

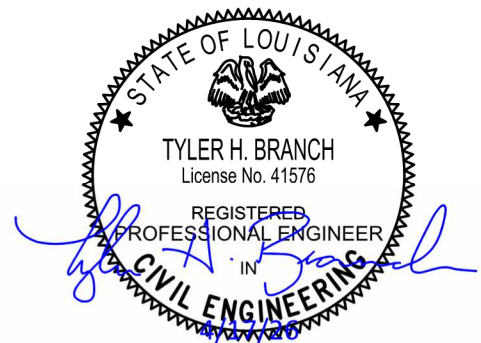
CONTRACT DOCUMENTS AND SPECIFICATIONS

CITY OF COVINGTON

Columbia Roundabouts

April 2026

PREPARED BY:



CITY OF COVINGTON
317 NORTH JEFFERSON
AVENUE
COVINGTON, LOUISIANA
70433

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SECTION 00 11 13
Advertisement for Bids

Sealed bids will be received until the hour of **2:00 P.M.**, local time, **Thursday, November 19, 2026** at City Hall, Covington, Louisiana, 317 N. Jefferson Avenue, Covington, LA 70433; for furnishing all labor, materials, supervision, etc., and performing all work necessary to complete the **Columbia Roundabouts, Project No. C0234**, for the City of Covington, Louisiana. Bids will be opened and publicly read aloud at **2:00 P.M.** in the City Hall Conference Room, City Hall, Covington, Louisiana. Any bids received after **2:00 P.M.** will be returned unopened.

The Contractor shall hold a Louisiana Contractor's license in Highway, Street and Bridge.

The work consists of the construction of two roundabouts.

A **non-mandatory** pre-bid conference will be held **Thursday, November 5, 2026**. The meeting will be held at **2:00 p.m.** at City of Covington, City Hall Conference Room, Covington, Louisiana, 317 N. Jefferson Avenue, Covington, LA 70433.

A complete set of Contract Documents are available to download from our web site free of charge: <https://www.covla.com/city-departments/grantsandprocurement/>

A complete set of Bid Documents are also available at Central Bidding (www.centralbidding.com). Electronic Bids may be submitted at Central Bidding (www.centralbidding.com). For questions related to the electronic bidding process, please call Central Bidding at 225-810-4814.

Each bid must be accompanied by a bid security in the form of certified check, cashier's check, or Bid Bond as prescribed by LA RS 38:2218.A.C, in the amount equal to at least five percent (5%) of the total amount bid and payable without conditions to the Owner as a guarantee that the Bidder, if awarded the Contract, will promptly execute a Contract in accordance with his proposal and all terms and conditions of the Contract Documents. The outside envelope in which the bid is placed must be clearly marked as follows:

Sealed Bid: CITY OF COVINGTON
COLUMBIA ROUNDABOUTS
Project No. C0234

Bid Due Date and Time: November 19, 2026, 2:00 P.M.

INCLUDE: Contractor's name, address, and Louisiana state contractor's license number

It is requested, but not mandatory, that the entire bid package be submitted in duplicate. Duplicate copy can be a photocopy.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout.

City of Covington
St Tammany Farmer 3xs: 10/21/26, 10/28/26, & 11/4/26

**SECTION 00 21 13
INSTRUCTIONS TO BIDDERS**

SECTION 1. BID FORM

A. GENERAL

- (1) Sealed bids will be received at Covington City Hall, 317 N Jefferson Avenue, Covington, LA 70433 and online at www.centralbidding.com, until the date and hour specified in Section 00 11 13, Advertisement for Bids, at which time they will be publicly opened. Late bids will not be accepted.
- (2) All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal.
- (3) The City of Covington reserves the right to reject any and all bids in whole or in part and to waive any and all formalities in the best interest of the City, pursuant to the law.
- (4) Only bids written in ink or type written and properly signed by a member of the firm or authorized representative, will be accepted. Pencil and/or photostatic figures or signatures will disqualify bid.
- (5) For submission of bids, the only form used shall be the bid form (Section 00 41 43) provided by the City. Additional copies of this form may be furnished for Bidding at the cost of reproduction.
 - (a) The plans, specifications, and other documents designated in the bid form will be considered a part of the bid whether attached or not.
 - (b) Bid forms must be made out in ink or typed. Illegibility or ambiguity therein may constitute justification for rejection of the bid.
- (6) The purpose and intention of this invitation to bid is to afford all suppliers/contractors an equal opportunity to bid on construction, maintenance, repair, operating, services, supplies and/or equipment listed in this bid proposal. The City of Covington will accept one bid only from each vendor. Items bid on must meet or exceed specifications.
- (7) **USE OF BRAND NAMES AND STOCK NUMBERS.** Where brand names, make, manufacturer or stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, style, type and character provided brand names and stock numbers are specified. Complete product data may be required prior to award.
- (8) The City, its engineers, architects or anyone distributing plans and specifications for City public works projects, equal to or over the contract limit as defined in LSAR. S. 38:2212A(1)(d), shall furnish all prime bidders who request bid documents and who are properly licensed by the Louisiana State Licensing Board for Contractors with at least one set of complete bid documents. A deposit or fee may be charged on the documents as authorized by LSA-R.S. 38:2212A(1)(e).

- (a) Plans and specifications shall be available to bidders on the day of the first advertisement and shall be available until twenty-four (24) hours before the bid opening date, LSA-R.S. 38:2212 A(3)(c). Bid proposal documents will not be issued within the twenty-four- hour period prior to bid opening.
- (b) Addenda may be issued, as authorized by LSA-R.S. 38:2212C, by any of the following means:
 - (i) Certified mail, return receipt requested, sent to the address given by the bidder upon obtaining the bidding documents, the transmission of which shall be conclusive evidence of receipt of such notice by the bidder to whom it is addressed;
 - (ii) First-class mail with a United States Postal Service Certificate of Mailing, sent to the address given by the bidder upon obtaining the bidding documents, the transmission of which shall be conclusive evidence of receipt of such notice by the bidder to whom it is addressed;
 - (iii) Express mail sent to the address given by the bidder upon obtaining the bidding documents. Delivery of the addenda by express mail shall be conclusive evidence of receipt of the addenda by the bidder to whom it is addressed;
 - (iv) Facsimile or telecopy transmission sent to the telecopy number given by the bidder upon obtaining the bidding documents, the transmission of which shall be conclusive evidence of receipt of such notice by the bidder to whom it is transmitted; or
 - (v) Electronic transmission sent to the e-mail address given by the bidder upon obtaining the bidding documents. Transmission of the addenda by email shall be conclusive evidence of receipt of the addenda by the bidder to whom it was sent.
 - (vi) Hand delivery to the address given by the bidder upon obtaining the bidding documents or if the bidder prefers to receive delivery to the Director of Administration, City Hall, Covington, Louisiana, 317 N. Jefferson Avenue, Covington, LA 70433.
- (9) Each bidder shall comply with all rules and regulations of the Louisiana State Licensing Board for Contractors in accordance with existing state laws.
- (10) Each bid must be submitted in a sealed envelope bearing on the outside: the name of the Bidder, his address, and the name of the project for which the bid is submitted; and, if the bid is in the amount of \$50,000 or more, the state license number of the Bidder, unless otherwise excepted by law.
- (11) Further, the City of Covington reserves the right to cancel this contract at anytime and for any reason by issuing a thirty (30) day written notice to contractor.

- (12) It is requested, but not mandatory, that the entire bid package be submitted in duplicate. Duplicate copy can be a photocopy.

B. PRICE

- (1) In the event there is a difference in unit prices and totals, the unit prices shall prevail. In the event there is a difference in unit prices, written unit prices shall prevail over numerical unit prices.
- (2) The price quoted in Proposals to supply labor and materials to the City of Covington shall include all costs necessary for the complete performance of the work in full conformity with the conditions of the Contract Documents, and shall include all licenses and permit fees and all applicable Federal, State, County or Parish, Municipal, or other taxes due by the contractor.
- (3) The quantities listed on the bid form are prepared for comparison of bids and may be approximate. Payment to the contractor will be made in accordance with measurement and payment requirements for bid items and other requirements of the project specifications. Bid item quantities may be increased, decreased, or omitted as provided in the specifications.
- (4) SALES TAXES. The City of Covington is exempt from Louisiana State Sales and Use Taxes, and local parish and city taxes. An exemption certificate for state of sales and use tax will be provided upon request. (LSA-R.S. 47:301(8)(c)).

C. SIGNING

- (1) Written evidence establishing the authority of the person signing the bid must be submitted at the time of bidding. Sufficient evidence is defined by LSA-R.S. 38:2212. Failure to do so shall result in the bid being rejected.

D. INSURANCE

- (1) Proof of insurance and certificates of insurance naming the City and other parties as required in the Supplementary Conditions shall be supplied within twelve (12) calendar days after receipt of notice of award of the Contract by the Owner.

E. BID GUARANTEE

- (1) A Bid Guarantee in the proper amount and in the proper form must accompany the proposal. No bid will be considered unless it is so guaranteed. Cashier's check, certified check or money order must be made payable to the order of the Owner. Cash deposits will not be accepted. The Owner reserves the right to cash or deposit the cashier's check, certified check or money order.
- (2) The amount of the bid guarantee shall be not less than five (5%) percent of the amount bid and at the option of the bidder may be a cashier's check, certified check, money order or a satisfactory bid bond attached to the bid form, unless, a project, funded in whole or in part by State and/or Federal Funds, is governed by State and/or Federal Regulations or Laws which

require a bid guarantee in a different amount, in which event the State and/or Federal Regulations or Laws shall take precedence.

- (3) Bid Guarantees of the three lowest bidders will be retained by the Owner until the Contract is executed or until final disposition is made of the bids submitted. Bid Guarantees of all other bidders will be returned within ten (10) days after the canvass of bids.
- (4) Bids shall remain binding for at least forty-five (45) days after the date set for Bid Opening. In the event the Owner issues the Letter of Award during this period, the bid accepted shall continue to remain binding until the Execution of Contract. City of Covington and the lowest responsible bidder, by mutually written consent, may agree to extend the deadline for award by one or more extensions of thirty (30) calendar days.
- (5) The successful bidder upon his failure or refusal to execute Contract with Owner and deliver bonds within a period of twelve (12) calendar days after original date of Owner's Letter of Award, as defined in the General Specifications, shall forfeit to Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

F. LICENSING REQUIREMENTS

- (1) No person shall undertake, attempt, or submit a bid or offer to construct, supervise, superintend, oversee, direct, or in any manner assume charge of the construction, alteration, repair, improvement, movement, demolition, putting up, tearing down, or furnishing labor, material or equipment and installing same for any building, highway, road, railroad, sewer, grading, excavation, pipeline or public utility structure, project, development, improvement or any other undertaking within the jurisdiction of this City where the cost of same is fifty thousand dollars (\$50,000.00) or more unless such person shall first have acquired a valid contractor's license from the state when required by R.S. 37:2150-37:2163.
- (2) W-9 Form and City of Covington Vendor Application is to be furnished prior to the execution of the contract.

SECTION 2. WITHDRAWAL OR REVISION OF BIDS

- A. A bid may be withdrawn at any time prior to the scheduled closing time for receipt of bids, provided a request in writing, executed by the Bidder or his duly authorized representative, is filed with the Owner prior to that time. When such a request is received, the bid will be returned to the Bidder unopened.
- B. Written communications, over the signature of the Bidder, to modify bids will be accepted and the bids corrected in accordance therewith if received by the Owner prior to the scheduled closing time for receipt of bids. Oral, telephonic, telegraphic modifications will not be considered.
- C. No bid can be modified or corrected after the hour set for opening such bids.
- D. No bid can be withdrawn after the hour set for opening such bid except as provided in LSA-R.S. 38:2214C, i.e. bids containing patently obvious, unintentional, and substantial mechanical, clerical,

or mathematical errors, or errors of unintentional omission of a substantial quantity of work, labor, material, or services made directly in the compilation of the bid, may be withdrawn by the contractor if clear and convincing sworn, written evidence of such errors is furnished to the City of Covington, 317 N. Jefferson Avenue, Covington, LA 70433, within forty-eight (48) hours of the bid opening excluding Saturdays, Sundays, and legal holidays. Such errors must be clearly shown by objective evidence drawn from inspection of the original work papers, documents, or material used in the preparation of the bid sought to be withdrawn. If the City of Covington determines that the error is a patently obvious mechanical, clerical, or mathematical error, or unintentional omission of a substantial quantity of work, labor, material, or service, as opposed to a judgment error, and that the bid was submitted in good faith it shall accept the withdrawal and return the bid security to the contractor. A contractor who attempts to withdraw a bid under these provisions shall not be allowed to resubmit a bid on the project (LSA-R.S.38:2214D).

SECTION 3. INTERPRETATION OF CONTRACT DOCUMENTS

- A. No oral interpretation will be made to any Bidder as to the meaning of the drawings, specifications, or contract documents. Every request for such interpretation shall be made in writing and addressed and forwarded to the Engineer, Architect or person distributing plans and specifications. No inquiry received within three (3) days prior to the day fixed for opening of the bids will be given consideration. Every interpretation made to the Bidder shall be in the form of an addendum to the Specifications and shall be issued as set forth above in Section 1A(8)(b). All such addenda shall become a part of the Contract Documents. Failure of any Bidder to receive any such interpretation shall not relieve any Bidder from any obligation under his Bid as submitted without modification.
- B. The specifications and plans are complementary of each other and all work called for or reasonably implied by either shall be performed as if called for by both. In case of conflict between the requirements of the specifications and plans, the specifications shall take precedence. Figured dimensions shall take precedence over scale dimensions, and larger scale details shall take precedence over smaller scale details in the general work drawings.

SECTION 4. REJECTION OF BIDS

- A. The Owner reserves the right to reject any or all Bids, to waive informalities, and to make award as it may elect, pursuant to the law. Incomplete, informal, or unbalanced Bids may be rejected. Reasonable grounds for belief that any one Bidder is concerned, directly or indirectly, with more than one Bid will cause rejections of all Bids wherein such Bidder is concerned. If required, a Bidder shall furnish satisfactory evidence of his competence and ability to perform the work stipulated in his Proposal. If satisfactory evidence of competence to perform work is not furnished, the bid shall be rejected.
- B. Additionally, bids may be considered irregular and be rejected for any of the following, but is not limited to the following circumstances;
 - (1) If the bid form is on a form other than that furnished by the City or if the form is altered or any part thereof is detached.

- (2) If **affidavits** included in bid documents and/or required by law are not returned within 10 days after bid opening or are not properly executed and notarized.
- (3) If there are unauthorized additions, conditional or alternate bids or irregularities which alter the general terms and conditions, the plans or specifications, or make the bid incomplete, indefinite, or ambiguous as to its meaning.
- (4) If the bidder adds provisions reserving the right to accept or reject the award or to enter into the contract pursuant to the award.
- (5) If an owner or a principal officer of the bidding firm is an owner or a principal officer of a firm which has been declared by the City to be ineligible to bid.
- (6) If the proposed bid guaranty does not meet the requirements of Section 1E Bid Guaranty.
- (7) If more than one proposal for the same work, services, materials or supplies is received from an individual, partner, firm, corporation, joint venture, other legal entity, or combination thereof under the same or a different name.
- (8) The bid is not properly signed or the authority of the signed person submitting the bid is deemed insufficient or unacceptable.
- (9) Any other reasons for rejection set forth by City, State or Parish laws, ordinances or resolutions.

SECTION 5. FAMILIARITY WITH LAWS AND ORDINANCES

- A. Bidders shall familiarize themselves with and shall comply with all applicable Federal and State Laws, parish/municipal ordinances, resolutions, and the rules and regulations of all authorities having jurisdiction over construction of the project, which may directly or indirectly affect the work or its prosecution.
- B. These laws and/or ordinances will be deemed to be included in the contract, the same as though herein written in full.
- C. In case of conflict between the requirements of these specifications and any State and/or Federal Regulations or Laws, the State and/or Federal Regulations or Laws shall take precedence in all cases in which State and/or Federal Funding of the contract, in whole or in part, depends upon compliance with said State and/or Federal Regulations or Laws.

SECTION 6. DRAWINGS, ETC.

Bidders shall thoroughly examine and be familiar with Drawings, Specifications, and Contract Documents. The failure or omission of any Bidder to receive or examine any form, instrument, drawing, or document or to visit the site and acquaint himself with conditions there existing, shall in no way relieve any Bidder from any obligation with respect to his Bid and the responsibility in the premises rests with him. Submission of a bid shall be considered prima facie evidence that the bidder has made such

examination and is satisfied as to the conditions to be encountered in performing the work and as to requirements of the plans, project specifications, and contract forms.

SECTION 7. AWARD OF CONTRACT

The award of the Contract, if it be awarded, will be by the Owner to the lowest responsible Bidder whose Proposal shall have complied with all the requirements necessary to render it formal. The successful Bidder will be notified by telegram or letter mailed to the address shown on the Proposal that his bid has been accepted and that he has been awarded the Contract. No contract shall be executed with any Contractor until their certificates of insurance, performance bonds, labor and materials payment bonds, or any other bonds required are made satisfactory to the Owner.

SECTION 8. DISQUALIFICATION OF BIDDERS

- A. The causes for disqualification from consideration for award of a contract with the City of Covington are as follows:
- (1) Conviction for commission of a criminal offense as an incident to obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract;
 - (2) Conviction under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity or business honesty which currently, seriously, and directly affects responsibility as a City contractor;
 - (3) Conviction under state or federal antitrust statutes arising out of the submission of bids or proposals;
 - (4) Violation of contract provisions, as set forth below, of a character which is regarded by the City of Covington to be serious as to justify disqualification:
 - (a) Deliberate failure without good cause to perform in accordance with the specifications or within the time limit provided in the contract; or
 - (b) A recent record of failure to perform or of unsatisfactory performance in accordance with the terms of one or more contracts; provided that failure to perform or unsatisfactory performance caused by acts beyond the control of the contractor shall not be considered to be a basis for disqualification;
 - (5) Any other cause the City determines to be so serious and compelling as to affect responsibility as a City contractor, including debarment by another governmental entity for any cause;
 - (6) Violation of the State Code of Ethics
 - (7) Failure to secure and/or maintain necessary licenses and/or permits;

- (8) Failure to comply with or meet bid specifications and or failure to be a responsible bidder.

SECTION 9. EXECUTION OF CONTRACT

The successful Bidder shall execute the Contract with the Owner in the form of the Contract included in the Specifications, a copy of which is annexed hereto, in such number of counterparts as the Owner may request within twelve (12) days after receipt of notice of award of the Contract by the Owner. One copy of the executed contract with all documents forming a part thereof shall be filed at the expense of the Contractor, with the Recorder of Mortgages at the St. Tammany Parish Clerk of Court.

The Performance and Payment Bond that shall be supplied with the contract shall be in the amount of the contractor's total bid amount.

SECTION 10. MISCELLANEOUS

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, sex or religion under Title VII of the Civil Rights Act of 1964, as amended; nor discriminate on the basis of age under the Age Discrimination Act of 1975, as amended; nor with respect to an otherwise qualified handicapped individual as provided in Title V of the Rehabilitation Act of 1973; as amended. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k) (5) of the Regulations.

SECTION 11. ADDITIONAL REQUIRED INFORMATION/DOCUMENTATION TO BE SUPPLIED BY THE LOW BIDDER

To the extent that the front end documents, including the Instructions to Bidders, General Conditions and Supplementary Conditions, require that any information or documentation be supplied with the bid, and which said information or documentation is not allowed to be required with the bid under the Louisiana Uniform Public Works Bid Form, then the requirement to provide it with the bid is waived. All such required information or documentation not provided with the bid must be provided within 10 calendar days of bid opening by the apparent low bidder. Failure to provide said information and documentation within the 10 calendar days shall be grounds to declare the bid non-responsive.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
C0234

The undersigned bidder hereby declares and represents that she/he: a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Forte and Tablada
_____ and dated: 4/17/2026

(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) _____.

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" * but not alternates) the sum of:

_____ Dollars (\$ _____)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

_____ Dollars (\$ _____)

Alternate No. 2 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

_____ Dollars (\$ _____)

Alternate No. 3 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

_____ Dollars (\$ _____)

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

LOUISIANA CONTRACTOR'S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____

DATE: _____

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** **A CORPORATE RESOLUTION OR WRITTEN EVIDENCE** of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
City Project C0234

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CLEARING AND GRUBBING			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
201-01-00100	1	LUMP SUM		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REMOVAL OF STRUCTURES AND OBSTRUCTIONS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-01-00100	1	LUMP SUM		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REMOVAL OF ASPHALT PAVEMENT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-02-02020	3981.7	SQ. YD.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REMOVAL OF CONCRETE CATCH BASIN			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-02-06060	4	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REMOVAL OF CONCRETE WALKS AND DRIVES			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-02-06100	1026	SQ. YD.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REMOVAL OF MANHOLES			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-02-26000	1	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REMOVAL OF PIPE (SIDE DRAIN)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-02-32120	335	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REMOVAL OF PIPE (STORM DRAIN)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-02-32140	823	LIN. FT.		

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
City Project C0234

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REMOVAL OF SIGNS AND SUPPORTS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-02-38240	14	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ RELOCATION OF SIGN			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-03-38000	6	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ RELOCATION OF SIGN POLE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
202-03-38020	2	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ EXCAVATION AND EMBANKMENT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
203-05-00100	1	LUMP SUM		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ TEMPORARY HAY BALES			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
204-02-00100	273	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ TEMPORARY SILT FENCING			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
204-06-00100	2343	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CLASS II BASE COURSE (5" THICK) (CRUSHED STONE)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
302-02-05000	1833.8	SQ. YD.		

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
City Project C0234

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CLASS II BASE COURSE (8" THICK) (CRUSHED STONE)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
302-02-08020	4138.8	SQ. YD.		
DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ LIME			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
304-01-00100	21.13	TON		
DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ LIME TREATMENT (TYPE E)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
304-05-00100	1493	SQ. YD.		
DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ TRAFFIC MAINTENANCE SURFACING (AGGREGATE) (VEHICULAR MEASUREMENT)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
402-01-00100	101.3	CU. YD		
DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ ASPHALT CONCRETE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
502-01-00100	1197.1	TON		
DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ PORTLAND CEMENT CONCRETE PAVEMENT (COLORED) (11" THICK)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
601-01-10000	1002.6	SQ. YD.		
DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ STORM DRAIN PIPE (15" RCP/RPVCP)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
701-03-01002	369	LIN. FT.		
DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ STORM DRAIN PIPE (18" RCP/RPVCP)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
701-03-01022	144	LIN. FT.		

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
City Project C0234

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ STORM DRAIN PIPE (24" RCP/RPVCP)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
701-03-01042	197	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ STORM DRAIN PIPE ARCH (15" EQUIV. RCPA)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
701-04-01000	265	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ STORM DRAIN PIPE ARCH (18" EQUIV. RCPA)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
701-04-01020	191	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ STORM DRAIN PIPE ARCH (24" EQUIV. RCPA)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
701-04-01040	338	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ SIDE DRAIN PIPE ARCH (18" EQUIV. RCPA)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
701-06-00020	50	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ SIDE DRAIN PIPE ARCH (24" EQUIV. RCPA)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
701-06-00040	58	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ YARD DRAIN PIPE (8" PVC)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
701-07-00300	19	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ MANHOLES (MH-06)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
702-02-00100	1	EACH		

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
City Project C0234

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CATCH BASINS (CB-01)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
702-03-00100	16	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CATCH BASINS (CB-05)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
702-03-00400	1	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CATCH BASINS (CB-06)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
702-03-00500	18	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ ADJUSTING CATCH BASINS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
702-04-00200	1	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ PAVED GUTTER DRAIN (SINGLE)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
702-10-00100	2	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ PERFORATED PIPE UNDERDRAINS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
703-03-00100	71	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CONCRETE WALK (4" THICK)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
706-01-00100	693.6	SQ. YD.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CONCRETE DRIVE (6" THICK)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
706-02-00200	841.4	SQ. YD.		

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UNIT PRICE FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
City Project C0234

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ___ CURB RAMPS (TYPE 3)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
706-04-00110	40.5	SQ. YD.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ___ CURB RAMPS (TYPE 4)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
706-04-00111	53.7	SQ. YD.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ___ CONCRETE CURB (BARRIER)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
707-01-00100	286.4	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ___ COMBINATION CONCRETE CURB AND GUTTER (OUTER EDGE OF PAVEMENT)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
707-03-00100	1393.6	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ___ COMBINATION CONCRETE CURB AND GUTTER (CENTRAL ISLAND AND SPLITTER ISLANDS)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
707-03-00101	1212.4	LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ___ TEMPORARY SIGNS AND BARRICADES			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
713-01-00100	1	LUMP SUM		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ___ BEDDING MATERIAL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
726-01-00100	193.4	CU. YD.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ___ MOBILIZATION			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
727-01-00100	1	LUMP SUM		

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LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
City Project C0234

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ SIGN (TYPE A)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
729-01-00100	463.8	SQ. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ DEAD END ROAD INSTALLATIONS (TYPE A)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
729-19-00100	1	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ SQUARE TUBING POST WITH 2-1/4" OMNI DIRECTIONAL ANCHOR			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
729-22-00200	50	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REFLECTORIZED RAISED PAVEMENT MARKERS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
731-02-00100	213	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ PLASTIC PAVEMENT STRIPING (SOLID LINE) (12" WIDTH) (THERMOPLASTIC 90 MIL)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
732-01-01060	316	LN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ PLASTIC PAVEMENT STRIPING (SOLID LINE) (24" WIDTH) (THERMOPLASTIC 125 MIL)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
732-01-05400	538	LN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ PLASTIC PAVEMENT STRIPING (SOLID LINE) (4" WIDTH) (THERMOPLASTIC 90 MIL)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
732-02-02000	0.693	MILE		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ PLASTIC PAVEMENT STRIPING (SOLID LINE) (8" WIDTH) (THERMOPLASTIC 90 MIL)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
732-02-02040	0.147	MILE		

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LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
City Project C0234

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ PLASTIC PAVEMENT STRIPING (DOTTED LINE) (24" W)(2' L) (THERMOPLASTIC 90 MIL)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
732-03-02060	0.034	MILE		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ MAILBOXES			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
735-01-00100	1	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ MAILBOX SUPPORTS (SINGLE)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
735-02-00100	1	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ HYDRO-SEEDING			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
739-01-00100	0.68	ACRE		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CONSTRUCTION LAYOUT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
740-01-00100	1	LUMP SUM		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ RELOCATE FIRE HYDRANT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
741-29-00100	1	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ REMOVAL OF FIRE HYDRANT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
741-38-00100	2	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CLASS A1 CONCRETE (RETAINING WALL)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
805-01-00600	9.93	CU. YD.		

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LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

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317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
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DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ CONCRETE FINISH (CLASS 2 RUBBED FINISH)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
805-18-00100	177	SQ. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ DEFORMED REINFORCING STEEL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
806-01-00100	780	LB.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ ARBORIST SERVICES			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
NS-201-00005	1	LUMP SUM		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ SAW CUTTING ASPHALT CONCRETE PAVEMENT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
NS-500-00340	1248	IN.-LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ SAW CUTTING PORTLAND CEMENT CONCRETE PAVEMENT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
NS-600-00220	3461	IN.-LIN. FT.		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ TRENCH DRAINS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
NS-700-00100	1	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ TREE PROTECTION FENCING			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
NS-719-00001	1	LUMP SUM		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ TREE TRIMMING			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
NS-719-00002	1	LUMP SUM		

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LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: City of Covington
317 N. Jefferson Avenue
Covington, LA 70433

BID FOR: City of Covington
Columbia Roundabouts
City Project C0234

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ ROOT PRUNING			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
NS-719-00003	1	LUMP SUM		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# ____ WATER LINE ADJUSTMENT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
NS-741-00100	5	EACH		

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

SECTION 00 43 13
BID BOND FORM

Date: _____

KNOW ALL MEN BY THESE PRESENTS:

That _____ of _____, as Principal, and
, as Surety, are held and firmly bound unto the
_____ (Obligee), in the full and just sum of
five (5%) percent of the total amount of this proposal, including all alternates, lawful money of the United
States, for payment of which sum, well and truly be made, we bind ourselves, our heirs, executors,
administrators, successors and assigns, jointly and severally firmly by these presents.

Surety represents that it is listed on the current U. S. Department of the Treasury Financial
Management Service list of approved bonding companies as approved for an amount equal to or greater that
the amount for which it obligates itself in this instrument or that it is a Louisiana domiciled insurance company
with at least an A - rating in the latest printing of the A. M. Best's Key Rating Guide. If surety qualifies by
virtue of its Best's listing, the Bond amount may not exceed ten percent of policyholders' surplus as shown in
the latest A. M. Best's Key Rating Guide.

Surety further represents that it is licensed to do business in the State of Louisiana and that this Bond
is signed by surety's agent or attorney-in-fact. This Bid Bond is accompanied by appropriate power of
attorney.

THE CONDITION OF THIS OBLIGATION IS SUCH that, whereas said Principal is herewith submitting its
proposal to the Obligee on a Contract for:

NOW, THEREFORE, if the said Contract be awarded to the Principal and the Principal shall, within
such time as may be specified, enter into the Contract in writing and give a good and sufficient bond to secure
the performance of the terms and conditions of the Contract with surety acceptable to the Obligee, then this
obligation shall be void; otherwise this obligation shall become due and payable.

PRINCIPAL (BIDDER)

SURETY

BY: _____
AUTHORIZED OFFICER-OWNER-PARTNER

BY: _____
AGENT OR ATTORNEY-IN-FACT(SEAL)

SECTION 00 45 19
NON-COLLUSION AFFIDAVIT

STATE OF LOUISIANA

PARISH OF _____

BEFORE ME, THE UNDERSIGNED AUTHORITY, PERSONALLY CAME AND APPEARED _____, WHO AFTER BEING BY ME DULY SWORN, DEPOSED AND SAID THAT HE IS THE FULLY AUTHORISED _____ OF _____ (HEREIN AFTER REFERRED TO AS BIDDER) THE PARTY WHO SUBMITTED A BID FOR _____, BID NO. _____ AND SAID AFFIANT FURTHER SAID:

- 1) That bidder employed no person, corporation, firm, association or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the bidder whose services in connection with the construction of the public building or project or in securing the public contract were in the regular course of their duties for bidder; and
- 2) That no part of the contract price received by bidder was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the bidder whose services in connection with the construction of the public building or project were in the regular course of their duties for bidder.
- 3) Said bid is genuine and the bidder has not colluded, conspired or agreed directly or indirectly with any other bidder to offer a sham or collusive bid.
- 4) Said bidder has not in any manner, directly or indirectly, agreed with any other 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 that of any other bidder, or to induce any other person to refrain from bidding.
- 5) Said bidder is not intended to secure an unfair advantage or benefit from the City of Covington or in favor of any person interested in the proposed contract.

NAME OF BIDDER

NAME OF AUTHORIZED SIGNATORY OF BIDDER

SIGNATURE OF AUTHORIZED SIGNATORY OF
BIDDER

SWORN TO AND SUBSIBED

BEFORE ME THIS _____ DAY OF

_____, 20____.

NOTARY PUBLIC

SECTION 00 45 21
PAST CRIMINAL CONVICTION AFFIDAVIT

STATE OF LOUISIANA

PARISH OF _____

BEFORE ME, THE UNDERSIGNED AUTHORITY, PERSONALLY CAME AND APPEARED

_____, WHO AFTER BEING BY ME DULY SWORN, DEPOSED
AND SAID THAT HE IS THE FULLY AUTHORISED _____ OF
_____(HEREIN AFTER REFERRED TO AS BIDDER) THE PARTY
WHO SUBMITTED A BID FOR _____, BID NO.
_____. AND SAID AFFIANT FURTHER SAID:

He/she personally has not been convicted of, nor has he/she entered a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed below. No individual partner, incorporator, director, manager, officer, organizer, or member, who has a minimum of a ten percent ownership in the bidding entity, has been convicted of, or has entered a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed below.

A conviction of or plea of guilty or nolo contendere to the following state crimes or equivalent federal crimes shall permanently bar any person or the bidding entity from bidding on public projects:

- (a) Public bribery (R.S. 14:118).
- (b) Corrupt influencing (R.S. 14:120).
- (c) Extortion (R.S. 14:66).
- (d) Money laundering (R.S. 14:230).

A conviction of or plea of guilty or nolo contendere to the following state crimes or equivalent federal crimes shall bar any person or the bidding entity from bidding on public projects for a period of five years from the date of conviction or from the date of the entrance of the plea of guilty or nolo contendere:

- (a) Theft (R.S. 14:67).
- (b) Identity Theft (R.S. 14:67.16).
- (c) Theft of a business record (R.S. 14:67.20).
- (d) False accounting (R.S. 14:70).
- (e) Issuing worthless checks (R.S. 14:71).
- (f) Bank fraud (R.S. 14:71.1).
- (g) Forgery (R.S. 14:72).
- (h) Contractors; misapplication of payments (R.S. 14:202).
- (i) Malfeasance in office (R.S. 14:134).

The five-year prohibition provided for in this section shall apply only if the crime was committed during the solicitation or execution of a contract or bid awarded pursuant to these provisions. If evidence is submitted substantiating that a false attestation has been made and the project must be readvertised or the contract cancelled, the awarded entity making the false attestation shall be responsible to the public entity for the costs of rebidding, additional costs due to increased costs of bids and any and all delay costs due to the rebid or cancellation of this project.

NAME OF BIDDER

NAME OF AUTHORIZED SIGNATORY OF BIDDER

SIGNATURE OF AUTHORIZED SIGNATORY OF
BIDDER

SWORN TO AND SUBSRIBED

BEFORE ME THIS _____ DAY OF

_____, 20____.

NOTARY PUBLIC

SECTION 00 45 43
CORPORATE RESOLUTION/AUTHORITY TO SIGN

If the Bidder is a corporation or partnership, attach to bid submittal a certified copy of corporate resolutions or evidence of authority to sign authorizing an officer of the Corporation to execute the Agreement contained within this document on behalf of the Corporation.

SECTION 00 46 19
EMPLOYEE VERIFICATION AFFIDAVIT FORM
(R.S. 38:2212.10(C))
(Verification of Employees)

L.A. R.S. 38:2212.10 Verification of Employees

- A. Appear is registered and participates in a status verification system to verify that all employees in the State of Louisiana are legal citizens of the United States or are legal aliens.
- B. If awarded the contract, Appearer shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.
- C. If awarded the contract, Appearer shall require all subcontractors to submit to it a sworn affidavit verifying compliance with Paragraphs (A) and (B) of this Subsection.

NAME OF BIDDER

NAME OF AUTHORIZED SIGNATORY OF BIDDER

DATE

TITLE OF AUTHORIZED SIGNATORY OF BIDDER

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER

Witness

Witness

Notary Public

SECTION 00 52 10
HOLD HARMLESS AGREEMENT

_____ (Contractor) agrees to protect, defend, indemnify, save, and hold harmless the City of Covington, its elected and appointed officials, departments, agencies, boards and commissions, their officers, agents servants, employees, including volunteers, from and against any and all claims, demands, expense and liability arising out of injury or death to any person or the damage, loss or destruction of any property to the extent caused by any act or omission of Contractor, its agents, servants, employees, and subcontractors, or any and all costs, expense and/or attorney fees incurred by the City of Covington as a result of any claim, demands, and/or causes of action that results under the performance or non-performance of this contract.

_____ (Contractor) agrees to investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at its sole expense and agrees to bear all other costs and expenses related thereto, even if it (claims, etc.) is groundless, false or fraudulent.

SIGNED, this ____ day of _____, 20__.

WITNESSES:

(Name of Company or Contractor)

Printed Name: _____

BY: _____
(Signature of Authorized Officer)

Printed Name: _____

Printed Name: _____
Title: _____

STATE OF _____

PARISH OF _____

SWORN TO and subscribed before me, Notary, on this ____ day of _____, 20__.

NOTARY PUBLIC
My Commission Expires: _____

Contractor - please complete the following:

Claims contact for this project will be:

(Print name and title of Contact Person)

Address

Email address

Telephone#

Cell #

Fax #

**FORM OF AGREEMENT
BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT**

THIS AGREEMENT is by and between City of Covington ("Owner") and
 ("Contractor").

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents for the Columbia Roundabouts

ARTICLE 2 – THE PROJECT

- 2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows: construction and all related items required to construct a mini-roundabout at N. Columbia St. and N. Jefferson Ave. and a roundabout at N. Columbia St., W. 30th Ave., and Monroe St.

- 2.02 The Project has been designed by City of Covington (Engineer), which is to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 3 – CONTRACT TIMES

- 3.01 Time of the Essence

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

- 3.02 *Days to Achieve Substantial Completion and Final Payment*

- A. The Work will be substantially completed within 180 days after the date when the Contract Times commence to run as indicated on a written Notice to Proceed provided to Contractor from the City of Covington, and completed and ready for final payment within 225 days after the date when the Contract Times commence to run.

- 3.03 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 3.02 above, plus any extensions thereof allowed per written approval of City Engineer. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$ 1500

for each day that expires after the time specified in Paragraph 3.02 above for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$ 1500 for each day that expires after the time specified in Paragraph 3.02 above for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 4 – CONTRACT PRICE

4.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 4.01.A, below:

- A. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the actual quantity of that item performed under each task order.

The Bid prices for Unit Price Work set forth as of the Effective Date of the Agreement are based on estimated quantities. As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.07 of the General Conditions. No unit price adjustments for actual quantities will be made.

ARTICLE 5 – PAYMENT PROCEDURES

5.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment. Progress payments on account of Unit Price Work will be based on the number of units completed and will be incorporated into a form of Application for Payment acceptable to Engineer. 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.

5.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 1st day of each month during

performance of the Work as provided in Paragraph 5.02.A.1 below. All such payments will be measured by the Unit Price Work based on the number of units completed.

- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts as Engineer shall determine in accordance with contract provisions and less 100 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

5.03 *Final Payment*

- A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price as recommended by Engineer, less retainage.
- B. Following acceptance of the Work by Owner, Contractor, at his expense, shall file the acceptance with the Clerk of Court and Ex-Officio Recorder of Mortgages within 30 days of receipt of fully executed Certificate of Substantial Completion. If Contractor fails to file within the stipulated time, Owner may file the Certificate of Substantial Completion and deduct such cost from Contractor's Retainage.
- C. Release and payment of Retainage, or balance due, will become due and will be paid by Owner to Contractor thirty days after receipt of Application for Retainage Payment (which must include a clear lien and privilege certificate secured from the Clerk of Court and Ex-Officio Recorder of Mortgages dated no less than forty-five (45) days after the filing of the acceptance and other documentation), and recommendation of payment by ENGINEER.
- D. If Contractor fails to submit the required clear lien and privilege certificate and Application for Retainage Payment within seventy-five (75) days after the filing of the acceptance and other documentation, Owner may secure the required clear lien and privilege certificate from the Clerk of Court and Ex-Officio Recorder of Mortgages and deduct such cost from Contractor's Retainage. Owner may also pay the remainder of Contractor's Retainage without the Application for Retainage Payment after the aforementioned time has elapsed and after all work has been completed on the Project and the required clear lien and privilege certificate secured from the Clerk of Court and Ex-Officio Recorder of Mortgages dated no less than forty-five (45) days after the filing of the acceptance and other documentation has been submitted to or acquired by the Owner.

ARTICLE 6 – CONTRACTOR'S REPRESENTATIONS

- 6.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.

- B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities), if any.
- E. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Contractor's safety precautions and programs.
- F. Contractor does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 7 – CONTRACT DOCUMENTS

7.01 *Contents*

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages 00 52 43 - 1 to 00 52 43 - 7, inclusive).
 - 2. Performance and Payment bond (pages 00 61 13 - 1 to 00 61 13 - 2, inclusive).
 - 3. General Conditions (pages 00 72 43 - i to 00 72 43 - 55, inclusive).
 - 4. Specifications as listed in the table of contents of the Project Manual.

5. Addenda (numbers _____ to _____, inclusive).
6. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages _____ to _____, inclusive).
 - b. Documentation submitted by Contractor prior to Notice of Award (pages _____ to _____, inclusive).
7. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Notice to Proceed (pages _____ to _____, inclusive).
 - b. Work Change Directives.
 - c. Change Orders.
- B. The documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 8.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

ARTICLE 8 – MISCELLANEOUS

8.01 *Terms*

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

8.02 *Assignment of Contract*

- A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

8.03 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

8.04 *Severability*

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- B. The City of Covington reserves the right to cancel this contract at anytime and for any reason by issuing a thirty (30) day written notice to contractor.

8.05 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.05:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement. Counterparts have been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or have been identified by Owner and Contractor or on their behalf.

This Agreement will be effective on date as signed by Mayor of Covington.

OWNER:

CONTRACTOR

By: _____
Title: Mayor - City of Covington
Date: _____

By: _____
Title: _____
Date: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
Title: City Engineer- City of Covington
Address for giving notices:
317 N. Jefferson Avenue
Covington, LA 70433

Attest: _____
Title: _____
Address for giving notices:

License No.: _____

SECTION 00 61 63
PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we (1) * _____ and (2) * _____

hereinafter called "Principal" and (3) * _____ a Surety Company authorized to do and doing business in the State of Louisiana, hereinafter called "Surety" are held and firmly bound unto the City of Covington, Louisiana, hereinafter called "Owner" in penal sums of

_____ dollars (\$_____) Performance Bond and
_____ dollars (\$_____) Payment Bond in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, 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 furnishing of:

City of Covington
Columbia Roundabouts

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 which may be granted by the owner, with or without notice to the Surety, 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, and 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 prosecution of such work, and all insurance premiums on said 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, alterations or addition to the terms of the contract or to the work to be performed there under or the specifications accompanying the same shall in anywise 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 of 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 instrument is execute in **Three (3)** originals each one of which shall be deemed an original, this the _____ day of _____, 20____.

ATTEST: _____
(PRINCIPAL)

(SEAL) _____ By _____
(Principal Secretary)

(Witness as to Principal) (Address)

Address

Surety

ATTEST:

(SEAL) _____ By: _____
(Surety) Secretary

(Witness as to Surety)

Address

NOTE: DATE OF BOND MUST NOT BE PRIOR TO DATE OF THIS AGREEMENT.

SECTION 00 62 11
SUBMITTAL TRANSMITTAL FORM

Date: _____

Submittal No. _____

To:	From:

Per the General Conditions, contractor shall use this transmittal form for submittal of shop drawings, testing reports, and product information. The procedure for submitting these items is located in the General Conditions.

Contractor shall follow all specifications. Failure to follow all requirements included in the contract documents and specifications will constitute as reason for the return of the submittal for an additional re-submittal. Contractor is to number each submittal.

Project Name: _____

Specification Section No. _____

Contractor: _____

Subcontractor/Supplier: _____

Notes/Comments:

Submittal Review:

- ☐ No Exceptions Taken ☐ Approved as Noted ☐ Revise and Resubmit
☐ Incomplete/Not Reviewed(Resubmit) ☐ Rejected

Review is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents and specifications. Contractor is responsible for: dimensions which shall be confirmed and correlated at the job site; fabrication processes and techniques of construction; coordination of his or her work with that of all other trades; and the satisfactory performance of his or her work. Approval of submittal does not relieve the contractor, subcontractor or material supplier of his or her responsibility to comply with the requirements of the contract documents.

DATE _____

Signature _____

Title _____

Organization/Company _____

SECTION 00 62 76
APPLICATION FOR PAYMENT FORM

TO:	FROM:
-----	-------

PROJECT: _____ CHECK ONE: ☐ PARTIAL ☐ FINAL

DATE: _____ APPLICATION NO.: _____

CONTRACTOR'S APPLICATION FOR PAYMENT

1. Original Contract Sum _____
2. Net Change By Change Orders _____
3. Contract Sum to Date \$ _____
4. Total Completed and Stored to Date..... _____
5. Retainage
 - a. _____% of work completed \$ _____
 - b. _____% of stored material _____Total Retainage \$ _____
6. Total Earned Less Retainage \$ _____
7. Less Previous Applications for payment _____
8. Current Payment Due \$ _____
9. Balance Due to Finish Including Retainage..... \$ _____

The undersigned 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 payments were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of Louisiana

Parish of : _____

Subscribe and sworn before me this _____ day of _____, _____

NOTARY PUBLIC: _____

My Commission Expires: _____

**SECTION 00 63 57
CHANGE ORDER REQUEST FORM**

Date: _____

Request No. _____

To:	From:

Description of Change Order Request:

References/Support Documents For Change Order:

For the change order request above, contractor is to provide a itemized cost proposal addressing the Engineer's proposed changes to the Contract Documents and Specifications. This proposal should indicate changes in Task Order Cost and Task Order Duration.

THIS DOCUMENT IS ONLY A PROPOSAL REQUEST. No work is to begin on items indicated in this Change Order Request until a written Notice to Proceed with Change Order is given by Engineer.

CHANGE ORDER REQUESTED BY:

DATE _____

Engineer's Signature

Title

Organization/Company

Seal: _____

CHANGE ORDER FORM

PROJECT NAME: _____

Change Order No. _____

Date Initiated: _____

Engineer's description, explanation, & estimated cost of proposed revision:

Page 1 of 1

In order to facilitate plans for local development, the City has opted to make changes / additions to the Project requirements that result in quantity changes to the following existing items:

There is requested increase in contract time of ____ days due to the cost of the above changes.

The preceding will necessitate the following changes in quantities (if space is not sufficient, use extra forms):

ITEM NO.	ITEM	UNIT	UNIT PRICE	REVISED		ORIGINAL	
				QUANTITY	AMOUNT	QUANTITY	AMOUNT
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
					\$ 0.00		\$ 0.00
Additional contract days requested:		Amount of over run and under run	\$ 0.00	TOTAL	\$ 0.00	TOTAL	\$ 0.00

It is mutually agreed to perform and accept the above revisions in accordance with original contract and applicable specifications at the above prices. Approval of this change order by the Parish

Engineer may be subject to and conditioned upon approval by other participating agencies and becomes official upon distribution.

CONTRACTOR:

Name
Title

DATE _____

PROJECT MANAGER:

Name
Title

DATE _____

OWNER:

Name
Title

DATE _____

SECTION 00 65 16
CERTIFICATE OF SUBSTANTIAL COMPLETION

DATE OF ISSUANCE: _____

OWNER: City of Covington

CONTRACTOR: _____

PROJECT: _____

OWNER's Project No. _____

☐ This Certification of Substantial Completion applies to ***all Work*** under the Contract Documents.

☐ This Certification of Substantial Completion ***applies to the following specified parts*** of the Contract Documents:

The Work to which this Certificate applies has been inspected by authorized representatives of the OWNER, CONTRACTOR and ENGINEER, and found to be substantially complete and is also the date of commencement of applicable warranties required by the Contract Documents, * (except as attached.)

The Work is hereby declared to be substantially complete with the Contract Documents on:

Date of Substantial Completion

☐ A "Punch-List" of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of the CONTRACTOR to complete all Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by the CONTRACTOR within _____ days of the above date of Substantial Completion.

☐ * A list of "excepted" Warranty items is attached hereto.

Contractor's Representative

I, _____, certify that work has been installed in accordance with the contract documents. As applicable, I agree to any "Punch-list" or warranty items as listed as part of the substantial completion.

Contractor's Signature

Date

License Number

Engineer's Representative

I, _____, certify that based upon inspection of work, the work has been substantially completed in accordance with City of Covington requirements, contract documents, and approved plans and specifications.

Engineer Signature

Date

License Number

Owner's Representative

I, _____, certify that I have received all contract documents and that it is the City's responsibility to see that the project is maintained in accordance with the contract documents.

Owner Signature

Date

SECTION 00 72 43
GENERAL CONDITIONS

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
 3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Asbestos*—Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
 5. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 6. *Bidder*—The individual or entity who submits a Bid directly to Owner.
 7. *Bidding Documents*—The Bidding Requirements and the proposed Contract Documents (including all Addenda).
 8. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid security of acceptable form, if any, and the Bid Form with any supplements.
 9. *Change Order*—A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
 10. *Claim*—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
 11. *Contract*—The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
 12. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other

Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*—The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
14. *Contract Times*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
15. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.
16. *Cost of the Work*—See Paragraph 11.01 for definition.
17. *Drawings*—That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
18. *Effective Date of the Agreement*—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
19. *Engineer*—The individual or entity named as such in the Agreement.
20. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
21. *General Requirements*—Sections of Division 1 of the Specifications.
22. *Hazardous Environmental Condition*—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto.
23. *Hazardous Waste*—The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
24. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
25. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
26. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
27. *Notice of Award*—The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*—A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
29. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
30. *PCBs*—Polychlorinated biphenyls.
31. *Petroleum*—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
32. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
33. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
34. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
35. *Radioactive Material*—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
36. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.
37. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
38. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
39. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
40. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
41. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

- 42. *Specifications*—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
- 43. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
- 44. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
- 45. *Successful Bidder*—The Bidder submitting a responsive Bid to whom Owner makes an award.
- 46. *Supplementary Conditions*—That part of the Contract Documents which amends or supplements these General Conditions.
- 47. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or Subcontractor.
- 48. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 49. *Unit Price Work*—Work to be paid for on the basis of unit prices.
- 50. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 51. *Work Change Directive*—A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

- A. The words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. Intent of Certain Terms or Adjectives:

1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day:

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective:

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide:

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.

- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

- A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor up to five printed or hard copies of the Drawings and Project Manual and one set in electronic format. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Time will commence to run on the day indicated in the Notice to Proceed.

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 Contract, 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

2.06 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.07 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to Owner.
- C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

- A. Standards, Specifications, Codes, Laws, and Regulations
 - 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard, specification, manual, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract

Documents. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3. The work shall be performed in accordance with the Louisiana Administrative Code Title 33, part IX, subpart 3, chapter 73, amended June 2022, and any supplement or amendments thereto issued prior to the date of these Contract Documents, except as modified or supplemented in these General Conditions, Special Provisions, drawings, or other Contract Documents.
4. Standard Specifications: Refer in precedent order to the Louisiana Administrative Code Title 33, part IX, subpart 3, chapter 73, amended June 2022, and the other specifications of ASTM, ANSI, AWWA, etc., as referenced and as published on the date of the bid advertisement.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies:*

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor discovers, or has actual knowledge of, and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) any standard, specification, manual, or code, or (c) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - a. the provisions of any standard, specification, manual, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference in the Contract Documents); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:
 - 1. A Field Order;
 - 2. Engineer's approval of a Shop Drawing or Sample (subject to the provisions of Paragraph 6.17.D.3); or
 - 3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

- A. Contractor and any Subcontractor or Supplier shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions; or
 - 2. reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

- A. Unless otherwise stated in the Supplementary Conditions, the data furnished by Owner or Engineer to Contractor, or by Contractor to Owner or Engineer, that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefore 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:*

- 1. A topographic survey of the pond was performed on January 11, 2022, by Bryant Hammett and Associates, LLC. No other survey has since been conducted.
- 2. No maps of existing underground utilities and facilities are available from the City of Covington for the Contractor's information. Contractor is responsible for identifying and locating underground utilities.
- B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
 - 1. the completeness of such specifications 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. Any aspects of the Contractor's means, methods, techniques, sequences, procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:

1. is of such a nature as to require a change in the Contract Documents; or
2. differs materially from that shown or indicated in the Contract Documents; or
3. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. *Possible Price and Times Adjustments:*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
 - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
 - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as

provided in Paragraph 10.05. However, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data provided by others; and
2. The cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all such information and data;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents;
 - c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction; and
 - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated:*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of

any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefore 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:* No reports and drawings are known to Owner relating to Hazardous Environmental Conditions that have been identified at the Site.
- B. 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.
- C. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 4.06.E.
- D. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to Contractor: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefore as provided in Paragraph 10.05.
- E. 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 therefore 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.

- F. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- G. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- H. 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. Within 10 days of the initial agreement, Contractor shall furnish a certified letter from a bonding company, as deemed acceptable by these documents, stating that the contractor can maintain this capacity at all times during the contract duration.
- B. Contractor shall furnish performance and payment bonds within 10 days of the effective date of any Contract in the amount of \$100,000 or greater, each in the amount at least equal to the Contract estimated value, as security for the performance and payment of all Contractor's obligations under the contract documents. These bonds shall remain in effect until expiration of the contract. Contractor shall also furnish such other bonds as are required by the Contract Documents.
- C. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.

- D. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

- A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

- A. Contractor shall deliver to Owner, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.
- B. Owner shall deliver to Contractor, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.
- C. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.
- E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

5.04 *Contractor's Insurance*

- A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
 - 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
 - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
 - b. by any other person for any other reason;
 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by this Paragraph 5.04 shall:
1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
 3. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
 4. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
 5. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
 6. include completed operations coverage:
 - a. Such insurance shall remain in effect for two years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Waiver of Rights*

- A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for:
1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

5.07 *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.

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

6.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 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 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.
 - 1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and
 - 3) it has a proven record of performance and availability of responsive service.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
 - 2. *Substitute Items:*

- a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
- b. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefore. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
- c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented by the General Requirements, and as Engineer may decide is appropriate under the circumstances.
- d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - 1) shall certify that the proposed substitute item will:
 - a) perform adequately the functions and achieve the results called for by the general design,
 - b) be similar in substance to that specified, and
 - c) be suited to the same use as that specified;
 - 2) will state:
 - a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time,
 - b) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
 - c) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
 - 3) will identify:
 - a) all variations of the proposed substitute item from that specified, and
 - b) available engineering, sales, maintenance, repair, and replacement services; and
 - 4) shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.

- B. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.
- C. *Engineer's Evaluation:* Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by a Change Order in the case of a substitute and an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.
- D. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- E. *Engineer's Cost Reimbursement:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- F. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.
- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as a loss payee on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and

subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

- A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.
- B. Proof of any permits required for the performance of Work must be provided by the Contractor to the Owner before the Work pertaining to the permits can begin.

6.09 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas:*

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record

documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- F. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs. The contractor is responsible for all site safety.

6.15 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

- A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. *Shop Drawings:*

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples:*

- a. Submit number of Samples specified in the Specifications.
- b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures:

1. Before submitting each Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.
3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawings or Sample submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review:

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. *Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 *Continuing the Work*

- A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 1. observations by Engineer;
 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. use or occupancy of the Work or any part thereof by Owner;
 5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
 6. any inspection, test, or approval by others; or
 7. any correction of defective Work by Owner.

6.20 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.
- B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 – OTHER WORK AT THE SITE

7.01 *Related Work at Site*

- A. Owner may perform other work related to the Project at the Site with Owner's employees, or through other direct contracts therefore, 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 therefore as provided in Paragraph 10.05.
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.
- C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
 - 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
 - 2. the specific matters to be covered by such authority and responsibility will be itemized; and
 - 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's wrongful actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful action or inactions.

ARTICLE 8 – OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

- A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

- A. Owner's duties with respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

8.06 *Insurance*

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

- A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

- A. Owner is not responsible for inspections, tests, and approvals set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents.

8.12 *Compliance with Safety Program*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed pursuant to Paragraph 6.13.D.

ARTICLE 9 – ENGINEER’S STATUS DURING CONSTRUCTION

9.01 *Owner’s Representative*

- A. Engineer will be Owner’s representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner’s representative during construction are set forth in the Contract Documents.

9.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor’s executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer’s efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer’s visits and observations are subject to all the limitations on Engineer’s authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer’s visits or observations of Contractor’s Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor’s means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

- A. 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.

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 therefore as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

- A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

- A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.
- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.
- C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.
- D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question.
- B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believes that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.
- C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.
- D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

9.10 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant to Paragraph 6.13.D.

ARTICLE 10 – CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefore as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.D.

10.03 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:
 - 1. Changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
 - 2. Changes in the Contract Price or Contract Times, which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
 - 3. Changes in the Contract Price or Contract Times, which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

- A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.
- B. *Notice:* Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Times shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of

said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

- C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
1. deny the Claim in whole or in part;
 2. approve the Claim; or
 3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.
- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.
- F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

- A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 11.01.B, and shall include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and

approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A.

C. *Contractor's Fee:* When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. *Cash Allowances:*

1. Contractor agrees that:
 - a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. *Contingency Allowance:*

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. There will be no adjustment in unit prices for increased or decreased quantities under this contract except as stated otherwise.

ARTICLE 12 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

- A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefore as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.
- B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.
- D. Owner, Engineer, and their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.
- E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

- A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. Defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

- A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except as otherwise specifically provided in the Contract Documents. See Section 014100 Testing Laboratory Services for more.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.
- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

- A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.
- B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

- C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefore 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 therefore as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

- A. Promptly after receipt of written notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

- A. If within one year after the date of Final Acceptance of the Project by the Owner (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. repair such defective land or areas; or
 - 2. correct such defective Work; or

3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and for the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefore 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 therefore 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 Unit Price Work

- A. Progress payments on account of Unit Price Work will be based on the number of units completed and will be incorporated into a form of Application for Payment acceptable to Engineer.

14.02 Progress Payments

A. Applications for Payments:

- 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. *Review of Applications:*

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

- c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:
- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
 - d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due:

- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment:

- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
 - a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
 - b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - c. there are other items entitling Owner to a set-off against the amount recommended; or
 - d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and

promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor remedies the reasons for such action.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1 and subject to interest as provided in the Agreement.

14.03 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefore.
- 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 therefore. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will, within said 14 days, execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.
- E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the tentative list.

14.05 *Partial Utilization*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 14.04.A through D for that part of the Work.
 2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefore. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. *Application for Payment:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:

- a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.6;
 - b. consent of the surety, if any, to final payment;
 - c. a list of all Claims against Owner that Contractor believes are unsettled; and
 - d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. Engineer's Review of Application and Acceptance:

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due:

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

- A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such

payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefore as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
3. Contractor's repeated disregard of the authority of Engineer; or
4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion);
2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere; and

3. complete the Work as Owner may deem expedient.
- C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B and 15.02.C.

15.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
 3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
 4. reasonable expenses directly attributable to termination.
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 – DISPUTE RESOLUTION

16.01 *Methods and Procedures*

- A. Owner does not submit to mediation or arbitration.

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.

END OF SECTION

INSURANCE REQUIREMENTS

The Contractor shall procure insurance coverage against claims that may arise from, or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The Contractor shall keep all the required insurance in force continuously pursuant to their responsibility described in this contract, including any and all extensions. The Contractor shall pay all costs, premiums, and charges earned and payable under the required insurance. For the purpose of this exhibit: the term "Contractor" shall also include their respective agents, representatives, employees or subcontractors; and the term "City of Covington" (hereinafter called the "City") shall include their respective officers, agents, officials, employees, volunteers, boards and commissions.

- A. Minimum Scope and Limits of Insurance: The insurance required shall be written for not less than the scope and limits of insurance specified in this exhibit, or required by applicable federal, state and/or municipal law, regulation or requirement, whichever coverage is greater. It is agreed that the scope and limits of insurance coverage specified in this exhibit are minimum requirements and shall in no way limit or exclude the City from additional limits and coverage provided under the Contractor's policies.
 - 1. Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury, property damage, contractual liability and products /completed operations and \$2,000,000 annual aggregate.
 - 2. Automobile Liability and Physical Damage Coverage: \$1,000,000 combined single limit per occurrence for any auto, including statutory uninsured/underinsured motorists coverage and \$1,000 medical payments for the purpose of this contract.
 - 3. Workers' Compensation: Coverage A / Workers' Compensation: statutory limits as required by the Labor Code of the State of Louisiana. Coverage B / Employer's Liability: limits of \$500,000 each accident, \$500,000 disease/policy limit, \$500,000 disease/each employee. The Contractor agrees to hold the City of Covington, the Mayor, and the City Council, their respective boards and commissions, officers, agents, officials, employees, servants, volunteers, contractors and representatives harmless from any and all suits, claims, and actions arising from personal injuries sustained by the Contractor or Contractor's employees during the course of the performance of this contract, however caused.
- B. Additional Insured Endorsement: All liability policies (with the exception of Worker's Compensation and Professional Liability) shall have the City of Covington, the Mayor, the City Council, and their respective officers, agents, officials, employees, volunteers, boards and commissions endorsed as an Additional Insured with respect to liability arising out of or in connection with the activities performed by or on behalf of the Contractor; products and

completed operations of the Contractor; premises owned, leased, or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City.

- C. Acceptability of Insurers: Contractor's policies shall be written by insurance companies licensed to do business in the State of Louisiana, with a Best's rating of no less than A-:VII, or otherwise deemed acceptable by the City's Director of Administration.
- D. Subcontractors: Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.
- E. Waiver of Subrogation: Contractor shall provide that all insurance policies include a waiver of subrogation clause that states that it is agreed that in no event shall the insurance company have any right of recovery against the City. When the Contractor is self-insured, it is agreed that in no event shall the Contractor have any right of recovery against the City.
- F. Claims-Made Form: If the insurance coverage is underwritten on a claims-made basis, the retroactive date shall be prior to or coincident with the date of the contract. The certificate of insurance shall state the retroactive date and that the coverage is claims-made. The Contractor shall maintain coverage for the duration of the contract and for the two (2) years following the completion of the contract. Evidence of such coverage shall be provided to the City thirty (30) days prior to each policy expiration.
- G. Aggregate Limits: If a general aggregate is used, the general aggregate limit shall apply separately to the project or shall be twice the occurrence limit. All aggregate limits must be declared to the City. It is agreed that the Contractor shall notify the City with reasonable promptness with information concerning the erosion of limits due to claims paid under the general aggregate during the contract term. If the aggregate limit is eroded, the Contractor agrees to reinstate or purchase additional limits to meet the minimum limit requirements stated herein. The Contractor shall pay the premium.
- H. Deductibles and Self-Insured Retentions: Contractor must declare any deductibles or self-insured retentions to the City. All deductibles or self-insured retentions are the sole responsibility of the Contractor to pay and/or to indemnify.
- I. Notice of Cancellation or Nonrenewal: Contractor shall provide the City with 30 days prior written notice if any of the policies required by this exhibit shall be suspended, voided, cancelled or reduced in coverage or in limits. All Contractor's policies required by this exhibit shall be endorsed to state that coverage shall not be suspended, voided, cancelled, or reduced in coverage

or in limits except after thirty (30) days prior written notice has been provided. Ten (10) days prior written notice shall be given for non-payment of premium.

- J. Other Insurance Provisions: The policies are to contain, or be endorsed to contain, the following provisions:
 - 1. Liability Coverage: The Contractor's insurance coverage shall be primary insurance with respect to the City. Any insurance or self-insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it. Coverage shall state that the Contractor's insurance shall apply separately to each insured against whom a claim is made or suit is brought. Any failure to comply with the claim reporting provisions of the policy shall not affect coverage provided to the City.
- K. Verification of Coverage: The Contractor shall provide the City with certificates of insurance, declaration pages, policy endorsements or provisions confirming compliance with this exhibit before work commences. The certificates and endorsements for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. Renewal of expiring certificates shall be filed thirty (30) days prior to expiration. The City reserves the right to require complete, certified copies of all required policies, at any time. All insurance documents required by this exhibit should be mailed to: City of Covington, Director of Administration, 317 North Jefferson Avenue, Covington, LA 70433.
- L. Failure to Purchase or Maintain Insurance: If the City or the Contractor is damaged by failure of the Contractor to purchase or maintain insurance required by this exhibit, the Contractor shall bear all reasonable costs including, but not limited to, attorney's fees and costs of litigation, properly attributable thereto.

SECTION 00 80 00

Storm Water Pollution Prevention Plan (SWPPP) And Storm Water Best Management Practices (BMP) Requirements

GENERAL

1. The contractor shall prepare and maintain a Storm Water Pollution Prevention Plan (SWPPP), which describes in specific details the Contractor's program to prevent contamination of the storm water collection system for a project.
2. Contractor shall implement, maintain, inspect and remove all erosion and sediment controls identified in the SWPPP. The program shall address both common construction activities and extraordinary events.
3. Contractor shall include Water Pollution Control Drawings (WPCD) in the SWPPP to illustrate the locations, applications and deployment of Best Management Practices (BMPs) identified in the SWPPP. The WPCDs shall be included as an attachment to the SWPCP.
4. Best Management Practices (BMPs): A Best Management Practice is a technique, process, activity, or structure used to reduce the pollutant content of a storm water or non-storm water discharge. BMPs may include simple, non-structural methods such as good housekeeping, staff training, and preventive maintenance. Additionally, BMPs may include structural modifications such as the installation of berms, canopies or treatment control
5. The Contractor shall comply with laws, rules, and regulations of the State of Louisiana and agencies of the United States Government prohibiting the pollution of lakes, wetlands, streams, or river waters from the dumping of contaminates, refuse, rubbish or debris.
6. The contractor shall submit six (6) copies of the SWPPP, a minimum of 10 working days prior to beginning construction, to the Engineer. **Construction shall not begin until the SWPPP is approved.** Contractor shall update the SWPPP as necessary during the work to prevent contamination of the storm water collection system.
7. Before start of work, Contractor shall train all employees and subcontractors on the approved SWPPP and related WPCD and provide the City of Covington with written documentation of said training.

CONSTRUCTION

The contractor shall keep a copy of the SWPPP on the job site. The Contractor shall provide

continuously at the job site all the tools, equipment, and materials necessary to implement the SWPPP at all times from project initiation through completion, including any punch list or warranty work on the project. At a minimum the following requirements shall be met as applicable, to the maximum extent practicable, at construction sites:

1. **Storm Drain System Protection:** At the first order of work, the Contractor shall protect the existing storm drain system from entrance of construction debris and pollutants. Such protection shall include implementing the BMP's as outlines in the SWPPP. Protection shall prohibit the discharge of untreated runoff from temporary or permanent street maintenance/landscape, maintenance material, and waste storage areas from entering the storm drain system. Sediment that is generated on the project site shall be retained using structural drainage controls. In addition, the protection system shall have a minimum of three features: 1) a particulate filter of geosynthetic material securely Fastened in place such that it cannot be bypassed without significant physical damage; a prefilter for the particulate filter; and 3) on-hand materials to close off the inlet or opening in the case of a significant pollution spill. Contractor shall monitor and maintain all storm drain inlet protection devices during rain events to prevent flooding.
2. **Material Management & Storage:** No construction-related materials, wastes, spills or residues shall be discharged from the project site to streets, drainage facilities or adjacent properties by wind or runoff. All materials and/or equipment storage areas where liquid construction materials are placed, shall be protected by a physical barrier capable of containing the entire volume of stored liquid materials. During active construction activities, portions of the barrier may be removed for access. However, the barrier materials must be readily accessible for replacement by onsite construction personnel. The barrier must be in place at all times during the absence of Contractor personnel at the storage site. Building materials shall be placed on pallets and covered in event of rain. Do not store materials in the street or gutter area.
3. **Equipment & Vehicle Maintenance:** Non-storm water runoff from equipment and vehicle washing, and any other activity shall be contained at the project site. It shall not be allowed to discharge from the project site to streets, drainage facilities or adjacent properties by wind or runoff. The Contractor shall inspect vehicles and equipment on each day of use. Leaks shall be repaired off-site if possible. If necessary to repair on site, the runoff must be contained or the problem vehicle or equipment shall be removed from the site until repaired. If necessary, drip pans shall be placed under the vehicles or equipment while not in use to catch and/or contain drips and leaks.
4. **BMP Inspection:** The Contractor shall inspect all pollution control BMP's regularly. The Contractor shall also repair/replace any damaged or clogged element on a daily basis. During periods of precipitation where any runoff occurs, the system shall be checked twice a day, seven days a week, whether or not any work has been performed. The daily checks shall be between 6 a.m. to 9 a.m., and 4 p.m. to 8 p.m. The Contractor shall keep a monitoring inspection log of each inspection.
5. **Spill Prevention & Cleanup Plan:** Contractor shall have a spill prevention plan and spill cleanup materials readily available, and addressed in the SWPPP. Spills shall be cleaned up immediately using dry methods if possible. Spill cleanup materials shall be properly disposed off site.

Contractor shall keep a record of any spills in the inspection log. In addition, at the end of the project, the Contractor must certify that all contaminated materials have been properly disposed in accordance with the SWPPP.

6. **Asphalt & Concrete Activities:** Asphalt and concrete activities shall be scheduled for dry weather. Contractor shall prohibit saw cutting during a storm event of 0.25 inches or greater. Store bags of cement away from gutters, and storm drains: sealed and covered, protected from rainfall runoff and wind. Place tarp under cement mixer before operating to catch spills. Never dispose of cement washout or concrete dust onto driveways, streets, gutters, or storm drains.
7. **Sidewalk Washing:** The following methods should be utilized to prevent discharge of sidewalk cleaning wastewater into the storm system:
 - Sweep and pick up all areas to be cleaned before using water.
 - Manually scrape gum from sidewalks and other surfaces.
 - Must use high pressure and low volume of water with no additives, and at an average usage of 0.006 gallons per square foot of surface area to be rinsed.
 - Use a wet/dry vacuum to collect wash water for disposal. Large volumes of wash water may require the use of a small sump pump to remove wash water from the job site.
 - One or more of the following methods are recommended to prevent pollutants from entering the storm drain system:
 - Sandbags can be used to create a barrier around storm drains.*
 - Rubber mats or plugs can be used to seal drain openings.*
 - Temporary berms or containment pads help keep water on site.*
 - Use berms of sandbags to direct wash water to landscaping.*
 - Use large squeegees to accumulate sheet flow for collection.
 - * Remember to remove plugs, berms, and sandbags or you may be liable for flooding.
 - Wash water that may contain hazardous waste such as oil-saturated absorbents, water with lead or other heavy materials from oxidized paint, and solvent cleaners will require special treatment. This must be disposed of through a hazardous waste facility.
8. **Employee BMP Training:** Contractor shall train employees and subcontractors on BMP implementation, general good housekeeping, proper spill containment, and cleanup. Before job begins, Contractor shall provide the City of Covington with written documentation of training, and keep all documentation in the SWPCP.
9. **Inspection:** Contractor shall inspect, repair/replace, as needed, all job site BMP's a minimum of:
 - Biweekly
 - Before, during, and after a major rain event.Contractor shall document the inspections in the SWPPP.
10. **Dewatering:** Avoid dewatering discharges where possible by using the water for dust control, infiltration, etc.

SECTION 010100 SUMMARY OF WORK

1.1 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work covers construction and all related items required to construct a mini-roundabout at N. Columbia St. and N. Jefferson Ave. and a roundabout at N. Columbia St., W. 30th Ave., and Monroe St.
- B. Related requirements specified elsewhere:
 - 1. Project Administration: 012000
 - 2. Special Project Procedures: 013513
 - 3. Temporary Facilities, Utilities, and Operations: 015000

1.2 CONTRACTS

- A. Construct Work under a unit price Contract.
- B. As used in this Contract, the following term applies:
 - Owner: City of Covington

1.3 EXECUTION, CORRELATION, INTENT AND INTERPRETATIONS

- A. Extra payments will not be authorized for relocation, removal and/or replacement of any in-place construction made necessary by untimely or improperly sequenced work, where proper time and sequence could have been determined by examination of the Contract Documents. Any work required to complete the scope of work as defined by the Contract Documents shall be performed by the Contractor or his subcontractors at no additional cost to the Owner.
- B. Should there be any discrepancy between scale and dimensions, figured dimensions shall override scale dimensions. Although plans are drawn to scale, as indicated, and dimensions are given, the Contractor shall work to measurements of in-place construction.

- C. Should there be any discrepancy between information given on the Drawings, either written or drawing, and information written in the Specifications, the more stringent or detailed requirements shall govern.
- D. Should there be any discrepancy between written requirements of the General Contract for Construction and the Specifications, or between certain portions of the Specifications, the more stringent or detailed requirements shall govern.
- E. Any reference to standards (such as ASTM - American Society for Testing and Material), where the date is not specified, shall mean the latest edition of such standards published prior to the date of the Specifications, in accordance with the abbreviation referred to in the Technical Provisions. Where such a reference is made, the applicable standard is hereby made part of the Specification which refers to it, as if written out in the Specification in full, to the extent called for by the reference.

1.4 SUPERVISION AND CONSTRUCTION PROCEDURES

- A. The Designer, the Designer's employees and consultants, and the Project Representative will not assume any duty or obligation to provide supervision of construction methods or processes. In accordance with the General Conditions, the Contractor is solely responsible for construction means and methods, for compliance with laws and regulations and for protection of persons and property. Reference in the contract Documents to any rule or regulation is for the Contractor's information and does not imply assumption of responsibility by the Designer.
- B. No provision of any standard specification, manual or code incorporated by reference shall be effective to change the duties and responsibilities of Owner, Contractor and Designer, or any of their consultants, agents and employees from those set forth in the Contract Documents, nor shall it be effective to assign to the Designer or any of the Designer's consultants, agents and employees any duty or authority to supervise and direct the furnishing and performance of the work, or to undertake any responsibilities contrary to General Conditions Articles 9.
- C. The Contractor shall be solely responsible for all grades, lines and levels and be responsible for the Work being within the permissible limits.
- D. The Contractor shall secure all written warranties required in the Specifications and shall deliver them to the Designer for transmittal to the Owner.

1.5 EXAMINATION OF SITE

- A. By executing the Contract, the Contractor represents that he has:

1. Visited the site;
 2. Made due allowances for difficulties and contingencies to be encountered;
 3. Informed himself of existing conditions and work being performed by others;
 4. Notified the Designer of ambiguities, inconsistencies, and errors discovered in the Contract Documents, or between the Contract Documents and existing conditions.
- B. In accordance with Agreement Form Article 6.01, each Subcontractor shall similarly represent that he has fulfilled the same responsibilities to the Contractor.
- C. Failure to visit the site and perform attendant responsibilities shall not relieve the Contractor or any Subcontractor from their obligations, and no extra payment will be authorized for work related to conditions which can be determined by examination of the site and the Contract Documents.

END OF SECTION

PROJECT DETAILS

General Notes:

1. Contractor shall field verify all quantities and measurements. Contractor will be paid only for quantity of items used in work.
2. Contractor shall be responsible for locating and protecting all existing utilities. Contractor shall be responsible for all project safety.
3. During construction if any roadway closure is necessary, one lane shall remain open, whenever possible, if site conditions allow.
4. Contractor is responsible for acquiring their own Traffic Control Plan that is in accordance with MUTCD as well as furnishing and installing necessary MUTCD compliant signs and barricades for protection of the public and the project site if any roadway closure is necessary.
5. Prior to beginning work, contractor shall review and layout work with the managing City department.
6. Contractor must notify Owner representative, Covington Public Works, Fire, Police, Acadian Ambulance, Waste Collection, St. Tammany Parish Hospital, and School Board a **minimum** of 3 business days prior to closing any lanes or roadways.
7. Any additional work performed by the contractor without prior written approval from the City of Covington, the cost of the work will be borne by the contractor and will not be reimbursed by the City.
8. All Work Shall Conform to Louisiana Standard Specifications for Roads and Bridges, Latest Edition, unless noted otherwise in these plans and specifications. These LSSRB specifications are available [here](#).

Project General Requirements:

The following items are minimum project requirements:

1. Any field changes or plan changes must be submitted to and approved by Covington Engineering Department prior to construction.
2. Contractor is responsible for replacement of any damaged and/or removed items that occurred as part of their work. Replacement shall be of a quality and type of an equal or better than existing items. These items include but are not limited to the following:
 - a. Roadway asphalt and/or concrete surfacing, including sidewalks and driveways
 - b. Grass and/or sodding
 - c. Signs, mailboxes and supports
3. Contractor shall be responsible for all coordination with City of Covington for the duration of work. Coordination includes but is not limited to the scheduling of inspections with Covington Engineering Department, arranging traffic detours with police and fire departments, and plan change submittals.
4. Failure of contractor to satisfy any of the requirements set forth in these requirements may be subject to enforcement actions.
5. The contractor may be subject to specific state and federal requirements. The contractor is responsible for any drawings and/or permits from other agencies as required.
6. Contractor is responsible for the safety of all construction related activities related to the work in City of Covington right-of-way. These activities include but are not limited to, safety of general public and contractor's employees in work areas, coordination with utilities, LA One Call roadway and sidewalk detours, and temporary utility service.

END OF SECTION

SECTION 012000 PROJECT ADMINISTRATION

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A.	Summary of Work:	010100
B.	Testing Laboratory Services	014100
C.	Temporary Facilities, Utilities and Operations:	015000
D.	Clean-Up:	017423

1.2 PRE-CONSTRUCTION MEETING

- A. After notification that the Contract has been executed, the Project Engineer shall schedule with the Owner and Contractor a Pre-Construction Conference to be held at the project site. The Contractor shall be responsible to see that his principal Subcontractors are in attendance and shall furnish to the Engineer and Owner:
 - 1. list of Subcontractors and material suppliers,
 - 2. the Construction Schedule,
 - 3. Pedestrian Detour Plan, as required in Construction Plans.
- B. If the General Contractor fails to submit the aforementioned documentation as part of the pre-construction submittals, then pay applications shall not be processed until such time as the Owner receives this information.
- C. Designer shall prepare and distribute minutes.

1.3 PROJECT MEETINGS

- A. Designer shall schedule and administer monthly Project Meetings as necessary for proper and timely completion of the Project. The Contractor shall:
 - 1. Notify Owner, Designer and those specified to attend.
 - 2. Prepare agenda.
- B. Designer will attend meetings in his capacity as the Owner's representative to familiarize himself generally with the progress of the Work and to receive requests for interpretations necessary for the execution and the progress of the Work. Designer shall be responsible for distributing meeting minutes to Owner, Contractor, and other interested parties.

- C. Representatives of the Owner will attend meetings.
- D. Progress Meetings shall be held monthly at a time agreed to by the Designer, prior to submitting each Request for Payment. Progress Meetings shall be held at the Project Site and shall be attended by the Contractor's field and office representatives responsible for the Project, and by representatives of the Subcontractors and major materials suppliers as warranted by the current status of the Work. Purposes of Progress Meetings shall be to:
 - 1. Review work progress since the previous meeting.
 - 2. Resolve field problems and conflicts.
 - 3. Review off-site fabrication and materials delivery schedules.
 - 4. Review and update the Construction Schedule.
 - 5. Review status of outstanding submittals, change proposals, and other administrative matters affecting progress of the work.
 - 6. Plan and schedule operations during the succeeding work period.
 - 7. Expedite and coordinate activities necessary to maintain planned progress.
- E. In addition to monthly Progress Meetings and specified Project Meetings, the Contractor may hold other meetings as circumstances warrant, in order to resolve specific problems and maintain progress.
- F. Designer shall prepare and distribute minutes of all Project Meetings within one (1) week after each meeting.

1.4 ADMINISTRATION OF THE CONTRACT

- A. The Designer's normal working hours are from 7:30 A.M. to 5:00 P.M.. Monday through Thursday and from 7:30 A.M. to 11:30 A.M. on Friday.
- B. Contract time shall be based on calendar days. A calendar day is one of twenty-four (24) hours beginning at 12:00 midnight.
- C. Payments may be made on account of materials or equipment not incorporated in the work but delivered and suitably stored at the site, but payments will not be made on account of materials stored off-site. Invoices may be required.
- D. When the project is 75% to 85% complete the Project Engineer shall arrange with the Owner, and Contractor to conduct a Pre-Closeout Conference to be held at the project site. The Contractor shall be responsible to see that his principle Subcontractors are in attendance. A conference agenda will be provided. The conference shall follow the pre-closeout conference agenda.

1.5 CONSTRUCTION SCHEDULES - GENERAL

- A. Provide projected construction schedules for entire work; revise periodically.

- B. Prepare schedule in form of Critical Path Methodology, with horizontal bars representing Project breakdown by various units of work and critical path clearly displayed. Superimpose on bar chart, vertical lines representing months of year and weeks of each month.
- C. Minimum sheet size: As required to fit all information rendered in a legible manner on one (1) sheet.
- D. Provide complete sequence of construction by activity.
- E. Provide subschedules to define critical portions of entire schedule.
- F. Update Schedule as required. Show all changes since previous submission of updated schedule.
- G. Indicate progress of each activity; show start and completion dates. Revise with each update.

1.6 SUBMITTALS AND DISTRIBUTION OF SCHEDULES

- A. Submit initial schedules at Pre-construction Meeting.
 - 1. Designer will review schedules and return reviewed copy within ten (10) days after receipt.
 - 2. If required, resubmit within seven (7) days after return of reviewed copy.
- B. Submit, with each pay application, updated schedules accurately depicting progress to first day of each month.

1.7 PROJECT RECORD DOCUMENTS

- A. Contractor shall maintain documents at the site, as specified in General Conditions Article 6.12. Store record documents apart from documents used for construction.
- B. Provide files and racks for storage of documents.
- C. File documents in accordance with Table of Contents of Specifications.
- D. Maintain documents in clean, dry, legible condition.
- E. Do not use record documents for construction purposes.
- F. Make documents available at all times for inspection by Designer and Owner.
- G. Provide legible, indelible marking instruments for marking.

- H. Label each document "PROJECT RECORD" in 2" high printed letters.
- I. Specifications and Addenda: Legibly mark up 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 Addendum, Change Order and Field Order.
 - 3. Incorporate Addendum Drawing information into Contract Drawings.
- J. Drawings: Maintain one (1) complete set of blueline prints of Contract Drawings. Do not use this set for purposes other than record purposes. Legibly mark to record actual construction.
 - 1. Field change of dimension and detail.
 - 2. Changes made by Addendum, Field Order and Change Order.
 - 3. Details not on original Contract Drawings.
- K. Prior to acceptance of the Project, Contractor shall transmit project record drawings and project record specifications, addenda and shop drawings to the Designer for preparation of permanent record drawings. The Contractor shall review and approve the permanent record drawings prepared by the Designer.

1.8 PROJECT INSPECTIONS

- A. Where inspections of in place work are specified, and Designer's approval is required before further work can take place, or where records of procedures are specified; schedule inspection:
 - 1. With Designer.
 - 2. Give no less than twenty-four (24) hours notice.
- B. Where daylight or installed Project lighting, at areas to be inspected, is less than 30 candle power, provide this same level by artificial illumination with portable lighting.
- C. Where inspection reveals project non-compliance reschedule inspection giving a further twenty-four (24) hours notice.

1.9 CONTRACT ADMINISTRATION FORMS

- A. Attached to these specifications are the following forms:
 - 1. Change Order. See Section 00 63 63.
 - 2. Certificate of Substantial Completion. See Section 00 65 16
- B. These forms, or replicas of them, shall be used as applicable in the administration of the Contract.

END OF SECTION

SECTION 013513 SPECIAL PROJECT PROCEDURES

PART 1 - GENERAL

1.1 GENERAL

The requirements specified herein establish procedures that shall be followed by the Contractor during the course of construction. The particular location of the work requires constant vigilance on the part of the Contractor to properly protect the construction area.

1.2 PROCEDURES

- A. Existing utility lines will remain in continuous operation during the construction period; the Contractor shall cooperate with the Owner to the fullest extent in order to prevent interruption of essential services. All excavation should be closed by the end of the day unless specific written permission has been granted by the Designer.
- B. Contractor's Duties:
 - 1. Protect the safety of the public and his employees.
 - 2. Perform work and store materials and equipment without restricting highway or railroad access required by code, law or regulation.
 - 3. Restrict working force, vehicles, storage, loading and staging areas to locations that do not conflict with the traffic or facility operations.
 - 4. Advise the Owner and obtain advance permission for any interruptions of utility and operating services.
 - 5. Keep all necessary plans, specifications and permits for the said project on the jobsite at all times. The Contractor is also responsible for the same if he has any Subcontractors.
- C. Confine loose materials, papers, trash, and debris to prevent scattering. Transport in covered carts or receptacles to prevent the spread of dust and dropping of materials.
- D. Use canvas or rubber blankets to eliminate spread of sparks while welding.
- E. Have adequate fire extinguishers available and readily accessible at work areas at all times.
- F. Care shall be taken not to remove, disturb or injure existing utilities, pipes or conduits during excavation, backfilling and installing pipe without the approval of the Designer. If necessary the Contractor shall shore up, sling and maintain any of

these structures during work operation and shall repair all damage done to same within a reasonable length of time after damage (within 24 hours). All repairs shall be made to the satisfaction of the Designer.

If at any time utilities are damaged during progress of work, the Contractor shall notify the proper authority without delay and shall at his option repair the damage if approved by the utility agency done to such structures or pay to the utility the amount required to make proper repairs for such damage. The Contractor shall be responsible for any damage done to persons or property due to damaged structures or his neglect in reporting and/or repairing damaged structures.

The Owner or Designer shall not be responsible for any claims the Contractor may have based on underground obstructions being different than shown on the Plans. The Contractor shall, when directed to do so by the Designer, uncover subsurface obstructions before the work reaches them.

- G. Requirements and practices shall not be limited to items described herein. Compliance with these items shall not relieve the Contractor of responsibility for providing additional safety or warning devices as job conditions or construction phasing may require.
- H. Any work which requires temporary suspension of utilities or treatment shall be coordinated with the project Designer and the facility staff. A minimum of 48 hours notice is required.

1.3 WORK SCHEDULE

- A. Prior to starting work at the site, the Contractor shall submit a Progress Schedule in accordance with General Conditions 6.04, indicating intended sequence of operations and planned starting and completion times for each operation. Progress Schedule shall be revised and resubmitted as necessary to reflect changes in progress and sequence.
- B. Contractor shall expedite work to minimize interference with continuing facility operations.
- C. Work at other than normal hours and days (whether for Contractor's convenience, to meet schedule requirements, or due to Owner's requirements) shall be arranged for and scheduled in advance with Owner's approval. No extension of time and no additional compensation will be allowed for additional costs due to work at other than normal times.

1.4 SECURITY DURING CONSTRUCTION

- A. The Contractor shall be solely responsible for security of his temporary facilities, storage areas, equipment and other construction means.
- B. The Contractor shall construct and maintain temporary fences and gates, if necessary, for construction as indicated or required.

1.5 EMERGENCY CONTACT

Throughout the construction period, the Contractor shall have on call, 24 hours a day and 7 days a week, a responsible representative with authority to act immediately in emergencies involving life safety. Name and telephone number of this representative shall be kept on file with the facility.

END OF SECTION

SECTION 014000 REGULATORY REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

- A. The following are a list of most but not all Regulatory Requirements which the contractor must abide by during performance of all construction activities.(State Uniform Construction Code) (LAC 55:VI.301)
- B. Regulatory requirements applicable to this project are the following:
 - 1. 28 CFR 35 - Department of Justice accessibility regulations relating to State and local governments; current edition.
 - 2. 28 CFR 36 - Department of Justice accessibility regulations relating to public accommodations; current edition.
 - 3. 49 CFR 27, 37, and 38 - Transportation for Individuals with Disabilities; Final Rule; Department of Transportation; current edition.
 - 4. ATBCB ADAAG - Americans with Disabilities Act Accessibility Guidelines; 2002.
- D. ICC (IFC) - ICC International Fire Code, 2009.
 - 1. NFPA 101 - Life Safety Code, 2009.
- E. ICC (IBC) - ICC International Building Code, 2009.
- F. Plumbing Code: LA State Plumbing Code.
- G. ICC (IMC) - ICC International Mechanical Code, 2009.
- H. ICC (IFGC) - ICC International Fuel Gas Code, 2009.
- I. Private Sewage Disposal Code: Part XIV of the Louisiana State Sanitary Code.
- J. NFPA 70 - National Electrical Code, 2008.
- K. Energy Code: State of Louisiana.
- L. Erosion and Sedimentation Control Regulations: Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R.S. 302001 et seq.).

1.03 PERMITS

- A. The contractor must obtain all necessary clearances and permits in accordance with the General Conditions and all applicable regulations before beginning the project.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 014100 TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.1 SELECTION AND PAYMENT

The Owner will engage and pay for the services of an independent testing laboratory to perform inspection and tests of materials and construction except in the event of a test failure (the Contractor will be responsible for re-testing) or cancellation. Types and extent of testing is specified in detail in applicable Sections of the Specifications.

1.2 COOPERATION OF CONTRACTOR

- A. The Contractor shall cooperate with the laboratory.
- B. Make available, without cost, samples of all material to be tested in accordance with applicable standard specifications.
- C. Furnish such nominal labor and sheltered working space as is necessary to obtain samples at the Project Site.
- D. Advise the laboratory of the identity of material sources and instruct suppliers of required tests or inspections by designated laboratory.
- E. Notify laboratory sufficiently in advance of operations to allow for completion of initial tests and assignment of inspection personnel (minimum 48 hours notice).
- F. Notify the laboratory sufficiently in advance of cancellation of required testing operations. The Contractor shall be responsible to the laboratory for charges due to failure to notify if requirements for testing are canceled.

1.3 REJECTION OF MATERIALS

The laboratory shall notify the Contractor of any materials which are not in full conformance with the Specifications. The Designer shall be informed of such notifications.

1.4 TEST METHODS

Tests and inspections shall be conducted in accordance with the requirements of these Specifications, or where no specific procedure is specified, in accordance with the latest standards of ASTM or other recognized authorities applicable to the work being tested.

1.5 TEST REPORTS

The laboratory shall promptly submit written reports of each test and inspection made to the

Designer, Contractor, Owner and to such other parties the Designer or Owner may specify.

1.6 EXTENT OF LABORATORY TESTS AND INSPECTIONS

- A. The Designer will recommend to the Owner the type and number of tests to be performed on the Project. The Contractor will be advised of the number and type of tests to be performed by the Testing Laboratory, if different than specified in the various Sections of these Specifications.
- B. Testing Laboratory Services are required for the following items:
 - Excavation, Filling and Grading
 - Water Mains
 - Aggregate Surface Course
 - Sanitary Sewer
 - Sanitary Sewer Force Main
 - Cast-In-Place Concrete
 - AC & PCC Pavements
 - Base and Sub-base Course's
- C. The Contractor is responsible for testing laboratory costs necessary to confirm concrete mixes to be used where specified in plans.
- D. Concrete cylinders will be required as requested by the Designer and paid for by the Owner.

1.7 ADDITIONAL TESTS

The Owner reserves the right to require additional tests to those specified and the right to require tests upon materials not originally specified to receive testing. Should such additional tests be judged necessary because of apparently defective materials or workmanship, costs of these additional tests shall be borne by the Contractor.

1.8 CONTRACTOR'S RESPONSIBILITY

Employment of, or failure to employ, a Testing Laboratory by the Owner shall not relieve the Contractor of responsibility to comply with Contract requirements for materials and methods of construction in all parts of the work. Contractor is advised that Testing Laboratory services are for the Owner's purposes and that reports made available to the Contractor are for information only and are not to be construed as a warranty of acceptability of the work.

END OF SECTION

SECTION 015000
TEMPORARY FACILITIES, UTILITIES, AND OPERATIONS

1.1 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Summary of Work: 010100
- B. Special Project Procedures: 013513

1.2 LOCATIONS

Locate temporary facilities and signs in areas that avoid interfering with adjacent property operations. All locations of temporary facilities must be approved by the Engineer prior to beginning of construction.

1.3 ACCESS AND STAGING AREA

- A. It is understood that prior to bidding the Contractor became familiar with the conditions existing at the site, and accepts the site and conditions thereupon as they are.
- B. Staging Area: The Contractor and Subcontractors shall locate offices, materials storage and staging, equipment storage and maintenance areas, and similar major facilities in a staging area which does not interfere with operations required under the Contract.

1.4 SHEDS AND STORAGE

- A. For exterior storage, provide suitable and sufficient enclosed covered structures with raised flooring, to protect materials and equipment subject to damage by weather or construction work.
- B. Provide weatherproof coverage for materials and equipment needing only limited protection.
- C. Allocate and designate storage areas and workspaces for various trades.
- D. Arrange temporary buildings and designate storage spaces to avoid interfering with operations, to avoid re-handling and to expedite progress of work.

1.5 SIGNS AND TEMPORARY GRAPHICS

- A. Signs, as necessary for safety and to meet insurance requirements will be required.

- B. Signs, other than those specified, will not be permitted on site without specific approval.

1.6 FENCING, BARRICADING AND SAFETY EQUIPMENT

- A. Contractor shall construct and maintain, until construction is completed and accepted, fences, barricades and other necessary items required to prevent injury to persons on or about Project site, damage to property and intrusion of unauthorized persons.
- B. Provide personal safety equipment for authorized visitors.
- C. Protect structures, utilities, sidewalks, pavements, and other facilities immediately adjacent to excavations from damage or displacement.
- D. The Contractor will be responsible for maintaining access at all times during construction for the facility.

1.8 TOILETS

- A. Provide adequate temporary toilet facilities for use of persons working at site, as determined by size of work force on site and Local Sanitary Code Requirements.
- B. Maintain toilets in a clean and sanitary condition. Provide toilet tissue in suitable holder. Provide natural or artificial light and ventilation to toilet compartments.
- C. Remove temporary toilets when construction is completed and accepted.

1.9 ELECTRICITY

- A. It shall be the responsibility of the Contractor to determine a source for electric power to be used for construction purposes, and to make arrangements, pay deposits, furnish and install equipment, poles, wiring, switches and outlets to provide adequate supply of electricity for lighting and power during construction. Meet applicable safety requirements.
- B. The Contractor shall pay all costs for providing electric service for construction purposes and shall pay for current used during construction until acceptance.

1.10 WATER AND GAS

- A. It shall be the responsibility of the Contractor to determine a source of water and gas service to be used for construction purposes and to make arrangements, pay deposits, furnish and install equipment, piping, valves, outlets and hoses to provide construction water and gas during construction period.

- B. The Contractor shall pay all costs for water and gas service for construction purposes and shall pay all costs for water and gas used during construction until acceptance.
- C. Provide cold water and paper cups for drinking by Project workers.

1.11 PUMPING AND DRAINING

- A. Keep working and storage areas free from water that could damage or that could interfere with progress of work.
- B. Slope ground to drain surface water away from excavations and structures.
- C. Pump or drain to designated points as determined by the Designer. Distribute discharge to prevent excessive erosion. Replace eroded materials.

1.12 TRUCKING

- A. Load all trucks bringing materials to site or removing earth and debris from site in a manner to prevent dropping materials, earth or debris on public streets, roads and highways.
- B. Maintain an installation at all points where and when trucks enter or leave site to remove materials, mud or debris immediately from streets, roads and highways.
- C. Conform to all local regulations regarding load limits.

1.13 SHEET PILING

- A. In addition to work specified, provide sheet piling, should such be found necessary.
- B. Type, thickness, shoring, bracing and other details in regard to sheet piling shall be Contractor's sole responsibility and shall be determined by him as necessitated by excavation depth, soil conditions, rainfall, traffic adjacent to site and other related factors.

1.14 FIRE PROTECTION

- A. Provide general temporary fire protection during construction period.
- B. Have immediately available suitable fire extinguishers in areas where welding, flame cutting, and other hazardous operations are underway.

1.15 CLEAN-UP

- A. Remove temporary work when need for its use has passed.

- B. Clean area that was occupied by temporary work. Remove debris, rubbish and excess materials from site on a daily basis.

END OF SECTION

SECTION 016510 MATERIAL AND EQUIPMENT

1.1 GENERAL

A. Related Requirements Specified in Other Sections:

- | | | |
|----|------------------------------|--------|
| 1. | Summary of Work: | 010100 |
| 2. | Special Project Procedures: | 013513 |
| 3. | Testing Laboratory Services: | 014100 |

B. Material and equipment incorporated into the Work:

1. Conform to applicable specifications and standards.
2. Comply with size, make, type and quality specified, or as specifically approved in writing by the Designer.
3. Manufactured and Fabricated Products:
 - a. Design, fabricate and assemble in accordance with the engineering and shop practices accepted as standard by the industry.
 - b. Component parts of multiple items shall be interchangeable.
 - c. Two or more items of the same kind shall be identical, by the same manufacturer.
 - d. Product shall be suitable for the service conditions in which they will be used.
 - e. Provide equipment in the capacities, sizes and dimensions shown or specified unless variations are specifically approved in writing.
4. Do not use material or equipment for any purpose other than that for which designed or specified.

1.2 MANUFACTURER'S INSTRUCTIONS

- A. Install work in compliance with Manufacturer's printed instructions unless conflicting requirements are specified. Obtain and distribute copies of such instructions to parties involved in the installation, including two (2) copies to the Designer for information only.

1. Maintain one (1) set of complete instructions at the job site during installation and until completion.
- B. Handle, install, connect, clean, condition and adjust products in strict accord with such instructions and in conformity with specified requirements.
 1. Should job conditions or specified requirements conflict with Manufacturer's instructions, consult with Designer for further instructions.
 2. Do not proceed with work without clear instructions.
- C. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.3 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of Products in accord with construction schedules. Coordinate all deliveries with the facility to avoid conflict with work and conditions at the site.
 1. Deliver Products in undamaged condition, in Manufacturer's original containers or packaging, with identifying labels intact and legible.
 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that Products are properly protected and undamaged.
- B. Provide equipment and personnel to handle Products by methods to prevent soiling and damage to Products, packaging, and work in place.

1.4 STORAGE AND PROTECTION

- A. Store Products in accord with manufacturer's instructions, 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. Prevent soiling and staining.
- B. Exterior Storage

1. Store fabricated products above the ground, on blocking or skids. Cover products which are subject to deterioration with impervious sheet coverings, with adequate ventilation to avoid condensation.
2. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
- C. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored Products to assure that Products are maintained under specified conditions, and free from damage or deterioration.
- D. Store Products in such a manner as to prevent damage to in-place work.
- E. Protection After Installation: Provide substantial coverings as necessary to protect installed Products from damage from traffic and subsequent construction operations. Remove when no longer needed.

1.5 SUBSTITUTIONS AND PRODUCT OPTIONS

- A. Products List.
 1. At the pre-construction conference, submit a 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 by description or reference standard, select any product meeting the Specifications.
 2. For Products specified by naming several products or manufacturers, select any one of the products or manufacturers named, which complies with the specifications.
- C. Substitutions: Provisions governing pre-bid approval of proposed substitutions are in General Conditions, Article 6.05.A.2.

1.6 REPLACEMENT AND REPAIR

- A. Promptly remove damaged, defective and non-conforming material and equipment and replace with new material and equipment.
- B. Subject to Designer's approval, damaged and defective material and equipment may be repaired to condition equivalent to acceptable new condition. Material and equipment that cannot be satisfactorily repaired shall be removed and replaced.

- C. Replacement and repairs shall be made by the party responsible for the original installation of the materials and equipment involved, without additional cost to the Owner.

END OF SECTION

SECTION 017123 FIELD ENGINEERING

1.1 GENERAL REQUIREMENTS

- A. Contractor shall provide the services of a Registered Land Surveyor for laying out lines and establishing elevations of structures and improvements including all piping, equipment and foundation elevations.
- B. The Surveyor shall locate benchmarks and other reference points necessary to establish location, limits and extent of work.

1.2 SITE WORK

- A. Perform instrumental readings as follows:
 - 1. Verify grade elevations.
 - 2. Following filling and grading operations, but not earlier than two (2) weeks before Final Inspection, to certify that final grade elevations comply with grade elevations indicated on Drawings and are within tolerances specified.
- B. Perform instrumental readings at established grade points indicated on Drawings.

1.3 RECORDS

- A. Submit written records or readings to Designer before Final Inspection.
- B. Include documentation of location and elevation of monument.
- C. The Surveyor shall certify to the Owner that locations and elevations are in compliance with the Contract Documents.
- D. A record (location and elevation) of all the following items that apply to this project shall be submitted by the Contractor to the Designer prior to Substantial Completion. Contractor shall fill out and submit records in table form with the information and formatting of the Example Location and Elevation Record Table below.
 - 1. Catch Basins and Manholes

2. Pipe Inverts and Flow Lines
3. All Intersections of Pipe Lines
4. Curb Ramps

Example Location and Elevation Record Table

Station	Side ∇	Offset	Invert Elevation	Description
		(Feet)	(Feet)	
100+00.00	RT or LT	10.0	21.84	(Structure Number, Item description, etc.)

END OF SECTION

SECTION 017419 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.01 WASTE MANAGEMENT REQUIREMENTS

- A. Owner requires that this project generate the least amount of trash and waste possible.
- B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- D. Methods of trash/waste disposal that are not acceptable are:
 - 1. Burning on the project site.
 - 2. Burying on the project site.
 - 3. Dumping or burying on other property, public or private.
 - 4. Other illegal dumping or burying.
- E. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.
- F. Fire Protection: Store volatile waste in covered metal containers, and remove from premises daily.
- G. Pollution Control: Conduct clean-up and disposal operations to comply with local ordinances and anti-pollution laws.
- H. Disposal of volatile fluid wastes (such as mineral spirits, oil or paint thinner) in sanitary or storm system is not permitted.
- I. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- J. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

1.02 RELATED REQUIREMENTS

- A. Section 015000 - Temporary Facilities Utilities, and Operations: Additional requirements related to trash/waste collection and removal facilities and services.

1.03 DEFINITIONS

- A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
- B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- C. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.

- D. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.
- E. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- F. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- G. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.
- H. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- I. Return: To give back reusable items or unused products to vendors for credit.
- J. Reuse: To reuse a construction waste material in some manner on the project site.
- K. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- L. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
- M. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- N. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- O. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- P. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

1.04 SUBMITTALS

- A. See Section 012000 – Project Administration, for submittal procedures.

PART 2 PRODUCTS

2.01 PRODUCT SUBSTITUTIONS

- A. See Section 016510 – Material and Equipment for substitution submission procedures.
- B. For each proposed product substitution, submit the following information in addition to requirements specified in Section 016510:
 - 1. Relative amount of waste produced, compared to specified product.
 - 2. Cost savings on waste disposal, compared to specified product, to be deducted from the Contract Price.
 - 3. Proposed disposal method for waste product.
 - 4. Markets for recycled waste product.

PART 3 EXECUTION

3.01 WASTE MANAGEMENT PROCEDURES

- A. See Section 015000 for additional requirements related to trash/waste collection and removal facilities and services.

3.02 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, Owner, and Engineer.
- C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- D. Meetings: Discuss trash/waste management goals and issues at project meetings.
 - 1. Pre-bid meeting.
 - 2. Pre-construction meeting.
 - 3. Regular job-site meetings.
- E. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
 - 1. Provide containers as required.
 - 2. Provide adequate space for pick-up and delivery and convenience to subcontractors.
 - 3. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- F. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- G. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- H. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- I. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.
- J. Execute periodic cleaning of Project site to ensure that grounds and adjacent properties are maintained free from accumulation of waste material and rubbish caused by Project construction operations.
- K. Sprinkle dusty debris with water.
- L. At reasonable intervals during progress of work, clean up site and dispose of waste materials, rubbish, and debris.
- M. Provide for collection of waste materials, rubbish and debris.
- N. Do not allow waste materials, rubbish, debris and garbage to accumulate and become unsightly, unhealthy or hazardous.

- O. Remove waste materials, rubbish, and debris from the site and legally dispose of same at public or private dumping areas away from Project site.
- P. Broom clean paved surfaces; rake clean other surfaces of grounds.
- Q. Maintain cleaning until Project or portion thereof is accepted by the Owner.

END OF SECTION

SECTION 017423 CLEAN-UP

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

Clean-up required for specific work is specified in Sections pertaining to that work.

1.2 REQUIREMENTS

- A. Fire Protection: Store volatile waste in covered metal containers, and remove from premises daily.
- B. Pollution Control: Conduct clean-up and disposal operations to comply with local ordinances and anti-pollution laws.
- C. Disposal of volatile fluid wastes (such as mineral spirits, oil or paint thinner) in sanitary or storm system is not permitted.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS

- A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.1 DURING CONSTRUCTION

- A. Execute periodic cleaning of Project site to ensure that grounds and adjacent properties are maintained free from accumulation of waste material and rubbish caused by Project construction operations.
- B. Sprinkle dusty debris with water.
- C. At reasonable intervals during progress of work, clean up site and dispose of waste materials, rubbish, and debris.
- D. Provide for collection of waste materials, rubbish and debris.

- E. Do not allow waste materials, rubbish, debris and garbage to accumulate and become unsightly, unhealthy or hazardous.
- F. Remove waste materials, rubbish, and debris from the site and legally dispose of same at public or private dumping areas away from Project site.

3.2 FINAL CLEANING

- A. Broom clean paved surfaces; rake clean other surfaces of grounds.
- B. Maintain cleaning until Project or portion thereof is accepted by the Owner.

END OF SECTION

SECTION 022210 PRE-CONSTRUCTION VIDEO

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. The Contractor shall furnish all labor, materials and equipment to perform color audio-video recording of the project site surfaces as specified herein and in Section 017123 Field Engineering. Contractor shall furnish to the Owner an original and one (1) copy of a continuous color and audio-video file recording of the project sites.
- B. The Owner reserves the right to reject the audio-video file because of poor quality, unintelligible audio or uncontrolled pan or zoom. Any video rejected by the Owner shall be re-videoed at no additional cost to the Owner. The contractor shall submit one (1) USB with the continuous color and audio-video file recordings to the Owner for format and content approval prior to the start of any work.
- C. Prior to the commencement of any construction, equipment or material mobilization, the Contractor shall perform an audio-video survey of each project site area which will be excavated or which has the potential to be disturbed by the Contractor's operations. Specific areas of this project include, but are not limited to:
 - 1. All areas to be entered by vehicles or equipment, including construction areas for tank improvements.
 - 2. Paved and unpaved areas which will be entered by vehicles or equipment.
 - 3. Other areas that may be impacted by the Work, including work staging areas and field offices, as directed by the Owner.

1.02 QUALITY

- A. The video recording shall be performed by a qualified audio-video taping firm or individual knowledgeable in construction practices and experienced in the implementation of established inspection procedures.
- B. The video portion of the recording shall produce bright, sharp, clear pictures with accurate colors and shall be free from distortion, tearing, rolls, or any other form of picture imperfection. The audio portion of the recording shall reproduce precise and concise explanatory notes by the camera operator with proper volume, clarity and freedom from distortion.
- C. The recorder shall record the video in full high definition (1080p) in common file format.
- D. The Contractor shall be responsible for the timely execution of the preconstruction audio-video survey, its vantage points, and quality. The Contractor shall cooperate with the photographer's work and provide reasonable auxiliary services as requested, including access and use of temporary facilities including temporary lighting.

1.03 QUALIFICATIONS

- A. Photographer's Qualifications: Contractor shall submit name and qualifications of photographer to the engineer for review and acceptance prior to commencement of the work.

PART 2 PRODUCTS

2.01 DELIVERABLES

- A. Submitted recordings shall be reviewed and approved by the Owner within five (5) days of submittal of a satisfactory survey. Should the recordings not provide adequate coverage to fully illustrate the physical condition of the work area or not be in compliance with the specifications, project areas shall be re-surveyed prior to the initiation of construction at the project sites, with no additional cost to the Owner.
- B. The Contractor shall provide two (2) copies; USB flash drives labeled by USB number along with the following information:

Contract No. _____ Project Title: _____
Contractor: _____ USB No. _____
Date Televised (MM/YY): _____ Date Submitted _____

1. Information to be provided:

Work Area	Street, Address/Location	Starting Video Counter No.

- C. A cumulative index correlating the various segments of video coverage to the corresponding USB drives shall be supplied to the Owner. This index shall identify each segment in the video by location, engineering stationing corresponding to the stationing on the contract documents, video counter number, viewing side, point starting from, traveling direction, and ending point. Written documentation must coincide with the information on the recordings so as to make easy retrieval of locations sought for at a later date.

2.02 USAGE RIGHTS

- A. To preclude the possibility of tampering or editing, the audio-video file recordings shall display continuous digital information including the following:
1. Date and time of the recording; date information will contain the month, day and year; time information will contain hours, minutes and seconds, separated by colons.
 2. The engineering stationing corresponding to the stationing on the contract documents, or as directed by the Owner.

- B. Digital information shall appear at the bottom of the viewing screen and in no way interfere with the video portion of the recording.

PART 3 EXECUTION

3.01 VIDEO RECORDINGS - GENERAL

- A. At the start of each video recording segment, an identification summary shall be read into the record simultaneously with a wide-angle view with digital information. The identification summary shall include the following:
 - 1. USB number
 - 2. Contract number and name
 - 3. Contractor's name
 - 4. Date and time
 - 5. General location and stationing
 - 6. Weather
 - 7. Direction of travel and viewing direction
- B. The recording shall include the coverage of all surface and other site features located in areas to be affected by the Work. The surface features recorded shall include, but not be limited to, roadways, driveways, sidewalks, curbs, culverts, headwalls, retaining walls, buildings, above-ground utilities, equipment, parks, lawns, landscaping, trees, tree canopies, shrubbery and fences. The area of coverage shall extend to 50 feet from the proposed work site but shall also include all unpaved areas and access routes where vehicles or equipment will pass.
- C. Video recording may be ordered outside of the area of coverage in order to establish those features deemed necessary by the Owner.
- D. Video recording coverage shall include documentation of the condition of the surface and other site features located within the area of coverage and shall be supported by appropriate audio description. Audio description shall be made simultaneously with the video recording.
- E. Buildings shall be identified visually and verbally by number and or name in such a manner that proposed improvements (i.e., future grading) can be located by reference.
- F. The coverage shall be continuous (i.e., the camera shall not be turned off once recording has begun) to the greatest extent possible.
- G. The rate of travel for video recording shall be determined by the number, size and value of the surface and other site features within the construction area of coverage so as to produce a clear, detailed view of each feature. At no time shall the rate of travel exceed 44 feet per minute. Forward motion of the camera shall be halted when viewing objects or structures outside the limits of the street or easement being documented.
- H. The photographer shall pan and zoom in and out at a reasonable rate so as to control sufficiently the clarity of objects being viewed.
- I. When recording, the camera shall be mounted on a steady base. Horizontal and vertical shots shall be made from the base, in order to insure proper perspective. The distance

from the camera lens to the ground shall be not less than 12 feet. If not accessible by motorized vehicle, height shall be determined by the distance from ground to shoulder height of the camera operator. Contractor shall furnish all auxiliary lighting as required to produce a quality recording. At no time will the Contractor be allowed to use any electrical circuits within a building on private properties.

- J. All video recording shall be performed during regular business hours, unless otherwise approved by the Owner.
- K. No video recording shall be performed if the weather is not acceptable, such as rain, fog, or elongated shadows that distort perception and tend to prevent clear resolution.

END OF SECTION

SECTION 020010 TECHNICAL SPECIFICATIONS

PART 1 - INSTRUCTIONS FOR PROCUREMENT

1.1 STANDARDS

- A. Louisiana Standard Specifications for Roads and Bridges (2016 Edition) are hereby incorporated as the Technical Specifications for this project.
- B. The Order of Precedence for technical requirements shall be as follows:
 - 1. Special provisions contained within Part 2 of this specification section.
 - 2. Supplemental Specifications contained within Part 3 of this specification section.
 - 3. Specifications contained within this project manual.
 - 4. LA DOTD Standard Specifications for Roads and Bridges 2016 Edition (LA DOTD Specifications).
Available online at:

<https://dotd.la.gov/about/office-of-project-delivery/engineering/publications-and-downloads/specifications-and-standards/specifications/>
- C. Relation of Louisiana Standard Specifications for Roads and Bridges to this Construction Project:
 - 1. Substitution of Names:
The word "Engineer, or his duly authorized agents," shall be substituted wherever reference (direct or indirect) is made to the "Louisiana Department of Transportation and Development or its agents."
 - 2. Relation of Contract Documents:
In the event of conflict between the material contained in the Louisiana Standard Specifications for Roads and Bridges and the rest of the contract documents and drawings, the Louisiana Standard Specifications for Road and Bridges shall be considered as the least priority.
 - 3. Observation:
Observations shall be performed by the Engineer or an independent inspection laboratory chosen by the Owner and paid for by the Owner. Tests to be performed before acceptance of the project are, but not limited to, those specified in the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition. It is the Contractor's responsibility to notify the Engineer or the testing laboratory in writing one week before commencing work and verbally twenty-four (24) hours in advance of any work.

1.2 MATERIALS AND CONSTRUCTION

- A. Meet the requirements of the following sections of the referenced LA DOTD Standard Specifications for Roads and Bridges and the Plans, Supplemental Specifications and Special Provisions:

1. Clearing and Grubbing	Section 201
2. Removal of Structures and Obstructions	Section 202
3. Excavation and Embankment	Section 203
4. Temporary Erosion Control	Section 204
5. Class II Base Course	Section 302
6. Lime Treatment	Section 304
7. Traffic Maintenance Surfacing	Section 402
8. Asphalt Concrete Mixtures	Section 502
9. Portland Cement Concrete Pavement	Section 601
10. Culverts and Storm Drains	Section 701
11. Manholes, Junction Boxes, Catch Basins, and End Treatments	Section 702
12. Underdrain Systems	Section 703
13. Concrete Walks, Drives, and Incidental Paving	Section 706
14. Curbs and Gutters	Section 707
15. Temporary Traffic Control	Section 713
16. Bedding Material	Section 726
17. Mobilization	Section 727
18. Permanent Signs	Section 729
19. Raised Pavement Markers	Section 731
20. Plastic Pavement Markings	Section 732
21. Mailboxes and Mailbox Supports	Section 735
22. Hydro-Seeding	Section 739
23. Construction Layout	Section 740
24. Structural Concrete	Section 805
25. Deformed Reinforcing Steel	Section 806

- B. All other work not stated in the above list shall conform to the applicable sections which govern the specific type of work in the referenced LA DOTD Standard Specifications for Roads and Bridges.

PART 2 - SPECIAL PROVISIONS

2.1 DESCRIPTION

- A. Construct a functionally complete project, in accordance with the Contract.
- B. Provide all resources that may reasonably be inferred from the Contract to produce the intended result, without any adjustment in the Bid Amount or Contract Time.

- C. Bid Amount and Contract Time may only be modified by Change Order or Supplemental Agreement.
- D. Work items descriptions, materials, and construction requirements will conform to the applicable Highway Specification sections. Assume sole responsibility for means, methods, techniques, sequences or procedures for the Work.
- E. Fill out and submit a unit price form as required under **Section 004143**. Include quantities and prices of pay items aggregating the Contract Price.

PART 3 - SUPPLEMENTAL TECHNICAL SPECIFICATIONS

3.1 GENERAL

- A. Asphalt Concrete Mixture shall be PG70-22m and meet the requirements of Section 502 LA DOTD Standard Specifications for Roads and Bridges, 2016 Edition.
- B. No adjustments will be made to asphalt unit prices based on fluctuations in commodity prices, including fuel.
- C. The Contractor shall perform proof rolling of the subgrade (if necessary), subbase, and base course at no direct pay.
 - 1. Proof rolling shall be completed immediately prior to placement of the next layer, including base course or asphalt binder.
 - 2. Proof rolling shall consist of a loaded tandem dump truck with a minimum load of 25 tons (12 to 14 cubic yards) or an approved equivalent vehicle as determined by the Engineer. The vehicle shall make a minimum of one pass in each direction over the same alignment at a speed directed by the Engineer or their representative. If failing areas are incurred, additional passes may be required.
 - 3. Proof rolling shall be performed under the observation of the Engineer or their representative and shall be considered part of the visual inspection required prior to requesting density testing for acceptance.
 - 4. A passing proof roll is required prior to placement of any subsequent layer. Areas exhibiting pumping, rutting, deflection, or other signs of instability shall be considered failing.
 - 5. If unstable or unsuitable conditions are identified, the Contractor shall not proceed with additional work in the affected area until corrective measures are implemented. The Engineer will evaluate the failed areas and provide recommendations for undercutting, stabilization, or other remedial action. All corrective work shall be completed prior to placement of the next layer. Compensation for corrective work necessitated by deficiencies in existing soils will be negotiated and paid by change order. Corrective work resulting from deficiencies in materials furnished or placed by the Contractor shall be performed at no direct pay.
 - 6. A passing proof roll shall expire after 10 days, and proof rolling shall be repeated if precipitation or other conditions occur that could affect subgrade or base stability between the initial proof rolling and placement of the subsequent layer.

N.S. ARBORIST SERVICES:

D. DESCRIPTION.

1. This item consists of cleaning, cutting, and trimming the roots of trees that are to be saved as well as providing assistance in maintaining tree health in areas where excavation takes place for such purposes as grade changes, utilities installation or foundation work. The work shall be in accordance with the plans, the 2016 Louisiana Standard Specifications for Roads and Bridges, this special provision, and as directed.

E. MATERIALS.

1. Vacant

F. CONSTRUCTION REQUIREMENTS.

1. Perform all work in compliance with current A.N.S.I. Z-133 and International Society of Arboriculture (ISA) standards which are incorporated herein by reference.
2. All work shall be performed or supervised by an ISA Certified Arborist with a minimum of 5 years experience in arboriculture.
3. Arborist Services shall also include, but are not limited to; Supervision, Consultation and Recommendations to the Project Engineer, or arboricultural work associated with maintaining the health of the tree(s) during the course of the project.
4. Submit documentation proving that the tree trimmer/tree climber has a minimum of three (3) years full-time experience in tree removal and pruning operations along public roads and near energized wires.
5. Arborist(s) shall maintain an arborist license and insurances during the course of the project in accordance with Subsections 107.02 and 719.02 of the standard specifications. The Department reserves the right to request a new crew be assigned to perform the work if needed.

G. MEASUREMENT.

1. Arborist Services will be measured per the pay units below which include all materials, equipment, tools, and incidental labor needed to complete the work.

H. PAYMENT.

1. Payment for Arborist Services will be made at the contract unit price per each or lump sum.

Payment will be made under:

<u>Item No.</u>	<u>Pay Item</u>	<u>Pay Unit</u>
NS-201-00004	Arborist Services	Each
NS-201-00005	Arborist Services	Lump

3.2 N.S. SAW CUTTING ASPHALT CONCRETE PAVEMENT

A. DESCRIPTION

1. This item consists of furnishing all equipment, labor, materials and incidentals to perform saw cutting of existing asphalt concrete pavement at locations as shown on the plans or directed by the Project Engineer.

B. MEASUREMENT

1. The saw cutting will be measured and paid at the contract unit price per inch depth of cut times the linear foot of cut.

C. PAYMENT

Payment will be made at the contract unit price under:

<u>Item No.</u>	<u>Pay Item</u>	<u>Pay Unit</u>
NS-500-00340	Saw Cutting Asphalt Concrete Pavement	Inch Depth- Linear Foot

3.3 N.S. SAW CUTTING PORTLAND CEMENT CONCRETE PAVEMENT:

A. DESCRIPTION

1. This item consists of furnishing all equipment, labor, materials and incidentals to perform saw cutting of existing portland cement concrete pavement as shown on the plans or as directed by the Project Engineer.

B. MEASUREMENT

1. The saw cutting will be measured and paid at the contract unit price per inch depth of cut times the linear foot of cut.

C. PAYMENT

Payment will be made at the contract unit price under:

<u>Item No.</u>	<u>Pay Item</u>	<u>Pay Unit</u>
NS-600-00220	Saw Cutting Portland Cement Concrete Pavement	Inch Depth- Linear Foot

3.4 N.S. TRENCH DRAINS:

A. DESCRIPTION.

1. This work consists of installation of trench drains in the sidewalk locations as shown in the bid documents.

B. MATERIALS.

Comply with the following Sections:

Portland Cement Concrete (Class A1,B,D)	Section 707, Section 901
Asphaltic Varnish	1008.03
Welding	Section 809

Reinforcing Steel	Section 806
Cast Iron	1013.06
Joint Filler	1005.01.3

1. Trench drain cover shall be ADA compliant slotted cast iron and shall be in compliance with section 702. All metal components shall be galvanized.
2. The steel frame and cover shall be finished with asphaltic varnish.

C. CONSTRUCTION REQUIREMENTS.

1. Trench drains shall be constructed in accordance with Section 707 and as shown in the bid documents.
2. Excavate both upstream and downstream of the trench drain, as necessary, to provide satisfactory drainage.
3. Place ½" preformed bituminous joint filler along interface of sidewalk and trench drain, as indicated in bid documents.

D. MEASUREMENT.

1. Trench drain shall be measured per each installed and accepted and include all equipment, labor, and material necessary to complete the item as described herein and in the bid documents.

E. PAYMENT.

Payment for Trench Drain shall be made at the contract unit price under:

Item No.	Pay Item	Pay Unit
NS-700-00100	Trench Drain	Each

3.6 NS TREE ARBORIST WORK AND PROTECTION:

A. DESCRIPTION.

1. This work consists of arborist work and the protection of trees designated to remain that are within the roadway right-of-way and outside of the clearing and grubbing limits, in accordance with the plans and these specifications.

B. MATERIALS.

Comply with the following sections and subsections of the 2016 Louisiana Standard Specifications for Roads and Bridges:

Gravel	1003.01, 1003.10.3.1
Filter Cloth (Geotextile Fabric)	1019.01, Class B, C, or D
Topsoil	715.02.1
Reinforcing Steel	1009.01

C. GENERAL REQUIREMENTS.

1. Only the trees specified on the plans will be trimmed for construction operations.

2. A Louisiana Licensed Arborist shall perform the necessary tree trimming, root pruning, or removal of any tree or stump. A current list of licensed arborists may be obtained from: Louisiana Department of Agriculture and Forestry website: <http://www.ldaf.state.la.us/>
3. Dripline is defined as the entire diameter reach of the tree canopy. Excavation or trenching, within the dripline of any tree to remain is permitted only under existing roadbeds or as directed by the Project Engineer, who may seek guidance from the Landscape Architectural staff, prior to excavation or trenching. Boring or hydraulic jacking is acceptable within the dripline but must be at minimum depth of 30 inches and begin and end 10 feet from the dripline of the tree
4. Root pruning is defined as the cutting or grinding of roots followed by hand-pruning of any exposed root greater than 1 inch in diameter. Clean cuts shall be made to allow for the callusing of necessary wounds and for healthy re-growth of lost root systems. When root pruning is required, the extent of root pruning shall be determined by the Project Engineer, who may seek guidance from the Landscape Architectural staff.
5. Where tree roots interfere with placement of new curbs or any required bases, excavation for placement of new curbs within the dripline shall be omitted. Any tree roots damaged during removal of existing curbs, bases, or walks shall be root pruned. After a thorough analysis of the particular situation, only hand formed, poured-in-place concrete curbs should be installed, if required, over the remaining roots by using current acceptable arboricultural practices and recommendations, or as directed by the Project Engineer, who may seek guidance from the Landscape Architectural staff.
6. Where tree roots interfere with placement of a concrete walk, wherever possible a ramp shall be constructed over the roots in accordance with the special details. This work shall consist of placing a layer of gravel approximately 4 inches - 6 inches thick in order to create a minimum of 3 inch thick clearance above the top of the roots. The gravel layer shall be completely wrapped in filter cloth and extend for the width of the walk and the length of the ramp. The concrete ramp section of walk shall be reinforced with welded wire fabric WWR 4x4-W4xW4 for the full length of the ramp. The ramp section shall be constructed such that all ADA requirements are met and that a constant depth of concrete is maintained over the roots. Weakened transverse planes shall be constructed as required in the ramp section. No expansion joint shall be used in the ramp section. If ramping is not an option, the Project Engineer, who may seek the guidance of the Landscape Architectural staff, shall determine the root pruning necessary for construction clearance prior to excavating for the walk.
7. The storage of materials, supplies, equipment, or vehicles will not be permitted within the dripline of any tree. The erection of tree protection fencing around the perimeter of tree driplines may be required as shown on the plans or as directed by the Project Engineer. The contractor is responsible for maintaining the tree protection fencing until completion of the project. The tree protection fencing and posts shall be removed as directed by the Project Engineer and become the property of the contractor. The minimum barricade requirements shall be the following: steel post, with at least 4 feet above ground, set no more than 6 feet on center with orange plastic safety fencing attached from top to bottom, running post to post completely encircling the tree or the portion of the dripline encroaching onto state ROW.

8. Trees deemed significant according to EDSM No: I.1.1.21 shall be brought to the attention of the Project Engineer, who may seek the guidance of the District Roadside Development Coordinators and the Landscape Architectural staff.. Work on trees that fall into this category shall be paid under the appropriate pay items.

D. MEASUREMENT.

1. Tree protection fencing will be measured per lump sum.
2. Tree trimming will be measured per lump sum.
3. Root pruning will be measured per lump sum.
4. Hand formed and poured in-place concrete curb within the limits of the tree dripline will be measured per linear foot.
5. Gravel bed and filter cloth over tree roots will be measured per square yard.

E. PAYMENT.

1. Payment for tree protection fencing, tree trimming, root pruning and hand formed poured inplace concrete curb within the limits of tree dripline will be made at the contract unit price, which includes all labor, equipment, materials and other incidentals to complete the work. Tree protection fencing will include all the work specified above not specifically provided in one of the other items listed below. Payment for gravel bed and filter cloth over tree roots will include furnishing the gravel, fill, filter cloth. The concrete walk will be paid for under the walk item for which this work is applicable with welded wire fabric included in the unit price of the walk. Payment will be made under:

<u>Item No.</u>	<u>Pay Item</u>	<u>Pay Unit</u>
NS-719-00001	Tree Protection Fencing	Lump Sum
NS-719-00002	Tree Trimming	Lump Sum
NS-719-00003	Root Pruning	Lump Sum
NS-719-00004	Hand Formed and Poured In-Place Concrete Curb Within the Limits of the Tree Dripline	Linear Foot
NS-719-00005	Gravel Bed and Filter Cloth Over	Square Yard

3.7 NS AND 741 WATER DISTRIBUTION SYSTEMS

A. DESCRIPTION

1. This work consists of furnishing the necessary materials and installing, relocating and adjusting water distribution systems in accordance with these specifications and in conformity with the lines and grades shown on the plans or established by the Engineer.

B. MATERIALS

All supplied potable water piping and components shall comply with NSF 14, NSF 61, and NSF 372, and all thermoplastic piping shall be marked "NSF-pw."

1. DUCTILE IRON PIPE

AWWA C151 with AWWA C104 cement-mortar interior lining of standard thickness, mechanical-joint ends or push-on ends. Flanged or grooved ends may be used only where permitted herein.

- a. Mechanical-Joint Fittings
AWWA C110 or AWWA C153 with AWWA C104 cement-mortar interior lining of standard thickness; with glands, gaskets, and low alloy bolts conforming to AWWA C111.
- b. Push-on-Joint Fittings
AWWA C110 or AWWA C153 with AWWA C104 cement-mortar interior lining of standard thickness; with AWWA C111 rubber gaskets.
- c. Restrained Joints
Mechanical joints with pipe manufacturer's standard restrained, field-removable system.
- d. Flanges
ASME B16.1, Class 125 cast iron with AWWA C111 gaskets and low alloy steel bolts.
- e. Grooved-Joint Fittings and Couplings
ASTM A47 malleable iron fittings or ASTM A536 ductile iron fittings with AWWA C606 grooved couplings with ferrous housings and gasket suitable for potable water service.
- f. Flexible Expansion Joints
Compound-type, ductile iron, conforming to AWWA C110 or AWWA C153 with AWWA C104 lining; with two gasketed ball-and-socket joints and at least one gasketed sleeve; minimum working pressure of 250 psig.
- g. Deflection Fittings
Compound-type, ductile iron with sleeve and one or two flexing sections for up to 15 degrees of deflection, with gaskets and restrained-joint ends conforming to AWWA C110 or AWWA C153 with AWWA C104 lining; with AWWA C111 glands, rubber gaskets, and low alloy steel bolts; minimum working pressure of 250 psig.

2. THERMOPLASTIC PIPE

- a. PVC Pipe for Service Connections
ASTM D1785, Schedule 40 or ASTM D2241, Class 200 with plain ends.
 - 1) Fittings
ASTM D2466 socket fittings.

- 2) Adhesives
ASTM D2564 solvent-cement with ASTM F656 primer.
 - b. PVC Pipe for Water Mains
AWWA C900, Class 165 or 235, bell-and-spigot ends with ASTM F477 gaskets. Comply with UL 1285 for fire-service mains.
 - 1) PVC Fittings
AWWA C907 for molded fittings, Class 165 or 235 with bell-and-spigot ends with ASTM F477 gaskets.
 - 2) Ductile Iron Fittings
See mechanical-joint or push-on-joint fittings above.
 - c. Polyethylene Pipe (NPS 3 and Smaller)
AWWA C901, SDR 9, with compound number required to provide a pressure rating not less than 160 psig.
 - 1) Fittings
ASTM D3261 molded fittings, polyethylene resin, butt-fusion type to match polyethylene pipe.
 - d. Polyethylene Pipe (NPS 4 and Larger)
AWWA C906, DR 7, 9, 11, or 13.5 with compound number required to provide pressure rating not less than 160 psig.
 - 1) Fittings
AWWA C906 and ASTM D3261 butt-fusion type with DR number matching pipe and compound number required to provide pressure rating not less than 160 psig.
3. SOFT COPPER TUBE
ASTM B88 Type K, annealed temper.
- a. Fittings
ASME B16.18 cast copper alloy solder-joints or ASME B16.22 wrought copper solder-joint pressure fittings.
 - b. Solder
ASTM B32, lead-free alloys.
 - c. Flux
ASTM B813, water-flushable.
4. PIPE ENCASEMENT

AWWA C105 polyethylene tube or sheet; minimum LLDPE film thickness of 0.008 inches.

5. TUBULAR SLEEVE PIPE COUPLINGS

AWWA C219, bolted metal sleeve-type transition coupling, with manufacturer's standard center sleeve, rubber gasket, and 200 psig minimum pressure rating; all corrosive metal components shall have a corrosion-resistant finish.

6. PLASTIC-TO-METAL TRANSITION FITTINGS

One end with threaded brass insert and one solvent-cement socket end.

7. DIELECTRIC FITTINGS

a. Nipples

IAPMO PS 66, electroplated ASTM F1545 steel nipple, 300 psig pressure rating, threaded or grooved ends, noncorrosive lining.

b. Flanges

ASSE 1079, factory-fabricated, 150 psig minimum pressure rating, solder-joint end connections.

c. Insulating Flange Kits

Nonconducting materials to field assemble between flanges, 150 psig pressure rating with neoprene or phenolic gasket, phenolic or polyethylene bolt sleeve, and phenolic washers with steel backing.

8. RESILIENT-SEATED GATE VALVES

AWWA C509, gray- or ductile-iron body and bonnet, non-rising stem, mechanical-joint end connections, with bronze or gray- or ductile-iron gate, resilient seats, bronze stem, and stem nut; 200 psig minimum pressure rating; AWWA C550 interior coating.

9. BRONZE GATE VALVES

MSS SP-139, Class 125, lead-free silicon-bronze alloy body with solid wedge, threaded or soldered ends, and iron handwheel.

10. TAPPING SLEEVES AND VALVES

MSS SP-60 cast- or ductile-iron or stainless steel, two-piece bolted sleeve with type 304 stainless steel bolts and nuts and flanged outlet for new service connection. Include sleeve matching size and pipe material being tapped with recessed flange for branch valve. Provide factory epoxy finish coat on both inside and outside surfaces; omit outer surface coating for stainless steel sleeves. Valve shall be AWWA C509, gray- or ductile-iron gate valve with non-rising stem, resilient-seated with one raised face flange mated to tapping sleeve flange.

11. INSERTION VALVE

AWWA C509 or C515, resilient-seated, gray- or ductile-iron body with AWWA C110 mechanical-joint restraints for installation in a pressurized cast iron, ductile iron, steel, or AWWA C900 PVC water main while maintaining constant pressure without interruption to service. Provide type 304 stainless steel bolts, nuts, and washers for restraining device and AWWA 2-inch operating nut. Install steel extension stems if valve is buried more than 5 feet, sized for the full operating torque without binding, twisting, or bending; 200 psig minimum pressure rating.

12. SERVICE SADDLES

AWWA C800, copper alloy saddle and seal with AWWA C800 threaded outlet for corporation valve.

13. CORPORATION VALVES

Bronze body and ground key plug with AWWA C800 threaded inlet.

14. CURB VALVES

AWWA C800 bronze body with ground key plug.

15. WATER METERS

Comply with water utility company's requirements.

16. WATER METER AND METER BOXES

a. Metal

Cast iron body and cover marked "WATER METER" and slotted open bottom base to fit over pipe.

b. Concrete

Polymer concrete body and concrete lid marked "WATER METER." When located in a traffic lane, provide a steel frame and lid to meet an H-20 vehicle load.

c. Polymer

UV-resistant, one-piece molded polymer valve box rated for 15,000-pound vertical load, with ASTM A48 Class 25 cast iron ring and round lid marked "WATER METER."

17. CONCRETE VAULTS

ASTM C858 precast concrete vault, A-16 load designation per ASTM C857. Provide ASTM A48 Class 35A gray iron traffic-rated manhole frame and cover. For non-traffic areas, an aluminum hinged access door may be used in lieu of manhole frame and cover. Isolate aluminum access door from concrete with ASTM D1187 cold-applied asphalt emulsion.

18. CURB AND GATE VALVE BOXES

AWWA M44 cast iron for heavy roadway installations with top section, adjustable extension of length required for burial depth of valve, plug with "WATER" marked, and bottom section with valve-fitting base.

19. RPZ BACKFLOW PREVENTERS

ASSE 1013 or AWWA C511, bronze body for NPS 2 and smaller, cast iron with AWWA C550 coating for NPS 2-1/2 and larger; threaded ends for NPS 2 and smaller and flanged ends for NPS 2-1/2 and larger. Provide ball-type valves NPS 2 and smaller, OS&Y flanged valves for NPS 2-1/2 and larger.

20. RPZ DETECTOR-TYPE FIRE SERVICE BACKFLOW PREVENTERS

UL-listed, ASSE 1047 or FMG approved, cast iron body with AWWA C550 interior coating; flanged ends; Provide UL 262, FMG-approved OS&Y flanged gate valves on both ends. Install bypass with displacement water meter, RPZ backflow preventer, and shutoff valves.

21. DOUBLE CHECK BACKFLOW PREVENTERS

ASSE 1015 or AWWA C510 for continuous pressure applications, bronze body for NPS 2 and smaller and cast iron or steel for NPS 2-1/2 or larger; provide AWWA C550 interior coating; threaded ends for NPS 2 and smaller, flanged for NPS 2-1/2 and larger. Provide ball-type valves on both ends NPS 2 and smaller, OS&Y flanged valves on both ends for NPS 2-1/2 and larger.

22. DETECTOR-TYPE DOUBLE CHECK BACKFLOW PREVENTERS

UL-listed ASSE 1048 or FMG approved, cast iron body with AWWA C550 interior coating; flanged ends; Provide UL 262, FMG-approved OS&Y flanged gate valves on both ends. Install bypass with displacement water meter, RPZ backflow preventer, and shutoff valves.

23. FIRE HYDRANTS

AWWA C502 freestanding with cast iron body and compression valve opening against pressure and closing with pressure, with one NPS 4-1/2 and two NPS 2-1/2 outlets, 5-1/4 inch main valve, drain valve, stem coupling and breakaway traffic flange, pentagon operating nut, and NPS 6 mechanical-joint inlet. Fire hydrant shall have AWWA C550 coating applied to all wetted interior surfaces. Exterior finish shall have alkyd-gloss enamel paint with barrels in chrome yellow and bonnet and nozzle caps light blue for Class AA hydrants (greater than 1500 gpm), green for Class A hydrants (1,000 to 1499 gpm), orange for Class B hydrants (500 to 999 gpm), and red for Class C hydrants (0 to 499 gpm) according to NFPA 291 unless an existing color scheme has been adopted by the authority having jurisdiction.

24. DETECTION SYSTEMS FOR THERMOPLASTIC PIPES

a. Warning Tape

Acid and alkali-resistant polyethylene film warning tape, minimum 6 inches wide and 4 mils thick, continuously marked with description of utility, with

metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; in blue color. Install tape while backfilling trench.

- b. Direct-Bury Tracer Wire
Minimum 14-gauge copper-clad steel tracer wire with 30 mil LLDPE jacket in APWA blue.
- c. Horizontal Directional Drill (HDD) Tracer Wire
Minimum 12-gauge wire copper-clad steel tracer wire with 45 mil HDPE jacket in APWA blue.

25. APPROVED SOIL

Backfill material shall be native material if acceptable to the Engineer. Where native material is unsuitable, and where directed by the Engineer, select fill material shall be used for backfilling. Backfill material shall be free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.

- a. Select Fill Materials
Type B material in accordance with 701.3.060 of the LA DOTD Standard Specifications for Roads and Bridges with the following exceptions: Type A backfill is not an allowable substitute. Placement and compaction of backfill shall be in accordance with 3.7.C.10 below.

C. CONSTRUCTION REQUIREMENTS

1. SUBMITTALS

For each different component type to be installed, including for proposed changes to components previously accepted, provide product data sheet for review. Prior to installation, provide for record a certificate of compliance from the manufacturer for each component, per lot, to be installed. On Federal-aid projects, provide certificates indicating compliance of the Federal Buy America Act 23 C.F.R. §635.410 for all iron and steel products, including component parts of pay items such as reinforcing steel inside of precast manholes. Prior to construction, provide for record the latest version of all applicable non-departmental material and construction specifications referenced herein.

Submit for record a copy of all laboratory analysis specified in 3.7.C.9 below to the Engineer and the water utility company.

2. GENERAL REQUIREMENTS

Carefully handle all pipe, fittings, and other components to prevent breakage or damage, especially to cement-mortar lined pipe and fittings. Do not expose plastic pipe to sunlight or ultraviolet radiation for more than four weeks.

Identify and protect all water, sewer, gas, telecommunications, and stormwater piping systems prior to beginning construction by calling Louisiana One Call at

811. Coordinate with the Department District Utilities Specialist for identification of any Department-owned lines within the project limits.

Coordinate with water utility company for pipe material and joint construction required. Install pipe according to water utility company's requirements or these specifications if not prescribed. All water mains shall have a minimum pressure rating of 160 psig.

Minimum service connection shall be 3/4-inch and shall only serve one residence or commercial building.

If relocating or adjusting water utility service connections, match existing pipe and joint construction if possible. If connecting to existing underground steel pipe, use a plastic-to-metal transition fitting and install ASTM D2241 or Schedule 40 PVC pipe. Reconnect existing domestic water line to the relocated service connection.

a. Federal, State, and Local Codes and Laws

Perform all water main work according to the LDH State Sanitary Code, Title 51, Part XII of the Louisiana Administrative Code, and AWWA standards. Perform all service connection work according to the latest adopted edition of the International Plumbing Code with Louisiana Amendments and the water utility company's requirements.

Providing water main work in accordance with Federal, State, and local codes, laws, and ordinances is a minimum requirement. Work specified in the Contract that is more stringent than that required by the Federal, State, and local codes, laws, and ordinances shall also be provided. Work that does not meet the requirements of the Federal, State, and local codes, laws, and ordinances, and the Contract documents as appropriate, shall be corrected at no additional cost to the Department.

3. EXCAVATION

Conduct excavation according to 701.3.010 and 701.3.020, and the following requirements.

a. Protection of Excavation

Sheeting, shoring, and hand excavation shall be used as necessary for protection of work. Withdraw sheeting as backfilling is conducted except where the Engineer directs that sheeting and shoring be left in place. Cut off any sheeting left in place at least 18 inches below finished grade.

b. Bell Holes

Excavate bell holes of ample depth and width in pipe trenches at each joint location to permit the joint to be properly made and the pipe barrel to rest firmly on trench bottom.

4. INSTALLATION

Install ductile iron pipe according to AWWA C600 and AWWA M41. Install pipe encasement for all underground ductile iron pipe according to AWWA C105.

Install AWWA PVC pipe according to ASTM F645 and AWWA M23.

Install trenched polyethylene pipe according to ASTM D2774 and ASTM F645. For fire service mains, comply with NFPA 24.

Install copper tube and fittings according to CDA's "Copper Tube Handbook."

Install pipe encasement for Type K service connection taps off the water main.

Install underground piping with concrete thrust blocks and restrained joints at all tees, elbows, bends, and other horizontal and vertical changes in direction per water utility company's requirements. Construct thrust blocks from Class M concrete in accordance with Section 805. Thrust blocks shall bear against undisturbed soil.

Install pipes under pavement and waterways at least 5 feet deep, measured from finished grade to top of pipe. Minimum bury depth under ditches and other non-paved areas shall be 3 feet. Install tracer wire or warning tape for all direct-buried plastic pipe. Comply with water utility company's requirements, or when not prescribed, use tracer wire. For horizontal directional drilled pipe, bore tracer wire with pipe.

Tap water main according to the water utility company's requirements or arrange for a required tap of size and location to be made by the water utility company. Do not interrupt service of existing water main in operation. For connections larger than NPS 2, use tapping sleeve and valve assembly, and install concrete thrust block on side of water main opposite to service connection. For connections NPS 2 and smaller, use service saddle assembly and corporation valve. Locate points where connections will be made to existing pipe before opening trenches and uncover for Engineer to prescribe the type of connections and fittings to install.

Route service connections perpendicular to the water main until reaching the curb valve box. Do not run service connections parallel in the public right-of-way. Service connections to private property should be run parallel to the building foundation.

Where service connections are permanently removed due to building demolition or relocation, abandon the tap according to the water utility company's requirements. At minimum, remove all appurtenances including water meter, curb valve and valve box, and turn off and cut threads from the corporation valve; corporation valve to remain in place.

Install curb valves in valve box with head pointing upward.

Install water meters according to water utility company's written requirements. Furnish type of water meter required by water utility company. Install meter in water meter boxes for non-paved areas. Use cast iron, molded polymer, or concrete polymer meter boxes for NPS 2 and smaller meters. For NPS 3 and larger meters, install in concrete vault with valved bypass. Support vault pipe and valves with brick, block, or concrete piers. Offset service connection piping as required such that the centerline of water meter installed in a meter box is no deeper than 18 inches below finished grade to allow visual reading of meter.

Coordinate allowable depth of meters in concrete vaults with water utility company. Install new service connection pipe from the water main to the final location of water meter or to such points as directed to connect with existing or future domestic water lines and abutting property.

Schedule excavation, cleaning, laying, joining, and backfilling operations subsequent to one another and reasonably concurrent. Do not leave pipe in trench

without properly capping or joining. Backfill and compact trench as soon as possible after laying and joining but not before pressure testing has been completed. At the end of each workday, close the exposed end of pipe with an approved end cap.

Install transition fittings between dissimilar pipe materials. Use a fitting-type coupling for NPS 1-1/2 and smaller. Use sleeve coupling for NPS 2 and larger.

Isolate dissimilar metal pipe and tubing with dielectric fittings. Use nipples for NPS 2 and smaller. Use flanges for NPS 2-1/2 to NPS 4. Use flange kits for NPS 5 and larger.

Install all AWWA valves according to AWWA C600 and AWWA M44. Install shutoff valves no greater than one mile apart for water mains less than NPS 24 and no greater than 5 miles apart for NPS 24 and larger.

Install insertion valves in water mains where necessary to isolate and maintain pressure upstream prior to relocating or installing new sections of the water main downstream of the valve. Comply with valve manufacturer's instructions for installation.

Install backflow preventers according to the authority having jurisdiction. Install concrete thrust blocks on both underground elbows on vertical pipe riser.

Install fire hydrants with separate gate valve upstream in hydrant lead pipe, and anchor pipe with restrained joints and concrete thrust blocks per plans. Minimum fire hydrant lead shall be 6 inches. Install according to AWWA M17. Space fire hydrants at distances not greater than those prescribed by the authority having jurisdiction.

5. SEPARATION DISTANCES

Provide a minimum separation of 6 feet where water mains are laid parallel to new or existing gravity storm or gravity/force main sanitary sewer, septic tank, or other subsoil treatment system, measured edge to edge.

Provide a minimum vertical distance between a water main and new or existing gravity or force main sewer of 18 inches between the outside of the water main and outside of the sewer when installed parallel. Route water main above sewer.

Provide one full length of water main pipe near a sewer crossing so that both joints are located as far from the sewer crossing as possible.

Locate water mains at least 6 feet from sanitary sewer manholes.

Where not feasible to maintain these separation distances, seek a variance from the state health officer and comply with both of the following:

- a. Water main may be installed closer to sewer provided that the water main is laid in a separate trench or on an undisturbed earth shelf located on one side of the sewer at such an elevation that the bottom of the water main is at least 18 inches above the top of the gravity sewer.
- b. Construct sewer of AWWA pressure pipe having a minimum 150 psig pressure rating. Pressure test sewer according to the state health officer.

6. INSTALLATION UNDER PAVEMENT AND WATERWAYS

For water crossings greater than 15 feet in width at low flow, provide valves at both ends, within one half mile for less than NPS 24 water mains or within 2.5 miles for NPS 24 and larger water mains. Locate valves in areas not prone to flooding under high water conditions. Do not install any other appurtenances or tap water main between these two valves. Install a permanent tap or other means to allow use of a water meter on valve closest to water supply to determine leakage.

Where water lines are routed under pavement, driveways, or waterways, use the following methods for installing new pipe. Removal of existing pavement will not be allowed.

- a. Horizontal Directional Drilling (HDD)
Directional drill polyethylene pipe according to ASTM F1962. For boring segments less than 600 feet with pipe diameters less than 12 inches and not located under major waterways, PPI TR-46 may be used. Install transition fittings where connecting polyethylene pipe to PVC pipe. Locate transitions outside of roadway shoulders.
- b. Jacking
Jack pipe according to Section 728 in the LA DOTD Standard Specifications for Roads and Bridges.

7. JOINT CONSTRUCTION

Make joints according to the following.

- a. Ductile Iron Pipe
Mechanical-joint or push-on joint fittings for underground installations according to AWWA C600 and AWWA M41. Install flexible joints within roadway shoulders or curbs and gutters. For above-ground pipe and pipe installed underground in concrete vaults, the use of flanged or grooved joints is also permitted. For grooved joints, follow coupling manufacturer's recommendations.
- b. PVC Pipe
Bell-and-spigot according to AWWA C900. Construct joints with elastomeric seals and lubricant according to ASTM D2274 or ASTM D3139 and pipe manufacturer's recommendations. For ASTM D2241 and ASTM D1785 Schedule 40 PVC pipe, install solvent-cement joints according to ASTM D2855.
- c. Polyethylene Pipe
Join according to ASTM F2620, butt-fusion method.
- d. Copper Tube
Apply water-flushable flux to ends and join copper tube and fittings with lead-free solder joints according to ASTM B828 or CDA's "Copper Tube Handbook."

8. RELOCATIONS, ADJUSTMENTS, AND REMOVALS

Relocate or adjust to grade or remove all valves as shown on the plans or as designated, including valve boxes and fire hydrants. Protect all parts during removal and relocation; replace any items lost or damaged.

Relocate existing water meters and boxes as shown on the plans or as designated by the Engineer. Inspect each water meter prior to removal to determine condition; if defective and approved by the Engineer, furnish a replacement meter meeting the water utility company's requirements. Remove existing meter, meter box, all required pipe, unions, appurtenances, store and protect as required, and reinstall the meter, meter box, and curb stop in accordance with contract documents and as directed by the Engineer.

Lower or raise existing water meter and meter boxes to the grade established on the plans or as directed by the Engineer. Adjust existing service connections and domestic water lines as required.

9. TESTING AND CLEANING

Furnish all materials, equipment, and labor required to properly carry out testing, cleaning, and disinfection of water distribution systems. Furnish, install, and remove any temporary bulkheads, flanges, plugs, and corporation stops at high points in pipe runs and at test pump as necessary.

Test all water distribution piping according to AWWA C600, C605, or the procedure below prior to covering and backfilling over joints and after any thrust blocks have reached required strength. Perform all tests in the presence of the Engineer. Test sections shall not exceed 1,200 feet in length. Using potable water, fill pipe system 24 hours before testing.

Hydrostatically test at no less than 50 psig higher than the working pressure for two hours. Increase pressure in 50 psig increments and inspect joints. Hold at testing pressure for at least one hour and then depressurize line. Slowly increase again to testing pressure and hold for an additional hour. The maximum allowable leakage shall not exceed the leakage rates specified in AWWA C605. If this rate is exceeded, remake leaky joints and repeat test until the line passes leakage requirements. Replace any cracked, broken, or defective materials. No additional compensation will be given for required replacements, repairs, corrections or retesting.

Purge and disinfect according to authorities having jurisdiction, or if not prescribed, according to AWWA C651. Furnish suitable corporation stops, plugs, or caps for the pipe, injection pumps, pipe connections and other equipment, and all labor required. Perform disinfection in the presence of the Engineer. Notify Engineer and owner at least 48 hours prior to the beginning of disinfection process. After a minimum of 24 hours after disinfecting lines and after chlorine measurements are no longer higher than the general prevailing concentration of the system, notify the Owner and Owner's representative will collect water samples in sterile containers and submit to a laboratory certified by the state health officer to show water mains are free from coliform bacteria using EPA's *Standard Methods for the Examination of Water and Wastewater*. If samples show E. coli/fecal coliform positive, notify

the state health officer immediately. If samples are total coliform positive, repeat disinfection process and sample daily until two consecutive samples are negative.

10. BACKFILL

Place and compact initial backfill of approved soil 12 inches above top of pipe. Carefully compact initial backfill under pipe haunches, and compact evenly up on both sides and along the full length of piping to avoid damage or displacement of pipe.

Place and compact final backfill of soil to final subgrade elevation. Install tracer wire or warning tape directly above pipe, 12 inches below finished grade.

D. MEASUREMENT

Water mains and service connections will be measured by the linear foot along the center, parallel to the slope of the pipe, from end- to-end of each installation through all fittings.

Gate valves will be measured per each size installed. Valve boxes will not be measured separately for payment.

Tapping sleeve and valve will be measured per each size installed as a unit. Insertion valve will be measured per each size installed.

Fire hydrants will be measured per each installed. Backflow preventers will be measured per each installed.

Each water meter and box or water meter and vault will be measured per each installed as a unit.

Relocate Fire Hydrant, Relocate Backflow Preventer, Relocate Water Valve, and Relocate Water Meter will be measured per each relocated; relocation of associated boxes for valves and meters will not be measured for payment.

Adjust Valve or Meter Box will be measured per each adjusted to grade in their original locations. Installation of pipe offsets required to raise centerline of meter or valve no deeper than 18 inches below finished grade will not be measured for payment.

Removal of Water Valve and Box, Removal of Fire Hydrant, and Removal of Backflow Preventer will be measured per each removed. Boxes associated with water valves will not be measured for payment.

Water line adjustments will be measured per each adjusted.

Removal of Service Connection will be measured per each removed. Removal of associated curb and valve box will not be measured for payment.

1. INCIDENTALS

The following work is considered incidental and will not be measured for payment:

- a. Excavation, backfilling, corporation and curb valves, fittings, joint construction, tapping of water main and service saddle, directional drilling, pressure testing, and disinfecting required for water main or service connections.
- b. Joints and valve box for underground installations required for gate valves.
- c. Joints required for tapping sleeve and valve and insertion valve assemblies.
- d. Vertical extensions, shut-off valves, joints, pipe restraints, and drains required for fire hydrants.
- e. Vault and cover, and piping, drain, bypass, valves, and supports inside vault required for water meters NP3 and larger.
- f. Vertical pipe risers required for backflow preventers.
- g. Relocation of shutoff valve and new crushed stone drain required for relocating fire hydrants.
- h. Excavation and backfilling required for relocating water valves and water meters.
- i. Adjustment, relocation, or installation of boxes for valves and meters associated with water valves.
- j. Installation of pipe offsets required for adjusting meter boxes and valve boxes.
- k. Reconnection of domestic water line to service connection required for adjustment of service connections.

E. PAYMENT

Payment for Water Mains will be made at the contract unit price per linear foot of each size and type of pipe installed.

Payment for Gate Valves will be made at the contract unit price per each.

Payment for Tapping Sleeve and Valve will be made at the contract unit price per each.
Payment for Insertion Valve will be made at the contract unit price per each.

Payment for Fire Hydrants will be made at the contract unit price per each.

Payment for Water Meters NPS 2 and smaller installed in meter boxes will be made at the contract unit price per each.

Payment for Water Meters NPS 3 and larger installed in concrete vaults will be made at the contract unit price per each.

Payment for Backflow Preventers will be made at the contract unit price per each.

Payment for Service Connections will be made at the contract unit price per linear foot each size and type. Payment for Relocate Fire Hydrants will be made at the contract unit price per each.

Payment for Relocate Water Valves will be made at the contract unit price per each..
Payment for Relocate Water Meters will be made at the contract unit price per each.
Payment for Relocate Backflow Preventers will be made at the contract unit price per each.

Payment for Water line adjustments will be made at the contract unit price per each.

Payment for Adjust Valve or Meter Boxes will be made at the contract unit price per each.
Payment for Removal of Service Connections will be made at the contract unit price per each. Payment for Removal of Fire Hydrants will be made at the contract unit price per each Payment for Removal of Water Valves will be made at the contract unit price per each.

Payment for Removal of Backflow Preventers will be made at the contract unit price per each.

Payment will be made under:

<u>Item No.</u>	<u>Pay Item</u>	<u>Pay Unit</u>
741-20	Water Main (Size & Type)	Linear Foot
741-21	Gate Valve (Size)	Each
741-22	Tapping Sleeve and Valve (Size)	Each
741-23	Insertion Valve (Size)	Each
741-24	Fire Hydrant	Each
741-25	Water Meter and Box	Each
741-26	Water Meter and Vault	Each
741-27	Backflow Preventer	Each
741-28	Service Connection (Size & Type)	Linear Foot
741-29	Relocate Fire Hydrant	Each
741-30	Relocate Water Valve	Each
741-31	Relocate Water Meter	Each
741-32	Relocate Backflow Preventer	Each
741-35	Adjust Valve or Meter Box	Each
741-36	Removal of Service Connection	Each
741-37	Removal of Water Valve and Box	Each
741-38	Removal of Fire Hydrant	Each
741-39	Removal of Backflow Preventer	Each
NS-741-00100	Water Line Adjustment	Each

END OF SECTION

SECTION 311000 SITE CLEARING

PART 1 - GENERAL

1.1 RELATED ITEMS SPECIFIED ELSEWHERE

- | | | |
|----|--------------------|--------|
| A. | Field Engineering: | 017123 |
| B. | Earthwork: | 312010 |

1.2 PROTECTING

Properly protect aboveground and underground property of the Owner, public service corporations, and other private and public owners.

1.3 CLEARING

All clearing and stripping of trees, brush, weeds and other vegetation within working area shall be completed by the Contractor and included in project Clearing and Grubbing item price.

1.4 REMOVAL

As called for on the Drawings and necessary to complete new construction, remove and dispose of, or remove and replace (as directed by the Designer) existing culverts, fences, slabs and other surface improvements.

1.5 REFERENCE POINTS

- A. Do not proceed with balance of site work until reference points have been established as specified in Section 017123.
- B. Protect and maintain reference points from dislocation or damage. Replace or repair, immediately, reference points that have been damaged, destroyed or dislocated.

1.6 UTILITIES

- A. Verify the location of all utilities underground and aboveground as to location, size, levels and character of service. Probe site to locate underground utilities before beginning work.
- B. Maintain existing utilities indicated to remain; keep in service and protect against damage during construction operations.
- C. Refer to other requirements in Section 312010

1.7 SETTING-OUT

- A. Field engineering shall be as specified in Section 017123.
- B. Accurately locate roadway alignment, baseline, edges of pavement, curb lines, medians, drainage structures, and other features shown on the Drawings. Set grade stakes securely and maintain them in place until construction is complete.
- C. Notify Designer when laying-out is substantially complete.

1.8 CLEANING

- A. Remove debris and surplus materials from site promptly to prevent large accumulations. Construction debris and trash shall remain the Contractor's property and shall be disposed of by him off the Owner's property.
- B. Burning or burying on site is not permitted except with specific approval.
- C. Earthen materials shall remain the property of the Owner, and shall be hauled and deposited by the Contractor at a location on the Owner's property but outside the Project area, as directed by the Designer.

END OF SECTION



ECS Southeast, LLC

Geotechnical Engineering Report Columbia Street Roundabouts

Columbia Street
Covington, LA

ECS Project No. 65:1701

December 24, 2024





ECS SOUTHEAST, LLC

Geotechnical • Construction Materials • Environmental • Facilities

December 24, 2024

Mr. Tyler Branch, P.E.
Forte and Tablada, Inc.
9107 Interline Avenue
Baton Rouge, LA
tbranch@forteandtablada.com

ECS Project No. 65:1701

Reference: Geotechnical Engineering Report
Columbia Street Roundabouts
St. Tammany Parish
Covington, LA

Mr. Branch:

ECS Southeast, LLC (ECS) has completed the subsurface exploration, laboratory testing, and geotechnical engineering analyses for the Columbia Street Roundabouts Project in Covington, LA. Our services were performed in accordance with our agreed to scope of work. This report presents our geotechnical analysis of the project along with the results of the field exploration and laboratory testing conducted, and our design and construction recommendations.

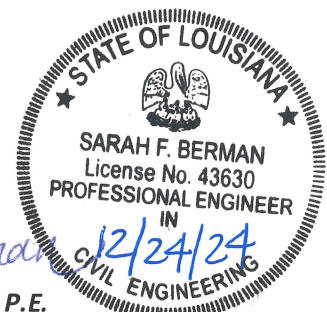
It has been our pleasure to be of service to Forte and Tablada during the design phase of this project. We would appreciate the opportunity to remain involved during the continuation of the design phase, and we would like to provide our services during construction phase operations as well to evaluate subsurface conditions assumed for this report. Should you have any questions concerning the information contained in this report, or if we can be of further assistance to you, please feel free to contact us.

Respectfully submitted,

ECS Southeast, LLC

Joe Cobena, P.E.
Office Manager | Associate Principal
JCobena@ecslimited.com

Sarah F. Berman, P.E.
Geotechnical Department Manager
SBerman@ecslimited.com



11211 INDUSTRIPLEX BOULEVARD, SUITE 300, BATON ROUGE, LA 70809 • T: 225-224-2583

ECS Florida, LLC • ECS Mid-Atlantic, LLC • ECS Midwest, LLC • ECS Pacific, Inc. • ECS Southeast, LLC • ECS Southwest, LLP
ECS New York Engineering, PLLC - An Associate of ECS Group of Companies • www.ecslimited.com

"ONE FIRM. ONE MISSION."

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APPENDICES

Appendix A – Drawings & Reports

- Site Location Diagram
- Boring Location Diagram

Appendix B – Field Operations

- Reference Notes for Boring Logs
- Boring Logs P-01 to P-14

Appendix C – Laboratory Testing

- Laboratory Testing Results Summary

EXECUTIVE SUMMARY

The following summarizes the main findings of the exploration, particularly those that may have a cost impact on the planned development. Further, our principal foundation recommendations are summarized. Information gleaned from the Executive Summary should not be utilized in lieu of reading the entire geotechnical report.

PROJECT UNDERSTANDING:

- Project Information: Two (2) new roundabout intersections on Columbia Street at W 30th Ave and N Jefferson Ave.

SUBSURFACE CONDITIONS:

- Surface Material: Asphalt pavement, grass groundcover
- Probable Fill: Up to 18-in of pavement subbase, up to 8-in fill material adjacent to existing roadway
- Expected Undercut: Approx 6-inches of any topsoil, milling of existing asphalt pavement
- Natural Material: Lean Clay, Silt
- Groundwater: None encountered

DESIGN & CONSTRUCTION RECOMMENDATIONS:

- Traffic Loading: - W 30th: 24,958 ADT
- N Jefferson: 22,205 ADT

ECS should be retained to review all project documents to confirm conformance with our recommendations, and to perform CMT testing for earthwork and foundation construction activities to document that our recommendations are strictly followed. This also allows us to quickly provide recommendations for remedial activities, where necessary.

1.0 INTRODUCTION

The purpose of this study was to provide geotechnical information for the design and construction of the Columbia Street Roundabouts in Covington, LA. The project consists of two new roundabouts on Columbia Street at the intersections of W 30th Avenue and N Jefferson Avenue. The recommendations developed for this report are based on project information supplied by Forte and Tablada through email, or estimations made by ECS. ECS was provided with a traffic study for the project, as well as the plan set for the State Mill and Overlay project of Columbia Street, dated 5/17/2012.

Our services were provided in accordance with our Proposal No. 2447-P, dated May 22, 2024, as authorized by Mr. Jason Fennell, P.E. on September 24, 2024, which includes our Terms and Conditions of Service.

This report contains the procedures and results of our subsurface exploration and laboratory testing programs, review of existing site conditions, engineering analyses, and recommendations for the design and construction of the project.

2.0 PROJECT INFORMATION

2.1 PROJECT LOCATION/CURRENT SITE USE/PAST SITE USE

The project is located on Columbia Street in Covington, LA. The proposed roundabouts are located at the Columbia Street intersections with W 30th Ave and N Jefferson Ave and are about 950-linear feet apart from each other. The topography of the site is relatively flat with surface elevations at about +26 feet MSL. The elevations and topographic variations were estimated from Google Earth, Figure 2.1.1.

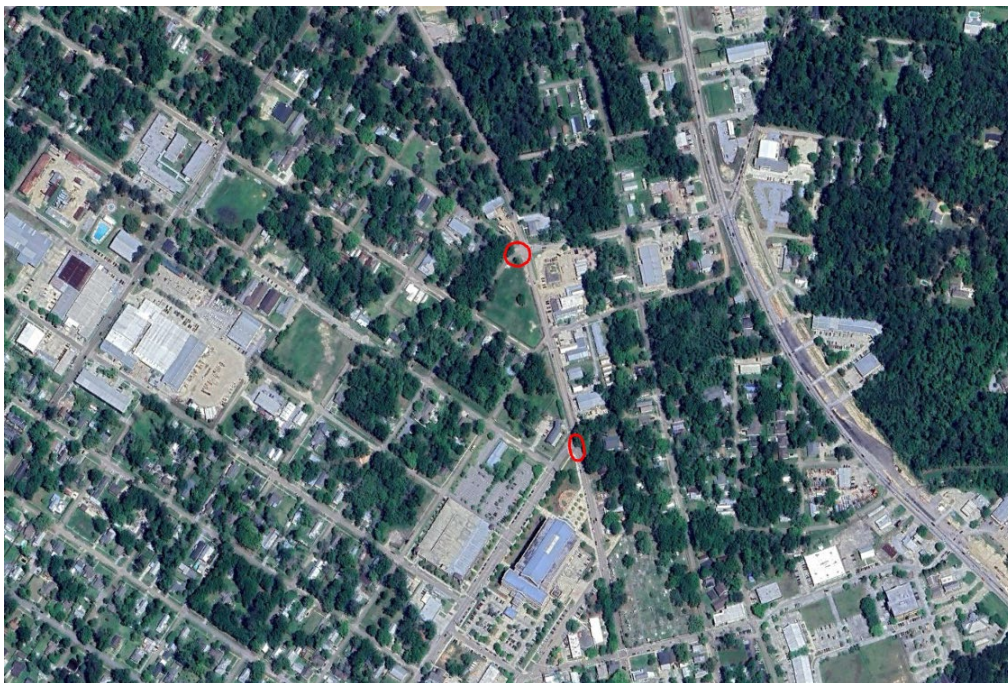


FIGURE 2.1.1: General Site Location Outlined in Red

2.2 PROPOSED CONSTRUCTION

The following table explains our understanding of the planned project construction. If ECS's understanding of the project is not correct, especially if the vehicular loads or elevations are different, please contact ECS so that we may review these changes and revise our recommendations, as appropriate.

Subject	Design Information/Understandings
Proposed Improvements	- 2 new intersection roundabouts – W 30 th and N Jefferson - New drainage systems
Finish Elevation	Estimated to at existing roadway elevation, approx. + 26 ft MSL
Estimated Traffic	- W 30 th : 24,958 ADT - N Jefferson: 22,205 ADT
Pavement Design Life	20 years (2043)

3.0 FIELD EXPLORATION AND LABORATORY TESTING

3.1 FIELD EXPLORATION PROGRAM

The field exploration scope was to characterize the project site in general geotechnical and geological terms and to evaluate subsequent field and laboratory data to assist in the determination of geotechnical recommendations.

3.1.1 Soil Borings

Our scope of work included drilling a total of fourteen (14) soil borings with at least eight (8) pavement cores. Two borings were not able to be performed, P-06 could not get through the pavement section after 3 tries and P-09 due to the proximity right-of-way utilities that could not be avoided. All borings were advanced to a depth of 6 feet below existing grades. Our borings were located with a handheld GPS unit, and their approximate locations are shown on the Boring Location Diagram in Appendix A. The approximate ground surface elevations noted in this report were estimated from Google Earth. The pavement sections encountered during drilling are described in the table below.

Boring	Pavement Section
P-01	--
P-02	3-in Asphalt Surface, 11-in Sand Base Course with gravel
P-03	3-in Asphalt Surface, 5-in Asphalt Base, 6-in Sand Base Course with gravel
P-04	--
P-05	2-in Asphalt Surface, 18-in Soil Cement Base
P-06	2-in Asphalt Surface, 12-in Asphalt Base, Concrete (could not penetrate concrete)
P-07	2-in Asphalt Surface, 4-in Sand Base Course with gravel
P-08	2-in Asphalt Surface, 18-in Soil Cement Base
P-10	3-in Asphalt Surface, 4-in Asphalt Base, 6-in Concrete
P-11	2.5-in Asphalt Surface, 16-in Asphalt Base
P-12	2.5-in Asphalt Surface, 16-in Asphalt Base
P-13	2-in Asphalt Surface, 6-in Asphalt Base, 4-in Concrete
P-14	2-in Asphalt Surface, 4-in Asphalt Base, 6-in Concrete

Representative soil samples were obtained by means of Standard Penetration Test (SPT) procedures in accordance with ASTM Specifications D-1586 in granular soils and by means of Shelby tube sampling procedures in accordance with ASTM Specifications D-1587 in cohesive soils. In the Shelby tube sampling procedure, a thin walled, steel, seamless tube with sharp cutting edges is pushed hydraulically into the soil, and a relatively undisturbed sample is obtained.

Field logs of the soils encountered in the borings were maintained by the drill crew. After recovery, each geotechnical soil sample was removed for the sampler and visually classified. Representative portions of each soil sample were then wrapped in plastic and transported to our laboratory for further visual examination and laboratory testing. After completion of the drilling operations, the boreholes were backfilled with cuttings to the existing ground surface.

3.2 SUBSURFACE CHARACTERIZATION

The following text provides generalized characterizations of the soil strata encountered during our subsurface exploration. For specific subsurface information, please refer to the Boring Logs in Appendix B:

Approximate Depth (ft)	Stratum No.	Soil Description
0 – 1.5 ft	-	ASPAHLT PAVEMENT
1.5 – 2.0 ft	I	SANDY SILT (ML)/SILT (ML) or SILTY SAND (SM), Stiff to Very Stiff/Loose, Gray and Brown
2.0 – 6.0 ft	II	SILT (ML) or LEAN CLAY (CL), Soft to Stiff, Tan and Gray

Notes:

- (1) Soil descriptions show generalized strata to 6'. Strata in the borings vary with depth, please see attached Boring Logs in Appendix B.

Please refer to the attached boring logs and laboratory data summary for this field exploration for a more detailed description of the subsurface conditions encountered in the borings as the stratification descriptions above are generalized for presentation purposes.

3.3 GROUNDWATER OBSERVATIONS

Groundwater levels, if observed, were made in the borings during and shortly after drilling operations. In auger drilling operations, water is not introduced into the borehole and the groundwater position can often be evaluated by observing water flowing into and out of the excavation. Furthermore, visual observation of soil samples retrieved can often be used in evaluating the groundwater conditions.

Groundwater was not encountered at the time of drilling.

The highest groundwater observations are normally encountered in the late winter or early spring or following seasonal heavy rainfall events. Fluctuations in the location of the long-term water table may occur due to changes in precipitation, evaporation, surface water runoff and other factors not immediately apparent at the time of this exploration. Therefore, the groundwater conditions at this site are expected to be significantly influenced by surface water runoff and seasonal rainfall.

3.4 LABORATORY TESTING

The laboratory testing consisted of selected tests performed on samples obtained during our field exploration operations. Classification and index property tests were performed on representative soil samples. The soil samples were tested for Moisture Content (ASTM D2216), Atterberg Limits (ASTM D4318), Percent Passing Standard No. 200 Sieve (ASTM D1140), and Particle Size Distribution with Hydrometer (ASTM D7928).

Samples were visually classified based on texture and plasticity in accordance with ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedures) and including USCS classification symbols. After classification, the samples were grouped in the major zones noted on the boring logs in Appendix B. The group symbols for each soil type are indicated in parentheses along with the soil descriptions. The stratification lines between strata on the logs are approximate; in situ, the transitions may be gradual.

The soil samples will be retained in our laboratory for a period of 60 days, after which, they will be discarded unless other instructions are received as to their disposition.

4.0 DESIGN RECOMMENDATIONS

The following recommendations have been developed based on Sections 2 and 3. If there are any changes to the project characteristics or if different subsurface conditions are encountered during construction, ECS should be consulted so that the recommendations of this report can be reviewed. We assume finished grade for new pavements will match existing elevations. If the project elevation deviates from this assumed site grades, the recommendations provided below should be evaluated by our office.

4.1 GEOTECHNICAL CONSIDERATIONS

Based on the subsurface conditions encountered in the borings and the anticipated traffic, the site appears suited for the proposed development provided the recommendations herein are strictly adhered to.

4.1.2 Moisture Sensitive Soils

Based on the laboratory test results, fine grained soils were disclosed directly beneath the surface layer across the site. These soils are moisture sensitive, subject to volume changes and will become inadequate when wet of their optimum moisture content as evaluated by ASTM D698 and may be prone to desiccation cracking that can cause degradation over seasonal wetting and drying periods. Effective site drainage should be implemented into the final designs, the onset of construction, and maintained throughout the construction process. Care should be taken to keep construction traffic to a minimum across the site during wet periods. Water should not be allowed to pond on construction areas (building pads or pavement subgrade) or near foundational supports.

4.2 PAVEMENTS

Pavement section recommendations for the planned roundabouts are provided for the traffic conditions and design parameters noted in Proposed Construction Section 2.2 and the table below.

Parameter ¹	Flexible Pavement Values
Road Type	Urban, 2-Lane
Performance Period	20 years
Initial Serviceability	4.2
Terminal Serviceability	2.0
Reliability Level	85%
Overall Standard Deviation	0.45
Asphalt Surface and Binder Layer Coefficient	0.44
Aggregate Base Layer Coefficient	0.14
Drainage Coefficient	1.2
Subgrade Resilient Modulus ²	5,200 psi (est. CBR = 3)
Provided 20 Year ESALs ⁴	1,544,958
Calculated Design Life ESALs ³	2,560,000
Design Structural Number Required	4.16

Notes:

- (1) Standard values obtained from the *Implementation of the New AASHTO Pavement Design Procedure in Louisiana*, June 1990.
- (2) Based on the in-situ subgrade material encountered during the investigation.
- (3) Calculated using an assumed growth rate of 5%.
- (4) Value obtained from 2012 plan set for the Columbia Street Improvements – LA State Project No H.009551.

The pavement design parameters above were used as inputs for the pavement design calculations. The engineer responsible for the final pavement design should review the estimated and provide traffic information and the design parameters for accuracy prior to finalization.

MATERIAL	FLEXIBLE PAVEMENT SECTION (in)
Asphaltic Concrete Surface and Binder Course ²	5
Graded Aggregate Base Course ¹	8
Properly Prepared Subgrade	12
Calculated Structural Number of Section	4.26

Notes:

- 1 Crushed aggregate base should be compacted to maximum lift height of eight inches to a minimum of 95 percent of the Standard Proctor (ASTM D698) maximum dry density. Aggregate should conform to the latest edition of the Louisiana Standard Specifications for Roads and Bridges (LSSRB) Section 1003.03.
- 2 Hot Mix asphaltic concrete should conform to the latest edition of the LSSRB Section 502. Engineered fill should meet the criteria for material properties and compaction recommended in Section 5.1 of this report.

Pavement Considerations: In regions of improper surface and/or subsurface drainage, a softening of the subgrade and other problems related to the deterioration of the pavement can be expected. Positive drainage will reduce the possibility of the subgrade materials becoming saturated during the normal service period of the pavement.

Representative soil samples should be collected from the upper 2 feet of the final pavement subgrade to assess the suitability of the in-situ CBR values, prior to implementation of the pavement sections provided herein. Often during construction and preparation of the roadway subgrade, the soil materials may be improved and can sometimes yield reduced pavement sections based on the actual CBR values and traffic loads.

5.0 SITE CONSTRUCTION RECOMMENDATIONS

5.1 SUBGRADE PREPARATION

The existing soils are moisture sensitive and will become inadequate when above their optimum moisture content as evaluated by ASTM D698. Effective site drainage should be implemented at the beginning of and maintained throughout construction activities. Care should be taken to keep construction traffic to a minimum during and immediately after times of inclement weather.

ECS should be on-site full-time during earthwork and foundation construction activities to document that our recommendations are strictly followed and to provide recommendations for remedial activities, if necessary.

5.1.1 Stripping and Grubbing

The subgrade preparation should consist of stripping approximately 6 inches of topsoil, existing pavement section, existing fill, construction debris, existing foundation elements and utilities, and soft or yielding materials from the 10-foot expanded construction limits, and 5 feet beyond the toe of engineered fills.

Note: Following stripping and grubbing the entire construction area should be proofrolled as outlined in Section 5.1.2 of this report. Soils observed to rut or deflect greater than an inch in depth should be undercut and replaced or otherwise mitigated.

Deeper topsoil or organic laden soils may be present in wet, low-lying, and poorly drained areas. In wooded areas, the root balls may extend as deep as about 2 feet and will require additional localized stripping depth to completely remove the organics. ECS should be retained to evaluate that topsoil and poor surficial materials have been removed prior to the placement of Engineered Fill or construction of structures.

5.1.2 Proofrolling

Following clearing activities and prior to fill placement or other construction on subgrades, the subgrades should be evaluated by an ECS field technician. The exposed subgrade should be thoroughly proofrolled with a half loaded tandem-axle dump truck or similar construction equipment weighing a minimum of 15 tons. Proofrolling should be traversed in two perpendicular directions (if possible) with overlapping passes of the vehicle under the observation of an ECS technician. This procedure is intended to assist in identifying localized yielding materials.

Where proofrolling identifies areas that are unstable or “pumping” subgrade those areas should be repaired prior to the placement of any subsequent Structural Fill or other construction materials. Methods of stabilization include undercutting, moisture conditioning, or chemical stabilization. The situation should be discussed with ECS to determine the appropriate procedure. Test pits may be excavated to explore the shallow subsurface materials to help in determining the cause of the observed unstable materials, and to assist in the evaluation of appropriate remedial actions to stabilize the subgrade.

5.2 EARTHWORK OPERATIONS

5.2.1 Engineered Fill

Prior to placement of engineered fill, representative bulk samples (approximately 50 pounds) of on-site and/or off-site borrow should be submitted to ECS for laboratory testing, which will typically include Atterberg limits, natural moisture content, grain-size distribution, and moisture-density relationships (i.e., Proctors) for compaction. Import materials should be tested prior to being hauled to the site to evaluate if they meet project specifications. Alternatively, Proctor data from other accredited laboratories can be submitted if the test results are within the last 90 days.

Satisfactory Engineered Fill Materials: Materials satisfactory for use as Engineered Fill should consist of inorganic soils and conform to the criteria below.

ENGINEERED FILL INDEX PROPERTIES		
Soil Type	USCS Classification	Property
Imported Clay Fill	CL, SC	LL < 45, 10 < PI < 25
Imported Sand Fill	SP, SP-SM	Less than 10% passing #200 sieve
Aggregate Base	GP	LADOTD 610 crushed limestone or similarly graded recycled aggregate
On-Site Soils	CL	Most of the lean clay soils encountered appear to meet the requirements for reuse as engineered fill.

ENGINEERED FILL COMPACTION REQUIREMENTS	
Subject	Requirement
Compaction Standard	Standard Proctor, ASTM D698
Required Compaction	95% of Max. Dry Density
Moisture Content	Optimum to +3 % Points of the Soil's Optimum Value
Loose Thickness	8 Inches Prior to Compaction

Fill Placement: Fill materials should not be placed on excessively wet soils. Borrow fill materials should be free of debris or organics at the time of placement. Excessively wet soils or aggregates should be scarified, aerated, and moisture conditioned.

5.3 UTILITY INSTALLATIONS

Utility Subgrades: The soils encountered in our exploration are expected to be generally adequate for support of utility pipes. The pipe subgrades should be observed and probed for stability by ECS. Loose or inadequate materials encountered should be removed and replaced with adequate compacted Engineered Fill, or pipe stone bedding material.

Utility Backfilling: The granular bedding material should be at least 4 inches thick, but not less than that specified by the civil engineer's project drawings and specifications. We recommend that the bedding materials be placed up to the springline of the pipe. Fill placed for support of the utilities, as well as backfill over the utilities, should conform to Section 5.2.

Based on the drawings provided, the proposed side drains will be A-2000 PVC culverts with a minimum of 12-inches of backfill consisting of crushed concrete or 610 crushed limestone that meets the ASTM D2321 Class I or II specification. This material shall be placed and compacted to 95% standard density.

Excavation Safety: Excavations and slopes should be constructed and maintained in accordance with OSHA excavation safety standards. The contractor is solely responsible for designing, constructing, and maintaining adequate excavations and slopes. The contractor's responsible person, as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. ECS is providing this information solely as a service to our client. ECS is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

6.0 CLOSING

ECS has prepared this report to guide the geotechnical-related design and construction aspects of the project. We performed these services in accordance with the standard of care expected of professionals in the industry performing similar services on projects of like size and complexity at this time in the region. No other representation expressed or implied, and no warranty or guarantee is included or intended in this report.

The description of the proposed project is based on information provided to ECS by Forte and Tablada. If any of this information is inaccurate or changes, either because of our interpretation of the documents provided or site or design changes that may occur later, ECS should be contacted so we can review our recommendations and provide additional or alternate recommendations that reflect the proposed construction.

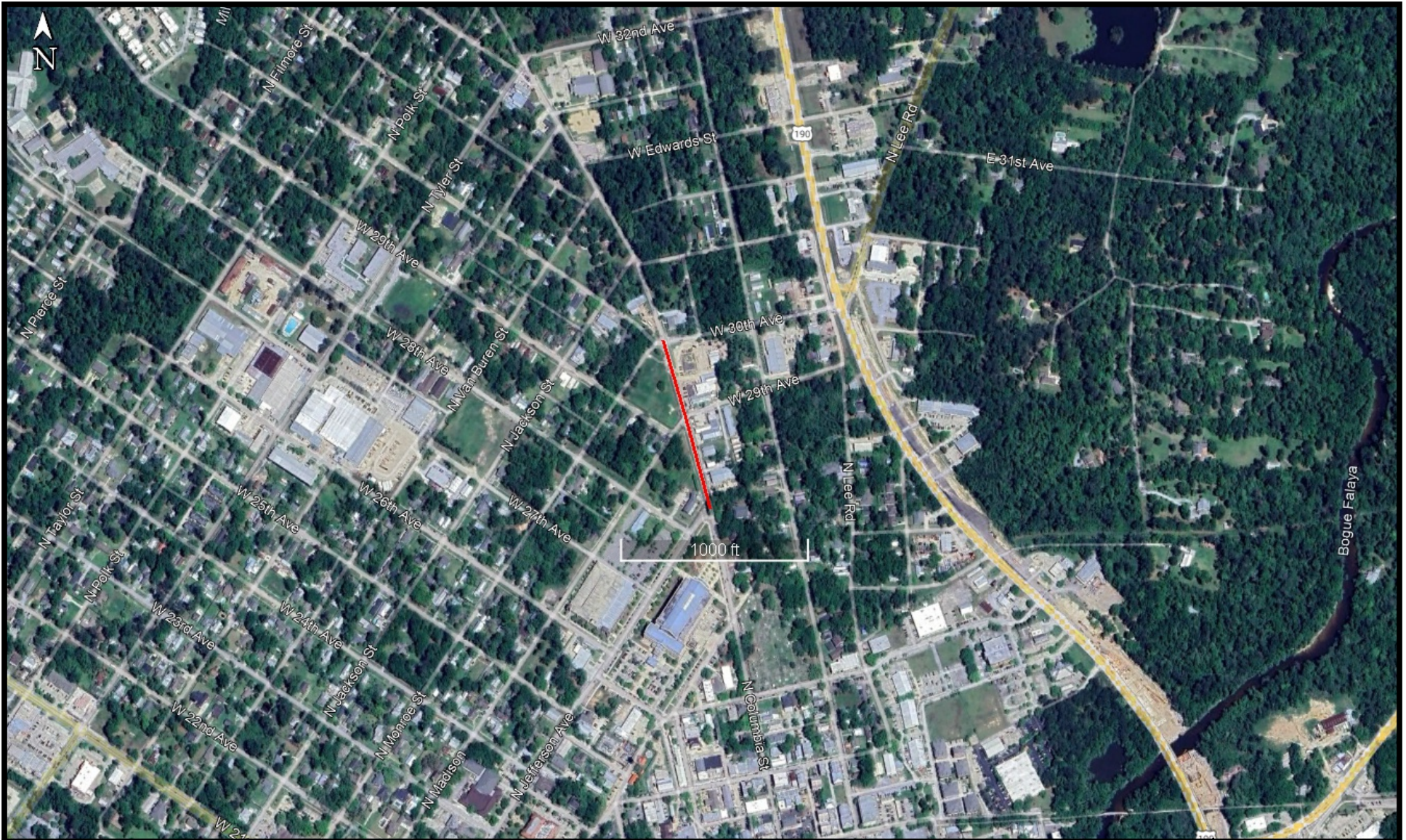
We recommend that ECS review the project plans and specifications so we can confirm that those plans/specifications are in accordance with the recommendations of this geotechnical report.

Field observations, and quality assurance testing during earthwork and foundation installation are an extension of, and integral to, the geotechnical design. We recommend that ECS be retained to apply our expertise throughout the geotechnical phases of construction, and to provide consultation and recommendation should issues arise.

ECS is not responsible for the conclusions, opinions, or recommendations of others based on the data in this report.

APPENDIX A – Diagrams & Reports

Site Location Diagram
Boring Location Diagram



SITE LOCATION DIAGRAM COLUMBIA ST. ROUNDABOUTS

COVINGTON, LOUISIANA

ENGINEER SFB2
SCALE AS NOTED
PROJECT NO. 65:1701
FIGURE 1 OF 1
DATE 12/24/2024



BORING LOCATION DIAGRAM COLUMBIA ST. ROUNDABOUTS

COVINGTON, LOUISIANA

ENGINEER SFB2
SCALE AS NOTED
PROJECT NO. 65:1701
FIGURE 1 OF 1
DATE 12/18/2024

APPENDIX B – Field Operations

Reference Notes for Boring Logs Boring
Logs P-01 to P-14

REFERENCE NOTES - GEO TEMPLATE WITH LAB BLANK GDT - 12/12/24 16:37 - C:\USERS\BERMAN\ONE DRIVE - ECS CORPORATE SERVICES\65 DATA\PROJECTS\1700-1799\65-1701 (A) COLUMBIA STREET ROUNDABOUT - COVINGTON, LA D3\LAB1701 COLU



ECS Southeast, LLC
11211 Industriplex Blvd, Suite 300
Baton Rouge, LA 70809

REFERENCE NOTES FOR BORING LOGS

CLIENT Forte and Tablada

PROJECT NAME Columbia Street Roundabouts

PROJECT NUMBER 65-1701

MATERIAL^{1,2,3}



ASPHALT: Asphalt



CL: LEAN CLAY
low to medium plasticity



FILL1: Fill (made ground)



ML: USCS Silt



SM: USCS Silty Sand

DRILLING SAMPLING SYMBOLS & ABBREVIATIONS

SS	Split Spoon Sampler	PM	Pressuremeter Test
ST	Shelby Tube Sampler	RD	Rock Bit Drilling
WS	Wash Sample	RC	Rock Core, NX, BX, AX
BS	Bulk Sample of Cuttings	REC	Rock Sample Recovery %
PA	Power Auger (no sample)	RQD	Rock Quality Designation %
HSA	Hollow Stem Auger		

PARTICLE SIZE IDENTIFICATION

DESIGNATION	PARTICLE SIZES
Boulders	12 inches (300 mm) or larger
Cobbles	3 inches to 12 inches (75 mm to 300 mm)
Gravel:	
Coarse	3/4 inch to 3 inches (19 mm to 75 mm)
Fine	4.75 mm to 19 mm (No. 4 sieve to 3/4 inch)
Sand:	
Coarse	2.00 mm to 4.75 mm (No. 10 to No. 4 sieve)
Medium	0.425 mm to 2.00 mm (No. 40 to No. 10 sieve)
Fine	0.074 mm to 0.425 mm (No. 200 to No. 40 sieve)
Silt & Clay ("Fines")	<0.074 mm (smaller than a No. 200 sieve)

COHESIVE SILTS & CLAYS

UNCONFINED COMPRESSIVE STRENGTH, QP ⁴	SPT ⁵ (BPF)	CONSISTENCY ⁷ (COHESIVE)
<0.25	<2	Very Soft
0.25 - <0.50	3 - 4	Soft
0.50 - <1.00	5 - 8	Firm
1.00 - <2.00	9 - 15	Stiff
2.00 - <4.00	16 - 30	Very Stiff
4.00 - 8.00	31 - 50	Hard
>8.00	>50	Very Hard

RELATIVE AMOUNT⁷

COARSE GRAINED (%)⁸

FINE GRAINED (%)⁸

Trace	≤ 5	≤ 5
With	10 - 20	10 - 25
Adjective (ex: "Silty")	25 - 45	30 - 45

GRAVELS, SANDS & NON-COHESIVE SILTS

SPT ⁵	DENSITY
<5	Very Loose
5 - 10	Loose
11 - 30	Medium Dense
31 - 50	Dense
>50	Very Dense

WATER LEVELS⁶

▽	WL (First Encountered)
▼	WL (Completion)
▽	WL (Seasonal High Water)
▽	WL (Stabilized)

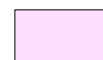
FILL AND ROCK



FILL



POSSIBLE FILL



PROBABLE FILL



ROCK

¹Classifications and symbols per ASTM D 2488-17 (Visual-Manual Procedure) unless noted otherwise.

²To be consistent with general practice, "POORLY GRADED" has been removed from GP, GP-GM, GP-GC, SP, SP-SM, SP-SC soil types on the boring logs.

³Non-ASTM designations are included in soil descriptions and symbols along with ASTM symbol [Ex: (SM-FILL)].

⁴Typically estimated via pocket penetrometer or Torvane shear test and expressed in tons per square foot (tsf).

⁵Standard Penetration Test (SPT) refers to the number of hammer blows (blow count) of a 140 lb. hammer falling 30 inches on a 2 inch OD split spoon sampler required to drive the sampler 12 inches (ASTM D 1586). "N-value" is another term for "blow count" and is expressed in blows per foot (bpf). SPT correlations per 7.4.2 Method B and need to be corrected if using an auto hammer.

⁶The water levels are those levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in granular soils. In clay and cohesive silts, the determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally employed.

⁷Minor deviation from ASTM D 2488-17 Note 14.

⁸Percentages are estimated to the nearest 5% per ASTM D 2488-17.

[illegible]

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-02 LAT: 30.484377° LONG: -90.096927° SURFACE EL.: 27.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH				
					STRATUM DESCRIPTION		UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF				
				37-13-8 (21)	SILT (ML), very stiff, gray, with clay	2.0	100	16									
				2-1-1 (2)	LEAN CLAY (CL), soft to medium stiff, gray and tan, with silt and trace sand		100	24	43	19	24						
5				1-3-4 (7)		6.0	85	20	41	16	25						
					Boring completed at 6-feet.												
10																	
15																	
20																	
25																	
30																	
35																	

NOTES:

- 1. Terms and symbols defined on reference notes.
- 2. Pavement Section: 3-in Asphalt Surface, 11-in Sand Base Course with gravel

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto



Client: Forte and Tablada

Project Name: Columbia Street Roundabouts

Site Location: Covington, LA

LOG OF BORING NO. P-02

Project No. 65-1701

PM/PE

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-03 LAT: 30.484261° LONG: -90.096695° SURFACE EL.: 27.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH											
					UNIT DRY WT, PCF		PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	☐ Penetrometer ☒ Torvane ☒ Hand Vane Unconfined ▼ Triaxial ● Miniature Vane ▲ KSF 0.51.01.52.02.5												
5				11-8-6 (14)	SANDY SILT (ML), stiff, gray	2.0		64	16															
				2-1-0 (1)	SILT (ML), very soft, gray and tan, with clay			100	20															
				0-2-5 (7)	LEAN CLAY (CL), medium stiff, gray and tan, with silt			100	20	28	15	13												
				Boring completed at 6-feet.																				
10																								
15																								
20																								
25																								
30																								
35																								
NOTES: 1. Terms and symbols defined on reference notes. 2. Pavement Section: 3-in Asphalt Surface, 5-in Asphalt Base, 6-in Sand Base Course with shells							START DATE: October 23, 2024 COMPLETION DATE: October 23, 2024 TOTAL DEPTH: 6.0' CAVED DEPTH: Not Applicable DRY AUGER: 6' WET ROTARY: Not Applicable BACKFILL: Cuttings LOGGER: J. Cobena DRILL RIG: Gulf South HAMMER TYPE: Auto																	
							Client: Forte and Tablada												LOG OF BORING NO. P-03					
							Project Name: Columbia Street Roundabouts																	
							Site Location: Covington, LA						Project No. 65-1701			PM/PE								

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-04 LAT: 30.483893° LONG: -90.096548° SURFACE EL.: 27.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH				
					STRATUM DESCRIPTION		UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF				
				7-7.5 (12)	SILTY SAND (SM), loose, dark gray	2.0		44	20								
				0-0-1 (1)	SILT (ML), very soft, gray	4.0		100	20								
5				4-6-9 (15)	LEAN CLAY (CL), stiff to very stiff, gray and tan, with silt	6.0		100	17	29	14	15					
					Boring completed at 6-feet.												
10																	
15																	
20																	
25																	
30																	
35																	

NOTES:

- 1. Terms and symbols defined on reference notes.
- 2. Grass groundcover, 7-in (FILL) Sand with gravel

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto



Client: Forte and Tablada

Project Name: Columbia Street Roundabouts

Site Location: Covington, LA

LOG OF BORING NO. P-04

Project No. 65-1701

PM/PE

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-05 LAT: 30.484136° LONG: -90.096915° SURFACE EL.: 26.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH					
					UNIT DRY WT, PCF		PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF						
					STRATUM DESCRIPTION							0.5	1.0	1.5	2.0	2.5		
5					FILL, Silty Sand with gravel			7										
				4-1-3 (4)	LEAN CLAY (CL), medium stiff to stiff, light gray and tan, with silt	2.0		100	18	28	15	13						
				2-4-6 (10)		6.0		100	21	34	16	18						
					Boring completed at 6-feet.													
10																		
15																		
20																		
25																		
30																		
35																		

NOTES:

1. Terms and symbols defined on reference notes.

2. Pavement Section: 2-in Asphalt Surface, 18-in Soil Cement Base

START DATE: October 23, 2024

COMPLETION DATE: October 23, 2024

TOTAL DEPTH: 6.0'

CAVED DEPTH: Not Applicable

DRY AUGER: 6'

WET ROTARY: Not Applicable

BACKFILL: Cuttings

LOGGER: J. Cobena

DRILL RIG: Gulf South

HAMMER TYPE: Auto

	Client: Forte and Tablada		LOG OF BORING NO. P-05	
	Project Name: Columbia Street Roundabouts			
	Site Location: Covington, LA		Project No. 65-1701	PM/PE

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-07 LAT: 30.484259° LONG: -90.096336° SURFACE EL.: 27.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH				
					STRATUM DESCRIPTION		UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF				
				2-1-1 (2)	SILT (ML), soft, dark gray	2.0	100										
				0-3-3 (6)	LEAN CLAY (CL), medium stiff to stiff, gray and tan, with silt			21	34	16	18						
5				1-6-6 (12)		6.0	100	18	36	22	14						
					Boring completed at 6-feet.												
10																	
15																	
20																	
25																	
30																	
35																	

NOTES:

- Terms and symbols defined on reference notes.
- Pavement Section: 2-in Asphalt Surface, 4-in Sand Base Course with gravel

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto



Client: Forte and Tablada

LOG OF BORING NO. P-07

Project Name: Columbia Street Roundabouts

Site Location: Covington, LA

Project No.

65-1701

PM/PE

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-08 LAT: 30.483939° LONG: -90.097002° SURFACE EL.: 26.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH								
					UNIT DRY WT, PCF		PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF									
												0.5	1.0	1.5	2.0	2.5					
5				4-4-5 (9) 2-4-8 (12)	SANDY SILT (ML), dark gray	2.0		53	18												
					SILT (ML), stiff, gray and tan, with clay			100	18												
					LEAN CLAY (CL), stiff, light brown		4.0														
					Boring completed at 6-feet.		6.0														
10																					
15																					
20																					
25																					
30																					
35																					

NOTES:

1. Terms and symbols defined on reference notes.
2. Pavement Section: 2-in Asphalt Surface, 18-in Soil Cement Base

START DATE: October 23, 2024

COMPLETION DATE: October 23, 2024

TOTAL DEPTH: 6.0'

CAVED DEPTH: Not Applicable

DRY AUGER: 6'

WET ROTARY: Not Applicable

BACKFILL: Cuttings

LOGGER: J. Cobena

DRILL RIG: Gulf South

HAMMER TYPE: Auto



Client: Forte and Tablada

LOG OF BORING NO. P-08

Project Name: Columbia Street Roundabouts

Site Location: Covington, LA

Project No.

65-1701

PM/PE

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-10 LAT: 30.481693° LONG: -90.09573° SURFACE EL.: 25.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH					
					UNIT DRY WT, PCF		PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF						
STRATUM DESCRIPTION																		
					SILT (ML), gray. with clay			100	18									
				0-2-3 (5)	LEAN CLAY (CL), medium stiff, gray, with trace sand and silt	2.0		100	19	29	15	14						
5				2-4-3 (7)		6.0		93	26									
					Boring completed at 6-feet.													
10																		
15																		
20																		
25																		
30																		
35																		

NOTES:

1. Terms and symbols defined on reference notes.

2. Pavement Section: 2-in Asphalt Surface, 4-in Asphalt Base, 6-in Concrete

START DATE: October 23, 2024

COMPLETION DATE: October 23, 2024

TOTAL DEPTH: 6.0'

CAVED DEPTH: Not Applicable

DRY AUGER: 6'

WET ROTARY: Not Applicable

BACKFILL: Cuttings

LOGGER: J. Cobena

DRILL RIG: Gulf South

HAMMER TYPE: Auto

Client: Forte and Tablada

Project Name: Columbia Street Roundabouts

Site Location: Covington, LA

LOG OF BORING NO. P-10

Project No. 65-1701

PM/PE

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-11 LAT: 30.481557° LONG: -90.095906° SURFACE EL.: 25.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH					
					UNIT DRY WT, PCF		PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF						
STRATUM DESCRIPTION												0.5	1.0	1.5	2.0	2.5		
					ASPHALT, 2.5-in Asphalt Surface, 16-in Asphalt Base	1.6			1									
				3-3-3 (6)	LEAN CLAY (CL), medium stiff to stiff, gray, with silt			100	18									
5				2-4-5 (9)		6.0		100	21	45	14	31						
					Boring completed at 6-feet.													
10																		
15																		
20																		
25																		
30																		
35																		

NOTES:

1. Terms and symbols defined on reference notes.

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto



Client: Forte and Tablada

Project Name: Columbia Street Roundabouts

Site Location: Covington, LA

LOG OF BORING NO. P-11

Project No. 65-1701

PM/PE

DEPTH, FT	WATER LEVEL SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-12 LAT: 30.481571° LONG: -90.096071° SURFACE EL.: 25.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH					
				UNIT DRY WT, PCF		PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF 0.5 1.0 1.5 2.0 2.5						
5			0-0-4 (4) 3-4-5 (9)	ASPHALT, 2.5-in Asphalt Surface, 16-in Asphalt Base	1.6			4									
				SILT (ML), medium stiff to stiff, gray, with clay		100	16										
				Boring completed at 6-feet.	6.0			100	21								
10																	
15																	
20																	
25																	
30																	
35																	

NOTES:

1. Terms and symbols defined on reference notes.

START DATE: October 23, 2024

COMPLETION DATE: October 23, 2024

TOTAL DEPTH: 6.0'

CAVED DEPTH: Not Applicable

DRY AUGER: 6'

WET ROTARY: Not Applicable

BACKFILL: Cuttings

LOGGER: J. Cobena

DRILL RIG: Gulf South

HAMMER TYPE: Auto



Client: Forte and Tablada

Project Name: Columbia Street Roundabouts

Site Location: Covington, LA

LOG OF BORING NO. P-12

Project No. 65-1701

PM/PE

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-13 LAT: 30.482004° LONG: -90.095899° SURFACE EL.: 25.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH					
					UNIT DRY WT, PCF		PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF 0.5 1.0 1.5 2.0 2.5						
					STRATUM DESCRIPTION													
					SILT WITH SAND (ML), brown and gray			83	22									
				0-2-1 (3)	LEAN CLAY (CL), soft to medium stiff, gray and tan, with silt	2.0		100	21									
5				1-2-3 (5)		6.0		100	22	44	16	28						
					Boring completed at 6-feet.													
10																		
15																		
20																		
25																		
30																		
35																		

NOTES:
1. Terms and symbols defined on reference notes.
2. Pavement Section: 2-in Asphalt Surface, 6-in Asphalt base, 4-in Concrete

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto



Client: Forte and Tablada

Project Name: Columbia Street Roundabouts

Site Location: Covington, LA

LOG OF BORING NO. P-13

Project No. 65-1701

PM/PE

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	BORING NO. P-14 LAT: 30.481368° LONG: -90.09572° SURFACE EL.: 25.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH					
					UNIT DRY WT, PCF		PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KSF 0.51.01.52.02.5						
5				2-3-6 (9) 3-5-5 (10)	LEAN CLAY (CL), brown and gray, with silt	2.0		100	17	30	18	12						
					LEAN CLAY (CL), stiff, gray and tan, with silt				21	31	17	14						
									Boring completed at 6-feet.	6.0		100	22					
10																		
15																		
20																		
25																		
30																		
35																		

NOTES:
1. Terms and symbols defined on reference notes.
2. Pavement Section: 2-in Asphalt Surface, 4-in Asphalt Base, 6-in Concrete

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

APPENDIX C – Laboratory Testing

Laboratory Test Results Summary

Laboratory Testing Summary

Sample Location	Sample Number	Depth (ft)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
P-01	S-01	0.5-2.0	21.0					58.8					
P-01	S-02	2.0-4.0	20.5					100.0					
P-01	S-03	4.8-6.3	19.4		31	14	17	100.0					
P-02	S-01	0.5-2.0	15.6					100.0					
P-02	S-02	2.5-4.0	23.5		43	19	24	100.0					
P-02	S-03	4.5-6.0	20.4		41	16	25	85.0					
P-03	S-01	0.5-2.0	16.2					64.3					
P-03	S-02	2.5-3.5	19.7					100.0					
P-03	S-03	4.5-6.0	19.5		28	15	13	100.0					
P-04	S-01	0.5-2.0	19.8					44.1					

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

Project: Columbia St. Roundabouts - City of Covington
Client: Forte and Tablada

Project No.: 65:1701
Date Reported: 12/10/2024



Office / Lab

Address

Office Number / Fax

ECS Southeast LLC - Baton Rouge

11211 Industriplex Blvd
Suite 300
Baton Rouge, LA 70809

(225)224-2583
(225)612-7062

Tested by	Checked by	Approved by	Date Received
JTortorich	NBurke	NBurke	

Laboratory Testing Summary

Sample Location	Sample Number	Depth (ft)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
P-04	S-2	2.5-4.0	19.7					100.0					
P-04	S-3	4.5-6.0	16.5		29	14	15	100.0					
P-05	S-1	0.0-2.0	6.6										
P-05	S-2	2.5-4.0	18.0		28	15	13	100.0					
P-05	S-3	4.5-6.0	20.6		34	16	18	100.0					
P-07	S-2	2.5-4.0	20.5		34	16	18						
P-07	S-3	4.5-6.0	17.7		36	22	14	100.0					
P-08	S-1	0.0-2.0	18.3					52.6					
P-08	S-2	2.5-4.0	17.9					100.0					
P-08	S-3	4.5-6.0	19.3		43	14	29	85.1					

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

Project: Columbia St. Roundabouts - City of Covington
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Tested by	Checked by	Approved by	Date Received
JTortorich	NBurke	NBurke	

Laboratory Testing Summary

Sample Location	Sample Number	Depth (ft)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
P-10	S-1	0.0-2.0	18.1					100.0					
P-10	S-2	2.5-4.0	18.8		29	15	14	100.0					
P-10	S-3	4.5-6.0	25.5					92.7					
P-11	S-1	0.0-2.0	1.2										
P-11	S-2	2.5-4.0	18.0					100.0					
P-11	S-3	4.5-6.0	21.1		45	14	31	100.0					
P-12	S-1	0.0-2.0	3.6										
P-12	S-2	2.5-4.0	16.1					100.0					
P-12	S-3	4.5-6.0	20.5					100.0					
P-13	S-1	0.0-2.0	21.5					83.0					

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

Project: Columbia St. Roundabouts - City of Covington
Client: Forte and Tablada

Project No.: 65:1701
Date Reported: 12/10/2024



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Tested by	Checked by	Approved by	Date Received
JTortorich	NBurke	NBurke	

Laboratory Testing Summary

Sample Location	Sample Number	Depth (ft)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
P-13	S-2	2.5-4.0	21.0					100.0					
P-13	S-3	4.5-6.0	22.2		44	16	28	100.0					
P-14	S-1	0.0-2.0	17.2		30	18	12	100.0					
P-14	S-2	2.5-4.0	20.9		31	17	14						
P-14	S-3	4.5-6.0	21.8					100.0					

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

Project: Columbia St. Roundabouts - City of Covington
Client: Forte and Tablada

Project No.: 65:1701
Date Reported: 12/10/2024



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Tested by	Checked by	Approved by	Date Received
JTortorich	NBurke	NBurke	