyarmor paint finish. Handles attach to seat with (3) 1/4" (6,35 mm) x 1 5/16" (33,32 mm) long stainless steel rivets. The full bucket measures 9" (229 mm) deep x 10 1/2" (266,7 mm) wide.

Chain/ProGuard: Steel 3/16" (4,75 mm) straight link chain, 800 lb. (362,87 kilograms) working load limit. Finish: ProGuard.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

177344A Single Post Swing Frame 52" Bury 8' Beam Height Only

Beam: Weldment comprised of tee clamps and 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" wall. Finish: ProShield®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

Post: See PlayBooster (PB) General Specifications.

177345A the 52" bury is to compensate for additional weight on the friendship swing.

Single Post Swing Frame 52" Bury Additional Bay 8' Beam Height Only

Beam: Weldment comprised of tee clamps and 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" wall. Finish: ProShield®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

Post: See PlayBooster (PB) General Specifications.

177351A Molded Bucket Seat (5-12 yrs) w/Harness ProGuard Chains for 8' Beam Height

Bumper: Molded from U.V. stabilized black EPDM rubber encapsulating 11 GA (.120") (3,04 mm) HRPO steel sheet.

Dbl. Pivot Block: Fabricated from 6061-T6 Aluminum with bronze oil impregnated bearing.

Mounting Bracket: Cast from 535 aluminum magnesium.

Chain/ProGuard: Steel 3/16" (4,75 mm) straight link chain, 800 lb. (362,87 kilograms) working load limit.
Finish: ProGuard.

Bucket Seat Assy: (Bucket Seat & Yoke) Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified. (Pipebolt) Made from 1.125" (28,58 mm) O.D. 6005-T5 threaded anodized aluminum tube. (Bearings) UHMW PE lubricated. (Brackets) Made from 356-T6 aluminum.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

237297A Friendship Swing w/Single Post Frame Additional Bay 52" Bury ProGuard Chains

Clamps: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Swing Beam: Weldment comprised of tee clamps and 5" (127 mm) O.D. extruded 6005-T5 aluminum alloy tube with a .125" (3,17 mm) W. Finish: ProShield, color specified.

Landscape Structures Inc. ("Manufacturer") warrants that all playstructures and/ or equipment sold will conform in kind and in quality to the specifications manual for the products identified in the Acknowledgment of Order and will be free of defects in manufacturing and material. Manufacturer further warrants:

100-YEAR LIMITED WARRANTY

On all PlayBooster® and PlayShaper® aluminum posts, stainless steel fasteners, clamps, beams and caps against structural failure due to corrosion/natural deterioration or manufacturing defects, and on PlayBooster steel posts against structural failure due to material or manufacturing defects.

15-YEAR LIMITED WARRANTY

On all Evos® and Weevos® steel arches, all plastic components (including TuffTimbers™ edging), all aluminum and steel components not covered above, Mobius® climbers, Rhapsody® Outdoor Musical Instruments, decks and TenderTuff™ coatings (except Wiggle Ladders, Chain Ladders and Swing Chain) against structural failure due to material or manufacturing defects.

10-YEAR LIMITED WARRANTY

On concrete products against structural failure due to natural deterioration or manufacturing defects. Does not cover minor chips, hairline cracks or efflorescence.

8-YEAR LIMITED WARRANTY

On Aeronet® climbers and climbing cables against defects in materials or manufacturing defects.

5-YEAR LIMITED WARRANTY

LANDARC CONSULTING GROUP, INC.

City of Hattiesburg Midtown Green

On Rhapsody® cables and mallets against defects in materials or manufacturing defects, on polycarbonate panels against defects in materials or manufacturing defects, and on bamboo panels against delamination due to defects in materials or manufacturing defects. Does not cover damage which may be associated with the natural characteristics of bamboo aging, including but not limited to discoloration, splitting, cracking, warping or twisting, nor the formation of algae, mold and other forms of fungal-type bodies on bamboo.

3-YEAR LIMITED WARRANTY

On all other parts, i.e.: Pulse® products, all swing seats and hangers, Mobius climber handholds, Wiggle Ladders, Chain Ladders and ProGuard™ Swing Chain, Track Ride trolleys and bumpers, all rocking equipment including Sway Fun® gliders, belting material, HealthBeat® resistance mechanism, Seesaws, etc., against failure due to corrosion/ natural deterioration or manufacturing defects.

The environment near a saltwater coast can be extremely corrosive. Some corrosion and/or deterioration is considered "normal wear" in this environment. Product installed within 500 yards (457 meters) of a saltwater shoreline will only be covered for half the period of the standard product warranty, up to a maximum of five years, for defects caused by corrosion. Products installed in direct contact with saltwater or that are subjected to salt spray are not covered by the standard warranty for any defects caused by corrosion.

This warranty does not include any cosmetic issues or wear and tear from normal use of the product, or misuse or abuse of the product. It is valid only if the playstructures and/or equipment are erected to conform with Landscape Structures' installation instructions and maintained according to the maintenance procedures furnished by Landscape Structures Inc.

Material Specifications-HEALTHBEAT FITNESS EQUIPMENT (13+ years)

192451B Ab Crunch/Leg Lift 2"SM Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sit-Up/Footrest: Weldment comprised of 1.660" (42,16 mm) O.D. RS-40 (.108"-.132") (2,74 mm-3,35 mm) wall galvanized steel tube, 1.029" O.D. RS20 (.070"-.080") (1,78 mm-2,03 mm) wall, and 3/16" (4,75 mm) HRPO sheet steel. Finish: ProShield, color specified.

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Bench/Seat: Rotationally molded from U.V. stabilized linear low-density polyethylene, black in color.

Bench Frame: Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120"-.130")(3,04 mm-3,30 mm) wall galvanized steel tube, 1/4" (6,35 mm) HRPO sheet steel and 3/16" (4,75 mm) HRPO sheet steel. Finish: ProShield®, color specified.

Bench Support: Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120"-.130")(3,04 mm-3,30 mm) wall galvanized steel tube, and 1/4" (6,35 mm) HRPO sheet steel. Finish: ProShield®, color specified.

192452B Assisted Row/Push-Up 2"SM Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Rail: Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) wall galvanized steel tube, 3/16" (4,75 mm) HRPO sheet steel and 1/4" (6,35 mm) HRPO sheet steel. Finish: ProShield, color specified.

192455B Cardio Stepper 2"SM Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Shaft Clamp: Stainless steel. Finish: ProShield®, color specified.

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Resistance Knob: Aluminum. Finish: ProShield®, black in color.

Foot Pad: Rotationally molded from U.V. stabilized linear low-density polyethylene, black in color.

Stepper Frame: Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120"-.130") (3,05 mm-3,30 mm) wall galvanized steel tube, 1.315" (33,40 mm) O.D. RS20 (.080"-.090") (2,28 mm-2,54 mm) wall galvanized steel tube, 1/4" (6,35 mm) thick HRPO sheet steel, 1" (25,4 mm) O.D. steel and 3/16" (4,75 mm) thick HRPO sheet steel. Finish: ProShield, color specified.

Stepper Footer (DB): Weldment comprised of 5.000" (127 mm) O.D. x .120" (3,05 mm) wall galvanized steel tube, and 1/4" (6,35 mm) thick HRPO sheet steel. Finish: ProShield, color specified

Leg Attachment: Weldment comprised of 1" (25 mm) O.D. steel shaft and 3/4" (19,05 mm) thick stainless steel plate. Finish: ProShield, color specified.

Stepper Arm: Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,15 mm-2,41 mm) wall galvanized steel tube, 1.900" (48,26 mm) O.D. x 1.253" (31,83 mm) I.D. steel tube, and 1/4" (6,35 mm) thick HRPO sheet steel. Finish: ProShield®, color specified.

Stepper Leg: Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,81 mm-3,07 mm) wall galvanized steel tube, 3/8" (9,52 mm) HRPO steel plate, 1.900" (48,26 mm) O.D. x 1.253" (31,83

mm) I.D. steel tube, 1" (25 mm) O.D. steel shaft and 1/4" (6,35 mm) thick HRPO sheet steel. Finish: ProShield, color specified.

Resistance Assy.: Resistance mechanism features wear-resistant composites that provide bi-directional resistance. Mechanism is mounted in a housing comprised of 3/4" (19,05 mm) thick steel plate and 11 GA. (.120") (3,05 mm) thick steel cover. Finish: ProShield®, color specified.

192456B Chest/Back Press 2"SM Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Chest Back/Seat Spacer: Recycled Permalene, color specified.

Shaft Clamp: Stainless steel. Finish: ProShield®, color specified.

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Resistance Knob: Aluminum. Finish: ProShield®, black in color.

Back Support/Seat: Rotationally molded from U.V. stabilized linear low-density polyethylene, black in color.

Frame: Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121")(2,81 mm-3,07 mm) wall galvanized steel tube, 7 GA. (.179") (4,54 mm) thick HRPO steel sheet and 1/4" (6,35 mm) thick HRPO sheet steel. Finish: ProShield, color specified.

Hand Bar : Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,81 mm-3,07 mm) wall galvanized steel tube, and .875" (22,22 mm) thick stainless steel. Finish: ProShield®, color specified.

Resistance Assy.: Resistance mechanism features wear-resistant composites that provide bi-directional resistance. Mechanism is mounted in a housing comprised of 3/4" (19,05 mm) thick steel plate and 11 GA. (.120") (3,05 mm) thick steel cover. Finish: ProShield®, color specified.

192457B Elliptical 2"SM Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Rung Cap: EPDM, black in color.

Rear Base Footer: Weldment comprised of 5.000" (130 mm) O.D. x 11 GA. (.120") (3,05 mm) wall galvanized steel tube, and 1/4" (6,35 mm) thick HRPO steel sheet. Finish: ProShield®, color specified.

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Support Stand: Weldment comprised of .250" (6,35 mm) thick HRPO flat steel. Finish: ProShield®, color specified.

Foot Pad: Rotationally molded from U.V. stabilized linear low-density polyethylene, black in color.

Resistance Assy.: Resistance mechanism features wear-resistant composites that provide bi-directional resistance. Mechanism is mounted in a housing comprised of 3/4" (19,05 mm) thick steel plate and 11 GA. (.120") (3,05 mm) thick steel cover. Finish: ProShield®, color specified.

Handle: Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,28 mm-2,54 mm) wall galvanized steel tube, 1/4" (6,35 mm) HRPO steel sheet and steel crank shaft. Finish: ProShield®, color specified.

Leg: Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,29 mm-2,54 mm) wall galvanized steel tube, 1/4" (6,35 mm) thick HRPO steel sheet and 1.900" (48,26 mm) O.D. steel shaft. Finish: ProShield®, color specified.

Front Base Footer: Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080"-.090") (2,03 mm-2,29 mm) wall galvanized steel tube, and 1/4" (6,35 mm) thick HRPO steel sheet. Finish: ProShield®, color specified.

Handle Axle Assy.: Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,29 mm-2,54 mm) wall galvanized steel tube, 7 GA. (.179") (4,55 mm) HRPO sheet steel, 3/16" (4,75 mm) HRPO sheet steel and steel handle shaft. Finish: ProShield®, color specified.

192458B Mobility 2"SM Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Step Ladder Supt.: Weldment comprised of 1.660" (42,16 mm) O.D. RS-20 (.085" - .095") (2,16 mm-2,41 mm) galvanized steel tubing and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield, color specified.

Ramp Foot Guard: One-color Permalene, gray in color.

Handrail: Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) wall galvanized steel tube. Finish: ProShield, color specified.

Handrail/Deck Support: Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) wall galvanized steel tube, and 1/4" (6,35 mm) HRPO sheet steel. Finish: ProShield, color specified.

Platform: Weldment comprised of 11 GA (.120") (3,05 mm) HRPO sheet steel. Standing surface is 22" (559 mm) x 18" (457 mm) and is perforated with 5/16" (7,94 mm) diameter holes. Finish: TenderTuff, gray in color.

Rail Support #1: Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) wall galvanized steel tube, and 1/4" (6,35 mm) HRPO sheet steel. Finish: ProShield, color specified.

Rail Support #2: Fabricated from 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) wall galvanized steel tube. Finish: ProShield, color specified.

Ramp: Weldment comprised of 11 GA (.120") (3,05 mm) HRPO sheet steel and is perforated with 5/16" (7,94 mm) diameter holes. Finish: TenderTuff, gray in color.

Step Ladder: Weldment comprised of 12 GA (.105") (2,67 mm) HRPO sheet steel conforming to ASTM A1011. Standing surface is 22" (559 mm) wide x 11 5/8" (295,28 mm) deep and is perforated with 5/16" (7,94 mm) diameter holes. Finish: TenderTuff, gray in color.

192460B Pull-Up/Dip 2"SM Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Pull-Up Bar: Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,81 mm-3,07 mm) wall galvanized steel tube, 1/4" (6,35 mm) HRPO sheet steel and 3/16" (4,75 mm) HRPO sheet steel. Finish: ProShield®, color specified.

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

192461B Squat press 2"SM Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Shaft Clamp: Stainless steel. Finish: ProShield®, color specified.

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Frame: Weldment comprised of 1.900" (48,26 mm) O.D. 12 GA. (.105")(2,66 mm) wall black steel tube, 1.315" (33,40 mm) O.D. (.098"-.120")(2,48 mm-3,05 mm) wall black steel tube, 1.660" (42,16 mm) O.D. RS40 (.111"-.121")(2,81 mm-3,07 mm) wall black steel tube, 7 GA. (.179") (4,54 mm) thick HRPO steel

sheet, 1/4" (6,35 mm) HRPO sheet steel, and 3/8" (9,53 mm) HRPO steel plate. Finish: ProShield®, color specified.

Arm: Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,81 mm-3,07 mm) wall galvanized steel tube, 2.375" (60,32 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,55 mm) wall galvanized steel tube, 1.900" (48,26 mm) O.D. RS40 (.090"-.100") (2,28 mm-2,54 mm) wall galvanized steel tube and .875" (22,22 mm) thick HRPO sheet plate. Finish: ProShield®, color specified.

Resistance Knob: Aluminum. Finish: ProShield®, black in color.

Shoulder Pad: Rotationally molded from U.V. stabilized EVA (ethyl vinyl acetate) and high density polyethylene, black in color.

Resistance Assy.: Resistance mechanism features wear-resistant composites that provide bi-directional resistance. Mechanism is mounted in a housing comprised of 3/4" (19,05 mm) thick steel plate and 11 GA. (.120") (3,05 mm) thick steel cover. Finish: ProShield®, color specified.

192463A Tai Chi Wheels Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Tai Chi Arm: Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,28 mm-2,54 mm) wall galvanized steel tube, 3/16" (4,74 mm) HRPO sheet steel, 3/8" (9,52 mm) HRPO steel sheet and stainless steel shaft. Finish: ProShield, color specified.

Speed Ball: Fabricated from 6061-T6 aluminum. Finish: Clear anodize.

Tai Chi Wheel: Weldment comprised of .125" thick aluminum alloy 6061, aluminum round hub and aluminum shaft. Finish: ProShield®, color specified.

192464B Intro Sign 2"SM

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Post: Weldment comprised of 5.000" (127 mm) O.D. 11 GA. (.120") (3,05 mm) wall galvanized steel tubing, 1.315" (33,4 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,28 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO steel sheet and 5" (127 mm) O.D. aluminum post cap. Finish: ProShield®, carbon in color.

205938A Hand Cycler Order Post Separately*

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Support: Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120"-.130")(3,04 mm-3,30 mm) wall galvanized steel tube, 1/4" (6,35 mm) HRPO sheet steel, 1/2" (12,7 mm) HRPO sheet steel, .125" (3,18 mm) HRPO flat steel, .375" (9,53 mm) HRPO flat steel and 3/16" (4,75 mm) HRPO sheet steel. Finish: ProShield®, color specified.

Adjustment Knob: Aluminum. Finish: ProShieldblack in color.

Resistance Assy.: Resistance mechanism features wear-resistant composites that provide bi-directional resistance. Mechanism is mounted in a housing comprised of 11 GA. (.120") (3,05 mm) thick steel cover. Finish: ProShield®, color specified.

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Resistance Knob: Aluminum. Finish: ProShield®, black in color.

Crank Shaft Assy.: Weldment comprised of 5/8" (15,88 mm) diameter stainless steel shaft and steel crank. Finish: ProShield®, color specified.

Hand Cycler Plate: Weldment comprised of 1/8" (3,18 mm) HRPO flat steel, and 1.156" (29,36 mm) diameter steel colar. Finish: ProShield®, color specified.

Handhold: High density polyethylene, black in color.

Rotor: Weldment comprised of 3/4" (19,05 mm) diameter stainless steel shaft and .500" (12,7 mm) thick 300 series stainless steel.

Side Panel: Recycled Permalene®, color specified.

Support: Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120"-.130")(3,04 mm-3,30 mm) wall galvanized steel tube, 1/4" (6,35 mm) HRPO sheet steel, 1/2" (12,7 mm) HRPO sheet steel, .125" (3,18 mm) HRPO flat steel, .375" (9,53 mm) HRPO flat steel and 3/16" (4,75 mm) HRPO sheet steel. Finish: ProShield®, color specified.

205944B Steel Post w/2 and 0 Attachments 2"SM

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Attachment Cover: Fabricated from A356 sand casted aluminum. Finish: Proshield, carbon in color.

Post: Weldment comprised of 5.000" (127 mm) O.D. 11 GA. (.120") (3,05 mm) wall galvanized steel tubing, 1.315" (33,4 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,28 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO steel sheet and 5" (127 mm) O.D. aluminum post cap. Finish: ProShield®, carbon in color.

205945B Steel Post w/2 and 1T Attachments 2"SM

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Attachment Cover: Fabricated from A356 sand casted aluminum. Finish: Proshield, carbon in color.

Post: Weldment comprised of 5.000" (127 mm) O.D. 11 GA. (.120") (3,05 mm) wall galvanized steel tubing, 1.315" (33,4 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,28 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO steel sheet and 5" (127 mm) O.D. aluminum post cap. Finish: ProShield®, carbon in color.

205946B Steel Post w/2 and 2 Attachments 2"SM

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Attachment Cover: Fabricated from A356 sand casted aluminum. Finish: Proshield, carbon in color.

Post: Weldment comprised of 5.000" (127 mm) O.D. 11 GA. (.120") (3,05 mm) wall galvanized steel tubing, 1.315" (33,4 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,28 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO steel sheet and 5" (127 mm) O.D. aluminum post cap. Finish: ProShield®, carbon in color.

205947B Steel Post w/3 Attachments 2"SM

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sign Panel: Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

Attachment Cover: Fabricated from A356 sand casted aluminum. Finish: Proshield, carbon in color.

Post: Weldment comprised of 5.000" (127 mm) O.D. 11 GA. (.120") (3,05 mm) wall galvanized steel tubing, 1.315" (33,4 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,28 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO steel sheet and 5" (127 mm) O.D. aluminum post cap. Finish: ProShield®, carbon in color.

No Material Spec for 206894A

No Material Spec for 207607A

Landscape Structures Inc. ("Manufacturer") warrants that all playstructures and/ or equipment sold will conform in kind and in quality to the specifications manual for the products identified in the Acknowledgment of Order and will be free of defects in manufacturing and material. Manufacturer further warrants:

100-YEAR LIMITED WARRANTY

On all PlayBooster® and PlayShaper® aluminum posts, stainless steel fasteners, clamps, beams and caps against structural failure due to corrosion/natural deterioration or manufacturing defects, and on PlayBooster steel posts against structural failure due to material or manufacturing defects.

15-YEAR LIMITED WARRANTY

On all Evos® and Weevos® steel arches, all plastic components (including TuffTimbers™ edging), all aluminum and steel components not covered above, Mobius® climbers, Rhapsody® Outdoor Musical Instruments, decks and TenderTuff™ coatings (except Wiggle Ladders, Chain Ladders and Swing Chain) against structural failure due to material or manufacturing defects.

10-YEAR LIMITED WARRANTY

On concrete products against structural failure due to natural deterioration or manufacturing defects. Does not cover minor chips, hairline cracks or efflorescence.

8-YEAR LIMITED WARRANTY

On Aeronet® climbers and climbing cables against defects in materials or manufacturing defects.

5-YEAR LIMITED WARRANTY

On Rhapsody® cables and mallets against defects in materials or manufacturing defects, on polycarbonate panels against defects in materials or manufacturing defects, and on bamboo panels against delamination due to defects in materials or manufacturing defects. Does not cover damage which may be associated with the natural characteristics of bamboo aging, including but not limited to discoloration, splitting, cracking, warping or twisting, nor the formation of algae, mold and other forms of fungal-type bodies on bamboo.

3-YEAR LIMITED WARRANTY

On all other parts, i.e.: Pulse® products, all swing seats and hangers, Mobius climber handholds, Wiggle Ladders, Chain Ladders and ProGuard™ Swing Chain, Track Ride trolleys and bumpers, all rocking equipment including Sway Fun® gliders, belting material, HealthBeat® resistance mechanism, Seesaws, etc., against failure due to corrosion/ natural deterioration or manufacturing defects.

The environment near a saltwater coast can be extremely corrosive. Some corrosion and/or deterioration is considered "normal wear" in this environment. Product installed within 500 yards (457 meters) of a saltwater shoreline will only be covered for half the period of the standard product

warranty, up to a maximum of five years, for defects caused by corrosion. Products installed in direct contact with saltwater or that are subjected to salt spray are not covered by the standard warranty for any defects caused by corrosion.

This warranty does not include any cosmetic issues or wear and tear from normal use of the product, or misuse or abuse of the product. It is valid only if the playstructures and/or equipment are erected to conform with Landscape Structures' installation instructions and maintained according to the maintenance procedures furnished by Landscape Structures Inc.

End of Section 9, PLAYGROUND/EXERCISE EQUIPMENT & SURFACING

SECTION 10 CONCRETE CURB & GUTTER

SECTION 11 ASPHALT

SECTION 12 05500 - METAL FABRICATIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

- A. Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this and all sections.

1.02 DESCRIPTION OF WORK:

- A. Definition: Metal fabrications include items made from iron and steel shapes, plates, bars, strips, tubes, pipes, and castings which are not a part of structural steel or other metal systems specified elsewhere.

- B. Structural Metal Framing, Metal Joists, Cold Formed Metal Framing, and Ornamental Metals are specified elsewhere in Division 5.

1.03 QUALITY ASSURANCE:

- A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrications where possible. Do not delay job progress; allow for trimming and fitting where taking field measurements before fabrication might delay work.
- B. Shop Assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitation. Clearly mark units for reassembly and coordinated installation.

1.04 SUBMITTALS:

- A. Shop Drawings: Submit shop drawings for fabrication and erection of miscellaneous metal fabrications. Include plans, elevations and details of sections and connections. Show anchorage and accessory items. Provide templates for anchor and bolt installation by others.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. Metals:

1. Metal surfaces, General: For Fabrication of miscellaneous metal work which will be exposed to view, use only materials which are smooth and free of surface blemishes including pitting, seam marks, roller marks, rolled trade names and roughness.
2. Steel Plates, Shapes and Bars: ASTM A36
3. Steel Tubing: Cold formed, ASTM A500; Class A or B.
4. Steel Pipe: ASTM A53; black finish, unless galvanizing is indicated; standard weight (Schedule 40), unless otherwise indicated.

B. Paint:

1. Metal Primer Paint:
 - a. Red lead mixed pigment, alkyd varnish, linseed oil paint, FS TT- P-86, Type II; or red lead iron oxide, raw linseed oil, alkyd paint, Steel Structures Painting Council (SSPC) Paint 2-64.

- b. Primer selected must be compatible with finish coats of paint. Coordinate selection of metal primer with finish paint requirements specified in Division 9.

- 2. Galvanizing Repair Paint: High zinc dust content paint for re-galvanizing welds in galvanized steel, complying with Military Specifications MIL-P-21035 (Ships).

2.02 FABRICATION, GENERAL:

- A. Workmanship: Use materials of size and thickness shown or, if not shown, of required size and thickness to produce strength and durability in finished product. Work to dimensions shown or accepted on shop drawings, using proven details of fabrication and support. Use type of materials shown or specified for various components of work.
- B. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges. Ease exposed edges to a radius of approximately 1/32" unless otherwise shown. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- C. Weld corners and seams continuously, complying with AWS recommendations. At exposed connections, grind exposed welds smooth and flush to match and blend with adjoining surfaces.
- D. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners, wherever possible. Use exposed fasteners of type shown or, if not shown, Phillips flat-head (countersunk) screws or bolts.
- E. Provide for anchorage of type shown, coordinated with supporting structure. Fabricate and space anchoring devices to provide adequate support for intended use.
- F. Cut, reinforce, drill, and tap miscellaneous metal work as indicated to receive finish hardware and similar items.
- G. Galvanizing: Provide a zinc coating for those items shown or specified to be galvanized, as follows:
 - 1. ASTM A 153 for galvanizing iron and steel hardware.
 - 2. ASTM A 123 for galvanizing rolled, pressed and forged steel shapes, plates, bars and strip 1/8" thick and heavier.
 - 3. ASTM A386 for galvanizing assembled steel products.
- H. Fabricate joints which will be exposed to weather in a manner to exclude water or provide weep holes where water may accumulate.
- I. Shop Painting:

1. Shop paint miscellaneous metal work, except members or portions of members to be embedded in concrete or masonry, surfaces, and edges to be field welded, and galvanized surfaces, unless otherwise specified.
2. Remove scale, rust, and other deleterious materials before applying shop coat. Clean off heavy rust and loose mill scale in accordance with SSPC SP-2 "Hand Tool Cleaning", or SSPC SP-3 "Power Tool Cleaning", or SSPC SP-7 "Brush-Off Blast Cleaning".
3. Remove oil, grease, and similar contaminants in accordance with SSPC SP-1 "Solvent Cleaning".
4. Immediately after surface preparation, brush, or spray on primer in accordance with manufacturer's instructions, and at a rate to provide uniform dry film thickness of not less than 2.0 mils for each coat. Use painting methods which will result in full coverage of joints, corners, edges, and exposed surfaces.
5. Apply one shop coat to fabricated metal items, except apply 2 coats of paint to surfaces inaccessible after assembly or erection. Change color of second coat to distinguish it from the first.

2.03 MISCELLANEOUS METAL FABRICATIONS:

A. Rough Hardware:

1. Furnish bent or otherwise custom fabricated bolts plates, anchors, hangers, dowels and other miscellaneous steel and iron shapes as required for framing and supporting woodwork, and for anchoring or securing woodwork to concrete or other structures.
2. Manufacture or fabricate items of sizes, shapes and dimensions required.
3. Use galvanized steel hardware for galvanized steel members.

B. Loose Steel Lintels:

1. Provide loose structural steel lintels for openings and recesses in masonry walls and partitions as shown. Weld adjoining members together to form a single unit where indicated. Provide not less than 8" bearing at each side of openings, unless otherwise shown. Loose lintels in exterior walls shall be hot dip galvanized after fabrication.

C. Miscellaneous Framing and Supports:

1. Provide miscellaneous steel framing and supports which are not a part of structural steel framework, as required to complete work.

2. Fabricate miscellaneous units to sizes, shapes and profiles shown or, if not shown, of required dimensions to receive adjacent other work to be retained by framing. Except as otherwise shown, fabricate from structural steel shapes and plates and steel bars, of welded construction using mitered joints for field connection. Cut, drill, and tap units to receive hardware and similar items.

PART 3 - EXECUTION

3.01 PREPARATION:

- A. Coordinate and furnish anchorages, setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, which are to be embedded in concrete or masonry construction. Coordinate delivery of such items to project site.

3.02 INSTALLATION:

- A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing miscellaneous metal fabrications to in-place construction; including, threaded fasteners for concrete and masonry inserts, toggle bolts, through-bolts, lag bolts, wood screws and other connectors as required.
- B. Cutting, Fitting and Placement: Perform cutting, drilling, and fitting required for installation of miscellaneous metal fabrications. Set work accurately in location, alignment, and elevation, plumb, level, true and free of rack, measured from established lines and levels. Provide temporary bracing or anchors in formwork for item which are to be built into concrete, masonry, or similar construction.
- C. Fit exposed connections accurately together to form tight hairline joints.
- D. Weld connections which are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Grind exposed joints smooth and touch-up shop paint. Do not weld, cut, or abrade the surfaces of exterior units which have been hot dip galvanized after fabrication and are intended for bolted or screwed field connections.
- E. Field Welding: Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance and quality of welds made, and the methods used in correcting welding work.

3.03 ADJUST AND CLEAN:

- A. Touch-up Paint: Immediately after erection, clean ground field welds, bolted connections and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.

- B. For Galvanized Surfaces: Clean field welds, bolted connections and abraded areas and apply 2 coats of galvanizing repair paint.

END OF SECTION 12, Metal Fabrications

SECTION 13

06200 – FINISH CARPENTRY

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

- A. Drawings and General Provisions for the Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 DESCRIPTION OF WORK:

- A. Definition: Finish carpentry includes carpentry and millwork which is exposed to view, is non-structural, and which is not specified as part of other sections. Types of finish carpentry work in this section include:

1. Running and standing trim.
2. Architectural Cabinets.
3. Solid Surface Countertops.
4. Plastic Laminate Countertops.
5. Wood Shelving.
6. Other finish woodwork indicated.

- B. Rough carpentry is specified in another section within Division 6.

1.03 QUALITY ASSURANCE:

- A. Quality standards - except as otherwise shown or specified, comply with specified provisions of the following:

1. Architectural Woodwork Institute (AWI) "Quality Standards".
2. Architectural Woodwork Institute (AWI) "Architectural Casework Details".
3. Architectural Woodwork Institute (AWI) "Guide to Wood Species".

1.04 SUBMITTALS:

- A. Shop Drawings - Submit shop drawings showing location of each item, dimensioned plans and elevations, large scale details, attachment devices and other components including specifications for all materials and hardware.

- B. Color Samples – Contractor to provide Architect with samples indicative of full range of color selections on all products to be used including but not limited to plastic laminates, solid surfacing, etc.
- C. Material Samples – Contractor to provide Architect with samples of materials to be used for approval including but not limited to:
 - 1. Samples of Stain Grade Wood products intended for use on the project finished with selected stain to represent the final product. Provide minimum 12" long sample or one of adequate size respective to its intended use.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Protect finish carpentry materials during transit, delivery, storage, and handling to prevent damage, soiling and deterioration.
- B. Do not deliver finish carpentry materials until painting, wet work, grinding and similar operations which could damage, soil, or deteriorate woodwork have been completed in installation areas.

1.06 JOB CONDITIONS:

- A. Conditioning: Installer shall advise contractor of temperature and humidity requirements for woodwork installation areas. Do not install woodwork until required temperature and relative humidity have been stabilized and will be maintained in installation areas.
- B. Maintain temperature and humidity in installation area as required to maintain moisture content of installed woodwork within a 1.0 percent tolerance of optimum moisture content, from date of installation through remainder of construction period. The fabricator of woodwork shall determine optimum moisture content and required temperature and humidity condition.

PART 2 - PRODUCTS:

2.01 BASIC MATERIALS AND FABRICATION METHODS:

- A. General: Except as otherwise indicated, comply with following requirements:
- B. Wood Moisture Content: Provide kiln dried (KD) lumber with an average content range of 9% to 13% for exterior work and 6% to 11% for interior work. Maintain temperature and relative humidity during fabrication, storage and finishing operations so that moisture content values for woodwork at time of installation do not exceed the following:
 - 1. Interior Wood Finish: 8% - 13%.

2. Exterior Trim: 9% - 14%

C. Exterior Wood for Opaque Finish:

1. Solid Wood: Honduras Mahogany, or any preservative treated softwood rated "good" or "excellent" for paint finishing in AWI "Guide to Wood Species", and meeting requirements for specified woodwork grade.
2. Exterior Plywood: Exterior Type PS-1 Medium Density Overlay (MDO/EXT-APA). Overlay on all exposed faces.

D. Interior Wood for Transparent Finish (Hardwood):

1. Solid Wood: Oak, Maple, or Birch meeting requirements for specified woodwork grade.
2. Plywood: Rotary Cut Natural Birch Veneer meeting requirements for specified woodwork grade.

E. Interior Wood for Opaque Finish (Softwood):

1. Solid Wood: Yellow-Poplar, or any softwood rated "good" or "excellent" for paint finishing in AWI "Guide to Wood Species", and meeting requirements for specified woodwork grade.
2. Plywood: same as "Exterior Plywood" above.

F. Plastic Laminate: Comply with NEMA LD-3, type, thickness, color, pattern and finish as indicated for each application.

G. Solid Surfacing (as indicated for countertops and other locations shown on drawings):

1. Grade: Premium, 1/2" thickness for surfaces minimum unless otherwise noted and 3/4" thick for trim with profiles as shown.
2. Design: As shown on drawings.
3. Colors and Patterns: Architect may select from manufacturers standard color range. For initial pricing purposing, all solid surfacing shall be equal to Corian or Formica standard solid surface colors.
4. Attachment: Securely attach as recommended by manufacturer including but not limited to use of compatible adhesive, dado connections, biscuit supports, etc.

H. Thermoset Decorative Overlay: Particleboard complying with ANSI A 208.1, Grade M-2, or medium-density fiberboard complying with ANSI A208.2, Grade MD, with surface of thermally fused, melamine-impregnated decorative paper complying with LMA SAT-1.

I. Quality Standards: For following types of architectural woodwork; comply with indicated standards as applicable:

1. Standing and Running Trim: AWI Section 300.

2. Architectural Cabinets (Casework) and Countertops: AWI Section 400, modified to prohibit the use of particleboard.

3. Shelving:

a. Closets - AWI Section 600.

b. Shelving Units - AWI Section 400.

J. Design and Construction Features: Comply with details shown for profile and construction of architectural woodwork; and, where not otherwise shown, comply with applicable Quality Standards, with alternate details as fabricator's option.

K. Pre-Cut Opening: Fabricate architectural woodwork with pre-cut openings, where possible, to receive hardware, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams for proper size and shape. Smooth edges of cutoffs.

L. Measures: Before proceeding with fabrication of woodwork required to be fitted to other construction, obtain measurements and verify dimensions and shop drawing details as required for accurate fit.

2.02 INTERIOR ARCHITECTURAL WOODWORK INSTITUTE TYPES:

A. Standing and Running Trim: Grade - Premium; transparent finish for that identified as hardwood; opaque finish elsewhere.

1. Fabricate standing and running trim to dimensions, profiles and details shown. Rout or groove reverse side (backed out) of trim members to be applied to flat surface, except for members with ends exposed in finish work.

B. Architectural Cabinets, Plastic Laminate Clad:

1. Grade: Premium, (no particleboard is to be used- only veneer core plywood. Use exterior type plywood for tops which contain a sink or lavatory). Standard plastic laminate colors and patterns with satin finish. Use plastic laminate types, as follows:

- a. Horizontal Surfaces: 0.050" thick, General-Purpose Type (high pressure).
- b. External Vertical Surfaces: 0.028" thick, General-Purpose Type (high pressure).
- c. Cabinet Lining: 0.020" thick, Cabinet-Liner Type (high pressure).
- d. Concealed Panel Backing: 0.020" thick, Backer Type (high pressure).

2. Design: Flush overlay design as per AWI Architectural Casework Details.

C. Architectural Cabinets, Opaque Finish:

- 1. Grade: Premium Grade (no particleboard is to be used- only veneer core plywood. Use exterior type plywood for tops which contain a sink or lavatory).
- 2. Design: As indicated. Reveal overlay raised panel style as per AWI Architectural Casework Details.

D. Architectural Cabinet, Transparent Finish:

- 1. Grade: Premium Grade (no particleboard is to be used- only veneer core plywood. Use exterior type plywood for tops which contain a sink or lavatory).
- 2. Design: As indicated. Reveal overlay raised panel style as per AWI Architectural Casework Details.

E. Shelving Units (Architectural Cabinet Construction), Opaque Finish:

- 1. Grade - Custom.

F. Shelving Units (Architectural Cabinet Construction), Transparent Finish:

- 1. Grade – Premium.

G. Wood Storage Shelving, Opaque Finish:

- 1. General: These requirements do not apply to shelving units located in occupied spaces.
- 2. Grade: Custom.

H. Solid Surfacing (as indicated for countertops and other locations shown on drawings):

1. Grade: Premium
2. Design: As shown on drawings.
3. Colors and Patterns: Architect may select from manufacturers standard color range including premium colors.
4. Acceptable Manufacturer's: Corian, Formica or Approved Equal

2.03 FINISH:

A. General - The finish painting of Finish Carpentry is specified in Division 9 sections.

2.04 CABINET HARDWARE AND ACCESSORY MATERIALS:

A. General: Provide cabinet hardware and accessory materials associated with Finish Carpentry, unless otherwise specified.

B. Hardware Standards: Except as otherwise indicated, comply with ANSI A156.9 "American National Standard for Cabinet Hardware".

1. Quality Level: Type 2 (institutional), unless otherwise indicated.
2. Cabinet Door Hardware: Provide hinges and pulls, of types indicated, to accommodate each door size and style.
 - a. All metal, adjustable, self-closing, concealed hinges (2 per door unless otherwise indicated). European Style 180 degree.
 - b. One 5/16-inch diameter x 4-inch pull (Stanley 4484, or equal).
3. Cabinet Door Hardware: Provide hinges, catches, and pulls as indicated on the drawings to accommodate each door size and style.
4. Drawer Hardware: Provide slides and pulls, of types indicated, to properly accommodate each drawer size and style.
 - a. Equip each drawer with side-mounted, full-extension, ball-bearing, nylon roller drawer slides.
 - b. Equip each drawer with pull to match doors.
5. Locks: Where indicated, provide standard pin-type or disc-type (5 pins or discs) tumbler locks, keyed individually, except as otherwise indicated.

6. Shelf Supports: Where shelving is indicated as "adjustable", provide heavy-duty slotted-type standards and brackets of type needed to properly support shelves with uniform 40-lb. per sq. ft. loading.
7. Exposed Hardware Finish: US26D or US28 or US10B oil rubbed dark bronze, unless otherwise indicated.

2.05 PRESERVATIVE TREATMENT:

- A. Material for exterior woodwork shall be preservative treated by not less than a three-minute dip in a 5% solution of Pentachlorophenol with water repellent added in accordance with NWMA IS4-81.
- B. Furnish treating material for brush coating ends cut and holes drilled on job.

2.06 ROUGH HARDWARE:

- A. Provide all necessary nails, screws, and other hardware to properly secure members in place. Use galvanized nails and other fasteners on exterior. Use finish or casing nails and trim head screws as appropriate where exposed.

PART 3 - EXECUTION

3.01 PREPARATION:

- A. Condition woodwork to average prevailing humidity conditions in installation areas prior to installing.
- B. Prior to installation of Finish Carpentry, examine shop fabricated work for completion, and complete work as required, including removal of packing.

3.02 INSTALLATION:

- A. Install the work plumb, level, true and straight with no distortions. Shim as required using concealed shims.
- B. Scribe and cut work to fit adjoining work.
- C. Standing and Running Trim: Install with minimum number of joints possible, using full-length pieces (from maximum length of lumber available) to the greatest extent possible. Stagger joints in adjacent and related members. Cope at returns, miter at corners, and comply with Quality Standards for joinery.
- D. Anchor woodwork to anchors or blocking built-in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Use fine finishing nails at wood substrate and trim head screws at metal substrate for exposed fastening, countersunk and filled flush with woodwork, and matching final finish where transparent finish is indicated.

- E. Architectural Cabinets: Install without distortion so that doors and drawers will fit openings properly and be accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete the installation of hardware and accessory items as indicated. Attach securely to wall.
- F. Countertops and Deal plates: Anchor securely to base units and other support systems as indicated.
- G. Wood Storage Shelving: Complete the assembly of units and install in areas indicated, including hardware and accessories as indicated.

3.03 ADJUSTMENT, CLEANING, FINISHING AND PROTECTION:

- A. Repair damaged and defective work wherever possible to eliminate defects functionally and visually; where not possible to repair properly, replace work. Adjust joinery for uniform appearance.
- B. Clean hardware, lubricate and make final adjustments for proper operation.
- C. Clean work on exposed and semi-exposed surfaces.
- D. Refer to the Division 9 Sections for finishing of installed woodwork.
- E. Protection: Installer of Finish Carpentry shall advise Contractor of final protection and maintained conditions necessary to ensure that work will be without damage or deterioration at time of acceptance.

END OF SECTION 13, FINISH CARPENTRY

SECTION 14 07200 - INSULATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

- A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this Section.

1.02 DESCRIPTION OF WORK:

- A. Extent of insulation work is shown on Drawings, by generic names or by abbreviations.
- B. Applications of insulation specified in this section include:

- 1. Blanket-type building insulation:

- a. Above suspended ceilings indicated.
- b. In exterior walls.
- c. In interior partitions

1.03 PRODUCT HANDLING:

- A. General Protection: Do not allow insulation materials to become wet, soiled, or covered with ice or snow. Comply with manufacturer's recommendations for handling, storage, and protection during installation.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Mineral/Glass Fiber Blanket/Batt Insulation: Inorganic fibers formed into flexible resilient blankets; ASTM C665; manufacturer's standard lengths and widths as required to coordinate with spaces to be insulated; type as follows:
 - 1. Exterior Wall and Ceiling Insulation: ASTM C665, Type III, Class A (25 flame spread) – Type III, Class B (75 flame spread) –Type II, Class C – vapor barrier, minimum R-19 Walls and R-30 Ceiling.
 - 2. Interior Ceiling Insulation: Type I (unfaced), 24 x 48-inch size, nominal 6" thickness.
 - 3. Interior Partitions: Type I (unfaced) sound attenuation blankets, full thickness of stud.

PART 3 - EXECUTION:

3.01 INSPECTION:

- A. Installer must examine substrate and conditions under which insulation work is to be performed and must notify Contractor in writing of unsatisfactory conditions. Do not proceed with insulation work until unsatisfactory conditions have been corrected in a manner acceptable to installer.

3.02 INSTALLATION:

- A. General:

- 1. Comply with manufacturer's instructions for conditions of installation in each case. If printed instructions are not available or do not apply to project conditions, consult manufacturer's technical representative for specific recommendations before proceeding with work.
- 2. Extend insulation full thickness as shown over entire area to be insulated. Cut and fit tightly around obstructions and fill voids with insulation.

3. Friction fit insulation between metal studs after covering material has been installed on one side. When faced insulation is used tape attachment flanges to studs prior to installing interior finish. Provide supplemental support to hold product in place until both surface finishes have been applied for insulated wall heights over 8 feet.
4. Apply a single layer of insulation of required thickness, unless otherwise shown or required to make up total thickness.

B. Wall and Ceiling Insulation:

1. Apply Apply with vapor barrier (when present) facing interior of building.
2. Apply blankets on top of ceiling. Omit at recessed light fixtures, holding insulation back 3 inches from fixture edges.
3. Position to fit snugly between webs of metal studs.
4. Staple flanges to wood studs at spacing of 8 inches. Stuff all cracks around doors and windows and cover with vapor barrier.
5. Place insulation and vapor barrier to outside of pipes to prevent freezing and fit neatly around and behind electrical boxes. Leave no gaps.
6. Staple unfaced insulation to gypsum board with at least five 9/16-inch staples driven through 1-1/2-inch-long pieces of gypsum board joint reinforcement placed on face of insulation to hold insulation in place, or use proprietary fastening system manufactured for this purpose.

END OF SECTION 14, INSULATION

SECTION 15

07412 – STANDING SEAM METAL ROOF

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of panel and accessory.

B. Shop Drawings:

1. Include fabrication and installation layouts of metal panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures, and accessories; and special details.

2. Accessories: Include details of the flashing, trim, and anchorage systems.

C. Calculations:

1. Include calculations with registered engineer seal, verifying roof panel and attachment method resist wind pressures imposed on it pursuant to applicable building codes.

D. Samples for Initial Selection: For each type of metal panel indicated with factory-applied color finishes.

1. Include similar Samples of trim and accessories involving color selection.

E. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below.

1. Metal Panels: 12 inches long by actual panel width. Include clips, fasteners, closures, and other metal panel accessories.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Deliver components, metal panels, and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.

B. Unload, store, and erect metal panels in a manner to prevent bending, warping, twisting, and surface damage.

C. Stack metal panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal panels to ensure dryness, with positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting, or other surface damage.

D. Remove strippable protective covering on metal panels as panels are being installed. Do not leave the film on installed panels.

1.4 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal panels to be performed according to manufacturers' written instructions and warranty requirements.

1.5 COORDINATION

A. Coordinate sizes and locations of roof curbs, equipment supports, and roof penetrations with actual equipment provided.

B. Coordinate metal panel installation with rain drainage work, flashing, trim, construction of soffits, and other adjoining work to provide a leak proof, secure, and noncorrosive installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.

1. Uplift Rating: UL 90.

2.2 STANDING-SEAM METAL ROOF PANELS

A. General: Provide factory-formed metal roof panels designed to be installed by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps. Include clips, cleats, pressure plates, and accessories required for weathertight installation.

1. Steel Panel Systems: Unless more stringent requirements are indicated, comply with ASTM E 1514.

B. Vertical-Rib, Seamed-Joint, Standing-Seam Metal Roof Panels formed with vertical ribs at panel edges and a flat pan between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels, engaging opposite edge of adjacent panels, and mechanically seaming panels together. 1. Basis-of-Design Product: Subject to compliance with requirements, provide MBCI BattenLok HS or comparable product by one of the following: a. CENTRIA Architectural Systems. b. Firestone Metal Products, LLC. c. Berridge Manufacturing Co.

2. Aluminum-zinc alloy-coated steel sheet complying with ASTM A 792/A 792M

a. Nominal Thickness: 0.024 inch

b. Exterior Finish: Two-coat fluoropolymer.

c. Painted materials shall have a removable plastic film to protect the paint during roll forming, shipping and handling. Strippable (protective) film must be removed prior to panel installation.

d. Color: As selected by Architect from Camp Shelby standard colors

3. Clips: Continuous Zee-rib to accommodate thermal movement.
 - a. Material: 0.024-inch nominal thickness, aluminum-zinc alloy-coated steel sheet.
4. Joint Type: Mechanically Seamed.
5. Panel Coverage: 16 inches.
6. Panel Height: 2.0 inches.

2.3 UNDERLAYMENT MATERIALS

A. Self-Adhering, High-Temperature Underlayment: Provide self-adhering, cold-applied, sheet underlayment, a minimum of 40 mils thick, consisting of slip-resistant, polyethylene-film top surface laminated to a layer of butyl or SBS-modified asphalt adhesive, with release-paper backing. Provide primer when recommended by underlayment manufacturer.

1. Thermal Stability: Stable after testing at 240 deg F ; ASTM D 1970.
2. Low-Temperature Flexibility: Passes after testing at minus 20 deg F (29 deg C); ASTM D 1970. 3. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Grace Ultra
 - b. Mid-States Asphalt Quick Stick HT Pro
 - c. Polyglass Polystick MTS
 - d. Soprema Lastobond Shield HT
 - e. Tamko TW Underlayment or TW Metal & Tile Underlayment

2.4 MISCELLANEOUS MATERIALS

A. Miscellaneous Metal Subframing and Furring: hot-dip galvanized coating designation or ASTM A 792/A 792M.

B. Panel Accessories: Provide components required for a complete, weathertight panel system including trim, copings, fascia, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal panels unless otherwise indicated.

1. Closures: Provide closures at eaves and ridges, fabricated of same metal as metal panels.
2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.

3. Closure Strips: Closed-cell, expanded; minimum 1-inch- (25-mm-) thick, flexible closure strips; cut or premolded to match metal panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

C. Flashing and Trim: Provide flashing and trim formed from same material as metal panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with same finish system as adjacent metal panels.

D. Gutters: Formed from same material as roof panels, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch- (2400-mm-) long sections, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Furnish gutter supports spaced a maximum of 36 inches (914 mm) o.c., fabricated from same metal as gutters. Provide wire ball strainers of compatible metal at outlets. Finish gutters to match roof fascia and rake trim.

E. Downspouts: Formed from same material as roof panels. Fabricate in 10-foot- (3-m-) long sections, complete with formed elbows and offsets, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Finish downspouts to match gutters.

F. Roof Curbs: Fabricated from same material as roof panels, 0.048-inch nominal thickness; with bottom of skirt profiled to match roof panel profiles and with welded top box and integral full-length cricket. Fabricate curb subframing of 0.060-inch- (1.52-mm-) nominal thickness, angle-, C-, or Z-shaped steel sheet. Fabricate curb and subframing to withstand indicated loads of size and height indicated. Finish roof curbs to match metal roof panels.

1. Insulate roof curb with 1-inch- (25-mm-) thick, rigid insulation.

G. Panel Fasteners: Zinc-coated steel, corrosion resisting steel, zinc cast head, or nylon capped steel, type and size as approved for the applicable loading requirements. Exposed fasteners, where approved by architect, shall be gasketed or have gasketed washers on the exterior side of the covering to waterproof the penetration.

H. Panel Sealants: Provide sealant type recommended by manufacturer that are compatible with panel materials, are nonstaining, and do not damage panel finish.

1. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch (13 mm) wide and 1/8 inch (3 mm) thick.

2. Joint Sealant: ASTM C 920; elastomeric polyurethane or silicone sealant; of type, grade, class, and use classifications required to seal joints in metal panels and remain weathertight; and as recommended in writing by metal panel manufacturer.

3. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C 1311.

2.5 FABRICATION

A. General: Fabricate and finish metal panels and accessories at the factory, by manufacturer's standard procedures and processes, as

necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.

B. On-Site Fabrication: Subject to compliance with requirements of this Section, metal panels may be fabricated on-site using factory set, non-adjustable portable roll-forming equipment if panels are of same profile and warranted by manufacturer to be equal to factory-formed panels. Fabricate according to equipment manufacturer's written instructions and to comply with details shown.

C. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.

D. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations and recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated.

1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.

2. Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate sealant and to comply with SMACNA standards.

3. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.

a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal panel manufacturer for application, but not less than thickness of metal being secured.

2.6 FINISHES

A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in same piece are unacceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

C. Steel Panels and Accessories:

1. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat applied by panel manufacturer on a continuous coil coating line, with a top side dry film thickness of 0.75 ± 0.05 mil over 0.2 ± 0.05 mil primer coat, to provide a total dry film thickness of 0.95 ± 0.10 mil (0.024 mm). Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

2. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish consisting of prime coat and wash coat with a minimum total dry film thickness of 0.35 mil (0.009 mm).

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal panel supports, and other conditions affecting performance of the Work.

1. Examine primary and secondary roof framing to verify that rafters, purlins, angles, channels, and other structural panel support members and anchorages have been installed within alignment tolerances required by metal roof panel manufacturer.

a. Verify that air- or water-resistive barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.

B. Examine roughing-in for components and systems penetrating metal panels to verify actual locations of penetrations relative to seam locations of metal panels before installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Miscellaneous Supports: Install subframing, furring, and other miscellaneous panel support members and anchorages according to ASTM C 754 and metal panel manufacturer's written recommendations.

3.3 UNDERLAYMENT INSTALLATION

A. Self-Adhering Sheet Underlayment: Apply primer if required by manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation. Apply at locations indicated on Drawings, wrinkle free, in shingle fashion to shed water, and with end laps of not less than 8 inches (203 mm) staggered 24 inches (610 mm) between courses. Overlap side edges not less than 36 inches (914.4 mm). Extend underlayment into gutter trough. Roll laps with roller. Cover underlayment within 14 days.

1. Apply over the entire roof surface.

B. Flashings: Install flashings to cover underlayment to comply with requirements specified in Section 076200 "Sheet Metal Flashing and Trim."

3.4 METAL PANEL INSTALLATION

A. General: Install metal panels according to manufacturer's written instructions in orientation, sizes, and locations indicated. Install panels perpendicular to supports unless otherwise indicated. Anchor

metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.

1. Shim or otherwise plumb substrates receiving metal panels.
2. Flash and seal metal panels at perimeter of all openings. Fasten with self-tapping screws. Do not begin installation until air- or water-resistive barriers and flashings that will be concealed by metal panels are installed.
3. Install screw fasteners in predrilled holes.
4. Locate and space fastenings in uniform vertical and horizontal alignment.
5. Install flashing and trim as metal panel work proceeds.
6. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
7. Align bottoms of metal panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.
8. Provide weathertight escutcheons for pipe- and conduit-penetrating panels.

B. Fasteners:

1. Steel Panels: Use stainless-steel fasteners for surfaces exposed to the exterior; use galvanized-steel fasteners for surfaces exposed to the interior.
2. Aluminum Panels: Use stainless-steel fasteners for surfaces exposed to the exterior; use stainless-steel fasteners for surfaces exposed to the interior.

C. Anchor Clips: Anchor metal roof panels and other components of the Work securely in place, using manufacturer's approved fasteners according to manufacturers' written instructions.

D. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal panel manufacturer.

E. Standing-Seam Metal Roof Panel Installation: Fasten metal roof panels to supports with concealed clips at each standing-seam joint at location, spacing, and with fasteners recommended in writing by manufacturer.

1. Install clips to supports with self-tapping fasteners.
2. Install pressure plates (if required) at locations indicated in manufacturer's written installation instructions.

3. Seamed Joint: Crimp standing seams with manufacturer-approved, motorized seamer tool so clip, metal roof panel, and factory-applied vinyl weatherseal are completely engaged.

F. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal panel system including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items. Provide types indicated by metal roof panel manufacturers; or, if not indicated, types recommended by metal roof panel manufacturer.

G. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

1. Install exposed flashing and trim that is without buckling and tool marks, and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and achieve waterproof and weather-resistant performance.

2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (610 mm) of corner or intersection. Where lapped expansion provisions cannot be used or

would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).

H. Gutters: Join sections with riveted and soldered or lapped and sealed joints. Attach gutters to eave with gutter hangers spaced not more than 36 inches (914 mm) o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.

I. Downspouts: Join sections with telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch (25 mm) away from walls; locate fasteners at top and bottom and at approximately 60 inches (1524 mm) o.c. in between.

1. Provide elbows at base of downspouts to direct water away from building.

2. Connect downspouts to underground drainage system indicated.

J. Roof Curbs: Install flashing around bases where they meet metal roof panels.

K. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to metal roof panels as recommended by manufacturer.

3.5 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect metal roof panel installation, including accessories. Report results in writing.
- B. Remove and replace applications of metal roof panels where tests and inspections indicate that they do not comply with specified requirements.
- C. Additional tests and inspections, at Contractor's expense, are performed to determine compliance of replaced or additional work with specified requirements.
- D. Prepare test and inspection reports.

3.6 CLEANING AND PROTECTION

- A. Remove temporary protective coverings and strippable films, if any, as metal panels are installed, unless otherwise indicated in manufacturer's written installation instructions. On completion of metal panel installation instructions. On completion of metal panel installation, clean finished surfaces as recommended by panel manufacturer. Maintain in a clean condition during construction.
- B. Replace metal panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 15, Standing Seam Metal Roof

SECTION 16

07600 - FLASHING AND SHEET METAL

PART 1 - GENERAL:

1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this section.

1.02 DESCRIPTION OF WORK:

- A. The extent of each type of flashing and sheet metal work is indicated on the drawings and by provisions of this section.
- B. The types of work specified in this section include the following:
 - 1. Miscellaneous sheet metal accessories.
 - 2. Other sheet metal work indicated.
- C. Some Roofing Accessories are specified in roofing system sections as roofing work.

1.03 SUBMITTALS:

- A. Product Safety Data Sheets listing any material content subject to EPA regulations or listed by them as carcinogenic or toxic.

1.04 JOB CONDITIONS: Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance and durability of the work and protection of materials and finishes.

PART 2 - PRODUCTS

2.01 FLASHING AND SHEET METAL MATERIALS: (All metal is to be included in the modified bitumen roof warranty – See Spec Section 07550)

A. Sheet Metal Fascia and Flashing:

1. Specified in Section 07550 - Modified Bitumen Membrane Roofing.

B. Miscellaneous Materials and Accessories:

1. Solder: For use with steel or copper, provide 50-50 tin/lead solder (ASTM B32), with rosin flux.
2. Fasteners: Same metal as flashing/sheet metal or, other noncorrosive metal as recommended by sheet manufacturer.
3. Bituminous Coating: FS TT-C-494 or SSPC-Paint 12, solvent type bituminous mastic, nominally free of sulfur, compounded for 15-mil dry film thickness per coat.
4. Mastic Sealant: Silicone sealant which will adhere to aluminum without primer, such as Dow Corning 799 Silicone Glass and Metal Building Sealant.
5. Metal Accessories: Provide sheet metal clips, straps, anchoring devices and similar accessory units as required for installation of work, matching or compatible with material being installed, noncorrosive, size and gage required for performance.
6. Roofing Cement: ASTM D2822, asphaltic.

C. Roof Drain Flashing: 4 lb. sheet lead – 2.5 ft. x 2.5 ft.

D. Vent Flashing: 2.5 lb. lead. Size as required for existing plumbing vents.

2.02 FABRICATED UNITS:

- A. General Metal Fabrication: Shop-fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements and recommendations of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work. Form work to fit substrates. Comply with material manufacturer's instructions and

recommendations. Form exposed sheet metal work without excessive oil-canning, buckling and tool marks, true to line and levels as indicated, with exposed edges folded back to form hems.

- B. Seams: Fabricate nonmoving seams in sheet metal with flat-lock seams. For metal other than aluminum, trim edges to be seamed, form seams, and solder. Form aluminum seams with epoxy seam sealer and rivet.
- C. Expansion Provisions: Where moveable, non-expansion type joints are required for proper performance of work, form metal to provide for proper installation of elastomeric sealant in compliance with industry standards.
- D. Separations: Provide for separation of metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.
- E. Flashing: Form to size and shape shown with exposed edges hemmed. Make counter flashing 2 piece type consisting of in-wall receiver and removable cap flashing insert. Cap flashing insert shall be secured with thumb nail notches or by other approved method which permits replacement without damage to receiver.

PART 3 - EXECUTION

3.01 INSTALLATION REQUIREMENTS:

- A. General: Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual". Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints and seams which will be permanently watertight and weatherproof.
- B. Underlayment: Where aluminum is to be installed directly on wood substrates, install a course of paper slip sheet and a course of polyethylene underlayment.
- C. Flanges: Bed in thick coat of bituminous roofing cement where required for waterproof performance. Nail to wood substrates at maximum spacing of 4".
- D. Roof Edge Flashing: Set under felt underlayment at eaves and on top of felt at rakes. Nail securely to deck.
- E. Metal Fascia:
 - 1. Set and fasten flanges as previously specified.
 - 2. Set sections with end joints spaced to allow for expansion and cap with cover bedded in mastic.
- F. Prime flanges at membrane roofing with bituminous paint before installation of stripping.

3.02 CLEANING AND PROTECTION:

- A. Clean exposed metal surfaces, removing substances which might cause corrosion of metal or adversely affect application of paint finish.
- B. Protection: Installer shall advise Contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction, to ensure that work will be without damage or deterioration, other than natural weathering, at time of substantial completion.

END OF SECTION 16, Flashing and Sheet Metal

SECTION 17 07900 - JOINT SEALANTS

PART 1 GENERAL:

1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this and all sections.

1.02 DESCRIPTION OF WORK:

- A. The extent of each form and type of joint sealer is indicated on drawings and by provisions of this section.
- B. The applications for joint sealers as work of this section include the following:
 - 1. Locations indicated or required to properly seal buildings.

1.03 JOB CONDITIONS: Weather Conditions - Do not proceed with installation of liquid sealants under unfavorable weather conditions. Install elastomeric sealants when temperature is in lower third of temperature range recommended by manufacturer for installation.

1.04 SUBMITTALS:

- A. Product Literature: Submit product data sheets and the manufacturer's installation instructions. If two or more different sealants are to be in physical contact with each other, obtain from each manufacturer confirmation that its product is compatible with the proposed and adjacent products, including any other products which may be used by other sub-contractors. Include primer literature with the submittal document unless the manufacturer's sealant submittal specifically eliminates the need for a primer. If a stain

type primer is required for the sealant selected, such information shall be specifically included on submittal documents calling attention to the need for such staining type primer and noting the planned precautions to prevent exposed stain residue.

1. Include Safety Data Sheets as specified in Section 01300, for sealants.

B. Color Samples: Submit manufacturer's standard color chart. Upon request, submit cured samples of each chosen color for verification of actual color to be installed.

1.05 PRODUCT DELIVERY AND STORAGE:

A. Deliver in manufacturer's original unopened container, clearly identifying each product specified, relating it to the product literature submitted.

B. Store in accordance with manufacturer's recommendation, with proper precautions concerning shelf life, temperature, humidity, and similar storage factors to ensure the fitness of the material when installed.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. General Sealer Performance Requirements: Provide colors indicated or, if not otherwise indicated, as selected by Architect from manufacturer's standard colors. Select materials for compatibility with joint surfaces and other indicated exposures, and except as otherwise indicated, select modulus of elasticity and hardness or grade recommended by manufacturer for each application indicated. Where exposed to foot traffic, select marketing materials of sufficient strength and hardness to withstand stiletto heel traffic without damage or deterioration of sealer system.

B. Elastomeric Sealants:

1. Silicone Rubber Sealant: Silicone rubber-based, low modulus, 1-part elastomeric sealant, complying with FS TT-S-001543, Class A; recommended by manufacturer for exterior joints. Dow Corning 790 Building Sealant, or equal. Use for vertical joints in other exterior locations and in non-fire rated and non-smoke barrier interior partitions where sealant is called for.

C. Non-Elastomeric Sealants (Caulking): One component acrylic latex caulking, minimum 75% recovery per ASTM C-736. Comply with ASTM C-834. Use for interior vertical joints unless sealant is called for.

D. Miscellaneous Materials:

1. Joint Primer/Sealer: Provide type of joint primer/sealer recommended by sealant manufacturer for joint surfaces to be primed or sealed.

2. Sealant Backer Rod: Compressible rod stock of open or closed cell polyethylene or polyurethane as recommended by sealant manufacturer for compatibility with sealant.

3. Bond Breaker Tape: An acceptable polyethylene or similar type bond breaker tape used to prevent three sided adhesion in locations where backer rod cannot be used.

PART 3 - EXECUTION :

3.01 MANUFACTURER'S INSTRUCTIONS: Comply with manufacturer's printed instructions, except where more stringent requirements are shown or specified, and except where manufacturer's technical representative directs otherwise.

3.02 INSPECTION:

A. Inspect substrate surface to assure that no bond breaker materials contaminate the surface to which the sealant is to adhere and to ensure that unsound substrates are repaired. Installation of sealant shall be evidence of acceptance of the substrate.

B. Verify joint dimensions prior to installation of the sealant to ensure that all dimensions are within tolerance established in the manufacturer's literature. Unacceptable variations shall be called to the Architects attention for resolution prior to installing any material.

3.03 JOINT PREPARATION:

A. Clean joint surfaces immediately before installation of sealant or caulking compound. Remove dirt, insecure coatings, moisture and other substances which could interfere with bond of sealant or caulking compound. Etch concrete and masonry joint surfaces as recommended by sealant manufacturer.

B. Prime or seal joint surfaces where indicated, and where not indicated if recommended by sealant manufacturer, prior to installation of any backer rod or bond breaker tape. Do not allow primer/sealer to spill or migrate onto adjoining surfaces.

3.04 INSTALLATION:

A. Set joint filler units full depth of joint or position in joint to coordinate with other work, including installation of backer rods and sealants. Do not leave voids or gaps between ends of joint filler units.

B. Install sealant backer rod for liquid elastomeric sealants, except where shown to be omitted or recommended to be omitted by sealant manufacturer for application indicated in which case a bond breaker tape shall be used to prevent 3 sided adhesion. Apply backer rod using blunt or rounded tools which will ensure a uniform depth without puncturing the material. Use a rod oversized a minimum of 33% for closed cell and 50% for open cell, unless otherwise required by the manufacturer.

- C. Employ only proven installation techniques, which will ensure that sealants are deposited in uniform, continuous ribbons without gaps or air pockets, with complete "wetting" of joint bond surfaces equally on opposite sides. Except as otherwise indicated, fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces, with a smooth, even finish.
- D. Install sealant to depths as shown or, if not shown, as recommended by sealant manufacturer but within the following general limitations, measured at center (thin) section of bead.
1. For horizontal joints sealed with elastomeric sealants and subject to traffic and other abrasion and indentation exposures, fill joints to a depth of 3/8 inch.
 2. For normal moving joints sealed with elastomeric sealants but not subject to traffic, fill joints to a depth equal to 50% of joint width, but neither more than 1/2" deep nor less than 1/4" deep.
 3. For joints sealed with non-elastomeric sealants, fill joints to a depth in range of 75% to 125% of joint width.
- E. Spillage: Do not allow sealants or compounds to overflow or spill onto adjoining surfaces or to migrate into voids of adjoining surfaces. Clean adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage.
- 3.05 CURE AND PROTECTION: Cure sealants and caulking compounds in compliance with manufacturer's instructions and recommendations to obtain high early bond strength, internal cohesive strength and surface durability.

END OF SECTION 17, JOINT SEALANTS

SECTION 18

08100 – METAL DOORS AND FRAMES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections apply to work of this and all sections.

1.02 DESCRIPTION OF WORK:

A. Extent of hollow metal doors and frames is shown and scheduled on the drawings.

B. Builder's hardware is specified elsewhere within Division 8.

1.03 QUALITY ASSURANCE:

A. Provide doors and frames complying with Steel Door Institute "Recommended Specifications: Standard Steel Doors and Frames" (SDI-100) and as herein specified.

B. Manufacturer: Provide steel doors and frames by a single firm specializing in production of this type of work.

1.04 SUBMITTALS: Shop Drawings - Submit for fabrication and installation of steel doors and frames. Include details of each frame type, laboratory label, elevations of door design, types, conditions at openings, details of construction, location and installation requirements of finish hardware and reinforcements and details of joints and connections. Show anchorage and accessory items.

1.05 DELIVERY, STORAGE AND HANDLING:

A. Inspect hollow metal work upon delivery for damage. Minor damages may be repaired, provided finished items are equal in all respects to new work and acceptable to Professional; otherwise, remove and replace damaged items as directed.

B. Store doors and frames at building site under cover. Place units on wood sills at least 4" high, or otherwise store on floors in manner that will prevent rust and damage. Avoid use of non-vented plastic or canvas shelters which could create humidity chamber.

PART 2 - PRODUCTS:

2.01 MATERIALS:

A. Hot-Rolled Steel Sheets and Strip: Commercial quality carbon steel, pickled and oiled, complying with ASTM A569 and ASTM A568.

B. Cold-Rolled Steel Sheets: Commercial quality carbon steel, complying with ASTM A366 and ASTM A568.

D. Inserts, Anchors Bolts and Fasteners: Manufacturer's standard units, except hot-dip galvanize items to be built into exterior walls, complying with ASTM A153 Class C or D as applicable.

E. Shop Applied Paint:

1. Primer: Rust-inhibitive enamel or paint, either air-drying or baking, suitable as a base for finish paints specified in Division 9 section.

2.02 FABRICATION, GENERAL

A. Fabricate steel door and frame units to be rigid, neat in appearance and free from defects, warp or buckle. Wherever practicable, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory-assembled before shipment, to assure proper assembly at project site.

B. Fabricate exposed faces of doors and panels, including stiles and rails of non-flush units, from only cold-rolled steel.

C. Fabricate frames, concealed stiffeners, reinforcement, edge channels, louvers and moldings from either cold-rolled or hot-rolled steel (at fabricator's option).

D. Exposed Fasteners: Unless otherwise indicated, provide countersunk flat Phillips heads for exposed screws and bolts.

E. Finish Hardware Preparation:

1. Prepare doors and frames to receive mortised and concealed finish hardware in accordance with final Finish Hardware Schedule and templates provided by hardware supplier. Comply with applicable requirements of ANSI A115 series specifications for door and frame preparation for hardware.

2. Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied finish hardware may be done at project site.

3. Locate finish hardware as shown on final shop drawings or, if not shown, in accordance with "Recommended Locations for Builder's Hardware", published by Door and Hardware Institute.

F. Shop Paint:

1. Clean, treat and paint exposed surfaces of steel door and frame units.

2. Clean steel surfaces of mill scale, rust, oil, grease, dirt and other foreign materials before application of paint.

3. Apply shop coat of prime paint of even consistency to provide a uniformly finished surface ready to receive finish paint.

2.03 STANDARD STEEL FRAMES:

A. Interior frames 4 feet or less: Provide 16 gage steel frames for doors, and other openings, of types and styles as shown on drawings and schedules. Conceal fastenings, unless otherwise indicated. Fabricate frames with mitered and full welded corners, unless otherwise indicated. Interior frames over 4 feet in width, exterior frames and lead lined frames require 14 gage steel minimum.

B. Door Silencers: Except on weatherstripped frames, drill stops to receive 3 silencers on strike jambs of single door frames and 2 silencers on heads of pair of door frames.

C. Plaster Guards: Provide 26 gage steel plaster guards or mortar boxes, welded to frame, at back of finish hardware cutouts where mortar or other material might obstruct hardware operation.

D. Provide floor anchors at each jamb and mullion in addition to required wall anchors.

E. Hinge Reinforcement: Add six additional half inch welds at all hinge reinforcements.

2.04 HEAVY-DUTY STEEL FRAMES:

A. Provide 14 gage metal frames for doors, and other openings, of types and styles as shown on drawings and schedules with 14 gage welded plate reinforcement behind continuous hinges. Conceal fastenings, unless otherwise indicated. Fabricate frames with mitered and full welded corners, unless otherwise indicated.

B. Door Silencers. Except on weatherstripped frames, drill stops to receive 3 silencers on strike jambs of single door frames and 2 silencers on heads of pair of door frames.

C. Plaster Guards: Provide 26 gage plaster guards or mortar boxes, welded to frame, at back of finish hardware cutouts where mortar or other material might obstruct hardware operation.

D. Provide floor anchors at each jamb and mullion in addition to required wall anchors.

2.06 JAMB ANCHORS:

A. Masonry Walls: 3/16 inch diameter crimped galvanized wire or corrugated steel T-strap design. Locate near bottom of frame, and 32 inch centers maximum intermittently, minimum three per jamb.

B. Metal Stud Wall Systems: Steel clips welded to frame, type or design compatible with stud system. Locate at top of frame, 12 inch from top, and 24 inch centers maximum intermittently, minimum four per jamb.

C. Previously Placed Concrete, Masonry, or Structural Steel: Tension plate and spacer design, welded to frame at approximately 16 inch centers, minimum three per jamb. Frames drilled and countersunk for 1/4 inch flathead anchor bolts, set below frame surface.

D. Fire Rated Frames: Comply with fire testing agency label and listing requirements.

PART 3 - EXECUTION

3.01 INSPECTION:

A. Installer must examine substrate and conditions under which steel doors and

frames are to be installed and must notify Contractor in writing of any conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to installer.

3.02 INSTALLATION:

A. General: Install standard steel doors, frames, and accessories in accordance with final shop drawings and manufacturer's data, and as herein specified.

B. Placing Frames:

1. Comply with provisions of SDI-105 "Recommended Erection Instructions for Steel Frames", unless otherwise indicated.

2. Place frames prior to construction of enclosing walls and ceilings. Set frames accurately in position, plumbed, aligned and braced securely until permanent anchors are set. After wall construction is completed remove temporary braces and spreaders leaving surfaces smooth and undamaged.

3. Locate 3 wall anchors, of type suitable for construction involved, per jamb at hinge and strike levels and floor anchor at each jamb and mullion. Building-in of masonry anchors and grouting of frames is specified in Division 4.

C. Door Installation:

1. Fit metal doors accurately in frames, within clearances specified in SDI-100.

3.03 ADJUST AND CLEAN:

A. Prime Coat Touch-up: Immediately after erection, sand smooth any rusted or damaged areas of prime coat and apply touch-up of compatible air-drying primer.

B. Final Adjustments: Check and readjust operation of finish hardware items, leaving steel doors and frames undamaged and in complete and proper operating condition.

END OF SECTION 18, METAL DOORS AND FRAMES

SECTION 19

08200 – WOOD DOORS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work specified in this section.

1.02 DESCRIPTION OF WORK:

A. Extent and location of each type of wood door is shown on Drawings and in schedule.

B. Types of doors required include the following:

1. Solid core flush wood doors with veneer faces - fire rated where indicated.

1.03 QUALITY ASSURANCE:

A. General: Comply with requirements of the following standards unless otherwise indicated.

1. Non-Fire Rated Flush Wood Doors: NWMA Industry Standard I.S. -1 "Wood Flush Doors" of the National Woodwork Manufacturers Association.

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1.04 SUBMITTALS:

A. Product Data: Submit door manufacturer's product data, specifications and installation instructions for each type of wood door and fixed panel. Include details of core and edge construction, trim for openings and louvers (if any) and similar components, and copy of manufacturer's warranty.

B. Shop Drawings: Submit shop drawings indicating locations and size of each unit, elevation of each, details of construction, location and extent of hardware blocking, fire ratings and other pertinent data.

C. Product Warranty: Provide manufacturer's standard extended warranty as follows:

1. Solid Core Flush Interior Doors: Life of installation.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING: Protect wood doors during transit, storage and handling to prevent damage, soiling and deterioration. Comply with the "On-site Care" recommendations of NWMA pamphlet "Care and Finishing of Wood Doors" and with manufacturer's instructions.

PART 2 - PRODUCTS:

2.01 MATERIALS AND COMPONENTS:

A. General: Provide flush wood doors complying with applicable requirements of NWMA I.S.-1 for kinds and types of doors indicated and as specified and Stile and Rail doors complying with AWI Quality Standards.

B. Face Panels: Manufacturer's standard 2 or 3-ply face panels, unless otherwise indicated.

C. Exposed Surfaces: Provide kind shown or scheduled and as further specified. Provide same exposed surface material on both faces of each door, unless otherwise indicated.

2.02 INTERIOR FLUSH WOOD DOORS:

A. Solid Core Wood Doors: Where shown or scheduled, provide interior solid core wood doors complying with applicable requirements of referenced standards and as follows:

1. Type II water-resistant bond.

2. Core Construction: Solid wood block, (particleboard,) or mineral with wood lock blocks, as required by door manufacturer to comply with specified warranty period and required fire rating. Provide (1 1/2" minimum width hardwood stiles for particleboard core and) triple ply hardwood stiles for B label doors. (Particleboard core is not acceptable).

3. Face Panels: Manufacturer's standard 2 or 3-ply face panels.

4. Exposed Surfaces for Transparent Finish: Solid core interior wood doors are to receive a transparent finish; provide manufacturer's standard thickness face veneers of the following quality: NWMA L.S.-1

Premium Grade plain-sawn White Oak veneer. Avoid sharp contrast at veneer joints, unless otherwise indicated. Provide exposed edges and other exposed solid wood components of same species as face veneers, unless otherwise required for fire-rating.

PART 3 - EXECUTION

3.01 INSPECTION: Installer must examine door frames and verify that frames are correct type and have been installed as required for proper hanging of corresponding doors and notify Contractor in writing of conditions detrimental to proper and timely installation of wood doors and panels. Do not proceed with installation until unsatisfactory conditions have been corrected in a manner acceptable to installer.

3.02 INSTALLATION:

A. Condition doors to average prevailing humidity in installation area prior to hanging.

B. Hardware: For installation see Division 8-Hardware section of these Specifications.

C. Manufacturer's Instructions: Install wood doors and fixed panels in accordance with manufacturer's instruction and as shown.

1. Job Fit Doors: Align doors to frame for proper fit and uniform clearance at each edge and machine for hardware. Seal cut surfaces after fitting and machining.

2. Bevel non-fire rated doors 1/8" in 2" at lock and hinge edges.

D. Clearance: For non-fire doors provide clearances of 1/8" at jambs and heads; 1/8" at meeting stiles for pairs of doors; and 1/2" from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 1/4" clearance from bottom of door to top of threshold

E. Job Site Finished Doors: See painting sections in Division 9 of these Specifications for requirements for finishing wood doors. Edges must be sealed immediately after trimming.

3.03 ADJUST AND CLEAN:

A. Operation: Rehang and replace doors which do not swing or operate freely and properly, as directed by Architect.

B. Protection of Completed Work: Advise Contractor of proper procedures required for protection of installed wood doors from damage or deterioration until acceptance of work.

END OF SECTION 19, WOOD DOORS

SECTION 20 08330 - OVERHEAD COILING DOORS

PART 1 GENERAL

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1.01 SECTION INCLUDES

- A. Overhead coiling doors, operating hardware, exterior, manual operation.

1.02 RELATED REQUIREMENTS

- A. Section 08700 - Hardware: Cylinder cores and keys.

1.03 REFERENCE STANDARDS

- A. ASTM A 36/A 36M - Standard Specification for Carbon Structural Steel; 2008.
- B. ASTM A 123/A 123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2009.
- C. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2009a.

1.04 SUBMITTALS

- A. See Section 01300 - Submittals, for submittal procedures.
- B. Product Data: Provide general construction, component connections and details, electrical equipment.
- C. Shop Drawings: Indicate pertinent dimensioning, anchorage methods, hardware locations, and installation details.
- D. Manufacturer's Instructions: Indicate installation sequence and procedures, adjustment and alignment procedures.
- E. Maintenance Data: Indicate lubrication requirements and frequency and periodic adjustments required.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Overhead Coiling Doors:
 - 1. Overhead Door: www.overheaddoor.com
 - 2. Alpine Overhead Doors, Inc: www.alpinedoors.com.
 - 3. Cornell Iron Works, Inc: www.cornelliron.com.
 - 4. The Cookson Company: www.cooksondoor.com.
 - 5. Wayne-Dalton Corporation: www.wayne-dalton.com.
 - 6. Or approved equal.

2.02 COILING DOORS

- A. Coiling Counter Doors (Door 124):
 - 1. Product: Equal to Overhead Door Series 652.
 - 2. Finish: Powder Coat Finish – Color as selected by Architect.
 - 3. Size: As indicated on drawings.
 - 4. Hood Enclosure: Manufacturer's standard.
 - 6. Mounting: As indicated.
 - 7. Operation: Manual w/ interior slide bolt.

2.03 MATERIALS

- A. Curtain Construction: Interlocking slats.

1. Slat Ends: Each slat fitted with end locks to act as wearing surface in guides and to prevent lateral movement.
2. Curtain Bottom: Fitted with angles to provide reinforcement and positive contact in closed position.
3. Weatherstripping: Moisture and rot proof, resilient type, located at jamb edges, bottom of curtain, and where curtain enters hood enclosure of exterior doors.
- B. Steel Slats: Minimum 22 gage (.644 mm) ASTM A 653/A 653M galvanized steel sheet.
- C. Guide Construction: Continuous, of profile to retain door in place with snap-on trim, mounting brackets of same metal.
- D. Steel Guides: ASTM A 36/A 36M steel angles, size as required for wind loading, hot-dip galvanized per ASTM A 123/A 123M.
- E. Hood Enclosure: Internally reinforced to maintain rigidity and shape.
 1. Prime paint.
- F. Hardware:
 1. Latching: Inside mounted, adjustable keeper, spring activated latch bar with feature to keep in locked or retracted position.
 2. Latch Handle: Interior and exterior handle.
- G. Roller Shaft Counterbalance: Steel pipe and helical steel spring system, capable of producing torque sufficient to ensure smooth operation of curtain from any position and capable of holding position at mid-travel; with adjustable spring tension; requiring 25 lb (10 kg) nominal force to operate.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that opening sizes, tolerances and conditions are acceptable.

3.02 INSTALLATION

- A. Install units in accordance with manufacturer's instructions.
- B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- C. Fit and align assembly including hardware; level and plumb, to provide smooth operation.
- D. Complete wiring from disconnect to unit components.
- E. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
- F. Install perimeter trim and closures.

3.03 ADJUSTING

- A. Adjust operating assemblies for smooth and noiseless operation.

3.04 CLEANING

- A. Clean installed components.
- B. Remove labels and visible markings.

END OF SECTION 20, OVERHEAD COILING DOORS

SECTION 21

08700 - HARDWARE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this and all sections.

1.02 DESCRIPTION OF WORK: The work under this Section includes items known commercially as Builder's Hardware which are required for swing doors, except for hardware specified in the same section as the door and door frame.

1.03 SUBMITTALS:

A. Submit schedule indicating type, manufacturer's name and number, location and finish of each item required for Architect's approval before hardware or templates are ordered.

B. Submit descriptive literature as required by Architect.

1.04 GENERAL REQUIREMENTS:

A. Have technical experience and competence to interpret Drawings, details and Specifications; to furnish complete and appropriate hardware; and promptly provide an efficient builder's hardware engineer to service the hardware on the job as may be required.

B. Upon completion have hardware engineer inspect hardware job with Architect and advise Architect of any installation defect, the cost of such visit to be included in the hardware bid.

C. All hardware for metal frames shall be made to template and furnished with proper size machine screws, bolts, etc., required for proper installation. All necessary blue print templates shall be furnished in duplicate to the maker of metal frames and doors by the hardware subcontractor without charge.

D. Length of kickplates shall be 2 inches less than door width.

E. Doors opening out from locked space shall have auxiliary latch to deadlock latch bolt.

F. Use closers of sizes recommended by manufacturer; thru bolt overhead closers.

G. Keying: All locks shall be keyed as directed, masterkeyed, and grand masterkeyed.

1. Furnish two (2) keys per lock, four (4) masterkeys and four (4) grandmaster keys.

2. Send Master Keys direct to Owner.

H. Finishes: As indicated.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Closers: ANSI A156.4, Grade 1.
- B. Hinges: ANSI A156.1
- C. Locksets: ANSI A156.2, Grade 1 - lever handle
- D. Kickplates: Stainless Steel.
- E. Overhead Stops and Holders: ANSI A156.8
- F. Floor/Wall Stops, Bolts and Silencers: BHMA 1201
- G. Thresholds: Aluminum.
- H. Where ANSI numbers are specified, provide products of required grade or better.
- I. Where proprietary products are specified, provide product specified or equal.
- J. All exterior doors swinging out shall have NRP hinges.
- K. All doors except those with closers with PT 4G shall have wall bumpers W1276CCS where door strikes wall and floor stops W1210 combo at balance.
- L. Silencers shall be furnished at all openings not requiring weatherstripping. There shall be two at each pair and three at each single.

2.02 HARDWARE ALLOWANCE (Refer to Section 01020 – Allowances)

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware" by the Door and Hardware Institute, except as specifically indicated or required to comply with governing regulations and except as may be otherwise directed Architect.
- B. Install each hardware item in compliance with manufacturer's instructions and recommendations. Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, coordinate removal, storage and reinstallation or application of surface protection with finishing work specified in Division 9 sections. Do not install surface mounted items until finishes have been completed on the substrate.

C. Set units level, plumb and true to line and location. Adjust and reinforce installation and operation.

D. Drill and countersink units which are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.

3.02 ADJUST AND CLEAN:

A. Adjust and check each operating item of hardware and each door to insure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.

B. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operating of heating and ventilating equipment.

C. Instruct Owner's personnel in proper adjustment and maintenance of hardware and hardware finishes during the final adjustment of hardware.

END OF SECTION 21, HARDWARE

SECTION 22

09250 – GYPSUM BOARD ASSEMBLIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 General Requirements sections, apply to work of this section.

1.02 DESCRIPTION OF WORK:

A. Types of work include:

1. Interior gypsum wallboard.
2. Exterior gypsum sheathing.
3. Wallboard finishing (joint tape-and-compound treatment).
4. Screw type support systems.
5. Gypsum wallboard accessories.

1.03 QUALITY ASSURANCE:

A. Gypsum Board: GA-216 by Gypsum Association.

B. Metal Support System Installation: ASTM C754.

C. Manufacturer: Obtain gypsum board products from a single manufacturer, or from manufacturers recommended by the prime manufacturer of gypsum boards.

D. UL Rated Assemblies: Some walls and ceilings are components of assemblies for two hour fire-resistance rating. Provide materials bearing UL Classification Marking for applicable UL design number listed in UL "Fire Resistance Directory". Provide protection materials for fixtures and ducts as required for UL Design number selected.

B. Allowable Tolerances: 1/8" in 8' - 0" variation in finish surface.

1.04 SUBMITTALS:

A. Product Data: Provide Safety Data Sheets as specified in Section 01300 for fire resistant (Type X) gypsum board.

1.05 PRODUCT HANDLING: Deliver, identify, store and protect gypsum drywall materials to comply with referenced standards.

1.06 JOB CONDITIONS: Environmental conditions - Comply with referenced standards.

PART 2 - PRODUCTS

2.01 METAL SUPPORT SYSTEM MATERIALS:

A. Wall/Partition Support System Materials:

1. Studs: ASTM C645, 20 gage unless otherwise noted.

2. Depth of Sections: as shown on drawings.

3. Runners: Match studs; type recommended by stud manufacturer for bottom and top support of studs and for vertical abutment of gypsum board partitions against other work.

4. Furring Channels: 25 gage hat shaped metal furring channels unless otherwise noted.

5. Accessories: Provide stud manufacturer's standard clips, shoes, ties, reinforcement, fasteners, and other accessories as needed for a complete partition framing system.

6. Finish: Hop-dip galvanized per ASTM A525.

2.02 GYPSUM BOARD MATERIALS AND ACCESSORIES:

A. Manufacturer: Products of United States Gypsum are specified. Furnish specified product, equivalent of National Gypsum, Georgia Pacific, or equal, unless otherwise specified.

B. Gypsum Wallboard (Interior):

1. For all partitions regardless of rating (also where noted Type 'X'): Interior tapered or SW Firecode "C" Sheetrock, 5/8 inch thick unless otherwise noted. ASTM C36, Type "X".

2. For exterior and restroom walls: Mold/mildew resistant.

3. For all offices, private treatment, mechanical, conference and other enclosed private rooms and all toilets: Install product equal to Gold Bond Soundbreak XP 5/8" Gypsum board on one side of partitions sounding these rooms separating other occupied space.

C. Gypsum Sheathing (Exterior):

USG Gypsum Sheathing as manufactured by United States Gypsum Company, or equal, complying with FS SS-L-30 for Type II (sheathing), Class 2 (water-resistance surfaces), Form A (plain back), Grade (core) and Style indicated below, and with ASTM C 79.

1. Grade W: Water-Resistant treated core.

2. Style: Square edges and ends.

3. Thickness: 1/2" or as indicated on drawings.

4. Size: 4'-0" x 8'-0"/9'-0" as required for coordination with framing.

D. Furring Channel: USG Metal Furring Channel DWC-25. (See also Section 6100 – Rough Carpentry for furring in wood frame construction.)

E. Edging - USG 200-B unless otherwise indicated.

F. Corner Bead - USG Dur-A-Bead 103.

G. Expansion Joint - USG Zinc Control Joint No. 093.

H. Joint Treatment:

1. Interior - USG Perf-A-Tape Joint System with vinyl based joint compound. ASTM C475. At W/R panels use Sheetrock Brand W/R Compound for all nail and joint coats behind ceramic tile and for first coat at nails elsewhere.

2. Exterior - USG Perf-A-Tape Joint System with Durabond Joint Compound.

I. Miscellaneous Materials:

1. Fasteners:

a. Use screws complying with GA-216 for attaching gypsum board. For single layer use screw lengths of 1 inch for steel framing and 1 1/4 inch for wood framing, unless otherwise indicated. In all cases

screws shall penetrate framing at least 5/16 inch.

(1) For fire rated construction use same fasteners as used in applicable fire test.

b. Use annular ringed galvanized nails for nailing into concrete masonry.

c. Use cemented coated nails 1 7/8 inches long conforming with "Recommended Performance Standards for Nails for Gypsum Wallboard", adopted by Gypsum Association and the AWCI for attaching gypsum board.

J. Adhesive: Modified Contact Adhesive, unless otherwise approved.

K. Acoustical Sealant: USG Sheetrock Acoustical Sealant, or equal.

PART 3 - EXECUTION

3.01 METAL SUPPORT SYSTEMS:

A. Wall/Partition Support System: Unless otherwise indicated, support systems shall extend from floor to underside of structure above.

1. Install runner tracks at floors and bottom of roof or floor framing members and where stud system abuts other construction. Where partitions parallel, but are not directly beneath framing members, where there is no floor above, provide runner, or stud, headers between beams, spaced 4 feet on center, attached at each end, and secure top runner of partition thereto.

2. Space studs 16 inches on center, unless otherwise indicated.

3. Frame door openings with 20 gage vertical studs. Provide runner track header of same gage as jamb studs, and jack studs same as partition studs across head of opening.

4. Frame other openings same as door openings and frame above and below openings same as above door head.

5. Install supplementary framing, runners, blocking and bracing at openings and terminations in the work, and at locations required to support fixtures, equipment, services, heavy trim and similar work which cannot be adequately supported on gypsum board alone.

6. Secure perimeter framing to structural elements with suitable fasteners

located 2 inches from each end and 24 inches apart between, except top runner parallel to, but not directly under, framing members will be attached with 2 screws to headers provided at 48 inches on

center. Anchor studs adjacent to door and fixed light openings, partition intersections, and corners to top and bottom runner flanges. Make web-flange bend at each end of runner over openings and screw to jamb studs with 2 screws each end.

3.02 PREPARATION OF EXISTING SURFACES: Prepare existing wall surfaces as necessary to properly receive new wallboard, including removal of unsound finish which would interfere with proper bonding of adhesive and smoothing rough and irregular surfaces which would affect the appearance of the new finish. Clean off loose particles, dust, oils, etc. before applying adhesive.

3.03 GYPSUM BOARD INSTALLATION REQUIREMENTS:

A. Install, fasten and finish gypsum wallboard and accessories in strict accordance with manufacturer's printed directions and recommendations, with GA-216, and to comply with applicable fire tests where fire rated construction is required.

B. Install wall/partition boards with long dimension parallel to studs using sheet lengths to avoid end-butt joints wherever possible and with side and end edges positioned over a support. Offset joints on each side of partition at least on stud space.

C. Install gypsum board with face side out. Do not install imperfect, damaged or damp boards. Butt boards together for a light contact at edges and ends with not more than 1/16" open space between boards. Do not force into place.

D. Position boards so that both tapered edge joints abut, and mill-cut or field-cut end joints abut. Do not place tapered edges against cut edges or ends.

E. For partitions containing sound attenuating blankets, provide 1/4" - 3/8" gap between boards at corners and between bottom of board and floor. Fill gap with continuous bead of acoustical sealant. Close off all sound flanking paths around or through the work.

F. Install exterior ceiling board with long dimension perpendicular to supporting stud members and attach with cadmium plated type S-12 screws. Seal all cut edges of board with water-resistant sealant prior to installation.

G. Install interior wall board either perpendicular or parallel to framing.

H. Unless otherwise indicated, space fasteners in gypsum boards in

accordance with referenced standards and manufacturer's recommendations, except as otherwise indicated. For fire rated installation follow fastening used in fire test.

1. Fasten base layer to metal supports with Type S Drywall Screws, spaced 12" o.c. along supported edges and 24" o.c. along intermediate supports.

2. Fasten single layer and face layer to metal supports with Type S Drywall Screws, spaced 12" o.c., unless otherwise indicated. Stagger screws on abutting edges and ends.

3. Fasten to wood supports with 12" spacing for studs 24" o.c., and 16" spacing for studs 16" o.c., using Type W screws.

3.04 INSTALLATION OF WALLBOARD TRIM ACCESSORIES:

A. General: Where feasible, use the same fasteners to anchor trim accessory flanges as required to fasten gypsum board to the supports. Otherwise, fasten flanges by nailing or stapling in accordance with manufacturer's instructions and recommendations.

B. Install metal corner beads at all exposed external corners of gypsum board work.

C. Install metal edge trim when edge of gypsum board would otherwise be exposed or semi-exposed and where work is tightly abutted to other work.

D. Install venting reveal moulding around all edges of exterior ceilings.

3.05 INSTALLATION OF WALLBOARD FINISHING:

A. General: Apply treatment at gypsum board joints (both directions), flanges of trim accessories, penetrations, fasteners heads, surface defects and elsewhere as required to prepare work for decoration.

1. Apply joint tape at joints between gypsum boards, except where a trim accessory is indicated.

2. Apply joint compound in 3 coats (not including prefill of openings in base), and sand between last 2 coats and after last coat.

3. Where partitions are required to extend to deck the last two coats of joint compound and the sanding may be omitted above the ceiling. For fire rated partitions, all vertical joints must occur over framing members

and horizontal joints, if any, must be staggered 24" O.C. on opposite sides of the partition for this provision to apply.

END OF SECTION 22, GYPSUM BOARD ASSEMBLIES

SECTION 23

09500 – ACOUSTICAL TREATMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general conditions of Contract, including General and Supplementary Conditions and Divisions-1 Specification sections apply to work of this section.

1.2 SUMMARY

A. Section Includes:

1. Acoustical ceiling panels.
2. Exposed grid suspension system.
3. Wire hangers, fasteners, main runners, cross tees, and wall angle moldings.

B. Related Sections:

1. Section 01350, Special Environmental Requirements
2. Section 09250 - Gypsum Board
3. Section 09120 - Suspension System Framing and Furring for Plaster and Gypsum Board Assemblies
4. Division 15 Sections - Mechanical Work
5. Division 16 Sections - Electrical Work

C. Alternates

1. Prior Approval: Unless otherwise provided for in the Contract documents, proposed product substitutions may be submitted no later than TEN (10) working days prior to the date established for receipt of bids. Acceptability of a proposed substitution is contingent upon the Architect's review of the proposal for acceptability and approved products will be set forth by the Addenda. If included in a Bid are substitute products which have not been approved by Addenda, the specified products shall be provided without additional compensation.

2. Submittals which do not provide adequate data for the product evaluation will not be considered. The proposed substitution must meet all requirements of this section, including but not necessarily limited to, the following: Single source materials suppliers (if specified in Section 1.5); Underwriters' Laboratories Classified Acoustical performance; Panel design, size, composition, color, and finish; Suspension system

component profiles and sizes; Compliance with the referenced standards.

1.3 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM A 1008 Standard Specification for Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
2. ASTM A 641 Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.

3. ASTM A 653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
 4. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
 5. ASTM C 635 Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
 6. ASTM C 636 Recommended Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
 7. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
 8. ASTM E 1414 Standard Test Method for Airborne Sound Attenuation Between Rooms Sharing a Common Ceiling Plenum.
 9. ASTM E 1111 Standard Test Method for Measuring the Interzone Attenuation of Ceilings Systems.
 10. ASTM E 1264 Classification for Acoustical Ceiling Products.
 11. ASTM E 1477 Standard Test Method for Luminous Reflectance Factor of Acoustical Materials by Use of Integrating-Sphere Reflectometers.
 12. ASTM D 3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
 13. ASTM E 119 Standard Test Methods for Fire Tests of Building Construction and Material.
- B. ASHRAE Standard 62.1-2004, "Ventilation for Acceptable Indoor Air Quality"

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data for each type of acoustical ceiling unit and suspension system required.
- B. Samples: Minimum 6 inch x 6 inch samples of specified acoustical panel; 8 inch long samples of exposed wall molding and suspension system, including main runner and 4 foot cross tees.
- C. Shop Drawings: Layout and details of acoustical ceilings. Show locations of items which are to be coordinated with, or supported by the ceilings.
- D. Certifications: Manufacturer's certifications that products comply with specified requirements, including laboratory reports showing compliance with specified tests and standards. For acoustical performance, each carton of material must carry an approved independent laboratory classification of NRC, CAC, and AC.

E. If the material supplied by the acoustical subcontractor does not have an Underwriter's Laboratory classification of acoustical performance on every carton, subcontractor shall be required to send material from every production run appearing on the job to an independent or NVLAP approved laboratory for testing, at the architect's or owner's discretion. All products not conforming to manufacturer's current published values must be removed, disposed of and replaced with complying product at the expense of the Contractor performing the work.

1.5 QUALITY ASSURANCE

A. Single-Source Responsibility: Provide acoustical panel units and grid components by a single manufacturer.

B. Fire Performance Characteristics: Identify acoustical ceiling components with appropriate markings of applicable testing and inspecting organization.

1. Surface Burning Characteristics: As follows, tested per ASTM E 84 and complying with ASTM E 1264 for Class A products.

a. Flame Spread: 25 or less

b. Smoke Developed: 50 or less

C. Handle acoustical ceiling units carefully to avoid chipping edges or damaged units in any way.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver acoustical ceiling units to project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.

B. Before installing acoustical ceiling units, permit them to reach room temperature and a stabilized moisture content.

C. Handle acoustical ceiling units carefully to avoid chipping edges or damaged units in any way.

1.7 PROJECT CONDITIONS

A. Space Enclosure:

All ceiling products and suspension systems must be installed and maintained in accordance with Armstrong written installation instructions for that product in effect at the time of installation and best industry practice. Prior to installation, the ceiling product must be kept clean and dry, in an environment that is between 32oF (0o C) and 120oF (49o C) and not subject to Abnormal Conditions. Abnormal conditions include exposure to chemical fumes, vibrations, moisture from conditions such as building leaks or condensation, excessive humidity, or excessive dirt or dust buildup.

Standard Ceilings: Do not install interior ceilings until space is enclosed and weatherproof; wet work in place is completed and nominally dry; work above ceilings is complete; and ambient conditions of temperature and humidity are continuously maintained at values near those intended for final occupancy. Building areas to receive ceilings shall be free of construction dust and debris.

1.8 WARRANTY

A. Acoustical Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace acoustical panels that fail within the warranty period. Failures include, but are not limited to:

1. Acoustical Panels: Sagging and warping as a result of defects in materials or factory workmanship.
2. Grid System: Rusting and manufacturer's defects
3. Acoustical Panels with BioBlock Plus or designated as inherently resistive to the growth of micro-organisms installed with Armstrong suspension systems: Visible sag and will resist the growth of mold/mildew and gram positive and gram negative odor and stain causing bacteria.

B. Warranty Period:

1. Acoustical panels: One (1) year from date of substantial completion.
2. Grid: Ten years from date of substantial completion.

C. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

1.9 MAINTENANCE

A. Extra Materials: Deliver extra materials to Owner. Furnish extra materials described below that match products installed. Packaged with protective covering for storage and identified with appropriate labels.

1. Acoustical Ceiling Units: Furnish quality of full-size units equal to 5.0 percent of amount installed.
2. Exposed Suspension System Components: Furnish quantity of each exposed suspension component equal to 2.0 percent of amount installed.

PART 2-PRODUCTS

2.1 MANUFACTURERS

A. Ceiling Panels:

1. Armstrong World Industries, Inc. or approved equal.

2.2 ACOUSTICAL CEILING UNITS (INTERIOR)

A. Acoustical Panels Type L.A.T. or as otherwise indicated on drawings:

1. Surface Texture: Smooth
2. Composition: Mineral Fiber
3. Color: White
4. Size: 24in X 24in X 1in
5. Edge Profile: Square Tegular Lay-In for interface with Prelude ML 15/16" Exposed Tee.
6. Noise Reduction Coefficient (NRC): ASTM C 423; Classified with UL label on product carton, 0.55.
7. Ceiling Attenuation Class (CAC): ASTM C 1414; Classified with UL label on product carton, 33
8. Emissions Testing: Section 01350 Protocol, < 13.5 ppb of formaldehyde when used under typical conditions required by ASHRAE Standard 62.1-2004, "Ventilation for Acceptable Indoor Air Quality"
9. Flame Spread: ASTM E 1264; Class A (UL)
10. Light Reflectance (LR): ASTM E 1477; White Panel: Light Reflectance: 0.82.
11. Dimensional Stability: Standard -Space is enclosed, weatherproofed, HVAC systems operating.
12. Antimicrobial Protection: None
13. Acceptable Product: CALLA 2822 as manufactured by Armstrong World Industries or equal.

2.4 SUSPENSION SYSTEMS

A. Components: All main beams and cross tees shall be commercial quality hot-dipped galvanized (galvanized steel, aluminum, or stainless steel) as per ASTM A 653. Main beams and cross tees are double-web steel construction with type exposed flange design. Exposed surfaces chemically cleansed, capping pre-finished galvanized steel (aluminum or stainless steel) in baked polyester paint. Main beams and cross tees shall have rotary stitching (exception: extruded aluminum or stainless steel).

1. Structural Classification: ASTM C 635 Intermediate Duty.
2. Color: White and match the actual color of the selected ceiling tile, unless noted otherwise.
3. Acceptable Product: Prelude ML 15/16" Exposed Tee as manufactured by Armstrong World Industries, Inc. or equal.

B. High Humidity Finish: Comply with ASTM C 635 requirements for Coating Classification for Severe Environment Performance where high humidity finishes are indicated.

1. SS Prelude Plus by Armstrong World Industries, Inc. - 100% Type 304 STAINLESS Steel.
2. AL Prelude Plus by Armstrong World Industries, Inc. - all ALUMINUM
3. Prelude Plus XL Fire Guard by Armstrong World Industries, Inc., G-60 Hot dipped galvanized /aluminum capping
4. Structural Classification: ASTM C 635 duty class.
5. Color: White aluminum

C. Attachment Devices: Size for five times design load indicated in ASTM C 635, Table 1, Direct Hung unless otherwise indicated.

D. Wire for Hangers and Ties: ASTM A 641, Class 1 zinc coating, soft temper, pre-stretched, with a yield stress load of at least three times design load, but not less than 12 gauge.

E. Edge Moldings and Trim: Metal or extruded aluminum of types and profiles indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations, including light fixtures, that fit type of edge detail and suspension system indicated. Provide moldings with exposed flange of the same width as exposed runner.

F. Accessories

PART 3 - EXECUTION

3.1 EXAMINATION

A. Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out, unless expressly permitted by manufacturer's printed recommendations. (Exception: HumiGuard Max Ceilings)

3.2 PREPARATION

A. Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edges of each ceiling. Avoid use of less than half width units at borders, and comply with reflected ceiling plans. Coordinate panel layout with mechanical and electrical fixtures.

B. Coordination: Furnish layouts for preset inserts, clips, and other ceiling anchors whose installation is specified in other sections.

1. Furnish concrete inserts and similar devices to other trades for installation well in advance of time needed for coordination of other work.

3.3 INSTALLATION

- A. Install suspension system and panels in accordance with the manufacturer's instructions, and in compliance with ASTM C 636 and with the authorities having jurisdiction.
- B. Suspend main beam from overhead construction with hanger wires spaced 4'-0" on center along the length of the main runner. Install hanger wires plumb and straight.
- C. Install wall moldings at intersection of suspended ceiling and vertical surfaces. Miter corners where wall moldings intersect or install corner caps.
- D. For reveal edge panels: Cut and reveal or rabbet edges of ceiling panels at border areas and vertical surfaces.
- E. Install acoustical panels in coordination with suspended system, with edges resting on flanges of main runner and cross tees. Cut and fit panels neatly against abutting surfaces. Support edges by wall moldings.

3.4 ADJUSTING AND CLEANING

- A. Replace damaged and broken panels.
- B. Clean exposed surfaces of acoustical ceilings, including trim, edge moldings, and suspension members. Comply with manufacturer's instructions for cleaning and touch up of minor finish damage. Remove and replace work that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION 23, ACOUSTICAL TREATMENT

SECTION 24

10800 - TOILET ACCESSORIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 DESCRIPTION OF WORK: Provide toilet accessories where shown on drawings or as specified herein.

1.03 QUALITY ASSURANCE:

A. Inserts and Anchorages: Furnish inserts and anchoring devices which must be built-in; coordinate delivery with other work to avoid delay.

B. Accessory Locations:

1. Coordinate accessory locations with other work to avoid interference and to assure proper operation and servicing of accessory units.

2. Coordinate with Mechanical Sub-contractor to assure that proper drilling is provided in lavatories to receive soap dispensers.

C. Comply with 36 CFR 1191 "Americans with Disabilities Act Accessory Guidelines for Buildings and Facilities" including requirement regarding location and installed structural strength of grab bars.

1.04 SUBMITTALS:

A. Product Data: Submit manufacturer's technical data and installation instructions for each toilet accessory.

B. Setting Drawings: Provide setting drawings, templates, instructions, and directions for installation of anchorage devices in other work.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS: Subject to compliance with requirements, provide toilet accessories by one of the following:

Bradley Corp.

Bobrick Washroom Equip, Inc.

Watrous, Inc.,

2.02 GENERAL MATERIALS:

A. Stainless Steel: AISI Type 302/304 with polished No 4 finish, 22 gage minimum unless otherwise indicated.

B. Galvanized Steel Mounting Devices: ASTM A 386, hot-dip galvanized after fabrication.

C. Fasteners: Screws, bolts, and other devices of same material as accessory unit or of galvanized steel where concealed.

2.03 FABRICATION:

A. General: Stamped names or labels on exposed faces of toilet accessory units are not permitted, except where otherwise indicated; non-obtrusive labels on surfaces not exposed to view are acceptable.

2.04 TOILET ACCESSORIES: Manufacturer Model Numbers listed below are as manufactured by Bradley Corporation unless otherwise noted.

A. Paper Towel Dispenser: Indicated on drawings as PTD or otherwise noted.

1. Provide one (1) at each lavatory and sink and as indicated on drawings.

2. Surface Mounted, provided by owner.

B. Toilet Tissue Dispenser: Indicated on drawings as TTD or otherwise noted.

1. Provide one (1) at each water closet.

2. Surface Mounted, provided by owner.

C. Grab Bars: Indicated on drawings as GB (size) or otherwise noted.

1. Provide in wall anchor plate 899-015 with appropriate mounting kit.

2. Provide one 48" Grab Bar at each water closet, Mod. No. 8322-00148.

3. Provide one 36" Grab Bar at each water closet, Mod. No. 8322-00136.

4. Alternate: Provide other grab bars with varying sizes by same manufacturer - see drawings for size. 8322-001XX (size).

D. Framed Mirrors: Indicated on drawings as FM or otherwise noted.

1. Provide one 18"x36" framed mirror at above each toilet lavatory, Model No. 780-1836, or approved equal

E. Lavatory Shield: Provide one (1) complete set for each wall mounted lavatory sink to cover supply lines and drain pipe.

1. Provide one (1) at each lavatory and sink and as indicated on drawings.

2. Truebro Lav Guard 2 Undersink Piping Covers or equal.

F. Soap Dispenser: Indicated on drawings as SD or otherwise noted.

2. Provide one (1) at each lavatory and sink and as indicated on drawings.

3. Surface Mounted, provided by owner.

2.05 PROXIMITY OF SIMILAR PRODUCTS: Provide products of same manufacturer for each type of accessory unit and for units exposed in same areas, unless otherwise acceptable to Architect.

PART 3 - EXECUTION

3.01 INSPECTION:

Installer must examine substrates, previously placed inserts and anchorages necessary for mounting of toilet accessories and other conditions under which installation is to occur, and must notify Contractor in writing of conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to installer.

3.02 INSTALLATION:

Install toilet accessory units in accordance with manufacturer's instructions, using fasteners which are appropriate to substrate and recommended by manufacturer of unit. Install units plumb and level, firmly anchored in locations indicated. Mount bottom of mirrors at 40" above floor and grab bars 34" above floor. Anchor grab bars to resist a 250 lb. load applied at any point.

3.03 MISCELLANEOUS FRAMING:

- A. Provide framing members at anchor locations of all surface mounted accessory units.
- B. Provide framing members at all sides of rough opening dimension for all recessed and pass-thru accessory units.

3.03 ADJUST AND CLEAN:

- A. Adjust toilet accessories for proper operation and verify that mechanisms function smoothly.
- B. Clean and polish all exposed surfaces after removing protective coatings.

END OF SECTION 24, TOILET ACCESSORIES

ARCHITECTURAL

SECTION 11 – CONCRETE UNIT MASONRY



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Ann Jones, Chief Administrative Officer
cc:
Date: Tuesday, December 20, 2022
Re: Approve Plans and Specifications for the Front Street Parklet Project and authorize advertisement for bids.
File Number: 2022-952
Minute Book #

Summary

Approve Plans and Specifications for the Front Street Parklet Project and authorize advertisement for bids.

Recommendation Statement

I recommend approval of this item.

Please place this on the December 20, 2022 City Council meeting for consideration.

FRONT STREET PARKLET

CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY

MAYOR

TOBY BARKER

CHIEF ADMINISTRATIVE OFFICER

ANN JONES

ENGINEERING DIRECTOR

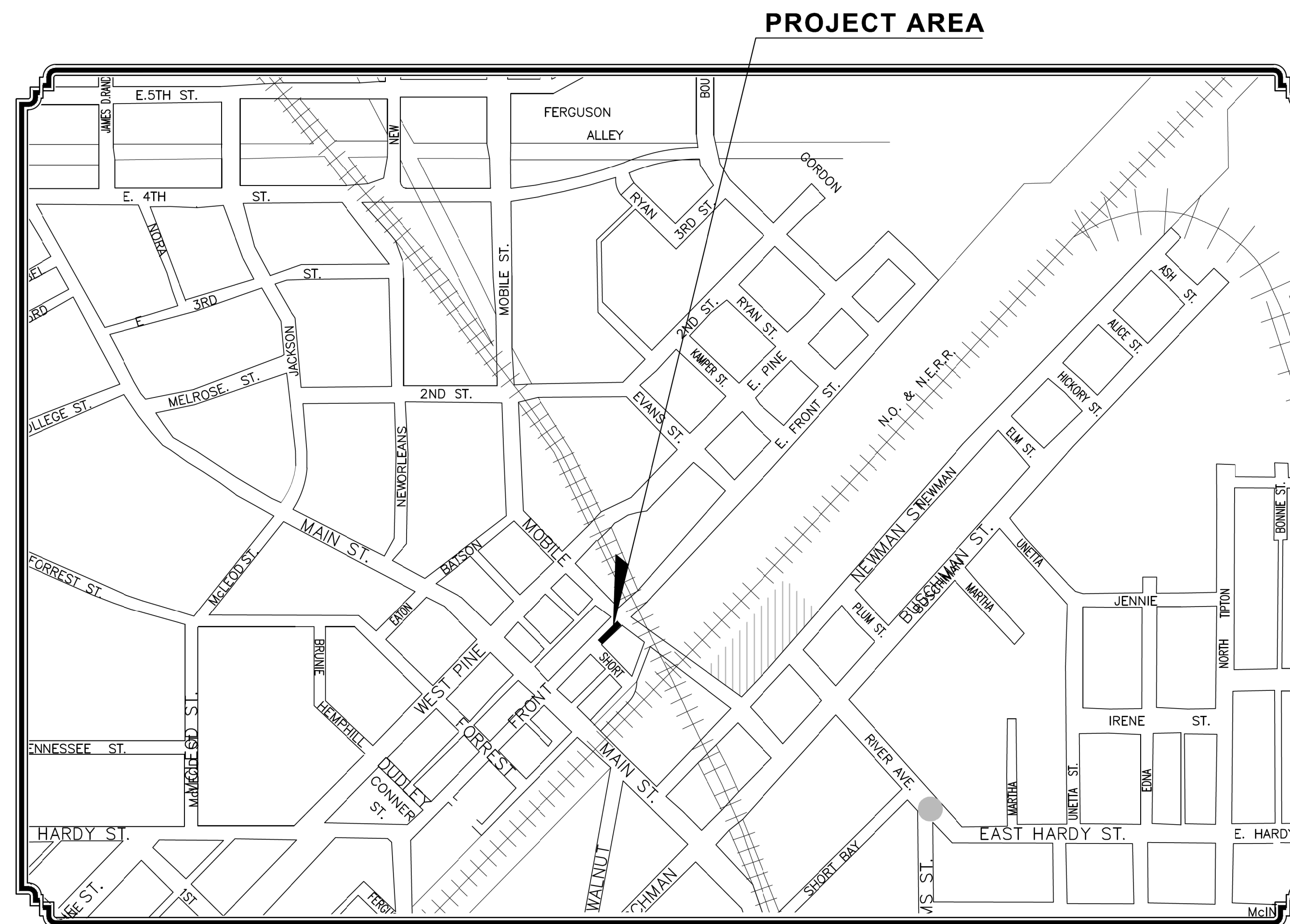
LAMAR RUTLAND, P.E.

COUNCIL MEMBERS

JEFFREY GEORGE	WARD 1
DEBORAH D. DELGADO	WARD 2
CARTER CARROLL	WARD 3
DAVE WARE	WARD 4
NICHOLAS BROWN	WARD 5

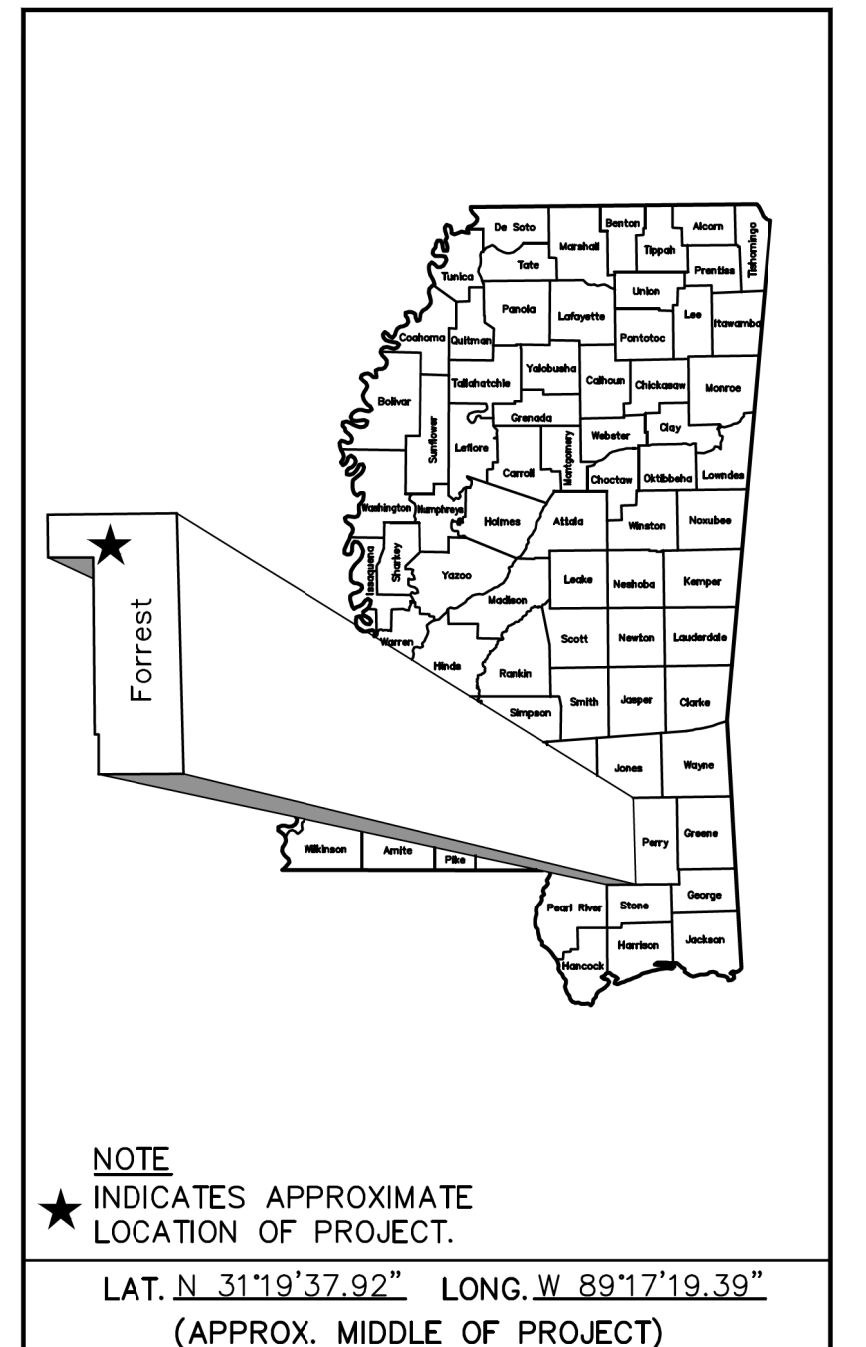
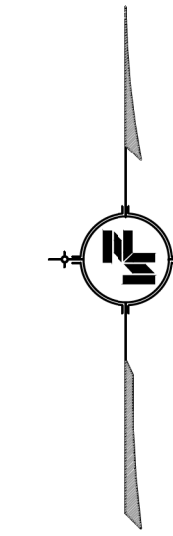
UTILITIES

CITY OF HATTIESBURG
MISSISSIPPI POWER
C-SPIRE
SPIRE GAS



VICINITY MAP

PROJECT LOCATION



PREPARED BY :

 **NEEL-SCHAFFER**
Solutions you can build upon



GEOFFREY P. CROSBY, P.E.
MISSISSIPPI LICENSE NO. 19984

GENERAL NOTES

1. THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2017 EDITION, AS AMENDED, SHALL BE THE STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF THIS PROJECT UNLESS OTHERWISE INDICATED OR AMENDED IN THE SPECIAL PROVISIONS, PROPOSAL AND CONTRACT DOCUMENTS.

2. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CANNOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION.

3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING GRADES AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.

4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, BRIDGES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHOULD BE EXERCISED IN UNDERCUT AREAS AND THE UNDERCUT DEPTH MAY BE ADJUSTED AT CROSS DRAINS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.

5. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES. THEREFORE, THE RISK OF A FAILURE OCCURRING DURING THE EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE WHAT BRACING, SHORING, OR GROUND SUPPORT SYSTEM THAT IS DEEMED NECESSARY TO PREVENT A FAILURE AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION, THE PUBLIC THAT MAY BE ABOVE THE EXCAVATION, OR ANY STRUCTURE ADJACENT TO THE EXCAVATION. ALL COSTS FOR ANY PROTECTIVE MEASURES INCLUDING THE MATERIALS AND LABOR FOR DESIGNING, DRAWING AND CONSTRUCTING THE FACILITY SHALL BE INCLUDED IN THE PRICE BID FOR CONTRACT ITEMS.

6. VOIDS CREATED BY THE REMOVAL OF POSTS, CONCRETE ANCHORS, FOOTINGS, ETC., SHALL BE BACKFILLED AND TAMPED IN ACCORDANCE WITH SECTION 203 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (COST ABSORBED).

7. PRIOR TO EXCAVATION AND EMBANKMENT CONSTRUCTION, ALL TOPSOIL SHALL BE STRIPPED AND STOCKPILED. AFTER COMPLETION OF EXCAVATION AND EMBANKMENT CONSTRUCTION, ALL SLOPES SHALL BE UNIFORMLY PLATED WITH THE STOCKPILED TOPSOIL. THE COST OF STRIPPING, STOCKPILING, PLACING AND SPREADING OF TOPSOIL IS TO BE INCLUDED IN OTHER ITEMS OF WORK.

8. ALL STORM DRAINAGE STRUCTURES SHALL BE CAST-IN-PLACE.

9. FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.

10. THE CONTRACTOR IS TO REMOVE AND RESET ANY SIGNS AND MAILBOXES WHICH CONFLICT WITH CONSTRUCTION (NOT A SEPARATE PAY ITEM).

11. THE LOCATION AND SPACING OF SIGNS SHOWN ON THE TRAFFIC CONTROL PLAN ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.

12. ALL POST LENGTHS FOR SIGNS SHALL BE VERIFIED IN THE FIELD PRIOR TO FABRICATION.

13. SOME WORK MAY BE REQUIRED OUTSIDE THE PROJECT LIMITS BEYOND THE B.O.P. AND E.O.P. NO ADDITIONAL COMPENSATION WILL BE MADE FOR SUCH WORK EXCEPT AS PROVIDED BY SPECIFIC PAY ITEMS SHOWN ON THE PLANS.

14. ALL SIGNS, SIGNALS, PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

15. ALL RAISED OBJECTS SHALL BE PLACED A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB.

16. CONTRACTOR SHALL MAKE THE APPLICATION FOR POWER SERVICE, COORDINATING WITH UTILITY COMPANY, IN ADVANCE OF REQUIRING THE ELECTRICAL SERVICE.

17. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THROUGH AND LOCAL TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

18. THE CONTRACTOR SHALL PROVIDE ACCESS (INGRESS AND EGRESS) TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO NOTIFY BUSINESSES AND HOMEOWNERS 48 HOURS IN ADVANCE OF ACCESS RESTRICTIONS.

19. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTOR'S TO FACILITATE TIE-INS TO OTHER CONTRACTOR'S WORK, WHERE FEASIBLE AND PRACTICABLE.

20. CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR RELOCATION OF EXISTING POWER, GAS, TELEPHONE, AND CABLE TV UTILITIES IF REQUIRED. CONTRACTOR SHALL PROVIDE ACCESS TO THE UTILITY COMPANIES FOR RELOCATION ACTIVITIES AS REQUIRED.

21. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE VERIFICATION, PROTECTION, AND RELOCATION OF BENCHMARKS DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR RELOCATION OF BENCHMARKS.

22. CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTNG ANY SIGNS THAT ARE IN DIRECT CONFLICT WITH CONSTRUCTION IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION (COST ABSORBED).

23. REMOVAL OF EXISTING AND TEMPORARY TRAFFIC STRIPING, TRAFFIC CONTROL SIGNS AND BARRICADES SHALL BE ABSORBED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.

24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE UTILITY COMPANIES IF ANY UTILITY POLES NEED TO BE SUPPORTED DURING CONSTRUCTION (COST ABSORBED).

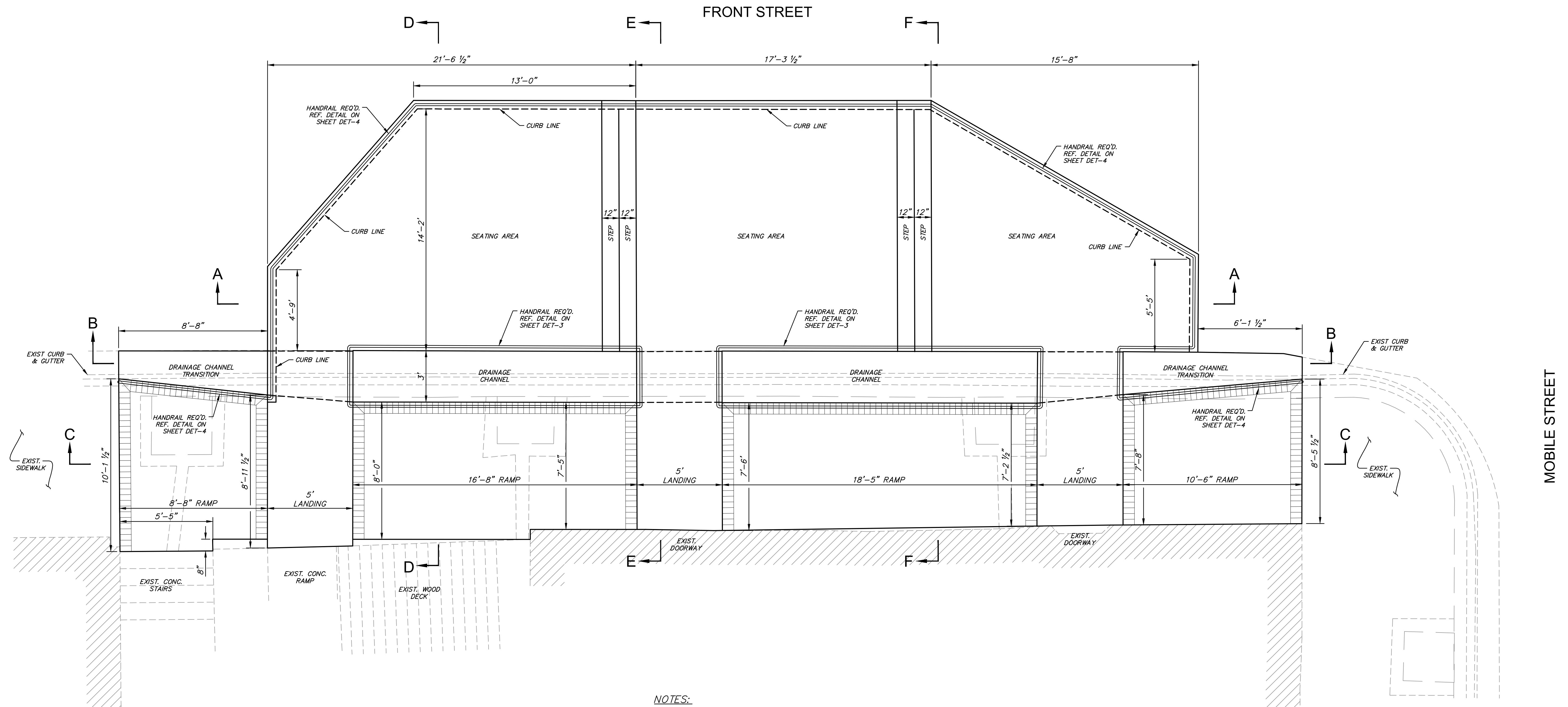
25. THE CONTRACTOR SHALL REPAIR FENCES, RETAINING WALLS, GATES, SODDING, LANDSCAPING, ETC. DAMAGED DURING OVERALL CONSTRUCTION (COST ABSORBED).

26. THE EROSION CONTROL DEVICES REFERENCED IN THESE PLANS ARE A MINIMUM RESPONSIBILITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT SILT DOES NOT LEAVE THE RIGHT OF WAY OR CONTAMINATE WATERS OF THE U.S. DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF WORK AND MAINTAIN THE PLAN DURING CONSTRUCTION.

27. CONTRACTOR SHALL PROVIDE ADA ACCESS DURING CONSTRUCTION IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
- | | DESCRIPTION OF SHEET | WKG. NO. | SHT. NO. |
|------------------------------------|----------------------|----------|----------|
| TITLE SHEET (1) | | | 1 |
| DETAILED INDEX & GENERAL NOTES (1) | | | |
| INDEX & GENERAL NOTES | | GN-1 | 2 |
| DEMOLITION SHEETS (1) | | | |
| DEMOLITION PLAN | | DEMO-1 | 3 |
| PLAN SHEETS (3) | | | |
| DIMENSIONED SITE PLAN | | PLN-1 | 4 |
| GRADING PLAN | | GRD-1 | 5 |
| JOINT PLAN | | JNT-1 | 6 |
| DETAIL SHEETS (4) | | | |
| SECTION DETAILS | | DET-1 | 7 |
| SECTION DETAILS | | DET-2 | 8 |
| CONSTRUCTION DETAILS | | DET-3 | 9 |
| CONSTRUCTION DETAILS | | DET-4 | 10 |
| TRAFFIC CONTROL SHEETS (3) | | | |
| TRAFFIC CONTROL PLAN | | TCP-1 | 11 |
| TRAFFIC CONTROL PLAN PHASE 1 | | TCP-2 | 12 |
| TRAFFIC CONTROL PLAN PHASE 2 | | TCP-3 | 13 |
| ELECTRICAL SHEETS (3) | | | |
| ELECTRICAL PLAN | | ELEC-1 | 14 |
| ELECTRICAL PLAN | | ELEC-2 | 15 |
| ELECTRICAL DETAILS | | ED-1 | 16 |
| EROSION CONTROL STANDARDS (4) | | | |
| SILT FENCE DETAILS | | ECD-3 | 17 |
| WATTLE EROSION CHECK DETAILS | | ECD-6 | 18 |
| SANDBAG EROSION CHECK DETAILS | | ECD-15 | 19 |
| SANDBAG DITCH CHECK DETAILS | | ECD-21 | 20 |
| TOTAL NUMBER OF SHEETS (20) | | | |

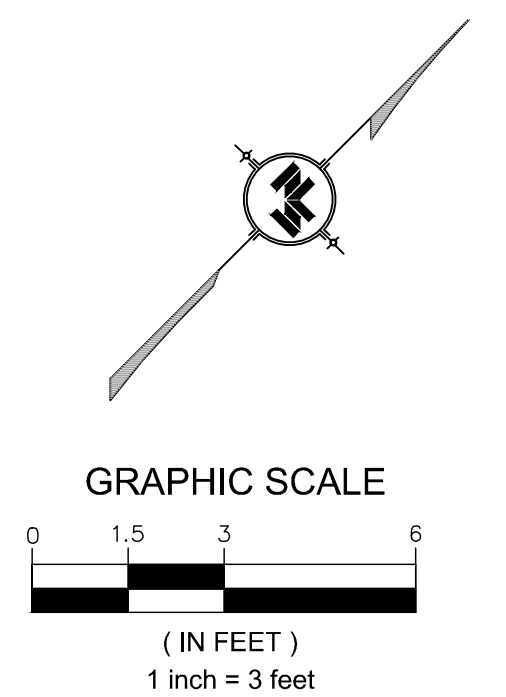
NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION		FRONT STREET PARKLET			INDEX & GENERAL NOTES	
	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17039.00				WORKING NUMBER:	DRAWING NUMBER:
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					DSGN: GPC	DATE: 08/2022				
					DRWN: JPF	DATE: 08/2022				
					CHKD:	DATE:				
					QA/QC:	DATE:				
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NOTES:

1. REFER TO SHEET DET-3 FOR BRICK EDGING DETAIL.
2. 24" RAIL PLANTER-STEEL W/ COGO LINE REQUIRED. LOCATION NOT SHOWN FOR CLARITY. LOCATIONS ALONG HANDRAIL TO BE DETERMINED BY THE ENGINEER AND OWNER.
3. 72" X 24" PLANTER - CEDAR REQUIRED. LOCATION NOT SHOWN FOR CLARITY. LOCATION TO BE DETERMINED BY THE ENGINEER AND OWNER.



NOTICE TO DRAWING HOLDER

NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS				DRAWING INFORMATION	
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				DSGN: GPC	DATE: 08/2022
				DRWN: JPF	DATE: 08/2022
				CHKD:	DATE:
				QA/QC:	DATE:

FRONT STREET PARKLET

CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



DIMENSIONED
SITE PLAN

WORKING NUMBER:
PLN-1

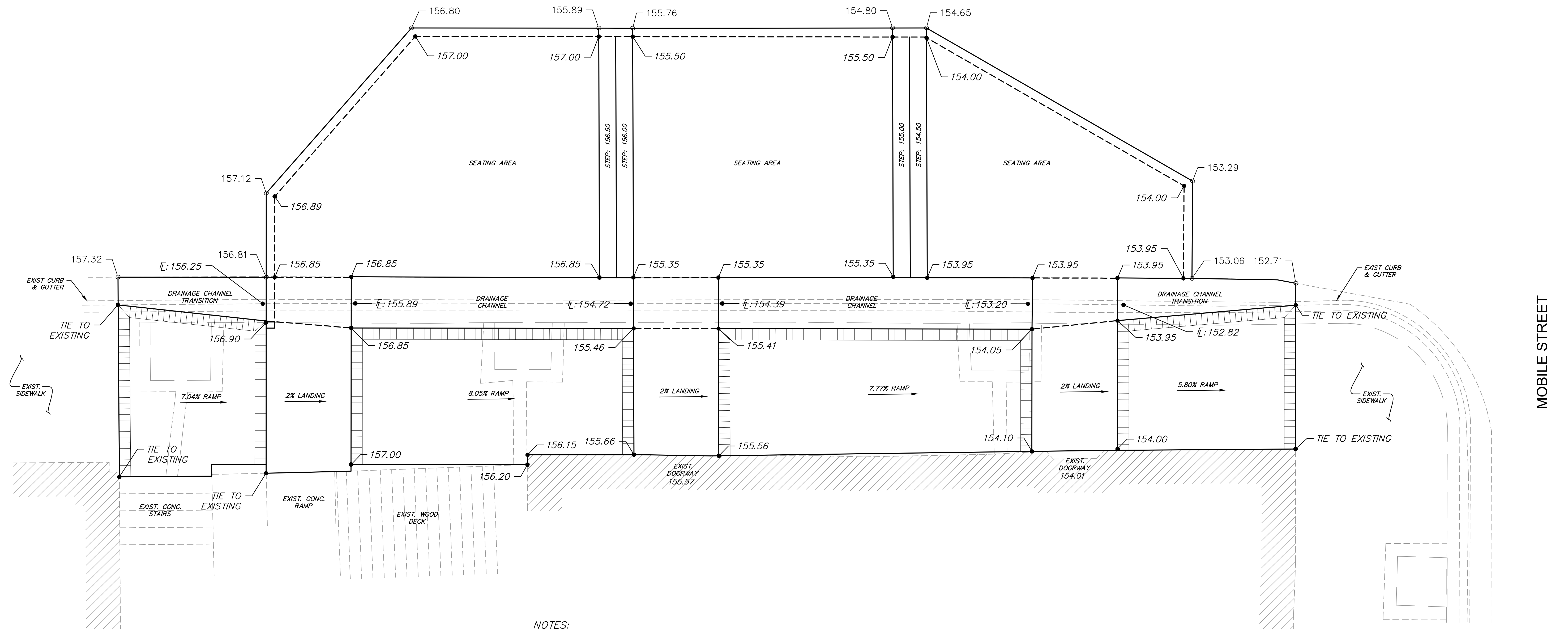
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FRONT STREET

LEGEND:

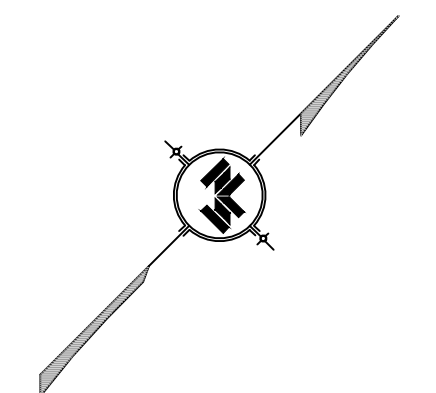
XXX.XX EXISTING ELEVATION

XXX.XX — FINISH ELEVATION

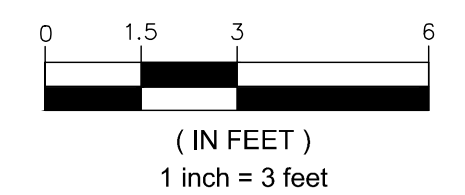


NOTES:

1. FINISH GRADES SHOWN ALONG PERIMETER HEADER CURB INDICATE THE SEATING AREA SLAB ELEVATION AND NOT THE TOP OF CURB.
2. CONTRACTOR TO VERIFY WITH ENGINEER EXISTING AND PROPOSED GRADES PRIOR TO CONSTRUCTION OF PROPOSED IMPROVEMENTS.



GRAPHIC SCALE



NOTICE TO DRAWING HOLDER

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				CHKD:	DATE:
				QA/QC:	DATE:

FRONT STREET PARKLET

CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



GRADING PLAN

WORKING NUMBER:
GRD-1

DRAWING NUMBER:

5

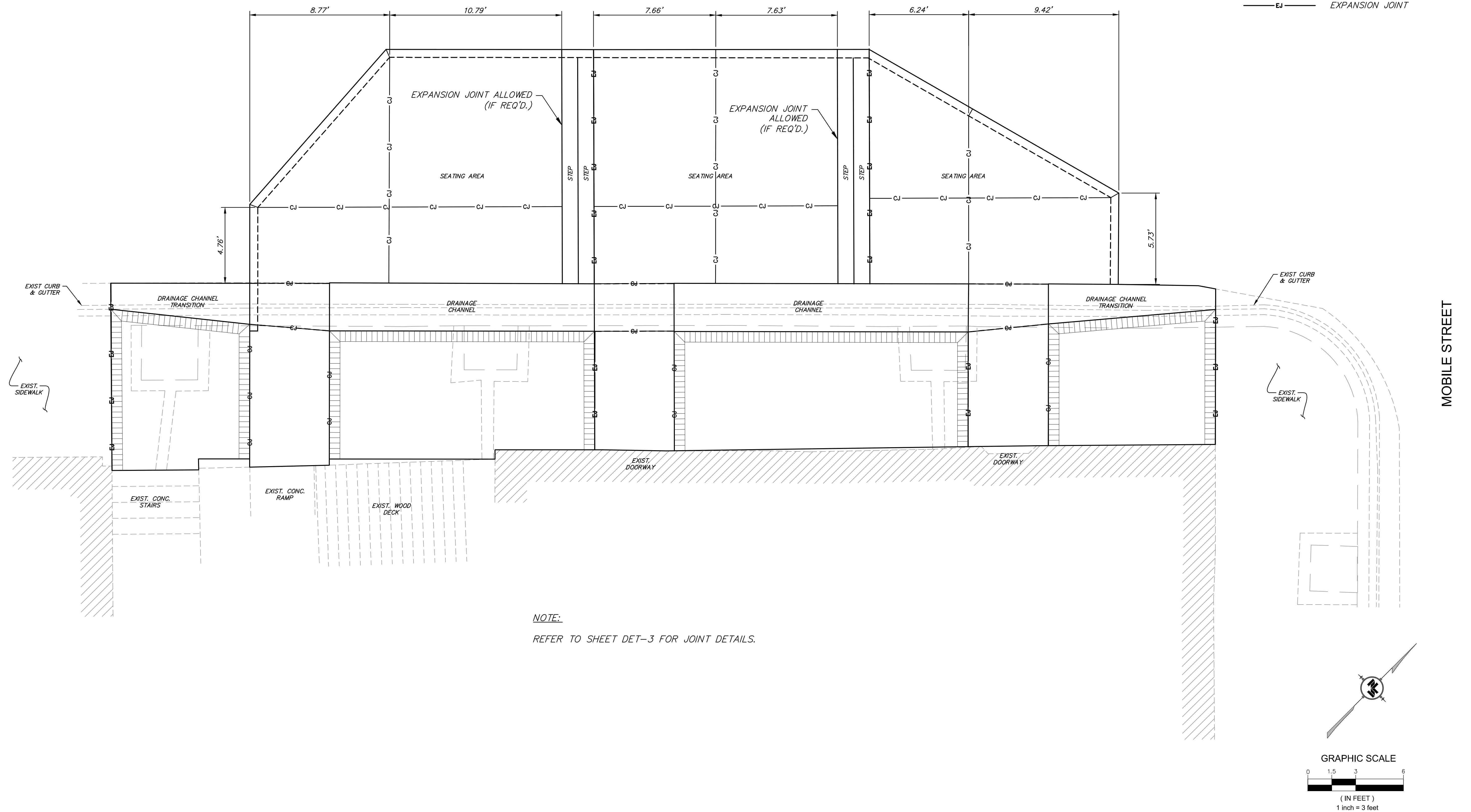
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FRONT STREET

LEGEND:

—CJ— CONSTRUCTION JOINT

—EJ— EXPANSION JOINT



NOTE:
REFER TO SHEET DET-3 FOR JOINT DETAILS.

NOTICE TO DRAWING HOLDER

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FRONT STREET PARKLET

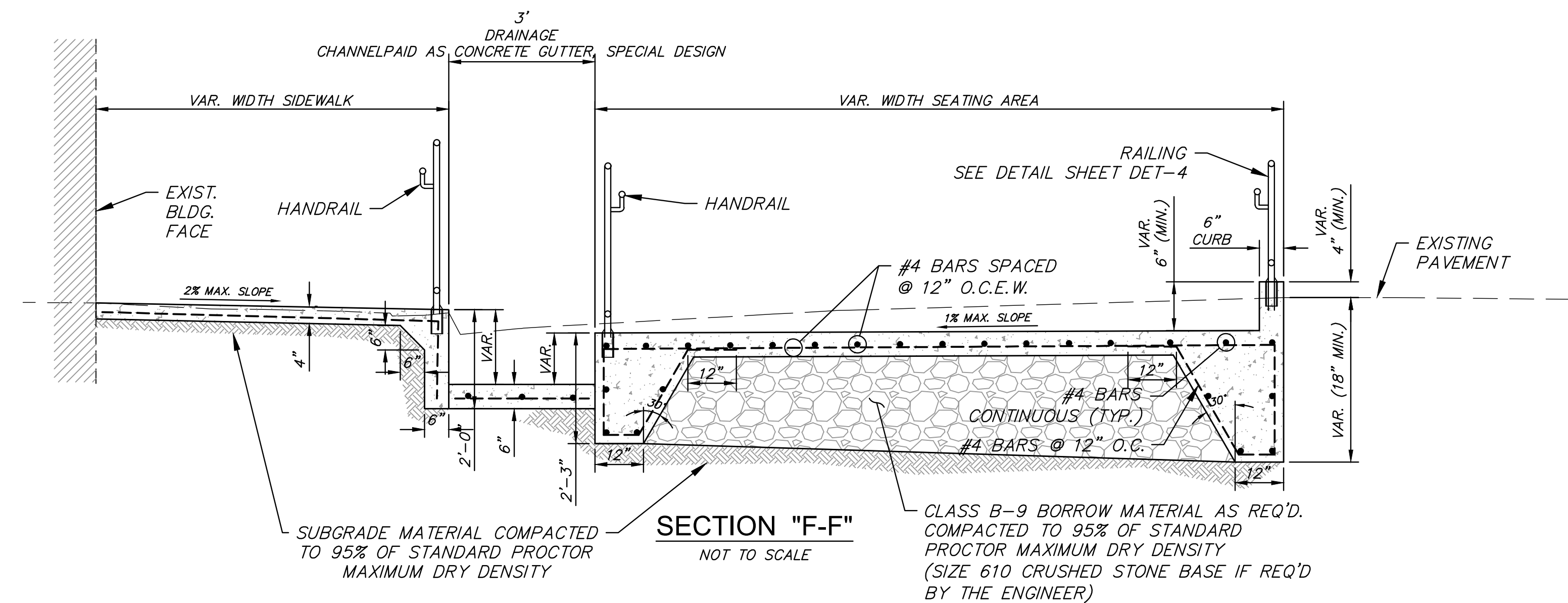
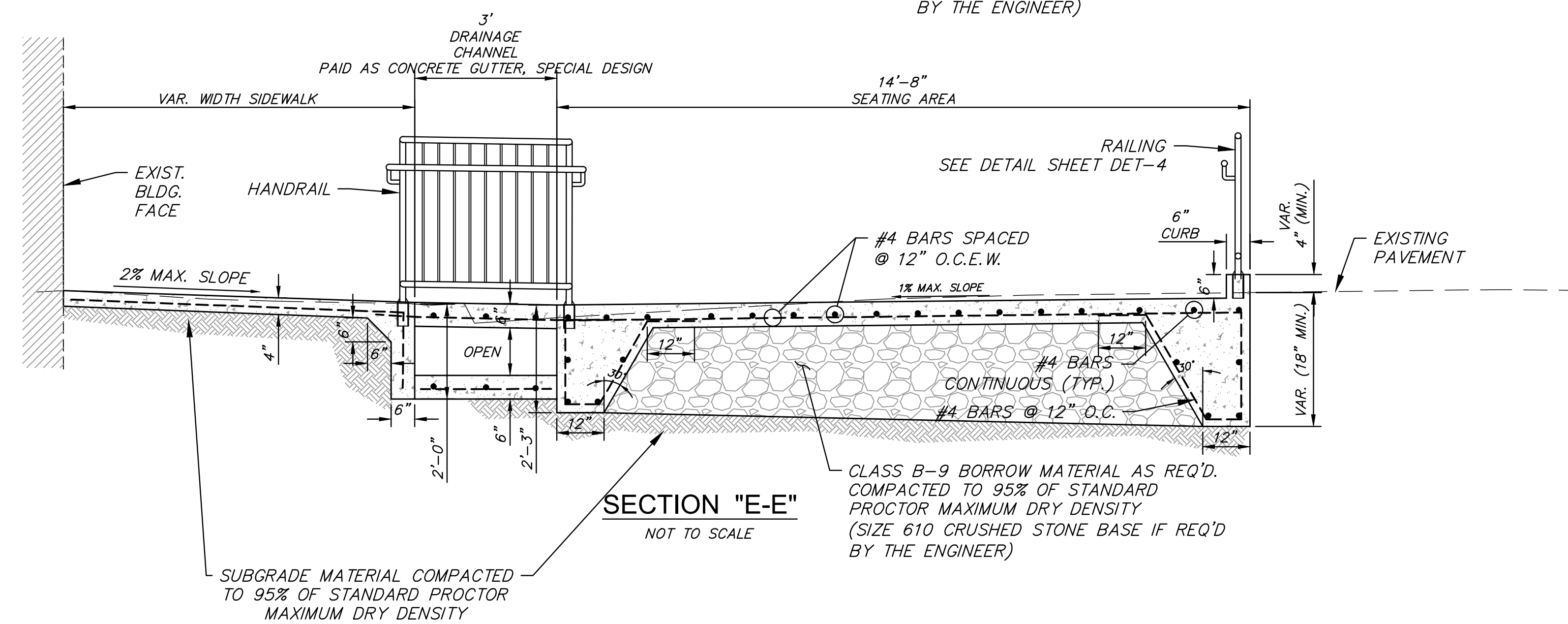
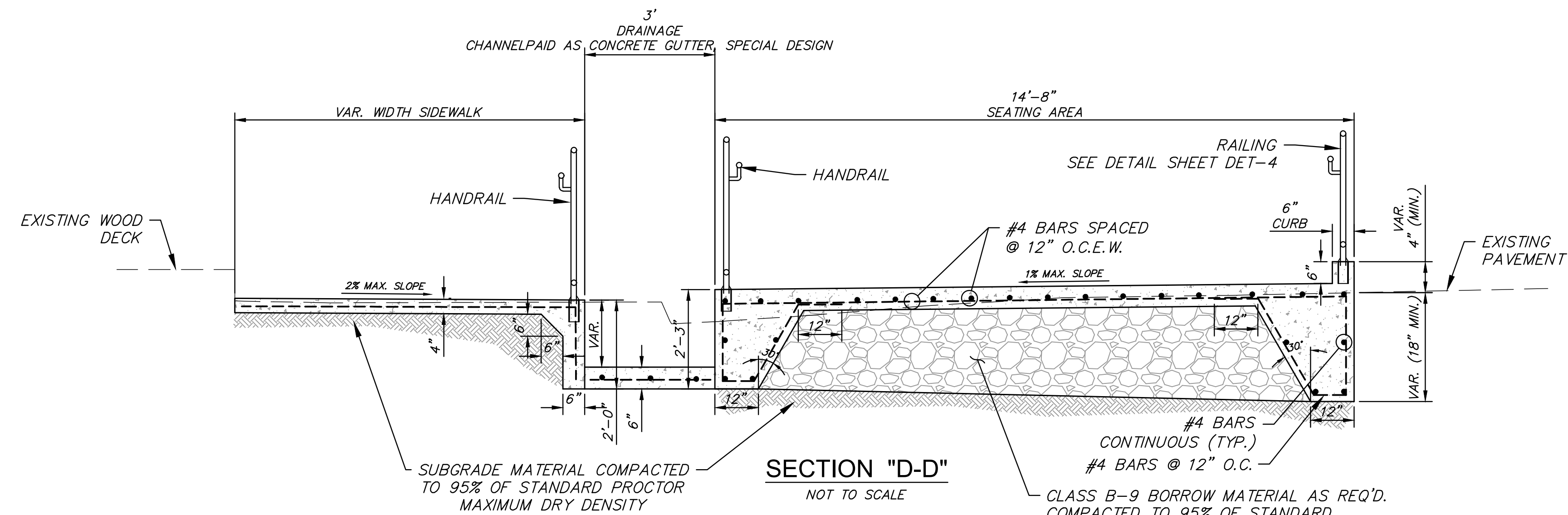
CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS

JOINT
PLAN

WORKING NUMBER:
JNT-1

DRAWING NUMBER:
6

11/21/2022 3:35 PM c:\17000\hatalliesburg\17039-to\18-front st & mobile st oda sidewalks\front street\front_details.dwg



NOTICE TO DRAWING HOLDER

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REVISIONS				DRAWING INFORMATION	
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FRONT STREET PARKLET

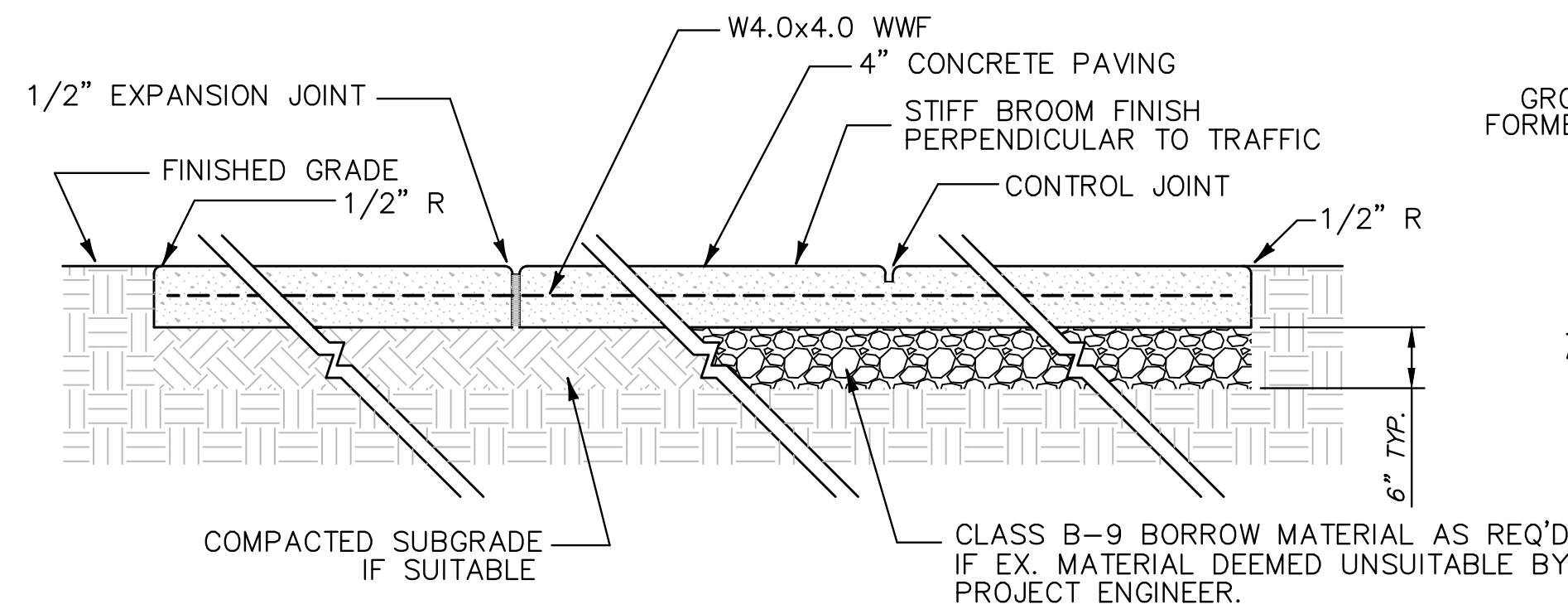
CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



SECTION DETAILS

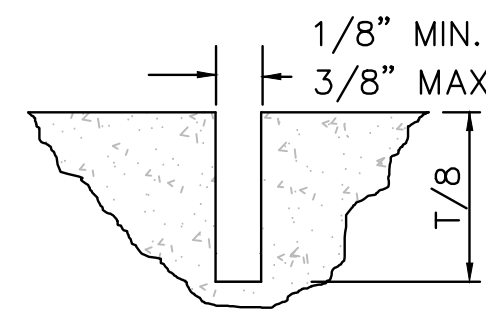
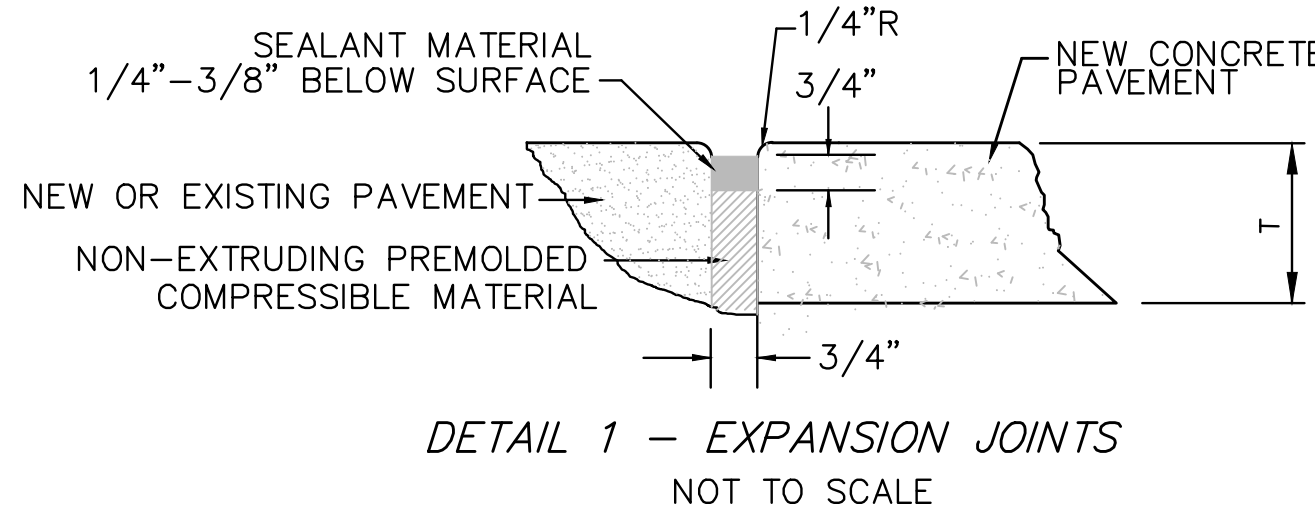
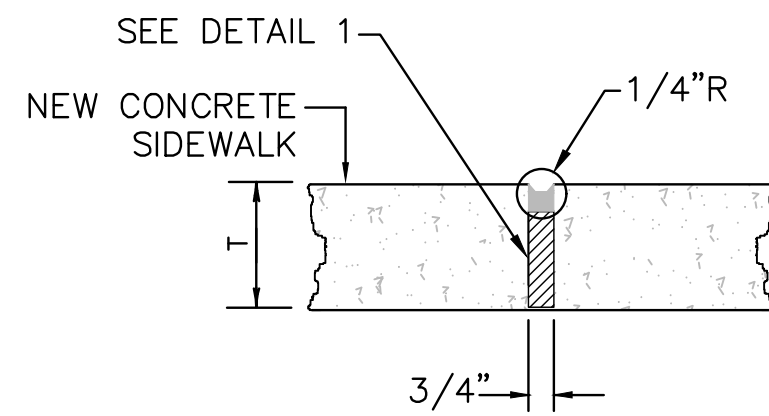
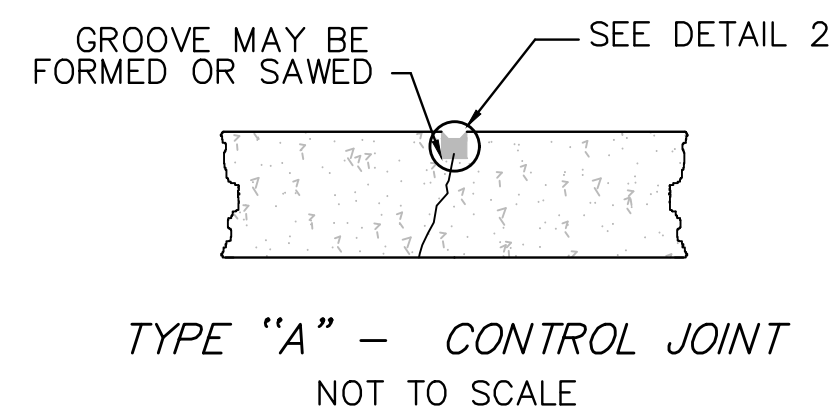
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DET-2

DRAWING NUMBER:
8

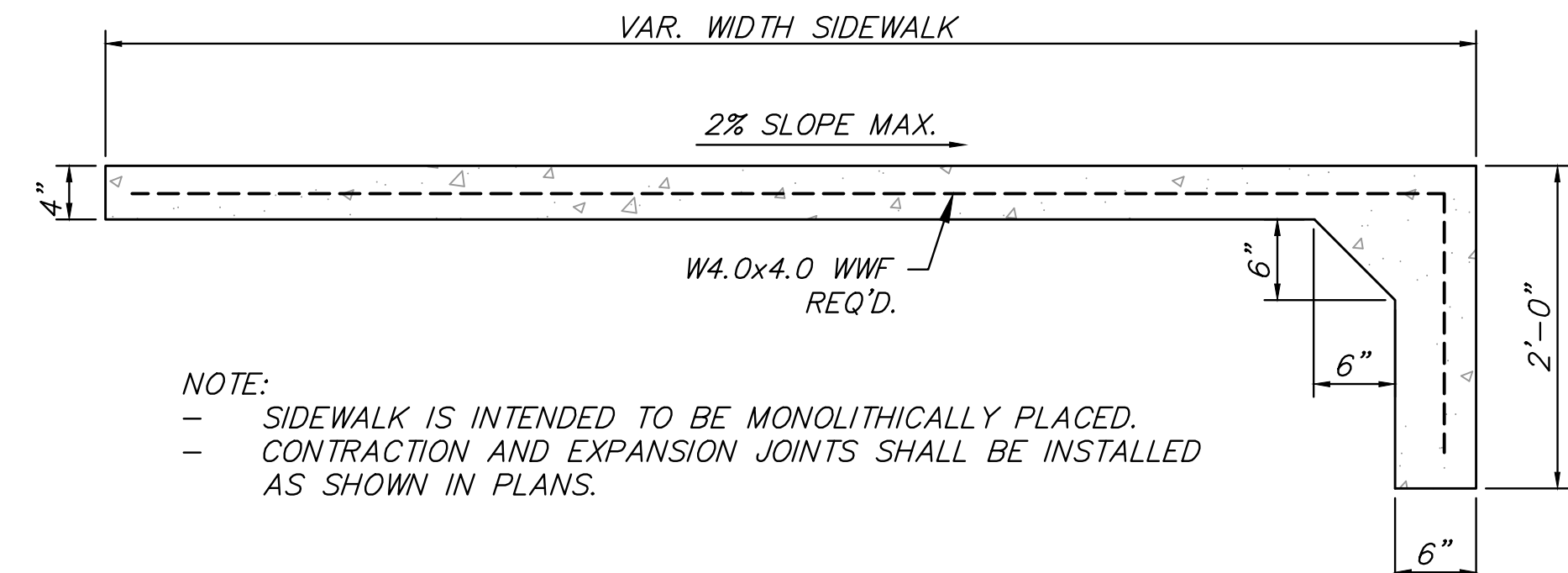


- NOTES:
1. 1/2" EXPANSION JOINT CONFORMING TO ASTM D1751. TOP OF JOINT SHALL BE SEALED w/ 1/2" TAR MODIFIED URETHANE SEALANT. PLACE EXPANSION JOINT AS SHOWN IN THE PLANS.
 2. HAND TOOLED CONTROL JOINTS W/ 1/2" RADIUS AS SHOWN ABOVE
 3. COMPACTION OF SIDEWALK SUBGRADE SOILS SHALL BE ENCOMPASSED BY THE ROADWAY COMPACTION RESULTS FOR DESIGN SOILS.

TYPICAL SIDEWALK DETAIL
NOT TO SCALE

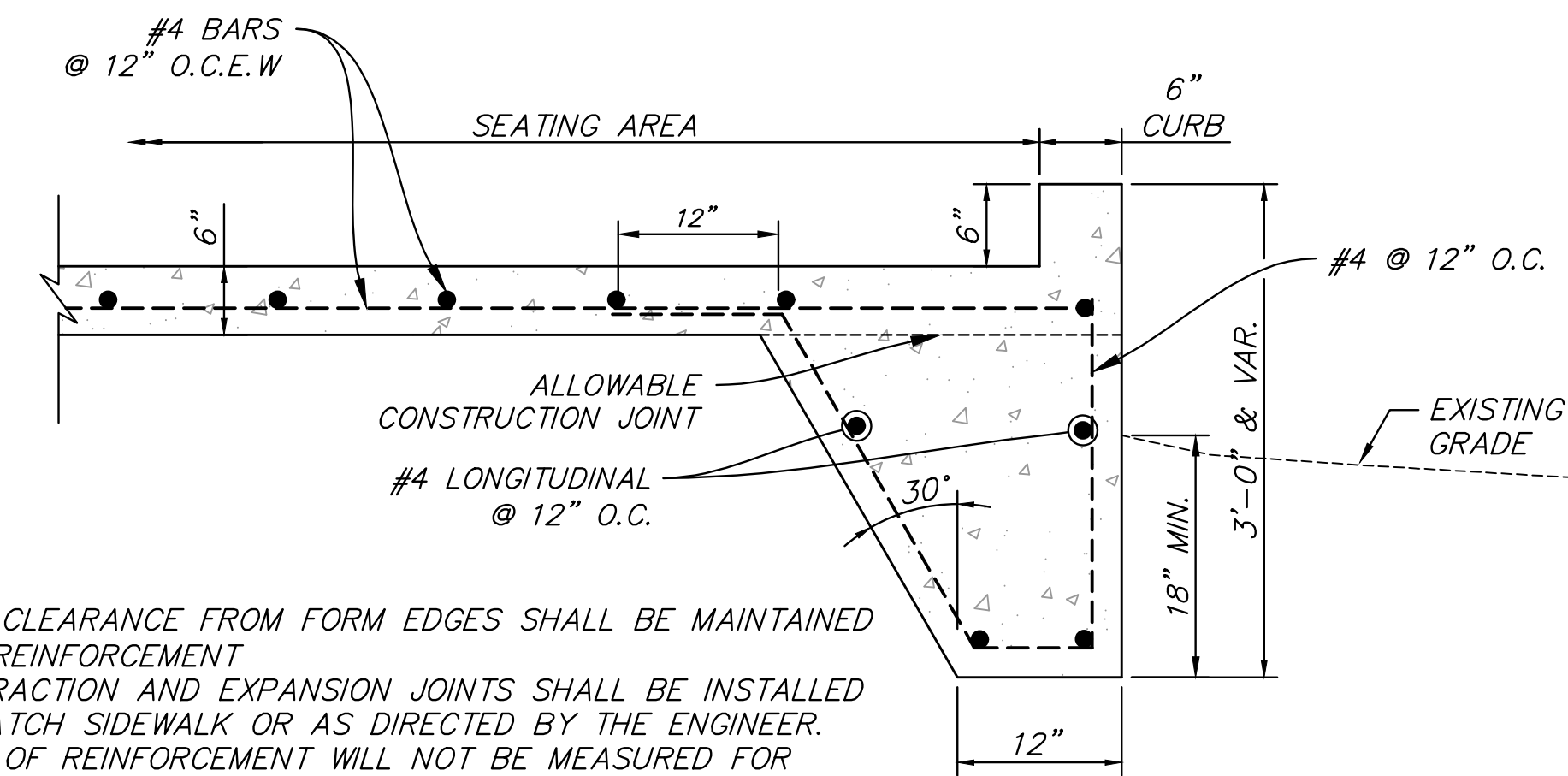


SIDEWALK JOINT DETAILS



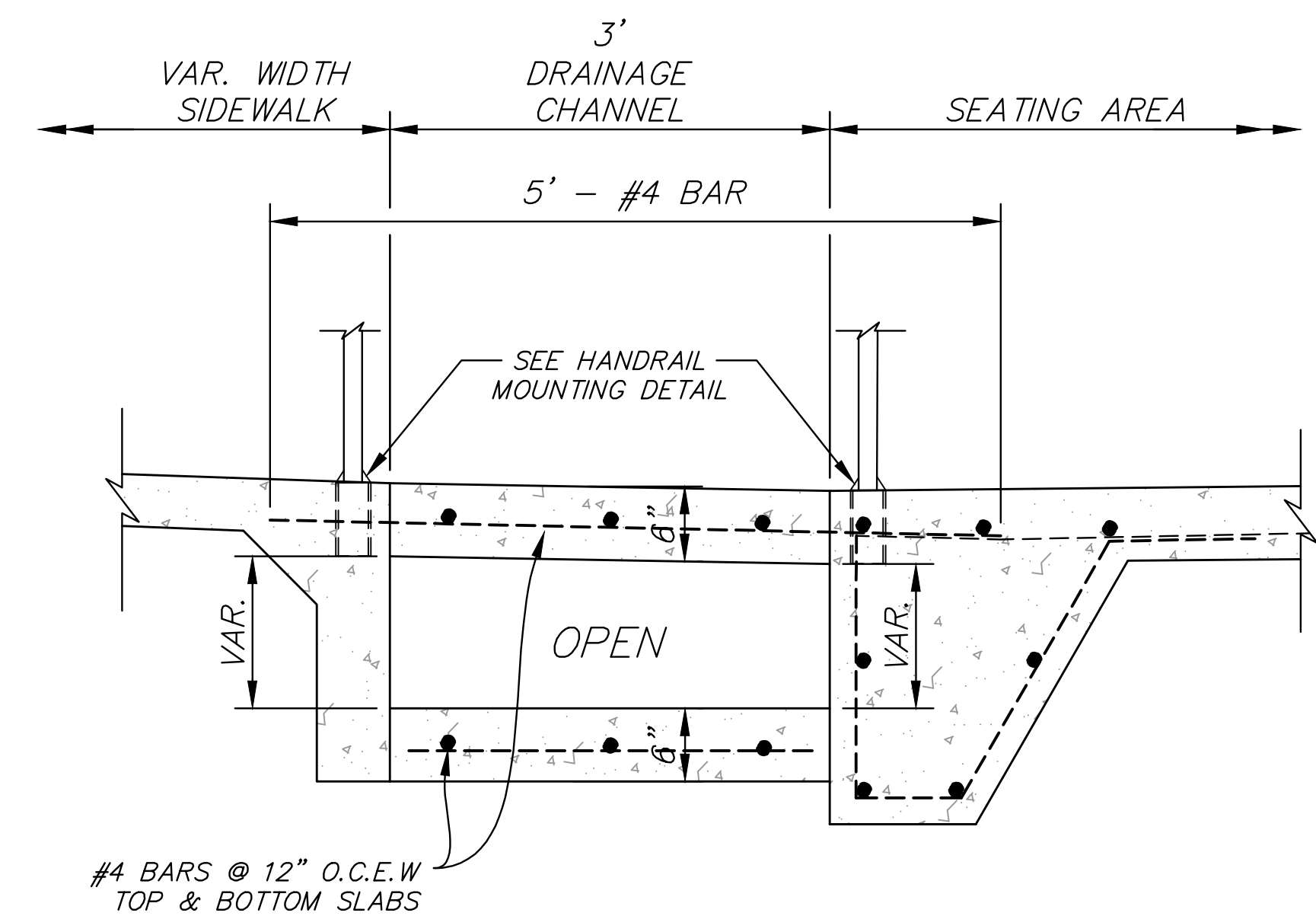
- NOTE:
- SIDEWALK IS INTENDED TO BE MONOLITHICALLY PLACED.
 - CONTRACTION AND EXPANSION JOINTS SHALL BE INSTALLED AS SHOWN IN PLANS.

THICKENED-EDGE SIDEWALK SECTION (TYP.)
NOT TO SCALE



- NOTE:
- A 3" CLEARANCE FROM FORM EDGES SHALL BE MAINTAINED FOR REINFORCEMENT
 - CONTRACTION AND EXPANSION JOINTS SHALL BE INSTALLED TO MATCH SIDEWALK OR AS DIRECTED BY THE ENGINEER.
 - COST OF REINFORCEMENT WILL NOT BE MEASURED FOR SEPERATE PAYMENT AND SHALL BE INCLUDED IN OTHER ITEMS.

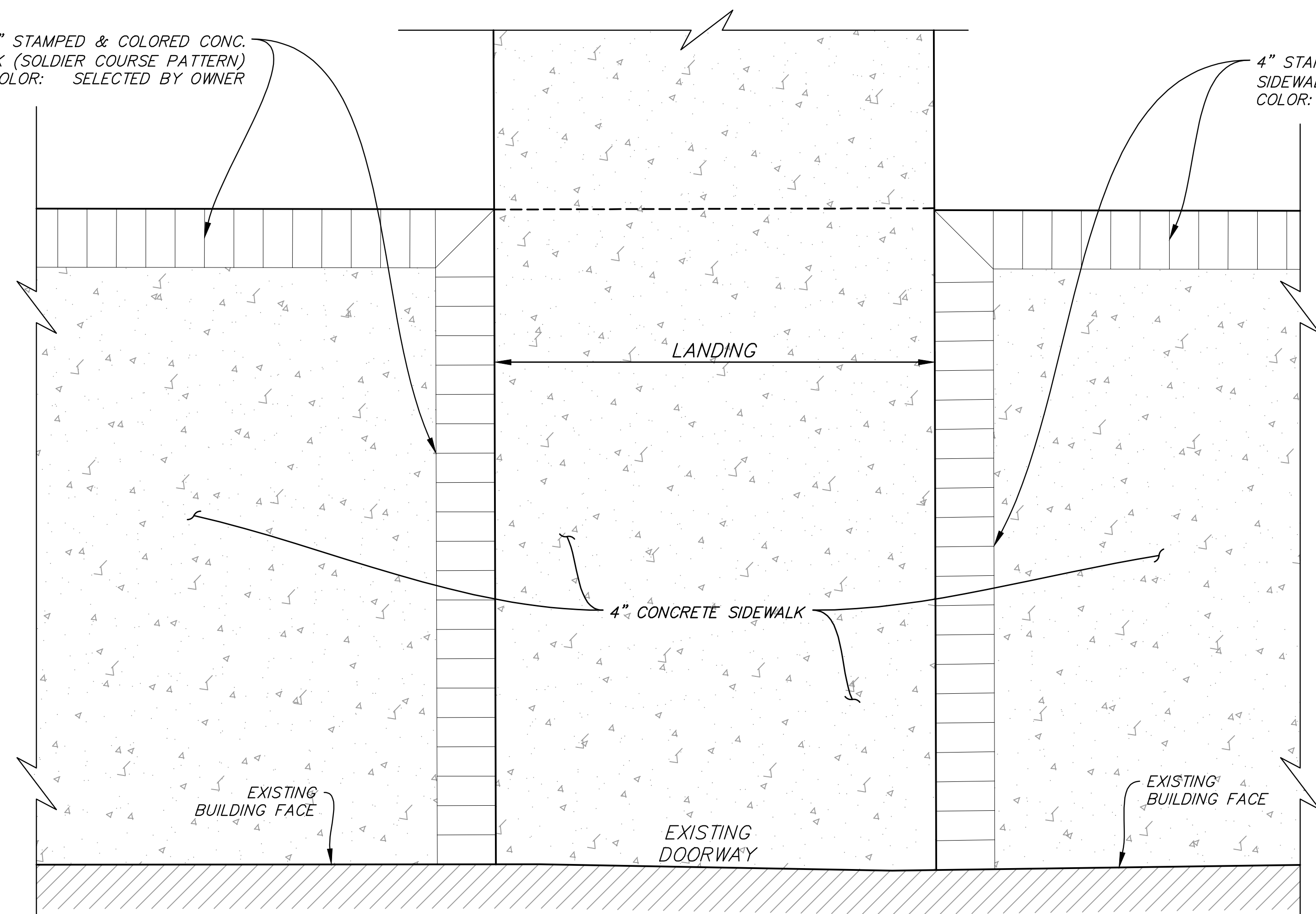
SEATING AREA FOUNDATION DETAIL (TYP.)
NOT TO SCALE



DETAIL OF LANDING EXTENSION OVER DRAINAGE CHANNEL (TYP.)
NOT TO SCALE

4" STAMPED & COLORED CONC. SIDEWALK (SOLDIER COURSE PATTERN)
COLOR: SELECTED BY OWNER

4" STAMPED & COLORED CONC. SIDEWALK (SOLDIER COURSE PATTERN)
COLOR: SELECTED BY OWNER



BRICK EDGING DETAIL (TYP.)
NOT TO SCALE

NOTICE TO DRAWING HOLDER

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				QA/QC:	DATE:

FRONT STREET PARKLET

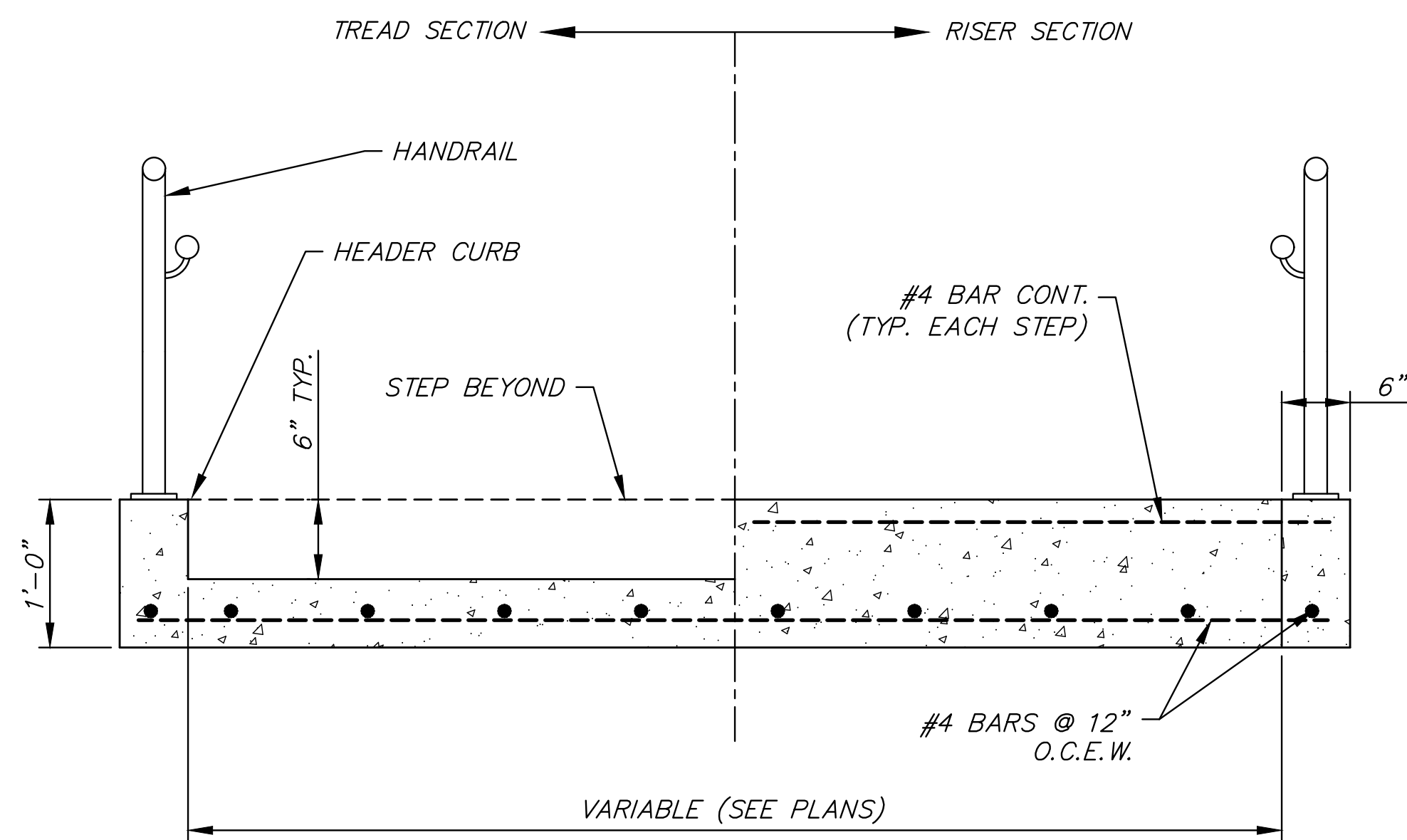
CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



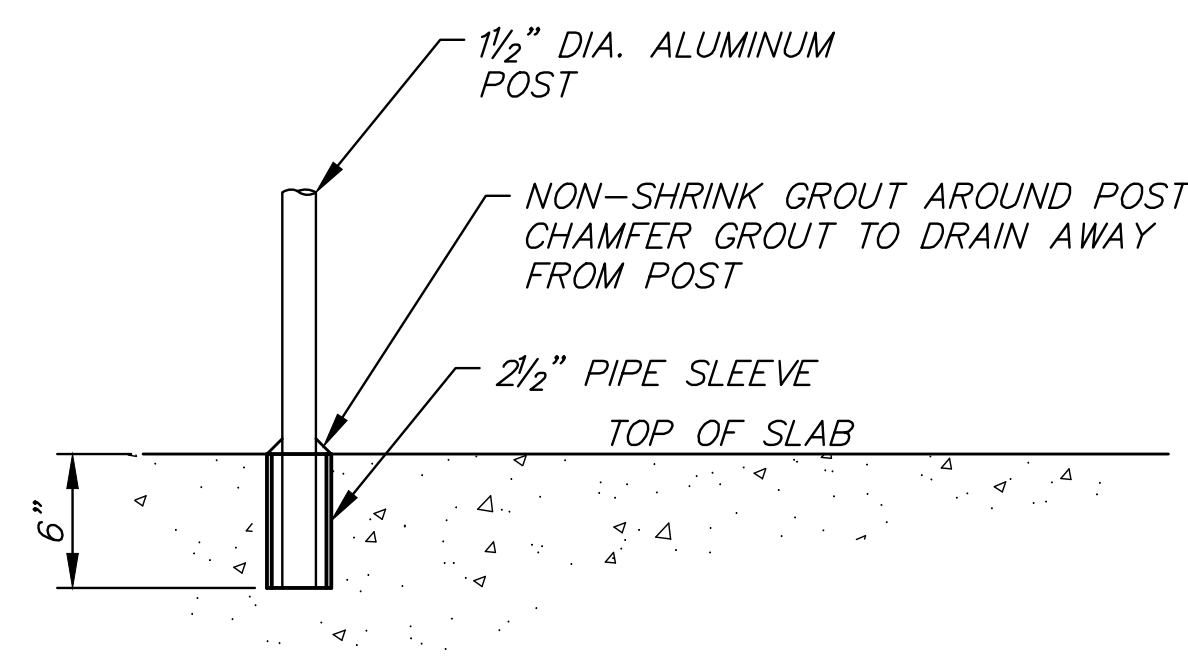
CONSTRUCTION DETAILS

WORKING NUMBER:	DRAWING NUMBER:
DET-3	9

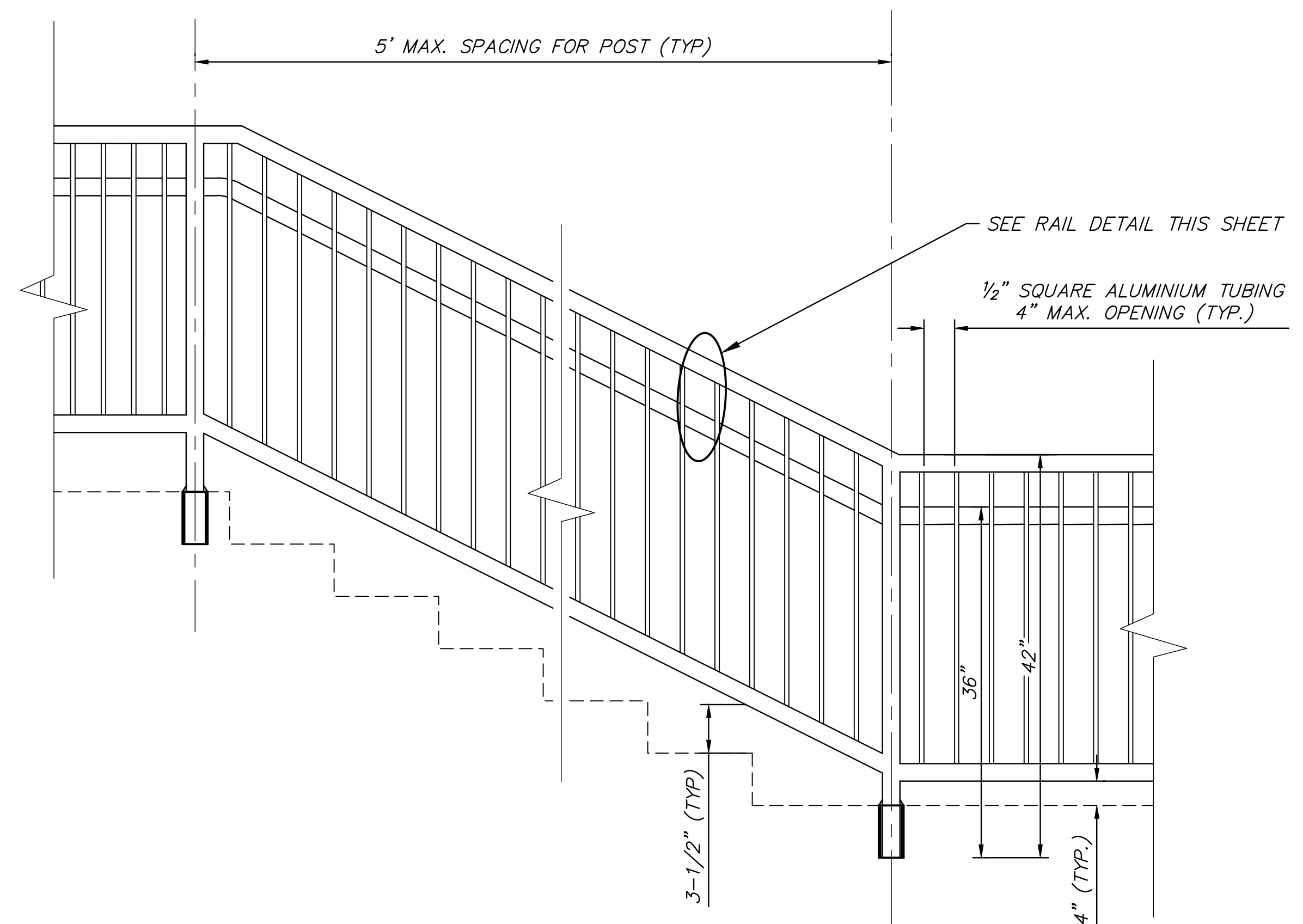
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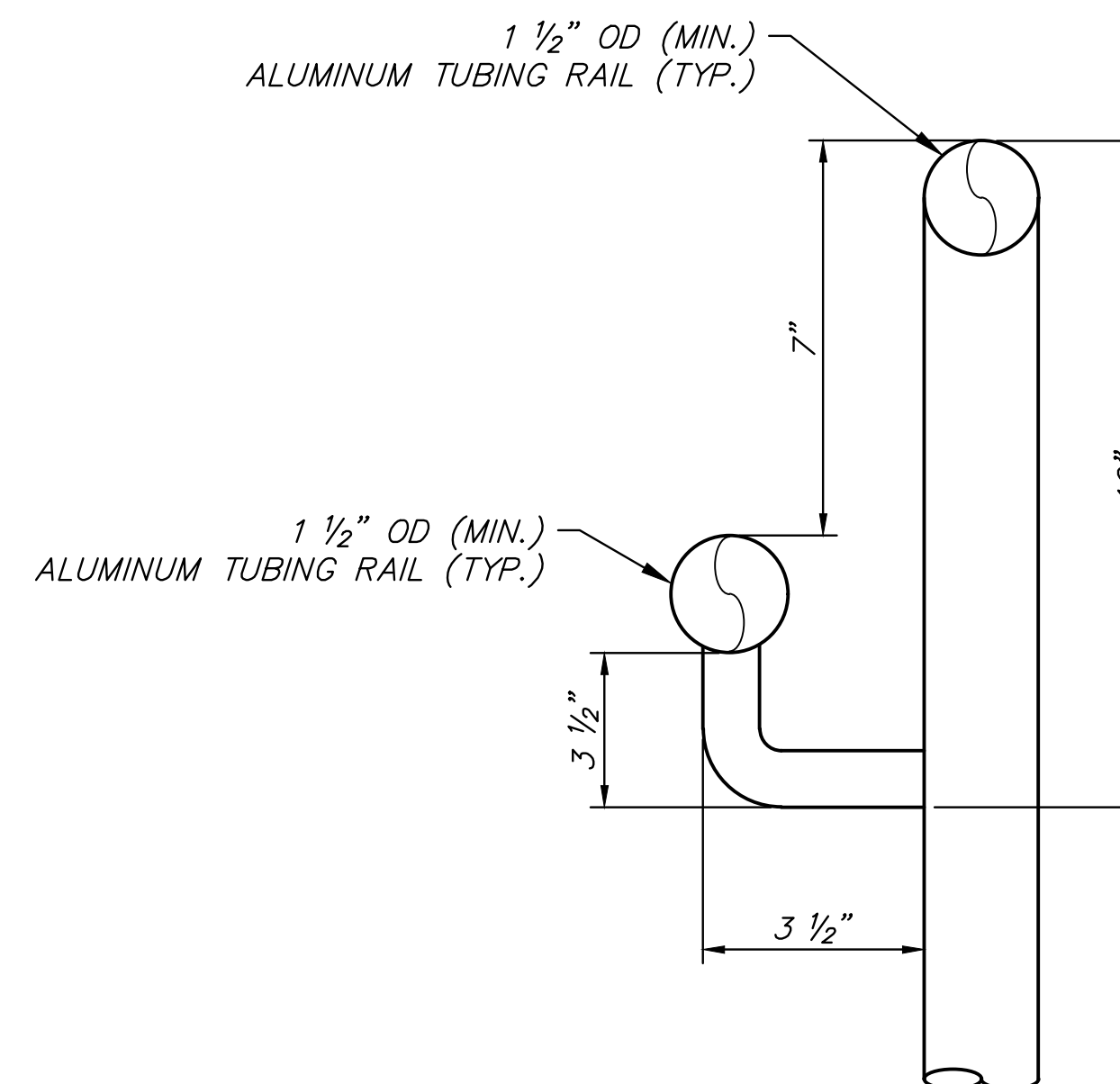
STAIR SECTION DETAIL
NOT TO SCALE



CONCRETE STRUCTURE (EMBEDDED)
NOT TO SCALE



HANDRAIL DETAIL (TYP.)
NOT TO SCALE



RAIL DETAIL
NOT TO SCALE

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FRONT STREET PARKLET

CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS

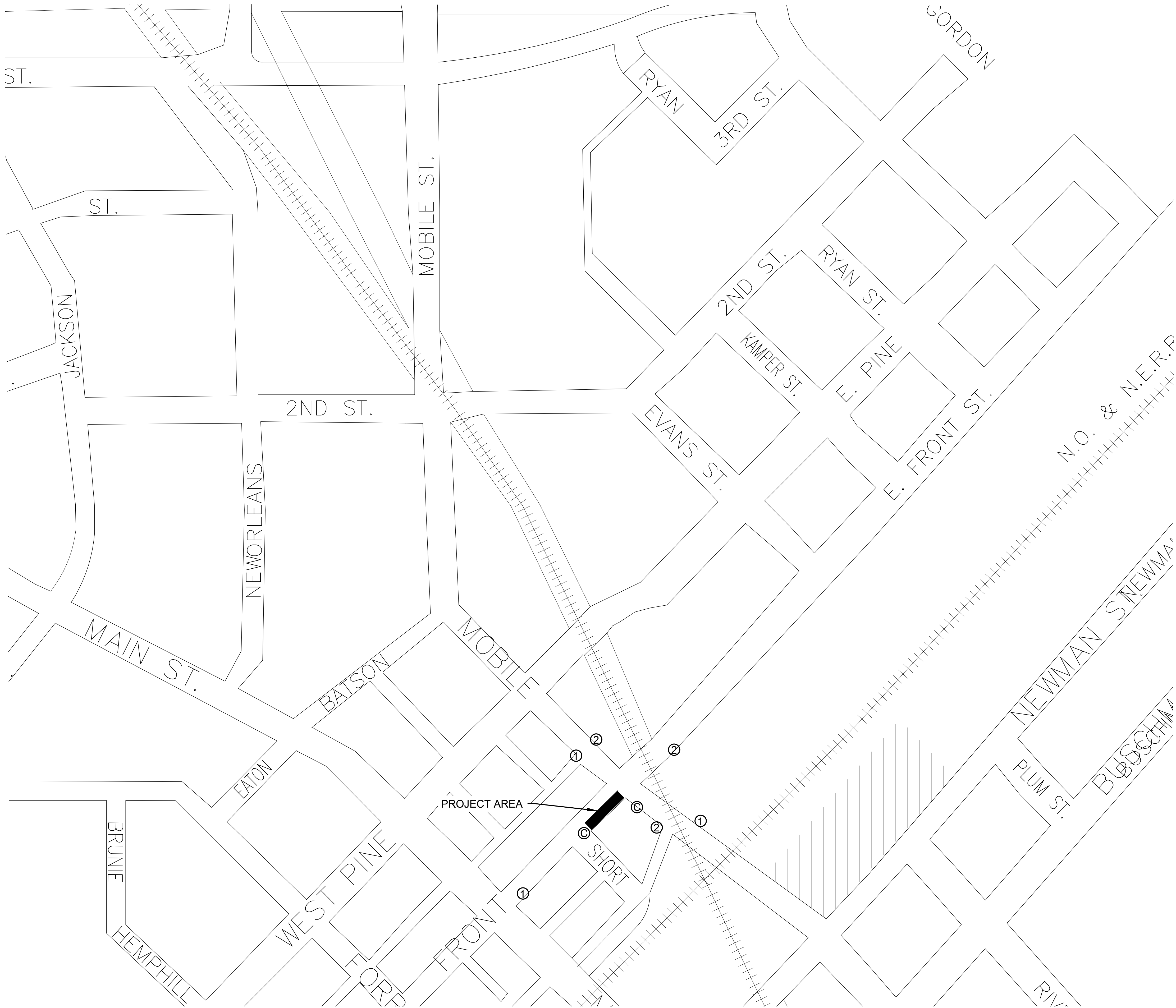


**CONSTRUCTION
DETAILS**

WORKING NUMBER:
DET-4

DRAWING NUMBER:
10

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LEGEND

①



W20-1
36x36

MOUNTED ON U-SECTION POST

②



G20-2a
36x18

MOUNTED ON U-SECTION POST

③



SIDEWALK
CLOSED

18" MIN.



TRAFFIC CONTROL NOTES:

- ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
- CONTRACTOR TO MAINTAIN ACCESS AT ALL TIMES DURING CONSTRUCTION.
- THE LOCATION AND SPACING OF SIGNS ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.
- FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

PEDESTRIAN NOTES:

- CONTRACTOR TO COORDINATE FENCE INSTALLATION WITH OVERALL CONSTRUCTION SCHEDULING
- THE SAFETY OF THE GENERAL PUBLIC WITHIN THE VICINITY OF CONSTRUCTION AREA IS EXTREMELY IMPORTANT. THE CONTRACTOR SHALL POST AND MAINTAIN, TO THE OWNER'S SATISFACTION, SIGNS THAT DIRECT THE GENERAL PUBLIC AROUND THE CONSTRUCTION AREAS USING THIS PLAN AS A MINIMUM REQUIREMENT. THE CONTRACTION SHALL COORDINATE WITH THE OWNER PRIOR TO CONSTRUCTION.
- THIS DRAWING IS USED TO ILLUSTRATE THE OWNER'S INTENT. CONTRACTOR SHALL SUBMIT WITHIN 10 DAYS AFTER NOTICE OF AWARD A CONSTRUCTION SEQUENCING PLAN TO THE ENGINEER FOR THEIR REVIEW AND APPROVAL.
- ITEMS ON THIS SHEET ARE INCLUDED IN MAINTENANCE OF TRAFFIC
- ADA COMPLIANT ACCESSIBLE ROUTES MUST BE MAINTAINED AT ALL TIMES THROUGHOUT CONSTRUCTION. IN ALL INSTANCES, PEDESTRIAN ACCESS ROUTES WILL NOT REQUIRE PERSONS WITH MOBILITY CONSIDERATIONS TO TAKE A DIFFERENT ROUTE FROM THAT OF A PERSON WITHOUT A MOBILITY CONSIDERATION.

CONSTRUCTION FENCING NOTES:

- CONSTRUCTION FENCING SHALL BE INSTALLED FOR PEDESTRIAN SAFETY. ADDITIONAL AREAS MAY REQUIRE PROTECTION AS DETERMINED BY THE ENGINEER. ALL FENCING MUST BE MAINTAINED UNTIL PROJECT COMPLETION.
- ALL ITEMS OF WORK SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

NOTICE TO DRAWING HOLDER NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.	REVISIONS			DRAWING INFORMATION		FRONT STREET PARKLET			TRAFFIC CONTROL PLAN	
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					CHKD:	DATE:				
					QA/QC:	DATE:				

FRONT STREET

LEGEND

PEDESTRIAN PATH

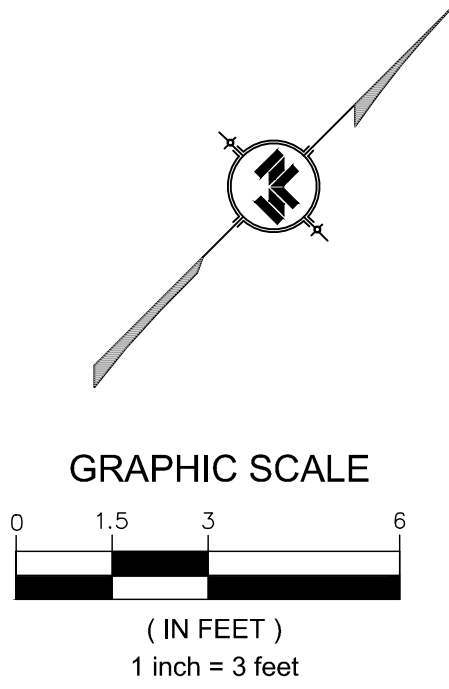
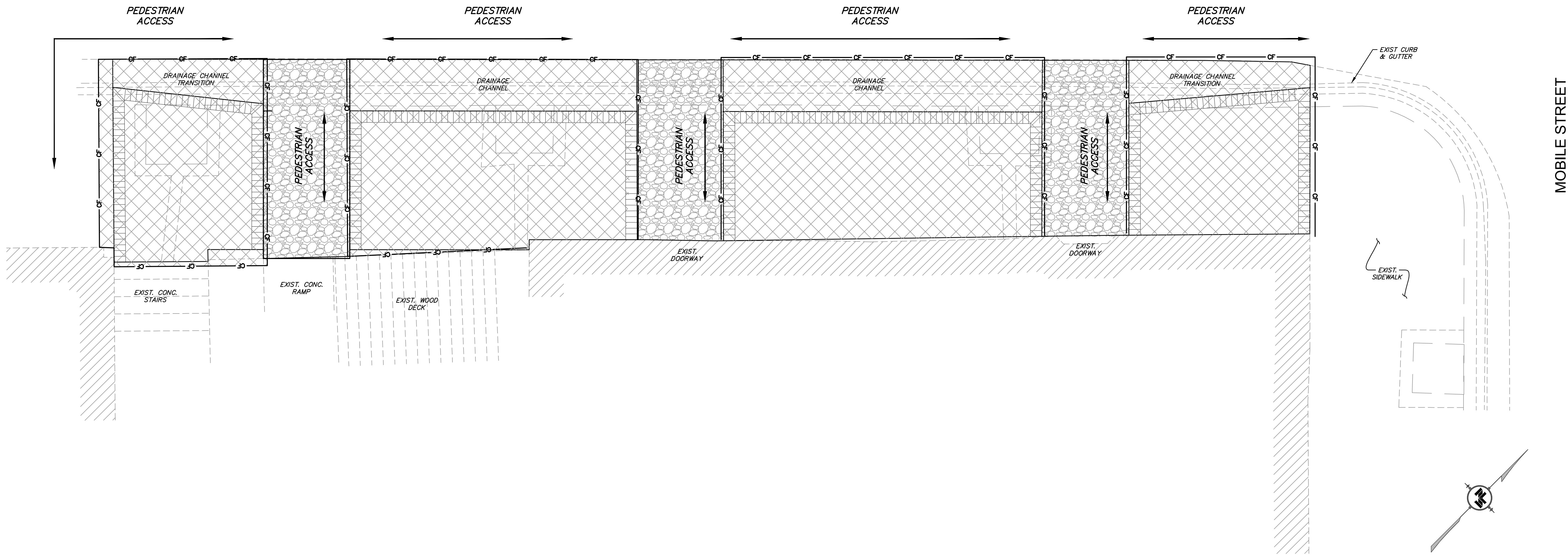
CONSTRUCTION FENCE

WORK ZONE

TEMPORARY BUSINESS ACCESS

NOTES:

- ALL ITEMS ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

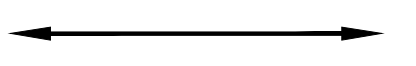


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					QA/QC:	DATE:				

FRONT STREET

LEGEND

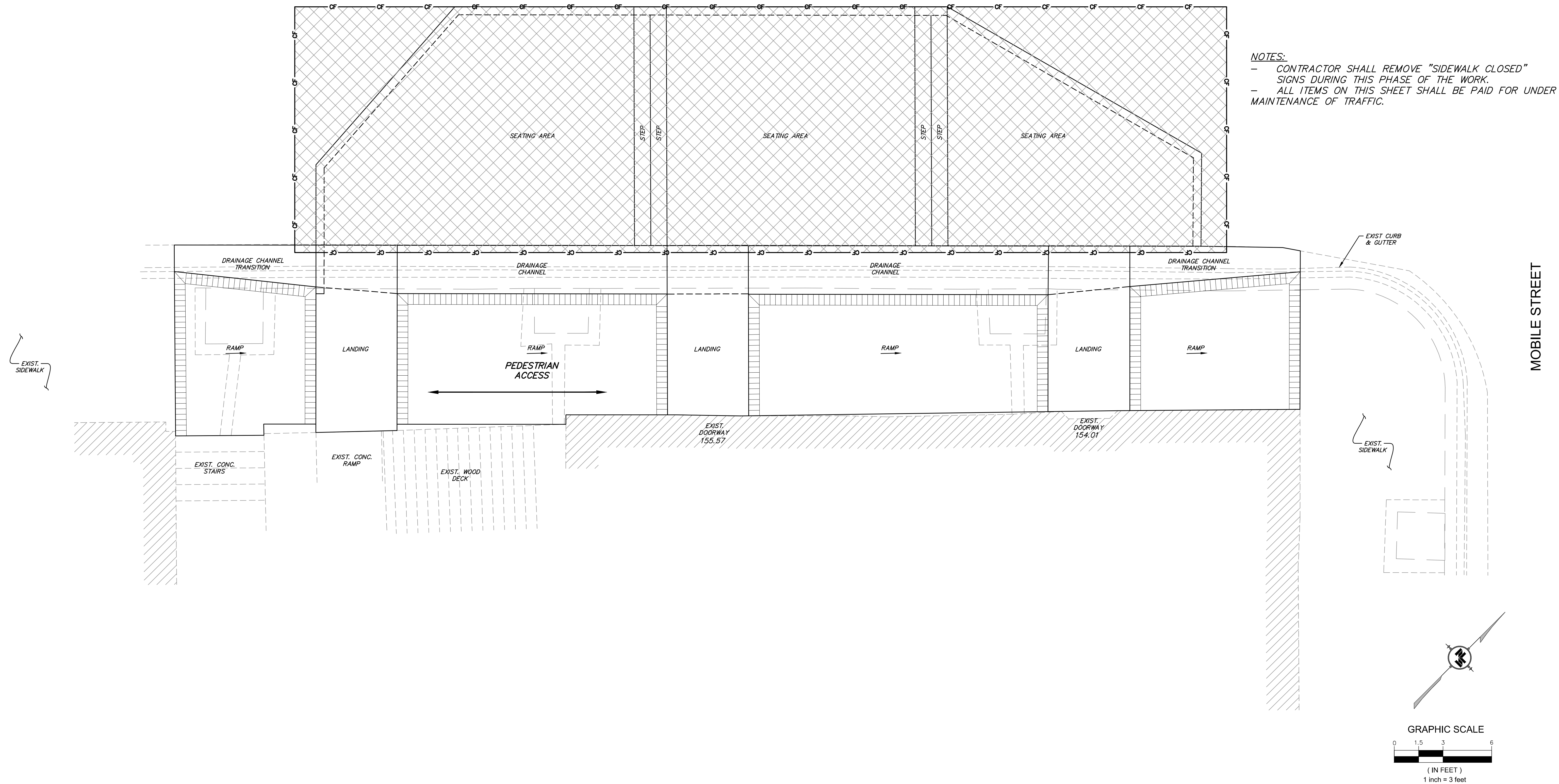
PEDESTRIAN PATH
CONSTRUCTION FENCE

WORK ZONE



NOTES:

- CONTRACTOR SHALL REMOVE "SIDEWALK CLOSED" SIGNS DURING THIS PHASE OF THE WORK.
- ALL ITEMS ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.



NOTICE TO DRAWING HOLDER

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REVISIONS				DRAWING INFORMATION	
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				QA/QC:	DATE:

	DRAWING INFORMATION
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DRAWING INFORMATION	
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SCALE: 1" = 3'

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DSGN: GPC	DATE: 08/20

DSGN: GPC	DATE: 08/20
DRWN: JPE	DATE: 08/20

DRWN: JPF	DATE: 08/20
CHKD:	DATE:

FRONT STREET PARKLET

CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



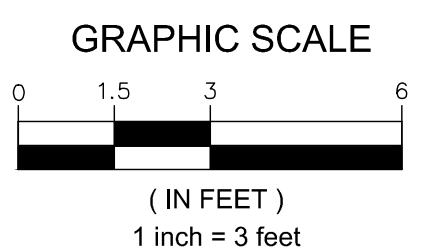
TRAFFIC CONTROL PLAN PHASE 2

WORKING NUMBER:

TCP-3

DRAWING NUMBER:

13



MATCHLINE: REF. WKG. NO. ELEC-2

REUSE OF EXISTING DESIGN

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REVISIONS				DRAWING INFORMATION	
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				CHKD:	DATE:
				QA/QC:	DATE:

CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



WORKING NUMBER: ELEC-1	DRAWING NUMBER: 14
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1/21/2022 1:54 PM c:\7000\hottiesburg\17039-tog118-front st & mobile st ada sidewalks\front street\front elec.dwg

NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

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	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17039.00	
					FILENAME: <i>Front_Elec.dwg</i>	
					SCALE: 1" = 10'	
					SURVEYED BY:	
					DSGN: VGR	DATE: 09/2022
					DRWN: JPF	DATE: 09/2022
					CHKD:	DATE:
					QA/QC:	DATE:

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	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17039.00
					FILENAME: <i>Front_Ltec.dwg</i>
					SCALE: 1" = 10'
					SURVEYED BY:
					DSGN: VGR DATE: 09/2022
					DRWN: JPF DATE: 09/2022
					CHKD: DATE:
					QA/QC: DATE:

FRONT STREET PARKLET PLAN

CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS

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					CHKD: DATE:
					QA/QC: DATE:

FRONT STREET PARKLET PLAN

CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



ELECTRICAL PLAN	
WORKING NUMBER: ELEC-2	DRAWING NUMBER: 15

ELECTRI

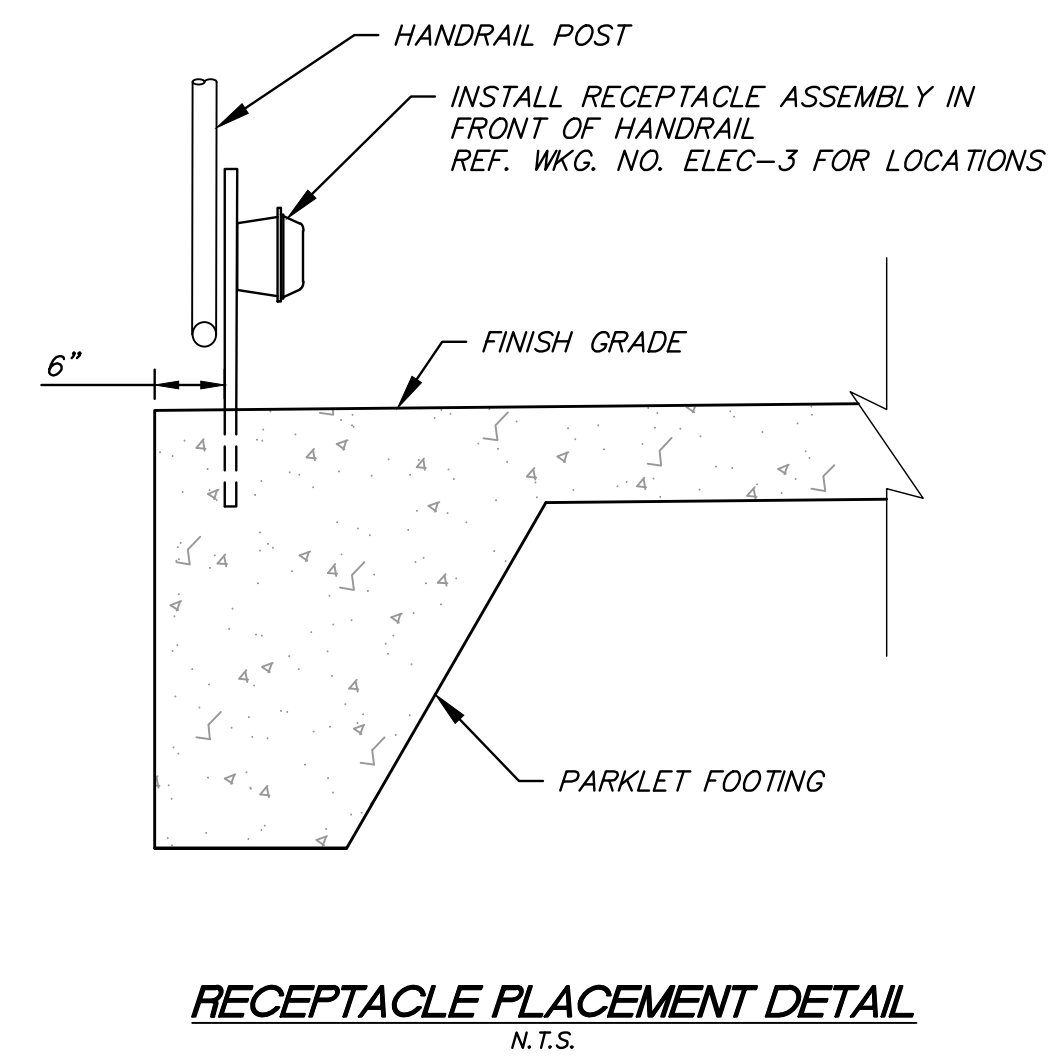
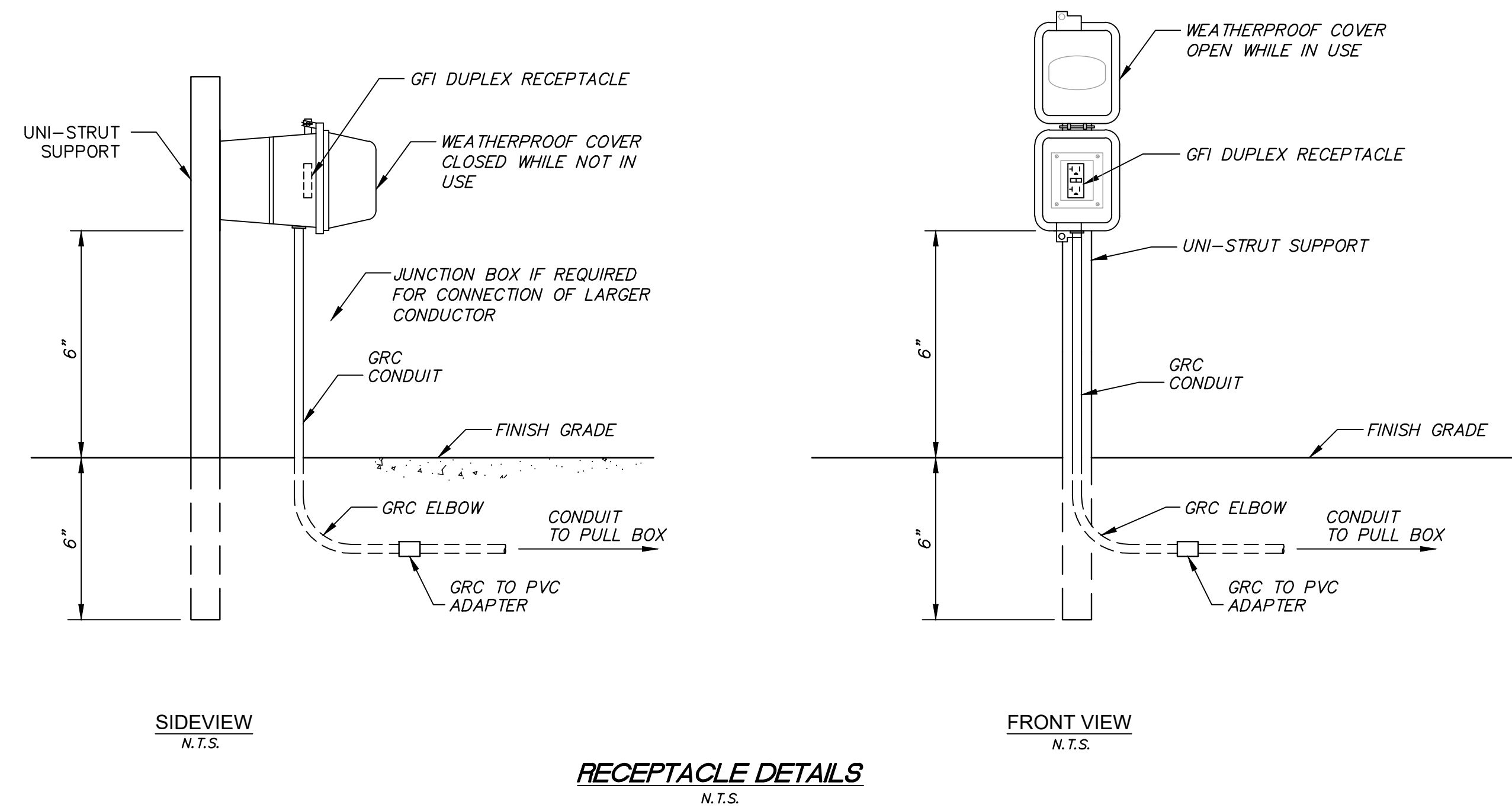
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ELEC-2

CAL PLAN

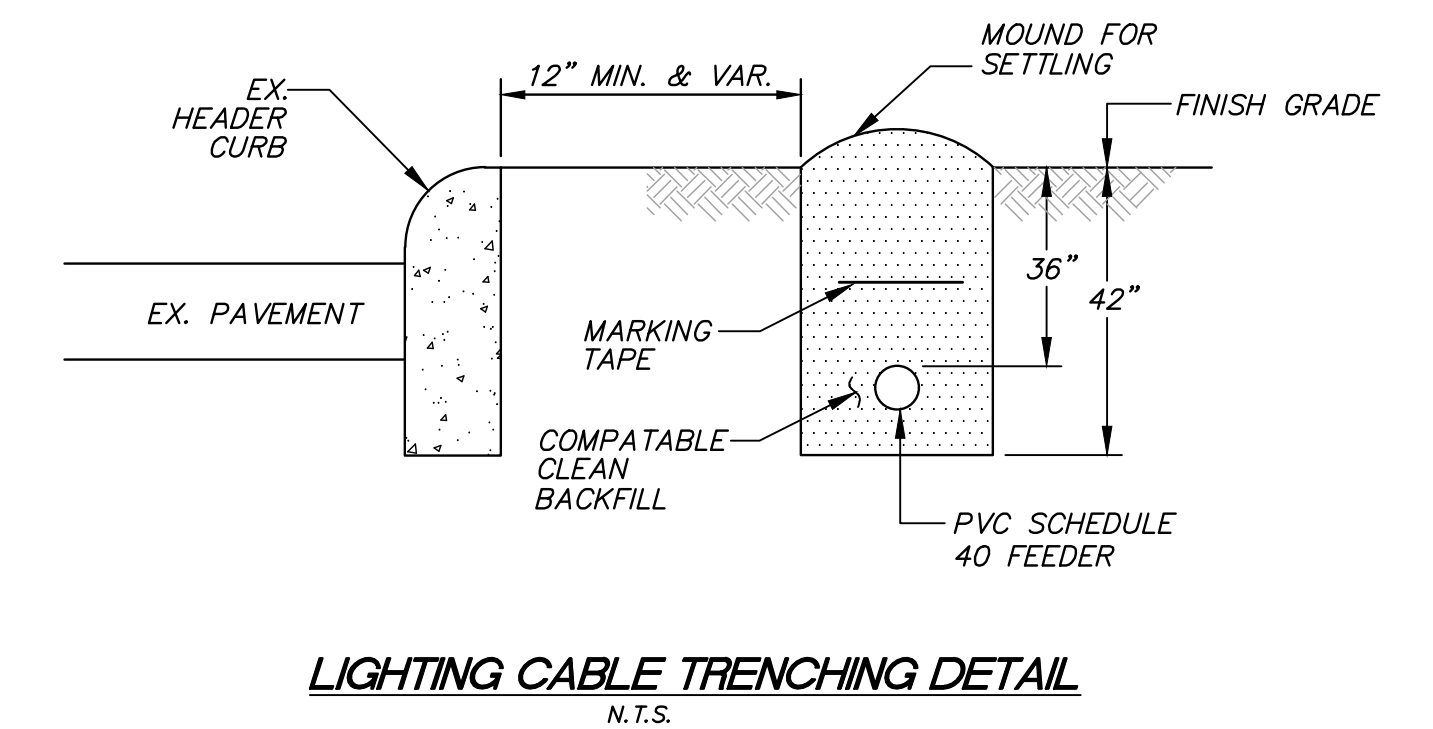
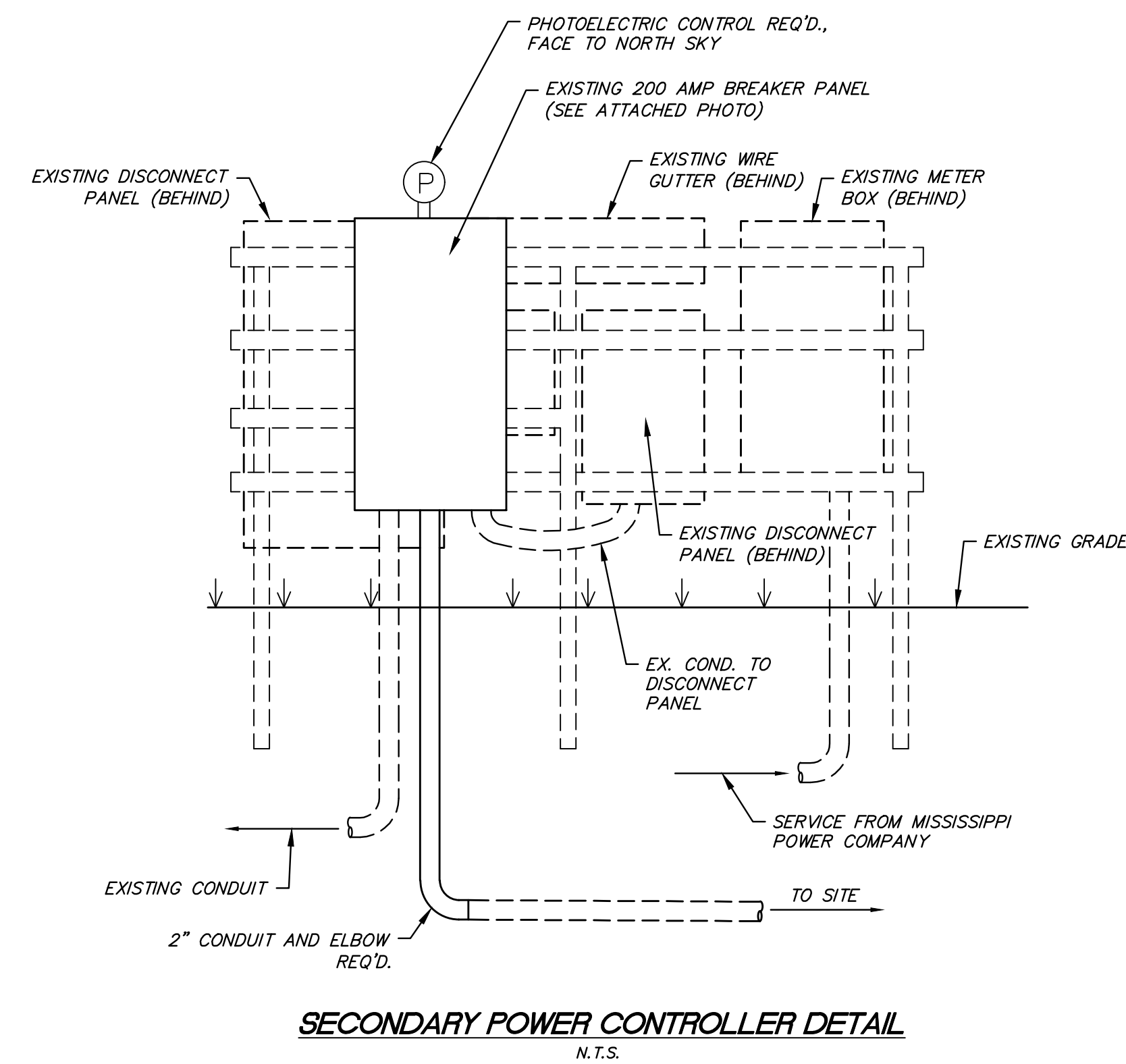
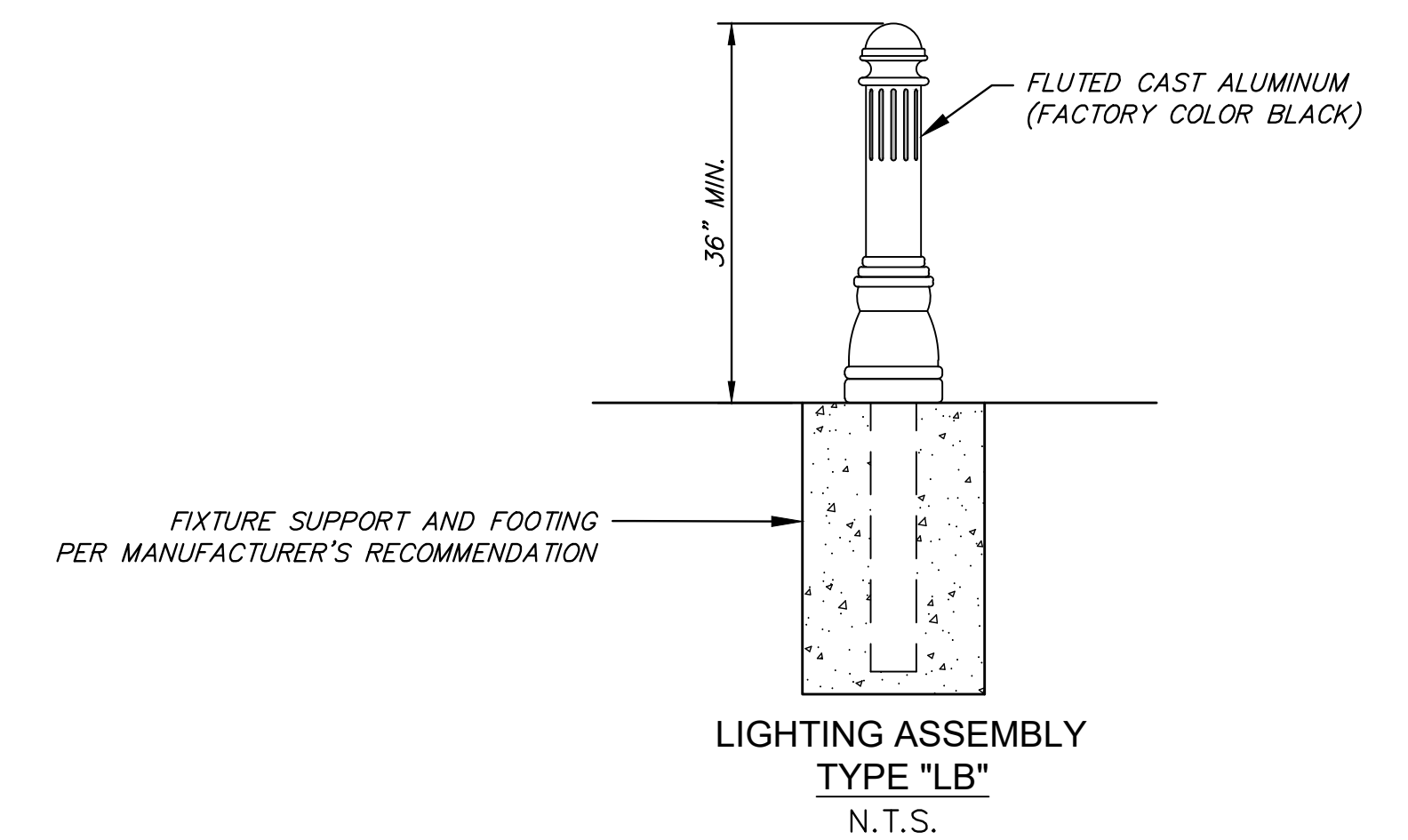
DRAWING NUMBER:

15



REQUIRED LIGHTED BOLLARD (LB)	
MANUFACTURER	BOLLARD
STERNBERG	7701LED-1L40TS-MDL07/BKT
SPRING CITY	ABDMIC-10-3.72-LD020-EVX1BL-279-CN5-YCLF-CU
HOLOPHANE	CHBOLED/CA/P40/3K/MVOLT/NI05/AWS/BK/DBB

(OR OTHER APPROVED EQUAL)



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NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17039.00	
				FILENAME: <i>Front_Elec.dwg</i>	
				SCALE: 1" = 3'	
				SURVEYED BY:	
				DSGN: VGR	DATE: 09/2022
				DRWN: JPF	DATE: 09/2022
				CHKD:	DATE:
				CA / CC:	DATE:

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N-S PROJECT NO.: 17039.00	
FILENAME: <i>Front_Elec.dwg</i>	
SCALE: 1" = 3'	
SURVEYED BY:	
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DRWN: JPF	DATE: 09/20/2011
CHKD:	DATE:
QA/QC:	DATE:

FRONT STREET PARKLET PLAN

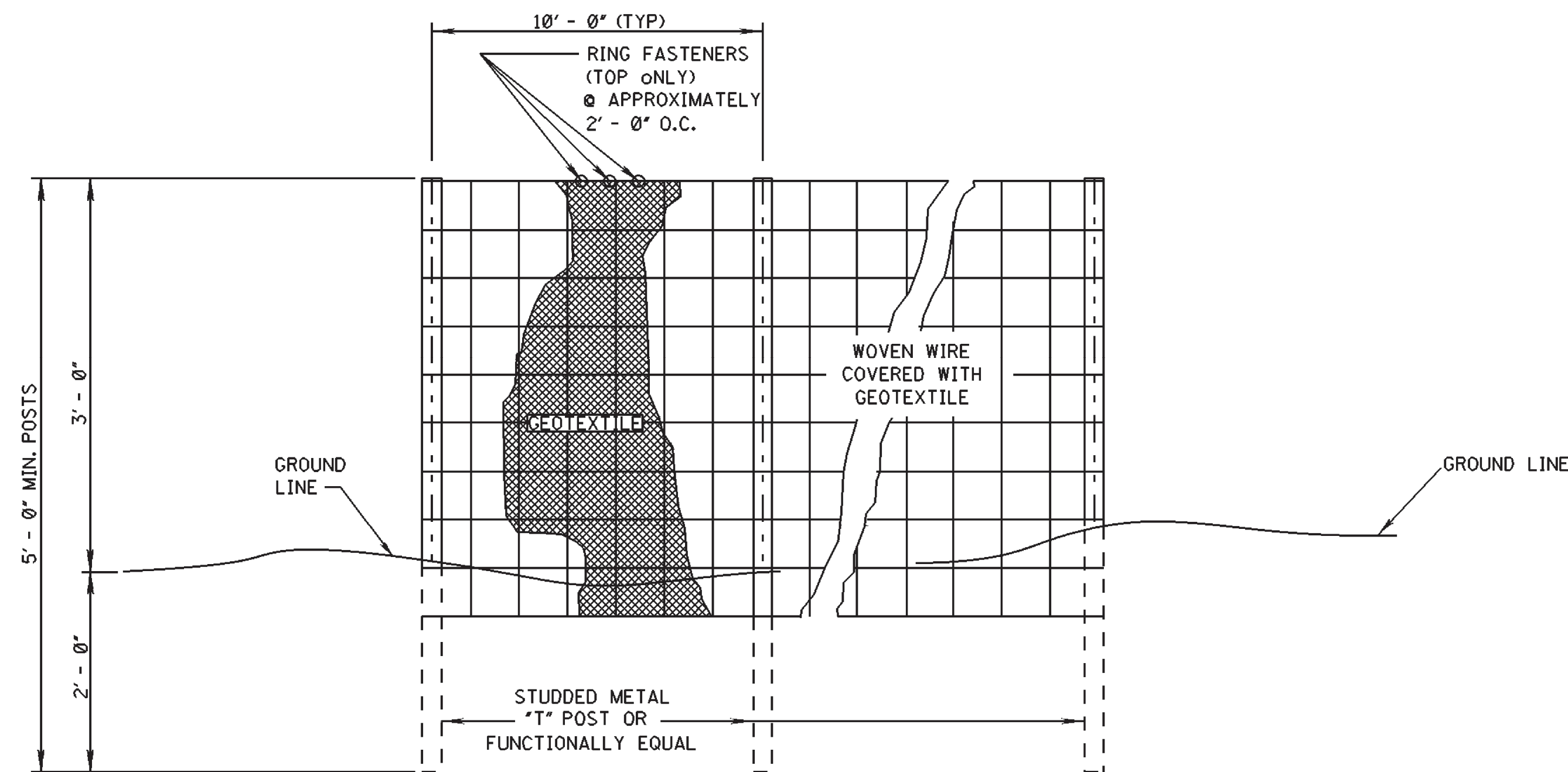
CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



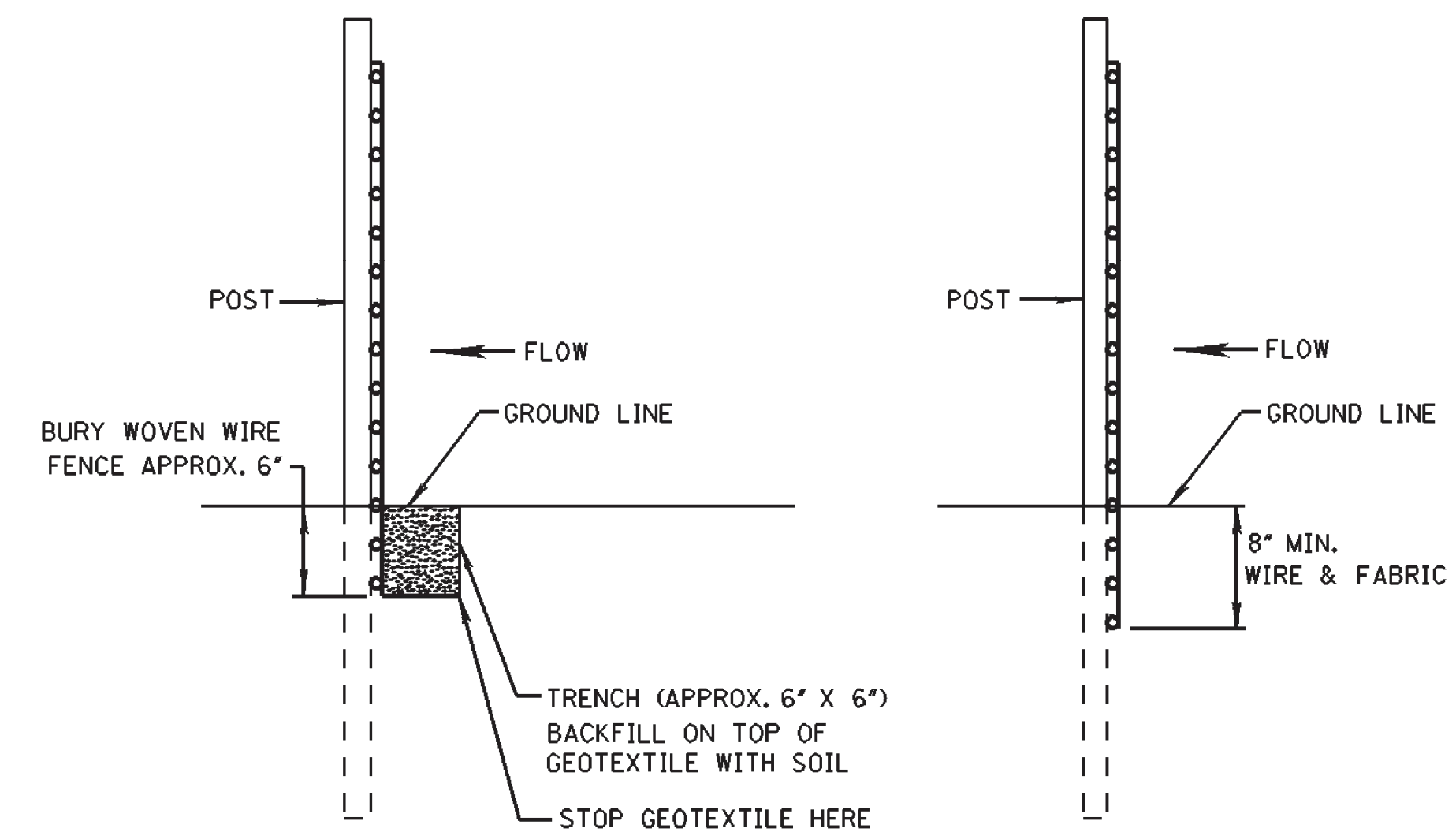
ELECTRICAL DETAILS

WORKING NUMBER:
ED-1

DRAWING NUMBER:
16



ELEVATION VIEW

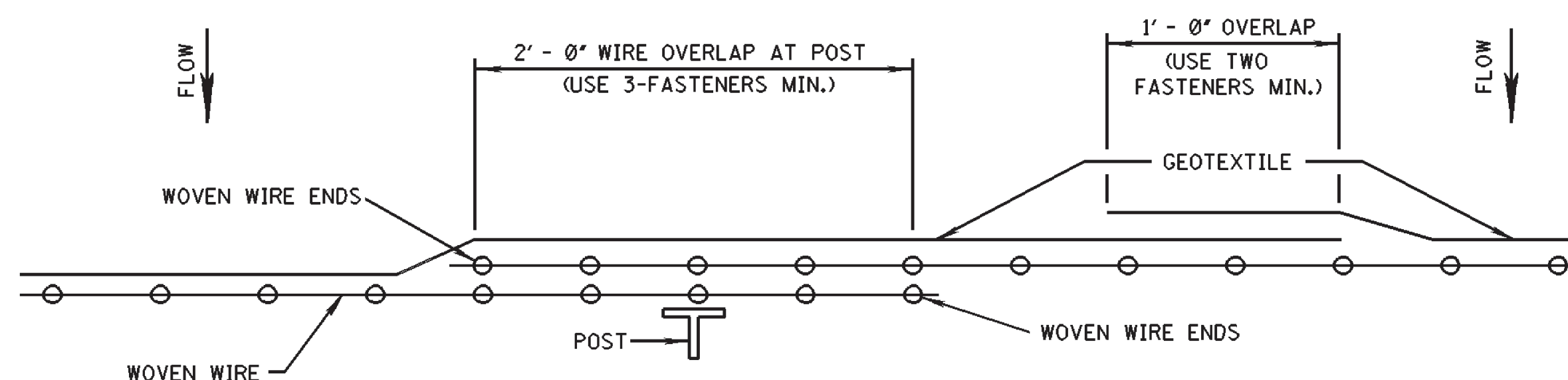


METHOD I

METHOD II
MECHANICAL INSTALLATION

SIDE VIEW

- NOTES:
1. SILT FENCES SHALL BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
 2. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHALL BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
 3. SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR A BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
 4. WHEREVER POSSIBLE SILT FENCE SHALL BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AND FACILITATES SEDIMENTATION.
 5. THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
 6. METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF THE DETAIL.
 7. WIRE SHALL BE MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
 8. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE,



PLAN VIEW

REQUIRED LAPPING

NOTICE TO DRAWING HOLDER

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			DRWN: JPF	DATE: 08/2022
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			QA/QC:	DATE:

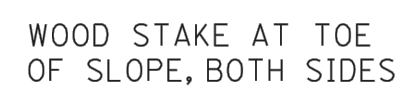
FRONT STREET PARKLET

CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



SILT FENCE DETAILS

WORKING NUMBER:	DRAWING NUMBER:
ECD-3	17



NOTE: END POINTS "A" SHALL BE HIGHER
THAN FLOWLINE POINT "B".

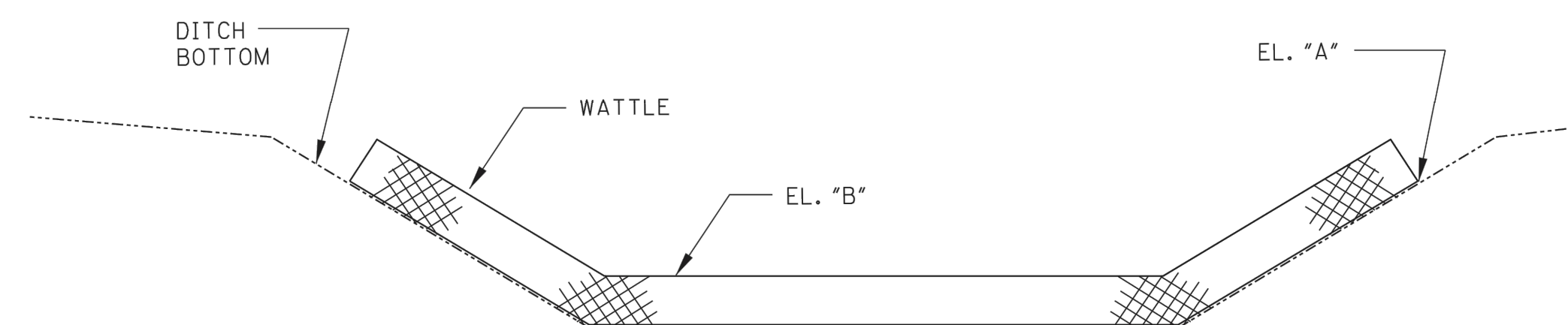


Diagram illustrating the construction of a wattle structure for erosion control. The structure is built using two wooden stakes driven into the ground, lashed together at the top with either twine or aluminum wire. A wattle (a mesh of woven material) is placed between the stakes, secured with a 20° angle. The wattle is held in place by a wood stake (do not anchor through). The structure is designed to withstand a flow of water, indicated by an arrow labeled "FLOW". The ground surface is shown with a cross-hatched pattern, and the structure is built on a minimum depth of 1.5'.

NOTES:

1. WATTLE DITCH CHECKS CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
2. THE PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECK SHALL BE 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
3. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
4. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
5. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.
6. IN THE EVENT WATTLES CANNOT BE SECURED IN PLACE USING WOOD STAKES, SAND BAGS MAY BE USED IN LIEU OF WOOD STAKES IN ORDER TO SECURE THE WATTLES IN PLACE. IF SANDS BAGS ARE USED IN THIS APPLICATION THEY WILL NOT BE A SEPARATE PAY ITEM.

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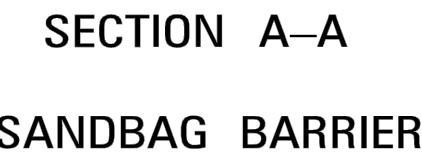
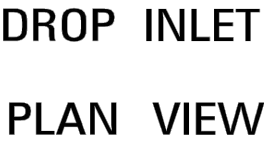
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				DRWN: JPF	DATE: 08/2022
				CHKD:	DATE:
				QA/QC:	DATE:

CITY OF HATTIESBURG - FORREST COUNTY
HATTIESBURG, MS



WORKING NUMBER:
ECD-6

DRAWING NUMBER:
18



- CURB INLET PROTECTION NOTES:
1. THIS CURB INLET PROTECTION METHOD CAN BE USED DURING ANY STAGE OF BASE AND PAVEMENT CONSTRUCTION.
 2. BAG HEIGHT AND NUMBER OF BAGS SHOULD BE BASED ON CURB HEIGHT AND USE OF TRAVELWAY.
 3. SEDIMENT SHOULD BE CONTROLLED PRIOR TO ENTERING GUTTER. GUTTER CHECKS AND INLET PROTECTION ARE FOR SECONDARY CONTROL.
 4. REMOVE ACCUMULATED SEDIMENT AFTER EVERY RAINFALL. SWEEP SEDIMENT FROM HARD SURFACES AND DISPOSE OF APPROPRIATELY AWAY FROM INLETS AND/OR WATER BODIES.
 5. IF DENUDED AREAS EXIST BEHIND THE INLET, A SEDIMENT BARRIER SHOULD BE INSTALLED AROUND ITS PERIMETER TO CONTROL SEDIMENT.

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	NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17039.00			WORKING NUMBER: ECD-15	DRAWING NUMBER: 19
					FILENAME: Front_Standards.dwg				
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					QA/QC: DATE:				



1. SANDBAG DITCH CHECKS ARE USED FOR VELOCITY REDUCTION AND MINIMAL SEDIMENT TRAPPING IN CONCRETE PAVED DITCHES OR IN DITCHES WITH ROCKY BOTTOMS.
2. MINIMUM RECOMMENDED PLACEMENT INTERVAL BETWEEN SANDBAG DITCH CHECK IS 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
3. PREVENTING SEDIMENT FROM ENTERING A PAVED DITCH IS PREFERABLE TO CAPTURING SEDIMENT WITHIN PAVED DITCH.
4. ROCKBAGS MAY BE USED IN LIEU OF SANDBAGS, ONLY WHEN PAY ITEM FOR ROCKBAGS IS INCLUDED IN THE CONTRACT.



DRAWING NUMBER:
20

***CONTRACT DOCUMENTS AND TECHNICAL
SPECIFICATIONS***

FOR

FRONT STREET PARKLET

FOR THE

**CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY**



NOVEMBER 2022

PREPARED BY



NEEL-SCHAFER
Solutions you can build upon

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ADVERTISEMENT FOR BIDS
FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI

Sealed bids will be received by the City of Hattiesburg, at the City Clerk's office, Mississippi, hereafter referred to as Owner, located at 200 Forrest Street, Hattiesburg, Mississippi, 39401, until 10:00 A.M., Local Time, Thursday, **January 12**, 2023 for supplying all labor, equipment, and materials (as specified) necessary for the construction of the above referenced project. Work consists of concrete sidewalk, handrail, stairs, concrete parklet along Front Street. When bids are submitted electronically, the same requirements for submitting sealed bids shall apply. Electronic bids shall be submitted online at www.hattiesburgsbids.com and shall include a document representing the cover of the envelope containing the aforementioned criteria.

The above general outline of features of the work does not in any way limit the responsibility of the Contractor to perform all work and furnish all labor, equipment and materials required by the specifications and the drawings referred to therein.

Bidder must be qualified under Mississippi Law and show current Certificate of Responsibility issued by the Mississippi State Board of Public Contractors establishing his classification as to the value and type of construction on which he is authorized to bid.

Each Bidder shall write his Certificate of Responsibility Number on the outside of the sealed envelope containing his proposal.

Proposals shall be submitted in duplicate, sealed and deposited with the Owner prior to the hour and date hereinbefore designated. No bidder may withdraw his bid within 90 days after the actual date of the opening thereof.

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so-called Golden Rule is followed state law requires a non-resident bidder is to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

Each Bidder must deposit with his proposal, a Bid Bond or Certified Check in an amount equal to five percent of his bid, payable to the Owner, as bid security. Bidders shall also submit a current financial statement, if requested, by the Owner. The successful bidder will be required to furnish a Payment Bond and Performance Bond each in the amount of 100 percent of the contract amount.

Bid documents are being made available via paper copy or pdf. All interested bidders are required to log-in or register for an account at www.hattiesburgsbids.com OR www.neel-schafferplans.com to view and order Bid Documents. All plan holders are required to have a valid email address for registration. Bid documents are non-refundable and must be purchased through the website. Questions regarding website registration and online orders please contact Plan House Printing at (601) 336-6378.

"Mississippi Standard Specifications for Road and Bridge Construction, 2017 Edition" as referred to herein, may be purchased from the Mississippi Department of Transportation.

The Owner hereby notifies all Bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged and women's business enterprises will be afforded the full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Engineer is Neel-Schaffer, Inc., 704 Hardy Street, Hattiesburg, Mississippi 39401; Phone No. (601) 545-1565, Fax No. (601)-545-2267. Geoffrey Crosby, P.E. – Senior Project Manager.

The Owner reserves the right to reject any and all bids and to waive any informalities or irregularities therein.

BY: _____
City Clerk
City of Hattiesburg, Mississippi

DATES OF PUBLICATION:

December 11, 2022

December 18, 2022

INSTRUCTIONS TO BIDDERS

FRONT STREET PARKLET

CITY OF HATTIESBURG, MISSISSIPPI

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1. COORDINATION OF SPECIFICATIONS

Work under this Contract shall be performed in accordance with the Contract Documents, which includes General Conditions, Supplementary Conditions and Technical Specifications contained therein. Division 200 through 800 of the *Mississippi Standard Specifications for Road and Bridge Construction* (2017 Edition) is made a part hereof as if it were attached hereto, except where superseded by special provisions contained herein.

2. DATE AND PLACE OF OPENING OF PROPOSALS

The date, time, and place for opening Proposals will be as set out in the published "Advertisement for Bids."

The Owner reserves the right to postpone the date for presentation and opening of Proposals and will give notice of any such postponement to each known prospective Bidder.

3. FORM FOR PROPOSALS

Proposals must be submitted on the forms furnished by the Owner and the envelope (if not submitted electronically) containing the Proposals must be addressed to:

City Clerk
City of Hattiesburg
200 Forrest Street
Hattiesburg, Mississippi 39401

The outside of the envelope (if not submitted electronically) containing the Proposal shall bear the inscription:

**SEALED BID FOR: FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI**

BY _____

Certificate of Responsibility No. _____

State License No. _____

The duplicate Proposals shall be in the form of one original Proposal, marked "ORIGINAL" and one photocopy (Xerox or similarly reproduced copy) marked "PHOTOCOPY" of the original Proposal.

If Proposals are forwarded by the U.S. Postal Service, delivery shall be by Registered or Certified Mail.

4. PREQUALIFICATION

All Bidders must be in good standing with the Owner. Bidders who are not in good standing with the Owner will not be considered for award of the contract. Good standing includes, among other things: (a) whether Bidder has failed to successfully complete the work or punchlist items under another Owner contract; (b) whether Bidder is currently, or has been in the past five years, involved in litigation with the Owner regarding work under another Owner contract, either as a general contractor or subcontractor; (c) whether Bidder has been or is currently in default under another Owner contract the past five years. with the Owner; or (d) whether Bidder has failed to fulfill provisions of another Owner contract within during the past five years.

5. CERTIFICATE OF RESPONSIBILITY

Prior to filing Bids on Owner projects (in excess of \$50,000), the prospective Bidder must obtain a Certificate of Responsibility from the Mississippi State Board of Public Contractors, establishing his classification as to the value and the type of construction on which he is authorized to bid. Application must be submitted to the Board at least 30 days prior to a regular Board meeting scheduled every Quarter on the first Tuesday of January, April, July and October.

6. ANNUAL LICENSE TO BID (Not Used)

7. CHARGES FOR PROPOSALS, PLANS AND SPECIFICATIONS

Prospective Bidders may obtain Proposal forms including one copy of Contract Documents upon payment of the amount of money stipulated in the "Advertisement for Bids."

No refunds will be made for return of Plans or Specifications.

If a contract award is made, the successful Bidder will be furnished (free of charge) two additional sets of the Plans and Specifications.

In the event all Bids are rejected and the Project is re-advertised, the original Bidders shall **NOT** be entitled to free Bidders Proposal forms for the subsequent letting.

8. OMISSIONS AND DISCREPANCIES

Should a Bidder find discrepancies, errors or omissions in the Drawings or Specifications, or should he be in doubt as to the correctness of the Plan details, dimensions and layout, he should immediately notify the Engineer in order to permit checking and any necessary revisions or modifications.

9. ADDENDA

Prior to the date set for opening of Bids, the right is reserved, in the interests of the Owner, as it may require, to revise or amend the Contract Documents. Such revisions, if any, will be announced by an Addendum or Addenda, and copies of such Addenda will be furnished to all prospective Bidders who have purchased Plans and Specifications for acknowledgment by return fax. If the revisions and Addenda are of a nature which require material changes in quantities or prices Bid, or both, the date set for opening Bids may be postponed to enable Bidders to revise their Bids. In such case, the Addendum or Addenda will include an announcement of the new date for opening Bids.

10. INTERPRETATIONS

No oral interpretation made to any Bidder as to the meaning of the Contract Documents shall be considered an effective modification of any of the provisions of the Contract Documents. In order to ensure appropriate and concise responses, and avoid any misinterpretations, no verbal questions will be received. Written requests for interpretation of the Plans and Specifications shall be submitted to the Engineer at least 10 days prior to opening of Proposals so that a formal decision can be given in writing to all known prospective Bidders in the form of an Addendum. The Contract Document contains the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the Contract.

11. BID SECURITY

All Bids shall be accompanied by a Bid Security in the form of a Certified Check upon a national or state bank or a Bid Bond made by a bonding company registered in the State of Mississippi, drawn and made payable to the Owner in an amount equal to five percent of the Bid. The Certified Check or Bid Bond must be enclosed in the same envelope with the Bid. Except as noted below, the Bid Security of all known unsuccessful Bidders will be returned promptly after a Notice of Award has been sent to the successful Bidder or in the event that all Bids are rejected.

The Bid Security of the next two lowest qualified Bidders will be retained until the Contract has been executed with the lowest qualified Bidder. The Bid Security of the successful Bidder will be returned when satisfactory Performance and Payment Bonds have been furnished and approved and the Contract executed.

12. GENERAL INFORMATION

Bidders shall inform themselves and comply with all pertinent Owner regulations and ordinances, State and Federal laws, licenses and tax liabilities which may in any manner affect their Bids and the prosecution of the work. The successful bidder will be responsible for obtaining all building, plumbing, and electrical permits required by the local city government. Special attention is directed to the rules and regulations published by the Mississippi State Tax Commission outlining certain taxes imposed on Contractors by the state of Mississippi.

13. REJECTION OF PROPOSAL

Proposals may be rejected in the case of any omission, alterations of forms, additions or conditions not called for, unauthorized alternate Bids, incomplete Bids, erasures or irregularities of any kind. Bids received conditioning their consideration or rejection upon Bids for the other work submitted by the same Bidder may be classed as irregular, unless the Contract Documents specifically invite or permit conditional or combination Bids. Bids in which the prices obviously are unbalanced may be rejected.

14. CONDITIONS OF WORK

Each Bidder must inform himself fully of the conditions relating to the construction of the Project and the employment of labor thereon. Failure to do so will not relieve a successful Bidder of his obligation to furnish all materials and labor necessary to carry out the provisions of his Contract. Insofar as possible, the Contractor, in carrying out his work, must employ such methods or means as

will not cause any interruption of or interference with the work of any other Contractor.

15. SECURITY FOR FAITHFUL PERFORMANCE

Simultaneously with his delivery of the Executed Contract, the Contractor shall furnish a Performance Bond and a Payment Bond each in the sum of 100% of the Contract amount as security for faithful performance of his Contract and for the payment of all persons performing labor on the Project under his Contract and furnishing materials in connection with his Contract, as specified in the Contract Documents. The surety of such Bonds shall be issued by a duly authorized surety company listed on the Treasury Department's most current list Circular 570 (as amended) and satisfactory to the Owner.

Attorneys in fact who sign Bid Bonds or Payment Bonds and Performance Bonds must file with each bond a certified and effective dated copy of their Power of Attorney. Failure of the successful Bidder to execute the Contract and to supply the required bonds within 10 calendar days from the date that the Notice of Award is delivered, or within such extended period as the Owner may grant based upon reasons determined sufficient by the Owner, shall constitute a default, and the Owner, at his discretion, may either award the Contract to the next lowest qualified Bidder or readvertise for Bids, and may charge against the Bidder the difference between the amount for which a Contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the Bid Bond. If a more favorable bid is received by readvertising, the defaulting Bidder shall have no claim against the Owner for a refund. The Contractor's bond will not be released until all provisions of the Contract have been fulfilled.

16. INSURANCE

The Contractor will be required to carry the types and amounts of insurance named in the Contract Documents for the full life of the Contract.

17. SUBCONTRACTORS

Bidders are specifically advised that any person, firm or other party to whom it is proposed to award a Subcontract must be acceptable to the Owner. Nothing contained in the Contract Documents shall create any contractual relation between subcontractor and the Owner.

18. METHOD OF AWARD – LOWEST RESPONSIVE BIDDER

The Owner will award the Contract to the lowest and best Bid unless all Bids are rejected. The award will be based on the evaluation of the low bid for the total base bid or the total alternate bid as decided upon by the Owner.

The responsiveness of the low Bidder shall be determined by (1) the completeness and regularity of the Bidders Proposal; (2) the Bidders Proposal being without exclusions or special conditions; (3) the Bid Form having no alternative Bids for any item unless requested in the Technical Specifications; and (4) such other factors as may be considered under State law, Federal law or regulation.

The evaluation of the low bidder will be based on whether the Bidder (1) maintains a permanent place of business; (2) has adequate plant equipment to do the work properly and within the time limit that is established; (3) has adequate financial status to meet his obligations contingent to the work; (4) has adequate manpower and present workload is such that he can perform according to a reasonable

schedule; and (5) such other factors as may be considered under State law, Federal law or regulation.

19. OBLIGATION OF BIDDER

At the time of the opening of Bids, each Bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Plans and Contract Documents (including all Addenda).

The failure or omission of any Bidder to examine any form, instrument or document shall in no way relieve any Bidder from any obligation in respect to his Bid. Submission of Bid shall be accepted as prima facie evidence that Bidder has inspected the site and is familiar with the Plans and Contract Documents.

20. SUBSURFACE DATA

Not Used.

21. EXECUTION OF CONTRACT

If the successful Bidder is a corporation, the officer who signs the Contract shall furnish copies of the resolution of the Directors of the corporation authorizing him to sign the contract. Such resolution should bear the seal of the corporation.

Subject to the applicable provisions of law, the Contract shall be in full force and effect only from and after the date when a fully executed and approved counterpart thereof has been rendered or delivered, or both, to the Contractor or his duly authorized agent or representative. Deposit of said counterpart in the United States mail in an envelope or wrapper properly addressed shall constitute compliance with these provisions by the Owner.

22. INTERCHANGEABLE TERMS

The terms "Bid" and "Proposal" wherever they are used in the Contract Documents are interchangeable and have the same meaning. The terms "Contract" and "Agreement", are interchangeable and have the same meaning. The terms "Contract Drawings" and "Plans", are interchangeable and have the same meaning.

23. QUALIFICATIONS OF BIDDER, OWNER'S RIGHTS

The Owner may make such investigation as it deems necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by or investigation of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

24. MATERIALS AND EQUIPMENT

Whenever materials or equipment are specified or described in the Contract Documents by using the name of a manufacturer, fabricator, supplier, or distributor, the naming of the item in this manner is intended to establish the type, function and quality required. Materials or equipment of other manufacturers, fabricators, suppliers, or distributors may be accepted by the Engineer if sufficient

information is submitted by the Contractor to allow the Engineer to determine that the material or equipment proposed is equivalent to that named in the Contract Documents. Bidders are referred to Section 6.3 of the General Conditions regarding procedures for approval of substitute materials and equipment.

25. NON-RESIDENT BIDDERS

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident Bidder's state awards contractors to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so called "Golden Rule" is followed, state law requires a non-resident Bidder to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

26. DESIGNATING OWNER AND ENGINEER

Any reference in the Contract Documents to the State of Mississippi, Mississippi Department of Transportation, Mississippi Transportation Commission, or any official thereof shall be interpreted to mean the City of Hattiesburg, Mississippi, the "Owner".

Any reference in the Standard Specifications to the Project Engineer, District Engineer, Office Engineer, or Engineer shall be interpreted to mean the Engineer for the City of Hattiesburg, Mississippi, Neel-Schaffer, Inc.

27. MATERIALS TESTING AND STAKING

The Contractor shall be responsible for all testing of materials associated with the project. Materials shall be tested in accordance to the requirements and frequencies outlined in the *Mississippi Standard Specifications for Road and Bridge Construction* (2017 Edition), and shall be considered an absorbed item.

Staking of proposed improvements shall be paid for under pay item 699-A Roadway Construction Stakes. This item shall also include surveying as necessary for earthwork computations.

28. CONTRACT TIME

The number of calendar days to for Substantial Completion of the parking lot will be 90 calendar days from the Notice to Proceed Date..

The calendar date for completion of the work to be performed by the Contractor for this project shall be a specified completion date. The specified completion date for this project will be calculated by adding the above number of calendar days to the date of the notice to proceed.

BIDDER'S PROPOSAL
FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI

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BIDDER'S PROPOSAL
FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI

DATE: _____, 20_____

PROPOSAL OF _____
(Name of Bidder)

(Address of Bidder)

for construction of the Front Street Parklet.

The documents on which this Proposal is based include the Instructions to Bidders, Bid Forms, General Conditions, Supplementary Conditions, Supplemental General Conditions, Technical Specifications, Contract Drawings, and all supplements, amendments and addenda for this Project and are made a part hereof by reference.

TO: CITY OF HATTIESBURG
200 FORREST STREET
HATTIESBURG, MISSISSIPPI 39401

Gentlemen:

The following Proposal is submitted on behalf of the undersigned Bidder(s) and no others. Evidence of my (our) authority to submit the Proposal is hereby furnished. The Proposal is submitted without collusion on the part of any person, firm or corporation.

I (We), the undersigned Bidder(s), certify that I (we) have carefully examined the Instructions to Bidders, Bid Forms, General Conditions, Supplemental Conditions, Technical Specifications, Contract Drawings and any and all Addenda thereof.

I (We) further certify that I, (we) have visited and carefully examined the site of the proposed Work and have inspected the location and condition of all public utilities and existing structures or other facilities on the site or adjacent thereto which may be affected by the proposed construction and fully understand all conditions relative to construction difficulties, hazards, labor, transportation and all other factors affecting the prosecution of the work covered by this Proposal.

I (We) understand that the quantities mentioned below are approximate only and are subject to either increase or decrease, and hereby propose to perform any increased or decreased quantities of work at the unit prices bid. No increase in quantities of work shall be performed until a written change order is duly executed in advance and approved in the public minutes of the Owner.

In accordance with the requirements of the Instructions to Bidders, Bid Forms, Federal Supplement to

00300-2

Bidder's Proposal, Technical Specifications, General Conditions, Supplementary Conditions, Contract Drawings, and any Addenda, I (we) propose to furnish all necessary materials, equipment, labor, tools and other means of construction and will do all Work called for by the Contract Documents within the specified Contract Time. The following is my (our) itemized proposal for the project:

Prices Bid and Approximate Quantities - Base Bid					
Pay Item	Pay Item Description	<u>Unit</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Price Extension</u>
202-B	Removal Of Concrete Sidewalk, Inc. Saw-Cutting	SY	70		
202-B	Removal of Pavement, All Depths, Inc. Saw-Cutting	SY	80		
202-B	Removal Of Curb & Gutter, All Types, Inc. Saw-Cutting	LF	70		
203-EX	Borrow Excavation, AH, FME, Class B9	CY	25		
203-G	Excess Excavation, FM, AH	CY	50		
304-G	Size 610 Crushed Stone Base, AEA	CY	80		
246-A	Sandbags	EA	100		
601-A	Class "B" Structural Concrete, Minor Structures, Perimeter Footing	CY	3		
907-601-PP	Class "B" Structural Concrete, Concrete Steps, Per Plans	LS	1	XXXX	
602-A	Reinforcing Steel	LBS	1,800		
501-A	6" Reinforced Cement Concrete Pavement, Broom Finish	SY	75		
608-B	Concrete Sidewalk, With Reinforcement, Inc. Edge Footing	SY	55		
907-616-C	Stamped and Colored Concrete Sidewalk, Brick Pavers	SY	8		
609-A	Concrete Gutter, Special Design	LF	70		
907-258-PP	Handrail, Per Plans	LF	228		
907-258-PP	24" Rail Planter, Per Plans	EA	36		

907-258-PP	72" Planter Bed, Per Plans	EA	5		
613-D	Adjustment of Utility Appurtenances	EA	6		
683-B500	Lighting Assembly, Lighted Bollard	EA	2		
907-259-F	Weatherproof GFCI Receptacle	EA	3		
637-C	Traffic Signal Conduit, Underground, Type 4, 2"	LF	200		
637-D	Traffic Signal Conduit, Underground Drilled Or Jacked, Roll Pipe, 2"	LF	100		
682-A	Underground Branch Circuit, Awg 6, 3 Conductor	LF	300		
682-D	Type 1 Pull Box	EA	2		
618-A	Maintenance of Traffic	LS	1	XXXX	
620-A	Mobilization	LS	1	XXXX	
699-A	Roadway Construction Stakes	LS	1	XXXX	
Total Base Bid \$					

THE BIDDER'S TOTAL ABOVE IS HIS TOTAL BID BASED ON HIS UNIT PRICES AND LUMP SUM PRICES AND THE ESTIMATED QUANTITIES. THIS FIGURE IS FOR INFORMATION ONLY AT THE TIME OF OPENING BIDS. THE OWNER WILL MAKE THE BID TABULATION FROM THE UNIT PRICES AND LUMP SUM PRICES BID. IF THERE IS AN ERROR IN THE TOTAL BY THE BIDDER, IT SHALL BE CHANGED AS ONLY THE UNIT PRICES AND LUMP SUM PRICES SHALL GOVERN.

NOTE: FAILURE OF BIDDER TO INCLUDE PRICES FOR THE ALTERNATE BID ITEMS MAY RENDER HIS PROPOSAL NON-RESPONSIVE.

NOTE: Bids shall include sales tax and all other applicable taxes and fees.

I (We) further propose to execute the Contract Agreement as bound herein within ten working days after receipt of Contract Forms from the Owner and to complete the work within the contract time. I (We) agree to pay as liquidated damages the actual costs, expenses and other losses reasonably incurred by Owner for each consecutive calendar day beyond the specified Contract Time.

I (We) also propose to execute a Performance Bond and a Payment Bond, as shown in the Specifications, each in an amount of not less than one hundred percent (100%) of the total of my (our) Bid. These Bonds shall not only serve to guarantee the completion of the Work on my (our) part, but also to guarantee the excellence of both workmanship and materials until the Work is finally accepted.

I (We) enclose a Bid Bond or Certified Check for 5 percent of _____
_____, DOLLARS (\$_____))
(Base Bid Amount)

and hereby agree that in case of my (our) failure to execute the Contract and furnish the Bonds within ten calendar days after delivery of the Notice of Award, the amount of this check (Bid Bond) will be forfeited to the Owner as liquidated damages arising out of my (our) failure to execute the Contract as proposed.

It is understood that in case I (we) am (are) not awarded the Work, the Certified Check or Bid Bond submitted as Bid security will be returned as stipulated in the Contract Documents.

Bidder acknowledges receipt of the following Addenda:

No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____

Respectfully Submitted,

Contractor(s)

By: _____
Title

Address

BIDDER'S CORPORATE DECLARATION
(TO BE FILLED IN IF BIDDER IS A CORPORATION)

Date: _____, 20_____.

Our corporation is chartered under the Laws of the state of _____ and the names,
titles and business addresses of the executives are as follows:

President

Secretary

Treasurer

DECLARATION OF PARTNERSHIP

(To be filled in if a Bidder is a Partnership)

Our Partnership is composed of the following individuals:

Address

Address

NON-COLLUSION AFFIDAVIT

**FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI**

(THIS AFFIDAVIT MUST BE EXECUTED FOR THE BID TO BE CONSIDERED)

STATE OF _____)
COUNTY OF _____) ss.

_____ being first duly sworn,
(Person)
deposes and says that he is _____

(Sole owner, a partner, president, secretary, etc.)
of _____ the party making the foregoing Proposal or Bid;
(Name of Firm)

that such Bid is genuine and not collusive; that said Bidder is not financially interested in, or otherwise affiliated in a business way with any other bidder on the same contract; that said Bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder or person, to put in a sham bid, or that such other person shall refrain from bidding, and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the Owner or any person or persons interested in the proposed contract; and that all statements contained in said Proposal or Bid are true; and further, that such Bidder has not, directly or indirectly submitted his Bid, or the contents thereof, or divulged information or data relative thereto to any association or to any member or agent thereof.

Affiant

Sworn to and subscribed before me this _____ day of _____, 20_____.

Notary Public in and for

_____ County,

(SEAL)

My Commission Expires

_____, 20_____.

BID BOND

**FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI**

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____ as Principal, and _____ as Surety, are hereby held and firmly bound unto the Owner, in the penal sum of \$_____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. Signed this ____ day of _____, 20 _____.

The condition of the above obligation is such that whereas the Principal has submitted to the Owner, a certain bid, attached hereto and hereby made a part hereof to enter into a contract in writing for the above referenced project.

NOW THEREFORE,

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to signed by their proper officers, the day and year first set forth above.

Contractor

SEAL

By:_____

Surety

SEAL

By:_____

PROPOSED SUBCONTRACTORS
FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI

The names and addresses of all persons and parties who will be utilized for subcontract Work in the foregoing Bidder's Proposal are listed below. (The Contractor must list all Subcontractors to be utilized on the Work. Failure to list Subcontractors may cause the Bidder's Proposal to be rejected by the Owner as non-responsive.) If the Bidder does not propose Subcontractors, so state.

NAME

ADDRESS

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

CONTRACT FORMS

**FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI**

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CONTRACT

**FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI**

This Contract, made this the _____ day of _____, 20____, by and between the City of Hattiesburg, Mississippi, a municipal corporation, hereinafter called "Owner" and _____ doing business as a _____ located in _____ hereinafter called the "Contractor".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. THE CONTRACTOR will commence and complete the "Front Street Parklet" in strict accordance with the Contract Documents and the Contract Drawings.
2. The Contractor will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED and will attain Final Completion within the contract time stipulated in the INSTRUCTION TO BIDDERS unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
The Contractor agrees to pay, as liquidated damages, the actual damages, costs, losses and expenses reasonably incurred by Owner for each consecutive calendar day that he shall be in default in attaining Final Completion within the time stipulated as provided herein.
3. The term "CONTRACT DOCUMENTS" means and includes Advertisement for Bids, Instructions to Bidders, Bidder's Proposal, Bid Bond, Contract, Payment Bond, Performance Bond, General Conditions, Supplementary Conditions, Technical Specifications, Contract Drawings, Notice of Award, Notice to Proceed, Addenda (if any), and all subsequent Change Orders, Supplemental Agreements and/or other modifications as if formally recopied in this Contract.
4. The Contractor agrees to furnish all materials in place and to faithfully complete all of said work contemplated by this Contract in good and workmanlike manner, strictly in accordance with said Contract Documents, Contract Drawings and other requirements of the Owner, and to the complete satisfaction of the Owner or his authorized representatives, and in accordance with the Laws of the state of Mississippi and the Ordinances of the Owner, for which the Owner hereby agrees to pay and the Contractor agrees to accept a sum of money in current funds equal to the contract amount of _____ (\$ _____) plus the amount of any supplemental agreements and force accounts for extra work authorized and duly set forth in a written change order approved and executed by the Owner and set forth in the public minutes of the Owner and in full compensation for furnishing all materials, the doing of all work contemplated under the Contract, as well as all loss or damage, if any, arising out of the nature of the work, or the action of the weather, and any and all other unforeseen obstructions or difficulties that may be encountered in the prosecution of the same, the Contractor assuming all risks of every kind and description in the performance of this Contract.
5. The Contractor shall protect, indemnify and save harmless the Owner from and against any and all damage, loss, claims, judgments or expenses, including but not limited to reasonable

attorney's fees, which the Owner may suffer or be subjected to by the performance of the work, including but without limitation injury to or death of any person whomever and destruction or damage to any property whatsoever.

6. Attached hereto and made a part of this Contract is a Performance Bond, executed by a Surety Company doing business in the state of Mississippi, in the sum of

(\$_____).
7. Attached hereto and made a part of this Contract is a Payment Bond, executed by a Surety Company doing business in the state of Mississippi, in the sum of

(\$_____).
8. The Contractor agrees to allow the Owner, or any of their duly authorized representatives, access to any books, documents, papers and records of the Contractor which are directly pertinent to the project which is the subject of this Contract, for the purpose of making audits, examinations, excerpts and transcriptions, and Contractor agrees to insert an identical clause in any and all subcontracts.
9. The Owner will pay to the Contractor in the manner and at such times and amounts as set forth in the Contract Documents.
10. This Contract shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
11. If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner his obligations under this Contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, the Owner shall thereupon have the right to terminate this Contract by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least five days before the effective date of such termination. Notwithstanding the above, the Contractor shall not be relieved of liability to the Owner for damages sustained by the Owner by virtue of any breach of the Contract by the Contractor and the Owner may withhold any payments to the Contractor until such time as the exact amount of damages due the Owner from the Contractor is determined.

IN WITNESS THEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Contract in 5 counterparts, each of which shall be deemed an original on the date first above written. (number)

OWNER

CONTRACTOR

BY _____

BY _____

ATTEST _____

ATTEST _____

(Seal)

(Seal)

PARTNERSHIP CERTIFICATE

State of _____

County of _____ Ss.

On this _____ day of _____, 20_____, before me personally appeared _____, known to me and known by me to be the person who executed the above instrument, who being by me first duly sworn, did depose and say that he is a general partner in the firm of _____; that said firm consists of himself and _____; and that he executed the foregoing instrument on behalf of said firm for the uses and purposes stated herein.

Notary Public in the

County of _____

State of _____

Notary Seal

My Commission Expires:

CORPORATE CERTIFICATE

I, _____ certify that I am the Secretary of the Corporation named as Contractor in the foregoing Contract; that _____, who signed said Contract on behalf of the Contractor was then _____ of said Corporation; that said Contract was duly signed for and in behalf of said Corporation by authority of its governing body and is within the scope of its corporate powers.

Secretary

Corporate Seal

GENERAL INSTRUCTIONS FOR BONDS

1. The surety on each Bond must be a responsible surety company, which is qualified to do business in Mississippi and satisfactory to the Owner.
2. The name, including full Christian name and residence of each individual party to the Bond shall be inserted in the body thereof, and each such party shall sign the Bond with his usual signature on the line opposite the seal and if signed in Maine, Massachusetts or New Hampshire an adhesive seal shall be affixed opposite the signature. The bond must be either signed or countersigned by a Mississippi Resident Agent of the Surety Company.
3. If the principals are partners, their individual names will appear in the body of the Bond with the recital that they are partners composing a firm, naming it; and all the members of the firm shall execute the Bond as individuals.
4. The signature of a witness shall appear in the appropriate place, attesting to the signature of each individual party to the Bond.
5. If the principal or surety is a corporation, the name of the State in which incorporated shall be inserted in the appropriate place in the body of the Bond, and said instrument shall be executed and attested under the corporate seal as indicated in the form. If the corporation has no corporate seal the fact shall be stated, in which case, a scroll or adhesive seal shall appear following the corporate name.
6. The official character and authority of the person or persons executing the Bond for the principal, if a corporation, shall be certified by the secretary or assistant secretary, according to the form attached hereto. In lieu of such certificate there may be attached to the Bond copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.
7. The date of this Bond must not be prior to the date of the Contract in connection with which it is given.
8. Surety Companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal, and
(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____ Dollars,
\$(_____) in lawful money of the United States, for the payment of which sum well
and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these
presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain
contract with the OWNER, dated _____ day of _____ 20 _____,
a copy of which is hereto attached and made a part hereof for the construction of :

Front Street Parklet

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings,
covenants, terms, conditions, and agreements of said contract during the original term thereof, and any
extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the
one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and
shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by
reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the
OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full
force and effect.

NOW, THEREFORE, if the Principal shall promptly make payment of all taxes, licenses, assignments,
contributions, damages, penalties, and interest thereon, when and as the same may lawfully be due the state of
Mississippi, or any county, municipality, board, department, commission, or political subdivision thereof, by
reason of and directly connected with the performance of said Contract or any part thereof as provided by
Sections 27-65-1, 27-65-21, 27-67-301 and 31-5-3, supra, or any other applicable statute or other authority,
then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change,

00500-7

extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this statement is executed in 5 counterparts, each one of which shall
(number)
be deemed an original, this the _____ day of _____, 20 _____.

ATTEST:

(Principal) Secretary
(Seal)

Principal
By _____

(Address)

Witness as to Principal

(Address)

Surety
By _____

ATTEST:

Witness as to Surety

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
 If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS THAT

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal,
(Corporation, Partnership, or Individual)

and _____
(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____
Dollars, \$(_____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____ 20 _____, a copy of which is hereto attached and made a part hereof for the construction of:

Front Street Parklet

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this statement is executed in 5 counterparts, each one of which shall
(number)
be deemed an original, this the _____ day of _____, 20 _____.

ATTEST:

(Seal) (Principal) Secretary

By Principal

(Address)

Witness as to Principal

(Address)

ATTEST:

Surety

By _____

Witness as to Surety

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

NOTICE OF AWARD

Date _____

TO: _____

RE: Front Street Parklet
 City of Hattiesburg, Mississippi

NOTICE OF AWARD

Gentlemen:

The Owner has considered the Proposal submitted by you for the above referenced Work in response to its Advertisement for Bids and Instructions to Bidders.

You are hereby notified that your Proposal has been accepted in the amount of \$_____.

You are required by the Instruction to Bidders to execute the Contract and furnish to the Owner the required Contractor's Performance Bond, Payment Bond and certificates of insurance within 10 calendar days from the date of delivery of this Notice to you. We have enclosed five copies of the necessary contract forms and bond forms. Please return all five copies of these documents to the offices of Neel-Schaffer, 704 Hardy Street, Hattiesburg, MS 39401.

If you fail to execute said Contract and to furnish said Bonds within 10 days from the date of delivery of this Notice, the Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your proposal as abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by Law.

You are required by the General Conditions and Supplementary Conditions to submit to Neel-Schaffer, Inc. an estimated progress schedule, a preliminary schedule of Shop Drawing submissions and a preliminary schedule of values of the Work within 10 days after the effective date of this Contract, all in accordance with Article 2.5 of the General Conditions.

You are required to return an acknowledged copy of this Notice of Award directly to the City of Hattiesburg, Mississippi, Attention: Lamar Rutland, P.E., and to Neel-Schaffer, Inc.

Sincerely,

NEEL-SCHAFFER, INC.

Geoffrey Crosby, P.E.
Senior Project Manager

c: Lamar Rutland, P. E.
City of Hattiesburg
200 Forrest Street
Hattiesburg, MS 39401

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged by _____ this, the
_____ day of _____, 20_____.

By _____

Title _____

NOTICE TO PROCEED

Date _____

To: _____

Attention: _____

REFERENCE: NOTICE TO PROCEED
FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI

Dear _____:

You are hereby notified to commence Work in accordance with the Contract dated _____, on or before _____. You are to complete the Work within _____ consecutive calendar days from the effective date of this Notice to Proceed. The date of Final Completion is therefore _____. Liquidated damages in the amount of the actual damages, costs, losses and expenses reasonably incurred by the OWNER per calendar day for each day the Work has not achieved Final Completion after _____ will be imposed unless the contract time is otherwise adjusted for due cause by change orders to the Contract. Liquidated Damages, as defined herein, will be assessed unless the Contract Time is otherwise adjusted for due cause by change order to the Contract.

The engineering firm of Neel-Schaffer, Inc. will act as the Engineer on behalf of the City of Hattiesburg, Mississippi for the work to be performed under the contract. Geoffrey Crosby, P.E., of Neel-Schaffer, Inc. will be the designated representative of the Engineer.

Please return a copy of this NOTICE TO PROCEED and ACCEPTANCE OF NOTICE to the undersigned and to Neel-Schaffer, Inc., indicating your receipt of this document in the space provided below.

Sincerely,

City of Hattiesburg, Mississippi

Mayor Toby Barker

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED

is hereby acknowledged by _____

this, the _____ day

of _____, 20_____.

By _____

Title _____

CONTRACT CHANGE ORDER

OWNER: _____ PROJECT NAME: _____

CONTRACTOR: _____

DATE: _____

CHANGE ORDER NUMBER: _____ CONTRACT NUMBER: _____

REASON FOR CHANGE: _____

YOU ARE HEREBY REQUESTED TO COMPLY WITH THE FOLLOWING CHANGES FROM THE CONTRACT
PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS: (USE ADDITIONAL SHEETS IF REQUIRED)

ITEM NO.	DESCRIPTION OF CHANGE(S) (QUANTITIES, ETC.)	QTY	UNIT COST	TOTAL CONTRACT
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00

TOTAL CONTRACT CHANGE	\$
	TOTAL CONTRACT
ORIGINAL CONTRACT AMOUNT:	\$
CURRENT CONTRACT AMOUNT:	\$
THIS CONTRACT CHANGE	
REVISED CONTRACT AMOUNT:	\$
CURRENT CONTRACT COMPLETION DATE:	
TIME EXTENSION REQUIRED BY CHANGE:	
REVISED CONTRACT COMPLETION DATE:	
THIS DOCUMENT SHALL BE AN AMENDMENT TO THE CONTRACT AND ALL PROVISIONS OF THE CONTRACT WILL APPLY. RECOMMENDED BY: _____ ENGINEER _____ DATE _____ NEEL-SCHAFFER, INC. ACCEPTED BY: _____ CONTRACTOR _____ DATE _____ ACCEPTED BY: _____ OWNER _____ DATE _____	

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By



PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

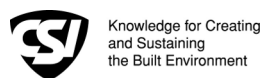
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The Associated General Contractors of America



Construction Specifications Institute

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1420 King Street, Alexandria, VA 22314

American Council of Engineering Companies
1015 15th Street, N.W., Washington, DC 20005

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain

administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times

but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents, or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
- c. has been damaged prior to Engineer's - recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement

or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or

responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work

(unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or

3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's

sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice*: If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review*: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

- a. reviewing and checking all such information and data,
- b. locating all Underground Facilities shown or indicated in the Contract Documents,
- c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
- d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will

promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to

entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified

in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection

from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any

deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract

Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or

received from the superintendent shall be binding on Contractor.

6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services;

4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract

Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. Contractor's Expense: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual

or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer,, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Draw-

ings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples*: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.

a. Submit number of Samples specified in the Specifications.

b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals , any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents

with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 Continuing the Work

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or

disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 Contractor's General Warranty and Guarantee

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal

shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and

2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and

properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 *Insurance*

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep

Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show

partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall

promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,

2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and

Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have

resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. Costs Excluded: The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.

C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall

be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an

allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted

by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to

be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications .

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress

payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent

inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

- a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling Owner to a set-off against the amount recommended; or
- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, , Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial

Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals

that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;

b. consent of the surety, if any, to final payment;

c. a list of all Claims against Owner that Contractor believes are unsettled; and

d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. *Engineer's Review of Application and Acceptance*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations

under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance

with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be

governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or

2. agrees with the other party to submit the Claim to another dispute resolution process, or

3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS

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SUPPLEMENTARY CONDITIONS

1. Definitions

- A. The definition of "Technical Specifications" shall be the same as the definition for Specifications stated in Paragraph 1.01 under item number 43 of the General Conditions.
- B. Delete Paragraph 1.01.A.12 of the General Conditions in its' entirety.
- C. In Paragraph 1.01A.52 delete the following words, "or responding to differing or unseen subsurface or physical conditions under which the work is to be performed or to emergencies."

2. Commencement of Contract Time: Notice to Proceed

The commencement of Contract Time, as stated in Item 2.03 of the General Conditions is changed to read The Contract Time will commence to run within the sixtieth day after the Effective Date of the Agreement, or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed; but in no event shall the Contract Time commence to run later than the sixtieth day after the Effective Date of the Agreement.

Notice to Proceed may be given at any time within sixty days after the Effective Date of the Agreement. Refer to Item 21 of the Instructions to Bidders regarding execution of the Contract.

3. Before Starting Construction

In addition to the requirements of Paragraph 2.05 of the General Conditions, "**CONTRACTOR** shall deliver to the **OWNER**, with his signed Contract, all bonds and insurance which he is required to purchase and maintain in accordance with Article 5 of the General Conditions. A copy shall also be submitted to the **ENGINEER**. The **OWNER** shall deliver to the **CONTRACTOR** a copy of all policies of insurance which the **OWNER** is required to purchase and maintain in accordance with Article 5 of the General Conditions."

4. Preconstruction Conference

The time period for holding the preconstruction conference as stated in Paragraph 2.06 of the General Conditions shall be within 30 days after the Effective date of the Agreement, but before the **CONTRACTOR** starts the Work at the site.

5. Subsurface and Physical Conditions

Paragraphs 4.02 and 4.03 shall be deleted in its' entirety and replaced with the following:

DIFFERING SITE CONDITIONS PROVISION:

Execution of this Contract (Agreement) by the Contractor is a representation that the Contractor has visited the site, that general and local conditions are suitable for the work to be performed and that the Contractor accepts all conditions at the Project site. The Contractor assumes all risks with respect to the requirements of the Contract Documents, including without limitation the characteristics (natural and manmade) of the site, site accessibility, labor rates and availability, weather conditions, and any other matter that could affect the performance and cost of the work.

6. Insurance Requirements

- A. Paragraphs 5.05 and 5.06 shall be deleted in their entirety.
- B. Paragraphs 5.07.B, 5.07.B.1 and 5.07.B.2 shall be deleted in their entirety.
- C. In addition to the requirements of Article 5 of the General Conditions, insurance coverage specified herein constitutes the minimum requirements and said requirements shall in no way lessen or limit the liability of the **CONTRACTOR** under the terms of the Contract. The **CONTRACTOR** shall procure and maintain at his own expense any additional kinds and amounts of insurance that, in his own judgment, may be necessary for his proper protection in the prosecution of the Work.
 - 1. The **CONTRACTOR** shall carry insurance as prescribed herein and all policies shall be with companies satisfactory to the **OWNER**. If a part of this Contract is sublet, the **CONTRACTOR** shall require each Subcontractor to carry insurance of the same kinds and in like amounts as carried by the **CONTRACTOR**, including all additional insureds and waivers of subrogation.
 - 2. Certificates of insurance shall state that 30 days written notice will be given to the **OWNER** before the policy is canceled or changed. No **CONTRACTOR** or Subcontractor will be allowed to start any construction work on this Contract until certificates of all insurance required herein and all coverage requirements specified in contract documents are filed with and approved by the **OWNER**. The certificates shall show the type, amount, class of operations covered, effective dates and the dates of expiration of policies.
 - 3. The **CONTRACTOR** shall secure and maintain in effect for the period of the **CONTRACT** and pay all premiums for the following kinds and amounts of insurance:
 - a. Worker's Compensation and Employer's Liability Insurance: This insurance shall protect the **CONTRACTOR** against all claims under applicable State Worker's Compensation Laws. The **CONTRACTOR** shall also be protected and shall cause each Subcontractor to be protected against claims for injury, disease, or death of employees, which for any reason, may not fall within the provisions of a Worker's Compensation Law. The liability limits shall not be less than the required statutory limits for Worker's Compensation and Employer's Liability limits in the amount of ONE MILLION DOLLARS (\$1,000,000.00). **CONTRACTOR** and subcontractors shall supply **OWNER** endorsements from their carriers evidencing waiver of subrogation in favor of the **OWNER**.
 - b. **CONTRACTOR'S** and Subcontractor's Comprehensive General Liability Insurance, including bodily injury, property damage, contractual and other

standard coverage contained in Comprehensive General Liability Insurance, in an amount of not less than ONE MILLION DOLLARS (\$1,000,000) per occurrence and aggregate. **OWNER** shall be provided an endorsement naming the **OWNER** as an insured from the insurer for the work contracted. The Comprehensive General Liability policies carried by both the **CONTRACTOR** and the Subcontractors shall contain an endorsement to include the coverage of the following hazards:

- i. Explosion, collapse, and underground property damage to include any damage or destruction of property below the surface of the ground, such as wires, conduits, pipes, mains, sewers, etc., caused by the **CONTRACTOR'S** operations.
 - ii. The collapse of and structural injury to any building, structure or property on or adjacent to the **OWNER'S** premises or right-of-way caused by the **CONTRACTOR'S** operations in the removal of other buildings, structures, or supports, or by excavation below the surface of the ground.
 - iii. Contractual Liability Coverage for the Hold Harmless segments of the Contract Documents.
- c. **CONTRACTOR'S** Contingent or Protective Liability and Property Damage: In case part of this Contract is sublet, the **CONTRACTOR** shall secure contingent or protective liability and property damage insurance to protect the **CONTRACTOR** from any and all claims arising from the operation of Subcontractors in the execution of Work included in the Contract. In no case shall the amount of such protection be less than the limits of \$500,000/\$1,000,000 for Public Liability Insurance and \$500,000/\$1,000,000 for Property Damage Insurance. The coverage in each case shall be acceptable to the **OWNER**.
- d. Auto Liability: The **CONTRACTOR** shall maintain Auto Liability Insurance in the amount of not less than ONE MILLION DOLLARS (\$1,000,000) Combined Single Limit to protect him from any and all claims arising from the use of the following:
- i. **CONTRACTOR'S** own automobiles and trucks.
 - ii. Hired and non-owned automobiles and trucks.
 - iii. Automobiles and trucks owned by Subcontractors.
- The aforementioned is to cover use of automobiles and trucks on and off the site of the Project. The **OWNER** shall be provided an endorsement from the insurer naming the **OWNER** as an insured for the work contracted.
- e. **OWNER'S** Protective Liability Policy: The **CONTRACTOR** shall maintain **OWNER'S** Protective Liability Insurance with the **OWNER** as the named insured, and the **ENGINEER**, and their servants, agents and employees as additional insureds, in an amount not less than ONE MILLION DOLLARS (\$1,000,000).
- f. Umbrella Liability: The **CONTRACTOR** shall provide **OWNER** a certificate of insurance evidencing Umbrella Liability Insurance in the amount of not less than FIVE MILLION DOLLARS (\$5,000,000).
- g. Builder's Risk and Boiler and Machinery Insurance: The **CONTRACTOR** shall purchase and maintain Builder's Risk and Boiler and Machinery Insurance in the amount of the total value of the materials necessary for the

project. A certificate evidencing such coverage shall be on file with the **OWNER**.

h. Property Insurance: No property insurance is required for this project.

7. Contractor's Responsibilities

Delete Paragraph 6.02.B in its entirety.

8. Record Documents

In addition to the requirements of Paragraph 6.12 of the General Conditions, **CONTRACTOR** shall provide accurate 'mark-ups' acceptable to the **ENGINEER** on or before the date of Substantial Completion of the Project for use by the **ENGINEER** in the preparation of 'record' drawings. Final payment will not be made to the **CONTRACTOR** prior to the **ENGINEER** receiving these mark-ups from the **CONTRACTOR**.

9. Limitations on ENGINEER'S Responsibilities

In addition to the requirements of Paragraph 9.09.B, when it comes to his attention, the **ENGINEER** will immediately notify the **OWNER** in the event that the **CONTRACTOR** is not complying with the Contract Documents or is conducting the Work in such a manner that could be considered grounds for termination of the Contract. The **CONTRACTOR** shall retain responsibility for performing all Work in compliance with the Contract Documents.

The following language shall be added to Paragraph 9.09.B:

“Consistent with the express provisions of this Section 00700, Article 6.13, Article 6.17.D.2, Article 9.02.B, Article 9.09, this Article 9.09.B, and Article 14.02.B.4.b, any reference to “safety” elsewhere in this contract, including but not limited to those found in Section 00700, Articles 4.02.B.1, 4.04.A.2.d, 4.04.B.1, 4.06.B.1, 6.02.B, 6.14, 6.15, 6.16, 6.17.C.1.c, and 13.02.A, does not impose upon the Engineer any duty, obligation or other contractual undertaking to administer the “safety” aspects of Contractor’s performance, or any other matter relating to the Contractor’s means, methods, techniques, sequences or procedures. Contractor’s contractual safety obligations and means and methods during construction are the sole responsibility of the Contractor and are not being administered, overseen or reviewed in any way by the Engineer in performing its contractual obligations”

10. Change of the Contract Time

In addition to the requirements of Paragraph 12.03 of the General Conditions, rainstorms which are encountered in the project area on a regular and seasonal basis do not constitute an abnormal weather condition.

11. Payments to **CONTRACTOR**

Paragraph 14.02.A, Application for Payments, is deleted in its' entirety and the following substituted therefore:

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- A. Monthly Estimates and Partial Payments: The **CONTRACTOR'S** partial payment period shall end on the last day of each month. The **CONTRACTOR** shall submit acceptable Application for Payment to the **ENGINEER** by the date indicated on the payment schedule as supplied to **CONTRACTOR** by **ENGINEER** provided that the amount due on completed work is at least \$500.00. The partial payment request shall be filled out and signed by the **CONTRACTOR** covering the work completed as of the date of the request and accompanied by such supporting documentation as is required by the Contract Documents and also as the **ENGINEER** may reasonably require. At the discretion of the **OWNER**, the **ENGINEER** may be authorized to include in any monthly estimate advances covering approximately 95 percent of the value of unused materials delivered and stored on the site of the work. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site, the Application for Payment shall also be accompanied by such data, satisfactory to **OWNER**, as will establish **OWNER'S** title to the material and equipment and protect **OWNER'S** title to the material and equipment and protect **OWNER'S** interest therein, including applicable insurance. Each subsequent Application for Payment shall include an affidavit of **CONTRACTOR** stating that all previous progress payments received on account of the Work have been applied to discharge in full all of **CONTRACTOR'S** obligations reflected in prior Applications for Payment.
- B. After each monthly estimate has been approved, the **OWNER** shall pay to the **CONTRACTOR** 95 percent of the amount of said estimate. From the total value of each estimate there will be deducted an amount equivalent to 5 percent of the whole as a retainage to be held by the **OWNER**. The monthly estimates will be approximate only and subject to correction in any subsequent estimate rendered following discovery of the error. At the discretion of the **OWNER**, the **ENGINEER** may be authorized to include any monthly advances covering approximately 95 percent of the value of unused materials delivered and stored on the site of the work.
- C. Subsequent to discovery of any defective or questionable work, an amount equal to the estimated value of such work will be deducted from the next current estimate. The sum will not be included in a subsequent estimate until the defects have been remedied to the **ENGINEER'S** satisfaction.
- D. The **OWNER** reserves the right to withhold payment of any monthly estimate that becomes due if, in the opinion of the **OWNER'S** Attorney, such action is warranted because of any breach of the Contract Provisions or malfeasance on the part of the **CONTRACTOR** or because the progress or the quality of the work is unsatisfactory and does not comply with the Plans and Specifications.

Paragraph 14.02.C of the General Conditions is modified to read "60 days after presentation of the Application for Payment to **OWNER** with **ENGINEER'S** recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by **OWNER** to **CONTRACTOR**."

Paragraph 14.07.C of the General Conditions is modified to read, "If the Application and accompanying documentation are appropriate as to form and substance, **OWNER** shall, within 60 days after receipt thereof, pay **CONTRACTOR** the amount recommended by **ENGINEER**."

Delete Paragraph 14.09.A.2 in its entirety.

12. List of Contract Drawings: Not Used.

13. Liquidated and Special Damages

The **CONTRACTOR** will be subject to liquidated damages and actual damages in the amount of the actual costs incurred by the Owner after the time stipulated for Final Completion of the work.

The **CONTRACTOR** will be subject to liquidated damages in the amount of **\$750** for each consecutive calendar day after the time stipulated for Final Completion of the work. The actual costs includes, but is not limited to construction related costs resulting from the Contractor's failure to complete the work on schedule.

When the Contractor fails to complete the work within the time stipulated, a deduction will be made of \$750 a day from the money due the Contractor not as a penalty but as liquidated damages. The Contractor and the Contractor's Sureties shall be liable for all liquidated damages in excess of money due the Contractor

The liquidated damages provided for herein were not calculated in contemplation or anticipation that the **CONTRACTOR** would default or otherwise abandon the project. In the event the **CONTRACTOR** does default or otherwise abandon the project, the **OWNER** reserves the right to collect from the **CONTRACTOR** or its surety, in addition to the liquidated damages, the actual damages including, but not limited to, additional engineering costs, incurred by the **OWNER** as a result of the default or abandonment.

14. Suspension of Work and Termination

In Paragraph 15.04.A delete the following words: "or Engineer fails to act on any Application for Payment within thirty days, after it is submitted" and add the words "if the". In Paragraph 15.04.B delete the following words: "if Engineer has failed to act on an Application for Payment within thirty days after it is submitted" and add the words "if the".

16. Methods and Procedures

Delete sentence 16.01.C.2 in its entirety

*** * END OF SECTION * ***

SECTION 01010
SUMMARY OF WORK

PART 1 GENERAL

1.01 Location of Work

All of the work of this Contract is located in public right-of-way or on easements and property owned or obtained by the Owner.

1.02 Work to be Done

- A. The CONTRACTOR shall furnish all labor, materials, equipment, tools, services and incidentals to complete all work required by these Specifications and as shown on the Drawings.
- B. The CONTRACTOR shall perform the work complete, in place, and ready for continuous service, and shall include repairs, testing, permits, cleanup, replacements and restoration required as a result of damages caused during this construction.
- C. All materials, equipment, skills, tools and labor which are reasonably and properly inferable and necessary for the proper completion of the work in a substantial manner and in compliance with the requirements stated or implied by these Specifications or Drawings shall be furnished and installed by the CONTRACTOR without additional compensation, whether specifically indicated in the Contract Documents or not.
- D. The CONTRACTOR shall comply with all county, state, federal, and other codes which are applicable to the proposed construction work.

1.03 General Description of Work to be Performed

- A. The Work included in the Contract shall be as described in the Contract Documents.
- B. All work shall be done as described in the Specifications and as shown on the Drawings, complete, tested and ready for operation.

1.04 Work Sequence

- A. All work to be done under the Contract shall be done with minimum inconvenience to the OWNER. The CONTRACTOR shall coordinate his work with private property owners such that existing drainage, water service, sewer service and garbage pickup and other public services are maintained at all times.
- B. Construct Work in stages to accommodate the OWNER'S use of the premises during the construction period; coordinate the construction schedule and operations with the ENGINEER.
- C. Construct the Work in stages to provide for public convenience. Do not close off public

access until completion of one stage of construction will provide alternative usage.

1.05 Construction Areas

- A. CONTRACTOR shall limit his use of the construction areas for Work and for storage, to allow for:
 - 1. Work by other contractors.
 - 2. OWNER use.
 - 3. Public use.
- B. Coordinate use of work site under direction of ENGINEER.
- C. Assume full responsibility for the protection, security and safekeeping of products under this Contract stored on the site.
- D. Move any stored products, under CONTRACTOR'S control which interfere with operations of the OWNER or other contractors.
- E. Obtain and pay for the use of additional storage or work areas needed for operations.

1.06 Owner Occupancy

- A. OWNER will have full access to and use of all existing sewer facilities during the entire period of construction for the conduct of his normal operations. Cooperate with ENGINEER in all construction operations to minimize conflict and to facilitate OWNER usage.
- B. CONTRACTOR shall at all times conduct his operations as to insure the least inconvenience to the general public.

1.07 Partial Owner Occupancy

The CONTRACTOR shall schedule his operations for completion of portions of the Work, as designated, for the OWNER'S occupancy prior to Substantial Completion of the entire Work.

1.08 Plans and Specifications

- A. Specifications: The Technical Specifications consist of three parts: General, Products, and Execution. The General section contains general requirements which govern the work. The Products and Execution sections modify and supplement these by detailed requirements of the work and shall always govern whenever there appears to be a conflict.
- B. Intent:
 - 1. All work called for in the Specifications applicable to the Contract but not shown on the Plans in their present form or vice versa shall be of like effect as if shown or mentioned in both. Work not specified in either the Plans or in the Specifications but involved in carrying out their intent or in the complete and proper execution of the work is required and shall be performed by the CONTRACTOR as though it were specifically delineated or described at the CONTRACTOR'S expense.
 - 2. The apparent silence of the Specifications as to any detail, or the apparent omission

from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

- C. Conflict between Drawings and Specifications. Where an obvious conflict exists between the Plans and Specifications, the ENGINEER shall decide which governs and the CONTRACTOR shall comply with the decision. Such decision shall not be grounds for additional payment to the CONTRACTOR, i.e., the CONTRACTOR shall include the price of the most expensive alternative in his bid.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 Description

- A. CONTRACTOR shall furnish all labor, materials, tools, equipment, appurtenances and all services necessary to perform all Work required, at the lump sum or unit prices for the items listed in the Prices Bid Table located in the Bid Proposal.
- B. The pay items listed in the Bid Proposal constitute all of the pay items for the completion of the Contract. No direct or separate payment will be made for providing miscellaneous temporary or accessory works, plant, services, CONTRACTOR'S or ENGINEER'S field offices, layout surveys, job signs, sanitary requirements, testing, safety devices, approval and record drawings, water supplies, power, removal of waste, watchmen, bonds, insurance, and all other requirements of the Contract Documents. Compensation for all such services, things and materials shall be included in the prices stipulated for the lump sum and unit pay items listed herein.

1.02 Engineer's Estimate of Quantities

The ENGINEER's estimated quantities for unit bid prices, as listed in the Bid Form, are approximate only and are included solely for the purpose of comparison of Bids. The OWNER does not expressly or by implication agree that the nature of the materials encountered below the surface of the ground or the actual quantities of material encountered or required will correspond therewith and reserves the right to increase or decrease any quantity or to eliminate any quantity as OWNER may deem necessary.

1.03 Related Provisions Specified Elsewhere

- A. Payments to CONTRACTOR: Refer to General Conditions and Supplemental Conditions.
- B. Changes in Contract Price: General Conditions and Contract Forms.
- C. Schedule of Values: Section 01026.

1.04 Measurement of Quantities

- A. The measurement and determination of quantities for each pay item will be made in general as prescribed hereinafter and specifically as set out under Method of Measurement and Basis of Payment for each respective pay item section. Actual authorized quantities of work, complete and accepted under the contract, will be measured by the Engineer according to United States standard measures, and in accordance with well recognized engineering practices.
- B. A station when used as a definition or term of measurement will be 100 linear feet.

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- C. Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures having an area of nine square feet or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered by the Engineer.
 - D. Where the area unit for measurement and payment is specified for erosion control items, the measurements will be taken on the slope of the ground to compute the actual surface area for payment.
 - E. Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.
 - F. All items which are measured by the linear foot, such as pipe culverts, guardrail, underdrains, etc., will be measured as specified under the Method of Measurement for the item unless otherwise shown on the plans.
 - G. No payment will be made for unauthorized excavation. Excavation or embankment performed beyond the required neat lines or slope stakes will not be measured for payment unless within tolerances specified or otherwise provided.
 - H. In computing volumes of excavation and embankment, the average end area method will be used, unless otherwise specified.
 - I. When size number is used in the measurement of wire, it will mean the size number specified in AASHTO Designation: M 32.
 - J. The term ton will mean the short ton consisting of 2000 pounds avoirdupois. All materials which are specified for measurement by the ton shall be weighed by competent personnel on approved scales set at locations approved by the Engineer or in the case of prepackaged materials, the manufacturer's bag weight may be used. If material is shipped by rail, the car weight may be accepted provided it is the actual weight of material and not minimum car weight used for assessing freight tariff. However, car weights will not be acceptable for material to be used in mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such time as the Engineer directs, and each truck shall bear a plainly legible identification mark.
 - K. When a complete structure or structural unit, in effect "lump sum" work, is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.
 - L. Volumes of materials computed in cubic yards by the average end area method are designated as "Final Measure" (FM), or "Final Measure - Embankment" (FME). Volumes of materials designated for measurement loose in the vehicle are designated as "Loose Vehicle Measure" (LVM).

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- M. Volumetric measurement of excavation, embankment, granular materials or similar materials in cubic yards will be made by the methods designated on the plans or in the proposal. For justifiable reasons, such as impracticability of measurement of volumes (usually small) by the designated method, the Engineer may order measurement by another method as follows:
1. Volumes designated for payment by FM may be measured LVM and converted to contract measurement by multiplying the loose measure by 80 percent.
 2. Volumes designated for payment by LVM may be measured in its original position by the average end area method and multiply the FM measure by 125 percent.
 3. Volumes designated for payment by FME may be measured in its original position by the average end area method and multiply the FM measure by 90 percent.
 4. Small volumes of surplus, excess excavation or other small volumes of excavation which are impractical to measure by the average end area method but are designated to be measured by FME may be measured LVM and multiply the loose measure by 72 percent.

When the Engineer orders the use of a conversion factor for converting a unit of measure, the ordered method of measurement shall be deemed acceptable to all parties and shall be final.

- N. When requested by the Contractor and with written approval of the Engineer, material specified to be measured by the cubic yard or ton may be converted to the other measure as appropriate. Factors for this conversion will be determined by the Engineer and agreed to by the Contractor before such method of measurement is used.
- O. All materials measured by the cubic yard LVM shall be hauled in approved vehicles and verified at the point of delivery. Vehicles may be of any size or type acceptable to the Engineer provided the body is of such shape that the capacity may be readily and accurately determined to the whole cubic yard. Unless all vehicles on the work are of uniform capacity, each vehicle must be plainly labeled to indicate its measured capacity. All vehicles shall be legibly numbered for identification.
- P. The vehicles shall be loaded to ensure a water level load when they arrive at the point of delivery. Loads hauled in unapproved vehicles and loads of a quantity less than the measured quantity for the hauling vehicle, will be subject to rejection.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01026

SCHEDULE OF VALUES

PART 1 GENERAL

1.01 Requirements Included

The Schedule of Values is an itemized list that establishes the value or cost of each part of the work as defined in Section 01025, Part 1.04. All other work shall be paid according to the Prices Bid Table. It shall be used as the basis for preparing progress payments and may be used as a basis for negotiations concerning additional work or credits which may arise during the construction. Quantities and unit prices may be included in the schedule when approved by or required by the ENGINEER.

1.02 Preparation

- A. Schedule shall show breakdown of labor, materials equipment and other costs used in preparation of the Bid.
- B. Costs shall be in sufficient detail to indicate separate amounts for each Section of the Specifications.
- C. CONTRACTOR may include items for bond, insurance, temporary facilities and job mobilization within the mobilization bid item.
- D. Schedule of Values shall be prepared on 8-1/2 inch by 11 inch white paper.
- E. Use Table of Contents of the Specifications as basis for Schedule format and identify each item with number and title in the Table of Contents. List sub-items of major products or systems as appropriate or when requested by ENGINEER.
- F. When requested by ENGINEER, support values with data that will substantiate their correctness.
- G. The sum of the individual values shown on the Schedule of Values must equal the total Contract Price.
- H. The manner in which overhead and profit are shown shall be supported by the ENGINEER.
- I. Schedule shall show the purchase and delivery costs for materials and equipment that the CONTRACTOR anticipates he shall request payment for prior to their installation.

1.03 Submittal

Submit two copies of Schedule to ENGINEER for approval at least 20 days prior to submitting first application for a progress payment. After review by ENGINEER, revise and resubmit Schedule as required until it is approved.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01027

APPLICATIONS FOR PAYMENT

PART 1 GENERAL

1.01 Requirements Included

Submit Applications for Payment to the ENGINEER in accordance with the General Conditions and in the form required by the OWNER.

1.02 Format and Data Required

- A. Submit applications typed with itemized Schedule of Values data typed on 8-1/2 inch x 11 inch white continuation sheets.
- B. Provide detailed substantiating data on additional sheets, including paid invoices where applicable.

1.03 Preparation of Application for Progress Payments

- A. Application Form:
 - 1. Fill in required information, including that for Change Orders executed prior to date of submittal of application.
 - 2. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
 - 3. Execute certification with signature of a responsible officer of the CONTRACTOR.
- B. Continuation Sheets:
 - 1. Fill in total list of all scheduled component items of work, with item number and scheduled dollar value for each item.
 - 2. Fill in dollar value in each column for each scheduled line item when work has been performed or products stored. Round off values to the nearest dollar or as specified for Schedule of Values.
 - 3. List each Change Order executed prior to date of submission by Change Order Number and description.
 - 4. To receive payment for materials stored on site, submit copies of the original paid invoices with the application for payment.

1.04 Substantiating Data for Progress Payments

- A. Provide substantiating data containing suitable information for review of costs requested with the applications for progress reports identifying:
 - 1. The payment item to which the substantiating data applies.
 - 2. Application number and date.
 - 3. Detailed list of enclosures.
 - 4. For stored materials:
 - a. Item number and identification as shown on application.
 - b. Description of specific material and invoice of delivered material.

-
- c. Consolidated inventory of stored materials showing:
 - (1) Materials received.
 - (2) Materials used.
 - d. Additional stored materials may not be claimed upon reaching 75% completion of the total project.
 - e. Stored Materials shall be inventoried jointly prior to each pay request.
 - B. Submit one copy of data for each copy of application for payment.
 - C. The CONTRACTOR is to maintain an updated set of record drawings in accordance with Section 01720. As a prerequisite for monthly progress payments, the CONTRACTOR is to exhibit the updated record drawings for review by the OWNER and the ENGINEER.
 - D. Construction photographs as required by Section 01380 will be submitted with each progress payment and shall be considered a part of that payment request.
 - E. Updated construction schedule showing work completed and work projected by month to the completion of the project.

1.05 Preparation of Application for Final Payment

- A. Fill in application form as specified for progress payments.
- B. Use continuation sheet for presenting the final statement of accounting.

1.06 Submittal Procedure

- A. Submit applications for payment to the ENGINEER at the times stipulated in the General Conditions.
- B. Initially a pencil draft application shall be informally submitted to the ENGINEER who shall review the draft with the CONTRACTOR and make adjustments as appropriate. The CONTRACTOR shall then prepare a formal typed application using the informally approved amounts and submit three (3) complete sets to the ENGINEER.
- C. When the ENGINEER finds the application properly completed and correct, as informally approved, he will transmit it to the OWNER for payment with a copy to the CONTRACTOR.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01030

SPECIAL PROJECT PROCEDURES

PART 1 GENERAL

1.01 WORKMANSHIP, MATERIAL AND EQUIPMENT

- A. When a particular product is specified or called for, it is intended and shall be understood that the Contractor include those products in his bid. Should the Contractor desire to substitute products which he purports to be equal to those specified, the Contractor shall furnish information as described in Section 00700, General Conditions, The alternative products(s) submitted by the Contractor shall meet the requirements of the specifications and shall, in all respects, be equal to the products specified by name herein.
- B. All apparatus, mechanism, equipment, machinery, and manufactured articles for incorporation into the Work shall be new and unused and the standard products of recognized reputable manufacturers.

1.02 PROVISIONS FOR CONTROL OF EROSION AND POLLUTANTS

Sufficient precautions shall be taken during construction to minimize the runoff of polluting substances such as silt, clay, fuels, oils, bitumens, calcium chloride, or other materials harmful to humans, fish, or other life, into the ground and surface waters of the state. Contractor will give all notices and comply with all laws, notices, ordinances, rules and regulations applicable to the work, without exception.

1.03 ON-SITE STORAGE

The Contractor's attention is invited to special storage requirements and possible charges for noncompliance of on-site storage requirements for materials and equipment as specified in Section 01600.

1.04 INCLEMENT WEATHER

- A. In the event of inclement weather, or whenever Engineer shall direct, Contractor and Subcontractors will protect carefully the work and materials against damage or injury from the weathers, including sudden rises in flows due to storms outside the immediate construction zone. Damaged Work and materials shall be removed and replaced. If, in the opinion of Engineer, any portion of Work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or Subcontractors to so protect the Work, no additional time for removal and replacement will be given by the Owner.

1.05 WARRANTIES

- A. All work supplied under the Contract shall be warranted for a period of one (1) year or such longer period of time as may be prescribed by any special guarantee required by Change Orders or issued by Subcontractor, suppliers, or manufacturers, from the date of acceptance for operations (beneficial use) by the Owner as specified in Section 01740, Warranties and Bonds.
- B. The work shall be warranted to be free from defects in workmanship, design and materials. If any part of the work should fail during warranty period, it shall be replaced or restored to service at no expense to the Owner.

1.06 CONSTRUCTION CONDITIONS

The Contractor shall strictly adhere to the specific requirements of the governmental units(s) or agency(ices) having jurisdiction over the work. Wherever there is a difference in the requirements of a jurisdictional body and these Specifications, the more stringent shall apply.

1.07 PUBLIC NUISANCE

The Contractor shall not create a public nuisance, including, but not limited to, encroachment on adjacent lands, flooding of adjacent lands, or excessive noise.

1.08 SUSPENSION OF WORK DUE TO WEATHER

During inclement weather, all work which might be damaged or rendered inferior by such weather conditions shall be suspended. The orders and decisions of the Engineer as to suspensions shall be final and binding. The authority of the Engineer to issue such an order shall not be interpreted as a requirement to do so. During suspension of the work from any cause, the work shall be suitably covered and protected so as to preserve it from injury by the weather. Notwithstanding this provision, it is understood and agreed that the General Conditions shall control.

1.09 RELOCATIONS

The Contractor shall be responsible for the relocation of structures, including, but not limited to, light poles, signs, sign poles, fences, mailboxes, piping, conduits and drains that interfere with the positioning of the work as set out on the Drawings. The cost of all such relocations shall be included in the bid.

1.10 SALVAGE

Any existing equipment or materials, including, but not limited to, valves, pipes, fittings, couplings, etc., which are removed or replaced as a result of construction under this project may be designated as salvage by the Engineer and, if so, shall be removed and delivered to the Owner at a location directed by the Engineer.

1.11 PERMITS

Upon notice of award, the Contractor shall immediately apply for all applicable permits not previously obtained by the Owner to do the work from the appropriate governmental agency or agencies. No work shall commence until all applicable permits have been obtained and copies delivered to the Engineer. The costs for obtaining all permits shall be borne by the Contractor.

1.12 HAZARDOUS LOCATION

- A. The existing wet wells, manholes, sewers, force mains, pipes, and other related areas are hazardous locations in that explosive concentrations of sewage gas may be present. The Contractor is cautioned that the above areas, especially the wet well, may be deficient in oxygen. Checks shall be made by the Contractor whenever personnel are working in these areas to insure that adequate ventilation has been provided.
- B. In his operations in hazardous locations, the Contractor shall use spark-proof tools and explosion-proof temporary lighting and shall not use electric power tools, open flame devices, electric welding or any device or methods which might conceivably cause ignition or explosion.
- C. If a working is atmosphere is unsafe, the Contractor shall furnish, install, operate, and later remove such temporary auxiliary ventilating facilities as are necessary to provide a safe atmosphere.
- D. The Contractor shall also instruct and caution his employees and the employees of his subcontractors to avoid smoking while in the hazardous areas. Suitable prominent "No Smoking" signs shall be placed at locations where sewage gas could be present.

1.13 NOTIFICATION OF WORK ON EXISTING FACILITIES

Before commencing work on any of the existing structures or equipment, the Contractor shall notify the Engineer, in writing, at least ten (10) calendar days in advance of the date he proposes to commence such work.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01041

PROJECT COORDINATION

PART 1 GENERAL

1.01 Work Progress

The CONTRACTOR shall furnish personnel and equipment which will be efficient, appropriate, and large enough to secure a satisfactory quality of work and a rate of progress which will insure the completion of the work within the time stipulated in the contract. If at any time such personnel appear to the ENGINEER to be inefficient, inappropriate, or insufficient for performing the quality of work required or for producing the rate of progress aforesaid, he may order the CONTRACTOR to increase the efficiency, change the character or increase the personnel and equipment, and the CONTRACTOR shall conform to such order at his own expense. Failure of the ENGINEER to give such order shall in no way relieve the CONTRACTOR of his obligations to perform the work at the specified quality and rate of progress.

1.02 Private Land

The CONTRACTOR shall not enter or occupy private land outside of the OWNER'S land, right-of-ways, or servitudes except by written permission of both the OWNER and the Owner of the private land. Such permission shall be obtained by and at the expense of the CONTRACTOR and at no additional cost to the OWNER.

1.03 Work Locations

Work shall be located substantially as indicated on the Drawings, but the Engineer reserves the right to make such modifications in locations as may be found desirable to avoid interference with existing structures or for other reasons.

1.04 Open Excavations

All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons and damage to property. The CONTRACTOR shall, at his own expense, provide suitable and safe bridges and other crossings for accommodating travel by the public, OWNER'S and ENGINEER'S personnel, and workmen.

1.05 Test Pits

Test pits for the purpose of locating underground utilities or structures which may interfere with installation of the Work shall be excavated in advance of the Work and backfilled by the CONTRACTOR. Test pits shall be backfilled immediately after their purpose has been satisfied and maintained in a manner satisfactory to the ENGINEER. The costs for such test pits shall be included in the cost of the work for which the test pits benefit.

1.06 Water for Construction Purposes

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- A. In locations where public water supply is available, the CONTRACTOR shall purchase water for all construction purposes.
 - B. The CONTRACTOR shall make his own arrangements and pay all costs for connections to public water systems and for water used. Existing OWNER supplies or connections shall not be used without prior approval by OWNER.

1.07 Maintenance of Flow

The CONTRACTOR shall maintain the flow of sewers, drains, and water courses interrupted during the progress of the Work, including complete pumped bypass systems where necessary. The CONTRACTOR shall immediately remove all offensive matter. The entire procedure of maintaining existing flow shall be fully discussed with the ENGINEER well in advance of the interruption of any flow. All temporary works installed for flow maintenance shall be removed when the permanent work is finished and the areas cleaned and restored to good condition.

1.08 Protection of Construction and Equipment

- A. All newly constructed work shall be carefully protected from injury in any way. No wheeling or walking or placing of heavy loads on it shall be allowed. All portions of the work injured shall be reconstructed by the CONTRACTOR at his own expense.
- B. All structures shall be protected in a suitable manner. Should any parts of the structures become heaved, cracked or otherwise damaged, all such damaged portions of the work shall be completely repaired and made good by the CONTRACTOR at his own expense and to the satisfaction of the ENGINEER. If, in the final inspection of the work, any defects, faults or omissions are found, the CONTRACTOR shall cause the same to be repaired or removed and replaced by proper materials and workmanship without extra compensation for the materials and labor required. Further, the CONTRACTOR shall be fully responsible for the satisfactory maintenance and repair of the construction and other work undertaken herein for at least the guarantee period described in the contract.
- C. The CONTRACTOR shall take all necessary precautions to prevent damage to any structure due to water pressure (groundwater or surface water) during and after construction and until such structure is accepted and taken over by the OWNER.
- D. The CONTRACTOR is responsible for security of the site. Security of all equipment, material, tools, machinery, supplies, structures, buildings, vehicles and offices is the responsibility of the CONTRACTOR. Measures to affect job site security and limit unauthorized access, including temporary fencing, security guards, and other measures are the responsibility of the CONTRACTOR at his expense.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01041.1

UTILITIES COORDINATION

PART 1 GENERAL

1.01 UTILITIES

Utilities for the purpose of these specifications shall be considered as including, but not limited to: pipelines, conduits, cables, transmission lines and appurtenances of Public Utilities and those of Special Utility Districts, Cities or Towns, businesses or individuals solely for their own use or for use of their tenants; and storm drains, sanitary sewers, street lighting, traffic signal and fire alarm systems.

1.02 UNDERGROUND INSTALLATIONS

Existing underground pipelines and utilities are indicated on the Drawings only to the extent such information was made available to or discovered by Engineer in preparing drawings. There is no guarantee as to the accuracy or completeness of such information, and all responsibility for the accuracy and completeness thereof is expressly disclaimed by the Owner and the Engineer.

1.03 UTILITIES LOCATED IN CITY RIGHT-OF-WAY

Unless otherwise provided or excepted herein, the removal, adjusting, relocation, or replacement of utility structures or facilities within City right-of-way which may be necessary for construction of the work in accordance with these Contract Documents, shall be at the expense of the Contractor.

It shall be the Contractor's responsibility to protect and maintain those utilities which, in the opinion of the Engineer, do not need to be disturbed in order to accomplish the work required by the contract.

1.04 RELOCATIONS OF EXISTING GAS LINES, TELEPHONE LINES, ELECTRIC LINES, CABLE TV LINES AND WATER LINES

The Contractor shall notify the proper authority of the utility involved when relocation of these lines is required. The Contractor shall coordinate all work by the utility so that the progress of construction will not be hampered.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

The Contractor, when the Notice to Proceed is received, shall notify the owners of utilities affected by the work, the approximate date upon which he will begin work, and shall submit a progress schedule of the proposed work. This shall be deemed sufficient notice if the project progresses according to the progress schedule submitted with the notification. If changes in the schedule of the

work occur, the Contractor shall appraise both the owner of the utility affected and the Engineer so that adjustments in the work schedule of utility can be made. The Contractor shall be responsible for damages to the utility facility and construction delays resulting from failure to notify the utility and the Engineer of changes in procedure or location.

3.02 PROTECTION OF EXISTING UTILITIES

- A. The attention of the Contractor is drawn to the fact that during excavation, the possibility exists of the Contractor encountering various water, gas, telephone, electrical, or other utility lines not shown on the Drawings. The Contractor shall exercise extreme care before and during excavation to locate and flag these lines so as to avoid damage to the existing lines. Should damage occur to an existing line, the Contractor shall repair the line at no cost to the Owner.
- B. The Contractor shall assume full responsibility for the protection of all utilities, public and private, including poles, services to buildings, gas pipes, water pipes, hydrants, sewers, drains, and electric and telephone cables, whether or not they are shown on the Drawings. The Contractor shall carefully support and protect all such utilities from injury of any kind. Any damage resulting from the Contractor's operation shall be repaired by him at his expense.

The protection and preservation of utility facilities which are located within the right-of-way, but outside the normal limits of construction, as determined by the Engineer, shall be the responsibility of the Contractor. The Contractor shall be responsible for all damage to utilities which are due to his negligence.

- C. The Contractor shall bear full responsibility for obtaining locations of all underground structures and utilities (including existing water services, drain lines, and sewer). Services to buildings shall be maintained, and all costs or charges resulting from damage thereto shall be paid by the Contractor.
- D. If, in the opinion of the Engineer, permanent relocation of a utility owned by the City is required, he may direct the Contractor, in writing, to perform the work. Work so ordered will be paid for at the Contract unit prices, if applicable, or as extra work under Article 10 of the General Conditions. If relocation of a privately owned utility is required, the Contractor will notify the Utility to perform the work as expeditiously as possible. The Contractor shall fully cooperate with the County and Utility and shall have no claim for delay due to such relocation.
- E. The Contractor shall notify public and private utility companies in writing at least two, but not more than five full days (excluding Saturdays, Sundays, and legal holidays) before excavating near their utilities.

3.03 UTILITIES TO BE ADJUSTED

The owners of utility facilities which require relocation, removal, adjustment or replacement shall, if possible and feasible, perform this work prior to the commencement of the Contractor's work. Where utility work must be done in conjunction with the Contractor's work on the project or in conjunction with the work of other utilities, arrangements for when, how and where the operation is to proceed

shall be worked out among the parties concerned. If disputes arise, the Engineer shall decide the course of action to be taken.

3.04 UTILITIES CONFLICTING WITH OPERATIONS

Those utility facilities which do not conflict with the improvement, but which are obstructions to the operations required for installation or which are obstructions to the operations required for installation of which present unusual difficulty due to their close proximity to the area of the operations, shall be located with certainty by the owners of the utility prior to the arrival of the Contractor's operation which would be hindered by the utility facility. The Contractor is required to preserve the utility facility in place without damage and shall be responsible for damages sustained, if the utility owner has located the facility by exposing it to the view of the Contractor or has otherwise made the Contractor aware, with certainty, of the location of the facility. Any other arrangements that the Contractor may make with a utility owner as a substitute for the requirements of this Section shall require the approval of the Engineer, in writing.

3.05 MISLOCATED UTILITIES

The owner of a utility shall be wholly responsible for the proper location of his facilities which are affected by construction work performed according to these specifications. Improperly located or mislocated facilities which are damaged during construction shall be the responsibility of the utility, providing proper notification has been given.

*** * END OF SECTION * ***

SECTION 01045
CUTTING AND PATCHING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Contractor shall be responsible for all cutting, fitting and patching, including attendant excavation and backfill, required to complete the Work to include:

- A. Make its several parts fit together properly.
- B. Uncover portions of the Work to provide for installation of ill-timed work.
- C. Remove and replace defective work.
- D. Remove and replace work not conforming to requirements of the Contract Documents
- E. Remove samples of installed work as specified for testing.

1.02 SUBMITTALS

- A. Submit a written request to the Engineer well in advance of executing any cutting or alteration which affects:
 - 1. Work of the Owner or any separate contractor.
 - 2. Structural value or integrity of any element of the Project or work.
 - 3. Integrity or effectiveness of weather-exposed or moisture-resistant elements or systems.
 - 4. Efficiency, operational life, maintenance or safety of operational elements.
 - 5. Visual qualities of sight-exposed elements.
- B. Request shall include:
 - 1. Identification of the work.
 - 2. Description of affected work.
 - 3. The necessity for cutting, alteration or excavation.
 - 4. Effect on work of Owner or any separate Contractor, or on structural or weatherproof integrity of work.

-
5. Description of proposed work:
 - a. Scope of cutting, patching, alteration, or excavation.
 - b. Trades who will execute the work.
 - c. Products proposed to be used.
 - d. Extent of refinishing to be done.
 6. Alternatives to cutting and patching.
 7. Cost proposal, when applicable.
- C. Submit written notice to the Engineer designating the date and the time the work will be uncovered.

PART 2 PRODUCTS

2.01 MATERIALS

Comply with specifications and standards for each specific product involved.

PART 3 EXECUTION

3.01 INSPECTION

- A. Inspect existing conditions of Project, including elements subject to damage or to movement during cutting and patching.
- B. After uncovering work, inspect conditions affecting installation of products or performance or work.
- C. Report unsatisfactory or questionable conditions to the Engineer in writing; do not proceed with work until the Engineer has provided further instructions.

3.02 PREPARATION

- A. Provide adequate temporary support as necessary to assure structural value or integrity of affected portion of Work.
- B. Provide devices and methods to protect other portions of Project from damage.
- C. Provide protection from elements for the portion of the Project which may be exposed by cutting and patching work, and maintain excavations free from water.

3.03 PERFORMANCE

- A. Execute cutting and demolition by methods which will prevent damage to other work and will provide proper surfaces to receive installation of repairs.
- B. Execute excavating and backfilling by methods which will prevent settlement or damage to other work.
- C. Employ original installer or fabricator to perform cutting and patching for:
 - 1. Weather-exposed or moisture-resistant elements.
 - 2. Sight-exposed finished surfaces.
- D. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes.
- E. Restore work which has been cut or removed; install new products to provide completed work in accord with requirements of Contract Documents.
- F. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:
 - 1. For continuous surfaces, refinish to nearest intersection.
 - 2. For an assembly, refinish entire unit.

*** * END OF SECTION * ***

SECTION 01050
FIELD ENGINEERING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Contractor shall provide and pay for field engineering services for:
 - 1. Survey work required in execution of work.
 - 2. Civil, structural, or other professional engineering services specified or required to execute the Contractor's construction method.
- B. The method of field staking for the construction of the work shall be at the option of the Contractor. The Owner shall provide the engineering surveys to establish reference points which in his judgment are necessary to enable the Contractor to proceed with his work.
- C. The accuracy of any method of staking shall be responsibility of the Contractor. All engineering for vertical and horizontal control shall be the responsibility of the Contractor.
- D. The Contractor shall be held responsible for the preservation of all stakes and marks. If any stakes or marks are carelessly or willfully disturbed by the Contractor, the Contractor shall not proceed with any work until he has reestablished such points, marks, lines and elevations as may be necessary for the prosecution of the work.
- E. The Contractor shall retain the services of a competent surveyor, registered in the State of Mississippi, to layout the work and maintain a survey during construction. The Contractor shall be solely responsible for proper location of the work.

1.02 SURVEY REFERENCE POINTS

Locate and protect control points prior to starting site work, and preserve all permanent reference points during construction.

- 1. Make no changes or relocations without prior written notice to the Engineer.
- 2. Report to the Engineer when any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations.

1.03 PROJECT SURVEY REQUIREMENTS

- A. Establish temporary bench marks as needed, referenced to data established by survey control points. Record locations, with horizontal and vertical data, on Record Drawings.
- B. Establish lines and levels, and locate and lay out, by instrumentation and similar appropriate

means:

1. Site improvements, including utility slopes and invert elevations.
 2. Batter boards for structures.
- C. From time to time, verify layouts by same methods.
- D. Establish all lines and grades prior to construction of site improvements.

1.04 RECORDS

- A. Maintain a complete, accurate log of all control and survey work as it progresses.
- B. At Contract closeout, submit a survey of installation of water mains, fire hydrants, and valves at the same scale as the Engineer's drawings indicating elevations and channel stationing at 100 foot increments.

1.05 SUBMITTALS

- A. On request of the Engineer, submit documentation to verify accuracy of field engineering work.
- B. Submit Drawings showing locations of all pipes and structures constructed. This Drawing shall be included with the Record Drawings.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01060

REGULATORY REQUIREMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Abbreviations and acronyms used in Contract Documents to identify reference standards are as indicated herein.

1.02 QUALITY ASSURANCE

- A. Applications: When a standard is specified by references, comply with requirements and recommendations stated in the standard, except when requirements are modified by the Contract Documents, or applicable codes establish stricter standards.
- B. Publications Date: The publication in effect on the date of issue of Contract Documents, except when a specific publication date is specified.

1.03 ABBREVIATIONS, NAMES, AND ADDRESSES OF ORGANIZATIONS

The following standards may be referenced in the Contract Documents. The contractor shall obtain copies of reference standards directly from the publication source when needed for proper performance of Work or when required for submittal by Contract Documents.

AAN	American Association for Nurserymen 1250 I Street N.W., Suite 500 Washington, DC 20005 (202) 789-2900
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W., Suite 225 Washington, DC 20001 (202) 624-5800
ACI	American Concrete Institute Post Office Box 19150 22400 W. Steven Mile Road Detroit, MI 48219 (313) 532-2600
ACPA	American Concrete Pipe Association 8320 Old Courthouse Road, Suite 201 Vienna, VA 22180 (703) 821-1990
AI	Asphalt Institute

	Asphalt Institute Building College Park, MD 20740-1802
AISC	American Institute of Steel Construction 400 North Michigan Avenue Chicago, IL 60611 (312) 670-2400
AISI	American Iron and Steel Institute 1133 15th Street N.W., Suite 300 Washington, DC 20005 (202) 452-7100
ANSI	American National Standard Institute 1430 Broadway New York, NY 10018 (212) 354-3300
ASCE	American Society of Civil Engineers 345 East 47th Street New York, NY 10017 1-800-548-ASCE 345 East 47th Street New York, NY 10017 (212) 705-7722
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103 (215) 299-5400
AWPA	American Wood Preserver's Association Post Office Box 849 Stevensville, MD 21666 (301) 643-4163
AWS	American Welding Society Post Office Box 351040 550 LeJeune Road, N.W. Miami, FL 33126 1-800-443-9353
AWWA	American Water Works Association 6666 W. Quincy Avenue Denver, CO 80235 (303) 794-7711
CLFMI	Chain Link Fence Manufacturers Institute

	1776 Mass Avenue N.W., Suite 500 Washington, DC 20036 (202) 659-3537
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Road Schaumburg, IL 60173 (312) 517-1200
DIPRA	Ductile Iron Pipe Research Association 245 Rivercase Parkway E., Suite 100 Birmingham, AL 35244 (205) 988-9870
FS	Federal Specification General Services Administration Specifications and Consumer Information & Distribution Section (WFSIS) 7 and D Street S.W., Room 654 Washington, DC 20407 (202) 472-2140
IEEE	Institute of Electrical and Electronic Engineers Service Center 345 E. 47th Street New York, NY 10017 (212) 705-7900
MDOT	Mississippi Department of Transportation P. O. Box 1850 Jackson, Ms 39215-1850 (601) 359-1213
MIL	Department of the Navy Navel Publications and Forms Center 5801 Torbor Avenue Philadelphia, PA 19120-5099 (215) 697-2667
NEC	National Electric Code National Fire Protection Association Batterymarch Park Quincy, MA 02269 (617) 770-3000
NEMA	National Electrical Manufacturer's Association 2101 L Street, NW, Suite 300 Washington, DC 20037 (202) 457-8400
NSPE	National Society of Professional Engineers

	1420 King Street Alexandria, VA 22314 (703) 684-2835
OSCI	Office of Standards Code and Information National Bureau of Standards Gaithersburg, MD 20899 (301) 975-4029
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077 (312) 966-6200
PCI	Prestressed Concrete Institute 175 W. Jackson Blvd., Suite 1859 Chicago, IL 60604 (312) 786-0300
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association Post Office Box 70 Merrifield, VA 22116 (703) 790-9890
SSPC	Steel Structures Painting Council 4400 5th Avenue Pittsburgh, PA 15213 (412) 268-3327
UL	Underwriter's Laboratories, Inc. 333 Pfingsten Road Northbrook, IL 60062 (312) 272-8800

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION(NOT USED)

*** * END OF SECTION * ***

SECTION 01200
PROJECT MEETINGS

PART 1 GENERAL

1.01 Requirements Included

- A. The ENGINEER shall schedule and administer a preconstruction meeting, construction progress meetings, and specially called meetings throughout the progress of the work. The ENGINEER will:
 - 1. Prepare agenda for meetings.
 - 2. Make physical arrangements for meetings.
 - 3. Preside at meetings.
 - 4. Record the minutes; include significant proceedings and decisions.
 - 5. Reproduce and distribute copies of minutes.
- B. The CONTRACTOR and representatives of, where appropriate, subcontractors and suppliers shall attend meetings. The representative shall be qualified and authorized to act on behalf of the entity each represents.
- C. The CONTRACTOR shall attend and identify at the meetings the actual status of the Contract Work and, when the Work is not being performed consistently with the Contract Documents and construction schedules, shall identify at the meetings the steps he is taking to resolve the inconsistency.

1.02 Pre-construction Meeting

- A. The CONTRACTOR shall participate in a preconstruction meeting to be held after the effective date of the Agreement and prior to the date of Notice to Proceed.
- B. The following are expected to be in attendance:
 - 1. OWNER'S Representative and other staff as appropriate.
 - 2. ENGINEER and his professional consultants as appropriate.
 - 3. ENGINEER's Resident Project Representative.
 - 4. CONTRACTOR's Representative and Construction Superintendent.
 - 5. Subcontractors as appropriate.
 - 6. Utility representatives as appropriate.
 - 7. Others as appropriate.
- C. The following matters are expected to be addressed:
 - 1. Distribution and discussion of:
 - a. List of major subcontractors.
 - b. Project construction schedules.
 - 2. Critical work sequencing.
 - 3. Project Coordination.
 - 4. Designation of responsible personnel.
 - 5. Procedures and processing of:

-
- a. Field decisions.
 - b. Proposal requests.
 - c. Submittals.
 - d. Change Orders.
 - e. Applications for Payment.
 6. Distribution of Contract Documents.
 7. Procedures for maintaining Record Documents.
 8. Use of premises:
 - a. Office, work and storage areas.
 - b. OWNER'S requirements.
 9. Construction facilities, controls and construction aids.
 10. Temporary utilities.
 11. Housekeeping procedures.
 12. Insurance certifications.
 13. Liquidated damages for delay.
 14. Weekly job meetings.
 15. Laboratory testing of material requirements.

1.03 Construction Progress Meetings

- A. Construction progress meetings will be held monthly with the first meeting 30 days or less after the date of Notice to Proceed.
- B. Special construction progress meetings will be held as required by progress of the Work.
- C. The following are expected to be in attendance:
 1. OWNER Representative and other staff as appropriate.
 2. The ENGINEER and his professional consultants as appropriate.
 3. CONTRACTOR's Representative and/or construction Superintendent.
 4. Subcontractors as appropriate.
 5. Suppliers as appropriate.
 6. Others as appropriate.
- D. The following matters are expected to be addressed:
 1. Review and approve minutes of previous meeting.
 2. Review of work progress.
 3. Field observations, problems, conflicts.
 4. Problems which impede Construction Schedule.
 5. Review of off-site fabrication, delivery schedules.
 6. Corrective measures and procedures to regain Construction Schedule.
 7. Revisions to Construction Schedule.
 8. Progress and schedule during succeeding work period.
 9. Payment applications and processing.
 10. Submittals.
 11. Maintenance of quality standards.
 12. Changes, substitutions, and Change Orders.

-
- 13. Review proposed changes for:
 - a. Effect on Construction Schedule and completion date.
 - b. Effect on other contracts of the Project.
 - 14. Other matters as appropriate.
 - 15. Record drawings.
- E. The CONTRACTOR shall be prepared to discuss the above topics and to make commitments for resolving deficiencies.
- F. The CONTRACTOR shall provide a current submittal log at each progress meeting in accordance with Section 01340.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01310
CONSTRUCTION SCHEDULES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Contractor shall comply with the General Conditions.
- B. Submit revised progress schedules periodically.

1.02 FORM OF SCHEDULES

- A. Prepare schedules in the form of a horizontal bar chart.
 - 1. Provide separate horizontal bar for each trade or operation.
 - 2. Horizontal time scale; identify the first work day of each week.
 - 3. Scale and spacing: To allow for notations and future revisions.
 - 4. Minimum sheet size: 8-1/2 inches by 11 inches.
- B. Format of listings: The table of contents of the Contract Documents.
- C. Identification of listings: Items of work.

1.03 CONTENT OF SCHEDULE:

- A. Construction Progress Schedule:
 - 1. Show the complete sequence of construction by activity.
 - 2. Show the dates for the beginning, and completion of each major element of construction.
 - 3. Show projected percentage of completion for each item, as of the first day of each month.
 - 4. Show an anticipated monthly payment schedule.
- B. Submittal Schedule for Shop Drawings, Product Data and Samples. Show:
 - 1. The dates for Contractor's submittal.
 - 2. The dates approved submittal will be required from the Engineer.

1.04 PROGRESS REVISIONS

- A. Indicate progress of each activity to date of submission.
- B. Show changes occurring since previous submission of schedule:
 - 1. Major changes in scope.
 - 2. Activities modified since previous submission.
 - 3. Revised projections of progress and completion.
 - 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
 - 1. Problem areas, anticipated delays, and the impact on the schedule.
 - 2. Corrective action recommended, and its effect.

1.05 SUBMISSIONS

- A. Submit initial schedules in accordance with the General Conditions.
 - 1. Engineer will review schedules and return review copy within ten (10) days after receipt.
 - 2. If required, Contractor shall resubmit within seven (7) days after return of review copy.
- B. Submit revised progress schedules with each Application for Payment.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01340

SHOP DRAWINGS, PROJECT DATA, AND SAMPLES

PART 1 GENERAL

1.01 Requirements Included:

- A. The Contractor shall submit to the Engineer for review and exception, if any, such working drawings, shop drawings, test reports and data on materials and equipment (hereinafter in this article called data), and material samples (hereinafter in this article called samples) as are required for the proper control of work, including but not limited to those working drawings, shop drawings, data and samples for materials and equipment specified elsewhere in the Specifications and in the Contract Drawings.
- B. Within fifteen (15) calendar days after the Effective Date of the Agreement, the Contractor shall submit to the Engineer a complete list of preliminary data on items for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way relieve the Contractor from submitting complete shop drawings, data, and samples in accordance with the Specifications. This procedure is required in order to expedite final review of Shop Drawings.
- C. The Contractor is to maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting. This log should include the following items:
 - 1. Submittal Description and Number assigned.
 - 2. Date to Engineer.
 - 3. Date returned to Contractor (from Engineer).
 - 4. Status of Submittal (No exceptions taken, returned for confirmation or resubmittal, rejected).
 - 5. Date of Resubmittal and Return (as applicable).
 - 6. Date material released (for fabrication).
 - 7. Projected date of fabrication.
 - 8. Projected date of delivery to site.
 - 9. Status of O&M manuals submittal.

1.02 Contractor's Responsibility

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- A. It is the duty of the Contractor to check all drawings, data and samples prepared by or for him before submitting them to the Engineer for review. Each and every copy of the Drawings and data shall bear Contractor's stamp showing that they have been so checked. Shop drawings submitted to the Engineer without the Contractor's stamp or evidence that the Contractor has not performed the required review will be returned to the Contractor for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the Contract Documents.
- B. Determine and verify:
1. Field measurements.
 2. Field construction criteria.
 3. Catalog numbers and similar data.
 4. Conformance with Specifications and indicate all variances from the Specifications.
- C. The Contractor shall furnish the Engineer a schedule of Shop Drawing submittals fixing the respective dates for the submission of shop and working drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.
- D. The Contractor shall not begin any of the work covered by a drawing, data, or a sample returned for correction until a revision or correction thereof has been reviewed and returned to him by the Engineer with no exceptions taken.
- E. The Contractor shall submit to the Engineer all drawings and schedules sufficiently in advance of construction requirements to provide no less than twenty-one (21) calendar days for checking and appropriate action from the time the Engineer receives them.
- F. The Contractor shall submit five (5) copies of shop drawings and descriptive or product data submittal to complement shop drawings to the Engineer which will be retained for his use.
- G. The Contractor shall be responsible for and bear all cost of damages which may result from the ordering of any material or from proceeding with any part of work prior to the completion of the review by Engineer of the necessary shop drawings.
- H. The Contractor shall utilize a Sequential Numbering System for submittals (1-999). Resubmittals or confirming material shall be assigned a letter next to the submittal number, i.e. A= second submittal, B= third submittal, etc.
- I. Submittals shall include a certified statement of compliance to the requirements detailed in the specifications in addition to other submittal requirements. This certification shall be prepared by the manufacturer and not the local supplier. Validity of the authority and position of the person signing the certification shall be verified by a Notary Public. The statement of compliance shall address each point of conformance contained in the governing specifications with definite comments of either compliance or non-compliance. Statements of non-compliance with points of conformance shall be accompanied by a statement of

justification as to the reason for non-conformance and why the non-complying feature is considered to be either equal to or better than the specified feature. The Engineer will use the certified statement of compliance in his evaluation of the submittal rendering a judgment as to equality to the specified product and issuing a statement as to whether the product is acceptable for or rejected from incorporation into the work.

- J. When a manufacturer named in the controlling specification is chosen to supply a product and the details of manufacture, size, and installation are shown on this standard catalog cut sheets, the manufacturer may submit the certified statement of compliance as detailed above along with installation details specific to the work such as laying schedules, etc. as required, deleting the standardized catalog data.

1.03 Engineer's Review of Shop Drawings

- A. The Engineer's review of drawings, data and samples submitted by the Contractor will cover only general conformity to the Specifications, external connections, and dimensions which affect the installation.
- B. The review of drawings and schedules will be general, and shall not be construed:
 - 1. as permitting any departure from the Contract requirements;
 - 2. as relieving the Contractor of responsibility for any errors, including details, dimensions, omissions and materials;
- C. If the drawings or schedules as submitted describe variations per subparagraph (1.04.D), and show a departure from the Contract requirements which Engineer finds to be in the best interest of the Owner and to be so minor as not to involve a change in Contract Price or Time, The Engineer may return the reviewed Drawings without noting any exception.
- D. After the ENGINEER completes his review, the Shop Drawings will be marked with one of the following notations:
 - 1. No Exceptions Taken.
 - 2. Make Corrections Noted.
 - 3. Revise and Resubmit.
 - 4. Rejected.
 - 5. Submit Specified Item.
- E. If a submittal is acceptable, it will be marked "No Exception Taken" or "Make Corrections Noted". Three copies of the submittal will be returned to the CONTRACTOR.
- F. Upon return of a submittal marked "No Exception Taken" or "Make Corrections Noted", the CONTRACTOR may order, ship or fabricate the materials included on the submittal, provided it is in accordance with the corrections indicated.
- G. If a Shop Drawing action is "Make Corrections Noted" but has extensive corrections or corrections affecting other drawings or Work, the ENGINEER may require that the CONTRACTOR make the corrections indicated thereon and resubmit the Shop Drawings for

record purposes. In this case, the submittal will be marked "Make Corrections Noted-Resubmit".

- H. If a submittal is unacceptable, two copies will be returned to the CONTRACTOR with one of the following notations:
 - 1. "Revise and Resubmit"
 - 2. "Rejected"
- I. Upon return of a submittal marked "Revise and Resubmit", the CONTRACTOR shall make the corrections indicated and repeat the initial approval procedure. The "Rejected" notation is used to indicate material or equipment that is not acceptable. Upon return of a submittal so marked, the CONTRACTOR shall repeat the initial approval procedure utilizing acceptable material or equipment.
- J. Submittals lacking adequate details or information to allow the ENGINEER to determine whether or not the submittal meets the intent of the Contract specifications shall be marked "Submit Specified Item" and returned without further comment.
- K. Shop Drawings or other submittals not bearing the ENGINEER'S "No Exception Taken" or "Make Corrections Noted" notations shall not be issued to Subcontractors nor utilized for construction purposes. No Work shall be performed or equipment installed without a drawing or submittal bearing one of these notations.
- L. In the event the CONTRACTOR obtains the ENGINEER'S approval for the use of equipment other than that which is shown or specified, the CONTRACTOR shall, at his own expense and using methods approved by the ENGINEER, make all changes to the Work, including structures, piping, electrical, equipment and controls, that may be necessary to accommodate this equipment.
- M. Resubmittals will be handled in the same manner as first submittals. The Contractor shall direct specific attention to revisions other than the corrections requested by the Engineer on previous submissions by written details or markings on the resubmitted Shop Drawings. The Contractor shall make any corrections required by the Engineer.
- N. If the Contractor considers any correction indicated on the Drawings to constitute a change to the Contract Drawings or Specifications, the Contractor shall give written notice thereof to the Engineer.
- O. The Engineer will review a submittal/resubmittal a maximum of three times after which cost of review will be borne by the Contractor. The cost of engineering shall be equal to the Engineer's charges to the Owner under the terms of the Engineer's agreement with the Owner.
- P. When the Shop Drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions or approval from the Engineer.

Q. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor, and will be considered "NOT APPROVED" until resubmitted.

1.13 SHOP DRAWINGS

- A. Shop drawings shall be complete and detailed.
- B. Drawings and schedules shall be checked and coordinated with the work of all trades involved, before they are submitted for review by the Engineer and shall bear the Contractor's stamp of approval as evidence of such checking and coordination. Drawings or schedules submitted without this stamp of approval shall be returned to the Contractor for resubmission.
- C. Each shop drawing shall have a blank area 3-1/2 inches by 3-1/2 inches, located adjacent to the title block. The title block shall display the following:
 - 1. Number and title of the drawing.
 - 2. Date of drawing or revision.
 - 3. Name of project building or facility.
 - 4. Name of contractor and subcontractor submitting drawing.
 - 5. Clear identification of contents and location of the work.
 - 6. Specification number and title.
- D. If Drawings show variations from Contract requirements because of standard Shop practice or other reasons, the Contractor shall describe such variations in his letter of transmittal. If acceptable, proper adjustment in the Contract shall be implemented where appropriate. If the Contractor fails to describe such variations, he shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such Drawings have been reviewed.
- E. Data on materials and equipment include, without limitation, materials and equipment lists, catalog data sheets, cuts, performance curves, diagrams, materials of construction and similar descriptive material as required. Materials and equipment lists shall give for each item thereon the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish, and all other pertinent data.
- F. The Contractor shall provide a list including the equipment name, address, and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained for all mechanical and electrical equipment furnished.
- G. All manufacturers or equipment suppliers who proposed to furnish equipment or products shall submit an installation list to the Engineer along with the required Shop Drawings. The

installation list shall include at least five installations where identical equipment has been installed and has been in operation for a period of at least one (1) year.

- H. Only the Engineer will utilize the color red in marking Shop Drawing submittals.
- I. Before final payment is made, the Contractor shall furnish to Engineer five (5) sets of record shop drawings all clearly revised, complete and up to date showing the permanent construction as actually made for all reinforcing and structural steel, miscellaneous metals, process and mechanical equipment, yard piping, electrical system and instrumentation system.

1.13 Working Drawings

- A. Working drawings shall be considered to mean the Contractor's plans for temporary structures.
- B. Copies of working drawings as noted in subparagraph 1.02, shall be submitted to the Engineer where required by the Contract Documents or requested by the Engineer, and shall be submitted at least thirty (30) calendar days (unless otherwise specified by the Engineer) in advance of their being required for work.
- C. The Engineer will not review working drawings but shall use them as information to monitor the work performed by the Contractor.

1.14 Samples

- A. The Contractor shall furnish for the review of the Engineer samples required by the Contract Documents or requested by the Engineer. Samples shall be delivered to the Engineer as specified or directed and the Contractor shall prepay all shipping charges. Materials or equipment for which samples are required shall not be used in work until reviewed by the Engineer.
- B. Samples shall be of sufficient size and quantity to clearly illustrate:
 - 1. Functional characteristics of the product, with integrally related parts and attachment devices.
 - 2. Name of Contractor and Subcontractor
 - 3. Material or Equipment represented
 - 4. Place of Origin
 - 5. Name of Producer and Brand (if any).
 - 6. Location in Project

(Samples of finished materials shall have additional marking that will identify them under the finished schedules.)

- C. The Contractor shall prepare a transmittal letter in triplicate for each shipment of samples containing the information required in subparagraph 1.06B above. He shall enclose a copy of this letter with the shipment and send a copy of this letter to the Engineer under separate cover and the remaining copy shall be for the Contractor's records. Review of a sample shall be only for the characteristics or use named and shall not be construed to change or modify any Contract requirements.
- D. Reviewed samples not destroyed in testing shall be sent to the Engineer or stored at the site of the work. Reviewed samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the reviewed samples. Samples which failed testing or were rejected will be returned to the Contractor at his expense, if so requested at time of submission.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01410

TESTING LABORATORY SERVICES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Contractor will employ and pay for the services of an Independent Testing Laboratory to perform testing specifically indicated on the Contract Documents or specified in the Specifications and may at any other time elect to have materials and equipment tested for conformity with the Contract Documents.

- A. Employment of the laboratory shall in no way relieve Contractor's obligations to perform the Work of the Contract.

1.02 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

Laboratory is not authorized to:

- A. Release, revoke, alter or enlarge on requirements of Contract Documents.
- B. Approve or accept any portion of the Work.
- C. Perform any duties of the Contractor.

1.03 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with laboratory personnel; provide access to Work, to Manufacturer's operations.
- B. Secure and deliver to the laboratory adequate quantities of representational samples of materials proposed to be used and which require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other materials mixes which require control by the testing laboratory.
- D. Materials and equipment used in the performance of work under this Contract are subject to inspection and testing at the point of manufacture or fabrication. Standard specifications for quality and workmanship are indicated in the Contract Documents. The Owner may require the Contractor to provide statements or certificates from the manufacturers and fabricators that the materials and equipment provided by them are manufactured or fabricated in full accordance with the standard specifications for quality and workmanship indicated in the Contract Documents. All costs of this testing and providing statements and certificates shall be a subsidiary obligation of the Contractor, and no extra charge to the Owner shall be allowed on account of such testing and certification.
- E. Furnish incidental labor and facilities:
 - 1. To provide access to Work to be tested.

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- 2 To obtain and handle samples at the Project site or at the source of the product to be tested.
 3. To facilitate inspections and tests.
 4. For storage and curing of test samples.
- F. Notify laboratory at least 24 hours in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.
- G. Employ and pay for the services of the same or a separate, equally qualified independent testing laboratory to perform additional inspections, sampling and testing required for the Contractor's convenience and as approved by the Owner.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01600

MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Material and equipment incorporated into the Work shall:

- A. Conform to applicable specifications and standards.
- B. Comply with size, make, type, and quality specified to the greatest extent possible, detailing all aspects and providing explicit reasons for parameters not in compliance and specifically approved in writing by the Engineer.
- C. Manufactured and Fabricated Products:
 - 1. Design, fabricate, and assemble in accord with the best engineering and standard shop practices.
 - 2. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - 3. Two or more items of the same kind shall be produced, by the same manufacturer.
 - 4. Products shall be suitable for service conditions.
 - 5. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
- D. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

1.02 APPROVAL OF MATERIALS

- A. Only new materials and equipment shall be incorporated in the Work. All materials and equipment furnished by the Contractor shall be subject to the inspection and approval of the Engineer. No material shall be delivered to the Work without prior approval of the Engineer.
- B. The Contractor shall submit to the Engineer, data relating to materials and equipment he proposes to furnish for the work. Such data shall be in sufficient detail to enable the Engineer to identify the particular product along with references to the applicable section(s) of the specifications to form an opinion as to its conformity to the specifications. The data shall comply with Paragraph 1.06 of this Section.
- C. Facilities and labor for handling and inspection of all materials and equipment shall be furnished by the Contractor. If the Engineer requires, the Contractor shall submit samples of materials for such special tests as may be necessary to demonstrate that they conform to the

specifications. Such samples shall be furnished, stored, packed, and shipped as directed at the Contractor's expense. Except as otherwise noted, the Contractor will make arrangements for and pay for the tests. Where such tests confirm compliance with the specifications, the Owner will reimburse the actual charges of the testing firm paid by the Contractor.

- D. Contractor shall submit data and samples sufficiently early to permit consideration, approval, manufacture, and delivery of materials before they are necessary for incorporation in the work. Any delay of approval resulting from the Contractor's failure to submit samples or data promptly shall not be used as a basis of claim against the Owner or the Engineer.
- E. The materials and equipment used in the Work shall correspond to the approved samples or other data.

1.03 MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION

- A. When Contract Documents require that installation of the Work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including five copies to the Engineer. One complete set of the installation instructions shall be available for use on the job site during and through completion of the Work.
- B. Handle, install, connect, clean, condition and adjust products as required by the manufacturer's instructions and in conformity with specified requirements.
 - 1. Should the specified requirements conflict with the manufacturer's instructions, the manufacturer's instructions shall have priority unless changes are authorized in writing by the manufacturer.
 - 2. Should job conditions conflict with the manufacturer's instructions, consult with the manufacturer for clarification.
 - 3. Clarifications of installation instructions shall be issued only by the manufacturer, shall be in writing, and shall be distributed to all parties involved in the installation as stated above and prior to alteration of the installation procedures.
 - 4. Do not proceed with the Work without clear instructions concerning the specific installation procedures.
- C. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by the manufacturer.

1.04 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of Products as required by the currently approved construction schedule coordinating each delivery to avoid conflict with other work and conditions at the site.
 - 1. Deliver Products in a undamaged condition, in the manufacturer's original containers or packaging and with identifying labels intact and legible.
 - 2. Prior to accepting delivery, inspect shipments to assure compliance with approved submittal, and that the Products have been properly protected and are undamaged.
- B. Provide equipment and personnel to handle Products preventing soiling or damage to the Products or their protective packaging.

1.05 STORAGE AND PROTECTION

- A. Store Products in accord with manufacturer's instruction, with seals and labels intact and legible.
 - 1. Store products subject to damage by the elements in weathertight enclosures.
 - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
 - 3. Store fabricated products above the ground, on blocking or skids, prevent spoiling, staining or corrosion. Cover products which are subject to deterioration with impervious sheet coverings and provide adequate ventilation to avoid condensation.
 - 4. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
- B. All materials and equipment to be incorporated in the Work shall be handled and stored in a manner to prevent warping, twisting, bending, breaking, chipping, rusting, and other injury, theft or damage.
- C. Cement and lime shall be stored under a roof and off the ground and shall be kept completely dry at all times. All miscellaneous steel, structural steel and reinforcing steel shall be stored off the ground, kept free of accumulations of dirt and grease, and in areas free of standing water to minimize rusting. Precast concrete sections shall be handled and stored in a manner to prevent staining, chipping or cracking. Brick, block and similar masonry products shall be handled and stored in a manner to reduce staining, breaking, chipping, cracking, and spalling.
- D. All materials which, in the opinion of the Engineer, have become so damaged as to be unfit for the use intended, including aesthetics, shall be promptly removed from the site of the work.
- E. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections and exercise or rotate moving parts of stored products as required by the

manufacturer to assure that products are maintained under specified conditions and free from damage or deterioration.

- F. Provide substantial coverings as necessary to protect installed products from damage caused by traffic and subsequent construction operations. Remove the protective covering when no longer needed.
- G. The Contractor shall be responsible for all material, equipment, and supplies sold and delivered to the Owner under this Contract until final inspection of the Work and acceptance thereof by the Owner. In the event any such material, equipment, and supplies are lost, stolen, damaged, or destroyed prior to final inspection and acceptance they shall be replaced by the Contractor.
- H. Should the Contractor fail to take proper action to properly store and handle equipment supplied under this Contract, the Owner retains the right to notify the Contractor in writing of the deficiencies, to correct all deficiencies and deduct the cost associated with these corrections from the contractor's Contract. These costs may be comprised of expenditures for labor, equipment usage, administration, clerical, engineering and any other costs associated with making the necessary corrections.

1.06 SUBSTITUTIONS AND PRODUCT OPTIONS

A. Products List:

Within fifteen (15) days after the Notice to Proceed, submit to the Engineer complete list of major products proposed to be used, with the name of the manufacturer and the installing subcontractor.

B. Contractor's Options:

- 1. For Products specified only by reference standard, select any product meeting that standard.
- 2. For Products specified by naming one or more Products or manufacturers and "or equal", Contractor must submit a request as for substitutions for any Product or manufacturer not specifically named.

C. Substitutions:

- 1. For a period of thirty (30) days after the Effective Date of the Agreement, the Engineer will consider written requests from Contractor for substitution of Products.

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2. Submit a separate request for each Product, supported with complete data, with drawings and samples as appropriate, including:
 - a. Comparison of the qualities of the proposed substitution with that specified.
 - b. Changes required in other elements of the work because of the substitution.
 - c. Effect on the construction schedule.
 - d. Cost data comparing the proposed substitution with the Product specified.
 - e. Any required license fees or royalties.
 - f. Availability of maintenance service, and source of replacement materials.
 3. The Engineer shall be the judge of the acceptability of the proposed substitution.
- D. Contractor's Representation:
- A request for a substitution constitutes a representation that Contractor:
1. Has investigated the proposed Product and determined that it is equal to or superior in all respects to that specified.
 2. Will provide the same warranties or bonds for the substitution as for the Product specified.
 3. Will coordinate the installation of an accepted substitution into the Work, and make such other changes as may be required to make the Work complete in all respects.
 4. Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.

1.07 SPECIAL TOOLS

Manufacturers of equipment and machinery shall furnish any special tools required for normal adjustment, operations and maintenance, together with instructions for their use. The Contractor shall preserve and deliver to the Owner these tools and instructions in good order no later than upon completion of the Contract.

1.08 WARRANTY

For all major pieces of equipment, submit a warranty from the equipment manufacturer. The manufacturer's warranty period shall be concurrent with the Contractor's as stipulated in the specifications for each piece of equipment.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01630

SUBSTITUTIONS

PART 1 GENERAL

1.01 General

Requests for review of a substitution shall conform to the requirements of Article 6.05 of the General Conditions and shall contain complete data substantiating compliance of proposed substitution with Contract Documents.

1.02 Substitutions

- A. During a period of 60 days after execution of Contract, ENGINEER will consider written requests from CONTRACTOR for substitution of products or construction methods (if specified).
 - 1. After end of specified period, requests will be considered only in case of unavailability of products or other conditions beyond control of CONTRACTOR.
 - 2. If the CONTRACTOR proposes to use products other than named manufacturers in the technical Specification, the ENGINEER reserves the right to require the CONTRACTOR to submit information within the first 30 days after the NOTICE TO PROCEED verifying that the proposed equipment will comply with the Specifications.
- B. Requests for review of a substitution shall conform to the requirements of Article 6.05 of the General Conditions, and shall contain complete data substantiating compliance of proposed substitution with the Contract Documents.
- C. In making request for substitution, CONTRACTOR represents:
 - 1. CONTRACTOR has investigated proposed product or method, and determined that it is equal or superior in all respects to that specified.
 - 2. CONTRACTOR will provide the same or better warranties or bonds for proposed substitution as for product or method specified.
 - 3. CONTRACTOR waives all claims for additional costs or extension of time related to proposed substitution that subsequently may become apparent.
- D. Proposed substitutions will not be accepted if:
 - 1. They are only shown or implied on the Shop Drawings.
 - 2. Acceptance will require substantial revision of Contract Documents.
 - 3. They will change design concepts or Specifications.
 - 4. They will delay completion of the Work, or the work of other contractors.
- E. The ENGINEER will determine whether substitute brands or products are equal to those specified in the Contract Documents. No substitute will be ordered or installed without the ENGINEER'S prior written acceptance.
- F. The OWNER may require CONTRACTOR to furnish at CONTRACTOR'S expense a

special performance guarantee or other surety with respect to any substitute.

- G. If the ENGINEER determines that a proposed substitute is not equal to that specified or described in the Drawings or Specifications, CONTRACTOR shall furnish one of the brands or products specified or described, at no additional cost to the OWNER.
- H. Engineering Costs:
1. The ENGINEER will record all time required in evaluating substitutions proposed by CONTRACTOR and in making any change in the Drawings or Specifications occasioned thereby. Whether or not the ENGINEER accepts a proposed substitute CONTRACTOR will reimburse the OWNER for the actual cost of the ENGINEER for evaluating any proposed substitute which either does not meet the requirements of the Drawings and Specifications, or the acceptance of which would require changes to other portions of the Work.
 2. CONTRACTOR shall reimburse OWNER for all associated engineering costs, including redesign, additional shop drawing reviews, investigations, consultant fees and revision of the Contract Documents required because of the substitution.
- I. The time required by the ENGINEER to evaluate and either accept or reject proposed substitutes is included in the Contract Time and no extension of the Contract Time shall be allowed therefore.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01710

CLEANING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Cleaning shall include daily "policing" of the work and surrounding areas to clear general debris waste paper, wood scraps, broken concrete, loose riprap, and other objectionable material along with the final cleanup of site(s) required for project acceptance. **DAILY CLEANUP IS REQUIRED.**

1.02 DISPOSAL REQUIREMENTS

Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 DURING CONSTRUCTION

- A. Execute daily cleaning to keep the Work, the site and adjacent properties, free from accumulations of waste materials, rubbish and windblown debris, resulting from construction operations.
- B. Provide onsite containers for the collection of waste materials, debris and rubbish. All waste materials including containers, food debris and other miscellaneous materials must be disposed of daily in onsite containers.
- C. Remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal areas away from the site.

3.02 FINAL CLEANING

- A. Employ skilled workmen for final cleaning.
- B. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
- C. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.
- D. Prior to final completion or Owner occupancy, Contractor shall conduct an inspection of sight-exposed interior and exterior surfaces and all work areas to verify that the entire Work is clean.

*** * END OF SECTION * ***

SECTION 01720
PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Maintain at the site for the Owner one record copy of:

- A. Conformed Drawings.
- B. Conformed Specifications.
- C. Change Orders and other Modifications to the Contract.
- D. Engineer's Field Orders or written instructions.
- E. Approved Shop Drawings, Working Drawings and Samples.
- F. Field Test records.
- G. Construction photographs.
- H. Latest, Approved Progress Schedule.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store documents and samples in a manner and location to prevent damage.
 - 1. Provide files and racks for storage of documents.
 - 2. Provide secure storage space for storage of samples.
- B. File documents and samples in accordance with CSI section numbers.
- C. Maintain documents in a clean, dry, legible, condition and in good order. Do not use record documents for construction purposes.
- D. Make documents and samples available at all times for inspection by the Owner.
- E. As a prerequisite for monthly progress payments, the Contractor is to exhibit the currently updated "record documents" for review by the Owner.

1.03 MARKING DEVICES

Provide felt tip marking pens for recording information in the color code designated by the Owner.

1.04 RECORDING

- A. Label each document "PROJECT RECORD" with rubber stamp.
- B. Record information concurrently with construction progress and do not conceal any work until required information is recorded.
- C. Legibly mark drawings to record actual construction:
 - 1. The Contractor shall use the following color code in marking Contract Drawings:
 - a. Yellow for no change.
 - b. Red to indicate additions, deletions and changes.
 - 2. Elevations of various structure elements in relation to elevation datum.
 - a. Elevations referenced to control points established by the Owner's agent.
 - b. Specifically, elevations of drainage culvert inverts, ditch grades, top of roadway and driveway curbs, bridges, etc.
 - 3. Location of internal utilities and appurtenances concealed in the construction by referencing to visible and accessible features of the structure.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Field Order or by Change Order.
 - 6. Details not on original contract drawings.
- D. Specifications and Addenda; Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and Supplier of each Product and item of equipment actually installed.
 - 2. Changes made by Field Order or by Change Order.
- E. Shop Drawings (after final review):

-
- F. Certified site survey and line elevations and stationing at 100 foot increments and all points of change of direction of channel improvements (Section 01050) by a registered land surveyor.

1.05 SUBMITTAL

- A. At Contract close-out, deliver Record Documents to the Owner.
- B. Accompany submittal with transmittal letter in duplicate, containing:
1. Date.
 2. Project title and number.
 3. Contractor's name and address.
 4. Title and number of each Record Document.
 5. Signature of Contractor or his authorized representative.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

SECTION 01740

WARRANTIES AND BONDS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Compile specified warranties and bonds, as in Articles 5 and 13 of the General Conditions.
- B. Co-execute submittals when so specified.
- C. Review submittals to verify compliance with Contract Documents.
- D. Submit to the Owner for review.

1.02 SUBMITTAL REQUIREMENTS

- A. Assemble and include warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, couplers, and subcontractors including effective dates.
- B. Number of original signed copies required. Two (2) each.
- C. Table of Contents. Neatly typed in orderly sequence. Provide complete information for each item.
 - 1. Product or work item.
 - 2. Firm, with name of principal, address and telephone number.
 - 3. Scope.
 - 4. Date of beginning warranty, and bond.
 - 5. Duration of warranty.
 - 6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure.
 - b. Instances which might affect the validity of warranty or bond.
 - 7. Contractor, name of responsible principal, address and telephone number.

1.04 FORM OF SUBMITTALS

- A. Prepare in duplicate packets.
- B. Format:
 - 1. Size 8-1/2-inches x 11-inches, punch sheets for standard 3-post binder.
 - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS." List:
 - a. Title of Project.
 - b. Name of Contractor.
- C. Binders: Commercial quality, three-post binder, with durable and cleanable plastic covers and maximum post width of 2-inches, "D" ring.

1.05 WARRANTY SUBMITTAL REQUIREMENTS

- A. For all components of the work, unless stated otherwise in the specifications for each individual item of equipment, submit a written warranty from the manufacturer to replace promptly any component thereof which, in the sole opinion of the Engineer, has defects in design, workmanship, materials, or performance within a one (1) year period following the date of acceptance for operation (Substantial Completion) by the Owner. The manufacturer's warranty period shall be concurrent with the Contractor's for one (1) year, unless otherwise specified, commencing at the time of acceptance for operation (beneficial use) by the Owner and shall be read in conjunction with the Contractor's warranty which shall operate together to provide for replacement of defective components and restoration of proper operation. The Contractor shall be solely responsible for both warranties.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

*** * END OF SECTION * ***

CITY OF HATTIESBURG

SPECIAL PROVISION NO. 907-616-2

CODE: (SP)

DATE: 08/25/2009

SUBJECT: Colored and Imprinted Concrete Median and Island Pavement

Section 616, Median and Island Pavement, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as amended by this special provision is applicable to Colored And Imprinted Concrete only.

907-616.01--Description. This work consists of furnishing all labor, materials, tools, tests, royalties, services and other incidentals as may be required for the good and proper completion of the colored and imprinted concrete island and median pavement.

The locations for colored and imprinted concrete island and median pavement are shown on the plans, but generally are limited to all proposed concrete islands and concrete median end noses.

The Contractor is advised of additional notes on the plans which call attention to particular requirements or conditions regarding colored and imprinted concrete island and median pavement.

Quality Assurance. Installation shall be performed by an installer with at least one year experience in the placement of colored and imprinted concrete paving systems.

907-616.02--Materials. Colored concrete materials and imprinting tool release agents shall meet the following requirements.

- A. Coloring Agents: Contractor shall apply dry-shake to the surface of the freshly poured concrete. The coloring agent shall be a mineral oxide pigment approved by the Engineer. Colors for colored and imprinted concrete shall be selected by the Engineer from Standard or Designer color charts, or an approved manufacturer's color charts.
- B. Curing and Finishing Material: Contractor shall utilize a color-matched curing and finishing material recommended by the manufacturer. Curing materials or methods for uncolored concrete shall not be used with Colored and Imprinted Concrete.
- C. Release Agent: Contractor shall utilize a dry-shake powder to facilitate the release of the concrete imprinting tools. The color of the release agent shall match the selected main coloring agent chosen by the Engineer for the concrete.
- D. Imprinting Tools: Tools shall be of high quality and shall provide uniform control of joint depth.

- E. Imprint Tool Pattern: The imprint pattern to be used for all concrete imprinting shall be a 4" x 8" brick herringbone pattern, with a 4" x 8" matching soldier course border used along the perimeter of all proposed concrete islands and median end noses. The Contractor shall reference the plans for pattern layout and orientation of the imprint patterns.

Once the color, method of coloring, and the imprinting tools have received approval from the Engineer, the Contractor shall provide a 4-foot square test panel, separate from proposed island and median end nose areas, to be reviewed and approved by the Engineer. Engineer will evaluate color as compared to color chart and texture of broom finish.

Subsequent test panels may be required, if the finish, imprint quality, or color is unacceptable to the Engineer. The Contractor shall remove unaccepted test panels immediately from site. Accepted panel shall remain until all colored concrete islands and median end noses have been completed by the Contractor, at which time the Contractor shall then remove the acceptable test panel from the site.

907-616.03.4--Handling, Measuring, Proportioning, and Mixing Materials. Should an integral coloring method be selected by the Contractor, the Contractor shall mix coloring agent in strict accordance with the approved manufacturer's written instructions. Copies of the manufacturer's written instructions shall be furnished to the Engineer prior to manufacture and placement of colored concrete.

Should a dry-shake applied coloring method be selected by the Contractor, the Contractor shall measure and apply coloring agent in strict accordance with the approved manufacturer's written instructions. Copies of the manufacturer's written instructions shall be furnished to the Engineer prior to manufacture and placement of colored concrete.

907-616.03.4--Protection and Curing. Protection and curing materials and methods of application for colored and imprinted concrete shall be in strict accordance with the approved manufacturer's written instructions. Copies of the manufacturer's written instructions shall be furnished to the Engineer prior to manufacture and placement of colored concrete.

907-616.04--Method of Measurement. Colored and imprinted concrete median and island pavement, completed and accepted, will be measured by the square foot or square yard. Test panels will not be measured for separate payment.

907-616.05--Basis of Payment. Colored and imprinted concrete median and island pavement, measured as prescribed above, will be paid for at the contract unit price per square foot or square yard, which price shall be full compensation for all labor, tools, materials, equipment, test panels, placement of concrete, imprinting the concrete, and all incidental necessary to complete the work.

Payment will be made under:

907-616-C: Stamped and Colored Concrete Sidewalk, Brick Pavers

- per square yard

ADVERTISEMENT FOR BIDS
FRONT STREET PARKLET
CITY OF HATTIESBURG, MISSISSIPPI

Sealed bids will be received by the City of Hattiesburg, at the City Clerk's office, Mississippi, hereafter referred to as Owner, located at 200 Forrest Street, Hattiesburg, Mississippi, 39401, until 10:00 A.M., Local Time, Thursday, **January 12**, 2023 for supplying all labor, equipment, and materials (as specified) necessary for the construction of the above referenced project. Work consists of concrete sidewalk, handrail, stairs, concrete parklet along Front Street. When bids are submitted electronically, the same requirements for submitting sealed bids shall apply. Electronic bids shall be submitted online at www.hattiesburgsbids.com and shall include a document representing the cover of the envelope containing the aforementioned criteria.

The above general outline of features of the work does not in any way limit the responsibility of the Contractor to perform all work and furnish all labor, equipment and materials required by the specifications and the drawings referred to therein.

Bidder must be qualified under Mississippi Law and show current Certificate of Responsibility issued by the Mississippi State Board of Public Contractors establishing his classification as to the value and type of construction on which he is authorized to bid.

Each Bidder shall write his Certificate of Responsibility Number on the outside of the sealed envelope containing his proposal.

Proposals shall be submitted in duplicate, sealed and deposited with the Owner prior to the hour and date hereinbefore designated. No bidder may withdraw his bid within 90 days after the actual date of the opening thereof.

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so-called Golden Rule is followed state law requires a non-resident bidder is to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

Each Bidder must deposit with his proposal, a Bid Bond or Certified Check in an amount equal to five percent of his bid, payable to the Owner, as bid security. Bidders shall also submit a current financial statement, if requested, by the Owner. The successful bidder will be required to furnish a Payment Bond and Performance Bond each in the amount of 100 percent of the contract amount.

Bid documents are being made available via paper copy or pdf. All interested bidders are required to log-in or register for an account at www.hattiesburgsbids.com OR www.neel-schafferplans.com to view and order Bid Documents. All plan holders are required to have a valid email address for registration. Bid documents are non-refundable and must be purchased through the website. Questions regarding website registration and online orders please contact Plan House Printing at (601) 336-6378.

"Mississippi Standard Specifications for Road and Bridge Construction, 2017 Edition" as referred to herein, may be purchased from the Mississippi Department of Transportation.

The Owner hereby notifies all Bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged and women's business enterprises will be afforded the full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Engineer is Neel-Schaffer, Inc., 704 Hardy Street, Hattiesburg, Mississippi 39401; Phone No. (601) 545-1565, Fax No. (601)-545-2267. Geoffrey Crosby, P.E. – Senior Project Manager.

The Owner reserves the right to reject any and all bids and to waive any informalities or irregularities therein.

BY: _____
City Clerk
City of Hattiesburg, Mississippi

DATES OF PUBLICATION:

December 11, 2022

December 18, 2022



Memorandum

To: Mayor Toby Barker and Members of City Council
From: Chris McGee, Director of Parks and Recreation
cc:
Date: Tuesday, December 20, 2022
Re: Approve the sale of grave spaces, per attached Memo's, Receipts, and Deeds.
File Number: 2022-933
Minute Book #

Summary

Approve the sale of grave spaces, per attached Memo's, Receipts, and Deeds.

Recommendation Statement

I am recommending approval of the sale of grave spaces.

Please place this on the December 20, 2022 City Council meeting for consideration.

To: CITY COUNCIL

From: Deborah Bourne, Division Manager of Cemeteries

Tommy Lee Fenton

(1) Space \$ 175.00

North Half (N ½) of the Northeast Quarter (NE ¼)

Lot 66, Section 23, Highland Cemetery

Ernest Cole, Jr

(1) Space \$ 175.00

South Half (S ½) of the Southeast Quarter (SE ¼)

Lot 86, Section 34, Highland Cemetery

David Anderson

(1) Space \$ 150.00

West Half (W ½) of the Northwest Quarter (NW ¼)

Lot 117, Section 1, South Hill Cemetery

Princess Velazquez Alva

(1) Space \$ 45.00

Baby Space# 68

Lot 3, Section 3, Highland Cemetery

Evelyn Simmons

(1) Space \$ 175.00

South Half (S ½) of the Southwest Quarter (SW ¼)

Lot 25, Section 38, Highland Cemetery

Aretha Smith

(1) Space \$ 175.00

South Half (S ½) of the Northwest Quarter (NW ¼)

Lot 74, Section 35, Highland Cemetery

To: CITY COUNCIL

From: Deborah Bourne, Division Manager of Cemeteries

Samantha A. Baggett

(4) Spaces \$ 700.00

West Half (W ½)

Lot 19, Section 39, Highland Cemetery

Samantha A. Baggett

(2) Spaces \$ 350.00

Southeast Quarter (SE ¼)

Lot 19, Section 39, Highland Cemetery

Samantha A. Baggett

(1) Space \$ 175.00

South Half (S ½) of the Northeast Quarter (NE ¼)

Lot 19, Section 39, Highland Cemetery

Charles W. Pierce

(1) Space \$ 175.00

North Half (N ½) of the Northwest Quarter (NW ¼)

Lot 112, Section 39, Highland Cemetery

Arnett Whitlock

(1) Space \$ 175.00

North Half (N ½) of the Southwest Quarter (SW ¼)

Lot 96, Section 39, Highland Cemetery

To: CITY COUNCIL

From: Deborah Bourne, Division Manager of Cemeteries

Micheal Hutchins

(1) Space \$ 175.00

North Half (N ½) of the Southeast Quarter (SE ¼)

Lot 32, Section 34, Highland Cemetery

Jean D. Harper

(2) Spaces \$ 350.00

Northwest Quarter (NW ¼)

Lot 147, Section 25, Highland Cemetery

James C. Smith

(1) Space \$ 175.00

South Half (S ½) of the Southeast Quarter (SE ¼)

Lot 20, Section 34, Highland Cemetery

Deborah G. & Adrian P. Panquerne

(2) Spaces \$ 350.00

Southwest Quarter (SW ¼)

Lot 94, Section 39, Highland Cemetery

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 11/29/ 2022

SOLD TO:

Mr. Mrs. Miss

David Anderson

ADDRESS

72 Pinetree DR. Hattiesburg, MS. 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

W 1/2 NW 1/4 Lot No. 117 Section No. 1 in South Hill Cemetery

Number of grave spaces

1

Price per grave space \$

150.00

Price Received \$

150.00

CITY OF HATTIESBURG, MISSISSIPPI

By

Debrah Borne

Supt. of City Cemeteries

Debit card

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 11/29/ 2022

SOLD TO:

Mr. Mrs. Miss

Tommy Lee Fenton

ADDRESS

846 N. Main St Apt #108 Hattiesburg, MS. 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

N 1/2 NE 1/4 Lot No. 66 Section No. 23 in Highland Cemetery

Number of grave spaces

1

Price per grave space \$

175.00

Price Received \$

175.00

CITY OF HATTIESBURG, MISSISSIPPI

By

Debrah Borne

Supt. of City Cemeteries

Cash

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 11/23/ 2022

SOLD TO:

Mr. Mrs. Miss

Ernest Cole, Jr

ADDRESS

805 Hardy St. Hattiesburg, MS. 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

S 1/2 SE 1/4 Lot No. 86 Section No. 34 in Highland Cemetery

Number of grave spaces

1

Price per grave space \$

175.00

Price Received \$

175.00

CITY OF HATTIESBURG, MISSISSIPPI

By

Debrah Borne

ck# 57633

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 11/30/ 20 22

SOLD TO:

Mr. Mrs. Miss Princess Velazquez Alva
ADDRESS 714 W. Pine St, Apt 101, Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

Baby Space #68 1/2 Lot No. 3 Section No. 3 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 45.00

Price Received \$ 45.00

cash

CITY OF HATTIESBURG, MISSISSIPPI

By Debrah Bourne
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-1- 20 22

SOLD TO:

Mr. Mrs. Miss ARETHA SMITH
ADDRESS 2 ANNE ST, HATTIESBURG MS 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

S 1/2 NW Lot No. 74 Section No. 35 in HIGHLAND Cemetery

Number of grave spaces 1 Price per grave space \$ 175.00

Price Received \$ 175.00 CASH

CITY OF HATTIESBURG, MISSISSIPPI

By Andy Park
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-01- 20 22

SOLD TO:

Mr. Mrs. Miss Evelyn Simmons
ADDRESS P.O. Box 16147 Hattiesburg, MS 39404-6147

desires to purchase the grave space described below, subject to Cemetery regulations.

S 1/2 SW Lot No. 25 Section No. 38 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.00

Price Received \$ 175.00

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-02- 2022

SOLD TO:

Mr. Mrs. Miss Samantha A. Baggett
ADDRESS 54 Raul Spring Rd Hattiesburg MS 39402

Desires to purchase the grave space described below, subject to Cemetery regulations.

W 1/2 19 Lot No. 19 Section No. 39 in Highland Cemetery

Number of grave spaces 4 Price per grave space \$ 175.⁰⁰

Price Received \$ 700.⁰⁰

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

Cash

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-02- 2022

SOLD TO:

Mr. Mrs. Miss Samantha A. Baggett
ADDRESS 54 Raul Spring Rd Hattiesburg MS 39402

Desires to purchase the grave space described below, subject to Cemetery regulations.

SE 1/2 19 Lot No. 19 Section No. 39 in Highland Cemetery

Number of grave spaces 2 Price per grave space \$ 175.⁰⁰

Price Received \$ 350.⁰⁰

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

Cash

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-02- 2022

SOLD TO:

Mr. Mrs. Miss Samantha A. Baggett
ADDRESS 54 Raul Spring Rd Hattiesburg MS 39402

Desires to purchase the grave space described below, subject to Cemetery regulations.

S 1/2 NE 1/4 Lot No. 19 Section No. 39 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.⁰⁰

Price Received \$ 175.⁰⁰

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

Cash

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-02-2022

SOLD TO:

Mr. Mrs. Miss Charles W. Pierce

ADDRESS 606 N. 25th Ave. Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

N $\frac{1}{2}$ NW $\frac{1}{4}$ Lot No. 112 Section No. 39 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.00

Price Received \$ 175.00

cash

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-02-2022

SOLD TO:

Mr. Mrs. Miss Annett Whitlock

ADDRESS 107 Hope Dr. Hattiesburg, MS 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

N $\frac{1}{2}$ SW $\frac{1}{4}$ Lot No. 96 Section No. 39 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.00

Price Received \$ 175.00

cash

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES

Hattiesburg, Miss., 12-08 2022

SOLD TO:

Mr. Mrs. Miss Deborah G. & Adrian P. Panguerne

ADDRESS 28 Dunleith Court Hattiesburg, MS 39402

desires to purchase the grave space described below, subject to Cemetery regulations.

1/2 SW 1/4 Lot No. 94 Section No. 39 in Highland Cemetery

Number of grave spaces 2 Price per grave space \$ 175.00

Price Received \$ 350.00

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

cod

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-07- 2022

SOLD TO:

Mr.. Mrs. Miss Michael Hutchins

ADDRESS 212 West 5th St. Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

N 1/2 SE 1/4 Lot No. 32 Section No. 34 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.⁰⁰

Price Received \$ 175.⁰⁰

cash

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-07- 2022

SOLD TO:

Mr.. Mrs. Miss Jean D. Harper

ADDRESS 16000 W. Parks Rd. Raymond, MS 39154

desires to purchase the grave space described below, subject to Cemetery regulations.

1/2 NW 1/4 Lot No. 147 Section No. 25 in Highland Cemetery

Number of grave spaces 2 Price per grave space \$ 175.⁰⁰

Price Received \$ 350.⁰⁰

card

CITY OF HATTIESBURG, MISSISSIPPI

By [Signature]
Supt. of City Cemeteries

**CITY OF HATTIESBURG
PURCHASE OF CEMETERY GRAVE SPACES**

Hattiesburg, Miss., 12-07- 2022

SOLD TO:

Mr.. Mrs. Miss James C. Smith

ADDRESS 1406 Kinnard St. Hattiesburg, MS 39401

desires to purchase the grave space described below, subject to Cemetery regulations.

S 1/2 SE 1/4 Lot No. 20 Section No. 34 in Highland Cemetery

Number of grave spaces 1 Price per grave space \$ 175.⁰⁰

Price Received \$ 175.⁰⁰

CITY OF HATTIESBURG, MISSISSIPPI

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Ernest Cole, Jr., subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S½) of the Southeast Quarter (SE¼)

Lot 86 Section 34

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Tommy Lee Fenton, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

North Half (N½) of the Northeast Quarter (NE¼)

Lot 66 Section 23

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

DEED TO CEMETERY LOT
SOUTH HILL CEMETERY

For and in consideration of the sum of ONE HUNDRED FIFTY AND NO/100 Dollars (\$150.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto David Anderson, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

West Half (W½) of the Northwest Quarter (NW¼)

Lot Number: 117 Section Number: 1

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as South Hill Cemetery, and containing
One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST: CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK MAYOR
(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and Deputy City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires: _____
NOTARY PUBLIC

DEED TO CEMETERY LOT HIGHLAND CEMETERY

Baby Space #68

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

CITY OF HATTIESBURG, MISSISSIPPI

MAYOR

(SEAL)

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Evelyn Simmons, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S½) of the Southwest Quarter (SW¼)

Lot 25 Section 38

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Aretha Smith, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S½) of the Northwest Quarter (NW¼)

Lot 74 Section 35

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires:

NOTARY PUBLIC

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Samantha A. Baggett, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Southeast Quarter (SE¼)

Lot Number 19 Section Number 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

DEED TO CEMETERY LOT
HIGHLAND CEMETERY

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Samantha A. Baggett ., subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S½) of the Northeast Quarter (NE¼)

Lot 19 Section 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Charles W. Pierce., subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

North Half (N½) of the Northwest Quarter (NW¼)

Lot 112 Section 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Arnett Whitlock, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

North Half (N½) of the Southwest Quarter (SW¼)

Lot 96 Section 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto Micheal Hutchins., subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

North Half (N½) of the Southeast Quarter (SE¼)

Lot 32 Section 34

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of ONE HUNDRED SEVENTY-FIVE AND NO/100 Dollars (\$175.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto James C. Smith, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

South Half (S½) of the Southeast Quarter (SE¼)

Lot 20 Section 34

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

One (1) Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day of December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally, appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022.

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Jean D. Harper, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Northwest Quarter (NW¹/₄)

Lot Number 147 Section Number 25

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022

My Commission Expires:

NOTARY PUBLIC

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR
CITY OF HATTIESBURG
HATTIESBURG, MS

**DEED TO CEMETERY LOT
HIGHLAND CEMETERY**

For and in consideration of the sum of THREE HUNDRED FIFTY AND NO/100 Dollars (\$350.00), cash in hand paid to the City of Hattiesburg, Mississippi, the City of Hattiesburg, Mississippi acting by and through its duly authorized Mayor and City Clerk does hereby bargain, sell and convey unto, Deborah G. & Adrian P. Panquerne, subject to the reservations and restrictions hereinafter set out and subject to rules and regulations now or hereafter adopted, the following described grave spaces:

Southwest Quarter (SW¼)

Lot Number 94 Section Number 39

according to the Cemetery Survey of the City of Hattiesburg, Mississippi known as Highland Cemetery, and containing

Two Grave space (s).

SAID Lot shall be used for burial purposes only and all graves therein must be checked and laid out by the Cemetery sexton before the same is dug and must be at least 4 feet deep and shall be, when completed, level with the ground. No shrubbery, vines or trees shall be planted in the Cemetery Lot and there shall be nothing left above the ground except markers which may be erected to meet all City regulations and requirements. All burials in the grave space(s) herein conveyed shall comply with applicable State and Federal laws governing human burial and with City rules and regulations pertaining thereto. If boxes or vaults are used they shall be at least 10 inches below the ground level.

GRANTEE herein shall not sell or convey this lot without a written permit from the Mayor and Council of the City of Hattiesburg, Mississippi.

WITNESS the signature and seal of the City of Hattiesburg, Mississippi, a Municipal Corporation, acting, by and through its duly authorized Mayor and City Clerk, on this, the 20th day December, 2022.

ATTEST:

CITY OF HATTIESBURG, MISSISSIPPI

CITY CLERK

MAYOR

(S E A L)

STATE OF MISSISSIPPI
COUNTY OF FORREST/LAMAR

Personally appeared before me, the undersigned authority in and for said County and State, Toby Barker and Kermas Eaton, Mayor and City Clerk, respectively, of the City of Hattiesburg, Mississippi, a municipal corporation, each of whom acknowledged before me that they signed, executed and delivered the above and foregoing Cemetery Deed on the day and year therein mentioned as the act and deed of the City of Hattiesburg after having first been authorized so to do.

Given under my hand and official seal of office on this, the 20th day of December, 2022

My Commission Expires:

NOTARY PUBLIC



Memorandum

To: Mayor Toby Barker and Members of City Council
From:
cc:
Date: Tuesday, December 20, 2022
Re: Approve claims docket for the period ending December 16, 2022.
File Number: 2022-938
Minute Book #

Summary

Recommendation Statement

Please place this on the December 20, 2022 City Council meeting for consideration.

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
001000											
001000	060100										BALANCE SHEET
											GAS/LUBRICANT-CITY BARN
003497	MAPLES GAS COMPANY	242589	2300635	2023	2	INV	P	28,967.76	121622	294493	GAS AND DIESEL FOR
003497	MAPLES GAS COMPANY	243035	2300741	2023	2	INV	P	13,174.39	121622	294493	GAS FOR FUEL STATIO
003497	MAPLES GAS COMPANY	244003	2300878	2023	3	INV	P	9,814.72	121622	294493	DIESEL FOR FUEL STA
								51,956.87			
003918	PINE BELT OIL COMPAN	INV-124424	2300742	2023	2	INV	P	14,188.36	121622	294529	DIESEL FUEL
003918	PINE BELT OIL COMPAN	INV-125473	2300780	2023	3	INV	P	9,425.00	121622	294529	GAS FOR FUEL STATIO
003918	PINE BELT OIL COMPAN	INV-127295	2300877	2023	3	INV	P	10,752.60	121622	294529	GAS FOR FUEL STATIO
								34,365.96			
								ACCOUNT TOTAL			
								86,322.83			
001000	122000										DAMAGE DEPOSITS
003040	HAVARD PEST CONTROL	HAVARD 10/15/22	0	2023	3	INV	P	600.00	121622	294461	REFUND SECURITY DEP
049492	LYMAN FILLINGAME	LFILLINGAME 11/11/22	0	2023	3	INV	P	100.00	121622	294491	REFUND SECURITY DEP
049498	DEBBIE COFFIIN	D COFFIN 11/26/22	0	2023	3	INV	P	600.00	121622	294426	REFUND SECURITY DEP
049500	MONICA BELLIPANNI	MBELLIPANNI 11/25/22	0	2023	3	INV	P	100.00	121622	294506	REFUND SECURITY DEP
049501	LAURA FELSHER	L FELSHER 10/29/22	0	2023	3	INV	P	500.00	121622	294488	REFUND SECURITY DEP
049503	SHARON BOBBETT	S BOBBETT 10/9/22	0	2023	3	INV	P	100.00	121622	294553	REFUND SECURITY DEP
								ACCOUNT TOTAL			
								2,000.00			
								ORG 001000 TOTAL			
								88,322.83			
001001											REVENUES
001001	222500										GAS & PLUMBING
003905	PIERCE PLUMBING INC	12/13/22	0	2023	3	INV	P	50.00	121622	294528	REFUND PERMIT NO. G
								ACCOUNT TOTAL			
								50.00			
001001	287000										POLICE/FIRE-SPECIAL DUTY
047581	PROTECTION AGENCY &	1395	0	2023	3	INV	P	95.00	121622	294540	SECURITY 10/15/22 E
047581	PROTECTION AGENCY &	1442	0	2023	3	INV	P	114.00	121622	294540	SECURITY 11/12/22 E
047581	PROTECTION AGENCY &	1476	0	2023	3	INV	P	100.00	121622	294540	SECURITY -EVENT 12/
047581	PROTECTION AGENCY &	1477	0	2023	3	INV	P	137.50	121622	294540	SECURITY 11/26/22 E
								446.50			
								ACCOUNT TOTAL			
								446.50			
								ORG 001001 TOTAL			
								496.50			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
001003 CITY COUNCIL										
001003	511500			FOOD						
002709	EATON, ALVIN K (PETT PC/11/2022		0	2023	3	INV P	14.02	121622	294432	PETTY CASH 11/2022
ACCOUNT TOTAL							14.02			
001003 606000				TELEPHONE AND TELEGRAPH						
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	291.58	121622	294380	MB2016-287/WIRELESS
ACCOUNT TOTAL							291.58			
001003 611002				TRAVEL EXP-WARD 2						
002645	DELGADO, DEBORAH DEN OT 9511 REIMBURSE		0	2023	3	INV P	268.12	121622	294427	COUNCIL - DDELGADO
004017	REGIONS CARDHOLDER S 1346 - 11-30-2022		0	2023	3	INV P	776.84	121622	294544	1346 - 11-30-2022 C
ACCOUNT TOTAL							1,044.96			
001003 684501				REG FEE/TUITION-WARD 1						
003694	MS MUNICIPAL LEAGUE	25841188753918	0	2023	3	INV P	150.00	121622	294509	COUNCIL - JGEORGE R
ACCOUNT TOTAL							150.00			
ORG 001003 TOTAL							1,500.56			
001015 CITY COURT										
001015	604900			OTHER PROFESSIONAL SERV.						
003940	POLK-PAYTON, GAY ATT 29		0	2023	2	INV P	3,250.00	121622	294533	PROTEM JUDGES HOURS
049257	JC DIAZ	101	0	2023	2	INV P	100.00	121622	294474	SPANISH TRANSLATOR
ACCOUNT TOTAL							3,350.00			
001015 604901				OTHER PROF-TECHNOLOGY						
004050	RICOH CORP	37060780	0	2023	2	INV P	287.51	121622	294547	MB# 2018-183-184 CO
004050	RICOH CORP	37178303	0	2023	2	INV P	287.51	121622	294547	MB# 2018-183-184 CO
004050	RICOH CORP	37290204	0	2023	2	INV P	287.51	121622	294547	MB# 2018-183-184 CO
							862.53			
004057	RJ YOUNG COMPANY	INV4892783	0	2023	2	INV P	168.00	121622	294549	MB#2017-96 COURT RJ
ACCOUNT TOTAL							1,030.53			
001015 606000				TELEPHONE AND TELEGRAPH						
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	470.42	121622	294380	MB2016-287/WIRELESS
ACCOUNT TOTAL							470.42			
001015 620000				PRINTING						
004050	RICOH CORP	5065452762	0	2023	2	INV P	385.30	121622	294547	RICOH PRINTING OVER

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR TYP S			WARRANT		CHECK	DESCRIPTION	
004050	RICOH CORP	5065672686		0	2023	2	INV P	296.53	121622	294547	RICOH PRINTING OVER	
004050	RICOH CORP	5065977026		0	2023	2	INV P	332.88	121622	294547	RICOH PRINTING OVER	
								1,014.71				
ACCOUNT TOTAL								1,014.71				
001015	630000				GAS							
004321	SPIRE	G2022 2 DEC		0	2023	3	INV P	59.45	121622	294567	SPIRE-VARIOUS DEPTS	
004321	SPIRE	G2022-8 DEC		0	2023	3	INV P	4,377.78	121622	294567	SPIRE-VARIOUS DEPT-	
								4,437.23				
ACCOUNT TOTAL								4,437.23				
ORG 001015 TOTAL								10,302.89				
001020	MAYOR/ADMIN.											
001020	501000				OTHER EXPENDABLE OFF.SPL							
004017	REGIONS CARDHOLDER S	1286 - 11-30-2022	0	2023	3	INV P	92.30	121622	294544	1286	11-30-2022 CRE	
004017	REGIONS CARDHOLDER S	4524 - 11-30-2022	0	2023	3	INV P	29.99	121622	294544	4524 -	11-30-2022	
								122.29				
ACCOUNT TOTAL								122.29				
001020	502000				MINOR OFFICE EQUIP/FURN.							
004017	REGIONS CARDHOLDER S	1286 - 11-30-2022	0	2023	3	INV P	189.33	121622	294544	1286	11-30-2022 CRE	
ACCOUNT TOTAL								189.33				
001020	511500				FOOD							
002500	COCA COLA BOTTLING C	19873227269	0	2023	3	INV P	127.50	121622	294415	ADMINISTRATION WATE		
ACCOUNT TOTAL								127.50				
001020	603300				ENTERTAINMENT							
049479	CORLEY EDWARD D JR	INV0874	0	2023	3	INV P	856.00	121622	294422	BAND FOR TREE LIGHT		
ACCOUNT TOTAL								856.00				
001020	606000				TELEPHONE AND TELEGRAPH							
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	171.99	121622	294380	MB2016-287/WIRELESS		
002160	AT&T MOBILITY	287289913717X120522	0	2023	3	INV P	99.09	121622	294379	MB2016-287/WIRELESS		
								271.08				
ACCOUNT TOTAL								271.08				
001020	611000				TRAVEL EXPENSE							
004017	REGIONS CARDHOLDER S	4524 - 11-30-2022	0	2023	3	INV P	1,201.61	121622	294544	4524 -	11-30-2022	

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
					ACCOUNT TOTAL				1,201.61		
001020	615000				ADVERTISING						
003031	HATTIESBURG ALLIANCE	2022	ART	0	2023	2	INV	P	15,000.00	121622	294458 HAPA/2022 PUBLIC AR
004017	REGIONS CARDHOLDER S	4524	- 11-30-2022	0	2023	3	INV	P	16.04	121622	294544 4524 - 11-30-2022
					ACCOUNT TOTAL				15,016.04		
001020	641000				OFFICE EQUIPMENT RENT						
003825	OWENS BUSINESS MACHI	455734		0	2023	3	INV	P	187.00	121622	294521 ADMIN COPIER/MONTHL
003825	OWENS BUSINESS MACHI	455735		0	2023	3	INV	P	85.38	121622	294521 ADMIN COPIER/MONTHL
									272.38		
					ACCOUNT TOTAL				272.38		
					ORG 001020 TOTAL				18,056.23		
001040	MUNICIPAL CLERK										
001040	501000			OTHER EXPENDABLE OFF.SPL							
002709	EATON, ALVIN K (PETT	PC/11/2022		0	2023	3	INV	P	24.36	121622	294432 PETTY CASH 11/2022
					ACCOUNT TOTAL				24.36		
001040	602000			CONSULTANT SERV/SURVEYS							
049467	BUSINESS TRAINING	7170		0	2023	3	INV	P	11,170.00	121622	294396 SUPERVISOR TRAINING
					ACCOUNT TOTAL				11,170.00		
001040	615000			ADVERTISING							
003141	HUB CITY SPOKES	101037		0	2023	3	INV	P	525.84	121622	294466 CITY WIDE ADS & NOT
					ACCOUNT TOTAL				525.84		
001040	684500			REGISTRATION FEE/TUITION							
049462	EXTENSION CENTER FOR	102622		0	2023	3	INV	P	200.00	121622	294438 CERTIFIED MUNICIPAL
					ACCOUNT TOTAL				200.00		
					ORG 001040 TOTAL				11,920.20		
001042	ACCOUNTING DIV.										
001042	501000			OTHER EXPENDABLE OFF.SPL							
002709	EATON, ALVIN K (PETT	PC/11/2022		0	2023	3	INV	P	8.15	121622	294432 PETTY CASH 11/2022
					ACCOUNT TOTAL				8.15		
					ORG 001042 TOTAL				8.15		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
001080			HUMAN RESOURCES							
001080 636500			OFFICE EQUIPMENT R&M							
004050	RICOH CORP	37060552	0	2023	3	INV P	185.85	121622	294547	HR COPIER LEASE SEP
004050	RICOH CORP	37178856	0	2023	3	INV P	185.85	121622	294547	HR COPIER LEASE OCT
004050	RICOH CORP	37289196	0	2023	3	INV P	185.85	121622	294547	HR COPIER LEASE NOV
004050	RICOH CORP	5065452844	0	2023	3	INV P	123.25	121622	294547	HR COPIER USAGE SEP
004050	RICOH CORP	5065672766	0	2023	3	INV P	200.00	121622	294547	HR COPIER USAGE OCT
004050	RICOH CORP	5065976759	0	2023	3	INV P	178.93	121622	294547	HR COPIER USAGE NOV
							1,059.73			
ACCOUNT TOTAL							1,059.73			
ORG 001080 TOTAL							1,059.73			
001081			LOSS CONTROL							
001081 606000			TELEPHONE AND TELEGRAPH							
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	90.11	121622	294380	MB2016-287/WIRELESS
ACCOUNT TOTAL							90.11			
ORG 001081 TOTAL							90.11			
001090			URBAN DEVELOPMT							
001090 501000			OTHER EXPENDABLE OFF.SPL							
004017	REGIONS CARDHOLDER S	1286 - 11-30-2022	0	2023	3	INV P	21.39	121622	294544	1286 11-30-2022 CRE
ACCOUNT TOTAL							21.39			
001090 501100			N.I.P. SUPPLIES							
002796	FASTSIGNS OF HATTIES	2153-9472	2300073	2023	3	INV P	167.50	121622	294442	NATIONAL NIGHT OUT
004205	SIGNS FIRST	H-82166	2300074	2023	3	INV P	259.00	121622	294555	NATIONAL NIGHT OUT
ACCOUNT TOTAL							426.50			
001090 525000			GAS AND OIL							
003918	PINE BELT OIL COMPAN	6821145	0	2023	3	INV P	31.14	121622	294529	GAS FOR UNIT 17789
ACCOUNT TOTAL							31.14			
001090 604900			OTHER PROFESSIONAL SERV.							
048727	ORION PLANNING	3648	0	2023	3	INV P	6,517.50	121622	294520	AUGUST '22 Services
048727	ORION PLANNING	3704	0	2023	3	INV P	6,485.00	121622	294520	DEC '22 Services -M
							13,002.50			
ACCOUNT TOTAL							13,002.50			
001090 606000			TELEPHONE AND TELEGRAPH							
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	300.43	121622	294380	MB2016-287/WIRELESS

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
ACCOUNT TOTAL							300.43			
001090	641000			OFFICE EQUIPMENT RENT						
004050	RICOH CORP	5066283600	0	2023	3	INV P	124.32	121622	294547	RICOH COPIER RENTAL
049464	MICHAEL P KLEMA INC	31962	0	2023	2	INV P	528.85	121622	294502	RICOH IM-C4500 TONE
ACCOUNT TOTAL							653.17			
ORG 001090 TOTAL							14,435.13			
001091	INFO TECHNOLOGY									
001091	508000			COMPUTER SUPPLIES						
004605	WB MASON CO INC (FOR 233979150		2300482	2023	2	INV P	696.76	121622	294595	INK CARTRIDGES - IT
ACCOUNT TOTAL							696.76			
001091	604900			OTHER PROFESSIONAL SERV.						
002158	AT&T	0598 11.8.22	0	2023	2	INV P	6,790.00	121622	294372	INTERACT SUPPORT -
004050	RICOH CORP	1094307382	0	2023	2	INV P	2,295.00	121622	294547	MAILPREPARER SUBSCR
004482	TYLER TECHNOLOGIES IN	025-401532	0	2023	2	INV P	4,630.50	121622	294578	2022 SUPPORT & MAIN
004482	TYLER TECHNOLOGIES IN	045-400563	0	2023	2	INV P	2,800.00	121622	294578	MUNIS IMPLEMENTATIO
004482	TYLER TECHNOLOGIES IN	182724	0	2023	3	INV P	218,600.55	121622	294578	ANNUAL APPLICATION
							226,031.05			
ACCOUNT TOTAL							235,116.05			
001091	606000			TELEPHONE AND TELEGRAPH						
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	159.83	121622	294380	MB2016-287/WIRELESS
002160	AT&T MOBILITY	287289913717X120522	0	2023	3	INV P	477.74	121622	294379	MB2016-287/WIRELESS
							637.57			
ACCOUNT TOTAL							637.57			
001091	606800			NETWORK						
002384	C SPIRE (MEGAGATE)	205876-76	0	2023	2	INV P	425.00	121622	294400	NETWORK/INTERET - M
ACCOUNT TOTAL							425.00			
001091	636500			OFFICE EQUIPMENT R&M						
002383	C D W GOVERNMENT	FB00185	2300610	2023	2	INV P	4,711.39	121622	294399	SOFTWARE - IT DEPT
004050	RICOH CORP	5065882503	0	2023	2	INV P	233.96	121622	294547	CHARGES FOR PRODUCT
004050	RICOH CORP	5066217063	0	2023	2	INV P	223.47	121622	294547	CHARGES FOR PRODUCT
							457.43			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT		CHECK	DESCRIPTION
004482	TYLER TECHNOLOGIES IN	025-401531	0	2023	2	INV P	15,052.86	121622	294578	ENERGOV SPT&MTN 1/2
ACCOUNT TOTAL							20,221.68			
ORG 001091 TOTAL							257,097.06			
001092	GEN.GOV'T.BLDG									
001092	513000			CHEMICALS						
002459	CHEM-AQUA	7901594	0	2023	3	INV P	612.50	121622	294405	WATER TREATMENT PRO
002459	CHEM-AQUA	7977748	0	2023	3	INV P	612.50	121622	294405	WATER TREATMENT PRO
002459	CHEM-AQUA	8013330	0	2023	3	INV P	612.50	121622	294405	WATER TREATMENT PRO
							1,837.50			
ACCOUNT TOTAL							1,837.50			
001092	560000			BUILDING MATERIALS & SPLY						
002101	AMERICAN APPLIANCE &	18620	2300693	2023	2	INV P	8.95	121622	294368	MATERIAL FOR CITY H
002101	AMERICAN APPLIANCE &	18726	2300693	2023	2	INV P	62.65	121622	294368	MATERIAL FOR CITY H
							71.60			
ACCOUNT TOTAL							71.60			
001092	560500			ELECTRICAL SUPPLIES						
002101	AMERICAN APPLIANCE &	18620	2300693	2023	2	INV P	85.44	121622	294368	MATERIAL FOR CITY H
002901	GILKEY ELECTRIC SUPP	365398	2300730	2023	3	INV P	121.74	121622	294451	LAMP EQUIV FOR CITY
ACCOUNT TOTAL							207.18			
001092	630000			GAS						
004321	SPIRE	G2022 2 DEC	0	2023	3	INV P	2,353.87	121622	294567	SPIRE-VARIOUS DEPTS
ACCOUNT TOTAL							2,353.87			
001092	630500			ELECTRICITY						
003700	MS POWER COMPANY	E2022-1 DEC	0	2023	3	INV P	1,790.76	121622	294510	MISSISSIPPI POWER E
ACCOUNT TOTAL							1,790.76			
001092	639400			DISINFECT./EXTERMINATION						
003040	HAVARD PEST CONTROL	2031650	0	2023	3	INV P	90.00	121622	294460	HAVARD PEST CONTROL
ACCOUNT TOTAL							90.00			
ORG 001092 TOTAL							6,350.91			
001093	INTERMODAL FAC O&M									
001093	544000			HORT./LANDSCAPING SPLY.						
004547	VESELY'S NURSERY	02300808	2300808	2023	3	INV P	36.00	121622	294588	P&R TRAIN DEPOT/COM

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
ACCOUNT TOTAL									36.00		
001093	546000				MINOR EQUIPMENT						
002709	EATON, ALVIN K (PETT PC/11/2022		0	2023	3	INV	P	3.56	121622	294432	PETTY CASH 11/2022
003570	MCQUAGGE PRODUCTIONS 149		2300797	2023	3	INV	P	590.00	121622	294500	REPLACE MIXER AT TR
ACCOUNT TOTAL									593.56		
ORG 001093 TOTAL									629.56		
001094		METRPLTN PLANG.									
001094	511500				FOOD						
002709	EATON, ALVIN K (PETT PC/11/2022		0	2023	3	INV	P	39.57	121622	294432	PETTY CASH 11/2022
ACCOUNT TOTAL									39.57		
001094	604900				OTHER PROFESSIONAL SERV.						
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV	P	37.23	121622	294380	MB2016-287/WIRELESS
ACCOUNT TOTAL									37.23		
001094	684000				DUES AND MEMBERSHIPS						
004017	REGIONS CARDHOLDER S 1708 - 11-30-2022		0	2023	3	INV	P	308.00	121622	294544	1708 - 11-30-2022 C
ACCOUNT TOTAL									308.00		
ORG 001094 TOTAL									384.80		
001095		G/G INS.OTH SER									
001095	602500				LEGAL						
002377	BUTLER,SNOW,O'MARA,S 10361323		0	2023	3	INV	P	207.00	121622	294397	ARPA ADMINSTRATION/
002906	GLADDEN LAW OFFICE P 0299		0	2023	2	INV	P	1,869.25	121622	294453	PLANNING, ZONING, A
003608	MILLS & SCANLON, P.A 46		0	2023	3	INV	P	123,614.48	121622	294504	2016 ANNEXATION
003637	MONTAGUE, PITTMAN & 49061		0	2023	3	INV	P	500.00	121622	294507	GENERAL COUNSEL FOR
004694	ZAC FAIRLEY APPRAISA 1119		0	2023	3	INV	P	500.00	121622	294596	APPRAISAL REPORT AT
ACCOUNT TOTAL									126,690.73		
001095	602701				MEDICAL ANALYSIS-EMP CLINIC						
002522	COMCAST	11.26.22	0	2023	3	INV	P	184.26	121622	294418	COMCAST - CITY EMPL
003576	MEDICAL ANALYSIS-GHV 10899		0	2023	3	INV	P	29,392.12	121622	294501	12/22 EMPLOYEE CLIN
047011	JANI-KING OF SOUTH E C12220009		2300340	2023	3	INV	P	415.00	121622	294473	TWO QUOTE - JANITOR
ACCOUNT TOTAL									29,991.38		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR		TYP	S	WARRANT	CHECK	DESCRIPTION
001095	604900				OTHER PROFESSIONAL SERV.						
003256	JOHNSON CONTROLS, IN	00073902393	229588	2023	3	INV	P	8,645.00	121622	294477	M & V SERVICES AND
003256	JOHNSON CONTROLS, IN	1-121065646236	229588	2023	3	INV	P	3,552.50	121622	294477	M&V SERVICES AND PR
								12,197.50			
004482	TYLER TECHNOLOGIES IN	045-397529	0	2023	3	INV	P	1,525.74	121622	294578	MUNIS PACE - A JOUB
004482	TYLER TECHNOLOGIES IN	045-400564	0	2023	3	INV	P	1,759.19	121622	294578	MUNIS PACE S WHITLI
								3,284.93			
ACCOUNT TOTAL								15,482.43			
001095	606000				TELEPHONE AND TELEGRAPH						
002158	AT&T	12022 11.28.22	0	2023	3	INV	P	218.25	121622	294372	BLUE LIGHTS"LONG DI
002159	AT&T LONG DISTANCE S	0277512181	0	2023	3	INV	P	32.06	121622	294375	ONE NET SERVICE
047050	C SPIRE (IP)	L2022	0	2023	3	INV	P	6,320.20	121622	294401	CSPIRE- DEC 2022
ACCOUNT TOTAL								6,570.51			
001095	615500				UNALLOCATED ADVERTISING						
003141	HUB CITY SPOKES	100684	0	2023	3	INV	P	846.96	121622	294466	HATTIESBURG GO BOND
ACCOUNT TOTAL								846.96			
001095	627000				SURETY AND FORGERY BONDS						
004307	SOUTHGROUP (HATTIESB	224872	0	2023	3	INV	P	88.50	121622	294565	NOTARY BOND RENEWAL
004307	SOUTHGROUP (HATTIESB	224974	0	2023	3	INV	P	88.50	121622	294565	NOTARY BOND RENEAL
004307	SOUTHGROUP (HATTIESB	224975	0	2023	3	INV	P	88.50	121622	294565	NOTARY BOND RENEWAL
								265.50			
ACCOUNT TOTAL								265.50			
ORG 001095 TOTAL								179,847.51			
001096				FED PROG ADMIN							
001096	611000				TRAVEL EXPENSE						
004017	REGIONS CARDHOLDER S	1286 - 11-30-2022	0	2023	3	INV	P	691.92	121622	294544	1286 11-30-2022 CRE
ACCOUNT TOTAL								691.92			
ORG 001096 TOTAL								691.92			
001100				POLICE/PUB.SFTY							
001100	501000				OTHER EXPENDABLE OFF.SPL						
003810	OFFICE PRODUCTS PLUS	99307-2	2300598	2023	2	INV	P	234.90	121622	294519	OFFICE SUPPLIES & P
ACCOUNT TOTAL								234.90			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3		ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
001100	525000						GAS AND OIL					
003918	PINE BELT OIL COMPAN	11/22				0	2023	3	INV P	1,566.07	121622	294531 11/22 FLASH MART CH
ACCOUNT TOTAL										1,566.07		
001100	535500						WEARING APPAREL					
004017	REGIONS CARDHOLDER S	1286 - 11-30-2022				0	2023	3	INV P	460.38	121622	294544 1286 11-30-2022 CRE
004017	REGIONS CARDHOLDER S	1346 - 11-30-2022				0	2023	3	INV P	531.79	121622	294544 1346 - 11-30-2022 C
004017	REGIONS CARDHOLDER S	2080 - 11-30-2022				0	2023	3	INV P	798.88	121622	294544 2080 - 11-30-2022 C
004017	REGIONS CARDHOLDER S	9492 - 11-30-2022				0	2023	3	INV P	731.95	121622	294544 9492 - 11-30-2022 C
										2,523.00		
ACCOUNT TOTAL										2,523.00		
001100	546000						MINOR EQUIPMENT					
002709	EATON, ALVIN K (PETT PC/11/2022					0	2023	3	INV P	11.24	121622	294432 PETTY CASH 11/2022
003742	N & H ELECTRONIC DIS	08506				2300648	2023	3	INV P	675.00	121622	294512 CR123 BATTERIES-HPD
004017	REGIONS CARDHOLDER S	1346 - 11-30-2022				0	2023	3	INV P	446.50	121622	294544 1346 - 11-30-2022 C
004017	REGIONS CARDHOLDER S	9492 - 11-30-2022				0	2023	3	INV P	770.38	121622	294544 9492 - 11-30-2022 C
										1,216.88		
004459	TRI-TECH INC	00805980				2300445	2023	3	INV P	220.71	121622	294574 CRIME SCENE BAGS-HP
004495	ULINE	156908231				2300793	2023	3	INV P	611.69	121622	294579 VACUUM & TIRE RACK
047017	VERGE ENTRANCE SOLUT	6332				2300815	2023	2	INV P	97.63	121622	294586 REMOTES FOR SERVICE
ACCOUNT TOTAL										2,833.15		
001100	559000						OTHER OPERATING MATL/SPLY					
004017	REGIONS CARDHOLDER S	1708 - 11-30-2022				0	2023	3	INV P	2,796.00	121622	294544 1708 - 11-30-2022 C
047599	CRASH DATA GROUP	INV11681				2300895	2023	3	INV P	4,000.00	121622	294425 RECONSTRUCTION UPGR
ACCOUNT TOTAL										6,796.00		
001100	570000						MTR VEHICLE REP. PTS/SPL					
002060	ADVANCE AUTO PARTS	5604233279580				2300777	2023	3	INV P	341.98	121622	294363 REPAIR PARTS FOR UN
002060	ADVANCE AUTO PARTS	5604233279581				2300761	2023	3	INV P	312.33	121622	294363 REPAIR PARTS FOR UN
002060	ADVANCE AUTO PARTS	5604233379631				2300790	2023	3	INV P	230.72	121622	294363 REPAIR PARTS FOR ST
002060	ADVANCE AUTO PARTS	5604233379635				2300788	2023	3	INV P	334.23	121622	294363 REPAIR PARTS FOR SH
002060	ADVANCE AUTO PARTS	5604233479722				2300830	2023	3	INV P	1,369.41	121622	294363 REPAIR PARTS FOR VA
002060	ADVANCE AUTO PARTS	5604233579763				2300840	2023	3	INV P	388.60	121622	294363 REPAIR PARTS FOR UN
002060	ADVANCE AUTO PARTS	5604234079847				2300897	2023	3	INV P	85.25	121622	294363 SUPPLIES FOR SHOP-H
002060	ADVANCE AUTO PARTS	5604234379920				2300932	2023	3	INV P	152.17	121622	294363 REPAIR PARTS FOR VA
002060	ADVANCE AUTO PARTS	5604234379926				2300937	2023	3	INV P	1,268.33	121622	294363 REPAIR PARTS FOR SH
002060	ADVANCE AUTO PARTS	5604234379927				2300954	2023	3	INV P	242.74	121622	294363 REPAIR PARTS FOR UN
002060	ADVANCE AUTO PARTS	5604234679963				2300976	2023	3	INV P	565.37	121622	294363 REPAIR PARTS FOR VA

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION		
002060	ADVANCE AUTO PARTS	5604234770007	2300997	2023	3	INV	P	323.92	121622	294363	REPAIR PARTS FOR UN	
								5,615.05				
002160	AT&T MOBILITY	287308925627X120522	0	2023	3	INV	P	6,749.60	121622	294378	MB2016-287/HPD GEOT	
002709	EATON, ALVIN K (PETT	PC/11/2022	0	2023	3	INV	P	42.96	121622	294432	PETTY CASH 11/2022	
004514	UNIVERSITY TIRE & SE	INV207158	2300871	2023	3	INV	P	3,432.00	121622	294583	TIRES FOR STOCK-HPD	
								ACCOUNT TOTAL		15,839.61		
001100	599000							OTHER REPAIR/MAINT. SPL.				
003339	KNOX COMPANY	INV-KA-134061	2300150	2023	2	INV	P	1,021.00	121622	294480	KNOX BOX FOR NEW BU	
								ACCOUNT TOTAL		1,021.00		
001100	602700							MEDICAL				
003033	HATTIESBURG CLINIC P	8801716	0	2023	3	INV	P	600.00	121622	294459	PSYCH LATERAL/MCLEA	
								ACCOUNT TOTAL		600.00		
001100	604900							OTHER PROFESSIONAL SERV.				
002522	COMCAST	DEC 01-DEC 31 2022	0	2023	3	INV	P	114.62	121622	294418	COMCAST-POLICE DEPT	
002750	EQUIFAX INFORMATION	2053641444	0	2023	2	INV	P	10.67	121622	294437	ONLINE INVESTIGATIO	
004453	TRANSUNION RISK AND	362606-202211-1	0	2023	3	INV	P	482.20	121622	294573	ONLINE INVESTIGATIO	
047017	VERGE ENTRANCE SOLUT	6331	2300189	2023	2	INV	P	2,298.94	121622	294586	ROLL UP DOOR AT SER	
047055	INTERPRETERS & TRANS	179248	0	2023	3	INV	P	94.87	121622	294470	INTERPRETING SERVIC	
047187	FOUR SEASONS LAWN	14120	0	2023	3	INV	P	2,576.50	121622	294449	MB#2021-326 LAWN MA	
049046	HENDERSON PAULA	10001	0	2023	3	INV	P	2,800.00	121622	294462	CLEANING SERVICE FO	
049465	LEXISNEXIS RISK	6963523-20230930P	0	2023	3	INV	P	2,940.00	121622	294490	ONLINE INVESTIGATIO	
								ACCOUNT TOTAL		11,317.80		
001100	604921							NOLA EXPENSE				
002901	GILKEY ELECTRIC SUPP	365123	2300620	2023	3	INV	P	471.70	121622	294451	POWER BOX & POLE MO	
002901	GILKEY ELECTRIC SUPP	365125	2300620	2023	3	INV	P	1,101.00	121622	294451	POWER BOX & POLE MO	
002901	GILKEY ELECTRIC SUPP	365595	2300784	2023	3	INV	P	147.81	121622	294451	WIRING FOR NOLA CAM	
								1,720.51				
004017	REGIONS CARDHOLDER S	1346 - 11-30-2022	0	2023	3	INV	P	825.92	121622	294544	1346 - 11-30-2022 C	
								ACCOUNT TOTAL		2,546.43		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION		
001100	606000								TELEPHONE AND TELEGRAPH		
002158	AT&T	0563149329001	12/22	0	2023	3 INV P	43.65	121622	294373	LONG DISTANCE POLIC	
002158	AT&T	L2022 11/28/22		0	2023	3 INV P	202.00	121622	294372	AT&T DEPT OF SAFETY	
002158	AT&T	M3182220010593	11/22	0	2023	3 INV P	413.50	121622	294374	POLICE PRI CONNECTI	
							659.15				
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	1,635.34	121622	294380	MB2016-287/WIRELESS	
002160	AT&T MOBILITY	287289913717X120522	0	2023	3	INV P	7,119.54	121622	294379	MB2016-287/WIRELESS	
							8,754.88				
048026	SOUTHERN BILLING	30208	0	2023	3	INV P	137.30	121622	294557	METRO PHONE SERVICE	
ACCOUNT TOTAL							9,551.33				
001100	612000								FREIGHT		
004495	ULINE	156908231	2300793	2023	3	INV P	216.92	121622	294579	VACUUM & TIRE RACK	
004505	UNITED PARCEL SERVIC	00008E1Y15432	0	2023	2	INV P	19.00	121622	294582	SHIPPING FEE	
004505	UNITED PARCEL SERVIC	00008E1Y15462	0	2023	2	INV P	1.14	121622	294582	SHIPPING FEE	
							20.14				
047599	CRASH DATA GROUP	INV11681	2300895	2023	3	INV P	40.00	121622	294425	RECONSTRUCTION UPGR	
ACCOUNT TOTAL							277.06				
001100	630500								ELECTRICITY		
003700	MS POWER COMPANY	E2022-1 DEC	0	2023	3	INV P	2,919.71	121622	294510	MISSISSIPPI POWER E	
ACCOUNT TOTAL							2,919.71				
001100	638400								MOTOR VEHICLE EQ. R&M		
003861	PATTERSON AUTO ELECT	81460	2300853	2023	3	INV P	2,433.70	121622	294524	REPAIRS TO UNIT#204	
047725	HI-FI CRUISIN	125740	0	2023	3	INV P	150.00	121622	294463	REPAIRS TO UNIT#217	
ACCOUNT TOTAL							2,583.70				
001100	639800								TOW IN CHARGES		
003389	LARRY'S WRECKER SERV	10400	0	2023	3	INV P	55.00	121622	294487	TOWING OF UNIT#1774	
003389	LARRY'S WRECKER SERV	10422	0	2023	3	INV P	55.00	121622	294487	TOWING OF UNIT#1934	
							110.00				
003869	PEANUTS TOWING SERVI	101152	0	2023	3	INV P	100.00	121622	294525	TOWING OF UNIT#2084	
ACCOUNT TOTAL							210.00				
001100	641700								MOTORCYCLE RENT		
049468	EMAG DATTONA HD LLC	01012023	0	2023	3	INV P	13,500.00	121622	294434	MB # 2021-123 MOTOR	

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3									
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP S	WARRANT	CHECK	DESCRIPTION	
					ACCOUNT TOTAL	13,500.00			
001100	684000			DUES AND MEMBERSHIPS					
002773	F B I NATIONAL ACADE	31599/2023	0	2023	3 INV P	120.00	121622	294439	FBINAA MEMBERSHIP D
003199	INTL ASSN OF CHIEFS	0249987	0	2023	3 INV P	190.00	121622	294471	MEMBERSHIP DUES FOR
					ACCOUNT TOTAL	310.00			
001100	684500			REGISTRATION FEE/TUITION					
049418	THARPE CONSULTING	HPD DEL 1032	0	2023	3 INV P	550.00	121622	294569	REGISTRATION FOR HA
					ACCOUNT TOTAL	550.00			
001100	739900			OTHER EQUIPMENT					
002879	GALL'S LLC	022903816	228478	2023	3 INV P	355.59	121622	294450	UNIFORMS FOR ENTRY
003169	IDEMIA IDENTITY & SE	152992	228787	2023	3 INV P	24,778.00	121622	294467	LIVESCAN FINGERPRIN
					ACCOUNT TOTAL	25,133.59			
					ORG 001100 TOTAL	100,313.35			
001131			JOINT P&F TRNG.						
001131	501000			OTHER EXPENDABLE OFF.SPL					
002709	EATON, ALVIN K (PETT	PC/11/2022	0	2023	3 INV P	15.92	121622	294432	PETTY CASH 11/2022
					ACCOUNT TOTAL	15.92			
001131	559000			OTHER OPERATING MATL/SPLY					
002709	EATON, ALVIN K (PETT	PC/11/2022	0	2023	3 INV P	40.17	121622	294432	PETTY CASH 11/2022
					ACCOUNT TOTAL	40.17			
001131	630000			GAS					
004321	SPIRE	G2022 2 DEC	0	2023	3 INV P	621.17	121622	294567	SPIRE-VARIOUS DEPTS
					ACCOUNT TOTAL	621.17			
					ORG 001131 TOTAL	677.26			
001160			FIRE DIVISION						
001160	512000			MEDICAL SUPPLIES					
004273	SOUTHERN GAS & SUPPL	37377678	2300763	2023	3 INV P	116.66	121622	294558	HFD MEDICAL OXYGEN
					ACCOUNT TOTAL	116.66			
001160	525000			GAS AND OIL					
003918	PINE BELT OIL COMPAN	11/2022	0	2023	3 INV P	19.94	121622	294530	11/22 FLASHMART CHA
					ACCOUNT TOTAL	19.94			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
001160	525700										
003918	PINE BELT OIL COMPAN	11/2022	0	DIESEL FUEL		2023	3	INV P	1,570.68	121622	294530 11/22 FLASHMART CHA
				ACCOUNT TOTAL					1,570.68		
001160	546000										
003818	O'REILLY AUTO PARTS	0943-427070	2300844	MINOR EQUIPMENT		2023	3	INV P	109.94	121622	294517 HFD STA 2 AIR COMP
				ACCOUNT TOTAL					109.94		
001160	559000										
002194	BARDING GENERATOR &	8098	2300769	OTHER OPERATING MATL/SPLY		2023	3	INV P	349.90	121622	294384 HFD BATTERIES FOR N
				ACCOUNT TOTAL					349.90		
001160	560000										
004017	REGIONS CARDHOLDER S	1346 - 11-30-2022	0	BUILDING MATERIALS & SPLY		2023	3	INV P	219.00	121622	294544 1346 - 11-30-2022 C
				ACCOUNT TOTAL					219.00		
001160	560500										
002709	EATON, ALVIN K (PETT PC/11/2022		0	ELECTRICAL SUPPLIES		2023	3	INV P	39.02	121622	294432 PETTY CASH 11/2022
				ACCOUNT TOTAL					39.02		
001160	570000										
003818	O'REILLY AUTO PARTS	0943-426690	2300791	MTR VEHICLE REP. PTS/SPL		2023	3	INV P	163.26	121622	294517 HFD SHOP SUPPLIES U
003818	O'REILLY AUTO PARTS	0943-427070	2300844			2023	3	INV P	75.53	121622	294517 HFD STA 2 AIR COMP
									238.79		
				ACCOUNT TOTAL					238.79		
001160	606000										
002160	AT&T MOBILITY	287273578351X1208225	0	TELEPHONE AND TELEGRAPH		2023	3	INV P	214.13	121622	294380 MB2016-287/WIRELESS
002160	AT&T MOBILITY	287290217384X120522	0			2023	3	INV P	1,410.68	121622	294376 MB2016-287/WIRELESS
									1,624.81		
				ACCOUNT TOTAL					1,624.81		
001160	630000										
004321	SPIRE	G2022 2 DEC	0	GAS		2023	3	INV P	526.39	121622	294567 SPIRE-VARIOUS DEPTS
004321	SPIRE	G2022-28 NOV	0			2023	3	INV P	676.07	121622	294567 SPIRE-STATION #4 &
004321	SPIRE	G2022-8 DEC	0			2023	3	INV P	370.60	121622	294567 SPIRE-VARIOUS DEPT-
									1,573.06		
				ACCOUNT TOTAL					1,573.06		
001160	630500			ELECTRICITY							

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT		CHECK	DESCRIPTION		
003700	MS POWER COMPANY	E2022-1 DEC	0	2023	3	INV P	1,756.74	121622	294510	MISSISSIPPI POWER E		
003873	PEARL RIVER VALLEY E	2022-28 NOV	0	2023	3	INV P	582.70	121622	294526	PEARL RIVE VALLEY E		
004282	SOUTHERN PINE ELECTR	E2022 12/02	0	2023	3	INV P	942.59	121622	294560	SOUTHERN PINE ELECT		
ACCOUNT TOTAL							3,282.03					
001160	635000	BUILDING R&M										
004498	UNDERWOOD DOOR COMPA	15118	2300267	2023	3	INV P	1,370.00	121622	294580	HFD STATION 4 BAY D		
ACCOUNT TOTAL							1,370.00					
001160	638400	MOTOR VEHICLE EQ. R&M										
002565	COURTESY MOTORS INC	313467C	2300176	2023	3	INV P	2,979.63	121622	294423	HFD UNIT # 16965 DI		
004316	SPEEDY PRINTING & SI	30919	2300698	2023	3	INV P	485.00	121622	294566	HFD UNIT #2681 1939		
ACCOUNT TOTAL							3,464.63					
001160	639000	COMMUNICATION EQ. R&M										
002535	COMSOUTH	202314	2300284	2023	3	INV P	1,980.00	121622	294420	HFD BATTERY REPLACE		
ACCOUNT TOTAL							1,980.00					
001160	639400	DISINFECT./EXTERMINATION										
003040	HAVARD PEST CONTROL	2045159	0	2023	3	INV P	75.00	121622	294460	HAVARD PEST CONTROL		
ACCOUNT TOTAL							75.00					
ORG 001160 TOTAL							16,033.46					
001180	LAND DEVEL.ADM.											
001180	535500	WEARING APPAREL										
047040	BOOT COUNTRY	00010000027497	2300602	2023	2	INV P	119.99	121622	294390	BOOTS FOR INSPECTOR		
ACCOUNT TOTAL							119.99					
001180	570000	MTR VEHICLE REP. PTS/SPL										
048827	CARQUEST	14758-19429	2300882	2023	3	INV P	27.66	121622	294402	HOSE FOR UNIT # 159		
ACCOUNT TOTAL							27.66					
001180	602300	ABSTRACTING & RECORDING										
002847	FORREST COUNTY CHANC	133	0	2023	3	INV P	338.00	121622	294447	RECORDING FEES FOR		
047491	LAMAR COUNTY CHANCER	11 01 2022	0	2023	3	INV P	182.00	121622	294482	RECORDING FEES FOR		
ACCOUNT TOTAL							520.00					
001180	606000	TELEPHONE AND TELEGRAPH										
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	924.86	121622	294380	MB2016-287/WIRELESS		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION	
ACCOUNT TOTAL								924.86			
001180	611000				TRAVEL EXPENSE						
004017	REGIONS CARDHOLDER S	1286 - 11-30-2022	0	2023	3	INV P	407.85	121622	294544	1286 11-30-2022 CRE	
ACCOUNT TOTAL								407.85			
001180	638400				MOTOR VEHICLE EQ. R&M						
004514	UNIVERSITY TIRE & SE	206895	2300846	2023	3	INV P	540.23	121622	294583	4 NEW TIRES & FRONT	
004514	UNIVERSITY TIRE & SE	INV206750	2300782	2023	2	INV P	44.95	121622	294583	OIL CHANGE FOR UNIT	
								585.18			
ACCOUNT TOTAL								585.18			
ORG 001180 TOTAL								2,585.54			
001190	P/S CONTRAC.SER										
001190	681500				JAIL EXPENSE						
002851	FORREST CTY SUPERVIS	10.1.22-10.31.22	0	2023	3	INV P	92,330.66	121622	294448	OCTOBER 2022 HOUSIN	
003371	LAMAR CTY SHERIFF	11.1.22-11.30.22	0	2023	3	INV P	60.00	121622	294483	HOUSING OF INMATES	
ACCOUNT TOTAL								92,390.66			
ORG 001190 TOTAL								92,390.66			
001191	TRAFFIC MAINT.										
001191	501000				OTHER EXPENDABLE OFF.SPL						
003809	OFFICE DEPOT INC	275751056001	2300597	2023	2	INV P	56.98	121622	294518	CECIL OFFICE FURNIT	
ACCOUNT TOTAL								56.98			
001191	508000				COMPUTER SUPPLIES						
004017	REGIONS CARDHOLDER S	1286 - 11-30-2022	0	2023	3	INV P	307.60	121622	294544	1286 11-30-2022 CRE	
ACCOUNT TOTAL								307.60			
001191	606000				TELEPHONE AND TELEGRAPH						
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	71.30	121622	294380	MB2016-287/WIRELESS	
ACCOUNT TOTAL								71.30			
001191	630000				GAS						
004321	SPIRE	G2022-8 DEC	0	2023	3	INV P	372.90	121622	294567	SPIRE-VARIOUS DEPT-	
ACCOUNT TOTAL								372.90			
001191	637500				TRAFFIC CONTROL EQ. R&M						
003953	POWELL CONSTRUCTION	4012	0	2023	3	INV P	2,778.00	121622	294535	TRAFFIC POLE REPAIR	

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3													
ACCOUNT/VENDOR				INVOICE		PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
						ACCOUNT TOTAL			2,778.00				
001191 643000						UNIFORM RENT							
002471 CINTAS CORPORATION # 4138581800				0	2023	2	INV	P	25.00	121622	294407	TRAFFIC UNIFORMS	S
002471 CINTAS CORPORATION # 4139304398				0	2023	3	INV	P	25.00	121622	294407	TRAFFIC UNIFORM	SC/
002471 CINTAS CORPORATION # 4140006852				0	2023	3	INV	P	25.00	121622	294407	TRAFFIC UNIFORM	SC
									75.00				
						ACCOUNT TOTAL			75.00				
001191 643500						MOP-MAT-RAG RENT							
002471 CINTAS CORPORATION # 4138581388				0	2023	2	INV	P	7.70	121622	294407	TRAFFIC MATS	SC/8
002471 CINTAS CORPORATION # 4139304144				0	2023	3	INV	P	7.70	121622	294407	TRAFFIC MATS	SC/82
002471 CINTAS CORPORATION # 4140006557				0	2023	3	INV	P	7.70	121622	294407	TRAFFIC MATS	SC/82
									23.10				
						ACCOUNT TOTAL			23.10				
001191 687000						CUSTODIAL SERVICE							
002037 AB SUPPORT SERVICES 4B1010				2300002	2023	2	INV	P	325.00	121622	294361	JANITORIAL CLEANING	
						ACCOUNT TOTAL			325.00				
						ORG 001191 TOTAL			4,009.88				
001201 STREET DIV.													
001201 540000						ASPHALT & ASPHALT PROD.							
004586 WARREN PAVING INC 69699				2300615	2023	3	INV	P	341.94	121622	294590	ASPHALT FOR VARIOUS	
004586 WARREN PAVING INC 69843				0	2023	3	INV	P	278.58	121622	294590	ASPHALT VARIOUS LOC	
004586 WARREN PAVING INC 70017				0	2023	3	INV	P	653.82	121622	294590	ASPHALT/VARIOUS LOC	
004586 WARREN PAVING INC 70023				0	2023	3	INV	P	222.55	121622	294590	ASPHALT/PO 2300615	
004586 WARREN PAVING INC 70029				0	2023	3	INV	P	576.66	121622	294590	ASPHALT/PO 2300615	
004586 WARREN PAVING INC 70120				0	2023	3	INV	P	324.07	121622	294590	ASPHALT/PO 2300615	
004586 WARREN PAVING INC 70176				0	2023	3	INV	P	234.72	121622	294590	ASPHALT/PO 2300615	
004586 WARREN PAVING INC 70209				0	2023	3	INV	P	464.58	121622	294590	ASPHALT/PO 2300615	
004586 WARREN PAVING INC 70345				0	2023	3	INV	P	480.82	121622	294590	ASPHALT/PO#2300615	
004586 WARREN PAVING INC 70352				0	2023	3	INV	P	319.19	121622	294590	ASPHALT/ PO 2300615	
004586 WARREN PAVING INC 70481				0	2023	3	INV	P	321.63	121622	294590	ASPHALT/REF PO 2300	
004586 WARREN PAVING INC 70489				0	2023	3	INV	P	242.85	121622	294590	ASPHALT FOR VARIOUS	
									4,461.41				
						ACCOUNT TOTAL			4,461.41				
001201 540500						CONCRETE, CEMENT, ETC.							
047525 DELTA INDUSTRIES 782473				2300443	2023	3	INV	P	455.00	121622	294428	CONCRETE 3000 PSI	
047525 DELTA INDUSTRIES 782715				2300443	2023	3	INV	P	590.00	121622	294428	CONCRETE 3000 PSI	
047525 DELTA INDUSTRIES 784003				2300443	2023	3	INV	P	845.00	121622	294428	CONCRETE 3000 PSI	
									1,890.00				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3				ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
ACCOUNT TOTAL											1,890.00		
001201	559000												
004300	SOUTHERN WATERWORKS	92757			2300820	2023	3	INV	P	291.53	121622		294564 DRAINAGE PRJCT @ 40
ACCOUNT TOTAL											291.53		
001201	560500												
002901	GILKEY ELECTRIC SUPP	366032			2300885	2023	2	INV	P	73.31	121622		294451 EMERGENCY EXIT/PW
ACCOUNT TOTAL											73.31		
001201	570000												
002166	AUTO ARMATURE SERVIC	29840			2300674	2023	2	INV	P	349.90	121622		294381 BATTERY/UNIT #16081
002166	AUTO ARMATURE SERVIC	29923			2300542	2023	2	INV	P	199.95	121622		294381 UNIT 17017 MTP65 BA
											549.85		
048827	CARQUEST	14758-19402			2300891	2023	3	INV	P	1,307.50	121622		294402 PARTS/UNIT #16239
ACCOUNT TOTAL											1,857.35		
001201	575500												
002083	ALLBRITTON CHAIN SAW	94551			2300607	2023	3	INV	P	61.98	121622		294366 WEED EATER REPAIR/H
ACCOUNT TOTAL											61.98		
001201	604900												
003186	INSTALLATION PLUS	10668			0	2023	2	INV	P	775.00	121622		294468 ANNUAL DEQ TEST, LI
047034	BUGZ LAWN CARE	16			0	2023	3	INV	P	1,200.00	121622		294394 LANDSCAPE MAINTENAN
048676	PROCARE LANDS	8			0	2023	2	INV	P	3,000.00	121622		294538 MAINTENANCE OF CLAS
048825	MCKINNEY EQUIPMENT	0107046			2300824	2023	3	INV	P	74.75	121622		294499 ESTIMATE/TROUBLESHO
048966	MARTINEZ DAVID J	107			0	2023	2	INV	P	1,000.00	121622		294496 WEEKLY MAINTENANCE
ACCOUNT TOTAL											6,049.75		
001201	612000												
002569	COVINGTON SALES & SE	94840			2300500	2023	3	INV	P	350.00	121622		294424 GUTTER BROOMS/UNIT
ACCOUNT TOTAL											350.00		
001201	636099												
047056	WARREN PAVING INC	2300525.1			2300525	2023	3	INV	P	148,783.33	121622		294591 PAVING SULLIVAN DRI
ACCOUNT TOTAL											148,783.33		
001201	638400												
MOTOR VEHICLE EQ. R&M													

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT		CHECK	DESCRIPTION		
002035	AAMCO TRANSMISSION (	I145324	2300778	2023	2	INV P	1,156.12	121622	294360	REPAIRS/UNIT #20053		
002569	COVINGTON SALES & SE	94840	2300500	2023	3	INV P	3,024.00	121622	294424	GUTTER BROOMS/UNIT		
004597	WATERS INTERNATIONAL	08P841770	2300458	2023	2	INV P	902.07	121622	294593	REPAIRS/UNIT 16082		
004597	WATERS INTERNATIONAL	08S828993	2300444	2023	3	INV P	4,066.23	121622	294593	REPAIRS ON UNIT 160		
							4,968.30					
047021	HINTON, ANTHONY	000123	2300899	2023	3	INV P	370.00	121622	294464	REPAIRS/UNIT 16082		
ACCOUNT TOTAL							9,518.42					
001201	638700	AGRICULTURAL EQ. R&M										
003380	LANCASTER'S MACHINE	25347	2300807	2023	3	INV P	915.00	121622	294484	REPAIRS/21690, 2037		
ACCOUNT TOTAL							915.00					
001201	639900	OTHER REPAIRS AND MAINT.										
002905	GILLILANDS ELECTRONI	9420	2300164	2023	3	INV P	1,100.00	121622	294452	REPAIRS ON 2 DOORS		
ACCOUNT TOTAL							1,100.00					
001201	684500	REGISTRATION FEE/TUITION										
002111	AMERICAN PUBLIC WORK	001	2300135	2023	2	INV P	225.00	121622	294369	R.PERKINS TRL ADV.		
ACCOUNT TOTAL							225.00					
ORG 001201 TOTAL							175,577.08					
001202	STREET LIGHTS											
001202	630500	ELECTRICITY										
003700	MS POWER COMPANY	E2022-1 DEC	0	2023	3	INV P	3,541.34	121622	294510	MISSISSIPPI POWER E		
003700	MS POWER COMPANY	E2022-29 NOV	0	2023	3	INV P	98.10	121622	294510	MISSISSIPPI POWER E		
003700	MS POWER COMPANY	E2022-DEC 1	0	2023	3	INV P	144.88	121622	294510	MISSISSIPPI POWER E		
							3,784.32					
003873	PEARL RIVER VALLEY E	2022 11.18.22	0	2023	3	INV P	1,268.59	121622	294526	PRVEPA VARIOUS DEPT		
003873	PEARL RIVER VALLEY E	2022 30 NOV	0	2023	3	INV P	396.00	121622	294526	PEARL RIVER VALLEY		
003873	PEARL RIVER VALLEY E	2022-28 NOV	0	2023	3	INV P	2,289.65	121622	294526	PEARL RIVE VALLEY E		
003873	PEARL RIVER VALLEY E	2022-29 NOV	0	2023	3	INV P	331.63	121622	294526	PEARL RIVER VALLEY		
							4,285.87					
ACCOUNT TOTAL							8,070.19					
ORG 001202 TOTAL							8,070.19					
001203	ENGR/PUBLIC SER											
001203	508000	COMPUTER SUPPLIES										
004017	REGIONS CARDHOLDER S	1286 - 11-30-2022	0	2023	3	INV P	307.60	121622	294544	1286 11-30-2022 CRE		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3									
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
ACCOUNT TOTAL							307.60		
001203	601500			ENGINEERING					
004197	SHOWS DEARMAN & WAIT	23145	0	2023	3	INV P	3,977.50	121622	294554 MB# 2012-1/34 GENER
004197	SHOWS DEARMAN & WAIT	23147	0	2023	3	INV P	7,442.50	121622	294554 MB# 2012-1/34 FIRE
004197	SHOWS DEARMAN & WAIT	23148	0	2023	3	INV P	7,612.50	121622	294554 MB# 2012-1/34 2010
							19,032.50		
ACCOUNT TOTAL							19,032.50		
001203	606000			TELEPHONE AND TELEGRAPH					
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	218.06	121622	294380 MB2016-287/WIRELESS
002160	AT&T MOBILITY	287289913717X120522	0	2023	3	INV P	52.06	121622	294379 MB2016-287/WIRELESS
							270.12		
ACCOUNT TOTAL							270.12		
001203	613000			MESSENGER/EXPRESS SERV.					
002798	FEDERAL EXPRESS	7-934-18360	0	2023	3	INV P	30.54	121622	294443 MDEQ PACKAGE
002798	FEDERAL EXPRESS	7-968-78139	0	2023	3	INV P	79.10	121622	294443 CONSTRUCTION AGREEM
							109.64		
ACCOUNT TOTAL							109.64		
001203	630000			GAS					
004321	SPIRE	G2022 2 DEC	0	2023	3	INV P	149.88	121622	294567 SPIRE-VARIOUS DEPTS
ACCOUNT TOTAL							149.88		
001203	687000			CUSTODIAL SERVICE					
002037	AB SUPPORT SERVICES	4B1010	2300002	2023	2	INV P	425.00	121622	294361 JANITORIAL CLEANING
ACCOUNT TOTAL							425.00		
ORG 001203 TOTAL							20,294.74		
SHOP DIVISION									
001204	559000			OTHER OPERATING MATL/SPLY					
002795	FASTENAL COMPANY	MSHAT235461	2300322	2023	2	INV P	186.68	121622	294441 PUBLIC WORK SHOP/SH
ACCOUNT TOTAL							186.68		
001204	570000			MTR VEHICLE REP. PTS/SPL					
048827	CARQUEST	14758-19470	2300910	2023	3	INV P	31.12	121622	294402 MATERIAL FOR PW SHO
ACCOUNT TOTAL							31.12		
001204	630000			GAS					

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
004321	SPIRE	G2022 2 DEC	0	2023 3	INV	P	1,679.55	121622	294567	SPIRE-VARIOUS DEPTS
ACCOUNT TOTAL							1,679.55			
001204	642500			CYLINDER RENT						
002071	AIRGAS USA LLC (NORD 9993059618		0	2023 3	INV	P	418.11	121622	294364	AIRGAS CYLINDER REN
ACCOUNT TOTAL							418.11			
001204	643000			UNIFORM RENT						
002471	CINTAS CORPORATION # 4139304337		0	2023 2	INV	P	61.89	121622	294406	PUBLIC WORK SHOP/SC
002471	CINTAS CORPORATION # 4140006788		0	2023 3	INV	P	90.21	121622	294406	UNIFORM RENTAL/SC#8
							152.10			
ACCOUNT TOTAL							152.10			
ORG 001204 TOTAL							2,467.56			
001205				G O & F S DIV.						
001205	604900			OTHER PROFESSIONAL SERV.						
003186	INSTALLATION PLUS	10670	0	2023 2	INV	P	75.00	121622	294468	MONTHLY MONITORING
048825	MCKINNEY EQUIPMENT	0107046	2300824	2023 3	INV	P	384.00	121622	294499	ESTIMATE/TROUBLESHO
ACCOUNT TOTAL							459.00			
001205	606000			TELEPHONE AND TELEGRAPH						
002160	AT&T MOBILITY	287273578351X1208225	0	2023 3	INV	P	481.49	121622	294380	MB2016-287/WIRELESS
002160	AT&T MOBILITY	287290252011X120522	0	2023 3	INV	P	1,661.83	121622	294377	MB2016-287/WIRELESS
							2,143.32			
ACCOUNT TOTAL							2,143.32			
ORG 001205 TOTAL							2,602.32			
001206				DRAINAGE DIV.						
001206	729500			OTHER IMPROVEMENTS						
004058	RJM MCQUEEN CONTRACT 2719		0	2023 3	INV	P	21,255.00	121622	294550	MB 2022-680 MAMIE S
004058	RJM MCQUEEN CONTRACT 2721		0	2023 3	INV	P	5,202.26	121622	294550	MB 2022-680 ARLEDGE
							26,457.26			
004197	SHOWS DEARMAN & WAIT	23133	0	2023 3	INV	P	1,812.38	121622	294554	MB# 2012-1/34 DRAIN
ACCOUNT TOTAL							28,269.64			
ORG 001206 TOTAL							28,269.64			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
001207 CONSTRUCTION												
001207 559000 OTHER OPERATING MATL/SPLY												
002714	ECONOMY	SUPPLY	CO	088741	2300827	2023	2	INV	P	55.80	121622	294433 STAPLER AND STAPLER
ACCOUNT TOTAL										55.80		
001207 560000 BUILDING MATERIALS & SPLY												
002714	ECONOMY	SUPPLY	CO	088587	2300812	2023	2	INV	P	120.00	121622	294433 WAVERLY BOARD/CONST
ACCOUNT TOTAL										120.00		
001207 560500 ELECTRICAL SUPPLIES												
002901	GILKEY	ELECTRIC	SUPP	365552	2300779	2023	2	INV	P	82.16	121622	294451 ZIP TIES FOR CHRIST
002901	GILKEY	ELECTRIC	SUPP	365755	2300828	2023	2	INV	P	468.34	121622	294451 LIGHTS FOR PAVILLIO
										550.50		
ACCOUNT TOTAL										550.50		
001207 570000 MTR VEHICLE REP. PTS/SPL												
004514	UNIVERSITY	TIRE & SE	INV	206821	2300817	2023	2	INV	P	285.94	121622	294583 TIRES FOR UNIT#1900
ACCOUNT TOTAL										285.94		
001207 604900 OTHER PROFESSIONAL SERV.												
002523	COMCAST	CABLEVISION		112722	0	2023	3	INV	P	141.11	121622	294419 CABLE FOR 125 WALNU
003191	INTERFACE	SECURITY	S	20361534	0	2023	2	INV	P	46.99	121622	294469 SECURITY/TWIN FORK
ACCOUNT TOTAL										188.10		
001207 606000 TELEPHONE AND TELEGRAPH												
002160	AT&T	MOBILITY		287273578351X1208225	0	2023	3	INV	P	122.60	121622	294380 MB2016-287/WIRELESS
ACCOUNT TOTAL										122.60		
001207 639100 DOWNTOWN LIGHTS R&M												
002672	DOLEAC	ELECTRIC	CO	I 61735-10	0	2023	3	INV	P	981.52	121622	294430 MB 2021-87 LIGHTING
002672	DOLEAC	ELECTRIC	CO	I 61735-11	0	2023	3	INV	P	243.12	121622	294430 MB 2021-87 LIGHTING
002672	DOLEAC	ELECTRIC	CO	I 61735-12	0	2023	3	INV	P	553.47	121622	294430 MB 2021-87 LIGHTING
002672	DOLEAC	ELECTRIC	CO	I 61735-8	0	2023	3	INV	P	9,926.37	121622	294430 MB 2021-87 LIGHTING
002672	DOLEAC	ELECTRIC	CO	I 61735-9	0	2023	3	INV	P	2,705.08	121622	294430 MB 2021-87 LIGHTING
										14,409.56		
ACCOUNT TOTAL										14,409.56		
001207 642500 CYLINDER RENT												
002071	AIRGAS	USA LLC (NORD	9993059619		0	2023	3	INV	P	207.71	121622	294364 CYLINDER RENTAL/CON
ACCOUNT TOTAL										207.71		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR TYP S			WARRANT		CHECK	DESCRIPTION
001207	643000				UNIFORM RENT						
002471	CINTAS CORPORATION # 4139304322				0	2023	2	INV P	63.94	121622	294406 UNIFORM RENTAL/SC#8
002471	CINTAS CORPORATION # 4140006685				0	2023	3	INV P	51.33	121622	294407 UNIFORM RENTAL/CONS
									115.27		
ACCOUNT TOTAL									115.27		
ORG 001207 TOTAL									16,055.48		
001220	SANITATION DIV.										
001220	546000				MINOR EQUIPMENT						
002901	GILKEY ELECTRIC SUPP 365792				2300821	2023	3	INV P	196.65	121622	294451 REPAIR OF RECYCLE S
ACCOUNT TOTAL									196.65		
001220	570000				MTR VEHICLE REP. PTS/SPL						
002367	BURROUGHS DIESEL INC 805365				2300757	2023	2	INV P	71.68	121622	294395 UNIT 21727 HOOD LAT
002709	EATON, ALVIN K (PETT PC/11/2022				0	2023	3	INV P	42.52	121622	294432 PETTY CASH 11/2022
002739	EMPIRE TRUCK SALES(J CE006203657:01				2300795	2023	2	INV P	111.82	121622	294435 UNIT 20072 FLUID SE
002739	EMPIRE TRUCK SALES(J CE006203775:1				2300836	2023	3	INV P	188.75	121622	294435 UNIT 20072 PRESSURE
002739	EMPIRE TRUCK SALES(J RE006037013:01				2300634	2023	2	INV P	11,617.37	121622	294435 TEAR DOWN & REPAIR
002739	EMPIRE TRUCK SALES(J RE06037144:01				2300980	2023	3	INV P	866.34	121622	294435 REPAIRS AND LABOR F
									12,784.28		
004465	TRUCKPRO LLC 039-0710217				2300599	2023	3	INV P	3,017.77	121622	294576 BRAKE KITS FOR SANI
004467	TRUCKWORX-JACKSON 0530633129				2300772	2023	2	INV P	87.02	121622	294577 LAMP LIGHTS FOR SAN
004583	WARING OIL CO (GULFP 188124				2300271	2023	2	INV P	3,996.00	121622	294589 CHEVRON AW68 FOR SA
047021	HINTON, ANTHONY 000122				2300826	2023	2	INV P	365.00	121622	294464 SERVICE CALL FOR UN
ACCOUNT TOTAL									20,364.27		
001220	604900				OTHER PROFESSIONAL SERV.						
002523	COMCAST CABLEVISION 11282022				0	2023	2	INV P	1.98	121622	294419 ACCT#83964107308986
ACCOUNT TOTAL									1.98		
001220	638400				MOTOR VEHICLE EQ. R&M						
002252	BIG IRON DIESEL REPA R05150				2300852	2023	3	INV P	6,100.66	121622	294385 TEARDOWN & REPAIR U
002739	EMPIRE TRUCK SALES(J RE06037144:01				2300980	2023	3	INV P	757.60	121622	294435 REPAIRS AND LABOR F
004297	SOUTHERN TIRE MART (2520109158				2300829	2023	2	INV P	339.00	121622	294562 UNITS 19877 SERVICE
004297	SOUTHERN TIRE MART (2520109985				2300706	2023	2	INV P	1,218.48	121622	294562 UNIT 21388 STEER TI

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3				ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
											1,557.48		
ACCOUNT TOTAL											8,415.74		
001220	643000					UNIFORM RENT							
002471	CINTAS CORPORATION # 4139304648	0	2023	3	INV	P	202.55	121622	294406	SC8200044758-SANIT			
002471	CINTAS CORPORATION # 4140006615	0	2023	3	INV	P	37.30	121622	294407	SC8200044758-SANIT.			
002471	CINTAS CORPORATION # 4140007020	0	2023	3	INV	P	240.98	121622	294406	SC 8200044758 -SANI			
											480.83		
ACCOUNT TOTAL											480.83		
001220	643500					MOP-MAT-RAG RENT							
002471	CINTAS CORPORATION # 4131001611	0	2023	2	INV	P	35.04	121622	294407	SC8200044758-SANIT.			
002471	CINTAS CORPORATION # 4139304215	0	2023	3	INV	P	37.30	121622	294407	SC8200044758 SANIT.			
											72.34		
ACCOUNT TOTAL											72.34		
001220	688000					TIPPING FEES							
002007	98 WASTE LLC 4782	0	2023	3	INV	P	14,560.00	121622	294358	MB#2016-322-SANITAT			
002007	98 WASTE LLC 4783	0	2023	3	INV	P	11,473.00	121622	294358	MB2016-322 CODE ENF			
002007	98 WASTE LLC 4784	0	2023	3	INV	P	2,632.00	121622	294358	MB2016-322 CODE ENF			
											28,665.00		
003798	NORTHGATE LAND & TIM 975	0	2023	3	INV	P	62.00	121622	294516	CODE ENF. FIELD DIR			
003920	PINE BELT REGIONAL S 7046	0	2023	3	INV	P	42,118.28	121622	294532	MB197-1/451-454 SAN			
004591	WASTE MANAGEMENT OF 0013469-2526-4	0	2023	3	INV	P	1,355.23	121622	294592	MB2003-5/484 SANIT.			
ACCOUNT TOTAL											72,200.51		
001220	689000					RECYCLING FEES							
004030	REPUBLIC SERVICES IN 0991-000342355	2300081	2023	3	INV	P	13,607.17	121622	294546	OPEN P.O.-RECYCLING			
004030	REPUBLIC SERVICES IN 0991-00034235A	0	2023	3	INV	P	3,918.67	121622	294546	MB2020-292(REF: P.O			
											17,525.84		
ACCOUNT TOTAL											17,525.84		
ORG 001220 TOTAL											119,258.16		
001250	HEALTH DIVISION												
001250	513000					CHEMICALS							
002443	CERTIFIED LABORATORI 8034067	2300814	2023	3	INV	P	4,831.28	121622	294403	TCC-1000-(CERTALEX)			
ACCOUNT TOTAL											4,831.28		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3										
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
001250	570000			MTR VEHICLE REP.	PTS/SPL					
048827	CARQUEST	14758-19206	2300834	2023 3	INV	P	98.13	121622	294402	UNIT 17017 WIPER MO
ACCOUNT TOTAL							98.13			
001250	575500			AGRICLTR L REPAIR	PTS/SPL					
002304	BRACKMAN MOWER WAREH	104883	2300673	2023 2	INV	P	237.72	121622	294391	FILTER/LAWN MOWERS
ACCOUNT TOTAL							237.72			
ORG 001250 TOTAL							5,167.13			
001260	ANIMAL CONTROL									
001260	699900			SERVICES NOT SPECIFIED						
004283	SOUTHERN PINES ANIMA	2022-09	0	2023 3	INV	P	15,000.00	121622	294561	MB#2022-678 HOUSING
004283	SOUTHERN PINES ANIMA	2022.10	0	2023 3	INV	P	15,000.00	121622	294561	MB#2022-678 HOUSING
004283	SOUTHERN PINES ANIMA	2022.11	0	2023 3	INV	P	15,000.00	121622	294561	MB#2022.678 HOUSING
004283	SOUTHERN PINES ANIMA	2022.12	0	2023 3	INV	P	15,000.00	121622	294561	MB#2022.678 HOUSING
							60,000.00			
ACCOUNT TOTAL							60,000.00			
ORG 001260 TOTAL							60,000.00			
001402	ECONOMIC DEV.									
001402	604900			OTHER PROFESSIONAL SERV.						
002996	HANCO CORP	2022-29	229492	2023 3	INV	P	4,999.99	121622	294457	PUBLIC SAFETY COMPL
004058	RJM MCQUEEN CONTRACT	2723	226249	2023 3	INV	P	52,849.00	121622	294550	MAIN ST SIDEWALK RE
ACCOUNT TOTAL							57,848.99			
ORG 001402 TOTAL							57,848.99			
001551	AIRPORT DIV.									
001551	630000			GAS						
004321	SPIRE	G2022 2 DEC	0	2023 3	INV	P	75.27	121622	294567	SPIRE-VARIOUS DEPTS
ACCOUNT TOTAL							75.27			
ORG 001551 TOTAL							75.27			
001553	CEMETERY DIV									
001553	502000			MINOR OFFICE EQUIP/FURN.						
003825	OWENS BUSINESS MACHI	455736	0	2023 3	INV	P	59.60	121622	294521	COPIER MAINTENANCE
ACCOUNT TOTAL							59.60			
001553	545000			HAND TOOLS						
002846	FORESTRY SUPPLIERS I	319849-00	2300675	2023 2	INV	P	153.75	121622	294446	SUPPLIES FOR TREE C

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3														
ACCOUNT/VENDOR				INVOICE				PO	YEAR/PR TYP S		WARRANT	CHECK	DESCRIPTION	
								ACCOUNT TOTAL		153.75				
001553	546000			MINOR EQUIPMENT										
002846	FORESTRY SUPPLIERS I	319849-00		2300675	2023	2	INV P		289.00	121622		294446	SUPPLIES FOR TREE C	
								ACCOUNT TOTAL		289.00				
001553	570000			MTR VEHICLE REP. PTS/SPL										
003961	POWER HOUSE TOOLS &	220000015849		2300061	2023	3	INV P		69.90	121622		294537	MOTOR VEHICLE PARTS	
								ACCOUNT TOTAL		69.90				
001553	575500			AGRICLTRL REPAIR PTS/SPL										
003961	POWER HOUSE TOOLS &	220000015402		2300056	2023	3	INV P		440.00	121622		294537	AGRICULTURE SUPPLIE	
003961	POWER HOUSE TOOLS &	220000015849		2300061	2023	3	INV P		482.91	121622		294537	MOTOR VEHICLE PARTS	
										922.91				
004499	UNDERWOOD OUTDOOR PO	118081		2300876	2023	3	INV P		137.00	121622		294581	AGRICULTURE SUPPLIE	
								ACCOUNT TOTAL		1,059.91				
001553	604900			OTHER PROFESSIONAL SERV.										
003634	MOLLY MAID	1222		0	2023	3	INV P		245.00	121622		294505	MB#2005-2/267 CLEAN	
								ACCOUNT TOTAL		245.00				
001553	606000			TELEPHONE AND TELEGRAPH										
002160	AT&T MOBILITY	287273578351X1208225	0		2023	3	INV P		114.60	121622		294380	MB2016-287/WIRELESS	
								ACCOUNT TOTAL		114.60				
001553	611000			TRAVEL EXPENSE										
003846	PARKER, ANDY	9585-OT		0	2023	2	INV P		423.00	121622		294523	TRAVEL ADVANCE FOR	
								ACCOUNT TOTAL		423.00				
001553	612000			FREIGHT										
002846	FORESTRY SUPPLIERS I	319849-00		2300675	2023	2	INV P		62.28	121622		294446	SUPPLIES FOR TREE C	
								ACCOUNT TOTAL		62.28				
001553	630000			GAS										
004321	SPIRE	G2022 2 DEC		0	2023	3	INV P		115.77	121622		294567	SPIRE-VARIOUS DEPTS	
								ACCOUNT TOTAL		115.77				
001553	630500			ELECTRICITY										
003873	PEARL RIVER VALLEY E	2022-28 NOV		0	2023	3	INV P		51.50	121622		294526	PEARL RIVE VALLEY E	
								ACCOUNT TOTAL		51.50				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3									
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
001553	643000								
002471	CINTAS CORPORATION # 4137225012		0	2023	2	INV P	35.83 121622	294407	ST. CONT#8200044758
						ACCOUNT TOTAL	35.83		
001553	684000								
004017	REGIONS CARDHOLDER S 1346 - 11-30-2022		0	2023	3	INV P	165.00 121622	294544	1346 - 11-30-2022 C
						ACCOUNT TOTAL	165.00		
001553	684500								
003976	PROFESSIONAL ARBORTI 10012022		2300800	2023	3	INV P	150.00 121622	294539	CONFERENCE REGISTRA
						ACCOUNT TOTAL	150.00		
			ORG 001553			TOTAL	2,995.14		
FUND 001 REVENUES				TOTAL:		1,305,885.94			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3																			
ACCOUNT/VENDOR				INVOICE		PO		YEAR/PR TYP S		WARRANT		CHECK		DESCRIPTION					
002300				PKS/REC-RECREATION MAINT. DIV.															
002300 513000				CHEMICALS															
047024		GREENPOINT AG HOLDIN		1538759	2300487	2023	3	INV	P	122.03	121622	294454	P&R TOWN SQUARE PAR						
047024		GREENPOINT AG HOLDIN		1539833	2300526	2023	3	INV	P	3,848.63	121622	294454	P&R ALL BALLFIELDS-						
										3,970.66									
ACCOUNT TOTAL										3,970.66									
002300 525000				GAS AND OIL															
001002		CITY OF HATTIESBURG		11/22 FUND 2	0	2023	3	INV	P	5,979.93	121622	294409	TRF FUEL USAGE 11/1						
ACCOUNT TOTAL										5,979.93									
002300 525700				DIESEL FUEL															
001002		CITY OF HATTIESBURG		11/22 FUND 2	0	2023	3	INV	P	495.51	121622	294409	TRF FUEL USAGE 11/1						
ACCOUNT TOTAL										495.51									
002300 544000				HORT./LANDSCAPING SPPLY.															
002492		CLEMTS HARDWARE		129741	2300537	2023	3	INV	P	370.93	121622	294414	P&R GROUNDS- SEED S						
002507		COLEMAN NURSERY		0537968	2300702	2023	3	INV	P	300.00	121622	294416	P&R TSP/MOBILE ST-C						
004547		VESELY'S NURSERY		02300806	2300806	2023	3	INV	P	340.00	121622	294588	P&R TSP CHRISTMAS T						
004547		VESELY'S NURSERY		02300900	2300900	2023	3	INV	P	1,462.00	121622	294588	P&R COMM CENTERS-FA						
										1,802.00									
047024		GREENPOINT AG HOLDIN		1518571	2300024	2023	3	INV	P	146.38	121622	294454	P&R DOWNTOWN-RYE GR						
047024		GREENPOINT AG HOLDIN		1538759	2300487	2023	3	INV	P	204.00	121622	294454	P&R TOWN SQUARE PAR						
										350.38									
ACCOUNT TOTAL										2,823.31									
002300 551000				RECREATIONAL SUPPLIES															
002709		EATON, ALVIN K (PETT PC/11/2022		0	2023	3	INV	P	28.89	121622	294432	PETTY CASH 11/2022							
002832		FLOWERS BY MARIAM		11152022	2300663	2023	3	INV	P	1,100.00	121622	294444	P&R TSP-CHRISTMAS B						
004017		REGIONS CARDHOLDER S		9492 - 11-30-2022	0	2023	3	INV	P	279.51	121622	294544	9492 - 11-30-2022 C						
ACCOUNT TOTAL										1,408.40									
002300 559000				OTHER OPERATING MATL/SPLY															
002714		ECONOMY SUPPLY CO		086663	2300488	2023	3	INV	P	58.95	121622	294433	P&R GRNDS MAINT-WAT						
ACCOUNT TOTAL										58.95									
002300 560000				BUILDING MATERIALS & SPLY															

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION		
002714	ECONOMY SUPPLY CO	087429	2300548	2023	3	INV P	119.40 121622	294433	P&R- VETERANS BUILD		
ACCOUNT TOTAL							119.40				
002300	570000			MTR	VEHICLE	REP.	PTS/SPL				
002709	EATON, ALVIN K (PETT	PC/11/2022	0	2023	3	INV P	11.91 121622	294432	PETTY CASH 11/2022		
003246	JERRY'S AUTOMOTIVE R	22036	2300713	2023	3	INV P	463.79 121622	294475	P&R TRUCK UNIT 1856		
004299	SOUTHERN TIRE MART L	2520110169	2300771	2023	3	INV P	602.45 121622	294563	P&R TRK UNIT 21613-		
ACCOUNT TOTAL							1,078.15				
002300	575000			COMMUNICATION	REPAIR	PTS					
002535	COMSOUTH	202397	2300715	2023	3	INV P	150.00 121622	294420	P&R RADIO BATTERY		
002709	EATON, ALVIN K (PETT	PC/11/2022	0	2023	3	INV P	5.00 121622	294432	PETTY CASH 11/2022		
ACCOUNT TOTAL							155.00				
002300	575500			AGRICLTRL	REPAIR	PTS/SPL					
002083	ALLBRITTON CHAIN SAW	94545	2300802	2023	3	INV P	164.83 121622	294366	P&R GRNDS MAINT-CHA		
003843	PARISH TRACTOR (HATT	W01469	2300096	2023	3	INV P	3,680.53 121622	294522	P&R TRACTOR 21788-S		
ACCOUNT TOTAL							3,845.36				
002300	604900			OTHER PROFESSIONAL	SERV.						
002275	BLUE DOLPHIN POOLS	47645	0	2023	3	INV P	840.00 121622	294386	PR MNTHLY MAINT VET		
ACCOUNT TOTAL							840.00				
002300	606000			TELEPHONE AND	TELEGRAPH						
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV P	506.56 121622	294380	MB2016-287/WIRELESS		
ACCOUNT TOTAL							506.56				
002300	630500			ELECTRICITY							
003700	MS POWER COMPANY	E2022-1 DEC	0	2023	3	INV P	59.69 121622	294510	MISSISSIPPI POWER E		
ACCOUNT TOTAL							59.69				
002300	635700			PLUMBING EQUIPMENT	R&M						
003905	PIERCE PLUMBING INC	20773522	2300676	2023	3	INV P	1,057.69 121622	294527	P&R EASTSIDE PARK-P		
ACCOUNT TOTAL							1,057.69				
002300	638400			MOTOR VEHICLE	EQ.	R&M					
002169	AUTOMOTIVE GLASS SPE	I253424	2300721	2023	3	INV P	345.00 121622	294382	P&R TRUCK UNIT 2041		
003246	JERRY'S AUTOMOTIVE R	22036	2300713	2023	3	INV P	278.66 121622	294475	P&R TRUCK UNIT 1856		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
004297	SOUTHERN TIRE MART (	2520109718	2300719	2023	3	INV	P		39.95 121622	294562	P&R TRUCK UNIT 2175
004299	SOUTHERN TIRE MART L	2520110169	2300771	2023	3	INV	P		93.00 121622	294563	P&R TRK UNIT 21613-
ACCOUNT TOTAL									756.61		
002300	638700			AGRICULTURAL EQ. R&M							
003843	PARISH TRACTOR (HATT W01469		2300096	2023	3	INV	P		1,244.32 121622	294522	P&R TRACTOR 21788-S
004297	SOUTHERN TIRE MART (	2520107138	2300720	2023	3	INV	P		22.23 121622	294562	P&R MOWER UNIT 9603
ACCOUNT TOTAL									1,266.55		
002300	643000			UNIFORM RENT							
002471	CINTAS CORPORATION # 4139060553		0	2023	3	INV	P		181.72 121622	294406	PR-GRNDS UNIFORM RE
002471	CINTAS CORPORATION # 4139753340		0	2023	3	INV	P		161.30 121622	294406	PR GRNDS UNIFORM RE
									343.02		
ACCOUNT TOTAL									343.02		
002300	644900			OTHER RENT							
002071	AIRGAS USA LLC (NORD 9993059621		0	2023	3	INV	P		87.11 121622	294364	PR GRNDS MAINT-CYLI
002471	CINTAS CORPORATION # 4139060155		0	2023	3	INV	P		29.11 121622	294407	PR GRNDS MAT RENTAL
002471	CINTAS CORPORATION # 4139752949		0	2023	3	INV	P		29.11 121622	294407	PR GRNDS MAT RENTAL
									58.22		
004281	SOUTHERN ON SITE STO	97570	2300544	2023	3	INV	P		200.00 121622	294559	P&R EASTSIDE PARK-R
ACCOUNT TOTAL									345.33		
002300	684500			REGISTRATION FEE/TUITION							
004517	USA BOXING-SOUTHERN	790007	0	2023	3	INV	P		100.00 121622	294584	PR UNETTA GYM-BOXIN
ACCOUNT TOTAL									100.00		
002300	687000			CUSTODIAL SERVICE							
047011	JANI-KING OF SOUTH E	C12220009	2300340	2023	3	INV	P		521.00 121622	294473	TWO QUOTE - JANITOR
ACCOUNT TOTAL									521.00		
002300	699900			SERVICES NOT SPECIFIED							
002472	CINTAS FIRST AID J71	5134514367	0	2023	3	INV	P		35.84 121622	294408	PR GRNDS FIRST AID
002777	FAGAN TREE AND SPRAY	3926	2300573	2023	3	INV	P		4,000.00 121622	294440	P&R ALL BALLFIELDS-
003380	LANCASTER'S MACHINE	25344	2300773	2023	3	INV	P		250.00 121622	294484	P&R KAMPER PARK-BOA
047187	FOUR SEASONS LAWN	13746	0	2023	3	INV	P		4,778.00 121622	294449	PR- HWY 49 LAWN MAI
047187	FOUR SEASONS LAWN	14001	0	2023	3	INV	P		530.00 121622	294449	PR 38TH AVE LAWN MA

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION		
047187	FOUR SEASONS LAWN	14172		0	2023	3	INV P	325.00	121622	294449	PR	HARDY-LAWN MAINT
								5,633.00				
					ACCOUNT TOTAL			9,918.84				
					ORG 002300	TOTAL		35,649.96				
002315	PKS/REC-REC.ADMIN/COM.REL.											
002315	525000				GAS AND OIL							
001002	CITY OF HATTIESBURG	11/22 FUND 2		0	2023	3	INV P	66.11	121622	294409	TRF	FUEL USAGE 11/1
					ACCOUNT TOTAL			66.11				
002315	551000				RECREATIONAL SUPPLIES							
004017	REGIONS CARDHOLDER S	1286 - 11-30-2022		0	2023	3	INV P	562.80	121622	294544	1286	11-30-2022 CRE
004017	REGIONS CARDHOLDER S	2080 - 11-30-2022		0	2023	3	INV P	180.93	121622	294544	2080	- 11-30-2022 C
								743.73				
048941	SWANK MOTION PICTURE	1953899		228718	2023	3	INV P	675.00	121622	294568	OUTDOOR MOVIES	
					ACCOUNT TOTAL			1,418.73				
002315	551001				RECREATIONAL SUPP-ARTS CENTER							
004017	REGIONS CARDHOLDER S	1708 - 11-30-2022		0	2023	3	INV P	164.85	121622	294544	1708	- 11-30-2022 C
004017	REGIONS CARDHOLDER S	2080 - 11-30-2022		0	2023	3	INV P	52.86	121622	294544	2080	- 11-30-2022 C
								217.71				
					ACCOUNT TOTAL			217.71				
002315	560000				BUILDING MATERIALS & SPLY							
003543	MCELHANEY PLUMBING I	294487		2300948	2023	3	INV P	16.95	121622	294497	TOILET	REPAIR FOR C
004256	SOLAR SUPPLY INC	3460049		2300949	2023	3	INV P	78.42	121622	294556	ICE	MACHINE REPAIR
					ACCOUNT TOTAL			95.37				
002315	603400				OFFICIALS							
004460	TROTTER, COREY	12.9.22		0	2023	3	INV P	75.00	121622	294575	HPR	CONTRACT LABOR
047595	MARTIN DERRICAS	12.9.22		0	2023	3	INV P	75.00	121622	294494	HPR	CONTRACT LABOR
048772	LEE ANTHONY	12.9.22		0	2023	3	INV P	75.00	121622	294489	HPR	CONTRACT LABOR
049431	MILLER CLIFFORD G	12.9.22		0	2023	3	INV P	75.00	121622	294503	HPR	CONTRACT LABOR
					ACCOUNT TOTAL			300.00				
002315	604900				OTHER PROFESSIONAL SERV.							
002540	CONNER, TOBARRA	12.9.22		0	2023	3	INV P	30.00	121622	294421	HPR	CONTRACT LABOR

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT		CHECK	DESCRIPTION	
002965	GUTHRIE, JONI S	12.9.2022	0	2023	3	INV P	270.00	121622	294456	HPR CONTRACT	LABOR
003313	KETTLEY, ANNETTE	12.9.22	0	2023	3	INV P	30.00	121622	294478	HPR CONTRACT	LABOR
003508	MARTIN, MAGDALINE	12.9.2022	0	2023	3	INV P	120.00	121622	294495	HPR CONTRACT	LABOR
003958	POWELL, RANDY	12.9.22	0	2023	3	INV P	75.00	121622	294536	HPR CONTRACT	LABOR
004162	SHABAZZ, AMATULLAH	12.9.2022	0	2023	3	INV P	144.00	121622	294552	HPR CONTRACT	LABOR
004523	USM/POLICE DEPARTMEN	104	0	2023	3	INV P	266.00	121622	294585	ADULT FLAG	FOOTBALL
048422	RAY NANCY REBEKAH	12.9.2022	0	2023	3	INV P	225.00	121622	294543	HPR CONTRACT	LABOR
049451	BOLTON EMMALEE W	12.10.2022	0	2023	3	INV P	30.00	121622	294388	INNOVATATIVE	PROGRA
ACCOUNT TOTAL							1,190.00				
002315	604919			OTH	PROF	SERV-ART CENTER					
047117	ABIGAIL L ALLEN	12.02.2022	0	2023	3	INV P	50.00	121622	294362	AFTER SCHOOL	ART CL
047117	ABIGAIL L ALLEN	12132022	0	2023	3	INV P	50.00	121622	294362	AFTER SCHOOL	ART CL
							100.00				
049332	THOMAS ABREEZA C.K.	12.13.2022	0	2023	3	INV P	350.00	121622	294571	BLOCK PRINTING	CLAS
ACCOUNT TOTAL							450.00				
002315	611000			TRAVEL	EXPENSE						
002451	CHAPMAN, CHAYVONTAE'	9528	0	2023	3	INV P	184.00	121622	294404	PR MRPA CONF	TRAVEL
003545	MCGEE, CHRIS	9526	0	2023	3	INV P	184.00	121622	294498	PR MRPA CONF	TRAVEL
ACCOUNT TOTAL							368.00				
002315	630000			GAS							
004321	SPIRE	G2022 2 DEC	0	2023	3	INV P	40.00	121622	294567	SPIRE-VARIOUS	DEPTS
004321	SPIRE	G2022-8 DEC	0	2023	3	INV P	1,124.62	121622	294567	SPIRE-VARIOUS	DEPT-
							1,164.62				
ACCOUNT TOTAL							1,164.62				
002315	630500			ELECTRICITY							
003700	MS POWER COMPANY	E2022-1 DEC	0	2023	3	INV P	1,265.85	121622	294510	MISSISSIPPI POWER	E
003700	MS POWER COMPANY	E2022-DEC 1	0	2023	3	INV P	58.68	121622	294510	MISSISSIPPI POWER	E
							1,324.53				
ACCOUNT TOTAL							1,324.53				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR TYP S				WARRANT	CHECK	DESCRIPTION
002315 684000						DUES AND MEMBERSHIPS						
004517 USA BOXING-SOUTHERN				412239	0	2023	3	INV	P	180.00	121622	294584 PR UNETTA ST GYM-20
004517 USA BOXING-SOUTHERN				799591	0	2023	3	INV	P	300.00	121622	294584 PR UNETTA ST BOXING
										480.00		
ACCOUNT TOTAL										480.00		
002315 684500						REGISTRATION FEE/TUITION						
004517 USA BOXING-SOUTHERN				783766	0	2023	3	INV	P	100.00	121622	294584 PR UNETTA ST-BOXER
004517 USA BOXING-SOUTHERN				790995	0	2023	3	INV	P	100.00	121622	294584 PR UNETTA GYM BOXIN
										200.00		
ACCOUNT TOTAL										200.00		
ORG 002315						TOTAL		7,275.07				
FUND 002 PARKS & RECREATION FUND						TOTAL:		42,925.03				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR TYP S			WARRANT		CHECK	DESCRIPTION	
009660				W&S O&M-CUSTOMER ACCT. DIV.								
009660	525000			GAS AND OIL								
001002	CITY OF HATTIESBURG	11/22	FUND 9	0	2023	3	INV P	1,345.53	121622	294411	TRF 11/2022	FUEL US
ACCOUNT TOTAL								1,345.53				
009660	559000			OTHER OPERATING MATL/SPLY								
048827	CARQUEST	14758-19575		2300951	2023	3	INV P	67.08	121622	294402	OIL FOR TRUCKS	WATE
ACCOUNT TOTAL								67.08				
009660	604900			OTHER PROFESSIONAL SERV.								
002146	ARNOLD LINE WATER AS	271431		0	2023	3	INV P	405.00	121622	294371	SEWER READS	OCT-NOV
002146	ARNOLD LINE WATER AS	271434		0	2023	3	INV P	1,800.00	121622	294371	MB 2021-839	PAYMENT
								2,205.00				
002181	BADGER METER INC	80113856		0	2023	3	INV P	3,038.32	121622	294383	MB 2018-832	BEACON
002665	DIXIE COMMUNITY UTIL	DX 120822		0	2023	3	INV P	423.00	121622	294429	SEWER READS	DEC 202
003385	LANDRY LEWIS GERMANY	CN 22-3940-002		0	2023	3	INV P	6,000.00	121622	294486	PRE DESIGN	WATER DE
004003	RAWLS SPRINGS UTILIT	RS12212020		0	2023	3	INV P	208.00	121622	294542	SEWER READS	NOV 202
004482	TYLER TECHNOLOGIES IN	182724		0	2023	3	INV P	21,896.70	121622	294578	ANNUAL APPLICATION	
047562	ENCO UTILITY	INV56934		0	2023	3	INV P	862.50	121622	294436	MB 2020-835	RT3 BIL
ACCOUNT TOTAL								34,633.52				
009660	606000			TELEPHONE AND TELEGRAPH								
002160	AT&T MOBILITY	287273578351X1208225	0		2023	3	INV P	590.67	121622	294380	MB2016-287/WIRELESS	
ACCOUNT TOTAL								590.67				
009660	607000			POSTAGE								
047562	ENCO UTILITY	INV56934		0	2023	3	INV P	2,126.99	121622	294436	MB 2020-835	RT3 BIL
047562	ENCO UTILITY	INV57122		0	2023	3	INV P	3,013.03	121622	294436	MB 2020-835	RT 1 BI
								5,140.02				
ACCOUNT TOTAL								5,140.02				
009660	620000			PRINTING								
047562	ENCO UTILITY	INV57122		0	2023	3	INV P	1,211.77	121622	294436	MB 2020-835	RT 1 BI
ACCOUNT TOTAL								1,211.77				
009660	635000			BUILDING R&M								
002901	GILKEY ELECTRIC SUPP	366051		2300887	2023	3	INV P	281.11	121622	294451	BUILDING R & M	WATE

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
004316	SPEEDY PRINTING & SI			30954	2300818	2023	3	INV P	399.00	121622	294566 REPLACEMENT SIGNS F
ACCOUNT TOTAL									680.11		
009660	638400			MOTOR VEHICLE EQ. R&M							
004514	UNIVERSITY TIRE & SE			INV206225	2300710	2023	3	INV P	681.03	121622	294583 TIRE AND ALIGNMENT
004514	UNIVERSITY TIRE & SE			INV206787	2300794	2023	3	INV P	138.50	121622	294583 REPAIR TO UNIT 2044
004514	UNIVERSITY TIRE & SE			INV207296	2300912	2023	3	INV P	189.86	121622	294583 TIRE FOR UNIT 21882
									1,009.39		
ACCOUNT TOTAL									1,009.39		
009660	643000			UNIFORM RENT							
002471	CINTAS CORPORATION #			4137868751	0	2023	3	INV P	46.86	121622	294407 STATE CONTRACT 8200
002471	CINTAS CORPORATION #			4138584778	0	2023	3	INV P	60.87	121622	294406 STATE CONTRACT 8200
002471	CINTAS CORPORATION #			4139306516	0	2023	3	INV P	46.86	121622	294407 STATE CONTRACT 8200
002471	CINTAS CORPORATION #			4140008626	0	2023	3	INV P	60.87	121622	294407 STATE CONTRACT 8200
									215.46		
ACCOUNT TOTAL									215.46		
009660	687000			CUSTODIAL SERVICE							
002037	AB SUPPORT SERVICES			4B1010	2300002	2023	2	INV P	550.00	121622	294361 JANITORIAL CLEANING
ACCOUNT TOTAL									550.00		
ORG 009660 TOTAL									45,443.55		
009672				W&S O&M-WATER TRANSMISSION DIV							
009672	525000			GAS AND OIL							
001002	CITY OF HATTIESBURG			11/22 FUND 9	0	2023	3	INV P	6,148.03	121622	294411 TRF 11/2022 FUEL US
ACCOUNT TOTAL									6,148.03		
009672	525700			DIESEL FUEL							
001002	CITY OF HATTIESBURG			11/22 FUND 9	0	2023	3	INV P	4,944.41	121622	294411 TRF 11/2022 FUEL US
ACCOUNT TOTAL									4,944.41		
009672	545000			HAND TOOLS							
003543	MCELHANEY PLUMBING I			294470	2300805	2023	2	INV P	142.70	121622	294497 HAND TOOLS FOR WATE
ACCOUNT TOTAL									142.70		
009672	570000			MTR VEHICLE REP. PTS/SPL							
002700	EAGLE TIRE AND SERVI			INV069211	2300811	2023	3	INV P	271.06	121622	294431 TIRES FOR UNIT # 21
002700	EAGLE TIRE AND SERVI			INV069228	2300847	2023	3	INV P	122.99	121622	294431 TIRE FOR UNIT # 213
002700	EAGLE TIRE AND SERVI			INV069252	2300841	2023	3	INV P	1,930.98	121622	294431 TIRES FOR UNIT # 21

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT		CHECK	DESCRIPTION		
							2,325.03					
048827	CARQUEST	14758-18939	2300748	2023	3	INV P	62.97	121622		294402	REPAIR PARTS FOR UN	
048827	CARQUEST	14758-19036	2300776	2023	3	INV P	61.36	121622		294402	REPAIR PARTS FOR UN	
048827	CARQUEST	14758-19113	2300801	2023	3	INV P	5.85	121622		294402	REPAIR PARTS FOR UN	
							130.18					
ACCOUNT TOTAL							2,455.21					
009672	599000	OTHER REPAIR/MAINT. SPL.										
003685	MS GRASS NURSERY	3007	2300689	2023	2	INV P	150.00	121622		294508	CENTIPEDE SOD -- WA	
ACCOUNT TOTAL							150.00					
009672	638400	MOTOR VEHICLE EQ. R&M										
002700	EAGLE TIRE AND SERVI	INV069211	2300811	2023	3	INV P	40.00	121622		294431	TIRES FOR UNIT # 21	
002700	EAGLE TIRE AND SERVI	INV069228	2300847	2023	3	INV P	18.00	121622		294431	TIRE FOR UNIT # 213	
002700	EAGLE TIRE AND SERVI	INV069252	2300841	2023	3	INV P	138.00	121622		294431	TIRES FOR UNIT # 21	
							196.00					
ACCOUNT TOTAL							196.00					
009672	643000	UNIFORM RENT										
002471	CINTAS CORPORATION #	4139307115	0	2023	3	INV P	237.45	121622		294406	SC#820044758- UNIFO	
002471	CINTAS CORPORATION #	4140009056	0	2023	3	INV P	238.47	121622		294406	SC#820044758- UNIF	
							475.92					
ACCOUNT TOTAL							475.92					
009672	739900	OTHER EQUIPMENT										
003843	PARISH TRACTOR (HATT 03-E00754		2300909	2023	3	INV P	9,899.00	121622		294522	KUBOTA TRACTOR W/CU	
ACCOUNT TOTAL							9,899.00					
ORG 009672 TOTAL							24,411.27					
009673	W&S O&M-WATER PLANT DIVISION											
009673	513000	CHEMICALS										
002094	ALLIED UNIVERSAL COR	I2826412	2300785	2023	3	INV P	7,950.00	121622		294367	CHLORINE FOR WATER	
002094	ALLIED UNIVERSAL COR	I2826413	2300785	2023	3	INV P	13,250.00	121622		294367	CHLORINE FOR WATER	
							21,200.00					
ACCOUNT TOTAL							21,200.00					
009673	525000	GAS AND OIL										
001002	CITY OF HATTIESBURG	11/22 FUND 9	0	2023	3	INV P	1,024.19	121622		294411	TRF 11/2022 FUEL US	

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
ACCOUNT TOTAL						1,024.19					
009673	604900					OTHER PROFESSIONAL SERV.					
002288	BONNER ANALYTICAL TE	78517	0	2023	3	INV	P	57.82	121622	294389	COLIFORM TESTING, 1
002380	BYRD, WADE J.	BYRD122022	0	2023	3	INV	P	3,000.00	121622	294398	WATER OPERATOR OF R
ACCOUNT TOTAL						3,057.82					
009673	630000					GAS					
004321	SPIRE	G2022-28 NOV	0	2023	3	INV	P	40.00	121622	294567	SPIRE-STATION #4 &
004321	SPIRE	G2022-8 DEC	0	2023	3	INV	P	101.34	121622	294567	SPIRE-VARIOUS DEPT-
								141.34			
ACCOUNT TOTAL						141.34					
009673	630500					ELECTRICITY					
003700	MS POWER COMPANY	E2022-1 DEC	0	2023	3	INV	P	23,457.12	121622	294510	MISSISSIPPI POWER E
003700	MS POWER COMPANY	E2022-29 NOV	0	2023	3	INV	P	797.28	121622	294510	MISSISSIPPI POWER E
								24,254.40			
003873	PEARL RIVER VALLEY E	2022 30 NOV	0	2023	3	INV	P	5,364.32	121622	294526	PEARL RIVER VALLEY
003873	PEARL RIVER VALLEY E	2022-28 NOV	0	2023	3	INV	P	75.78	121622	294526	PEARL RIVE VALLEY E
003873	PEARL RIVER VALLEY E	2022-29 NOV	0	2023	3	INV	P	59.47	121622	294526	PEARL RIVER VALLEY
								5,499.57			
ACCOUNT TOTAL						29,753.97					
009673	643500					MOP-MAT-RAG RENT					
002471	CINTAS CORPORATION #	4140008818	0	2023	3	INV	P	80.84	121622	294406	SC#8200044758- MOPS
ACCOUNT TOTAL						80.84					
009673	687000					CUSTODIAL SERVICE					
047011	JANI-KING OF SOUTH E	C12220009	2300340	2023	3	INV	P	483.00	121622	294473	TWO QUOTE - JANITOR
ACCOUNT TOTAL						483.00					
009673	739900					OTHER EQUIPMENT					
003843	PARISH TRACTOR (HATT	03-E00754	2300909	2023	3	INV	P	32,900.00	121622	294522	KUBOTA TRACTOR W/CU
ACCOUNT TOTAL						32,900.00					
ORG 009673 TOTAL						88,641.16					
009676	W&S O&M-SEWER DIVISION										
009676	513000					CHEMICALS					
002094	ALLIED UNIVERSAL COR	I2827145	2300865	2023	3	INV	P	5,670.00	121622	294367	CHLORINE & SULFUR D
002094	ALLIED UNIVERSAL COR	I2827149	2300865	2023	3	INV	P	1,890.00	121622	294367	CHLORINE & SULFUR D

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3				ACCOUNT/VENDOR				INVOICE				PO	YEAR/PR	TYP	S	WARRANT		CHECK	DESCRIPTION	
														7,560.00						
002443	CERTIFIED LABORATORI	8034054		2300810	2023	3	INV	P		4,986.25	121622		294403	CHERRY FLOW FOR SEW						
ACCOUNT TOTAL									12,546.25											
009676	525000			GAS AND OIL																
001002	CITY OF HATTIESBURG	11/22	FUND 9	0	2023	3	INV	P		49.06	121622		294411	TRF 11/2022 FUEL US						
ACCOUNT TOTAL									49.06											
009676	525700			DIESEL FUEL																
001002	CITY OF HATTIESBURG	11/22	FUND 9	0	2023	3	INV	P		1,149.66	121622		294411	TRF 11/2022 FUEL US						
ACCOUNT TOTAL									1,149.66											
009676	559000			OTHER OPERATING MATL/SPLY																
003685	MS GRASS NURSERY	3014		2300867	2023	3	INV	P		450.00	121622		294508	CENTIPEDE SOD FOR S						
ACCOUNT TOTAL									450.00											
009676	561000			PLUMBING SUPPLIES																
004300	SOUTHERN WATERWORKS	92844		2300850	2023	3	INV	P		964.20	121622		294564	WAREHOUSE STOCK FOR						
ACCOUNT TOTAL									964.20											
009676	570000			MTR VEHICLE REP. PTS/SPL																
048827	CARQUEST	14758-19335		2300849	2023	3	INV	P		22.52	121622		294402	REPAIR PARTS FOR UN						
ACCOUNT TOTAL									22.52											
009676	599000			OTHER REPAIR/MAINT. SPL.																
004120	SANSOM EQUIPMENT CO	P03809		2300739	2023	3	INV	P		1,403.68	121622		294551	RODDER LINE FOR JET						
ACCOUNT TOTAL									1,403.68											
009676	612000			FREIGHT																
004120	SANSOM EQUIPMENT CO	P03809		2300739	2023	3	INV	P		125.00	121622		294551	RODDER LINE FOR JET						
ACCOUNT TOTAL									125.00											
009676	630500			ELECTRICITY																
003700	MS POWER COMPANY	E2022-1 DEC		0	2023	3	INV	P		762.23	121622		294510	MISSISSIPPI POWER E						
ACCOUNT TOTAL									762.23											
009676	636000			STREETS & STRUCTURES R&M																
004058	RJM MCQUEEN CONTRACT	2717		0	2023	3	INV	P		14,418.00	121622		294550	MB2022-680:SEWER RE						
004058	RJM MCQUEEN CONTRACT	2718		0	2023	3	INV	P		3,166.50	121622		294550	MB2022-680:SEWER RE						
004058	RJM MCQUEEN CONTRACT	2720		0	2023	3	INV	P		9,852.10	121622		294550	MB2022-680: SEWER R						
004058	RJM MCQUEEN CONTRACT	2722		0	2023	3	INV	P		6,685.00	121622		294550	MB2022-680: SEWER R						

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
004058	RJM MCQUEEN CONTRACT	2725	0	2023	3	INV	P		28,052.75	121622	294550 MB2022-680:SEWER RE
									62,174.35		
									ACCOUNT TOTAL		62,174.35
009676	638600					CONSTRUCTION EQUIP	R&M				
003861	PATTERSON AUTO ELECT	81689	0	2023	3	INV	P		570.00	121622	294524 TEARDOWN, INSPECT&RE
003861	PATTERSON AUTO ELECT	81691	0	2023	3	INV	P		918.00	121622	294524 TEARDOWN, INSPECT&RE
									1,488.00		
004120	SANSOM EQUIPMENT CO	W02041	0	2023	3	INV	P		1,755.00	121622	294551 TEARDOWN, INSPECT&RE
048827	CARQUEST	14758-19092	2300787	2023	2	INV	P		4.22	121622	294402 HYDRALIC FITTING FO
									ACCOUNT TOTAL		3,247.22
									ORG 009676 TOTAL		82,894.17
009677						W&S O&M-SEWER LAGOON DIV.					
009677	513000					CHEMICALS					
002094	ALLIED UNIVERSAL COR	I2827145	2300865	2023	3	INV	P		10,600.00	121622	294367 CHLORINE & SULFUR D
002094	ALLIED UNIVERSAL COR	I2827149	2300865	2023	3	INV	P		5,300.00	121622	294367 CHLORINE & SULFUR D
									15,900.00		
									ACCOUNT TOTAL		15,900.00
009677	525700					DIESEL FUEL					
001002	CITY OF HATTIESBURG	11/22 FUND 9	0	2023	3	INV	P		709.62	121622	294411 TRF 11/2022 FUEL US
									ACCOUNT TOTAL		709.62
009677	602500					LEGAL					
004599	WATKINS & EAGAR	422929	0	2023	3	INV	P		4,138.57	121622	294594 GENERAL ENVIRONMENT
004599	WATKINS & EAGAR	422931	0	2023	3	INV	P		1,096.50	121622	294594 WASTEWATER AGREEMEN
									5,235.07		
									ACCOUNT TOTAL		5,235.07
009677	604900					OTHER PROFESSIONAL SERV.					
004423	THE SPECTRUM GROUP I	11131	2300809	2023	3	INV	P		250.00	121622	294570 REPAIRS TO BURKETT
048129	APGN INC	16554	0	2023	3	INV	P		33,250.00	121622	294370 MB2021-1284: ANNUAL
									ACCOUNT TOTAL		33,500.00
009677	630500					ELECTRICITY					
003700	MS POWER COMPANY	E2022-1 DEC	0	2023	3	INV	P		15,342.86	121622	294510 MISSISSIPPI POWER E

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3																
ACCOUNT/VENDOR				INVOICE				PO	YEAR/PR TYP S			WARRANT		CHECK	DESCRIPTION	
003873	PEARL	RIVER	VALLEY	E	2022	11.18.22		0	2023	3	INV	P	434.40	121622	294526	PRVEPA VARIOUS DEPT
003873	PEARL	RIVER	VALLEY	E	2022	30 NOV		0	2023	3	INV	P	2,757.41	121622	294526	PEARL RIVER VALLEY
003873	PEARL	RIVER	VALLEY	E	2022	28 NOV		0	2023	3	INV	P	672.31	121622	294526	PEARL RIVE VALLEY E
003873	PEARL	RIVER	VALLEY	E	2022	29 NOV		0	2023	3	INV	P	47.95	121622	294526	PEARL RIVER VALLEY
													3,912.07			
ACCOUNT TOTAL													19,254.93			
009677	638000				FIXED EQUIPMENT R&M											
003348	L & A	CONTRACTING	CO	483-228			0	2023	3	INV	P	30,874.64	121622	294481	MB2016-64: LAGOONS	
ACCOUNT TOTAL													30,874.64			
ORG 009677 TOTAL													105,474.26			
FUND 009 WATER & SEWER OPERATION/MAINT.										TOTAL:		346,864.41				

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR				INVOICE		PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
019100						POL.FORFEITURES-POLICE DIV.						
019100 559000						OTHER OPERATING MATL/SPLY						
004446 TOSHIBA BUSINESS SOL 5473924						0	2023	3	INV P	33.35	121622	294572 MB#2022-514 COMMUNI
						ACCOUNT TOTAL			33.35			
						ORG 019100		TOTAL		33.35		
FUND 019 POLICE FORFEITURES FUND						TOTAL:			33.35			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3									
ACCOUNT/VENDOR	INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION	
039551			AIRPORT IMPR.-AIRPORT DIV						
039551	601500		ENGINEERING						
004197	SHOWS DEARMAN & WAIT 23149	0	2023	3	INV P	927.50	121622	294554	MB# 2012-1/34 HANGA
			ACCOUNT TOTAL			927.50			
039551	729502		AIRPORT IMP-FAA						
002843	FORD ENGINEERING SER 211116L	0	2023	3	INV P	4,871.54	121622	294445	MB 2021-306 TAXIWAY
			ACCOUNT TOTAL			4,871.54			
			ORG 039551 TOTAL			5,799.04			
FUND 039 AIRPORT IMPROVEMENT FUND			TOTAL:			5,799.04			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR			INVOICE	PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION	
072201			MUN.ROAD&BRIDGE-STREET DIV								
072201 601500			ENGINEERING								
003764	NEEL-SCHAFFER	INC	1082347	0	2023	3	INV	P	6,666.52	121622	294513 MB# 2011-4/307 FRON
003764	NEEL-SCHAFFER	INC	1082348	0	2023	3	INV	P	10,410.82	121622	294513 MB# 2021-454 EDWARD
003764	NEEL-SCHAFFER	INC	1082349-1083052	0	2023	3	INV	P	3,758.68	121622	294513 MB# 2021-500 HIGHWA
003764	NEEL-SCHAFFER	INC	1083051	0	2023	3	INV	P	9,392.14	121622	294513 MB# 2021-546 4TH ST
									30,228.16		
ACCOUNT TOTAL									30,228.16		
072201 636000			STREETS & STRUCTURES R&M								
004058	RJM MCQUEEN	CONTRACT	2724	0	2023	3	INV	P	51,169.20	121622	294550 MB 2022-680 CASCADE
ACCOUNT TOTAL									51,169.20		
072201 722522			GORDONS CREEK COMMONS								
003764	NEEL-SCHAFFER	INC	1082336-1083032	0	2023	3	INV	P	19,760.00	121622	294513 MB# 2021-61 GORDON'
ACCOUNT TOTAL									19,760.00		
ORG 072201 TOTAL									101,157.36		
FUND 072 MUNICIPAL ROAD & BRIDGE					TOTAL:			101,157.36			

YEAR/PERIOD: 2023/2 TO 2023/3		ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR TYP S		WARRANT		CHECK	DESCRIPTION	
073570 MASS TRANSIT-TRANSPORTATION													
073570 525000							GAS AND OIL						
001002	CITY OF HATTIESBURG	11/22	FUND 73		0		2023	3	INV	P	1,882.36	121622	294410 TRF FUEL USAGE 11/2
ACCOUNT TOTAL										1,882.36			
073570 525700													
001002	CITY OF HATTIESBURG	11/22	FUND 73		0		2023	3	INV	P	14,279.86	121622	294410 TRF FUEL USAGE 11/2
ACCOUNT TOTAL										14,279.86			
073570 606000													
002160	AT&T MOBILITY	287273578351X1208225		0			2023	3	INV	P	177.90	121622	294380 MB2016-287/WIRELESS
004543	VERIZON WIRELESS	9920174757		0			2023	3	INV	P	427.65	121622	294587 PARATRANSIT TABLETS
ACCOUNT TOTAL										605.55			
073570 643000													
							UNIFORM RENT						
002471	CINTAS CORPORATION #	4136521852		0			2023	3	INV	P	147.28	121622	294406 HCT UNIFORMS RENTAL
002471	CINTAS CORPORATION #	4137223826		0			2023	3	INV	P	147.28	121622	294406 HCT UNIFORM RENTALS
002471	CINTAS CORPORATION #	4137869194		0			2023	3	INV	P	186.05	121622	294406 HCT UNIFORM RENTALS
002471	CINTAS CORPORATION #	41385852223		0			2023	3	INV	P	147.28	121622	294406 HCT UNIFORM RENTALS
002471	CINTAS CORPORATION #	4139307035		0			2023	3	INV	P	194.82	121622	294406 HCT UNIFORM RENTALS
										822.71			
ACCOUNT TOTAL										822.71			
073570 686800													
002956	GROVE TRANSIT	JARC INV11/6-19/2022		0			2023	3	INV	P	4,456.50	121622	294455 Minute Book #2020-2
ACCOUNT TOTAL										4,456.50			
073570 687000													
002037	AB SUPPORT SERVICES	4B1010			2300002		2023	2	INV	P	300.00	121622	294361 JANITORIAL CLEANING
ACCOUNT TOTAL										300.00			
ORG 073570 TOTAL										22,346.98			
FUND 073 MASS TRANSIT FUND										TOTAL:		22,346.98	

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR					INVOICE	PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
075695					W&S CONSTR.-CAPITAL PROJECTS							
075695 601500					ENGINEERING							
004197	SHOWS	DEARMAN & WAIT	23136	0	2023	3	INV	P	8,200.00	121622	294554	MB# 2018-288-289 IN
004197	SHOWS	DEARMAN & WAIT	23138	0	2023	3	INV	P	7,077.38	121622	294554	MB# 2021-399 WEST 7
004197	SHOWS	DEARMAN & WAIT	23141	0	2023	3	INV	P	56,726.08	121622	294554	MB# 2021-465 FORRES
004197	SHOWS	DEARMAN & WAIT	23146	0	2023	3	INV	P	19,335.00	121622	294554	MB# 2012-1/34 STORM
									91,338.46			
ACCOUNT TOTAL									91,338.46			
075695 722005					MIDTOWN SEWER PROJECT							
004197	SHOWS	DEARMAN & WAIT	23137	0	2023	3	INV	P	19,602.50	121622	294554	MB# 2020-138 MIDTOW
ACCOUNT TOTAL									19,602.50			
ORG 075695 TOTAL									110,940.96			
FUND 075 WATER&SEWER CONSTRUCTION FUND									TOTAL:	110,940.96		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR		INVOICE		PO	YEAR/PR TYP S			WARRANT		CHECK	DESCRIPTION	
077000				COMMUNITY CTR		BALANCE SHEET						
077000	122000					DAMAGE DEPOSITS						
049508	JOANN WYNN	J WYNN	11/18/22	0	2023	3	INV	P	100.00	121622	294476	REFUND SECURITY DEP
049509	ALICIA KEYS	A KEYS	11/6/22	0	2023	3	INV	P	100.00	121622	294365	REFUND SECURITY DEP
049510	KIMBERLY WILLIAMS	K WILLIAMS	11/5/22	0	2023	3	INV	P	100.00	121622	294479	REFUND SECURITY DEP
ACCOUNT TOTAL									300.00			
ORG 077000 TOTAL									300.00			
077650				COMMUNITY CTR-ADMIN/GENERAL								
077650	510000					CLEANING/JANITORIAL SPLY						
003772	NEWELL PAPER COMPANY	4144472	2300916	2023	3	INV	P		216.56	121622	294514	JANITORIAL SUPPLIES
048909	BRADY COMPANIES, LLC	7562543	0	2023	2	INV	P		237.40	121622	294392	JUNIOR JUMBO 2 PLY
ACCOUNT TOTAL									453.96			
077650	525000					GAS AND OIL						
001002	CITY OF HATTIESBURG	11/22 FUND 77	0	2023	3	INV	P		123.04	121622	294412	TRF 11/22 FUEL USAG
ACCOUNT TOTAL									123.04			
077650	544000					HORT./LANDSCAPING SPLY.						
004547	VESELY'S NURSERY	02300808	2300808	2023	3	INV	P		168.00	121622	294588	P&R TRAIN DEPOT/COM
ACCOUNT TOTAL									168.00			
077650	546000					MINOR EQUIPMENT						
002031	A/C PARTS & EQUIPMEN	45439	2300842	2023	3	INV	P		612.06	121622	294359	FAN MOTOR FOR CE RO
002304	BRACKMAN MOWER WAREH	32865	2300934	2023	3	INV	P		299.99	121622	294391	EQUIPMENT FOR JACKI
004256	SOLAR SUPPLY INC	3459937	2300904	2023	3	INV	P		95.36	121622	294556	AC UNIT MATERIAL FO
ACCOUNT TOTAL									1,007.41			
077650	604900					OTHER PROFESSIONAL SERV.						
003225	JACKSON, ROOSEVELT I	036375	2300966	2023	3	INV	P		3,895.00	121622	294472	EXTERIOR FACIAL REP
ACCOUNT TOTAL									3,895.00			
077650	606000					TELEPHONE AND TELEGRAPH						
002160	AT&T MOBILITY	287273578351X1208225	0	2023	3	INV	P		61.30	121622	294380	MB2016-287/WIRELESS
ACCOUNT TOTAL									61.30			
077650	630000					GAS						
004321	SPIRE	G2022 2 DEC	0	2023	3	INV	P		1,283.71	121622	294567	SPIRE-VARIOUS DEPTS

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3											
ACCOUNT/VENDOR				INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
ACCOUNT TOTAL									1,283.71		
077650	630500				ELECTRICITY						
003700	MS POWER COMPANY	E2022-1 DEC	0	2023	3	INV	P	2,604.82	121622	294510	MISSISSIPPI POWER E
ACCOUNT TOTAL									2,604.82		
077650	639200				CLEANING AND PAINTING						
003225	JACKSON, ROOSEVELT I	729101	2300813	2023	3	INV	P	4,755.00	121622	294472	INTERIOR PAINTING/R
ACCOUNT TOTAL									4,755.00		
077650	643000				UNIFORM RENT						
002471	CINTAS CORPORATION #	4136522553	0	2023	2	INV	P	191.51	121622	294406	UNIFORM RENTAL FOR
002471	CINTAS CORPORATION #	4137224734	0	2023	2	INV	P	191.51	121622	294406	UNIFORM RENTAL FOR
002471	CINTAS CORPORATION #	4137869961	0	2023	2	INV	P	191.51	121622	294406	UNIFORM RENTAL FOR
002471	CINTAS CORPORATION #	4138585974	0	2023	2	INV	P	191.51	121622	294406	UNIFORM RENTAL FOR
									766.04		
ACCOUNT TOTAL									766.04		
ORG 077650					TOTAL			15,118.28			
FUND 077 COMMUNITY CENTERS' FUND					TOTAL:			15,418.28			

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3																			
ACCOUNT/VENDOR				INVOICE				PO		YEAR/PR TYP S				WARRANT		CHECK		DESCRIPTION	
082285 CDBG-ENTITLEMENTS																			
082285 525000								GAS		AND OIL									
001002		CITY OF HATTIESBURG		11/22		FUND 82		0		2023 3		INV P		181.38 121622		294413		TRF 11/222 FUEL USA	
ACCOUNT TOTAL														181.38					
082285 638400																			
002166		AUTO ARMATURE SERVIC		29997				0		MOTOR VEHICLE EQ. R&M		2023 3 INV P		159.95 121622		294381		ATLTERNATOR FOR UNI	
ACCOUNT TOTAL														159.95					
ORG 082285										TOTAL				341.33					
FUND 082 COMMUNITY DEVELOP. BLOCK GRANT										TOTAL:				341.33					

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3		ACCOUNT/VENDOR		INVOICE	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
086300				SPEC SALES TAX/RECREATION MAIN							
086300	7295PR			CAPITAL PROJECTS							
002350	BUCKHAULTS ELECTRIC	5899	2300173	2023 3 INV P					4,420.00	121622	294393 ELECTRICAL INSTALLA
002350	BUCKHAULTS ELECTRIC	PAY EST 2 & FINAL	0	2023 3 INV P					14,645.00	121622	294393 MB 2021-339 EAST SI
									19,065.00		
002377	BUTLER, SNOW, O'MARA, S	10356438	0	2023 3 INV P					58,000.00	121622	294397 BOND COUNSEL FEE/20
003381	LANDARC CONSULTING G	06-2029	0	2023 3 INV P					11,725.00	121622	294485 MB 2021-348 MIDTOWN
003944	POPE & POPE, PA	2286	0	2023 3 INV P					30,205.54	121622	294534 LOCAL COUNSEL FEE A
004019	REGIONS CORPORATE TR	REGIONS1	0	2023 3 INV P					1,000.00	121622	294545 2022 MS GENERAL OBL
049466	MYERS UNDERGROUND	MIDTOWN DRAINAGE #1	0	2023 3 INV P					70,091.19	121622	294511 MB 2021-549 MIDTOWN
				ACCOUNT TOTAL					190,086.73		
				ORG 086300 TOTAL					190,086.73		
	FUND 086	SPEC SALES TAX P&R/UNIV IMPROV		TOTAL:					190,086.73		

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3															
ACCOUNT/VENDOR				INVOICE		PO	YEAR/PR TYP S			WARRANT		CHECK	DESCRIPTION		
088603				PUBLIC SAFETY/REC CONSTRUCTION											
088603 729501				HALL AVENUE OVERPASS											
002515 COLONY CONSTRUCTION				HALL ROUNDABOUT #1	0	2023	3	INV	P	109,413.21	121622	294417	MB	2021-480	HALL AV
003789 NORFOLK SOUTHERN COR				92970842	0	2023	3	INV	P	3,281.17	121622	294515	MB	2021-283	HALL AV
048265 BNR INVESTMENTS LLC				172	2300714	2023	3	INV	P	6,500.00	121622	294387	2-QUOTE	WEST PINE	S
048575 RIGHT OF WAY TECH				298	0	2023	3	INV	P	8,700.00	121622	294548	MB	2021-359	HALL AV
048667 R & J CONSTRUCTION				HALL AVE EAST #9	0	2023	3	INV	P	228,569.28	121622	294541	MB	2021-325	HALL AV
049478 MADISON ACQUISITION				101	0	2023	3	INV	P	4,200.00	121622	294492	MB	2021-283	HALL AV
ACCOUNT TOTAL										360,663.66					
ORG 088603 TOTAL										360,663.66					
FUND 088				PUBLIC SAFETY/REC CONSTRUCTION				TOTAL:		360,663.66					

INVOICE LIST BY GL ACCOUNT

YEAR/PERIOD: 2023/2 TO 2023/3												
ACCOUNT/VENDOR			INVOICE			PO	YEAR/PR TYP S			WARRANT	CHECK	DESCRIPTION
097201			INFRA IMPROVE-INTRNT SALES TAX									
097201 721006			N 28TH AVE BRIDGE									
047493 HOLLIDAY CONSTRUCTIO			N. 28TH BRIDGE #3			0	2023 3 INV P			93,608.72	121622	294465 MB 2021-455 N. 28TH
			ACCOUNT TOTAL						93,608.72			
			ORG 097201 TOTAL						93,608.72			
FUND 097			INFRA IMPROVE-INTRNT SALES TAX			TOTAL:			93,608.72			

** END OF REPORT - Generated by Sherry Jackson **

12/15/2022 09:28
6050sjackson

City of Hattiesburg, MS
A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND	DUE TO	DUE FR
001 General Fund		1,305,885.94
002 PARKS & RECREATION FUND		42,925.03
009 WATER & SEWER OPERATION/MAINT.		346,864.41
019 POLICE FORFEITURES FUND		33.35
039 AIRPORT IMPROVEMENT FUND		5,799.04
072 MUNICIPAL ROAD & BRIDGE		101,157.36
073 MASS TRANSIT FUND		22,346.98
075 WATER&SEWER CONSTRUCTION FUND		110,940.96
077 COMMUNITY CENTERS' FUND		15,418.28
082 COMMUNITY DEVELOP. BLOCK GRANT		341.33
086 SPEC SALES TAX-P&R/UNIV IMPROV		190,086.73
088 PUBLIC SAFETY/REC CONSTRUCTION		360,663.66
097 INFRA IMPROVE-INTRNT SALES TAX		93,608.72
801 CLAIMS FUND	2,596,071.79	
	TOTAL	2,596,071.79
		2,596,071.79

** END OF REPORT - Generated by Sherry Jackson **