

ADDENDUM NO. 2
SEWER SYSTEM IMPROVEMENTS
CONTRACT 16-06
GRAVITY SEWER BORING IMPROVEMENTS
JACKSON ENERGY AUTHORITY
JACKSON, TENNESSEE
WAUFORD PROJECT NO. 3590
JEA WORK ORDER NO. 1700553
CDBG DISASTER PROJECT NO. 54299

Date of Addendum: Tuesday, March 10, 2020
Bid Opening: Thursday, March 12, 2020, 2:00 P.M. Local Time

1. See the attached sign in sheet from the Pre-Bid Conference.
2. The following contractors are prequalified to submit bids for this project:

Argo Construction Corporation
9394 Cordova Park Rd.
Cordova, TN 38018
Phone: 901-753-3673
Email: sbing@argoconstructioncorp.com

Delgado General Corporation
6874 Green Crest Dr.
Memphis, TN 38133
Phone: 901-308-0786
Email: adelgadogc@gmail.com

Cleary Construction, Inc.
2006 Edmonton Rd.
Tompkinsville, KY 42167
Phone: 270-487-1784
Email: estimating@clearyconst.com

Morgan Contracting, Inc.
900 Dutch Valley Drive
Knoxville, TN 37918
Phone: 865-249-8640
Email: JMorgan@Morgan1.com

3. General Conditions of the Construction Contract, C-700 (Rev. 1):
Add the attached JEA General Conditions C-700 (Rev. 1) immediately after JEA Section 00200 Instructions to Bidders in the Project Manual.
4. JEA Section 00800 Supplementary Conditions, Paragraph SC-5.03, Subsurface and Physical Conditions, Page 00800-4:

Modify this paragraph as follows:

"SC-5.03 SUBSURFACE AND PHYSICAL CONDITIONS

Add the following new paragraphs immediately after Paragraph 5.03 B:

- C. The following reports of explorations and tests of subsurface conditions at or contiguous to the Site are known to Owner:

Geotechnical Engineering Services Report PSI Project No. 0502712

- D. The following drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) are known to Owner:

[List any such drawings]

- E. The reports and drawings identified above are not part of the Contract Documents, but the "technical data" contained therein upon which Contractor may rely, as expressly identified and established above, are incorporated in the Contract Documents by reference. Contractor is not entitled to rely upon any other information and data known to or identified by Owner or Engineer.

- F. Copies of reports and drawings identified in SC-5.03 C and SC-5.03.D that are not included with the Bidding Documents may be examined at Jackson Energy Authority, 250 North Highland Ave., Jackson, TN 38301 during regular business hours."

5. Davis Bacon Wage Rate Determination:

Replace the Davis Bacon Wage Rate Determination General Decision Number TN20190130 dated 10/25/2019 with the attached General Decision Number TN20200130 dated 01/03/2020.

6. Detailed Specifications, Section 1, General Scope and Special Provisions:

Add the following Paragraph 34. Geotechnical Engineering Report to the end of this Section.

"A Geotechnical Engineering Report from a previous adjacent project is included at the end of this Section. The Geotechnical Engineering Report provides the Owner's information for the Bidder's convenience and is intended to supplement rather than serve in lieu of the Bidder's own investigations. The Geotechnical Engineering Report is made available for the Bidder's convenience and is not part of the Contract Documents. The Bidder is responsible for examination of the project site and existing conditions."

7. Detailed Specifications, Section 4, Gravity Sewers, Manholes and Appurtenances, Paragraph 7. Highway and Railroad Crossings, Subparagraph a. General, Page DS 4-9:

Revise this subparagraph as follows:

“a. General

Where shown on the Plans, highway and railroad crossings for sewers shall be bored to prevent interruption to traffic and to prevent later settlement of the roadway or roadbed. City streets may be “open-cut” except where otherwise shown on the Plans. There the following Tennessee Department of Transportation requirements apply: “Where open cutting is allowed, the following conditions shall be met: (1) all backfill material shall be compacted crushed stone, (2) one-half of the traveled portion of the paving must be open at all times”. Crossings of the County roads will be open cut with permission of the City of Jackson and the Madison County Highway Department.

The Contractor and his subcontractor must be fully equipped and experienced in the installation of pipelines by boring or tunneling methods. The Contractor shall be fully responsible for the successful operation without interruption of traffic and shall be held responsible for any settlement which occurs as a result of his work.

The requirements of Subparagraph c. CSXT Railroad Crossing by Jacking Steel Casing Pipe shall apply to all bored or tunneled crossings on this project. A copy of the railroad permits is included at the end of Section 4. The Contractor is responsible for paying fees required by each railroad related to construction activities including but not limited to flagmen, etc.”

8. Detailed Specifications, Section 4, Gravity Sewers, Manholes and Appurtenances, Paragraph 7. Highway and Railroad Crossings, Subparagraph b., Item (2) Steel Casing Pipe, Page DS 4-10:

Revise item (2) as follows:

“(1) Steel Casing Pipe

Black steel casing pipe shall be manufactured and tested in accordance with ASTM Designation A 139 or A 53, Grade B, 35,000 psi yield strength, and shall meet the American Railway Engineering

Association (AREA) Specification for Metal Pipe and Arches, Chapter 1, Part 5. Steel casing pipe where shown shall be as follows:

<u>Diameter Carrier in inches</u>	<u>Diameter Casing in inches</u>	<u>Minimum Wall Thickness of Casing in inches</u>
42	60	0.811
36	54	0.781
24	36	0.532

The exterior of steel casing pipe shall be asphalt coated.

9. Detailed Specifications, Section 5, Basis of Payment, Paragraph 4. Steel Casing Pipe, Page DS 4-1:

Revise this paragraph as follows:

“4. Steel Casing Pipe

Payment for installing by boring Steel Casing Pipe of the sizes shown in the BID FORM as a carrier for sewer lines will be made at the contract unit price per linear foot as shown in the BID FORM. No payment for steel casing pipe shall be made until each bore is completely installed in accordance with the Plans and Specifications.”

10. Plans, Sheets 3 and 6:

Revise as shown on the attached 8 ½” x 11” sheets.

11. Plans, Sheets 2, 3 and 4:

Remove Borehole Nos. 1 through 6 from these sheets.

J. R. WAUFORD & COMPANY,
CONSULTING ENGINEERS, INC.



J. Gregory Davenport, P.E.
Tennessee License No. 104881

Sign in Sheet – Pre-Bid Conference

SEWER SYSTEM REHABILITATION
 CONTRACT 16-06
GRAVITY SEWER BORING IMPROVEMENTS
JACKSON ENERGY AUTHORITY
 JACKSON, TENNESSEE
WAUFORD PROJECT NO. 3590
JEA WORK ORDER NO. 1700553
CDBG DISASTER PROJECT NO. 54299

PRE-BID CONFERENCE: TUESDAY, MARCH 3, 2020, 10:00 A.M. CENTRAL TIME
 BID OPENING: THURSDAY, MARCH 12, 2020, 2:00 P.M. CENTRAL TIME

Name	Organization	Contractor – Prime or Sub Please 'X' Below		Email
		Prime	Sub	
Greg Davenport	Wauford			greg.d@jrwauford.com
Eddie O'Neill	SEA			eoneill@JAXENERGY.com
Scott Davis	Wauford			Scott@JRWauford.com
Dawna Gurschick	CDP, LLC			dgurshick@cdpllc.com
Evan Sanders	CDP, LLC			esanders@cdpllc.com
Reg Johnson	Jackson Boring			rjohnson167@yahoo.com
Tylen Wood	Clary Construction			ESTIMATING@claryconst.com
Kiara Ayala	Delgado General			adelgado@gmail.com

Name	Organization	Contractor - Prime or Sub Please 'X' Below		Email
		Prime	Sub	
Vincent Bayles	Morgan Contracting			vbayles@morgan1.com
Stephen Bing	Argo Construction			Sbing@argoconstructioncorp.com
Michael Gates	Zylam		X	michael.gates@zylamins.com
Tommy Sander	Memphis RoadBery		X	tommy@wcomerphs.com
JOHN BRYANT	ARGO	X		JBRYANT@ARGOCONSTRUCTIONCORP.COM
Tom Price	TEA			TPRICE@TAXENERGY.COM
Eddie O'Neill	TEA			EONeill@TAXENERGY.COM
Kashly Butler	TEA			Kbutler@TAXENERGY.COM

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by



Endorsed by



These General Conditions have been prepared for use with the Agreement Between Owner and Contractor for Construction Contract (EJCDC® C-520, Stipulated Sum, or C-525, Cost-Plus, 2013 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other.

To prepare supplementary conditions that are coordinated with the General Conditions, use EJCDC's Guide to the Preparation of Supplementary Conditions (EJCDC® C-800, 2013 Edition). The full EJCDC Construction series of documents is discussed in the Commentary on the 2013 EJCDC Construction Documents (EJCDC® C-001, 2013 Edition).

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. 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, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 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. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision

regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.

25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.
27. *Notice to Proceed*—A written notice 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.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *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.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.
35. *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.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
37. *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, and such other lands furnished by Owner which are designated for the use of Contractor.

38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *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.
40. *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.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *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 but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *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; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in the following paragraphs 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 Article 10 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 15.03 or 15.04).
- 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. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words

“furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- 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. *Bonds*: 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 Contractor’s Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.

2.02 Copies of Documents

- A. Owner may, upon request, furnish to Contractor up to three (3) printed copies of the Contract (including fully executed Agreement), and one (1) copy in electronic portable document format (PDF). Additional printed copies may be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.
- C. FEMA Public Notice. All notices, informational pamphlets, press releases, research reports, signs, and similar public notices prepared and released by the Grantee in relation to this Grant Contract shall include the statement, “This project is funded under a contract with the State of Tennessee.” All notices by the Grantee in relation to this Grant Contract shall be approved by the State.

2.03 Before Starting Construction

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), 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;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *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 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, 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 and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.
- C. After the contract is awarded, Owner will conduct a preconstruction conference with the Contractor. The Contractor will be notified in advance as to the location, date, and time of this conference. In this conference, the contractor shall:
- D. Submit his proposed and general sequence of operation to Owner's for approval as described in the Standard General Conditions, Paragraph 2.03 A.
- E. Advise Owner of all anticipated construction problems and difficulties with OWNER operations and present plans to avoid unnecessary interferences therewith.
- F. Obtain Owner's interpretation and clarification concerning questionable requirements of the drawings or specifications.
- G. Discuss with Owner any other items pertaining to the work.
- H. Execute permits, if any, as required in 7.08 B of these Standard General Conditions.
- I. Owner may furnish upon request to the Contractor written minutes of the Preconstruction Conference, verifying the interpretations, clarifications, instructions, agreements and other information resulting from this conference.

2.05 *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 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.
- D. The data furnished by Owner or Engineer to Contractor, or by Contractor to Owner or Engineer, may be printed copies (hard copies) or electronic media. If there is a discrepancy between electronic files and hard copies, the hard copies govern.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, 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.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 *Reference Standards*

- A. Standards Specifications, Codes, Laws and Regulations
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, 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, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract 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, reference standard, 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 part of the Contract Documents prepared by or for Engineer. 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 part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies:*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or 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) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) 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 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
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 part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. The provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); 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).
 - c. Where the Specifications (bound documents) conflict with the Drawings, the Drawings shall take precedence.

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers 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 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; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- 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.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

4.02 *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 such date.

4.03 *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.

4.04 *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.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. 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, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, 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 Times and Contract Price. 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.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. 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. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:

1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. abnormal weather conditions;
 3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *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.
- 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 permanent improvements are to be made 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.

5.02 *Use of Site and Other Areas*

- A. *Limitation on Use of Site and Other Areas:*
 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas;

provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.

2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, 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 any such claim, and against all 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 directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent 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 and adjacent areas 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 of 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 structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer,

or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
 2. is of such a nature as to require a change in the Drawings or Specifications; or
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical

condition, or any related delay, disruption, or interference, 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 fall within any one or more of the categories described in Paragraph 5.04.A;
 - 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 Paragraph 13.03; and,
 - c. 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.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a 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 otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent 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 do not warrant or guarantee 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 information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;

- c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then 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 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.
- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:*
 - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - 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 Paragraph 13.03;
 - c. 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; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.

2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 2. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) 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 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
 - G. 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, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
 - H. 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, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
 - I. 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 (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
 - J. 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 failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond 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 the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then 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 bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

- A. **Owner and** Contractor shall obtain and maintain insurance as required in the Supplementary Conditions and attached JEA Contractors' Certificate of Insurance Coverage Requirements.
- B. Failure of Owner to demand such certificates or other evidence of the other party'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 the other party's obligation to obtain and maintain such insurance.
- C. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.

- D. Without prejudice to any other right or remedy, if the Contractor has failed to obtain required insurance, the Owner may elect to obtain equivalent insurance to protect its interests at the expense of the Contractor, and the Contract Price shall be adjusted accordingly.
- E. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- F. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 *Contractor's Insurance*

- A. See Supplementary Conditions for list.

6.04 *Waiver of Rights*

- A. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, 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 any insurance applicable to the Work.

6.05 *Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - 1. Include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk

policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.

3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, false work, and temporary structures.
 4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
 5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
 6. extend to cover damage or loss to insured property while in transit.
 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
 10. not include a co-insurance clause.
 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
 12. include performance/hot testing and start-up.
 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.

- E. *Insurance of Other Property*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES

7.01 *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.
- 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.

7.02 *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, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner’s written consent, which will not be unreasonably withheld.

7.03 *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, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work 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.

7.04 "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 Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item 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 is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that 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, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
 - 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.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.

- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 *Substitutes*

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 3. 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:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) 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
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in

Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. 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.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Owner requires the identity of all subcontractors, suppliers or other individuals or entities at the Preconstruction Conference.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a

- replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
 - G. 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 the right of Owner to the completion of the Work in accordance with the Contract Documents.
 - H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
 - I. 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.
 - J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
 - K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
 - L. 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.
 - M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
 - N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
 - O. 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 money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *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.

7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, 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 the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work
- B. Prior to or at the Preconstruction Conference, Contractor is required to execute the following:
 - 1. Storm Water Pollution Prevention Plan
 - 2. Notice of Intent
 - 3. Other permits as required

7.09 *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.

7.10 *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 or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and 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 such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 *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, other work in progress, 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 Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- 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 7.12.A.2 or 7.12.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 at its expense (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 protection 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 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.
- H. In particular regards to traffic control and safety of the public, the Contractor shall follow City of Jackson Engineer's directions and applicable ordinances governing the closure of streets to traffic and follow the latest available edition of USDOT Manual of Uniform Traffic Control Devices for application of signage, temporary traffic barriers and flagger control. Additionally, storage of materials and equipment shall not impede the safe movement of vehicles, pedestrians, cyclists and other traffic and in no instance shall contractor require traffic to leave the roadway to avoid contractor's materials or equipment except as provided for by construction easements obtained for that purpose. Such measures shall be specifically addressed in the Contractor's safety program as described in 7.12 A, and shall be submitted in writing at the Pre-Construction Conference. Insufficient considerations for traffic flow and public safety shall be just cause for suspension or termination the Contractor's work, in accordance with Article 16 of the General Conditions and as amended elsewhere in these Special Conditions.
- I. UNDERGROUND UTILITIES
 - 1. The Underground Utility Damage Prevention Act requires Contractors to notify utilities three to ten days prior to starting any work operation that includes but is not limited to boring, pile driving, blasting or digging, which might affect any adjacent utility. The

designated toll free number for the State of Tennessee is 811. A penalty may be assessed for non-compliance with this law. Obtaining a permit does not relieve Contractor of the responsibility of complying with this law.

2. Should the Owner's facilities not be located within the prescribed time allowed by law, the Contractor shall contact Owner for location of facilities. Should the Contractor proceed without location of the Owner's facilities, Contractor shall be liable for full reasonable cost of work performed by Owner including, but not limited to, repair of damaged facilities, unnecessary street cuts, etc. In addition, Contractor shall be liable for any claims by residents made against Owner resulting from said incident.

J. HOST/CONTRACTOR (INFORMATION EXCHANGE)

1. Host employers (e.g. utilities) and contract employers must exchange information regarding known hazards, as well as the conditions, characteristics, design, and operation of the host employer's system. Work rules and procedures must be coordinated between the host employer and contract employer, and must be designed to protect all employees. Host employers must also provide employees with all known information relating to the determination of existing characteristics and conditions.

7.13 *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.

7.14 *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.

7.15 *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.

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements:*

1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated the 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 and equipment 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 of that submittal, and that Contractor approves the 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 set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.
1. *Shop Drawings:*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - 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 7.16.D.
 2. *Samples:*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall 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 7.16.D.
 3. 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. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- 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 or to safety precautions or programs incident thereto.

3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample 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 7.16.A.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 will document any such approved variation from the requirements of the Contract Documents in a Field Order.
 5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
 7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.
- 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.
 2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
 3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *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 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;
 6. the issuance of a notice of acceptability by Engineer;
 7. any inspection, test, or approval by others; or
 8. any correction of defective Work by Owner.
- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, 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 7.18.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 7.18.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.

7.19 *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 Laws and Regulations.
- 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, 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, 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 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the

introduction and storage of materials and equipment and the execution of such other work. 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.

- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, 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.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be provided to Contractor prior to the start of any such other work:
 - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner for whom the Owner is responsible causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. 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.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and

as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.

- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.
- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) 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 any such claims, and against all 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 damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

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

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

9.03 *Furnish Data*

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

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.

- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Change Orders*

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.07 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.08 *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.

9.09 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.10 *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 (including obligations under proposed changes in the Work).

9.11 *Safety Programs*

- 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.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *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.

10.02 *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 10.08. 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.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. 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, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

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

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, 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 15.06.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 10.08 shall also apply to the Resident Project Representative, if any.

10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. *Change Orders:*
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
 - 2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents

governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes 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. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-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. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 *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, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. 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, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).
- C. *Contractor's Fee*: When applicable, 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 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.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 11.04.C.2.a and 11.04.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - 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 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under

the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
1. 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;
 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12 – CLAIMS

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal

and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work 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 13.01.C, 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, and 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 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), 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 communication 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 that Contractor is required by the Contract Documents to purchase and maintain.

C. *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 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here 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 Paragraph 13.01.B.

D. *Contractor's Fee:* When the Work as a whole 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, Change Proposal, Claim, set-off, or other 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 11.04.C.

E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, 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.

13.02 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*: Contractor agrees that:
 - 1. 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
 - 2. 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*: 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.

13.03 *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. Payments to Contractor for Unit Price Work will be based on actual quantities.
- 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. 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 the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction 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.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- 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, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. 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. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages 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. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then 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, and provide all necessary labor, material, and equipment.

1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages 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 pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
2. 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, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *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, then 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.

14.07 *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, 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, then 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 14.07, 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, 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 incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. 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 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *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, a warehouse bond, 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.
- C. *Review of Applications:*
1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, 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 13.03, 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; 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 money 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 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due:*

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

E. *Reductions in Payment by Owner:*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. 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;
 - l. there are other items entitling Owner to a set off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, 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, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
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 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 *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 and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. 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 punch list.

15.04 *Partial Use or Occupancy*

- 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. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be 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 15.03.A through E for that part of the Work.
 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 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 6.05 regarding builder's risk or other property insurance.

15.05 *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, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *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, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.
 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;

- c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) 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, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- 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 have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. 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 15.07. 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. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- D. *Payment Becomes Due:* Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special

guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.

- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas;
 - 2. correct such defective Work;
 - 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 to 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. 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 repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- 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, 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 are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 *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 written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work

on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

- B. If, in the opinion of the Owner, the Contractor is in violation of all or part of 7.12, Owner may suspend the Work or any portion thereof until the Owner, in his sole consideration, determines that the Contractor has made sufficient adjustments in his safety procedures to comply with 7.12. Contractor will be granted no adjustment in the Contract Price or extension of the Contract Times either directly or indirectly attributable to such suspension.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and 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);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, 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 complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.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 the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds 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.

- F. 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, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *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; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) 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 16.03.
- 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 are not intended to preclude Contractor from submitting a Change Proposal 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 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.
- C. If the Claim is not resolved by mediation, Engineer's action under Article 12 or a denial pursuant to Paragraphs 12.01 F or 12.01 G shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:
1. Gives written notice to the other party of the intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 *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, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract 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.

18.03 *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. 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.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

18.09 *FEMA RECORDS*

- A. The Grantee (and any approved subcontractor) shall maintain documentation for all charges under this Grant Contract. The books, records, and documents of the Grantee (and any approved subcontractor), insofar as they relate to work performed or money received under this Grant Contract, shall be maintained for a period of five (5) full years from the date of the final payment and shall be subject to audit at any reasonable time and upon reasonable notice by the Grantor State Agency, the Comptroller of the Treasury, or duly appointed representatives. The records shall be maintained in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification, Public Company Accounting Oversight Board (PCAOB) Accounting Standards Codification or Governmental Accounting Standards Board (GASB) Accounting Standards Codification, as applicable, and any related AICPA Industry Audit and Accounting guides. In addition, documentation of grant applications, budgets, reports, awards, and expenditures will be maintained in accordance with U.S. Office of Management and Budget's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. The Grantee shall also comply with any recordkeeping and reporting requirements prescribed by the Tennessee Comptroller of the Treasury. The Grantee shall establish a system of internal controls that utilize the COSO Internal Control – Integrated Framework model as the basic foundation for the internal control system. The Grantee shall incorporate any additional Comptroller of the Treasury directives into its internal control system. Any other required records or reports which are not contemplated in the above standards shall follow the format designated by the head of the Grantor State Agency, the Central Procurement Office, or the Commissioner of Finance and Administration of the State of Tennessee.

18.10 LOBBYING

The Grantee certifies, to the best of its knowledge and belief, that:

1. No federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, grant, loan, or cooperative agreement, the Grantee shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities", in accordance with its instructions. The Grantee shall require that the language of the certification be included in the award of documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into and is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352.

18.11 CONFLICTS OF INTEREST

1. The Grantee warrants that no part of the total Grant Contract Amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Grantee in connection with any work contemplated or performed relative to this Grant Contract.

18.12 SUBCONTRACTING

1. The Grantee shall not assign the Grant Contract or enter into a subcontract for any of the services performed under this Grant Contract without obtaining the prior written approval of the State. If such subcontracts are approved by the State, each shall contain, at a minimum, sections of this contract pertaining to "Conflicts of Interest," "Lobbying," "Nondiscrimination," "Public Accountability," "Public Notice," and "Records" (as identified by the section headings). Notwithstanding any use of approved subcontractors, the Grantee shall be the prime contractor and shall be responsible for all work performed.

GEOTECHNICAL ENGINEERING SERVICE REPORT

December 14, 2012

Mr. Jared Smith
Jackson Energy Authority
P.O. Box 68
Jackson, TN 38302

Subject: Geotechnical Engineering Services Report
Jackson Energy Authority
Interceptor Replacement
Jackson, Tennessee
PSI Project No.: 0502712

Dear Mr. Daniel:

Professional Service Industries, Inc. (PSI) is pleased to transmit our Geotechnical Engineering Services Report for the referenced project. This report includes the results of field and laboratory testing as well as general site development.

Project Information

Professional Service Industries, Inc. (PSI) has completed a geotechnical exploration for the proposed Jackson Energy Authority interceptor replacement in Jackson, Tennessee. Our services were authorized by Mr. George Flew of the Jackson Energy Authority on October 08, 2012 by signing our proposal. This exploration was accomplished in general accordance with PSI Proposal No. 0502-78471 dated September 21, 2012.

Project information was provided by Mr. Davenport of J.R. Wauford & Company. We have reviewed a site sketch dated July 25, 2011 received by e-mail that shows the proposed boring locations and existing and proposed construction. Briefly, we understand the proposed site is located in between US Highway 45 South to Airways Boulevard in Jackson, Tennessee. The project consists of approximately 11,370 linear feet of 36-inch, 48-inch, and 54-inch gravity sewer lines.

The purpose of this study was to explore the subsurface conditions at the site to develop geotechnical design criteria for the planned project. Our scope of services included drilling thirteen soil test borings at the site to depths of about 10 to 15 feet below the surface, select laboratory testing, and preparation of this geotechnical report. This report briefly outlines the testing procedures, presents available project information, describes the site and subsurface conditions, and presents recommendations regarding the following:

- A discussion of subsurface conditions encountered including pertinent soil properties and groundwater conditions.
- Geotechnical related recommendations for excavation.
- Recommendations concerning dewatering.

- Recommendations for overall site/soil preparation, including natural in-place soil and fill and overall suitability of the in-situ soils for use as utility backfill and structural fill.
- Discussions on geotechnical issues that may impact the planned construction activities.

Site and Subsurface Conditions

The project site is located within the JEA easement in Jackson, Tennessee. The easement roughly lays out between Riverside Drive to U.S. Highway South 45 and Airways Boulevard to Riverside Drive. At the time of drilling, the site was observed to be within a low lying area with standing water throughout the site. The site is mostly surrounded by dense woods; however, some commercial developments exist near the beginning and end of this project.

The site subsurface conditions were explored with thirteen soil test borings drilled along the proposed new sewer line. The boring depths ranged from 10 to 15 feet. The boring locations and depths were selected by J.R. Wauford & Company. The boring locations are illustrated on the Boring Location Plan enclosed in Appendix I. The borings were located in the field by PSI personnel by measuring distances from known site features.

The borings were advanced utilizing hand auger drilling methods, and soil samples were routinely obtained during the drilling process. Within the borings, Dynamic Cone Penetrometer tests were made at regular intervals. The Cone Penetrometer is similar to the more common standard penetration test (ASTM D 1586) in that a steel point is driven into the ground a specified distance using a standard amount of energy. The number of blows required to drive the point the given distance is recorded. The penetrations are then correlated to the standard penetration N-values to determine a consistency classification that is recorded on Boring Logs.

Two to four inches of topsoil was encountered at the boring locations. The soils encountered at the borings beneath the topsoil may be divided into two general strata. The upper stratum consisted of predominantly fine-grained soils and the second stratum consisted of sandy soils. These soil strata are discussed separately below.

The upper stratum of predominantly fine-grained soil extended from the topsoil to depths ranging from 5 feet to boring's terminal depths at the boring locations. Based on results of visual classification, these soils were classified as silty clay (CL) or sandy clay (CL) in accordance with the USCS. Cone Penetrometer values correlated to Standard penetration N-values within these fine-grained soils generally indicated consistencies of soft to firm. Overall, the moisture content of the fine-grained soil varied from 20 to 41 percent. These fine-grained soils were moist to wet.

When encountered, the second stratum consisted of sandy soils that extended to the boring terminal depths. Based on visual classification, these soils were classified as clayey sand (SC) or poorly graded sand (SP) in accordance with the USCS. Cone Penetrometer

values correlated to Standard penetration N-values within these granular soils generally indicated the materials to be loose, possibly due to the heave in the bottom of the borings due to the elevated water table.

Observations were made to determine if groundwater was present in the borings during drilling and at completion of drilling. Based on the information obtained, ground water may be encountered at approximately 2 to 3 feet below grade. Some fluctuations of the groundwater level should be anticipated with changing climatic conditions. The groundwater information presented in this report was obtained at the time of drilling, but the groundwater level at the site may be different at the time of construction.

The above subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs in the appendix should be reviewed for specific information at individual boring locations. These records include soil descriptions, stratifications, penetration resistances, locations of the samples, and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual. Water level information obtained during field operations is also shown on these boring logs. The samples that were not altered by laboratory testing will be retained for 60 days from the date of this report and then will be discarded.

Evaluation and Recommendations

Site Preparation

Groundwater may be encountered at a depth as shallow as 2 to 3 feet below grade. Therefore, it may be necessary for the contractor to deal with saturated soils and/or seepage during some of the excavation and backfill operations. Dewatering operations such as the use of well points may be required to allow work to proceed.

Wet fine-grained soils were encountered in the borings. Fine-grained soils that have moisture contents more than about 2 to 3 percentage points above the optimum moisture, these wet fine-grained soils typically pump and deflect significantly and do not provide adequate backfill material at their present moisture content. However, these fine-grained soils may be improved with activities such as aeration, drying, and re-compaction or undercutting.

Fill Requirements

Fill materials should be free of organic or other deleterious materials, have a maximum particle size of 3 inches, be relatively well graded, and have a liquid limit less than 45 and a plasticity index less than 25. Most of the on-site soils are suitable for use as structural fill with the exception of the existing topsoil; however, the moisture content of the otherwise suitable soils will most likely have to be adjusted to coincide with the moisture range required for structural fill. If a fine-grained silt or clay soil is used for fill,

close moisture content control will be required to achieve the recommended degree of compaction.

Structural fill should be compacted to at least 95 percent of standard Proctor (ASTM D 698) maximum dry density. If granular fill soils are used and are of a free draining type (i.e., less than about 12 percent fines) for which impact compaction will not produce a well defined moisture-density relationship curve, they should be compacted to at least 70 percent relative density (ASTM Designations D 4253 and D 4254).

Fill should be placed in maximum lifts of 8 inches of loose material and should be compacted within the range of 3 percentage points below to 2 percentage points above the optimum moisture content value. If the fill is too dry, water should be uniformly applied across the affected fill area. If the fill is too wet, it must be dried. In either event, the fill should be thoroughly mixed by disking to obtain a relatively uniform moisture content throughout the lift immediately prior to compaction.

Excavations

In Federal Register, Volume 54, No. 209 (October 1989), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) amended its "Construction Standards for Excavations, 29 CFR Part 1926, Subpart P". This document and subsequent updates were issued to better insure the safety of workmen entering trenches or excavations. It is mandated by this federal regulation that excavations (e.g., utility trenches, undercut areas, basement excavations, footing excavations, etc.) be constructed in accordance with the applicable OSHA guidelines. It is our understanding that these regulations are being strictly enforced and if they are not closely followed, the owner and the contractor could be liable for substantial penalties.

The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. 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 current local, state, and federal safety regulations.

We are providing this information solely as a service to our client. PSI does not assume responsibility for construction site safety or the contractor's compliance with local, state, and federal safety or other regulations.

Directional Boring

Based on the in situ condition of the subsurface soils, directional boring for placement of the large diameter pipe should be conducted by an experienced contractor. Due to the presence of saturated soils, subsurface voids may be developed if the installation method is not properly conducted. PSI notes that extreme pressure and vibrations from the advancement of the casing may cause these voids and installation techniques

should be monitored by an experience and qualified personnel. This is especially a concern while advancing the borings near the existing CSX railroad right-of-way.

Report Limitations

PSI should be retained to provide observation and testing of construction activities involved in the earthwork and related activities of this project. PSI cannot accept any responsibility for any conditions that deviate from those described in this report, nor for the performance if not engaged to also provide construction observation and testing for this project.

The recommendations submitted in this report are based on the available subsurface information obtained by PSI and design details furnished by J.R. Warford & Company for the proposed project. If there are any revisions to the plans for this project, or if deviations from the subsurface conditions noted in this report are encountered during construction, PSI should be notified immediately. If PSI is not retained to review these changes, PSI will not be responsible for the impact of those conditions on the project.

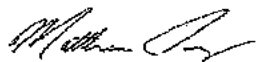
The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made after being prepared in accordance with generally accepted professional engineering practice in the local area. No other warranties are implied or expressed.

After the plans and specifications are more complete, the geotechnical engineer should be retained and provided the opportunity to review the final design plans and specifications to check that our engineering recommendations have been properly incorporated into the design documents. At this time, it may be necessary to submit supplementary recommendations. This report has been prepared for the exclusive use of Jackson Energy Authority for the specific application to the proposed Jackson Energy Authority Interceptor replacement in Jackson, Tennessee.

We appreciate the opportunity to perform this Geotechnical Study and look forward to continued participation during the design and construction phases of this project. If you have any questions pertaining to this report, or if we may be of further service, please contact our office.

Respectfully Submitted,

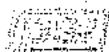
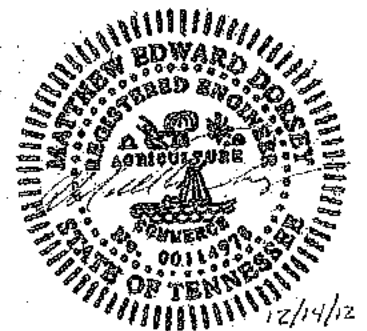
PROFESSIONAL SERVICE INDUSTRIES, INC.



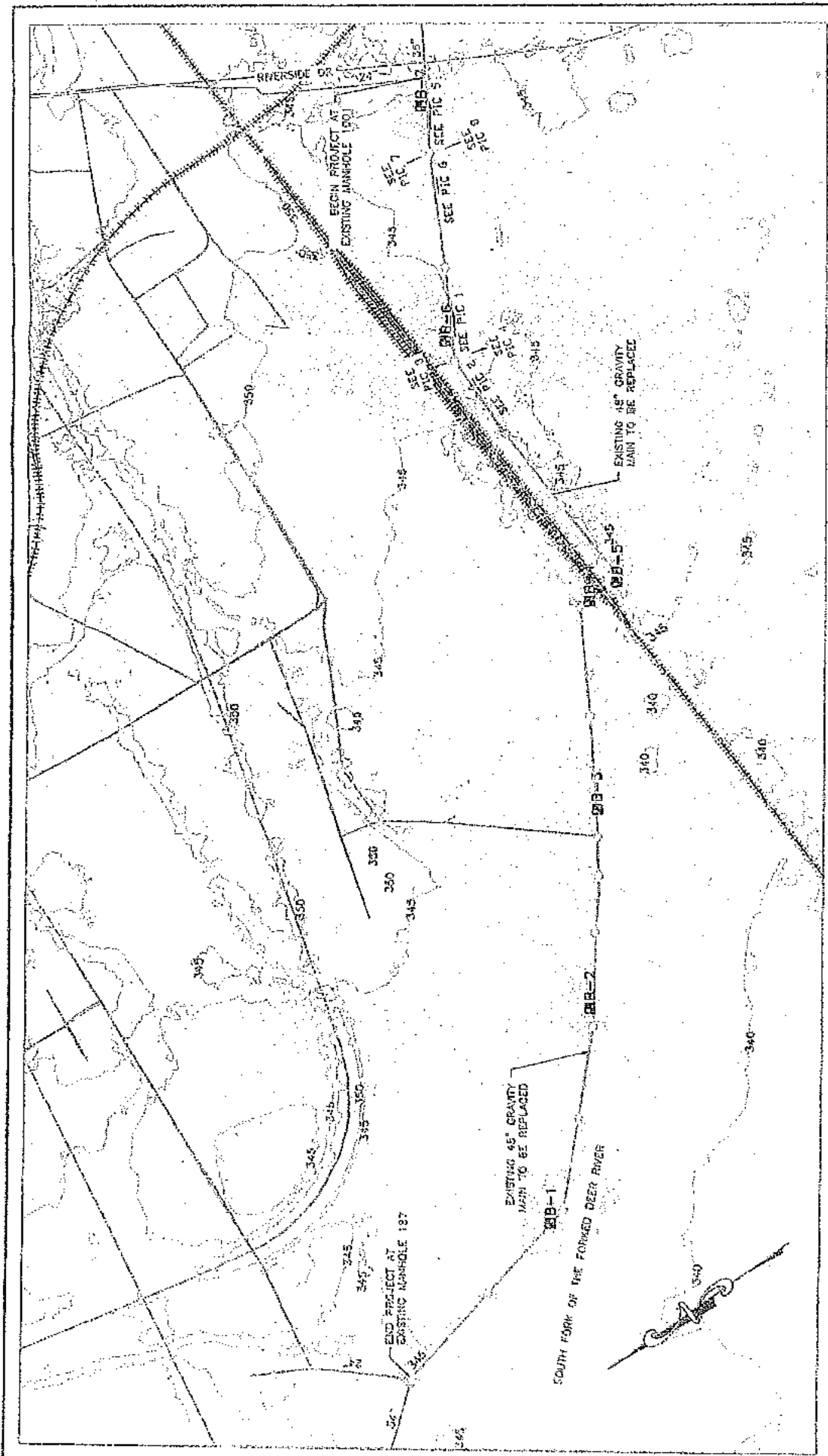
Matthew Dorsey, P.E.
Department Manager
Geotechnical Services



John O. Gordon, P.E.
Chief Engineer



APPENDIX I




UNITS: SEWER		HOR. SCALE: 1" = 400'		DESIGNED BY: EO	
BRANBLE CO.		VER. SCALE: 1" = 400'		DRAWN BY: EE	
CITY ENGINEER: M. D. COUTY		DATE: 07/25/2011		CHECKED BY: EO	
SHEET: 1 OF 1		DEPARTMENT: ENGINEERING			
RIVERSIDE CUIFALL				WORK ORDER #	
REPLACEMENT OF 6350' OF 48" GRAVITY SEWER				APPROVED: [Signature]	



DATE	BY	APP'D

RIVERSIDE 36" INTERCEPTOR



119 E. COLLEGE ST.
 JACKSON, TENNESSEE 38301
 Jackson-Hussey Architects

APPENDIX II



GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Soil Classification System (USCS), AASHTO 1988 and ASTM designations D2487 and D-2488 are used to identify the encountered materials unless otherwise noted. Coarse-grained soils are defined as having more than 50% of their dry weight retained on a #200 sieve (0.075mm); they are described as: boulders, cobbles, gravel or sand. Fine-grained soils have less than 50% of their dry weight retained on a #200 sieve; they are defined as silts or clay depending on their Atterberg Limit attributes. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size.

DRILLING AND SAMPLING SYMBOLS

- SFA: Solid Flight Auger - typically 4" diameter flights, except where noted.
- HSA: Hollow Stem Auger - typically 3/4" or 4/4" I.D. openings, except where noted.
- M.R.: Mud Rotary - Uses a rotary head with Bentonite or Polymer Slurry
- R.C.: Diamond Bit Core Sampler
- H.A.: Hand Auger
- P.A.: Power Auger - Handheld motorized auger
- ☒ SS: Split-Spoon - 1 3/8" I.D., 2" O.D., except where noted.
- ST: Shelby Tube - 3" O.D., except where noted.
- ▮ RC: Rock Core
- ⬇ TC: Texas Cone
- ⊞ BS: Bulk Sample
- ⊞ PM: Pressuremeter
- CPT-U: Cone Penetrometer Testing with Pore-Pressure Readings

SOIL PROPERTY SYMBOLS

- N: Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2-inch O.D. Split-Spoon.
- N₆₀: A "N" penetration value corrected to an equivalent 60% hammer energy transfer efficiency (ETR)
- Q_u: Unconfined compressive strength, TSF
- Q_p: Pocket penetrometer value, unconfined compressive strength, TSF
- w%: Moisture/water content, %
- LL: Liquid Limit, %
- PL: Plastic Limit, %
- PI: Plasticity Index = (LL-PL), %
- DD: Dry unit weight, pcf
- ▽, ▽, ▼ Apparent groundwater level at time noted

RELATIVE DENSITY OF COARSE-GRAINED SOILS ANGULARITY OF COARSE-GRAINED PARTICLES

Relative Density	N - Blows/foot
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	50 - 80
Extremely Dense	80+

Description	Criteria
Angular:	Particles have sharp edges and relatively plane sides with unpolished surfaces
Subangular:	Particles are similar to angular description, but have rounded edges
Subrounded:	Particles have nearly plane sides, but have well-rounded corners and edges
Rounded:	Particles have smoothly curved sides and no edges

GRAIN-SIZE TERMINOLOGY

Component	Size Range
Boulders:	Over 300 mm (>12 in.)
Cobbles:	75 mm to 300 mm (3 in. to 12 in.)
Coarse-Grained Gravel:	19 mm to 75 mm (3/4 in. to 3 in.)
Fine-Grained Gravel:	4.75 mm to 19 mm (No.4 to 3/4 in.)
Coarse-Grained Sand:	2 mm to 4.75 mm (No.10 to No.4)
Medium-Grained Sand:	0.42 mm to 2 mm (No.40 to No.10)
Fine-Grained Sand:	0.075 mm to 0.42 mm (No. 200 to No.40)
Silt:	0.005 mm to 0.075 mm
Clay:	<0.005 mm

PARTICLE SHAPE

Description	Criteria
Flat:	Particles with width/thickness ratio > 3
Elongated:	Particles with length/width ratio > 3
Flat & Elongated:	Particles meet criteria for both flat and elongated

RELATIVE PROPORTIONS OF FINES

Descriptive Term	% Dry Weight
Trace:	< 5%
With:	5% to 12%
Modifier:	>12%



GENERAL NOTES

(Continued)

CONSISTENCY OF FINE-GRAINED SOILS

<u>Q_u - TSF</u>	<u>N - Blows/foot</u>	<u>Consistency</u>
0 - 0.25	0 - 2	Very Soft
0.25 - 0.50	2 - 4	Soft
0.50 - 1.00	4 - 8	Firm (Medium Stiff)
1.00 - 2.00	8 - 15	Stiff
2.00 - 4.00	15 - 30	Very Stiff
4.00 - 8.00	30 - 50	Hard
8.00+	50+	Very Hard

MOISTURE CONDITION DESCRIPTION

<u>Description</u>	<u>Criteria</u>
Dry:	Absence of moisture, dusty, dry to the touch
Moist:	Damp but no visible water
Wet:	Visible free water, usually soil is below water table

RELATIVE PROPORTIONS OF SAND AND GRAVEL

<u>Descriptive Term</u>	<u>% Dry Weight</u>
Trace:	< 15%
With:	15% to 30%
Modifier:	>30%

STRUCTURE DESCRIPTION

<u>Description</u>	<u>Criteria</u>	<u>Description</u>	<u>Criteria</u>
Stratified:	Alternating layers of varying material or color with layers at least ¼-inch (6 mm) thick	Blocky:	Cohesive soil that can be broken down into small angular lumps which resist further breakdown
Laminated:	Alternating layers of varying material or color with layers less than ¼-inch (6 mm) thick	Lensed:	Inclusion of small pockets of different soils
Fissured:	Breaks along definite planes of fracture with little resistance to fracturing	Layer:	Inclusion greater than 3 inches thick (75 mm)
Slickensided:	Fracture planes appear polished or glossy, sometimes striated	Seam:	Inclusion 1/8-inch to 3 inches (3 to 75 mm) thick extending through the sample
		Parting:	Inclusion less than 1/8-inch (3 mm) thick

SCALE OF RELATIVE ROCK HARDNESS

<u>Q_u - TSF</u>	<u>Consistency</u>
2.5 - 10	Extremely Soft
10 - 50	Very Soft
50 - 250	Soft
250 - 525	Medium Hard
525 - 1,050	Moderately Hard
1,050 - 2,600	Hard
>2,600	Very Hard

ROCK BEDDING THICKNESSES

<u>Description</u>	<u>Criteria</u>
Very Thick Bedded	Greater than 3-foot (>1.0 m)
Thick Bedded	1-foot to 3-foot (0.3 m to 1.0 m)
Medium Bedded	4-inch to 1-foot (0.1 m to 0.3 m)
Thin Bedded	1½-inch to 4-inch (30 mm to 100 mm)
Very Thin Bedded	½-inch to 1¼-inch (10 mm to 30 mm)
Thickly Laminated	1/8-inch to ½-inch (3 mm to 10 mm)
Thinly Laminated	1/8-inch or less "paper thin" (<3 mm)

ROCK VOIDS

<u>Voids</u>	<u>Void Diameter</u>
Pit	<6 mm (<0.25 in)
Vug	6 mm to 50 mm (0.25 in to 2 in)
Cavity	50 mm to 600 mm (2 in to 24 in)
Cave	>600 mm (>24 in)

GRAIN-SIZED TERMINOLOGY

(Typically Sedimentary Rock)

<u>Component</u>	<u>Size Range</u>
Very Coarse Grained	>4.76 mm
Coarse Grained	2.0 mm - 4.76 mm
Medium Grained	0.42 mm - 2.0 mm
Fine Grained	0.075 mm - 0.42 mm
Very Fine Grained	<0.075 mm

ROCK QUALITY DESCRIPTION

<u>Rock Mass Description</u>	<u>RQD Value</u>
Excellent	90 - 100
Good	75 - 90
Fair	50 - 75
Poor	25 - 50
Very Poor	Less than 25

DEGREE OF WEATHERING

Slightly Weathered:	Rock generally fresh, joints stained and discoloration extends into rock up to 25 mm (1 in), open joints may contain clay, core rings under hammer impact.
Weathered:	Rock mass is decomposed 50% or less, significant portions of the rock show discoloration and weathering effects, cores cannot be broken by hand or scraped by knife.
Highly Weathered:	Rock mass is more than 50% decomposed, complete discoloration of rock fabric, core may be extremely broken and gives clunk sound when struck by hammer, may be shaved with a knife.

SOIL CLASSIFICATION CHART

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS	
			GRAPH	LETTER		
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES	
		(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES	
		GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES	
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES	
		CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
		(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES	
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES	
	(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES		
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY	
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
	MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
					CH	INORGANIC CLAYS OF HIGH PLASTICITY
					OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	



APPENDIX III



Professional Service Industries, Inc.
 4161 Ridgemoor Avenue
 Memphis, TN 38118
 Telephone: (901) 365-1802
 Fax: (901) 366-7233

LOG OF BORING B-1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	3 feet
▽ Upon Completion	3 feet
▽ Cave In	7 feet

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	STANDARD PENETRATION TEST DATA N in blows/ft @		Additional Remarks
										Moisture, %	Strength, tsf	
0	0	Topsoil: 2 inches										
	1	Gray Silty Clay (CL)						CL	26	X	>>⊙	
	2	Gray Silty Clay (CL)						CL	29	X	>>⊙ pH = 4.6	
	5	Gray Silty Clay (CL)						CL	24	X	>>⊙ Fines=74.3%	
	10	Gray Sand (SP)						SP				

Completion Depth: 10.0 ft	Sample Types:	Shelby Tube	Latitude:
Date Boring Started: 11/20/12	Auger Cutting	Hand Auger	Longitude:
Date Boring Completed: 11/20/12	Split-Spoon	Calif. Sampler	Drill Rig:
Logged By: M. Crews	Rock Core	Texas Cone	Remarks:
Drilling Contractor: PSI			

The stratification lines represent approximate boundaries. The transition may be gradual.



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 Fax: (901) 366-7233

LOG OF BORING B-2

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	3 feet
▽ Upon Completion	6 feet
▽ Cave In	7 feet

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft @		Additional Remarks
											Moisture	PL	
0	0						Topsoil: 3 inches						
	1						Brown Silty Clay (CL)	CL		36			>> pH = 4.1
	2						Gray Silty Clay (CL)	CL		26			>> Fines=77.7%
	5						Gray Silty Clay (CL)	CL		23			
	10						Gray Sand (SP)	SP					

Completion Depth: 12.0 ft	Sample Types:	Shelby Tube	Latitude:
Date Boring Started: 11/20/12	Auger Cutting	Hand Auger	Longitude:
Date Boring Completed: 11/20/12	Split-Spoon	Calif. Sampler	Drill Rig:
Logged By: M. Crews	Rock Core	Texas Cone	Remarks:
Drilling Contractor: PSI			

The stratification lines represent approximate boundaries. The transition may be gradual.



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 Memphis, TN 38118
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 Fax: (901) 366-7233

LOG OF BORING B-3

Sheet 1 of 1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	3 feet
▽ Upon Completion	6 feet
▽ Cave In	6 feet

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft @		Additional Remarks
											Moisture	PL	
0	0	Topsoil: 3 inches											
	1	Gray Silty Clay	CL				Gray Silty Clay (CL)	CL	31		X	>>⊕	
	2	Gray Silty Clay	CL				Gray Silty Clay (CL)	CL	27		X	>>⊕	
	3	Gray Silty Clay	CL				Gray Silty Clay (CL)	CL	20		X	>>⊕ Fines=69.2%	
	10	Gray Sand	SP				Gray Sand (SP)	SP					

Completion Depth: 12.0 ft
 Date Boring Started: 11/19/12
 Date Boring Completed: 11/19/12
 Logged By: M. Crews
 Drilling Contractor: PSI

Sample Types:
 Auger Cutting
 Split-Spoon
 Rock Core
 Sheelby Tube
 Hand Auger
 Calif. Sampler
 Texas Cone

Latitude:
 Longitude:
 Drill Rig:
 Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-4

Sheet 1 of 1

PSI Job No.: 0502712	Drilling Method: Hand Auger	WATER LEVELS ▽ While Drilling 3 feet ▽ Upon Completion 8 feet ▽ Cave In 10 feet
Project: JEA Interceptor Replacement	Sampling Method: SS	
Location: Jackson, Tennessee	Hammer Type: Manual Boring Location:	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA		Additional Remarks
											N in blows/ft ⊕	Strength, tsf	
											X Moisture □ PL + LL		
											STRENGTH, tsf ▲ Qu * Qp		
0	0						Topsoil: 4 inches						
	1						Gray Silty Clay (CL)	CL	21	X		>> ⊕	
	2						Gray Silty Clay (CL)	CL	30		X	>> ⊕	
	3						Gray Silty Clay (CL)	CL	26		X	>> ⊕	
	4						Gray Sandy Clay (CL)	CL	17	X		>> ⊕ Fines=42.2%	
	10						Gray Sand (SP)	SP					
	15												

Completion Depth: 15.0 ft	Sample Types:	Shelby Tube	Latitude:
Date Boring Started: 11/19/12	Auger Cutting	Hand Auger	Longitude:
Date Boring Completed: 11/19/12	Split-Spoon	Calif. Sampler	Drill Rig:
Logged By: M. Crews	Rock Core	Texas Cone	Remarks:
Drilling Contractor: PSI			

The stratification lines represent approximate boundaries. The transition may be gradual.



Professional Service Industries, Inc.
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 Telephone: (901) 365-1802
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LOG OF BORING B-5

Sheet 1 of 1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	6 feet
▽ Upon Completion	4 feet
▽ Cave In	12 feet

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft @		Additional Remarks
											Moisture	PL	
0	0						Topsoil: 3 inches						
	1						Brown Silty Clay (CL)	CL		26	X	>> ⊙	
	2						Gray Silty Clay (CL)	CL		23	X	>> ⊙	
5	3						Gray Sandy Clay (CL)	CL		24	X	>> ⊙	
	4						Gray Sandy Clay (CL)	CL		25	X	>> ⊙	
10	5						Gray Clayey Sand (SC)	SC		25	X	>> ⊙ Fines=41.4%	
15													

Completion Depth: 15.0 ft	Sample Types:	Shelby Tube	Latitude:
Date Boring Started: 11/19/12	Auger Cutting	Hand Auger	Longitude:
Date Boring Completed: 11/19/12	Split-Spoon	Calif. Sampler	Drill Rig:
Logged By: M. Crews	Rock Core	Texas Cone	Remarks:
Drilling Contractor: PSI			

The stratification lines represent approximate boundaries. The transition may be gradual.



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 Memphis, TN 38118
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LOG OF BORING B-6

Sheet 1 of 1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	3 feet
▽ Upon Completion	3 feet
▽ Cave In	6 feet

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft @		Additional Remarks
											Moisture	N	
0	0						Topsoil: 3 inches						
	1						Brown Silty Clay (CL)	CL		27	X	> > ⊕	
	2						Brown to Gray Silty Clay (CL)			25	X	> > ⊕ Fines=75.2%	
	3						Gray Sand (SP) with Gravel	SP				> > ⊕	

Completion Depth: 15.0 ft
 Date Boring Started: 11/19/12
 Date Boring Completed: 11/19/12
 Logged By: M. Crews
 Drilling Contractor: PSI

Sample Types:
 Auger Cutting
 Split-Spoon
 Rock Core
 Shelby Tube
 Hand Auger
 Calif. Sampler
 Texas Cone

Latitude:
 Longitude:
 Drill Rig:
 Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



Professional Service Industries, Inc.
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 Memphis, TN 38118
 Telephone: (901) 365-1802
 Fax: (901) 366-7233

LOG OF BORING B-7

Sheet 1 of 1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	3 feet
▽ Upon Completion	3 feet
▽ Cave In	9 feet

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft @			Additional Remarks
										Moisture	PL	LL	
0	0	Topsoil: 3 inches											
	1	Gray Silty Clay	CL			Gray Silty Clay (CL)	CL	28		X		>>⊕	
	2	Gray Silty Clay	CL			Gray Silty Clay (CL)	CL	19		X		>>⊕	
	3	Gray Silty Clay	CL			Gray Silty Clay (CL)	CL	17		X		>>⊕ pH = 4.3	
	4	Gray Sand	SP			Gray Sand (SP)	SP	28		X		>>⊕ Fines=7.6%	

Completion Depth: 12.0 ft	Sample Types:	Shelby Tube	Latitude:
Date Boring Started: 11/19/12	Auger Cutting	Hand Auger	Longitude:
Date Boring Completed: 11/19/12	Split-Spoon	Calif. Sampler	Drill Rig:
Logged By: M. Crews	Rock Core	Texas Cone	Remarks:
Drilling Contractor: PSI			

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-8

Sheet 1 of 1

PSI Job No.: 0602712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	3 feet
▽ Upon Completion	3 feet
▽	

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	STANDARD PENETRATION TEST DATA			Additional Remarks	
										N in blows/ft ⊕				
										Moisture, %			STRENGTH, tsf	
										X Moisture			▲ Qu	
										□ PL			* Qp	
										+ LL				
										0 25 50			0 2.0 4.0	
	0						Topsoil: 3 inches							
	1			1			Brown Silty Clay (CL)	CL		26	X		>> ⊕	
	2			2			Gray Silty Clay (CL)	CL		29	X		>> ⊕	
	3			3			Gray Silty Clay (CL)	CL		26	X		>> ⊕	
	4			4			Gray Sand (SP)	SP		29	X		>> ⊕ Fines=8.8%	

Completion Depth: 10.5 ft
 Date Boring Started: 11/19/12
 Date Boring Completed: 11/19/12
 Logged By: M. Crews
 Drilling Contractor: PSI

Sample Types:
 Auger Cutting
 Split-Spoon
 Rock Core
 Shelby Tube
 Hand Auger
 Calif. Sampler
 Texas Cone

Latitude:
 Longitude:
 Drill Rig:
 Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-9

Sheet 1 of 1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	3 feet
▽ Upon Completion	2.5 feet
▽ Cave In	6.5 feet

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA				Additional Remarks		
											N in blows/ft @						
											Moisture, %		STRENGTH, tsf				
											0 25 50		▲ Qu * Qp		0 2.0 4.0		
	0						Topsoil: 2 inches										
	1			1			Gray Silty Clay (CL)	CL	35		X				>>⊕		
	2			2			Gray Silty Clay (CL)	CL	34		X				>>⊕		
	5																
	3			3			Gray Sandy Clay (SP)		27		X				>>⊕		
							Gray Sand (SP)	SP									Fines=9.1%
	10																

Completion Depth: 10.0 ft	Sample Types:	Shelby Tube	Latitude:
Date Boring Started: 11/17/12	Auger Cutting	Hand Auger	Longitude:
Date Boring Completed: 11/17/12	Split-Spoon	Calif. Sampler	Drill Rig:
Logged By: M. Crews	Rock Core	Texas Cone	Remarks:
Drilling Contractor: PSI			

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-10

Sheet 1 of 1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	2 feet
▽ Upon Completion	2 feet
▽ Cave In	9 feet

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA		Additional Remarks
											N in blows/ft @	Moisture	
										STRENGTH, tsf			
										▲ Qu	* Qp		
	0						Topsoil: 3 inches						
	1			1			Gray Silty Clay (CL)	CL	26		X	>> pH = 3.9	
	2			2			Gray Silty Clay (CL)	CL	36		X	>>	
	3			3			Gray Silty Clay (CL)	CL	24		X	>>	
	4			4			Gray Sand (SP)	SP	21		X	>> Fines=14.0%	

Completion Depth: 10.5 ft	Sample Types:	Shelby Tube	Latitude:
Date Boring Started: 11/17/12	Auger Cutting	Hand Auger	Longitude:
Date Boring Completed: 11/17/12	Split-Spoon	Calif. Sampler	Drill Rig:
Logged By: M. Crews	Rock Core	Texas Cone	Remarks:
Drilling Contractor: PSI			

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-11

Sheet 1 of 1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	2 feet
▽ Upon Completion	2 feet
▽ Cave In	7.5 feet

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA		Additional Remarks
											N in blows/ft	⊗	
											STRENGTH, tsf		
											▲ Qu	* Qp	
0							Topsoil: 3 inches						
	1						Gray Silty Clay (CL)	CL		26	X	>> ⊗	
	2						Gray Silty Clay (CL)			20	X	>> ⊗	
	5						Gray Sand (SP)	SP		23	X	>> ⊗ Fines=13.2%	

Completion Depth: 12.0 ft	Sample Types:	Shelby Tube	Latitude:
Date Boring Started: 11/17/12	Auger Cutting	Hand Auger	Longitude:
Date Boring Completed: 11/17/12	Split-Spoon	Calif. Sampler	Drill Rig:
Logged By: M. Crews	Rock Core	Texas Cone	Remarks:
Drilling Contractor: PSI			

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-12

Sheet 1 of 1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	6 feet
▽ Upon Completion	3.25 feet
▽	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft @		Additional Remarks
										Moisture	N	
0	0					Topsoil: 3 inches						
	1					Gray Silty Clay (CL)		30	X		>> ⊕	
	2					Gray Silty Clay (CL)		29	X		>> ⊕	
5	3					Gray Silty Clay (CL)	CL	35	X		>> ⊕	
	4					Gray Silty Clay (CL)		41	X		>> ⊕	
10	5					Gray Silty Clay (CL)		29	X		>> ⊕ Fines=68.8%	

Completion Depth: 13.5 ft
 Date Boring Started: 11/17/12
 Date Boring Completed: 11/17/12
 Logged By: M. Crews
 Drilling Contractor: PSI

Sample Types:
 Auger Cutting
 Split-Spoon
 Rock Core
 Shelby Tube
 Hand Auger
 Calif. Sampler
 Texas Cone

Latitude:
 Longitude:
 Drill Rig:
 Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.



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LOG OF BORING B-13

Sheet 1 of 1

PSI Job No.: 0502712
 Project: JEA Interceptor Replacement
 Location: Jackson, Tennessee

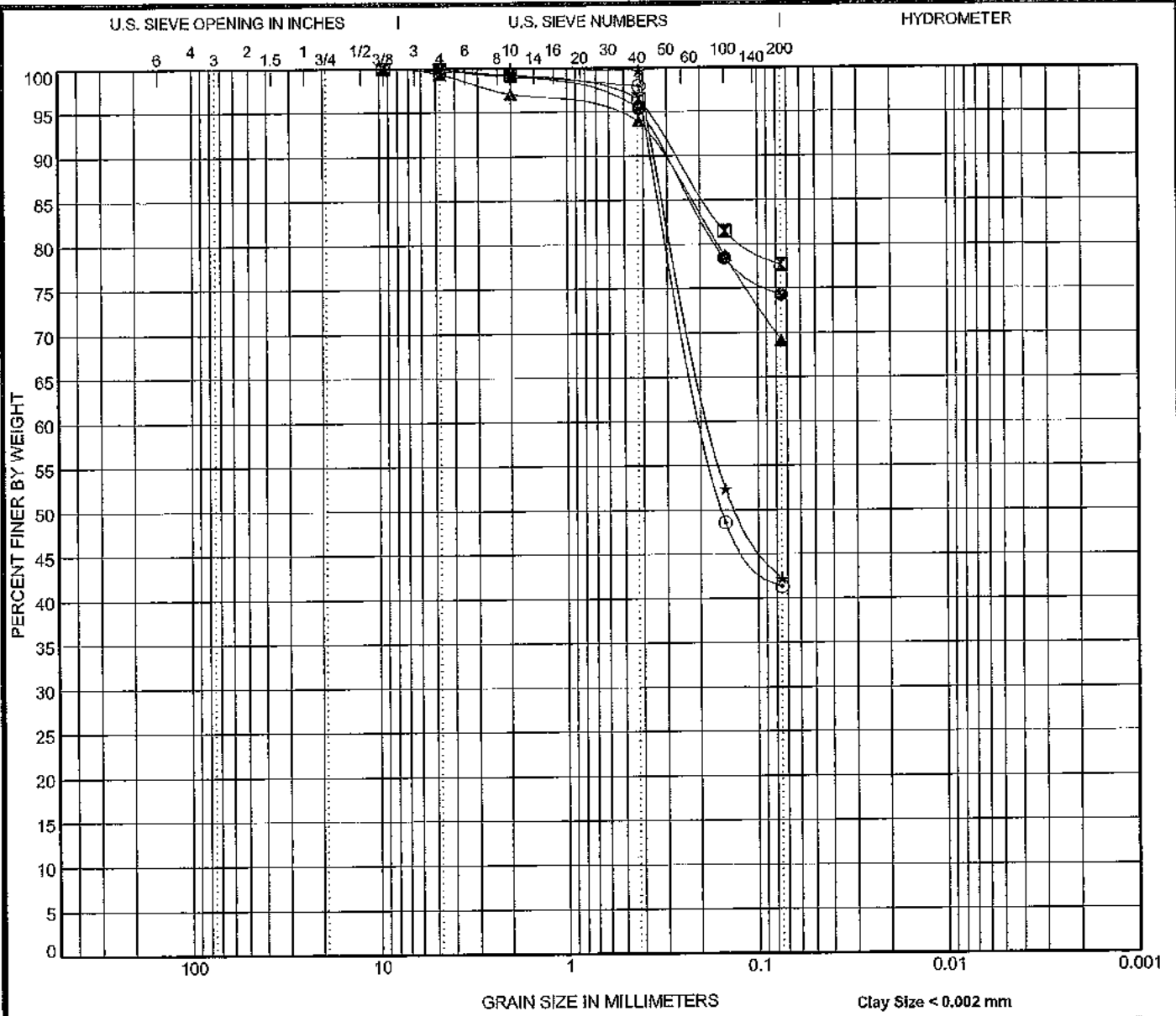
Drilling Method: Hand Auger
 Sampling Method: SS
 Hammer Type: Manual
 Boring Location:

WATER LEVELS	
▽ While Drilling	2 feet
▽ Upon Completion	2 feet
▽ Cave In	9 feet

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	STANDARD PENETRATION TEST DATA		Additional Remarks	
										N in blows/ft @			
										Moisture, %		STRENGTH, tsf	
										X Moisture		▲ Qu * Qp	
										□ PL + LL			
0							Topsoil: 3 inches						
	1						Gray Silty Clay (CL)	CL		24	X	>> ⊕	
	2						Gray Silty Clay (CL)			22	X	>> ⊕	
	3						Gray Sand (SP)			17	X	>> ⊕ pH = 4.6	
	4						Gray Sand (SP)	SP		23	X	>> ⊕ Fines=27.0%	

Completion Depth: 12.0 ft	Sample Types: Shelby Tube	Latitude:
Date Boring Started: 11/17/12	Hand Auger	Longitude:
Date Boring Completed: 11/17/12	Calif. Sampler	Drill Rig:
Logged By: M. Crews	Texas Cone	Remarks:
Drilling Contractor: PSI		

The stratification lines represent approximate boundaries. The transition may be gradual.



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	LL	PL	PI	Cc	Cu
● B-1	6.0 Gray Silty Clay (CL)					
⊠ B-2	6.0 Gray Silty Clay (CL)					
▲ B-3	6.0 Gray Silty Clay (CL)					
★ B-4	9.0 Gray Sandy Clay (CL)					
⊙ B-5	12.0 Gray Clayey Sand (SC)					

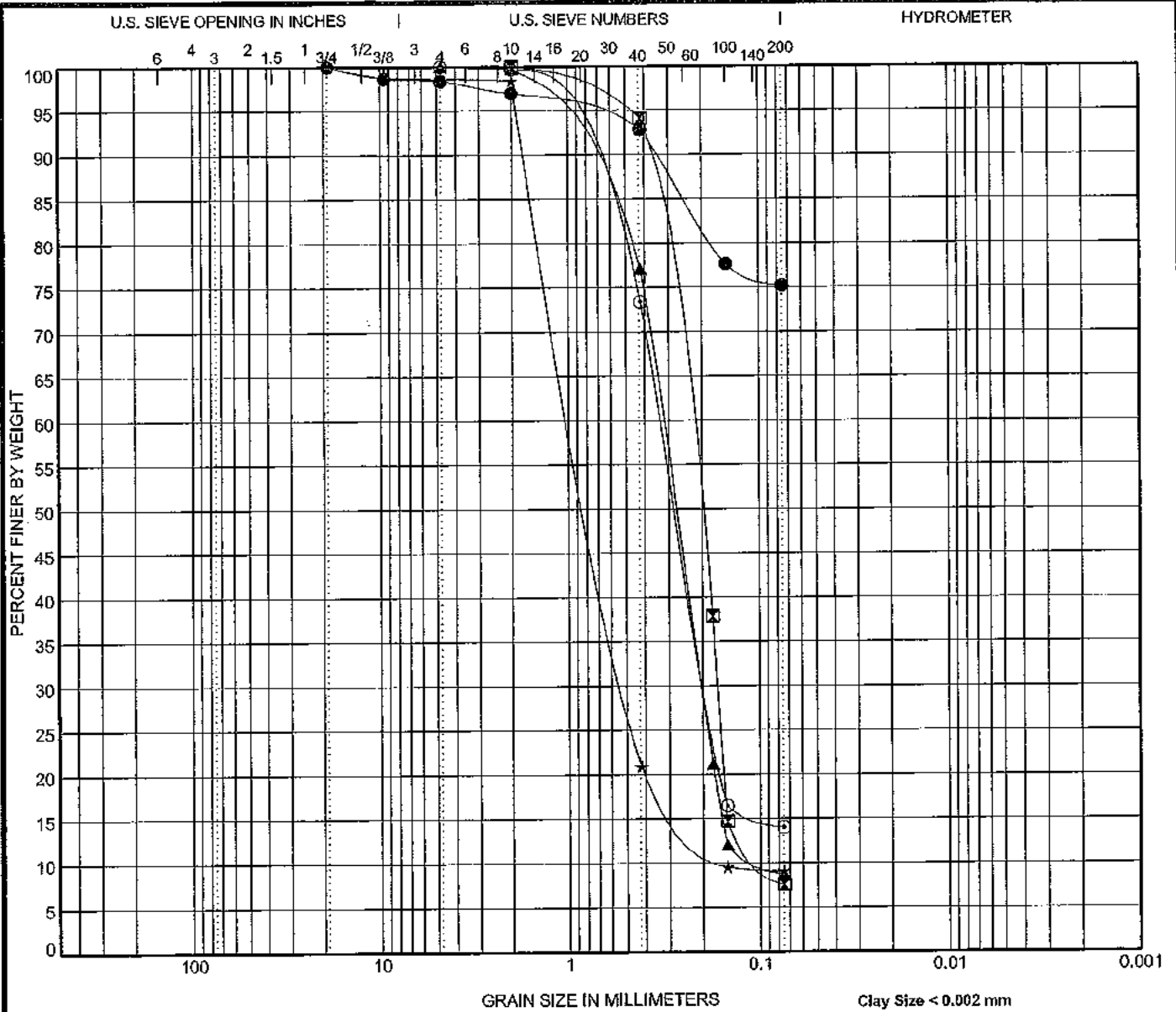
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-1	6.0	4.76			0.0	25.7	74.3	
⊠ B-2	6.0	9.5			0.1	22.2	77.7	
▲ B-3	6.0	9.5			0.6	30.2	69.2	
★ B-4	9.0	4.76	0.176		0.0	57.8	42.2	
⊙ B-5	12.0	9.5	0.189		0.3	58.3	41.4	



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GRAIN SIZE DISTRIBUTION

Project: JEA Interceptor Replacement
 PSI Job No.: 0502712
 Location: Jackson, Tennessee



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

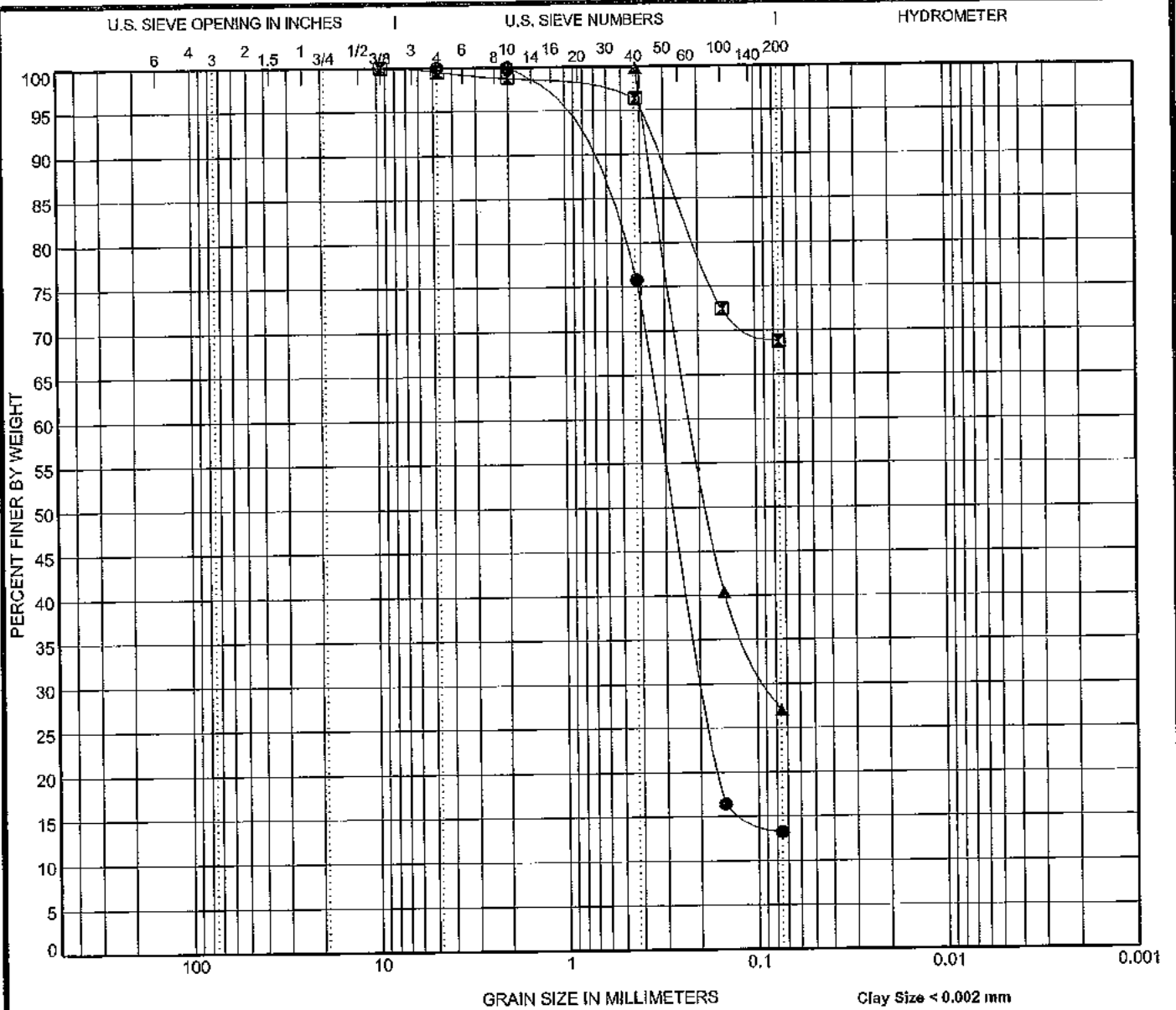
Specimen Identification	Classification	LL	PL	PI	Cc	Cu		
● B-6 4.0	Brown to Gray Silty Clay (CL)							
☒ B-7 9.0	Gray Sand (SP)				1.18	2.62		
▲ B-8 10.0					1.32	3.33		
★ B-9 9.0					1.77	5.95		
⊙ B-10 9.0	Gray Sand (SP)							
Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-6 4.0	19				1.6	23.1	75.2	
☒ B-7 9.0	2	0.249	0.167	0.095	0.0	92.4	7.6	
▲ B-8 10.0	4.76	0.322	0.203	0.097	0.0	91.2	8.8	
★ B-9 9.0	19	0.922	0.504	0.155	1.4	89.5	9.1	
⊙ B-10 9.0	4.76	0.329	0.191		0.0	86.0	14.0	



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GRAIN SIZE DISTRIBUTION

Project: JEA Interceptor Replacement
 PSI Job No.: 0502712
 Location: Jackson, Tennessee



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	LL	PL	PI	Cc	Cu
● B-11 6.0	Gray Sand (SP)					
☒ B-12 12.0	Gray Silty Clay (CL)					
▲ B-13 9.0	Gray Sand (SP)					

Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-11 6.0	4.76	0.319	0.189		0.0	86.8	13.2	
☒ B-12 12.0	9.5				0.5	30.7	68.8	
▲ B-13 9.0	2	0.21	0.087		0.0	73.0	27.0	



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GRAIN SIZE DISTRIBUTION

Project: JEA Interceptor Replacement
 PSI Job No.: 0502712
 Location: Jackson, Tennessee

"General Decision Number: TN20200130 01/03/2020

Superseded General Decision Number: TN20190130

State: Tennessee

Construction Type: Heavy
Including Water and Sewer Line Construction

County: Madison County in Tennessee.

HEAVY CONSTRUCTION PROJECTS (including sewer/water construction).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020

* ELEC0474-015 07/29/2019

	Rates	Fringes
ELECTRICIAN.....	\$ 28.60	13.72

ENGI0369-012 05/01/2013

	Rates	Fringes
Operating Engineers: Bulldozer, Crane, and Forklift.....	\$ 24.47	10.85

LAB00386-001 05/01/2017

	Rates	Fringes
LABORER: Common or General.....	\$ 18.47	6.65

	Rates	Fringes
LABORER: Flagger.....	\$ 8.73	0.00
LABORER: Pipelayer.....	\$ 11.68	0.00
OPERATOR: Backhoe.....	\$ 16.82	0.00
OPERATOR: Loader.....	\$ 13.50	0.00
TRUCK DRIVER: Dump Truck.....	\$ 10.76	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this

classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests

for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

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FACILITY ENCROACHMENT AGREEMENT

THIS AGREEMENT, Made and effective as of April 25, 2019, by and between CSX TRANSPORTATION, INC., a Virginia corporation, whose mailing address is 500 Water Street, Jacksonville, Florida 32202, hereinafter called "Licensor," and JACKSON ENERGY AUTHORITY, a corporation of the State of Tennessee, whose mailing address is 167 Miller Ave, Jackson, Tennessee 38305, hereinafter called "Licensee," WITNESSETH:

WHEREAS, Licensee desires to construct (unless previously constructed and designated as existing herein), use and maintain the below described facility(ies), hereinafter called "Facilities," over, under or across property owned or controlled by Licensor, at the below described location(s):

1. One (1) existing fifteen inch (15") diameter sub-grade pipeline crossing, to be abandoned per CSXT Specifications, located at or near Jackson, Madison County, Tennessee, Nashville Zone Division, Memphis Subdivision, Valuation Station 7579+10, Milepost ONG-143.76, Latitude N35:36:24.00, Longitude W88:48:28.00;
2. One (1) twenty-four inch (24") diameter sub-grade pipeline crossing, solely for the conveyance of raw/treated sewage, located at or near Jackson, Madison County, Tennessee, Nashville Zone Division, Memphis Subdivision, Valuation Station 7579+10, Milepost ONG-143.76, Latitude N35:36:24.00, Longitude W88:48:28.00;
3. One (1) manhole, located at or near Jackson, Madison County, Tennessee, Nashville Zone Division, Memphis Subdivision, Valuation Station 7579+10, Milepost ONG-143.76, Latitude N35:36:24.00, Longitude W88:48:28.00;
4. One (1) manhole, located at or near Jackson, Madison County, Tennessee, Nashville Zone Division, Memphis Subdivision, Valuation Station 7579+10, Milepost ONG-143.76, Latitude N35:36:24.00, Longitude W88:48:28.00;

hereinafter, called the "Encroachment," as shown on print(s) labeled Exhibit "A," attached hereto and made a part hereof;

NOW, THEREFORE, in consideration of the mutual covenants, conditions, terms and agreements herein contained, the parties hereto agree and covenant as follows:

1. LICENSE:

1.1 Subject to Article 17, Licensor, insofar as it has the legal right, power and authority to do so, and its present title permits, and subject to:

(A) Licensor's present and future right to occupy, possess and use its property within the area of the Encroachment for any and all purposes;

(B) All encumbrances, conditions, covenants, easements, and limitations applicable to Licensor's title to or rights in the subject property; and

(C) Compliance by Licensee with the terms and conditions herein contained;

does hereby license and permit Licensee to construct, maintain, repair, renew, operate, use, alter or change the Facilities at the Encroachment above for the term herein stated, and to remove same upon termination.

1.2 The term Facilities, as used herein, shall include only those structures and ancillary facilities devoted exclusively to the transmission usage above within the Encroachment, and as shown on attached Exhibit A.

1.3 No additional structures or other facilities shall be placed, allowed, or maintained by Licensee in, upon or on the Encroachment except upon prior separate written consent of Licensor.

2. ENCROACHMENT FEE; TERM:

2.1 Licensee shall pay Licensor a one-time nonrefundable Encroachment Fee of FIFTEEN THOUSAND TWO HUNDRED AND 00/100 U.S. DOLLARS (\$15,200.00) upon execution of this Agreement. Licensee agrees that the Encroachment Fee applies only to the original Licensee under this Agreement. In the event of a successor (by merger, consolidation, reorganization and/or assignment) or if the original Licensee changes its name, then Licensee shall be subject to payment of Licensor's current administrative and document preparation fees for the cost incurred by Licensor in preparing and maintaining this Agreement on a current basis.

2.2 However, Licensee assumes sole responsibility for, and shall pay directly (or reimburse Licensor), any additional annual taxes and/or periodic assessments levied against Licensor or Licensor's property solely on account of said Facilities or Encroachment.

2.3 This Agreement shall terminate as herein provided, but shall also terminate upon: (a) Licensee's cessation of use of the Facilities or Encroachment for the purpose(s) above; (b) removal of the Facilities; (c) subsequent mutual consent; and/or (d) failure of Licensee to complete installation within five (5) years from the effective date of this Agreement.

2.4 In further consideration for the license or right hereby granted, Licensee hereby agrees that Licensor shall not be charged or assessed, directly or indirectly, with any part of the cost of the installation of said Facilities and appurtenances, and/or maintenance thereof, or for any public works project of which said Facilities is a part.

3. CONSTRUCTION, MAINTENANCE AND REPAIRS:

3.1 Licensee shall construct, maintain, relocate, repair, renew, alter, and/or remove the Facilities, in a prudent, workmanlike manner, using quality materials and complying with any

applicable standard(s) or regulation(s) of Licensor (CSXT Specifications), or Licensee's particular industry, National Electrical Safety Code, or any governmental or regulatory body having jurisdiction over the Encroachment.

3.2 Location and construction of Facilities shall be made strictly in accordance with design(s) and specifications furnished to and approved by Licensor and of material(s) and size(s) appropriate for the purpose(s) above recited.

3.3 All of Licensee's work, and exercise of rights hereunder, shall be undertaken at time(s) satisfactory to Licensor, and so as to eliminate or minimize any impact on or interference with the safe use and operation of Licensor's property and appurtenances thereto.

3.4 In the installation, maintenance, repair and/or removal of said Facilities, Licensee shall not use explosives of any type or perform or cause any blasting without the separate express written consent of Licensor. As a condition to such consent, a representative will be assigned by Licensor to monitor blasting, and Licensee shall reimburse Licensor for the entire cost and/or expense of furnishing said monitor.

3.5 Any repairs or maintenance to the Facilities, whether resulting from acts of Licensee, or natural or weather events, which are necessary to protect or facilitate Licensor's use of its property, shall be made by Licensee promptly, but in no event later than thirty (30) days after Licensee has notice as to the need for such repairs or maintenance.

3.6 Licensor, in order to protect or safeguard its property, rail operations, equipment and/or employees from damage or injury, may request immediate repair or renewal of the Facilities, and if the same is not performed, may make or contract to make such repairs or renewals, at the sole risk, cost and expense of Licensee.

3.7 Neither the failure of Licensor to object to any work done, material used, or method of construction or maintenance of said Encroachment, nor any approval given or supervision exercised by Licensor, shall be construed as an admission of liability or responsibility by Licensor, or as a waiver by Licensor of any of the obligations, liability and/or responsibility of Licensee under this Agreement.

3.8 All work on the Encroachment shall be conducted in accordance with Licensor's safety rules and regulations.

3.9 Licensee hereby agrees to reimburse Licensor any loss, cost or expense (including losses resulting from train delays and/or inability to meet train schedules) arising from any failure of Licensee to make repairs or conduct maintenance as required by Section 3.5 above or from improper or incomplete repairs or maintenance to the Facilities or Encroachment.

3.10 In the event it becomes necessary for the Licensee to deviate from the approved Exhibit, Licensee shall seek prior approval from Licensor, or when applicable, an official field representative of Licensor permitted to approve changes, authorizing the necessary field changes and Licensee shall provide Licensor with complete As-Built Drawings of the

completed work. As-Built Drawings shall be submitted to Licensor in either electronic or hard copy form upon the substantial completion of the project and upon Licensor's request.

3.11 In the event of large scale maintenance/construction work to railroad bridges Licensee is required to protect power lines with insulated covers or comparable safety devices at their costs during construction/maintenance for safety of railroad employees.

4. PERMITS, LICENSES:

4.1 Before any work hereunder is performed, or before use of the Encroachment for the contracted purpose, Licensee, at its sole cost and expense, shall obtain all necessary permit(s) (including but not limited to zoning, building, construction, health, safety or environmental matters), letter(s) or certificate(s) of approval. Licensee expressly agrees and warrants that it shall conform and limit its activities to the terms of such permit(s), approval(s) and authorization(s), and shall comply with all applicable ordinances, rules, regulations, requirements and laws of any governmental authority (State, Federal or Local) having jurisdiction over Licensee's activities, including the location, contact, excavation and protection regulations of the Occupational Safety and Health Act (OSHA) (29 CFR 1926.651(b)), et al., and State "One Call" - "Call Before You Dig" requirements.

4.2 Licensee assumes sole responsibility for failure to obtain such permit(s) or approval(s), for any violations thereof, or for costs or expenses of compliance or remedy.

5. MARKING AND SUPPORT:

5.1 With respect to any subsurface installation or maintenance upon Licensor's property, Licensee, at its sole cost and expense, shall:

- (A) support track(s) and roadbed in a manner satisfactory to Licensor;
- (B) backfill with satisfactory material and thoroughly tamp all trenches to prevent settling of surface of land and roadbed of Licensor; and
- (C) either remove any surplus earth or material from Licensor's property or cause said surplus earth or material to be placed and distributed at location(s) and in such manner Licensor may approve.

5.2 After construction or maintenance of the Facilities, Licensee shall:

- (A) Restore any track(s), roadbed and other disturbed property; and
- (B) Erect, maintain and periodically verify the accuracy of aboveground markers, in a form approved by Licensor, indicating the location, depth and ownership of any underground Facilities or related facilities.

5.3 Licensee shall be solely responsible for any subsidence or failure of lateral or subjacent support in the Encroachment area for a period of three (3) years after completion of installation.

6. TRACK CHANGES:

6.1 In the event that rail operations and/or track maintenance result in changes in grade or alignment of, additions to, or relocation of track(s) or other facilities, or in the event future use of Licensor's rail corridor or property necessitate any change of location, height or depth in the Facilities or Encroachment, Licensee, at its sole cost and expense and within thirty (30) days after notice in writing from Licensor, shall make changes in the Facilities or Encroachment to accommodate such track(s) or operations.

6.2 If Licensee fails to do so, Licensor may make or contract to make such changes at Licensee's cost.

7. FACILITY CHANGES:

7.1 Licensee shall periodically monitor and verify the depth or height of the Facilities or Encroachment in relation to the existing tracks and facilities, and shall relocate the Facilities or change the Encroachment, at Licensee's expense, should such relocation or change be necessary to comply with the minimum clearance requirements of Licensor.

7.2 If Licensee undertakes to revise, renew, relocate or change in any manner whatsoever all or any part of the Facilities (including any change in voltage or gauge of wire or any change in circumference, diameter or radius of pipe or change in materials transmitted in and through said pipe), or is required by any public agency or court order to do so, plans therefor shall be submitted to Licensor for approval before such change. After approval, the terms and conditions of this Agreement shall apply thereto.

8. INTERFERENCE WITH RAIL FACILITIES:

8.1 Although the Facilities/Encroachment herein permitted may not presently interfere with Licensor's railroad or facilities, in the event that the operation, existence or maintenance of said Facilities, in the sole judgment of Licensor, causes: (a) interference (including, but not limited to, physical or interference from an electromagnetic induction, or interference from stray or other currents) with Licensor's power lines, communication, signal or other wires, train control system, or electrical or electronic apparatus; or (b) interference in any manner, with the operation, maintenance or use of the rail corridor, track(s), structures, pole line(s), devices, other property, or any appurtenances thereto; then and in either event, Licensee, upon receipt of written notice from Licensor of any such interference, and at Licensee's sole risk, cost and expense, shall promptly make such changes in its Facilities or installation, as may be required in the reasonable judgment of the Licensor to eliminate all such interference. Upon Licensee's failure to remedy or change, Licensor may do so or contract to do so at Licensee's sole cost.

8.2 Without assuming any duty hereunder to inspect the Facilities, Licensor hereby reserves the right to inspect same and to require Licensee to undertake repairs, maintenance or adjustments to the Facilities, which Licensee hereby agrees to make promptly, at Licensee's sole cost and expense.

9. RISK, LIABILITY, INDEMNITY:

With respect to the relative risk and liabilities of the parties, it is hereby agreed that:

9.1 To the fullest extent permitted by State law (constitutional or statutory, as amended), Licensee hereby agrees to, defend, indemnify, and hold Licensor harmless from and against any and all liability, loss, claim, suit, damage, charge or expense which Licensor may suffer, sustain, incur or in any way be subjected to, on account of death of or injury to any person whomsoever (including officers, agents, employees or invitees of Licensor), and for damage to or loss of or destruction of any property whatsoever, arising out of, resulting from, or in any way connected with the construction, repair, maintenance, replacement, presence, existence, operations, use or removal of the Facilities or any structure in connection therewith, or restoration of premises of Licensor to good order or condition after removal, EXCEPT when proven to have been caused solely by the willful misconduct or gross negligence of Licensor. HOWEVER, to the fullest extent permitted by State law, during any period of actual construction, repair, maintenance, replacement or removal of the Facilities, wherein agents, equipment or personnel of Licensee are on the railroad rail corridor, Licensee's liability hereunder shall be absolute, irrespective of any joint, sole or contributory fault or negligence of Licensor.

9.2 Use of Licensor's rail corridor involves certain risks of loss or damage as a result of the rail operations. Notwithstanding Section 9.1, Licensee expressly assumes all risk of loss and damage to Licensee's Property or the Facilities in, on, over or under the Encroachment, including loss of or any interference with use or service thereof, regardless of cause, including electrical field creation, fire or derailment resulting from rail operations. For this Section, the term "Licensee's Property" shall include property of third parties situated or placed upon Licensor's rail corridor by Licensee or by such third parties at request of or for benefit of Licensee.

9.3 To the fullest extent permitted by State law, as above, Licensee assumes all responsibility for, and agrees to defend, indemnify and hold Licensor harmless from: (a) all claims, costs and expenses, including reasonable attorneys' fees, as a consequence of any sudden or nonsudden pollution of air, water, land and/or ground water on or off the Encroachment area, arising from or in connection with the use of this Encroachment or resulting from leaking, bursting, spilling, or any escape of the material transmitted in or through the Facilities; (b) any claim or liability arising under federal or state law dealing with either such sudden or nonsudden pollution of air, water, land and/or ground water arising therefrom or the remedy thereof; and (c) any subsidence or failure of lateral or subjacent support of the tracks arising from such Facilities leakage.

9.4 Notwithstanding Section 9.1, Licensee also expressly assumes all risk of loss which in any way may result from Licensee's failure to maintain either required clearances for any overhead Facilities or the required depth and encasement for any underground Facilities, whether or not such loss(es) result(s) in whole or part from Licensor's contributory negligence or joint fault.

9.5 Obligations of Licensee hereunder to release, indemnify and hold Licensor harmless shall also extend to companies and other legal entities that control, are controlled by, subsidiaries of, or are affiliated with Licensor, as well as any railroad that operates over the rail corridor on which the Encroachment is located, and the officers, employees and agents of each.

9.6 If a claim is made or action is brought against Licensor, and/or its operating lessee, for which Licensee may be responsible hereunder, in whole or in part, Licensee shall be notified to assume the handling or defense of such claim or action; but Licensor may participate in such handling or defense.

9.7 Notwithstanding anything contained in this Agreement, the limitation of liability contained in the state statutes, as amended from time to time, shall not limit Licensor's ability to collect under the insurance policies required to be maintained under this Agreement.

10. INSURANCE:

10.1 Prior to commencement of surveys, installation or occupation of premises pursuant to this Agreement, Licensee shall procure and shall maintain during the continuance of this Agreement, at its sole cost and expense, a policy of

- (i) Statutory Worker's Compensation and Employers Liability Insurance with available limits of not less than ONE MILLION AND 00/100 U.S. DOLLARS (\$1,000,000.00).
- (ii) Commercial General Liability coverage (inclusive of contractual liability) with available limits of not less than FIVE MILLION AND 00/100 U.S. DOLLARS (\$5,000,000.00) in combined single limits for bodily injury and property damage and covering the contractual liabilities assumed under this Agreement and naming Licensor, and/or its designee, as additional insured. The evidence of insurance coverage shall be endorsed to provide for thirty (30) days' notice to Licensor, or its designee, prior to cancellation or modification of any policy. Mail CGL certificate, along with agreement, to CSX Transportation, Inc., Speed Code J180, 500 Water Street, Jacksonville, FL 32202. On each successive year, send certificate to RenewalCOI@csx.com.
- (iii) Business automobile liability insurance with available limits of not less than ONE MILLION AND 00/100 U.S. DOLLARS (\$1,000,000.00) combined single limit for bodily injury and/or property damage per occurrence naming Licensor, and/or its designee, as additional insured.

- (iv) The insurance policies must contain a waiver of subrogation against CSXT and its Affiliates, except where prohibited by law. All insurance companies must be A. M. Best rated A- and Class VII or better.
- (v) Such other insurance as Licensor may reasonably require.
- (vi) Licensee shall require its contractors to meet minimum insurance requirements above when performing work in relation to this agreement. Licensee will procure and review contractor's insurance certificates to confirm requirements are met. Licensor may request a copy of the insurance certificate.

10.2 If Licensee's existing CGL policy(ies) do(es) not automatically cover Licensee's contractual liability during periods of survey, installation, maintenance and continued occupation, a specific endorsement adding such coverage shall be purchased by Licensee. If said CGL policy is written on a "claims made" basis instead of a "per occurrence" basis, Licensee shall arrange for adequate time for reporting losses. Failure to do so shall be at Licensee's sole risk.

10.3 Licensor, or its designee, may at any time request evidence of insurance purchased by Licensee to comply with this Agreement. Failure of Licensee to comply with Licensor's request shall be considered a default by Licensee.

10.4 To the extent permitted by law and without waiver of the sovereign immunity of Licensee, securing such insurance shall not limit Licensee's liability under this Agreement, but shall be security therefor.

10.5 (A) In the event Licensee finds it necessary to perform construction or demolition operations within fifty feet (50') of any operated railroad track(s) or affecting any railroad bridge, trestle, tunnel, track(s), roadbed, overpass or underpass, Licensee shall: (a) notify Licensor; and (b) require its contractor(s) performing such operations to procure and maintain during the period of construction or demolition operations, at no cost to Licensor,

i) Railroad Protective Liability (RPL) Insurance, naming Licensor, and/or its designee, as Named Insured, written on the current ISO/RIMA Form (ISO Form No. CG 00 35 04 13) with limits of FIVE MILLION AND 00/100 U.S. DOLLARS (\$5,000,000.00) per occurrence for bodily injury and property damage, with at least TEN MILLION AND 00/100 U.S. DOLLARS (\$10,000,000.00) aggregate limit per annual policy period. The original of such RPL policy shall be sent to and approved by Licensor prior to commencement of such construction or demolition. Licensor reserves the right to demand higher limits.

OR

ii) The CGL policy shall include endorsement ISO CG 24 17 and the Auto Liability Policy shall include endorsement ISO CA 20 70 evidencing that coverage is provided for

work within 50 feet of a railroad. If such endorsements are not included, RPL insurance must be provided.

(B) At Licensor's option, in lieu of purchasing RPL insurance or the 50 foot endorsements from an insurance company (but not CGL insurance), Licensee may pay Licensor, at Licensor's current rate at time of request, the cost of adding this Encroachment, or additional construction and/or demolition activities, to Licensor's Railroad Protective Liability (RPL) Policy for the period of actual construction. This coverage is offered at Licensor's discretion and may not be available under all circumstances.

10.6 Notwithstanding the provisions of Sections 10.1 and 10.2, Licensee, pursuant to State Statute(s), may self-insure or self-assume, in any amount(s), any contracted liability arising under this Agreement, under a funded program of self-insurance, which fund will respond to liability of Licensee imposed by and in accordance with the procedures established by law.

11. GRADE CROSSINGS; PROTECTION SERVICES:

11.1 Nothing herein contained shall be construed to permit Licensee or Licensee's contractor to move any vehicles or equipment over the track(s), except at public road crossing(s), without separate prior written approval of Licensor.

11.2 If Licensor deems it advisable, during any construction, maintenance, repair, renewal, alteration, change or removal of said Facilities, to place watchmen, flagmen, or field construction managers for protection of operations of Licensor or others on Licensor's rail corridor at the Encroachment, and to keep persons, equipment or materials away from the track(s), Licensor shall have the right to do so at the expense of Licensee, but Licensor shall not be liable for failure to do so.

12. LICENSOR'S COSTS:

12.1 Any additional or alternative costs or expenses incurred by Licensor to accommodate Licensee's continued use of Licensor's property as a result of track changes or wire changes shall also be paid by Licensee.

12.2 Licensor's expense for wages ("force account" charges) and materials for any work performed at the expense of Licensee pursuant hereto shall be paid by Licensee within thirty (30) days after receipt of Licensor's bill therefor. Licensor may, at its discretion, request an advance deposit for estimated Licensor costs and expenses.

12.3 Such expense shall include, but not be limited to, cost of railroad labor and supervision under "force account" rules, plus current applicable overhead percentages, the actual cost of materials, and insurance, freight and handling charges on all material used. Equipment rentals shall be in accordance with Licensor's applicable fixed rate. Licensor may, at its discretion, require advance deposits for estimated costs of such expenses and costs.

13. DEFAULT, BREACH, WAIVER:

13.1 The proper and complete performance of each covenant of this Agreement shall be deemed of the essence thereof, and in the event Licensee fails or refuses to fully and completely perform any of said covenants or remedy any breach within thirty (30) days after receiving written notice from Licensor to do so (or within forty-eight (48) hours in the event of notice of a railroad emergency), Licensor shall have the option of immediately revoking this Agreement and the privileges and powers hereby conferred, regardless of encroachment fee(s) having been paid in advance for any annual or other period. Upon such revocation, Licensee shall make removal in accordance with Article 14.

13.2 No waiver by Licensor of its rights as to any breach of covenant or condition herein contained shall be construed as a permanent waiver of such covenant or condition, or any subsequent breach thereof, unless such covenant or condition is permanently waived in writing by Licensor.

13.3 Neither the failure of Licensor to object to any work done, material used, or method of construction or maintenance of said Encroachment, nor any approval given or supervision exercised by Licensor, shall be construed as an admission of liability or responsibility by Licensor, or as a waiver by Licensor of any of the obligations, liability and/or responsibility of Licensee under this Agreement.

14. TERMINATION, REMOVAL:

14.1 All rights which Licensee may have hereunder shall cease upon the date of (a) termination, (b) revocation, or (c) subsequent agreement, or (d) Licensee's removal of the Facility from the Encroachment. However, neither termination nor revocation of this Agreement shall affect any claims and liabilities which have arisen or accrued hereunder, and which at the time of termination or revocation have not been satisfied; neither party, however, waiving any third party defenses or actions.

14.2 Within thirty (30) days after revocation or termination, Licensee, at its sole risk and expense, shall (a) remove the Facilities from the rail corridor of Licensor, unless the parties hereto agree otherwise, (b) restore the rail corridor of Licensor in a manner satisfactory to Licensor, and (c) reimburse Licensor any loss, cost or expense of Licensor resulting from such removal.

15. NOTICE:

15.1 Licensee shall give Licensor at least thirty (30) days written notice before doing any work on Licensor's rail corridor, except that in cases of emergency shorter notice may be given. Licensee shall provide proper notification as follows:

a. For non-emergencies, Licensee shall submit online via the CSX Property Portal from Licensor's web site, via web link:
https://propertyportal.csx.com/pub_ps_res/ps_res/jsf/public/index.faces

b. For emergencies, Licensee shall complete all of the steps outlined in Section 15.1 a. above, and shall also include detailed information of the emergency. Licensee shall also call and report details of the emergency to Licensor's Rail Operations Emergency Telephone Number: 1-800-232-0144. In the event Licensor needs to contact Licensee concerning an emergency involving Licensee's Facility(ies), the emergency phone number for Licensee is: 731-422-7214.

15.2 All other notices and communications concerning this Agreement shall be addressed to Licensee at the address above, and to Licensor at the address shown on Page 1, c/o CSXT Contract Management, J180; or at such other address as either party may designate in writing to the other.

15.3 Unless otherwise expressly stated herein, all such notices shall be in writing and sent via Certified or Registered Mail, Return Receipt Requested, or by courier, and shall be considered delivered upon: (a) actual receipt, or (b) date of refusal of such delivery.

16. ASSIGNMENT:

16.1 The rights herein conferred are the privileges of Licensee only, and Licensee shall obtain Licensor's prior written consent to any assignment of Licensee's interest herein; said consent shall not be unreasonably withheld.

16.2 Subject to Sections 2 and 16.1, this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors or assigns.

16.3 Licensee shall give Licensor written notice of any legal succession (by merger, consolidation, reorganization, etc.) or other change of legal existence or status of Licensee, with a copy of all documents attesting to such change or legal succession, within thirty (30) days thereof.

16.4 Licensor expressly reserves the right to assign this Agreement, in whole or in part, to any grantee, lessee, or vendee of Licensor's underlying property interests in the Encroachment, upon written notice thereof to Licensee.

16.5 In the event of any unauthorized sale, transfer, assignment, sublicense or encumbrance of this Agreement, or any of the rights and privileges hereunder, Licensor, at its option, may revoke this Agreement by giving Licensee or any such assignee written notice of such revocation; and Licensee shall reimburse Licensor for any loss, cost or expense Licensor may incur as a result of Licensee's failure to obtain said consent.

17. TITLE:

17.1 Licensee understands that Licensor occupies, uses and possesses lands, rights-of-way and rail corridors under all forms and qualities of ownership rights or facts, from full fee simple absolute to bare occupation. Accordingly, nothing in this Agreement shall act as or be deemed to act as any warranty, guaranty or representation of the quality of Licensor's title

for any particular Encroachment or segment of Rail Corridor occupied, used or enjoyed in any manner by Licensee under any rights created in this Agreement. It is expressly understood that Licensor does not warrant title to any Rail Corridor and Licensee will accept the grants and privileges contained herein, subject to all lawful outstanding existing liens, mortgages and superior rights in and to the Rail Corridor, and all leases, licenses and easements or other interests previously granted to others therein.

17.2 The term "license," as used herein, shall mean with regard to any portion of the Rail Corridor which is owned by Licensor in fee simple absolute, or where the applicable law of the State where the Encroachment is located otherwise permits Licensor to make such grants to Licensee, a "permission to use" the Rail Corridor, with dominion and control over such portion of the Rail Corridor remaining with Licensor, and no interest in or exclusive right to possess being otherwise granted to Licensee. With regard to any other portion of Rail Corridor occupied, used or controlled by Licensor under any other facts or rights, Licensor merely waives its exclusive right to occupy the Rail Corridor and grants no other rights whatsoever under this Agreement, such waiver continuing only so long as Licensor continues its own occupation, use or control. Licensor does not warrant or guarantee that the license granted hereunder provides Licensee with all of the rights necessary to occupy any portion of the Rail Corridor. Licensee further acknowledges that it does not have the right to occupy any portion of the Rail Corridor held by Licensor in less than fee simple absolute without also receiving the consent of the owner(s) of the fee simple absolute estate. Further, Licensee shall not obtain, exercise or claim any interest in the Rail Corridor that would impair Licensor's existing rights therein.

17.3 Licensee agrees it shall not have nor shall it make, and hereby completely and absolutely waives its right to, any claim against Licensor for damages on account of any deficiencies in title to the Rail Corridor in the event of failure or insufficiency of Licensor's title to any portion thereof arising from Licensee's use or occupancy thereof.

17.4 Licensee agrees to fully and completely indemnify and defend all claims or litigation for slander of title, overburden of easement, or similar claims arising out of or based upon the Facilities placement, or the presence of the Facilities in, on or along any Encroachment(s), including claims for punitive or special damages.

17.5 Licensee shall not at any time own or claim any right, title or interest in or to Licensor's property occupied by the Encroachments, nor shall the exercise of this Agreement for any length of time give rise to any right, title or interest in Licensee to said property other than the license herein created.

17.6 Nothing in this Agreement shall be deemed to give, and Licensor hereby expressly waives, any claim of ownership in and to any part of the Facilities.

17.7 Licensee shall not create or permit any mortgage, pledge, security, interest, lien or encumbrances, including without limitation, tax liens and liens or encumbrances with respect to work performed or equipment furnished in connection with the construction, installation, repair, maintenance or operation of the Facilities in or on any portion of the

Encroachment (collectively, "Liens or Encumbrances"), to be established or remain against the Encroachment or any portion thereof or any other Licensor property.

17.8 In the event that any property of Licensor becomes subject to such Liens or Encumbrances, Licensee agrees to pay, discharge or remove the same promptly upon Licensee's receipt of notice that such Liens or Encumbrances have been filed or docketed against the Encroachment or any other property of Licensor; however, Licensee reserves the right to challenge, at its sole expense, the validity and/or enforceability of any such Liens or Encumbrances.

18. GENERAL PROVISIONS:

18.1 This Agreement, and the attached specifications, contains the entire understanding between the parties hereto.

18.2 Neither this Agreement, any provision hereof, nor any agreement or provision included herein by reference, shall operate or be construed as being for the benefit of any third person.

18.3 Except as otherwise provided herein, or in any Rider attached hereto, neither the form of this Agreement, nor any language herein, shall be interpreted or construed in favor of or against either party hereto as the sole drafter thereof.

18.4 This Agreement is executed under current interpretation of applicable Federal, State, County, Municipal or other local statute, ordinance or law(s). However, each separate division (paragraph, clause, item, term, condition, covenant or agreement) herein shall have independent and severable status for the determination of legality, so that if any separate division is determined to be void or unenforceable for any reason, such determination shall have no effect upon the validity or enforceability of each other separate division, or any combination thereof.

18.5 This Agreement shall be construed and governed by the laws of the state in which the Facilities and Encroachment are located.

18.6 If any amount due pursuant to the terms of this Agreement is not paid by the due date, it will be subject to Licensor's standard late charge and will also accrue interest at eighteen percent (18%) per annum, unless limited by local law, and then at the highest rate so permitted.

18.7 Licensee agrees to reimburse Licensor for all reasonable costs (including attorney's fees) incurred by Licensor for collecting any amount due under the Agreement.

18.8 The provisions of this License are considered confidential and may not be disclosed to a third party without the consent of the other party(s), except: (a) as required by statute, regulation or court order, (b) to a parent, affiliate or subsidiary company, (c) to an auditing firm or legal counsel that are agreeable to the confidentiality provisions, or (d) to

Lessees of Licensor's land and/or track who are affected by the terms and conditions of this Agreement and will maintain the confidentiality of this Agreement.

18.9 Within thirty (30) days of an overpayment in a cumulative total amount of One Hundred Dollars (\$100.00) or more by Licensee to Licensor, Licensee shall notify Licensor in writing with documentation evidencing such overpayment. Licensor shall refund the actual amount of Licensee's overpayment within 120 days of Licensor's verification of such overpayment.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate
(each of which shall constitute an original) as of the effective date of this Agreement.

Witness for Licensor:



CSX TRANSPORTATION, INC.

By: 

Print/Type Name: Ray E. Birkholz
Director, Real Estate Services

Print/Type Title: _____

Witness for Licensee:

JACKSON ENERGY AUTHORITY 

By: 

Who, by the execution hereof, affirms that he/she has
the authority to do so and to bind the Licensee to the
terms and conditions of this Agreement.

Print/Type Name: STEPHEN B. RAPER

Print/Type Title: SR V.P. WASTEWATER SYSTEM

Tax ID No.: 62-1868550

CSX-886707 EXHIBIT A

Jackson, Madison Co., TN
 Southwest Region / Nashville Zone / Memphis (MP) Subdivision / Jackson Branch
 Milepost 0NG-143.76
 Adjacent to At-Grade Public DOT #350138R, James Buchanan Dr.
 Val. Sta. 7579+10 (GIS Map No. 28117)
 N35:36:24.00 / W88:48:28.00

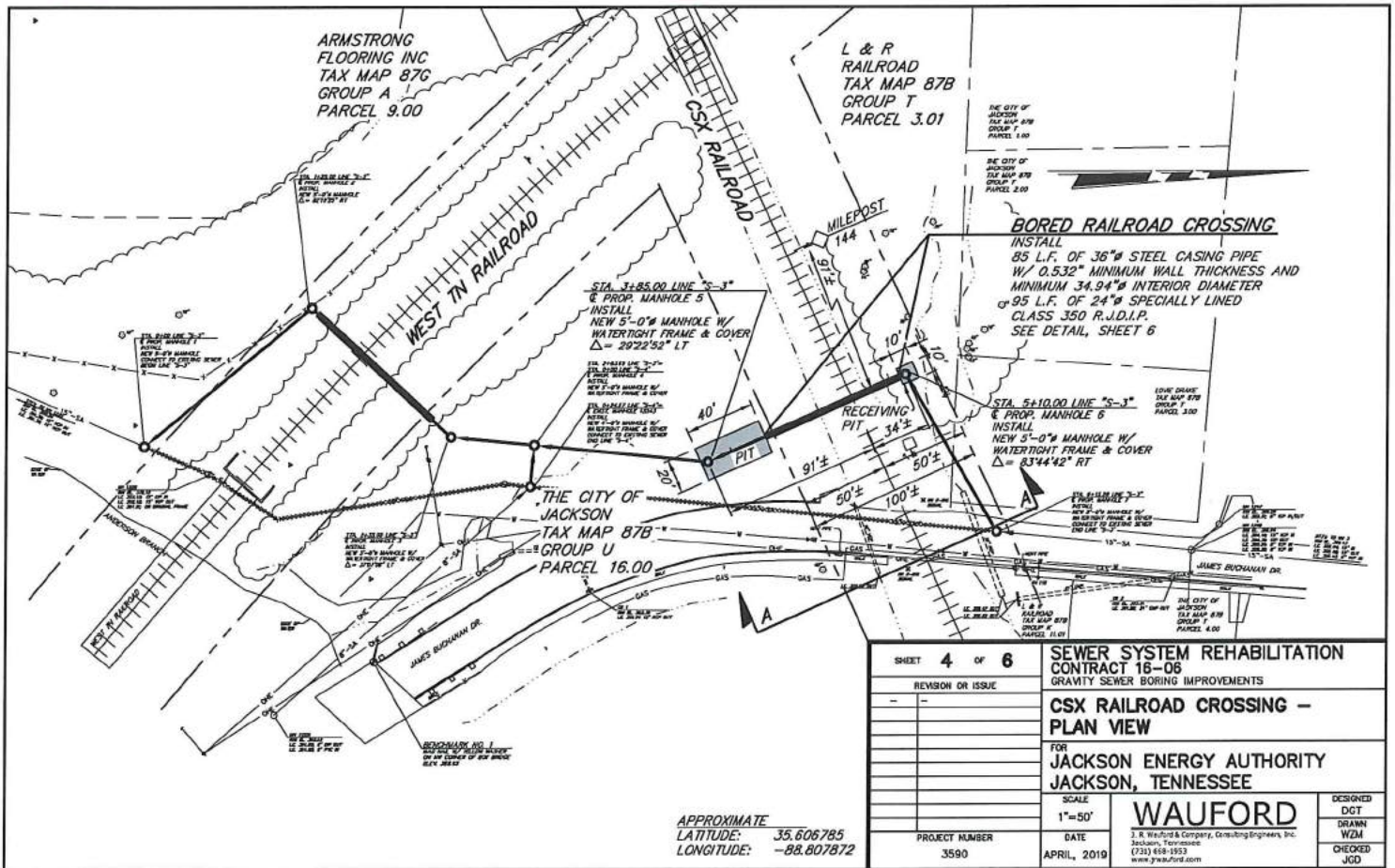
CSX PROPERTY SERVICES REVIEW	
<input type="checkbox"/> No Exceptions	<input checked="" type="checkbox"/> Exceptions Noted
<small>This review is for the general conformance with CSX utility design specifications only. Sole responsibility for all aspects of the general design shall remain with the facility owner. This review does not constitute approval to proceed without meeting all of CSX's safety and contractual requirements.</small>	
By: <i>[Signature]</i>	

CSX GENERAL NOTES:

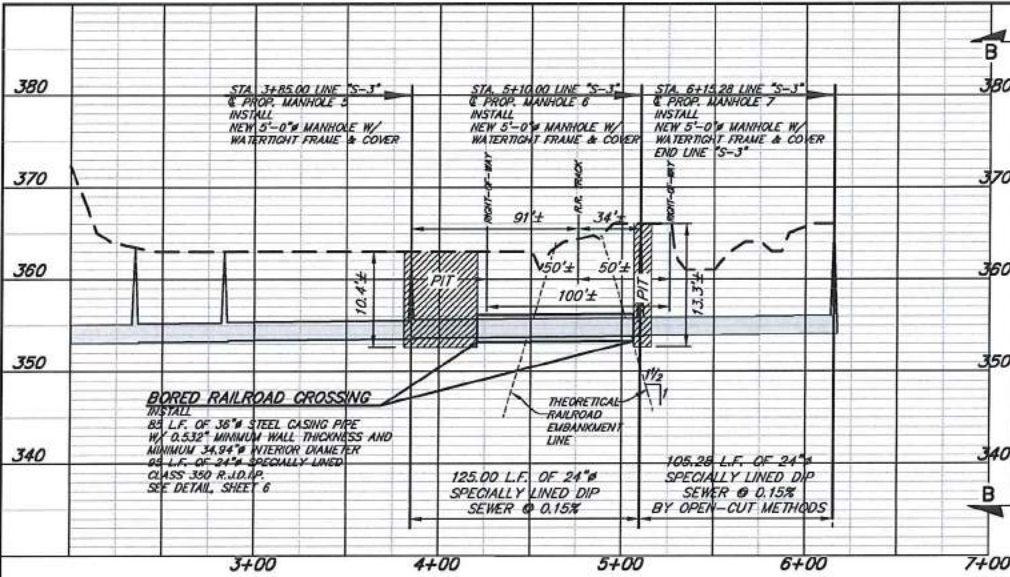
- REFER TO THE CSX PIPELINE DESIGN & CONSTRUCTION SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- THE FRONT OF THE PIPE SHALL BE PROVIDED WITH MECHANICAL ARRANGEMENTS OR DEVICES THAT WILL POSITIVELY PREVENT THE AUGER FROM LEADING THE PIPE SO THAT NO UNSUPPORTED EXCAVATION IS AHEAD OF THE PIPE.
- THE OPERATION SHALL BE PROGRESSED ON A 24-HOUR BASIS WITHOUT STOPPAGE (EXCEPT FOR ADDING LENGTHS OF PIPE) UNTIL THE LEADING EDGE OF THE PIPE HAS REACHED THE RECEIVING PIT.
- THE AUGER AND CUTTING HEAD ARRANGEMENT SHALL BE REMOVABLE FROM WITHIN THE PIPE IN THE EVENT AN OBSTRUCTION IS ENCOUNTERED.
- PIPELINE SHALL BE PROMINENTLY MARKED AT BOTH SIDES OF THE CSX PROPERTY LINES BY DURABLE, WEATHERPROOF SIGNS LOCATED OVER THE CENTERLINE OF THE PIPE IN ACCORDANCE WITH CSX SPECIFICATIONS.
- NO CONSTRUCTION OR ENTRY UPON THE CSX CORRIDOR IS PERMITTED UNTIL THE DOCUMENT TRANSACTION IS COMPLETED, YOU ARE IN RECEIPT OF A FULLY EXECUTED DOCUMENT, AND YOU HAVE OBTAINED AUTHORITY FROM THE LOCAL ROADMASTER.
- IF REQUIRED, A DEWATERING PLAN IN ACCORDANCE WITH CSX SPECIFICATIONS WILL BE SUBMITTED TO THE CSX REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO ANY DEWATERING OPERATIONS.
- BLASTING IS NOT PERMITTED UNDER OR ON CSX PROPERTY.
- CSX DOES NOT GRANT OR CONVEY AN EASEMENT FOR THIS INSTALLATION.
- ALL PERSONNEL SHALL RECEIVE SAFETY BRIEFINGS BY A CSXT FLAGMAN OR DESIGNATED CSXT REPRESENTATIVE EACH DAY BEFORE BEGINNING WORK ON THE RIGHT OF WAY. ADDITIONAL SAFETY BRIEFINGS MAY BE REQUIRED WHEN CONDITIONS AND/OR WORK SITES ARE CHANGED.
- AGENCY OR ITS CONTRACTOR SHALL ARRANGE AND CONDUCT ITS WORK SO THAT THERE WILL BE NO INTERFERENCE WITH CSXT OPERATIONS, INCLUDING TRAIN, SIGNAL, TELEPHONE AND TELEGRAPHIC SERVICES, OR DAMAGES TO CSXT'S PROPERTY, OR TO POLES, WIRES, AND OTHER FACILITIES OF TENANTS OF CSXT'S PROPERTY OR RIGHT-OF-WAY.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT ALL ACTIVE RAILROAD FACILITIES, INCLUDING ELECTRICAL, WATER LINES, SEWER LINES, COMMUNICATION AND SIGNAL LINES AS WELL AS UNDERGROUND PIPING. THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL EQUIPMENT AND MATERIAL A MINIMUM OF SIX (6) FEET FROM AFOREMENTIONED ELEVATED COMMUNICATION AND SIGNAL FACILITIES.
- CONTRACTOR MUST CONDUCT ALL OF ITS WORK IN A SAFE MANNER. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH RULES, REGULATIONS, PROCEDURES AND SAFE PRACTICES OF CSXT, OSHA, THE FLA AND ALL OTHER GOVERNMENT AGENCIES HAVING JURISDICTION OVER THE PROJECT.
- OWNER SHALL REIMBURSE CSXT DIRECTLY FOR ALL COSTS OF FLAGGING AND INSPECTION SERVICE THAT ARE REQUIRED ON ACCOUNT OF CONSTRUCTION WITHIN CSXT PROPERTY SHOWN IN THE PLANS, OR COVERED BY AN APPROVED PLAN REVISION, SUPPLEMENTAL AGREEMENT OR CHANGE ORDER. INSPECTION SERVICE SHALL NOT RELIEVE CONTRACTOR FROM LIABILITY FOR ITS WORK.
- OWNER OR CONTRACTOR SHALL GIVE A MINIMUM OF 30 DAYS ADVANCE NOTICE TO CSXT REPRESENTATIVE FOR ANTICIPATED NEED FOR FLAGGING AND INSPECTION SERVICE. NO WORK SHALL BE UNDERTAKEN UNTIL THE FLAG PERSON(S) AND INSPECTOR(S) IS/ARE AT THE JOB SITE. IF IT IS NECESSARY FOR CSXT TO ADVERTISE A FLAGGING JOB FOR BID, CSXT SHALL NOT BE LIABLE FOR THE COST OF DELAYS ATTRIBUTABLE TO OBTAINING SUCH SERVICE.
- THE RIGHT OF WAY SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE CONDITION PRIOR TO BEGINNING THE PROJECT BEFORE FINAL ACCEPTANCE WILL BE PROVIDED. PUNCH LISTS SHALL BE RESPONDED TO PRIOR TO ISSUANCE OF AN ACCEPTANCE MEMORANDUM SIGNED BY THE CSXT REPRESENTATIVE.
- JACKING PIT: IDENTIFY HAZARDS AND PUT CONTROLS IN PLACE PRIOR TO START OF EXCAVATION. STAKE OR MARK PIT AS NEEDED FOR DIGGING. ESTABLISH A LAYDOWN AREA ABOVE THE FLOOD ZONE TO PLACE MOTORIZED EQUIPMENT. PLACE SNOW FENCE AROUND PIT 20' BEYOND THE LEADING EDGE OF EXCAVATION. ALL EROSION CONTROL METHODS SHALL BE INSTALLED AND MAINTAINED USING BEST MANAGEMENT PRACTICES AS REQUIRED. APPLY LAYER OF WASHED STONE TO BASE OF EXCAVATION TO ESTABLISH PROPER LINE AND GRADE (6" MIN).
- EXCAVATION: IF THE EXCAVATION IS 5 FEET OR GREATER IN DEPTH, THE WALLS MAY BE SLOPED AT 1.5 HORIZONTAL TO 1 VERTICAL TO REDUCE THE RISK OF CAVE-INS OR SLIDES. A SAFE MANNER IN WHICH TO ENTER AND EXIT THE EXCAVATION MUST BE ESTABLISHED.
- CONTRACTOR ALSO HAS THE SOLE RESPONSIBILITY OF ASCERTAINING THAT ALL OTHER UTILITIES HAVE BEEN PROPERLY LOCATED BY COMPLYING WITH THE LOCAL "CALL BEFORE YOU DIG" REGULATION(S). CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR NOTIFYING OWNERS OF ADJACENT PROPERTIES AND OF UNDERGROUND FACILITIES AND 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.
- BEFORE EXCAVATING, ALL SIGNAL CABLES AND OTHER UTILITIES MUST BE LOCATED AND MARKED/FLAGGED.

EXCEPTIONS NOTED:

- CONTRACTOR SHALL BE GOVERNED BY CSXT SR 1369-01 EXCAVATION AND TRENCHING GUIDELINES.
- CONTRACTOR SHALL BE GOVERNED BY SECTION VI (TEMPORARY EXCAVATION AND SHORING) AND SECTION VII (TRACK MONITORING) OF CSXT CONSTRUCTION SUBMITTAL CRITERIA.
- ALL MATERIAL AND EQUIPMENT WILL BE STAGED TO NOT BLOCK ANY CSXT ACCESS OR MAINTENANCE ROADS. CLEAR WORKING LOCATIONS FOR EQUIPMENT USED WILL BE LAID OUT AND APPROVED BY THE CSXT FLAGGER PRIOR TO EQUIPMENT SETUP.



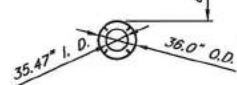
SHEET 4 OF 6		SEWER SYSTEM REHABILITATION	
REVISION OR ISSUE		CONTRACT 16-06	
		GRAVITY SEWER BORING IMPROVEMENTS	
		CSX RAILROAD CROSSING -	
		PLAN VIEW	
		FOR	
		JACKSON ENERGY AUTHORITY	
		JACKSON, TENNESSEE	
		SCALE	WAUFORD
		1"=50'	
PROJECT NUMBER		DATE	J. R. Wauford & Company, Consulting Engineers, Inc. Jackson, Tennessee (731) 668-1953 www.jrwaford.com
3590		APRIL, 2019	
		DESIGNED	DCT
		DRAWN	WZM
		CHECKED	JGD



- ABANDONED FACILITIES**
1. ABANDONED PIPELINES SHALL BE REMOVED OR COMPLETELY FILLED WITH CEMENT GROUT, COMPACTED SAND, OR OTHER METHODS APPROVED BY CSXT.
 2. ABANDONED MANHOLES AND OTHER STRUCTURES SHALL BE REMOVED TO A MINIMUM DEPTH OF 2 FEET BELOW FINISHED GRADE, AND COMPLETELY FILLED WITH CEMENT GROUT, COMPACTED SAND, OR OTHER METHODS AS APPROVED BY CSXT.
- CASING PIPE**
1. CASING PIPE SHALL BE SO CONSTRUCTED AS TO PREVENT LEAKAGE OF ANY SUBSTANCE FROM THE CASING THROUGHOUT ITS LENGTH, EXCEPT AT ENDS OF CASING WHERE ENDS ARE LEFT OPEN, OR THROUGH VENT PIPES WHEN ENDS OF CASING ARE SEALED. CASING SHALL BE INSTALLED SO AS TO PREVENT THE FORMATION OF A WATERWAY UNDER THE ROADWAY, AND WITH AN EVEN BEARING THROUGHOUT ITS LENGTH, AND SHALL SLOPE TO ONE END.
 2. THE INSIDE DIAMETER OF THE CASING PIPE SHALL BE SUCH AS TO ALLOW THE CARRIER PIPE TO BE REMOVED SUBSEQUENTLY WITHOUT DISTURBING THE CASING OR THE ROADBED. FOR STEEL PIPE CASING, THE INSIDE DIAMETER OF THE CASING PIPE SHALL BE AT LEAST 4 INCHES GREATER THAN THE LARGEST OUTSIDE DIAMETER OF THE CARRIER PIPE JOINTS OR COUPLINGS.
 3. STEEL PIPE SHALL HAVE A SPECIFIED MINIMUM YIELD STRENGTH, SMYS, OF AT LEAST 35,000 PSI.
 4. JOINTS BETWEEN THE SECTIONS OF PIPE SHALL BE FULLY WELDED AROUND THE COMPLETE CIRCUMFERENCE OF THE PIPE.
 5. THE CASING PIPE SHALL HAVE BOTH ENDS OF THE CASING BLOTTED UP IN SUCH A WAY AS TO PREVENT THE ENTRANCE OF FOREIGN MATERIAL, BUT ALLOWING LEAKAGE TO PASS IN THE EVENT OF A CARRIER BREAK.

- CASING PIPE INSTALLATION**
1. THE USE OF WATER OR OTHER LIQUIDS TO FACILITATE CASING REPLACEMENT AND SPOIL REMOVAL IS PROHIBITED.
 2. IF BORING INSTALLATION, AN OBSTRUCTION IS ENCOUNTERED WHICH PREVENTS INSTALLATION OF THE PIPE IN ACCORDANCE WITH CSXT RAILROAD SPECIFICATIONS, NOTIFY CSXT RAILROAD IMMEDIATELY, ABANDON THE PIPE IN PLACE, AND IMMEDIATELY FILL WITH GROUT. A NEW INSTALLATION PROCEDURE AND REVISED PLANS MUST BE SUBMITTED TO, AND APPROVED BY, CSXT RAILROAD BEFORE WORK CAN RESUME.
 3. THE BORING OPERATION SHALL BE PROCEEDED ON A 24-HOUR BASIS WITHOUT STOPPAGE (EXCEPT FOR ADDITIONAL LENGTHS OF PIPE) UNTIL THE LEASING EDGE OF THE PIPE HAS REACHED THE RECEIVING PIT.
 4. THE FRONT OF THE PIPE SHALL BE PROVIDED WITH MECHANICAL ARRANGEMENTS OR DEVICES THAT WILL POSITIVELY PREVENT THE AUGER FROM LEAVING THE PIPE SO THAT NO UNSUPPORTED EXCAVATION IS AHEAD OF THE PIPE.
 5. THE AUGER AND CUTTING HEAD ARRANGEMENT SHALL BE REMOVABLE FROM WITHIN THE PIPE IN THE EVENT AN OBSTRUCTION IS ENCOUNTERED.
 6. THE OVER-CUT BY THE CUTTING HEAD SHALL NOT EXCEED THE OUTSIDE DIAMETER OF THE PIPE BY MORE THAN 1/2 INCH. IF VOIDS SHOULD DEVELOP OR IF THE BORED HOLE DIAMETER IS GREATER THAN THE OUTSIDE DIAMETER OF THE PIPE (PLUS COATING) BY MORE THAN APPROXIMATELY 1 INCH, GROUTING OR OTHER METHODS APPROVED BY CSXT RAILROAD SHALL BE EMPLOYED TO FILL SUCH VOIDS.
 7. THE FACE OF THE CUTTING HEAD SHALL BE ARRANGED TO PROVIDE A REASONABLE OBSTRUCTION TO THE FREE FLOW OF SOFT OR POOR MATERIAL.
- CARRIER PIPE**
1. THE CARRIER PIPE SHALL BE LAD WITH SUFFICIENT SLACK SO THAT IT IS NOT IN TENSION.

CSX RAILROAD PIPELINE SPEC. REFERENCE	PIPELINE CONTENT DETAILS	
	COMMODITY DESCRIPTION:	UNTREATED SEWAGE
MAXIMUM OPERATING PRESSURE:	0 PSI	
IS COMMODITY FLAMMABLE:	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
CARRIER/CASING PIPE DETAILS		
	CARRIER PIPE	CASING PIPE
PIPE MATERIAL:	DUCTILE IRON	STEEL
MATERIAL SPECIFICATIONS & GRADE:	ANSI/AWWA A21.51/C151	ASTM A39 OR A53 GRADE B
SPECIFIED MINIMUM YIELD STRENGTH:	42,000 PSI	35,000 PSI
NOMINAL SIZE OUTSIDE DIAMETER (INCHES):	0.37	36.0
WALL THICKNESS (INCHES):	25.80	0.532
TYPE OF SEAM:	N/A	SEAMLESS
TYPE OF JOINTS:	PUSH ON	WELDED
TUNNEL LINER PLATES REQUIRED:	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
CATHODIC PROTECTION:	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO TYPE:	
PROTECTIVE COATING:	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO TYPE:	
TEMP. TRACK SUPPORT OR RIP-RAP REQ.:	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO MUST DESCRIBE & SHOW ON DWG.	



CROSS SECTION VIEW B-B

LOCATION: 91 FT. EAST OF MILE MARKER # 144

APPROXIMATE
LATITUDE: 35.606785
LONGITUDE: -89.807972

SHEET 4 of 6
REVISION OR ISSUE
PROJECT NUMBER 3590

SEWER SYSTEM REHABILITATION CONTRACT 16-06
GRAVITY SEWER BORING IMPROVEMENTS

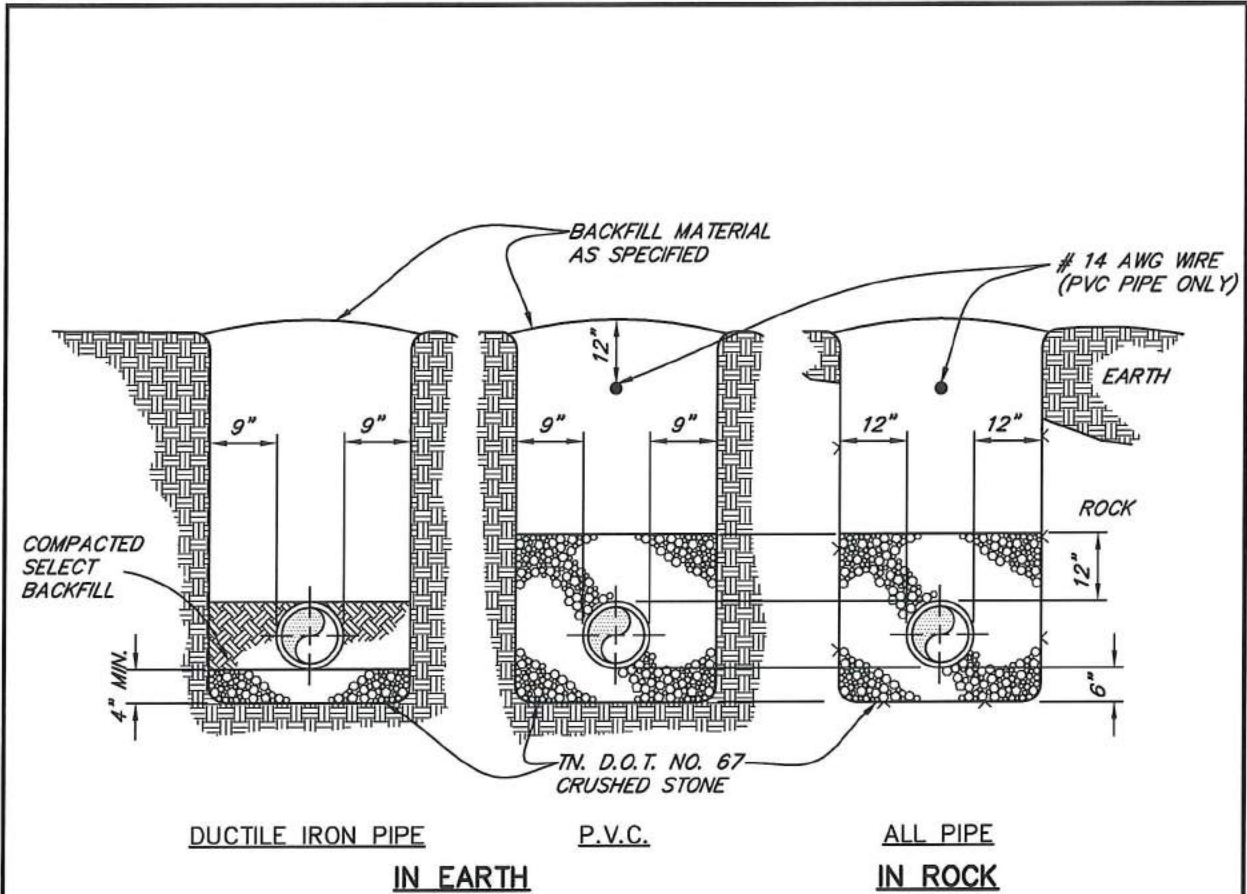
CSX RAILROAD CROSSING - PROFILE VIEW A-A

FOR JACKSON ENERGY AUTHORITY
JACKSON, TENNESSEE

SCALE
1" = 50' HOR.
1" = 10' VER.

WAUFORD
2 & Wauford & Company, Consulting Engineers, Inc.
Jackson, Tennessee
(731) 658-1953
www.wauford.com

DESIGNED DGT
DRAWN WZM
CHECKED JGD



STANDARD SEWER LINE BEDDING

SHEET 4 OF 6		SEWER SYSTEM REHABILITATION	
REVISION OR ISSUE		CONTRACT 16-06	
-	-	GRAVITY SEWER BORING IMPROVEMENTS	
		CSX RAILROAD CROSSING - TRENCH DETAIL	
		FOR	
		JACKSON ENERGY AUTHORITY	
		JACKSON, TENNESSEE	
		SCALE	WAUFORD
		1"=50' HOR.	
		1"=10' VER.	J. R. Wauford & Company, Consulting Engineers, Inc.
PROJECT NUMBER		DATE	Jackson, Tennessee
3590		APRIL, 2019	(731) 668-1953
			www.jrwauford.com
			DESIGNED DGT
			DRAWN WZM
			CHECKED JGD

THIS AGREEMENT 500151, made and entered into by and
between

WEST TENNESSEE RAILROAD LLC, a New Jersey Limited
Liability Company, hereinafter styled "Railway"; and

Jackson Energy Authority, a government entity,
hereinafter styled "Licensee";

WITNESSETH

WHEREAS, Licensee proposes to install, maintain, operate
and remove an 25-inch sewer pipeline in a 36-inch casing pipe, under and
across the right of way or property and any tracks of Railway, at Milepost
MP-471 plus 148 feet South, more or less, at or near Jackson, Madison
County, Tennessee, to be located with any ancillary appurtenances as shown
on print of Drawing marked Exhibit A, dated April 22, 2019, attached hereto
and made a part hereof (hereinafter called "Facilities");

NOW, THEREFORE, for and in consideration of the premises,
payment of a processing fee of SIX HUNDRED AND NO/100 DOLLARS (\$600.00),
and also an annual fee of SIX HUNDRED FOURTY FIVE AND NO/100 DOLLARS
(\$645.00), that will be subject to annual adjustments in proportion to
changes in the US CPI, payable in advance during the continuance of this
Agreement, and of the covenants hereinafter made, Railway hereby permits
and grants Licensee, insofar as Railway has the right to do, without
warranty and subject to all encumbrances, covenants and easements to which
Railway's title may be subject, the right to use and to occupy so much of
Railway's property as may be necessary for the Facilities, upon the
following terms and conditions:

1. Licensee will construct, and maintain the Facilities,
at its expense, in such a manner as will not interfere with the operations
of Railway or endanger persons or property of Railway, and in accordance
with (a) plans and specifications (if any) shown on said print(s) and any
other specifications prescribed by Railway, (b) applicable governmental
regulations or laws, and (c) applicable specifications adopted by the
American Railway Engineering Association when not in conflict with plans,
specifications or regulations mentioned in (a) and (b) above. If Licensee
uses a contractor to do any of the work performed on the Facilities
(including initial construction and subsequent relocation or substantial
maintenance and repair work), then the Licensee shall require its
contractor to execute Railway's Right of Entry Agreement. Licensee
acknowledges receipt of a copy of Railway's Right of Entry Agreement and
understands its terms, provisions and requirements, and will inform its
contractor of the need to execute the Agreement. Under no circumstances
will Licensee's contractor be allowed onto Railway's premises without first
executing the Right of Entry Agreement.

2. Licensee hereby agrees to indemnify and save harmless
Railway, its officers, agents and employees, from and against any and all
liability, claims, losses, damages, expenses (including attorney's fees)
or costs for personal injuries (including death) and/or property damage to
whomsoever or whatsoever occurring which arises in any manner from the

installation, maintenance, operation, presence or removal or the failure to properly install, maintain, operate or remove the Facilities, unless such losses, damages or injuries shall be caused solely by the negligence of Railway.

3. Licensee assumes all responsibility for any environmental obligations imposed under applicable laws, regulations or ordinances relating to the installation of the Facilities and/or to any contamination of any property, water, air or groundwater arising or resulting from Licensee's permitted operations or uses or Railway's property pursuant to this Agreement. In addition, Licensee shall obtain any necessary permits to install the Facilities. Licensee agrees to indemnify and hold harmless Railway from and against any and all liability, fines, penalties, claims, demands, costs (including attorneys' fees), losses or lawsuits brought by any person, company or governmental entity relating to contamination of any property, water, air or groundwater due to the use or presence of the Facilities. It is agreed that this indemnity provision extends to any cleanup costs related to Licensee's activities upon Railway's property and to any costs related to cleanup of the Facilities or to other property caused by the use of the Facilities.

4. (a) Prior to commencement of installation or maintenance of the Facilities or entry on Railway's property, Licensee or its contractor shall procure and maintain during the course of said installation or maintenance, a policy of general liability insurance, containing products and completed operations and contractual liability coverage, with a combined single limit of not less than \$5,000,000 for each occurrence. Licensee or its contractor also shall procure and maintain during the course of said installation, maintenance or entry on Railway's property a Railroad Protective Liability Insurance Policy with Railway as the named insured and having a combined single limit of \$5,000,000, each occurrence, and \$10,000,000 in the aggregate. The insurance required herein shall be of such form and content as may be acceptable to Railway. Evidence of such insurance (a certificate of insurance for the general liability insurance policy and the original policy of Railroad Protective Liability Insurance) must be furnished to and approved by Railway's Real Estate Manager, West Tennessee Railroad, PO Box 3295, Sea Bright, NJ 07760, prior to commencement of installation or maintenance of the Facilities or entry on Railway's property.

(b) The insurance required herein shall not limit the liability assumed by the Licensee under this Agreement.

(c) In lieu of the insurance requirements above, Licensee may provide to Railway a certificate of self-insurance in such amounts and in such form as are satisfactory to Railway.

5. The details of the Facilities to be installed and maintained shall be at the option of Licensee, and subject to the approval of the General Manager of Railway. In case of failure of Licensee to do the work as herein specified, Railway reserves the right to remove the Facilities from Railway's premises at the expense of Licensee, and to terminate this Agreement upon ten (10) days' written notice.

6. If Railway shall make any changes, alterations in or additions to the line, grade, tracks, structures, roadbed, installations or works of Railway at or near the Facilities, Licensee shall, at its own cost and expense, upon thirty (30) days' notice in writing from Railway, make such changes in the location and character of the Facilities as, in the opinion of the General Manager of Railway, shall be necessary or appropriate to accommodate any construction, improvements, alterations, changes or additions of Railway.

7. Licensee will notify Railway prior to the installation and placing in service of cathodic protection in order that tests may be conducted on Railway's signal, communications and other electronic systems for possible interference. If the Facilities cause degradation of the signal, communications or other electronic facilities of Railway, Licensee, at its expense, will relocate the cathodic protection and/or modify the facilities to the satisfaction of Railway so as to eliminate such degradation. Such modifications may include, without limiting the generality of the foregoing, providing additional shielding, reactances or other corrective measures deemed necessary by Railway. This provision applies to the existing signal, communications and electronic equipment of Railway and to any signal, communications or electronic equipment which Railway may install in the future.

8. If Licensee fails to take any corrective measures requested by Railway in a timely manner or if an emergency situation is presented which, in the Railway's judgment, requires immediate repairs to the facilities, Railway, at Licensee's expense, may undertake such corrective measures or repairs as it deems necessary or desirable.

9. Notwithstanding any other provision of this Agreement, it is understood, agreed and covenanted that Licensee accepts this Agreement as a mere license and assumes all risk of damage to its property by reason of its occupation of the premises herein described caused by any defects therein or business conducted thereon, whether caused by the negligence of Railway, its officers, agents or employees, or otherwise, and Licensee hereby indemnifies Railway, its officers, agents, and employees, from and against any such liability for said damage.

10. Railway shall furnish, at the cost of Licensee, labor and materials to support its tracks and to protect its traffic during the installation, maintenance, repair, renewal or removal of the Facilities.

11. It is further agreed between the parties that the premises shall be used by Licensee only for the Facilities and for no other purpose without the written permission of the chief engineering officer of Railway,

12. No fee adjustment refunds of \$100.00 or less will be made.

13. Licensee shall give Railway seventy-two (72) hours' advance notice (or less in case of emergencies) of any work to be performed on the premises of Railway. Licensee agrees to pay any costs incurred by Railway for the purpose of protection and inspection considered necessary

by Railway during installation, maintenance, operation, modification, replacement and/or removal of the Facilities.

14. Licensee shall not assign this Agreement without the written consent of Railway.

15. The word "Railway" as used herein shall include any other company whose property at the aforesaid location may be leased or operated by Railway. Said term also shall include Railway's officers, agents and employees, and any parent company, subsidiary or affiliate of Railway and their officers, agents and employees.

16. This Agreement may be terminated by either party upon sixty (60) days' written notice to the other party. During said sixty-day period, Licensee shall remove the Facilities from Railway's premises and restore said premises to a condition satisfactory to Railway's General Manager. If Licensee fails to remove the Facilities within the aforesaid sixty day period, Railway may elect: (a) to become the owner of the Facilities without any claim or consideration whatsoever therefor by or to Licensee, its successors or assigns, or (b) to remove the Facilities and all property of Licensee from the premises of Railway at the expense of Licensee. Licensee agrees to reimburse Railway for any and all costs of such removal. No termination of this Agreement shall affect any liability incurred by either party hereto prior to the effective date of such termination.

17. This Agreement shall take effect as of the 1st day of August 2019

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate, each part being an original, as of the 1st day of August 2019.

Witness:

WEST TENNESSEE RAILROAD LLC
By

As to Railway

President

Witness

JACKSON ENERGY AUTHORITY 
By



As to Licensee



Title

APPLICATION

PIPELINE CROSSING OR PARALLELISM OVER/UNDER PROPERTIES AND TRACK

DATE: April 22, 2019

The Applicant:

1. Correct name of applicant Jackson Energy Authority
Name of Project Manager Eddie O'Neill, P.E.
2. Telephone 731-422-7214 Fax Number _____
3. Street Address 167 Miller Avenue
4. City/State/Zip Jackson, TN 38305
5. State of Incorporation Tennessee
6. If partnership list all partners by their full names (women please list by birth and marriage names) N/A

The Line Crossing or Parallelism:

7. Type of proposed crossing or parallelism: Bored Gravity Sewer Crossing
8. Located between Jackson, TN and Jackson, TN R R Stations
9. Feet (North/South) 148' south of Mile Post number 471
(if applicable) TO: Feet (North/South) N/A of Mile Post number _____
10. Is this a revision to an existing crossing/parallelism? No Date _____
11. Total length within Railroad right of way 170'
12. Will any part of the pipeline be located in a public road right of way? If so, state road and municipality No
13. If pipe line running parallel (or approximately parallel) to Railroad's tracks for any distance, give approximate length _____ 75 ft.
14. Angle between center line of right of way and pipe line will be _____ 90 degrees.
15. Product to be conveyed Sanitary Sewer
Flammable YES [] NO [X]
Temperature 70 degrees

16. Maximum working pressure N/A PSI Field test pressure 2 psi

PSI Type Test N/A

17. Location of shut-off valves N/A

Pipe Specifications:

	Carrier Pipe	Casing Pipe
Material	<u>Ductile Iron</u>	<u>Steel</u>
Specifications and Grade	<u>ANSI/AWWA A21.51/C151</u>	<u>ASTM A39 or A53 Grade B</u>
Minimum Yield Strength of Material PSI	<u>42,000 PSI</u>	<u>35,000 PSI</u>
Mill Test Pressure PSI	<u>N/A</u>	<u>N/A</u>
Inside Diameter	<u>25.06"</u>	<u>34.94"</u>
Wall Thickness	<u>0.37"</u>	<u>0.532"</u>
Outside Diameter	<u>25.80"</u>	<u>36.0"</u>
Type of Seam	<u>N/A</u>	<u>Seamless</u>
Laying Lengths	<u>18'</u>	<u>N/A</u>
Kind of Joints	<u>Push On</u>	<u>Welded</u>

Vents: Number 0 Size _____ Hgt. above the ground _____ ft

Seals: Both ends X One end _____

Bury beneath tracks: Base of rail to top of casing 24 ft 0 in

Bury not beneath tracks: 9 ft 0 in

Bury roadway ditches: N/A ft _____ in

Cathodic Protection: YES [] NO [X]

Protective Coating: YES [] NO [X]

Kind _____

Type, size and spacing of insulators or supports Stainless steel or PVC, 8-inches wide at 6.5' center to center

Changes To Existing Crossing/Parrallelism

18. Specify exact changes to be made to the existing crossing or parrallelism N/A

(please use additional paper if necessary and attach to application)

19. Will changes increase/decrease existing encroachment? N/A

The Installation:

20. Method of Installation Jack and Bore

21. Will temporary track support or riprapping be required? YES [] NO [X]

Describe: _____

22. Description of proposed area of occupancy of property for installation purposes:

One bore pit will be located within right-of-way but shall not disturb railroad tracks

(also outline on detail map in green ink)

23. Wires, poles, obstructions to be relocated YES [] NO [X]

If yes describe _____

24. Proposed length of time for occupancy of property Permanent crossing

25. Name and address of Party to be responsible for continued maintenance and repair of crossing Jackson Energy Authority, 167 Miller Avenue, Jackson, Tennessee 38305

26. Name and address of Party to be responsible for future and continued lease payments _____

Jackson Energy Authority, 167 Miller Avenue, Jackson, Tennessee 38305

Plans for proposed installation shall be submitted to and meet the approval of the Railroad before construction is begun. Material and installation are to be in strict accordance with specifications of American Railway Engineering Association (AREA), and requirements of the Railroad. Original and two (2) copies of this form shall be submitted, accompanied by two (2) lettersize prints of a drawing showing plan, elevation section of crossing from field survey, location in respect to milepost (outlined in green ink), width of railroad's right of way, and location of adjacent structures affecting crossing and all information required in Figures 1 and 2 of AREA Specifications, Part 5 - Pipelines. If open cutting or tunneling is necessary, details of sheeting and method of supporting tracks or driving tunnel shall be shown.

Applicant agrees to reimburse the Railroad for any cost incurred by the Railroad incident to installation, maintenance, and/or supervision necessitated by this installation, if open cut, track resurfacing will be necessary. Further, applicant agrees to assume all liability for accidents or injuries which arise as a result of this installation.

West Tennessee Railroad
Pipeline Crossing Application

Date: 4/17/19

Company: JACKSON ENERGY AUTHORITY

[Signature]
Signature of Officer

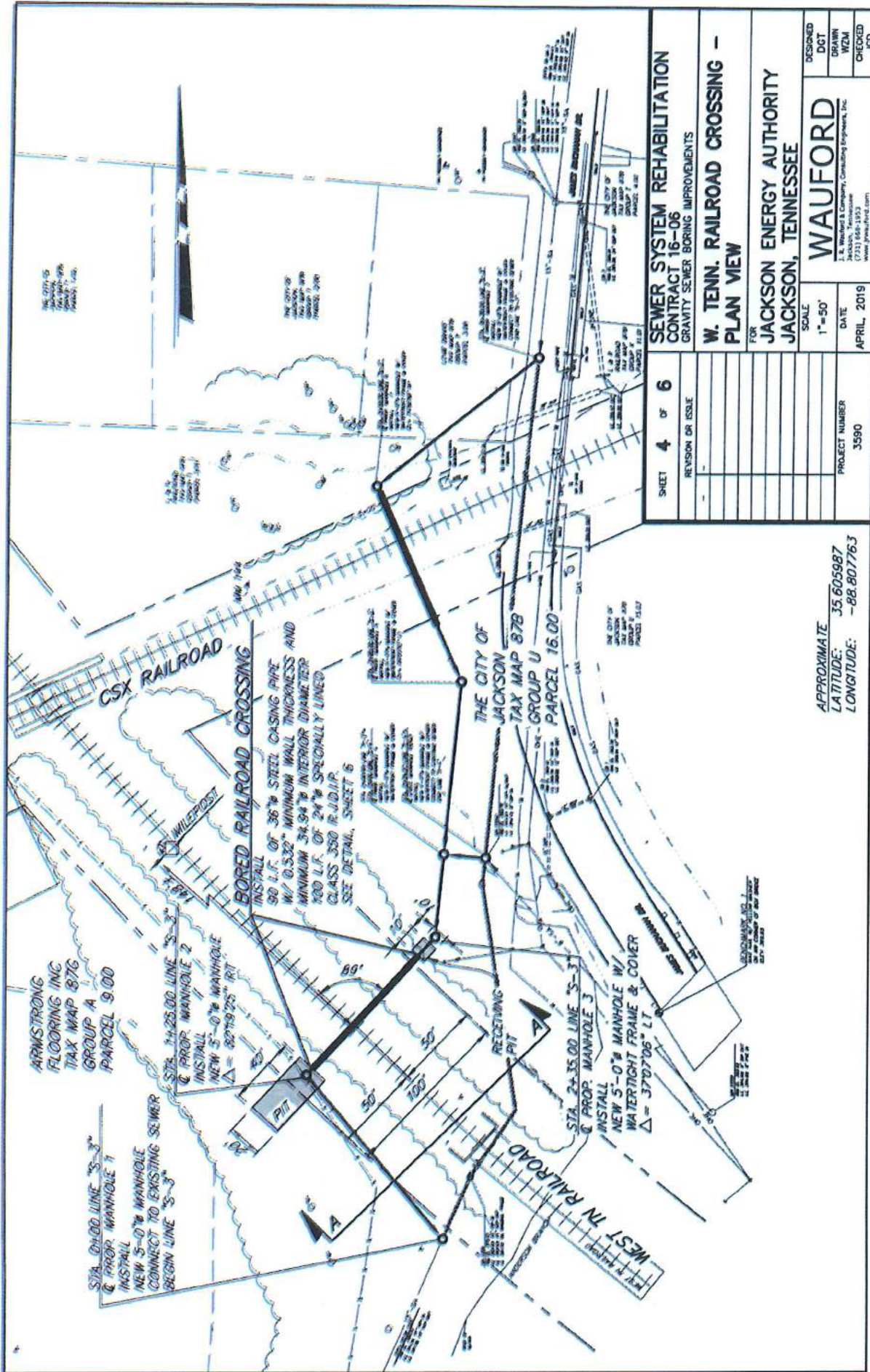
Print: FOOTE O'NEILL

Title: W/WWW OPERATIONS MANAGER

Accepted by:

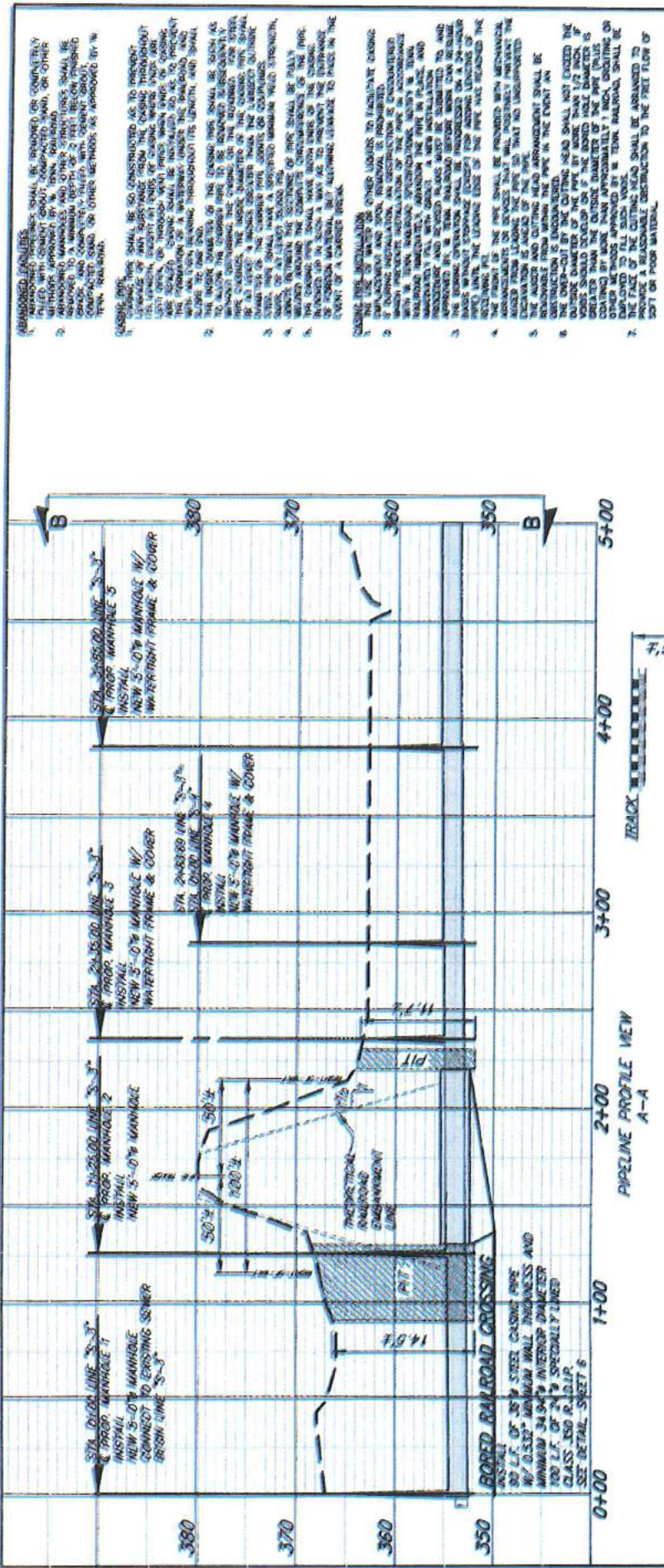
Date: 7/10/19
West Tennessee Railroad

[Signature]
Signature of Railroad Officer
Print:
Title:



SHEET 4 OF 6		DESIGNED	JED
REVISION OR ISSUE		DCT	
		DRAWN	WZM
		CHECKED	JED
		PROJECT NUMBER	3590
		SCALE	1"=50'
		DATE	APRIL, 2019
		SEWER SYSTEM REHABILITATION CONTRACT 16-06 GRAVITY SEWER BORING IMPROVEMENTS W. TENN. RAILROAD CROSSING -- PLAN VIEW FOR JACKSON ENERGY AUTHORITY JACKSON, TENNESSEE	
		DESIGNED	WAUFORD
		DRAWN	J. A. Wauford & Company, Consulting Engineers, Inc.
		CHECKED	JED

APPROXIMATE
 LATITUDE: 35.605987
 LONGITUDE: -88.807763



ABANDONED FACILITIES
 1. ALL EXISTING FACILITIES SHALL BE REMOVED OR COMPLETELY RELOCATED TO ADEQUATELY SERVE THE PROJECT AND TO BE REMOVED BY THE CONTRACTOR AT HIS OWN RISK AND COST, UNLESS OTHERWISE SPECIFIED BY THE CONTRACT DOCUMENTS.
 2. ALL EXISTING FACILITIES SHALL BE REMOVED OR COMPLETELY RELOCATED TO ADEQUATELY SERVE THE PROJECT AND TO BE REMOVED BY THE CONTRACTOR AT HIS OWN RISK AND COST, UNLESS OTHERWISE SPECIFIED BY THE CONTRACT DOCUMENTS.
 3. ALL EXISTING FACILITIES SHALL BE REMOVED OR COMPLETELY RELOCATED TO ADEQUATELY SERVE THE PROJECT AND TO BE REMOVED BY THE CONTRACTOR AT HIS OWN RISK AND COST, UNLESS OTHERWISE SPECIFIED BY THE CONTRACT DOCUMENTS.

CASING PIPE
 1. CASING PIPE SHALL BE SO CONSTRUCTED AS TO PREVENT LEAKAGE OF ANY SUBSTANCE FROM THE CASING THROUGHOUT THE LENGTH OF THE CASING. CASING SHALL BE INSTALLED WITH A MINIMUM OF 18" COVER UNDER THE CASING. CASING SHALL BE INSTALLED WITH A MINIMUM OF 18" COVER UNDER THE CASING. CASING SHALL BE INSTALLED WITH A MINIMUM OF 18" COVER UNDER THE CASING. CASING SHALL BE INSTALLED WITH A MINIMUM OF 18" COVER UNDER THE CASING.

CASING PIPE INSTALLATION
 1. THE USE OF WATER OR OTHER LIQUIDS TO FACILITATE CASING INSTALLATION IS PROHIBITED.
 2. CASING SHALL BE INSTALLED WITH A MINIMUM OF 18" COVER UNDER THE CASING. CASING SHALL BE INSTALLED WITH A MINIMUM OF 18" COVER UNDER THE CASING. CASING SHALL BE INSTALLED WITH A MINIMUM OF 18" COVER UNDER THE CASING.

CARRIER PIPE
 1. THE CARRIER PIPE SHALL BE LAID WITH SUFFICIENT SLACK SO THAT IT IS NOT IN TENSION.

SEWER SYSTEM REHABILITATION CONTRACT 16-06 GRAVITY SEWER BORING IMPROVEMENTS	
W. TENN. RAILROAD CROSSING - PROFILE VIEW	
FOR JACKSON ENERGY AUTHORITY JACKSON, TENNESSEE	
SCALE 1"=50' HOR. 1"=10' VER.	DESIGNED DOT
DATE APRIL, 2019	DRAWN WCM
PROJECT NUMBER 3590	CHECKED JCD

CROSS SECTION VIEW B-B
 LOCATION: 148 FT. SOUTH EAST OF MILE MARKER # 471
 APPROXIMATE LATITUDE: 35.605887
 APPROXIMATE LONGITUDE: -88.807763

NON-FLAMMABLE SUBSTANCE. NEOPRENE RUBBER END SEAL

PIPELINE CONTENT DETAILS	
COMMODITY DESCRIPTION: UNTREATED SEWAGE	
MAXIMUM OPERATING PRESSURE: 0 PSI	
IS COMMODITY FLAMMABLE: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
CARRIER/CASING PIPE DETAILS	
PIPE MATERIAL:	CASING PIPE
ANS/AWWA A21.51/C151	STEEL
42,000 PSI	ASTM A136 OR A53 GRADE B
25.80	35,000 PSI
N/A	36.0
PUSH ON	0.537
	SEAMLESS
	WELDED
TUNNEL LINER PLATES REQUIRED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
CATHODIC PROTECTION: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	TYPE:
PROTECTIVE COATING: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	TYPE:
TEMP. TRACK SUPPORT OR RR-RAP REQ.: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	MUST DESCRIBE & SHOW ON Dwg.

THIS AGREEMENT 500152, made and entered into by and between

WEST TENNESSEE RAILROAD LLC, a New Jersey Limited Liability Company, hereinafter styled "Railway"; and

Jackson Energy Authority, a government entity, hereinafter styled "Licensee";

WITNESSETH

WHEREAS, Licensee proposes to install, maintain, operate and remove an 38-inch sewer pipeline in a 54-inch casing pipe, under and across the right of way or property and any tracks of Railway, at Milepost MP-471 plus 2,888 feet South, more or less, at or near Jackson, Madison County, Tennessee, to be located with any ancillary appurtenances as shown on print of Drawing marked Exhibit A, dated April 22, 2019, attached hereto and made a part hereof (hereinafter called "Facilities");

NOW, THEREFORE, for and in consideration of the premises, payment of a processing fee of SIX HUNDRED AND NO/100 DOLLARS (\$600.00), and also an annual fee of SIX HUNDRED FORTY FIVE AND NO/100 DOLLARS (\$645.00), that will be subject to annual adjustments in proportion to changes in the US CPI, payable in advance during the continuance of this Agreement, and of the covenants hereinafter made, Railway hereby permits and grants Licensee, insofar as Railway has the right to do, without warranty and subject to all encumbrances, covenants and easements to which Railway's title may be subject, the right to use and to occupy so much of Railway's property as may be necessary for the Facilities, upon the following terms and conditions:

1. Licensee will construct, and maintain the Facilities, at its expense, in such a manner as will not interfere with the operations of Railway or endanger persons or property of Railway, and in accordance with (a) plans and specifications (if any) shown on said print(s) and any other specifications prescribed by Railway, (b) applicable governmental regulations or laws, and (c) applicable specifications adopted by the American Railway Engineering Association when not in conflict with plans, specifications or regulations mentioned in (a) and (b) above. If Licensee uses a contractor to do any of the work performed on the Facilities (including initial construction and subsequent relocation or substantial maintenance and repair work), then the Licensee shall require its contractor to execute Railway's Right of Entry Agreement. Licensee acknowledges receipt of a copy of Railway's Right of Entry Agreement and understands its terms, provisions and requirements, and will inform its contractor of the need to execute the Agreement. Under no circumstances will Licensee's contractor be allowed onto Railway's premises without first executing the Right of Entry Agreement.

2. Licensee hereby agrees to indemnify and save harmless Railway, its officers, agents and employees, from and against any and all liability, claims, losses, damages, expenses (including attorney's fees) or costs for personal injuries (including death) and/or property damage to whomsoever or whatsoever occurring which arises in any manner from the

installation, maintenance, operation, presence or removal or the failure to properly install, maintain, operate or remove the Facilities, unless such losses, damages or injuries shall be caused solely by the negligence of Railway.

3. Licensee assumes all responsibility for any environmental obligations imposed under applicable laws, regulations or ordinances relating to the installation of the Facilities and/or to any contamination of any property, water, air or groundwater arising or resulting from Licensee's permitted operations or uses or Railway's property pursuant to this Agreement. In addition, Licensee shall obtain any necessary permits to install the Facilities. Licensee agrees to indemnify and hold harmless Railway from and against any and all liability, fines, penalties, claims, demands, costs (including attorneys' fees), losses or lawsuits brought by any person, company or governmental entity relating to contamination of any property, water, air or groundwater due to the use or presence of the Facilities, It is agreed that this indemnity provision extends to any cleanup costs related to Licensee's activities upon Railway's property and to any costs related to cleanup of the Facilities or to other property caused by the use of the Facilities.

4. (a) Prior to commencement of installation or maintenance of the Facilities or entry on Railway's property, Licensee or its contractor shall procure and maintain during the course of said installation or maintenance, a policy of general liability insurance, containing products and completed operations and contractual liability coverage, with a combined single limit of not less than \$5,000,000 for each occurrence. Licensee or its contractor also shall procure and maintain during the course of said installation, maintenance or entry on Railway's property a Railroad Protective Liability Insurance Policy with Railway as the named insured and having a combined single limit of \$5,000,000, each occurrence, and \$10,000,000 in the aggregate. The insurance required herein shall be of such form and content as may be acceptable to Railway. Evidence of such insurance (a certificate of insurance for the general liability insurance policy and the original policy of Railroad Protective Liability Insurance) must be furnished to and approved by Railway's Real Estate Manager, West Tennessee Railroad, PO Box 3295, Sea Bright, NJ 07760, prior to commencement of installation or maintenance of the Facilities or entry on Railway's property.

(b) The insurance required herein shall not limit the liability assumed by the Licensee under this Agreement.

(c) In lieu of the insurance requirements above, Licensee may provide to Railway a certificate of self-insurance in such amounts and in such form as are satisfactory to Railway.

5. The details of the Facilities to be installed and maintained shall be at the option of Licensee, and subject to the approval of the General Manager of Railway. In case of failure of Licensee to do the work as herein specified, Railway reserves the right to remove the Facilities from Railway's premises at the expense of Licensee, and to terminate this Agreement upon ten (10) days' written notice.

6. If Railway shall make any changes, alterations in or additions to the line, grade, tracks, structures, roadbed, installations or works of Railway at or near the Facilities, Licensee shall, at its own cost and expense, upon thirty (30) days' notice in writing from Railway, make such changes in the location and character of the Facilities as, in the opinion of the General Manager of Railway, shall be necessary or appropriate to accommodate any construction, improvements, alterations, changes or additions of Railway.

7. Licensee will notify Railway prior to the installation and placing in service of cathodic protection in order that tests may be conducted on Railway's signal, communications and other electronic systems for possible interference. If the Facilities cause degradation of the signal, communications or other electronic facilities of Railway, Licensee, at its expense, will relocate the cathodic protection and/or modify the Facilities to the satisfaction of Railway so as to eliminate such degradation. Such modifications may include, without limiting the generality of the foregoing, providing additional shielding, reactances or other corrective measures deemed necessary by Railway. This provision applies to the existing signal, communications and electronic equipment of Railway and to any signal, communications or electronic equipment which Railway may install in the future.

8. If Licensee fails to take any corrective measures requested by Railway in a timely manner or if an emergency situation is presented which, in the Railway's judgment, requires immediate repairs to the facilities, Railway, at Licensee's expense, may undertake such corrective measures or repairs as it deems necessary or desirable.

9. Notwithstanding any other provision of this Agreement, it is understood, agreed and covenanted that Licensee accepts this Agreement as a mere license and assumes all risk of damage to its property by reason of its occupation of the premises herein described caused by any defects therein or business conducted thereon, whether caused by the negligence of Railway, its officers, agents or employees, or otherwise, and Licensee hereby indemnifies Railway, its officers, agents, and employees, from and against any such liability for said damage.

10. Railway shall furnish, at the cost of Licensee, labor and materials to support its tracks and to protect its traffic during the installation, maintenance, repair, renewal or removal of the Facilities.

11. It is further agreed between the parties that the premises shall be used by Licensee only for the Facilities and for no other purpose without the written permission of the chief engineering officer of Railway,

12. No fee adjustment refunds of \$100.00 or less will be made.

13. Licensee shall give Railway seventy-two (72) hours' advance notice (or less in case of emergencies) of any work to be performed on the premises of Railway. Licensee agrees to pay any costs incurred by Railway for the purpose of protection and inspection considered necessary

by Railway during installation, maintenance, operation, modification, replacement and/or removal of the Facilities.

14. Licensee shall not assign this Agreement without the written consent of Railway.

15. The word "Railway" as used herein shall include any other company whose property at the aforesaid location may be leased or operated by Railway. Said term also shall include Railway's officers, agents and employees, and any parent company, subsidiary or affiliate of Railway and their officers, agents and employees.

16. This Agreement may be terminated by either party upon sixty (60) days' written notice to the other party. During said sixty-day period, Licensee shall remove the Facilities from Railway's premises and restore said premises to a condition satisfactory to Railway's General Manager. If Licensee fails to remove the Facilities within the aforesaid sixty day period, Railway may elect: (a) to become the owner of the Facilities without any claim or consideration whatsoever therefor by or to Licensee, its successors or assigns, or (b) to remove the Facilities and all property of Licensee from the premises of Railway at the expense of Licensee. Licensee agrees to reimburse Railway for any and all costs of such removal. No termination of this Agreement shall affect any liability incurred by either party hereto prior to the effective date of such termination.

17. This Agreement shall take effect as of the 1st day of August 2019

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate, each part being an original, as of the 1st day of August 2019.

Witness:

WEST TENNESSEE RAILROAD LLC
By

As to Railway

President

Witness

JACKSON ENERGY AUTHORITY *30*
By

Delisa Love

As to Licensee

Stephen D. Payne

Title

APPLICATION

PIPELINE CROSSING OR PARALLELISM
OVER/UNDER PROPERTIES AND TRACKDATE: April 22, 2019**The Applicant:**

1. Correct name of applicant Jackson Energy Authority
Name of Project Manager Eddie O'Neill, P.E.
2. Telephone 731-422-7214 Fax Number _____
3. Street Address 167 Miller Avenue
4. City/State/Zip Jackson, TN 38305
5. State of Incorporation Tennessee
6. If partnership list all partners by their full names (women please list by birth and marriage names) N/A

The Line Crossing or Parallelism:

7. Type of proposed crossing or parallelism: Bored Gravity Sewer Crossing
8. Located between Jackson, TN and Jackson, TN R R Stations
9. Feet (North/South) 2,888' south of Mile Post number 471
(if applicable) TO: Feet (North/South) N/A of Mile Post number _____
10. Is this a revision to an existing crossing/parallelism? No Date _____
11. Total length within Railroad right of way 700'
12. Will any part of the pipeline be located in a public road right of way? If so, state road and municipality No
13. If pipe line running parallel (or approximately parallel) to Railroad's tracks for any distance, give approximate length N/A ft.
14. Angle between center line of right of way and pipe line will be 90 degrees.
15. Product to be conveyed Sanitary Sewer
Flammable YES [] NO [X]
Temperature 70 degrees

16. Maximum working pressure N/A PSI Field test pressure 2 psi
PSI Type Test N/A

17. Location of shut-off valves N/A

Pipe Specifications:

	Carrier Pipe	Casing Pipe
Material	<u>Ductile Iron</u>	<u>Steel</u>
Specifications and Grade	<u>ANSI/AWWA A21.51/C151</u>	<u>ASTM A39 or A53 Grade B</u>
Minimum Yield Strength of Material PSI	<u>42,000 PSI</u>	<u>35,000 PSI</u>
Mill Test Pressure PSI	<u>N/A</u>	<u>N/A</u>
Inside Diameter	<u>37.36"</u>	<u>52.438"</u>
Wall Thickness	<u>0.47"</u>	<u>0.781"</u>
Outside Diameter	<u>38.30"</u>	<u>54.0"</u>
Type of Seam	<u>N/A</u>	<u>Seamless</u>
Laying Lengths	<u>18'</u>	<u>N/A</u>
Kind of Joints	<u>Push On</u>	<u>Welded</u>
Vents: Number <u>0</u> Size _____ Hgt. above the ground _____ ft		
Seals: Both ends <u>X</u> One end _____		
Bury beneath tracks: Base of rail to top of casing _____ 9 ft _____ 0 in		
Bury not beneath tracks: _____ 9 ft _____ 0 in		
Bury roadway ditches: <u>N/A</u> ft _____ in		
Cathodic Protection: YES [] NO [X]		
Protective Coating: YES [] NO [X]		
Kind _____		
Type, size and spacing of insulators or supports <u>Stainless steel or PVC, 8-inches wide at 6.5' center to center</u>		

Changes To Existing Crossing/Parrallelism

18. Specify exact changes to be made to the existing crossing or parrallelism N/A

(please use additional paper if necessary and attach to application)

19. Will changes increase/decrease existing encroachment? N/A

The Installation:

20. Method of Installation Jack and Bore

21. Will temporary track support or riprapping be required? YES [] NO [X]

Describe: _____

22. Description of proposed area of occupancy of property for installation purposes:

Bore pits will be located at four (4) locations inside railroad yard, but shall not disturb
railroad tracks

(also outline on detail map in green ink)

23. Wires, poles, obstructions to be relocated YES [] NO [X]

If yes describe _____

24. Proposed length of time for occupancy of property Permanent crossing

25. Name and address of Party to be responsible for continued maintenance and repair of
crossing Jackson Energy Authority, 167 Miller Avenue, Jackson, Tennessee 38305

26. Name and address of Party to be responsible for future and continued lease payments _____
Jackson Energy Authority, 167 Miller Avenue, Jackson, Tennessee 38305

Plans for proposed installation shall be submitted to and meet the approval of the Railroad before construction is begun. Material and installation are to be in strict accordance with specifications of American Railway Engineering Association (AREA), and requirements of the Railroad. Original and two (2) copies of this form shall be submitted, accompanied by two (2) lettersize prints of a drawing showing plan, elevation section of crossing from field survey, location in respect to milepost (outlined in green ink), width of railroad's right of way, and location of adjacent structures affecting crossing and all information required in Figures 1 and 2 of AREA Specifications, Part 5 - Pipelines. If open cutting or tunneling is necessary, details of sheeting and method of supporting tracks or driving tunnel shall be shown.

Applicant agrees to reimburse the Railroad for any cost incurred by the Railroad incident to installation, maintenance, and/or supervision necessitated by this installation, if open cut, track resurfacing will be necessary. Further, applicant agrees to assume all liability for accidents or injuries which arise as a result of this installation.

West Tennessee Railroad
Pipeline Crossing Application

Date: 4/17/14

Company: JACKSON ENERGY AUTHORITY

Eddie O'Neill
Signature of Officer

Print: EDDIE O'NEILL

Title: W/wn OPERATIONS MANAGER

Accepted by:

Date: 7/10/15

West Tennessee Railroad

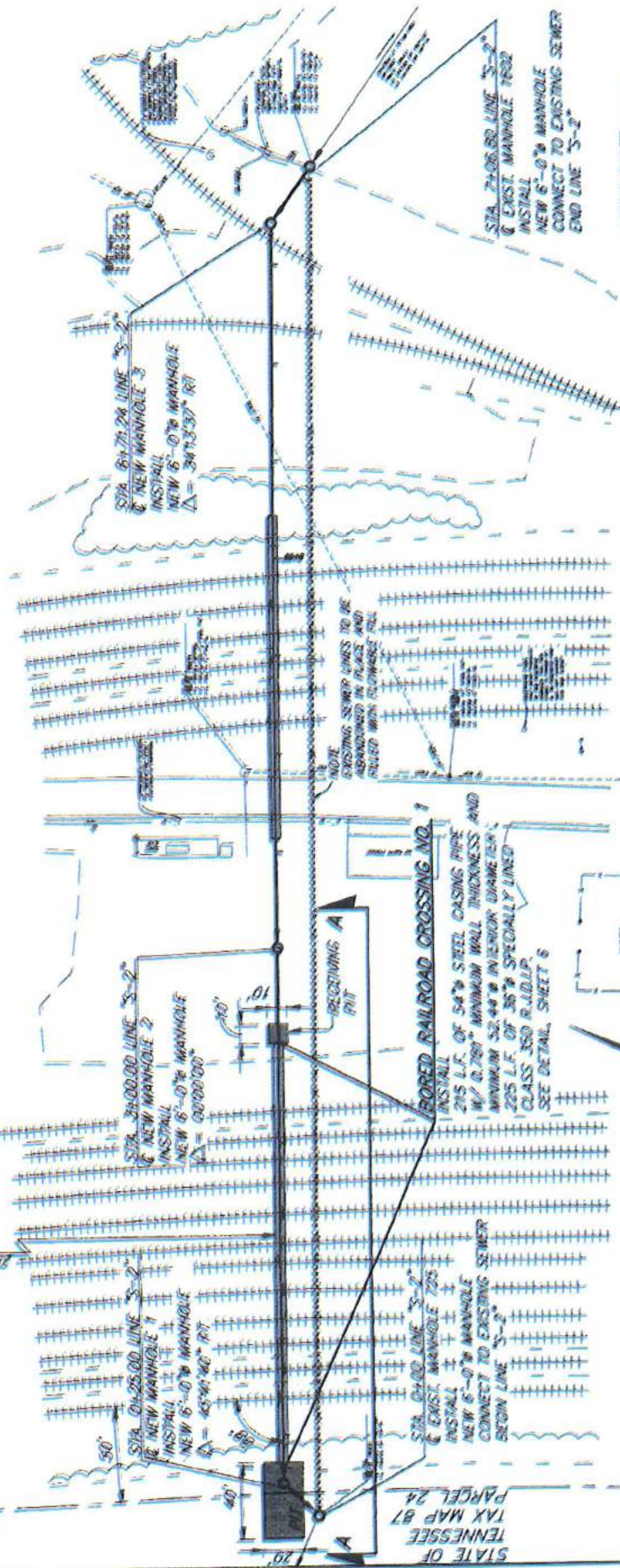
Kary OC
Signature of Railroad Officer

Print:

Title:

W. TENN. RAILROAD
TAX MAP 87
PARCEL 25.01

MILEPOST
2585.4



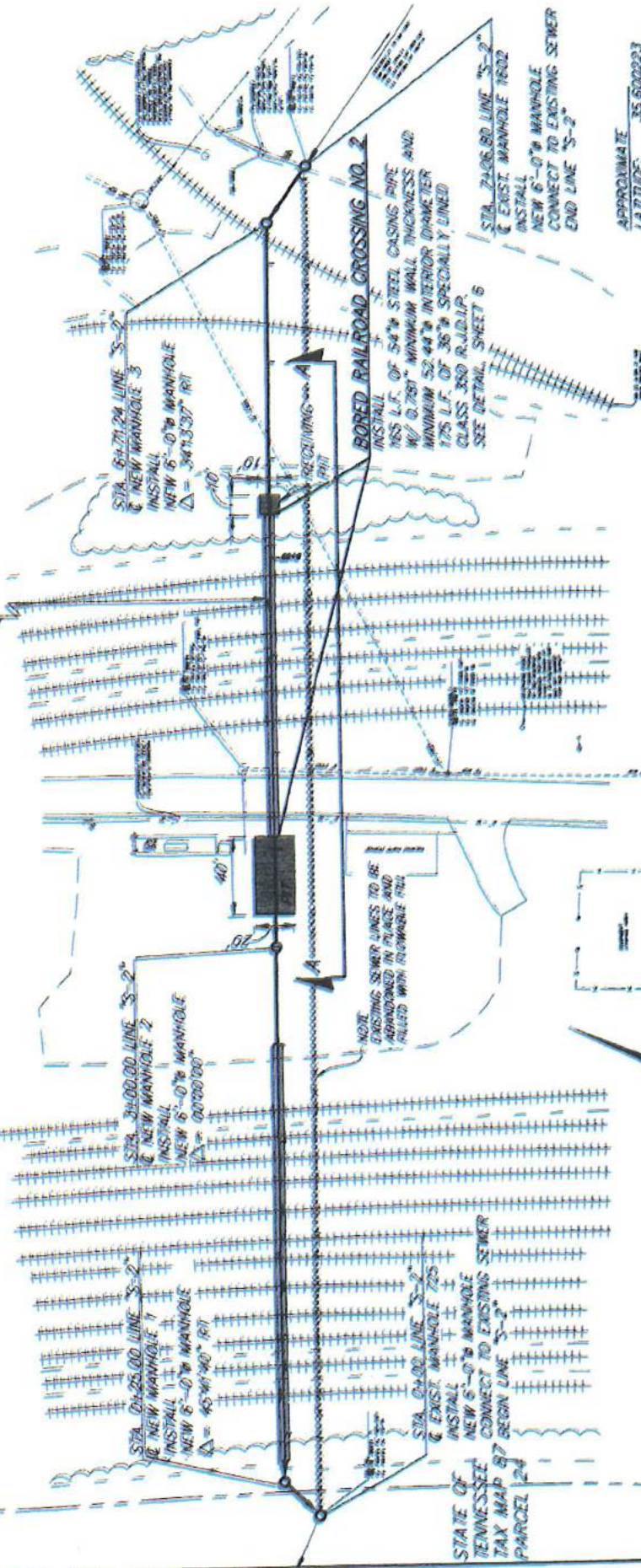
APPROXIMATE
LATITUDE: 35.599932
LONGITUDE: -88.799988

SHEET 3 OF 6		DESIGNED	
REVISION OR ISSUE		DST	
		DRAWN	
		WCM	
		CHECKED	
		JCD	
SEWER SYSTEM REHABILITATION CONTRACT 16-06 GRAVITY SEWER BORING IMPROVEMENTS			
W. TENN. RAILROAD CROSSING NO. 1 - PLAN VIEW			
FOR JACKSON ENERGY AUTHORITY JACKSON, TENNESSEE			
SCALE	DATE	DESIGNED	
1"=50'	APRIL, 2019	DST	
		DRAWN	
		WCM	
		CHECKED	
		JCD	
PROJECT NUMBER		WAUFORD	
3590		E. Wauford & Company, Consulting Engineers, Inc. (731) 384-1323 www.jwauford.com	

STATE OF
TENNESSEE
TAX MAP 87
PARCEL 24

W. TENN. RAILROAD
TAX MAP 87
PARCEL 25.01

MILEPOST
7599.7



APPROXIMATE
LATITUDE: 35.600223
LONGITUDE: -88.798784

SHEET 3 OF 6		DESIGNED	
REVISION OR ISSUE		DGT	
		DRAWN	
		WZM	
		CHECKED	
		JCD	
PROJECT NUMBER 3550		SCALE 1"=50'	DATE APRIL, 2019
SEWER SYSTEM REHABILITATION CONTRACT 16-06 GRAVITY SEWER BORING IMPROVEMENTS			
W. TENN. RAILROAD CROSSING NO. 2 - PLAN VIEW			
FOR JACKSON ENERGY AUTHORITY JACKSON, TENNESSEE			
WAUFORD		DESIGNED	
U.S. Road & Construction Company, Inc.		DGT	
(711) 844-1933		DRAWN	
www.usroad.com		WZM	
		CHECKED	
		JCD	

STATE OF
TENNESSEE
TAX MAP 87
PARCEL 24

Barry



Jackson Energy Authority

May 23, 2019

Real Estate Department
11 East Church Street
Sea Bright, New Jersey 07760

RE: West Tennessee Railroad Main Rail Crossing Nos. 1 and 2
Jackson Energy Authority
Jackson, Tennessee

Dear Sir or Madam,

We recently submitted applications to your department for two new bored crossings under the West Tennessee Railroad in Jackson, Tennessee. The purpose of these two crossings (see attached plan views) is to replace an existing aged 24-inch gravity sewer which has reached the end of its useful life.

The existing sanitary facilities at the site owned by the West Tennessee Railroad discharge to a pumping station which in turn pumps the sanitary sewer to an unknown location. The location of the sewage force main was unable to be located on site during the engineering field survey.

There is a possibility that the existing sewage force main discharges to the existing gravity sewer which is proposed to be abandoned as part of this project. If the existing sewage force main does discharge to the existing gravity sewer proposed to be abandoned, the Jackson Energy Authority will connect the existing sewage force main to proposed manhole 2 shown on the attached drawing.

Sincerely,

Eddie Oneill, P.E.
Operations Manager, Water/Wastewater System

Enclosure

Cc: Barry Crabtree, WTNRR Jackson (bcrabtree@wtnnrr.com)

CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

THIS AGREEMENT is made and entered into as of the ____ day of _____, 20____, by and between WEST TENNESSEE RAILROAD LLC, a New Jersey limited liability company (hereinafter referred to as the "Railroad") and [Contractor] _____, a [Incorp status] _____ (hereinafter referred to as the "Contractor").

RECITALS:

Contractor has been hired by _____ (hereinafter "_____") to perform work relating to _____ (the "Work") partially located on property of Railroad in the vicinity of Mile Post _____, which Work is the subject of a Contract dated _____, between _____ and _____.

Contractor has requested Railroad to permit it to perform the Work on Railroad property, and Railroad is agreeable thereto, subject to the following terms and conditions.

AGREEMENT:

NOW, THEREFORE, it is mutually agreed by and between the Railroad and Contractor, as follows:

ARTICLE 1 - DEFINITION OF CONTRACTOR.

For purposes of this Agreement, all references in this Agreement to the Contractor shall include the Contractor's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority.

ARTICLE 2 - RIGHT GRANTED; PURPOSE.

The Railroad hereby grants to the Contractor the right, during the term hereinafter stated and upon and subject to each and all of the terms, provisions and conditions herein contained, to enter upon and have ingress to and egress from the property described in the Recitals for the purpose of performing any work described in the Recitals above. The right herein granted to Contractor is limited to those portions of Railroad's property specifically described herein, or as designated by the Railroad Representative named in Article 4.

ARTICLE 3 - TERMS AND CONDITIONS CONTAINED IN EXHIBITS A AND A-1.

The terms and conditions contained in Exhibits A and A-1, hereto attached, are hereby made a part of this Agreement.

ARTICLE 4 - ALL EXPENSES TO BE BORNE BY CONTRACTOR; RAILROAD REPRESENTATIVE.

The Contractor shall bear any and all costs and expenses associated with any work performed by the Contractor, or any costs or expenses incurred by the Railroad relating to this Agreement. All work performed by Contractor on Railroad's property shall be performed in a manner satisfactory to the Railroad's General Manager or his authorized representative (hereinafter the "Railroad Representative") identified below:

Barry Crabtree
West Tennessee Railroad
1061 James Buchanan Dr
Jackson, TN 38301
Phone: (731) 423-4304

ARTICLE 5 - TERM; TERMINATION.

a. The grant of right herein made to Contractor shall commence on the date of this Agreement, and continue until _____, unless sooner terminated as herein provided, or at such time as Contractor has completed its work on Railroad's property, whichever is earlier. Contractor agrees to notify the Railroad Representative in writing when it has completed its work on Railroad property.

b. This Agreement may be terminated by either party on ten (10) days' written notice to the other party.

ARTICLE 6 - CERTIFICATE OF INSURANCE.

a. Before commencing any work, Contractor will provide Railroad with a Certificate, issued by its insurance carrier providing the insurance coverage required pursuant to Exhibit A-1 of this Agreement in a policy which contains the following type of endorsement. WEST TENNESSEE RAILROAD LLC and NORFOLK SOUTHERN RAILWAY COMPANY, their affiliates and all their officers, managers, agents, invitees and employees thereof is named are additional insured with respect to all liabilities arising out of Insured's, as Contractor, performance of any work on the property of the Railroad.

b. Contractor warrants that this Agreement has been thoroughly reviewed by its insurance agent(s)/broker(s) and that said agent(s)/broker(s) has been instructed to procure insurance coverage and an endorsement as required herein.

c. All insurance correspondence shall be directed to:

West Tennessee Railroad LLC
Real Estate Department
PO Box 3295
Sea Bright, NJ 07760

ARTICLE 7 - CHOICE OF FORUM.

This Agreement shall be governed, construed and enforced in accordance with the laws of the state of Tennessee.

ARTICLE 8 - DISMISSAL OF CONTRACTOR/SUBCONTRACTOR EMPLOYEE.

At the request of Railroad, Contractor shall remove from Railroad property any employee of Contractor or any subcontractor who fails to conform to the instructions of the Railroad Representative in connection with the work on Railroad's property, and any right of Contractor shall be suspended until such removal has occurred. Contractor shall indemnify Railroad against any claims arising from the removal of any such employee from Railroad property.

ARTICLE 9 - ADMINISTRATIVE FEE.

Contractor shall pay to the Railroad FIVE HUNDRED DOLLARS (\$500.00) as reimbursement for clerical, administrative and handling expenses in connection with the processing of this Agreement.

ARTICLE 10 - SPECIAL PROVISIONS.

a. No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.

b. Explosives or other highly flammable substances shall not be stored on Railroad property without the prior written approval of the Railroad Representative.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate as of the date first herein written.

WEST TENNESSEE RAILROAD LLC

By: _____
President

[Contractor]

By: _____

Title: _____

EXHIBIT A TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

Section 1. NOTICE OF COMMENCEMENT OF WORK – FLAGGING.

a. If work will be performed within 25 feet of any track, the Contractor's workers must receive training and work in compliance with Railroad's Roadway Worker Protection (RWP) policy. The Contractor agrees to notify the Railroad Representative at least 10 working days in advance of the Contractor commencing its work and at least 5 working days in advance of proposed performance of any work by the Contractor in which any person or equipment will be within 25 feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within 25 feet of any track. Upon receipt of such 5-day notice, the Railroad Representative will determine and inform the Contractor whether a flagman need be present and whether the Contractor need implement any special protective or safety measures. If a flagman is deemed necessary, no work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within 25 feet of any of Railroad's track(s) at any time, for any reason, unless and until a Railroad flagman is provided to watch for trains. If flagging or other special protective or safety measures are performed by the Railroad, such services will be provided at Contractor's expense with the understanding that if the Railroad provides any flagging or other services, the Contractor shall not be relieved of any of its responsibilities or liabilities set forth herein. Contractor shall promptly pay to Railroad all charges connected with such services within 30 days after presentation of a bill therefor.

b. The rate of pay per hour for each man will be the prevailing hourly rate in effect for an eight hour day for the class of men used during regularly assigned hours and overtime in accordance with rates in effect at the time the work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health & welfare, supplemental sickness, Railroad Retirement & UC, supplemental pension, Employment, Liability & Property Damage and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect on the day of execution of this Agreement. One and one-half times the current hourly rate is paid for overtime. Wage rates are subject to change, at any time, by law or by agreement between the Railroad and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized Governmental Agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, the Contractor shall pay on the basis of the new rates and charges.

c. Reimbursement to the Railroad will be required covering the full eight-hour day during which any flagman is furnished, unless he can be assigned to other Railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by said flagman following his assignment to work on the project for which the Railroad is required to pay the flagman and which could not reasonably be avoided by the Railroad Company by assignment of such flagman to other work, even though the Contractor may not be working during such time.

Section 2. LIMITATION AND SUBORDINATION OF RIGHTS GRANTED.

a. The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of the Railroad to use and maintain its entire property including the right and power of the Railroad to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines and other facilities upon, along or across any or all parts of its property, all or any of which may be freely done at any time or times by the Railroad without liability to the Licensee or to any other party for compensation or damages.

b. The foregoing grant is also subject to all outstanding superior rights (including those in favor of licensees and lessees of the Railroad's property, and others) and the right of the Railroad to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

Section 3. NO INTERFERENCE WITH RAILROAD'S OPERATION.

No work performed by Contractor shall cause any interference with the constant, continuous and uninterrupted use of the tracks, property and facilities of the Railroad, its lessees, licensees or others, unless specifically permitted under this Agreement, or specifically authorized in advance by the Railroad Representative. Nothing shall be done or suffered to be done by the Contractor at any time that would in any manner impair the safety thereof. When not in use, Contractor's machinery and materials shall be kept at least 50 feet from the centerline of Railroad's nearest track, and there shall be no vehicular crossings of Railroad's tracks except at existing open public crossings.

Section 4. MECHANIC'S LIENS.

The Contractor shall pay in full all persons who perform labor or provide materials for the work to be performed by Contractor. The Contractor shall not create, permit or suffer any mechanic's or materialmen's liens of any kind or nature to be created or enforced against any property of the Railroad for any such work performed. The Contractor shall indemnify and hold harmless the Railroad from and against any and all liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished.

Section 5. COMPLIANCE WITH LAWS.

In the prosecution of the work covered by this Agreement, the Contractor shall secure any and all necessary permits and shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work. The Contractor shall use only such methods as are consistent with safety, both as concerns the Contractor, Contractor's agents and employees, the officers, agents, employees and property of the Railroad and the public in general. The Contractor (without limiting the generality of the foregoing) shall comply with all applicable state and federal occupational safety and health acts and regulations. All Federal Railroad Administration regulations shall be followed when work is performed on the Railroad's premises. If any failure by the Contractor to comply with any such laws, regulations, and enactments, shall result in any fine, penalty, cost or charge being assessed, imposed or charged against the Railroad, the Contractor shall reimburse and indemnify the Railroad for any such fine, penalty, cost, or charge, including without limitation attorneys' fees, court costs and expenses. The Contractor further agrees in the event of any such action, upon notice thereof being provided by the Railroad, to defend such action free of cost, charge, or expense to the Railroad.

Section 6. SAFETY INSTRUCTIONS.

Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the Work pursuant to this Agreement. As reinforcement and in furtherance of overall safety measures to be observed by the Contractor (and not by way of limitation), the following special safety rules shall be followed:

a. The Contractor shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job. The Contractor shall have proper first aid supplies available on the job site so that prompt first aid services can be provided to any person that may be injured on the job site. The Contractor shall promptly notify the Railroad of any U.S. Occupational Safety and Health Administration reportable injuries occurring to any person that may arise during the work performed on the job site. The Contractor shall have a non-delegable duty to control its employees while they are on the job site or any other property of the Railroad to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug, narcotic or other substance that may inhibit the safe performance of work by the employee.

b. The employees of the Contractor shall be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing or free use of their hands or feet. Only waist length shirts with sleeves and trousers that cover the entire leg are to be worn. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching. The employees should wear sturdy and protective work boots and at least the following protective equipment:

(i) Protective head gear that meets American National Standard-Z89.1-latest revision. It is suggested that all hardhats be affixed with Contractor's or subcontractor's company logo or name;

(ii) Eye protection that meets American National Standard for occupational and educational eye and face protection, Z87.1-latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, burning, etc.; and

(iii) Hearing protection which afford enough attenuation to give protection from noise levels that will be occurring on the job site.

c. All heavy equipment provided or leased by the Contractor shall be equipped with audible backup warning devices. If in the opinion of the Railroad Representative any of Contractor's or any of its subcontractors' equipment is unsafe for use on the Railroad's right of way, the Contractor, at the request of the Railroad Representative, shall remove such equipment from the Railroad's right of way.

Section 7. INDEMNITY.

a. As used in this Section, "Railroad" includes other railroad companies using the Railroad's property at or near the location of the Contractor's installation and any other company whose property at the Contractor's location may be leased or operated by Railroad, their officers, agents, managers and employees; "Loss" includes loss, damage, claims, demands, actions, causes of action, penalties, costs and expenses of whatsoever nature, including court costs and attorneys' fees, which may result from: (i) injury to or death of persons whomsoever (including the Railroad's officers, agents, managers and employees, the Contractor's officers, agents, and employees, as well as any other person); and/or (ii) damage to or loss or destruction of property whatsoever (including Contractor's property, damage to the roadbed, tracks, equipment, or other property of the Railroad, or property in its care or custody).

b. As a major inducement and in consideration of the license and permission herein granted, the Contractor agrees to indemnify and hold harmless the Railroad from any Loss which is due to or arises from any cause and is associated in whole or in part with the work performed under this Agreement, a breach of the Agreement or the failure to observe the health and safety provisions herein, or any activity, omission or negligence arising out of performance or nonperformance of this Agreement regardless of whether contributed to in part by the negligence or fault of Railroad. However, the Contractor shall not indemnify the Railroad when the Loss is caused by the sole negligence of the Railroad.

c. Any liability of either party hereunder to one of its employees under any Workers' Compensation Act for the Federal Employers' Liability Act shall not be questioned or in any way challenged by the other party, nor shall any jury or court findings resulting from any employee's suit against either party pursuant to any such Act(s) be relied upon or used by either party in any attempt to assert common law liability against the other.

Section 8. RESTORATION OF PROPERTY.

In the event the Railroad authorizes the Contractor to take down any fence of the Railroad or in any manner move or disturb any of the other property of the Railroad in connection with the work to be performed by Contractor, then in that event the Contractor shall, as soon as possible and at Contractor's sole expense, restore such fence and other property to the same condition as the same were in before such fence was taken down or such other property was moved or disturbed. The Contractor shall remove all of Contractor's tools, equipment and materials from Railroad's property promptly upon completion of the work, restoring Railroad's property to the same state and condition as when Contractor entered thereon.

Section 9. WAIVER OF BREACH.

Waiver by the Railroad of the breach of any condition, covenant or agreement herein contained to be kept, observed and performed by the Contractor shall in no way impair the right of the Railroad to avail itself of any remedy for any subsequent breach thereof.

Section 10. ASSIGNMENT – SUBCONTRACTING.

The Contractor shall not assign, sublet or subcontract this Agreement, or any interest therein, without the written consent of the Railroad and any attempt to so assign, sublet or subcontract without the written consent of the Railroad shall be void. If the Railroad gives the Contractor permission to subcontract all or any portion of the work herein described, the Contractor is and shall remain responsible for all work of subcontractors and all work of subcontractors shall be governed by the terms of this Agreement.

Exhibit A-1
WEST TENNESSEE RAILROAD LLC
CONTRACT INSURANCE REQUIREMENTS
Third Party Contractor's Right of Entry Agreement

Contractor shall, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

(a) General Liability insurance providing bodily injury including death, personal injury and property damage coverage with a combined single limit of at least \$5,000,000 each occurrence or claim and an aggregate limit of at least \$10,000,000. This insurance shall contain broad form contractual liability with a separate general aggregate for the project (ISO Form CG 25 03 or equivalent). Exclusions for explosion, collapse and underground hazard shall be removed. Coverage purchased on a claims made form shall provide for at least a two (2) year extended reporting or discovery period if (i) the coverage changes from a claims made form to an occurrence form, (ii) there is a lapse/cancellation of coverage, or (iii) the succeeding claims made policy retroactive date is different for the expiring policy.

(b) Automobile Liability insurance providing bodily injury and property damage coverage with a combined single limit of at least \$2,000,000 each occurrence or claim. This insurance shall cover all motor vehicles including hired and non-owned, and mobile equipment if excluded from coverage under the general public liability insurance.

(c) Workers' Compensation insurance covering Contractor's statutory liability under the workers' compensation laws of the state(s) affected by this Agreement, and Employers' Liability. If such insurance will not cover the liability of Contractor in states that require participation in state workers' compensation fund, Contractor shall comply with the laws of such states. If Contractor is self-insured, evidence of state approval must be provided.

(d) Railroad Protective Liability insurance naming the Railroad as the insured with a combined single limit of \$5,000,000 per occurrence with a \$10,000,000 aggregate. The policy shall be broad form coverage for "Physical Damage to Property" (ISO Form CG 00 35 or equivalent) and include pollution arising out of fuels and lubricants brought to the job site (ISO Form CG 28 31 or equivalent). A binder of insurance for Railroad Protective Liability must be submitted to the Railroad and the original policy or a certified duplicate original policy must be forwarded to the Railroad when available. Contractor and its insurers shall endorse the required insurance policy(ies) to waive their right of subrogation against Railroad.

Contractor and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under its care, custody and control. Contractor's insurance shall be primary with respect to any insurance carried by Railroad. The policy(ies) required under (a) and (b) above shall provide severability of interests and shall name Railroad as an additional insured.

Prior to commencing the Work, Contractor shall furnish to Railroad certificate(s) of insurance evidencing the required coverage and endorsements and, upon request, a certified duplicate original of any required policy. The certificate(s) shall contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify Railroad in writing of any material alteration including any change in the retroactive date in any "claims-made" policies or substantial reduction of aggregate limits, if such limits apply, or any cancellation at least thirty (30) days prior thereto.

The insurance policy(ies) shall be written by a reputable insurance company(ies) acceptable to Railroad or with a current Best's Insurance Guide Rating of B and Class VII or better, and authorized to do business in the state(s) in which the Job Site is located.

Contractor WARRANTS that this Agreement has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by this Agreement.

If Contractor fails to procure and maintain insurance as required, Railroad may elect to do so at the cost of Contractor.

The fact that insurance is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad shall not be limited by the amount of the required insurance coverage.

Exhibit B
WEST TENNESSE RAILROAD LLC
CONTRACTOR INSURANCE REQUIREMENT

Contractor shall, at its sole cost and expense, procure and maintain during the life of this agreement the following insurance coverage:

- a) **Commercial General Liability Insurance.** This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$5,000,000 each occurrence and an aggregate limit of at least \$10,000,000. Coverage must be purchased on a post 1998 ISO occurrence form or equivalent and include coverage for, but not limited to the following:

- Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- Fire Legal Liability
- Products and Completed Operations
- Contractual Liability

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property
- The policy shall contain a Waiver of Subrogation
- Additional Insured endorsement in favor of Railroad
- Separation of Insureds
- The policy shall be primary and non-contributing with respect to any insurance carried by the Railroad

- b) **Business Automobile Insurance.** This insurance shall contain a combined single limit of at least \$2,000,000 per occurrence, and include coverage for, but not limited to the following:

- Bodily Injury and Property Damage
- Any and all vehicles owned, used or hired

- c) **Workers Compensation and Employers Liability insurance** including coverage for, but not limited to the following:

- Contractors statutory liability (Part A) under the workers compensation laws of the state(s) in which the work is to be performed
- Employers Liability (Part B) with limits of at least \$1,000,000 each accident, \$1,000,000 by disease policy limit, \$1,000,000 by disease each employee

d) Railroad Protective Liability Insurance (ISO-RIMA form or equivalent form approved by the Railroad) covering the Work to be performed at the designated job site and affording protection for damages arising out of bodily injuries or death, injury to or destruction of property including the damage to the insured's own property. The limit of liability shall be at least \$2,000,000 each occurrence and \$6,000,000 annual aggregate. Such insurance shall name the Railroad and any other Indemnities, their officers directors and employees as the Named Insured and shall amend the definition of "Physical damage of property" to mean direct and accidental loss of or damage to "all property of any Named Insured and all property in any Named Insured's care, custody or control".

Other Requirements:

- e) Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages and certificates of insurance shall reflect that no exclusion exists.
- f) Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad. In addition, its insurers through the terms of the policy or policy endorsement, waive their right of subrogation against Railroad for all claims and suits. Contractor further waives its right of recovery, and its insurers waive their right of subrogation against Railroad for loss of its owned or leased property or property under Contractor's care, custody or control.
- g) Contractor is not allowed to self insure without the prior written consent of the Railroad. If granted by Railroad, any deductible, self insured retention or other financial responsibility for claims shall be covered directly by Contractor in lieu of insurance. Any and all Railroad liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by Contractor's insurance will be covered as if Contractor elected not to include a deductible, self insured retention or other financial responsibility for claims.
- h) Prior to commencing the Work, the Contractor shall furnish to Railroad an acceptable certificate(s) of insurance evidencing the required coverage, endorsements or amendments.
- i) The policy(ies) shall require the insurance company(ies) notify the Railroad, in writing, at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision shall be included on the certificate of insurance.

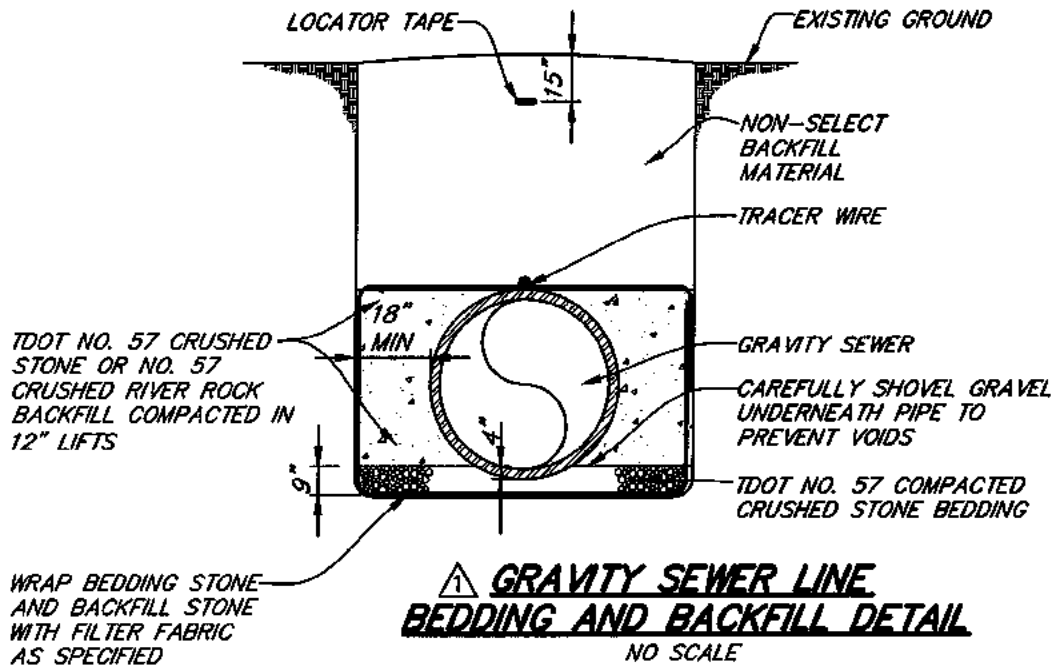
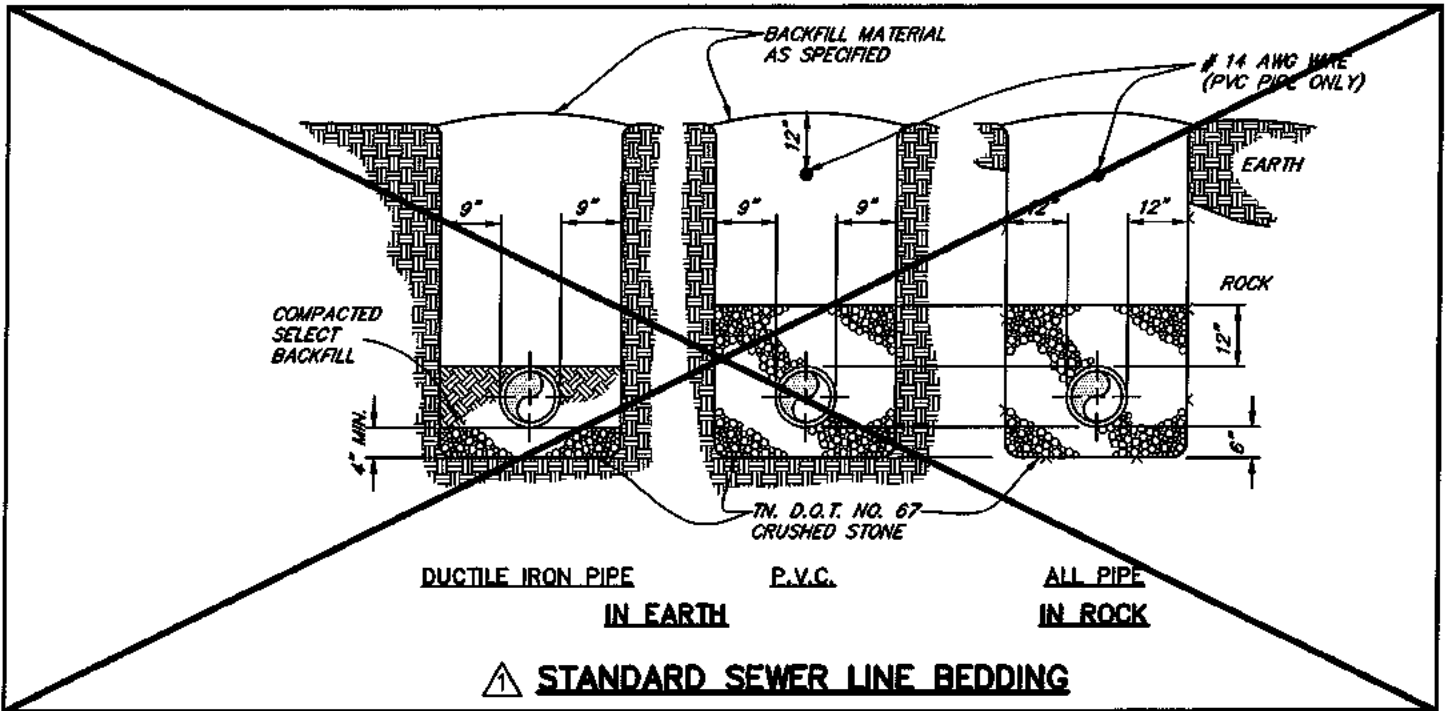
- j) Any insurance policy shall be written by a reputable insurance company acceptable to Railroad or with a current Best's Guide Rating of A- and Class VII or better, and are authorized to do business in the state(s) in which the service is to be provided.
- k) If any portion of the Work is to be subcontracted by Contractor, Contractor shall require that the subcontractor shall provide and maintain insurance coverages as set forth herein, naming Railroad as additional insured and shall require that the subcontractor shall release, defend and indemnify Railroad to the same extent and under the same terms and conditions as Contractor.
- l) The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad shall not be limited by the amount of the required insurance coverage.

The fact that insurance is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor, including without limitation, liability, liability under the indemnity provisions of this agreement. Damages recoverable by Railroad shall not be limited by the amount of the required insurance coverage.

CONSTRUCTION NOTES:

1. SEE "GENERAL NOTES" AND "LEGEND", SHEET 1.
2. FLOOD ELEVATIONS DEPICTED ON THIS SHEET WERE OBTAINED FROM FEMA MAP NO. 47113C0281E
3. THE EXISTING MANHOLES TO BE ABANDONED SHALL HAVE THE TOP CONE REMOVED (24" MIN.) AND THE ENTIRE MANHOLE FILLED WITH EITHER CRUSHED STONE OR TOPSOIL. 24" OF TOPSOIL SHALL BE PLACED OVER THE BACKFILL, SEEDED AND STRAWED IN ACCORDANCE WITH THE SPECIFICATIONS.
4. THE CONTRACTOR SHALL FIELD VERIFY THE INVERT IN ELEVATION OF EXISTING MANHOLE 724 AND THE INVERT OUT ELEVATION OF EXISTING MANHOLE 1602 AND REPORT RESULTS TO ENGINEER PRIOR TO BEGINNING WORK
- ⚠ 5. THE CONTRACTOR MAY RELOCATE THE 6'-0" MANHOLE REPLACING EXISTING MANHOLE 725 DOWNSTREAM UP TO 10'-0" TO ALLOW EXISTING MANHOLE 725 TO FUNCTION AS A SUCTION WELL FOR BYPASS PUMPING UNTIL IT IS ABANDONED AND RAZED.

SHEET 3 OF 6	SEWER SYSTEM REHABILITATION CONTRACT 16-06		
REVISION OR ISSUE	GRAVITY SEWER BORING IMPROVEMENTS		
⚠	ADDENDUM NO. 2	3/6/2020	SEWER LINE "S-2" - PLAN VIEW STA. 0+00 TO E.O.L.
	FOR JACKSON ENERGY AUTHORITY JACKSON, TENNESSEE		
	SCALE 1"=20'	WAUFORD <small>J. R. Wauford & Company, Consulting Engineers, Inc. Jackson, Tennessee (731) 668-1953 www.jrwauford.com</small>	DESIGNED DGT
PROJECT NUMBER 3590	DATE APRIL, 2019		DRAWN JLJ
			CHECKED JGD



SHEET 6 OF 6	SEWER SYSTEM REHABILITATION CONTRACT 16-06 GRAVITY SEWER BORING IMPROVEMENTS		
REVISION OR ISSUE	DETAIL SHEET		
△ ADDENDUM NO. 2 3/6/2020			
PROJECT NUMBER	SCALE	WAUFORD J. R. Wauford & Company, Consulting Engineers, Inc. Jackson, Tennessee (731) 658-1953 www.jrwauford.com	
3590	NO SCALE		
	DATE	DRAWN WZM	
	APRIL, 2019	CHECKED JGD	