

**ADDENDUM NO. 2
TO THE
BIDDING REQUIREMENTS AND CONTRACT DOCUMENTS
FOR THE
WHITE RIVER INTERCEPTOR SEWER – PHASE IIA PROJECT**

OWNER: City of Anderson

ISSUED BY/ENGINEER: Beam, Longest and Neff, L.L.C.
8320 Craig Street
Indianapolis, Indiana 46250

ISSUED TO: All Plan and Specifications Holders of Record

ISSUE DATE: December 9, 2020

BID DATE: December 17, 2020

This Addendum No. 1 shall clarify, correct, or change the Bidding Requirements or the proposed Contract Documents. This Addendum is a part of the Bidding Requirements and the proposed Contract Documents and shall govern in the performance of the Work.

PART 1 - PROJECT MANUAL

1.1 ITEM NO. 1 – 00011 TABLE OF CONTENTS

- A. The Table of Contents has been updated according to the attachment in this addendum.

1.2 ITEM NO. 1 – SECTION 00200 INSTRUCTIONS TO BIDDERS

- A. Remove 1.18.A.4 and renumber subsequent sections as applicable.

1.3 ITEM NO. 2 - SECTION 00410 BID FORM

- A. Bid Form Attachment A – Bid Prices has been modified according to the attachment in this addendum.
- B. Add the following language after 2.02.B:
 - C. *Affirmative Action Plan;*
 - D. *Company Wide/Project Workforce Breakdown Forms;*

E. Non-Discrimination Affidavit

1.4 ITEM NO. 3 – 00436 MBE/WBE FORMS

- A. This section has been deleted from the Project Manual.

1.5 ITEM NO. 4 – 00800 SUPPLEMENTARY CONDITIONS

- A. Replace entirely specification 00800 Supplementary Conditions.

1.6 ITEM NO. 5 – 02300 EARTHWORK

- A. Add the following verbiage after 1.2.J:

K. Pavement: Asphalt pavement to be removed for installation of proposed gravity sewer.

1.7 ITEM NO. 6 – 02300 EARTHWORK

- A. Add the following verbiage after Section 3.2:

3.3 PAVEMENT REMOVAL

A. Pavement Removal: Remove asphalt pavement over the trench excavation plus up to 8 feet additional on each side of the trench limits. All removed asphalt pavement must be disposed of off-site. Location of disposal must be submitted to Owner for review.

1.8 ITEM NO. 7 – 02546 SEWER SIPHONS

- A. Add the following language after 1.4.B.1.c. and renumber subsequent sections as applicable:

2. Calculations

- a. Longitudinal tensile stress calculations due to thermal expansion and contraction for HDPE pipe restraint for pipe-to-structure connections and connections to pipes of different materials.*

- B. Add the following language after 2.5.B.1.f.:

C. Longitudinal Restraint Fittings

- 1. Applicability: HDPE pipe 6-inches (6") and larger in size.*

2. *Longitudinal restraint shall be flexible HDPE saddles designed for attachment to HDPE pipe using the electrofusion method.*

- a. *Manufactured of pre-blended virgin resin with a PPI listing of PE4710 and in compliance with ASTM D1248 and ASTM D3350.*
- b. *Minimum axial resistance rating of 7,000 lb-ft per saddle.*

C. Add the following language after 3.1.A and renumber subsequent sections as applicable:

B. Provide longitudinal restraint designed to withstand thermal expansion and contraction of pipe at all HDPE pipe connections to structures and pipe of different materials.

1.8 ITEM NO. 8 – 01511 ENGINEER’S FIELD OFFICE

A. Add specification 01511 Engineer’s Field Office.

1.9 ITEM NO. 9 – 01512 CONTRACTOR’S FIELD OFFICE

A. Add specification 01512 Contractor’s Field Office.

1.10 ITEM NO. 10 – 07721 HATCHES

A. Add specification 07721 Hatches.

PART 2 - DRAWINGS

2.1 ITEM NO. 1 – SANITARY MANHOLES

- A. Rim elevations of manholes 6, 8, 9, and 11 on the Phase II Alignment are each raised three feet above grade. Conflict Structure #3 rim elevation is lowered three feet to match grade.
- B. Rim elevations of sanitary manholes 4, 5, and 6 on Line ‘Conflict Reroute #2’ are each raised three feet above grade.

2.2 ITEM NO. 2 – MITIGATION PLAN

- A. Do not plant canopy or shrubs/understory trees above the pipe.
- B. Under the General Planting Requirements, Note #6 is changed to “DO NOT PLANT MORE THAN 302 TREES PER ACRE.”

- C. The Stream Bank Restoration Plan and Profile should be removed. The CSO structure will no longer be removed, and the pipe will be abandoned by plugging.
- D. Site Monitoring Note 4.7 is modified to be “MEETS THE REQUIRED ACREAGE OF WETLAND MITIGATION (1.93 ACRES).”
- E. The total number of trees for this project phase has decreased. All trees for both wetlands and non-wetlands should be obtained as container stock. Replace the forest restoration planting tables on Sheet C16 with the two listed below.

WETLAND RESTORATION PLANTING TABLE (IF SPECIES ARE OBTAINED AS CONTAINER STOCK)			
Common Name	Type	Quantity	Percent of Total
Red Maple	Large Canopy Tree	96	10.9%
River Birch	Small Canopy Tree	115	13.1%
Shellbark Hickory	Large Canopy Tree	92	10.5%
Swamp White Oak	Large Canopy Tree	134	15.3%
Pin Oak	Small Canopy Tree	147	16.7%
Buttonbush	Medium Shrub	90	10.2%
Roughleaf Dogwood	Medium Shrub	45	5.1%
Peachleaf Willow	Small Understory Tree	45	5.1%
Common Ninebark	Small Shrub	57	6.5%
Common Winterberry	Medium Shrub	72	6.5%

NON-WETLAND FOREST RESTORATION PLANTING TABLE (IF SPECIES ARE OBTAINED AS CONTAINER STOCK)			
Common Name	Type	Quantity	Percent of Total
Sugar Maple	Large Canopy Tree	118	14.6%
Shagbark Hickory	Large Canopy Tree	92	11.4%
Redbud	Small Understory Tree	123	15.2%
White Oak	Large Canopy Tree	123	15.2%
Red Oak	Large Canopy Tree	83	10.3%
Hazelnut	Medium Shrub	46	5.7%
Witch Hazel	Medium Shrub	35	4.3%
Shingle Oak	Medium Canopy Tree	123	15.2%
Elderberry	Medium Shrub	44	5.4%
Black Haw	Medium Shrub	22	2.7%

2.3 ITEM NO. 3 – EXISTING SURVEY TOPOGRAPHY

- A. Structure – (6) inverts have been updated. The northwest invert is now 830.00 and the southeast invert is now 830.10.

2.4 ITEM NO. 4 – DISC GOLF COURSE

- A. All disc golf targets, picnic tables, and benches within the construction limits have been noted to be removed, protected, and reset.

2.5 ITEM NO. 5 – DOWNSTREAM SIPHON WALL ANCHOR SECTION

- A. All instances of 1” (inch) bar spacing should read 1’ (foot) bar spacing.

2.6 ITEM NO. 6 – CONFLICT STRUCTURE #3

- A. The 12” diameter PVC and 18” diameter PVC gravity pipes crossing the conflict structure should be replaced by ductile iron when crossing the pipe and two feet outside of the structure on both sides.

PART 3 - ADDITIONAL TECHNICAL INFORMATION

The following technical information is not part of the Contract Documents, but Bidder is entitled to rely upon this information as provided in Paragraph 4.02 of the General Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions, or information contained in such information.

3.1 LAST DAY TO ASK QUESTIONS

- A. The last day that questions will be received and answered will be Friday, December 11, 2020 at noon. Questions must be received in writing and will be answered via addendum.

3.2 QUESTION AND RESPONSE LIST NO. 1

- A. The Question and Response List No. 1 is attached with this addendum.

3.3 PHASE I BID TAB

- A. The Bid Tab from Phase I of the White River Interceptor is attached with this addendum.

Except as modified by this Addendum and other Addenda, the Bidding Requirements and the proposed Contract Documents shall remain unchanged. You will receive no other notification of this Addendum. **RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED IN SECTION 00410 - BID FORM, PAGE 00410-1.**

Enclosures: Section 00100 – Table of Contents
 Bid Form Attachment A – Bid Prices
 Section 00800 – Supplementary Conditions
 Section 01511 – Engineer's Field Office
 Section 01512 – Contractor's Field Office
 Section 07721 – Hatches
 Question and Response List No. 1
 Phase I Bid Tab

BLN Proj. No. 120046
 OWNER City of Anderson
 PROJECT NAME White River Interceptor Sewer - Phase IIA

Section 00011 - Table of Contents

Section	Title
DIVISION 0 – PROCUREMENT AND CONTRACTING REQUIREMENTS	
	Introductory Information
00010	Project Title Page
00011	Table of Contents
	Solicitation
00100	Advertisement for Bids
	Instructions for Procurement
00200	Instructions to Bidders
	Available Information
00310	Geotechnical Data
00311	Permits
00312	Easements
	Procurement Forms and Supplements
00410	Bid Form
00411	Indiana State Board of Accounts - Form 96
00431	Bid Bond Form
00434	Products List Form
00435	Subcontractor's List Form
	Contracting Requirements
00510	Notice of Award Form
00520	Agreement Form
00550	Notice to Proceed Form
	Bond Forms
00611	Performance Bond Form
00612	Payment Bond Form
	Certificates and Other Forms
00620	Certificates of Insurance
	Modification Forms
00632	Work Change Directive Form
	Conditions of the Contract
00700	General Conditions
00800	Supplementary Conditions
00831	E-Verify Affidavit
	Precontract Revisions
00900	Addenda
DIVISION 1 – GENERAL REQUIREMENTS	
	Summary
01001	General Administrative Requirements
	Price and Payment Procedures
01220	Measurement and Payment
	Temporary Facilities and Controls
01500	Temporary Facilities and Controls
01511	Engineer's Field Office
01512	Contractor's Field Office
01571	Temporary Sediment and Erosion Control
DIVISIONS 2 - 16: SPECIFICATIONS	
	DIVISION 2 – SITE CONSTRUCTION
	Site Preparation
02230	Site Clearing
02240	Dewatering
02260	Excavation Support and Protection
	Earthwork
02300	Earthwork
	Tunneling, Boring and Jacking
02410	Horizontal Directional Drilling Piping Installation
	Sanitary Sewer Systems
02530	Gravity Sanitary Sewerage
02539	Temporary Bypass Pumping
02546	Sewer Siphons
	Bases, Pavements, Drives, and Walkways
02700	Bases and Pavements
	Planting
02920	Lawns and Grasses
	DIVISION 7 – THERMAL AND MOISTURE PROTECTION
07721	Hatches

BID FORM ATTACHMENT A - BID PRICES
OWNER: City of Anderson
PROJECT: White River Interceptor Phase IIA

Bidder will complete the Work for the following Unit price(s):

Administrative

- 1 Mobilization/Demobilization
- 2 Maintenance of Traffic
- 3 Field Offices

Sitework

- 4 Pavement Removal
- 5 Site Clearing
- 6 Dewatering
- 7 Bypass Pumping
- 8 Erosion Control
- 9 Wetland and Forest Mitigation
- 10 Disc Golf Course and Park Restoration
- 11 Structure Backfill

- 11.01 Over Gravity Sanitary Sewers above 8-foot depth to 10-foot depth
- 11.02 Over Gravity Sanitary Sewers above 10-foot depth to 12-foot depth

Gravity Sanitary Sewers

- 12 12-inch Gravity Sanitary Sewers
 - 12.01 12-inch Ductile Iron Gravity Sanitary Sewers to 8 Foot Depth
- 13 18-inch Gravity Sanitary Sewers
 - 13.01 18-inch Ductile Iron Gravity Sanitary Sewers to 8 Foot Depth
- 14 24-inch Gravity Sanitary Sewers
 - 14.01 24-inch Gravity Sanitary Sewers to 8 Foot Depth
 - 14.02 24-inch Ductile Iron Gravity Sanitary Sewers to 8-foot Depth
- 15 42-inch Gravity Sanitary Sewers
 - 15.01 42-inch Gravity Sanitary Sewers to 8 Foot Depth
 - 15.02 42-inch Gravity Sanitary Sewers above 8-foot depth to 10-foot depth
- 16 72-inch Gravity Sanitary Sewers
 - 16.01 72-inch Gravity Sanitary Sewers above 8-foot depth to 10-foot depth
- 17 Pipe Insulation
 - 17.01 2-Inch Thick Extruded Polystyrene Insulation
- 18 Sewer Siphon (Double Barrel)
 - 18.01 12-inch River Crossing Pipe
 - 18.02 24-inch River Crossing Pipe
- 19 4-foot Dia. Gravity Sanitary Sewer Manholes
 - 19.01 4-foot Dia. Gravity Sanitary Sewer Manholes to 8 Foot Depth
 - 19.02 4-foot Dia. Gravity Sanitary Sewer Manholes above 8-foot depth to 10-foot depth

Estimated Quantity Unit Type Unit Price Estimated Price

1	LS		
1	LS		
11	Mo		
651	SY		
1	LS		
1	LS		
1	LS		
1	LS		
1	LS		
1	LS		
174	LF		
17	LF		
12	LF		
13	LF		
329	LF		
28	LF		
682	LF		
553	LF		
2,598	LF		
2,160	LF		
270	LF		
270	LF		
1	EA		
1	EA		

BID FORM

BID FORM ATTACHMENT A - BID PRICES
OWNER: City of Anderson
PROJECT: White River Interceptor Phase IIA

		Estimated Quantity	Unit Type	Unit Price	Estimated Price
20	5-foot Dia. Gravity Sanitary Sewer Manholes				
20.01	5-foot Dia. Gravity Sanitary Sewer Manholes to 8 Foot Depth	2	EA		
20.02	5-foot Dia. Gravity Sanitary Sewer Manholes above 8-foot depth to 10-foot depth	1	EA		
20.03	5-foot Dia. Gravity Sanitary Sewer Manholes above 10-foot depth to 12-foot depth	1	EA		
21	6-foot Dia. Gravity Sanitary Sewer Manholes				
21.01	6-foot Dia. Gravity Sanitary Sewer Manholes above 10-foot depth to 12-foot depth	1	EA		
22	10-foot Dia. Gravity Sanitary Sewer Manholes				
22.01	10-foot Dia. Gravity Sanitary Sewer Manholes above 8-foot depth to 10-foot depth	2	EA		
22.02	10-foot Dia. Gravity Sanitary Sewer Manholes above 10-foot depth to 12-foot depth	2	EA		
22.03	10-foot Dia. Gravity Sanitary Sewer Manholes above 12-foot depth to 14-foot depth	3	EA		
23	Special Manholes and Manhole Structures				
23.01	Siphon Structure Manhole 11	1	EA		
23.02	Conflict Structure #1	1	EA		
23.03	Conflict Structure #2	1	EA		
23.04	Conflict Structure #3	1	EA		
23.05	Special Manhole 11B	1	EA		
23.06	Special Manhole 11C	1	EA		
24	CSO Pipe				
24.01	Outfall pipe abandonment	1	EA		
Bases and Pavements					
25	Pavements				
25.01	Asphalt Pavement Over Gravity Sewers to 8 Foot Depth	191	LF		
Lawns and Grasses					
26	Lawns and Grasses				
26.01	Seeding	20,010	SY		

Total Unit Price Base Bid Amount, inclusive of all Pay Items:

_____ \$ _____
(words) *(numerals)*

Bidder: _____

Date: _____

By: _____
(Signature of Bid Form Signatory)

Name (typed or printed): _____

BID FORM

00800

Supplementary Conditions

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

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SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018). The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, "Paragraph SC-4.05."

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

SC-1.01.A. Add the following terms:

State: *The State of Indiana, including its agencies.*

Remedial: *See Defective in Section 00700 GC 1.02 Terminology.*

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

SC-2.01 Delete Paragraphs 2.01.B. and C. in their entirety and insert the following in their place:

- B. *Evidence of Contractor's Insurance:* When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner copies of the policies (including all endorsements, and identification of applicable self-insured retentions and deductibles) of insurance required to be provided by Contractor in this Contract. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

2.02 *Copies of Documents*

SC-2.02 Amend the first sentence of Paragraph 2.02.A. to read as follows:

Owner shall furnish to Contractor **[number]** printed copies of the Contract Documents (including one fully signed counterpart of the Agreement).

2.06 *Electronic Transmittals*

SC-2.06 Delete Paragraphs 2.06.B and 2.06.C in their entirety and insert the following in their place:

- B. *Electronic Documents Protocol:* The parties shall conform to the following provisions in Paragraphs 2.06.B and 2.06.C, together referred to as the Electronic Documents Protocol ("EDP" or "Protocol") for exchange of electronic transmittals.

1. *Basic Requirements*

- a. To the fullest extent practical, the parties agree to and will transmit and accept Electronic Documents in an electronic or digital format using the procedures

described in this Protocol. Use of the Electronic Documents and any information contained therein is subject to the requirements of this Protocol and other provisions of the Contract.

- b. The contents of the information in any Electronic Document will be the responsibility of the transmitting party.
- c. Electronic Documents as exchanged by this Protocol may be used in the same manner as the printed versions of the same documents that are exchanged using non-electronic format and methods, subject to the same governing requirements, limitations, and restrictions, set forth in the Contract Documents.
- d. Except as otherwise explicitly stated herein, the terms of this Protocol will be incorporated into any other agreement or subcontract between a party and any third party for any portion of the Work on the Project, or any Project-related services, where that third party is, either directly or indirectly, required to exchange Electronic Documents with a party or with Engineer. Nothing herein will modify the requirements of the Contract regarding communications between and among the parties and their subcontractors and consultants.
- e. When transmitting Electronic Documents, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the receiving party's use of software application packages, operating systems, or computer hardware differing from those established in this Protocol.
- f. Nothing herein negates any obligation 1) in the Contract to create, provide, or maintain an original printed record version of Drawings and Specifications, signed and sealed according to applicable Laws and Regulations; 2) to comply with any applicable Law or Regulation governing the signing and sealing of design documents or the signing and electronic transmission of any other documents; or 3) to comply with the notice requirements of Paragraph 18.01 of the General Conditions.

2. System Infrastructure for Electronic Document Exchange

- a. Each party will provide hardware, operating system(s) software, internet, e-mail, and large file transfer functions ("System Infrastructure") at its own cost and sufficient for complying with the EDP requirements. With the exception of minimum standards set forth in this EDP, and any explicit system requirements specified by attachment to this EDP, it is the obligation of each party to determine, for itself, its own System Infrastructure.
 - 1) The maximum size of an email attachment for exchange of Electronic Documents under this EDP is 15 MB. Attachments larger than that may be exchanged using large file transfer functions or physical media.
 - 2) Each Party assumes full and complete responsibility for any and all of its own costs, delays, deficiencies, and errors associated with converting, translating, updating, verifying, licensing, or otherwise enabling its System Infrastructure, including operating systems and software, for use with respect to this EDP.
- b. Each party is responsible for its own system operations, security, back-up, archiving, audits, printing resources, and other Information Technology ("IT") for

maintaining operations of its System Infrastructure during the Project, including coordination with the party's individual(s) or entity responsible for managing its System Infrastructure and capable of addressing routine communications and other IT issues affecting the exchange of Electronic Documents.

- c. Each party will operate and maintain industry-standard, industry-accepted, ISO-standard, commercial-grade security software and systems that are intended to protect the other party from: software viruses and other malicious software like worms, trojans, adware; data breaches; loss of confidentiality; and other threats in the transmission to or storage of information from the other parties, including transmission of Electronic Documents by physical media such as CD/DVD/flash drive/hard drive. To the extent that a party maintains and operates such security software and systems, it shall not be liable to the other party for any breach of system security.
- d. In the case of disputes, conflicts, or modifications to the EDP required to address issues affecting System Infrastructure, the parties shall cooperatively resolve the issues; but, failing resolution, the Owner is authorized to make and require reasonable and necessary changes to the EDP to effectuate its original intent. If the changes cause additional cost or time to Contractor, not reasonably anticipated under the original EDP, Contractor may seek an adjustment in price or time under the appropriate process in the Contract.
- e. Each party is responsible for its own back-up and archive of documents sent and received during the term of the contract under this EDP, unless this EDP establishes a Project document archive, either as part of a mandatory Project website or other communications protocol, upon which the parties may rely for document archiving during the specified term of operation of such Project document archive. Further, each party remains solely responsible for its own post-Project back-up and archive of Project documents after the term of the Contract, or after termination of the Project document archive, if one is established, for as long as required by the Contract and as each party deems necessary for its own purposes.
- f. If a receiving party receives an obviously corrupted, damaged, or unreadable Electronic Document, the receiving party will advise the sending party of the incomplete transmission.
- g. The parties will bring any non-conforming Electronic Documents into compliance with the EDP. The parties will attempt to complete a successful transmission of the Electronic Document or use an alternative delivery method to complete the communication.

C. Software Requirements for Electronic Document Exchange; Limitations

- 1. Each party will acquire the software and software licenses necessary to create and transmit Electronic Documents and to read and to use any Electronic Documents received from the other party (and if relevant from third parties), using the software formats required in this section of the EDP.
 - a. Prior to using any updated version of the software required in this section for sending Electronic Documents to the other party, the originating party will first

notify and receive concurrence from the other party for use of the updated version or adjust its transmission to comply with this EDP.

2. The parties agree not to intentionally edit, reverse engineer, decrypt, remove security or encryption features, or convert to another format for modification purposes any Electronic Document or information contained therein that was transmitted in a software data format, including Portable Document Format (PDF), intended by sender not to be modified, unless the receiving party obtains the permission of the sending party or is citing or quoting excerpts of the Electronic Document for Project purposes.
3. Software and data formats for exchange of Electronic Documents will conform to the requirements set forth in Exhibit A to this EDP, including software versions, if listed.

SC-2.06 Supplement Paragraph 2.06 of the General Conditions by adding the following paragraph:

D. Requests by Contractor for Electronic Documents in Other Formats

1. Release of any Electronic Document versions of the Project documents in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be at the sole discretion of the Owner.
2. To extent determined by Owner, in its sole discretion, to be prudent and necessary, release of Electronic Documents versions of Project documents and other Project information requested by Contractor ("Request") in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be subject to the provisions of the Owner's response to the Request, and to the following conditions to which Contractor agrees:
 - a. The content included in the Electronic Documents created by Engineer and covered by the Request was prepared by Engineer as an internal working document for Engineer's purposes solely, and is being provided to Contractor on an "AS IS" basis without any warranties of any kind, including, but not limited to any implied warranties of fitness for any purpose. As such, Contractor is advised and acknowledges that the content may not be suitable for Contractor's application, or may require substantial modification and independent verification by Contractor. The content may include limited resolution of models, not-to-scale schematic representations and symbols, use of notes to convey design concepts in lieu of accurate graphics, approximations, graphical simplifications, undocumented intermediate revisions, and other devices that may affect subsequent reuse.
 - b. Electronic Documents containing text, graphics, metadata, or other types of data that are provided by Engineer to Contractor under the request are only for convenience of Contractor. Any conclusion or information obtained or derived from such data will be at the Contractor's sole risk and the Contractor waives any claims against Engineer or Owner arising from use of data in Electronic Documents covered by the Request.
 - c. Contractor shall indemnify and hold harmless Owner and Engineer and their subconsultants from all claims, damages, losses, and expenses, including attorneys' fees and defense costs arising out of or resulting from Contractor's use, adaptation, or distribution of any Electronic Documents provided under the Request.

- d. Contractor agrees not to sell, copy, transfer, forward, give away or otherwise distribute this information (in source or modified file format) to any third party without the direct written authorization of Engineer, unless such distribution is specifically identified in the Request and is limited to Contractor's subcontractors. Contractor warrants that subsequent use by Contractor's subcontractors complies with all terms of the Contract Documents and Owner's response to Request.
3. In the event that Owner elects to provide or directs the Engineer to provide to Contractor any Contractor-requested Electronic Document versions of Project information that is not explicitly identified in the Contract Documents as being available to Contractor, the Owner shall be reimbursed by Contractor on an hourly basis (at \$155 per hour) for any engineering costs necessary to create or otherwise prepare the data in a manner deemed appropriate by Engineer.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

SC-3.01 Delete Paragraph 3.01.C in its entirety.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.05 *Delays in Contractor's Progress*

SC-4.05 Amend Paragraph 4.05.C by adding the following subparagraphs:

5. *Weather-Related Delays*
 - a. If "abnormal weather conditions" as set forth in Paragraph 4.05.C.2 of the General Conditions are the basis for a request for an equitable adjustment in the Contract Times, such request must be documented by data substantiating each of the following: 1) that weather conditions were abnormal for the period of time in which the delay occurred, 2) that such weather conditions could not have been reasonably anticipated, and 3) that such weather conditions had an adverse effect on the Work as scheduled.

ARTICLE 5—SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

5.03 *Subsurface and Physical Conditions*

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:

- E. The following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which Contractor may rely:

Report Title	Date of Report	Technical Data
Subsurface Investigation White River Interceptor Sewer Project	April 27, 2009	Geotechnical Report

- F. The following table lists the drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data, and specifically identifies the Technical Data upon which Contractor may rely:

Drawings Title	Date of Drawings	Technical Data
None		

- G. Contractor may examine copies of reports and drawings identified in SC-5.03.E and SC-5.03.F that were not included with the Bidding Documents at **Beam Longest and Neff, 8320 Craig Street, Indianapolis, IN 46250** during regular business hours, or may request copies from Engineer.

5.06 Hazardous Environmental Conditions

SC-5.06 Add the following new paragraphs immediately after Paragraph 5.06.A.3:

4. The following table lists the reports known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and the Technical Data (if any) upon which Contractor may rely:

Report Title	Date of Report	Technical Data
None		

5. The following table lists the drawings known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and Technical Data (if any) contained in such Drawings upon which Contractor may rely:

Drawings Title	Date of Drawings	Technical Data
None		[Identify Technical Data]

ARTICLE 6—BONDS AND INSURANCE

6.01 Performance, Payment, and Other Bonds

SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.A:

1. *Required Performance Bond Form:* The performance bond that Contractor furnishes will be in the form of EJCDC® C-610, Performance Bond (2018 edition). Performance Bonds shall remain in effect for a period of three (3) years following Final Payment.

2. *Required Payment Bond Form:* The payment bond that Contractor furnishes will be in the form of EJCDC® C-615, Payment Bond (2018 edition). Payment Bonds shall remain in effect for a period of one (1) year following Final Payment. 6.03 *Contractor's Insurance*

SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:

- D. *Other Additional Insureds:* As a supplement to the provisions of Paragraph 6.03.C of the General Conditions, the commercial general liability, automobile liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies must include as additional insureds (in addition to Owner and Engineer) the following:

City of Anderson

Beam Longest and Neff

- E. *Workers' Compensation and Employer's Liability:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance, including, as applicable, United States Longshoreman and Harbor Workers' Compensation Act, Jones Act, stop-gap employer's liability coverage for monopolistic states, and foreign voluntary workers' compensation (from available sources, notwithstanding the jurisdictional requirement of Paragraph 6.02.B of the General Conditions).

Workers' Compensation and Related Policies	Policy limits of not less than:
Workers' Compensation	
State	Statutory
Applicable Federal (e.g., Longshoreman's)	Statutory
Foreign voluntary workers' compensation (employer's responsibility coverage), if applicable	Statutory
Jones Act (if applicable)	
Bodily injury by accident—each accident	\$ NA
Bodily injury by disease—aggregate	\$ NA
Employer's Liability	
Each accident	\$1,000,000
Each employee	\$1,000,000
Policy limit	\$2,000,000

- F. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:
1. damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees,
 2. damages insured by reasonably available personal injury liability coverage, and
 3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- G. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial

general liability form (occurrence form) and include the following coverages and endorsements:

1. Products and completed operations coverage.
 - a. Such insurance must be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Severability of interests and no insured-versus-insured or cross-liability exclusions.
 4. Underground, explosion, and collapse coverage.
 5. Personal injury coverage.
 6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
 7. For design professional additional insureds, ISO Endorsement CG 20 32 07 04 "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- H. *Commercial General Liability—Excluded Content:* The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:
1. Any modification of the standard definition of "insured contract" (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).
 2. Any exclusion for water intrusion or water damage.
 3. Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.
 4. Any exclusion of coverage relating to earth subsidence or movement.
 5. Any exclusion for the insured's vicarious liability, strict liability, or statutory liability (other than worker's compensation).
 6. Any limitation or exclusion based on the nature of Contractor's work.
 7. Any professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.
- I. *Commercial General Liability—Minimum Policy Limits*

Commercial General Liability	Policy limits of not less than:
General Aggregate	\$2,000,000

Commercial General Liability	Policy limits of not less than:
Products—Completed Operations Aggregate	\$1,000,000
Personal and Advertising Injury	\$1,000,000
Bodily Injury and Property Damage—Each Occurrence	\$1,000,000

- J. *Automobile Liability*: Contractor shall purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis.

Automobile Liability	Policy limits of not less than:
Combined Single Limit	
Combined Single Limit (Bodily Injury and Property Damage)	\$2,000,000

- K. *Umbrella or Excess Liability*: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the Paragraphs above. The coverage afforded must be at least as broad as that of each and every one of the underlying policies.

Excess or Umbrella Liability	Policy limits of not less than:
Each Occurrence	\$5,000,000
General Aggregate	\$5,000,000

- L. *Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements*: Contractor may meet the policy limits specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy's policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy, as specified herein. If such umbrella or excess liability policy was required under this Contract, at a specified minimum policy limit, such umbrella or excess policy must retain a minimum limit of \$5,000,000 after accounting for partial attribution of its limits to underlying policies, as allowed above.

SC-6.04 Supplement Paragraph 6.04 of the General Conditions with the following provisions:

- F. *Builder's Risk Requirements*: The builder's risk insurance must:
1. be written on a builder's risk "all risk" policy form that at a minimum includes insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment stored and in transit, and must not exclude the coverage of the following risks: fire; windstorm; hail; flood; earthquake, volcanic activity, and other earth movement; lightning; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; and water damage (other than that caused by flood).

- a. Such policy will include an exception that results in coverage for ensuing losses from physical damage or loss with respect to any defective workmanship, methods, design, or materials exclusions.
 - b. 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 will be provided through other insurance policies acceptable to Owner and Contractor.
2. 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, falsework, and temporary structures.
3. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of contractors, engineers, and architects).
4. 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).
5. extend to cover damage or loss to insured property while in transit.
6. allow for the waiver of the insurer's subrogation rights, as set forth in this Contract.
7. allow for partial occupancy or use by Owner by endorsement, and without cancellation or lapse of coverage.
8. include performance/hot testing and start-up, if applicable.
9. be maintained in effect until the Work is complete, as set forth in Paragraph 15.06.D of the General Conditions, or until written confirmation of Owner's procurement of property insurance following Substantial Completion, whichever occurs first.
10. include as named insureds the Owner, Contractor, Subcontractors (of every tier), and any other individuals or entities required by this Contract to be insured under such builder's risk policy. For purposes of Paragraphs 6.04, 6.05, and 6.06 of the General Conditions, and this and all other corresponding Supplementary Conditions, the parties required to be insured will be referred to collectively as "insureds." In addition to Owner, Contractor, and Subcontractors of every tier, include as insureds the following:
 - a. City of Anderson
 - b. Beam Longest and Neff
11. include, in addition to the Contract Price amount, the value of the following equipment and materials to be installed by the Contractor but furnished by the Owner or third parties:

- a. No Owner furnished items this project.
- 12. If debris removal in connection with repair or replacement of insured property is subject to a coverage sublimit, such sublimit will be a minimum of \$250,000.
- G. *Builder's Risk and Other Property Insurance Deductibles:* The purchaser of any required builder's risk, installation floater, or other property insurance will be responsible for costs not covered because of the application of a policy deductible.
 - 1. The builder's risk policy (or if applicable the installation floater) will be subject to a deductible amount of no more than \$10,000 for direct physical loss in any one occurrence.
- H. *Installation Floater*
 - 1. Contractor shall provide and maintain installation floater insurance on a broad form or "all risk" policy providing coverage for materials, supplies, machinery, fixtures, and equipment that will be incorporated into the Work ("Covered Property"). Coverage under the Contractor's installation floater will include loss from covered "all risk" causes (perils) to Covered Property:
 - a. of the Contractor, and Covered Property of others that is in Contractor's care, custody, and control;
 - b. while in transit to the Site, including while at temporary storage sites;
 - c. while at the Site awaiting and during installation, erection, and testing;
 - d. continuing at least until the installation or erection of the Covered Property is completed, and the Work into which it is incorporated is accepted by Owner.
 - 2. The installation floater coverage cannot be contingent on an external cause or risk, or limited to property for which the Contractor is legally liable.
 - 3. The installation floater coverage will be in an amount sufficient to protect Contractor's interest in the Covered Property. The Contractor will be solely responsible for any deductible carried under this coverage.
 - 4. This policy will include a waiver of subrogation applicable to Owner, Contractor, Engineer, all Subcontractors, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.03 Labor; Working Hours

SC-7.03 Add the following new subparagraphs immediately after Paragraph 7.03.C:

- 1. Regular working hours will be between 7:00 am and 7:00 pm.
- 2. Owner's legal holidays are New Years Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving, Lincoln's Birthday, Washington's Birthday, and Christmas Day.

SC-7.03 Add the following new paragraph immediately after Paragraph 7.03.C:

- D. **Contractor shall** be responsible for the cost of any overtime pay or other expense incurred by the Owner for Engineer's services (including those of the Resident Project Representative, if any), Owner's representative, and construction observation services, occasioned by the performance of Work on Saturday, Sunday, any legal holiday, or as overtime on any regular workday. If Contractor is responsible but does not pay, or if the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC-7.03 Add the following new subparagraph immediately after Paragraph SC-7.03.D:

1. For purposes of administering the foregoing requirement, additional overtime costs are defined as any hour over 40 hours in a standard work week.

7.10 *Taxes*

SC-7.10 Add a new paragraph immediately after Paragraph 7.10.A:

- B. Owner is exempt from payment of sales and compensating use taxes of the State of Indiana and of cities and counties thereof on all materials to be incorporated into the Work.
 1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the Work.

ARTICLE 8—2. OWNER'S EXEMPTION DOES NOT APPLY TO CONSTRUCTION TOOLS, MACHINERY, EQUIPMENT, OR OTHER PROPERTY PURCHASED BY OR LEASED BY CONTRACTOR, OR TO SUPPLIES OR MATERIALS NOT INCORPORATED INTO THE WORK.OTHER WORK AT THE SITE

No Supplementary Conditions in this Article.

ARTICLE 9—OWNER'S RESPONSIBILITIES

No Supplementary Conditions in this Article.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.03 *Resident Project Representative*

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.B:

- C. The Resident Project Representative (RPR) will be Engineer's representative at the Site. RPR's dealings in matters pertaining to the Work in general will be with Engineer and Contractor. RPR's dealings with Subcontractors will only be through or with the full knowledge or approval of Contractor. The RPR will:
 1. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.

2. *Safety Compliance:* Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
 3. *Liaison*
 - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.
 - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for Contractor's proper execution of the Work.
 4. *Review of Work; Defective Work*
 - a. Conduct on-Site observations of the Work to assist Engineer in determining, to the extent set forth in Paragraph 10.02, if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Observe whether any Work in place appears to be defective.
 - c. Observe whether any Work in place should be uncovered for observation, or requires special testing, inspection or approval.
 5. *Inspections and Tests*
 - a. Observe Contractor-arranged inspections required by Laws and Regulations, including but not limited to those performed by public or other agencies having jurisdiction over the Work.
 - b. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work.
 6. *Payment Requests:* Review Applications for Payment with Contractor.
 7. *Completion*
 - a. Participate in Engineer's visits regarding Substantial Completion.
 - b. Assist in the preparation of a punch list of items to be completed or corrected.
 - c. Participate in Engineer's visit to the Site in the company of Owner and Contractor regarding completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.
 - d. Observe whether items on the final punch list have been completed or corrected.
- D. The RPR will not:
1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
 2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
 3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.

4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction.
5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Authorize Owner to occupy the Project in whole or in part.

ARTICLE 11—CHANGES TO THE CONTRACT

11.08 *Change of Contract Times*

SC-11.08 Add the following new paragraph immediately after Paragraph 11.08.B:

- C. No adjustment of Contract Time will be provided for delays in the work caused by flooding in a federally-designated floodway.

ARTICLE 12—CLAIMS

12.01 *Claims*

SC-12.01 Add the following new paragraph immediately after Paragraph 12.01.G:

- G. The party making the Claim shall be responsible for the costs incurred for Engineer's review and preparation of actions related to any Claim. Should Contractor make the Claim, Owner at its sole discretion shall be entitled to charge Contractor directly for such costs or offset such costs from any payment due Contractor.

ARTICLE 13—COST OF WORK; ALLOWANCES, UNIT PRICE WORK

13.01 *Cost of the Work*

SC-13.01.B.5.c Add the following new paragraph immediately after Paragraph 13.01.B.5.c:

- 4) Use of Contractor's and Subcontractor's Equipment. The value of such equipment ownership and use for the purposes of determining the value of any Work covered under 13.01.B.5.c shall not exceed the FHWA hourly rate listed in the current Rental Rate Blue Book published by *EquipmentWatch* for each hour of use in the Work. Equipment standby time will not be included in this value.

13.03 *Unit Price Work*

SC-13.03 Delete Paragraph 13.03.E in its entirety and insert the following in its place:

- E. *Adjustments in Unit Price*
 1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the extended price of a particular item of Unit Price Work amounts to 5 percent or more of the Contract Price (based on estimated quantities at the time of Contract

formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than 20 percent from the estimated quantity of such item indicated in the Agreement; and

- b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

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

No Supplementary Conditions in this Article.

ARTICLE 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

15.01 *Progress Payments*

15.03 *Substantial Completion*

SC-15.03 Add the following new subparagraph to Paragraph 15.03.B:

1. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, will be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under this Article 15.

15.08 *Correction Period*

SC-15.08 Add the following new Paragraph 15.08.G:

- G. The correction period specified as three years after the date of Final Payment in Paragraph 15.08.A of the General Conditions is hereby revised to be the number of years set forth in SC-6.01.A.1; or if no such revision has been made in SC-6.01.A, then the correction period is hereby specified to be 1 years after Substantial Completion.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

No Supplementary Conditions in this Article.

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

17.02 *Arbitration*

SC-17.02 Add the following new paragraph immediately after Paragraph 17.01.

17.02 *Arbitration*

- A. All matters subject to final resolution under this Article will be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules (subject to the conditions and limitations of this Paragraph SC-17.02). Any controversy or claim in the amount of \$100,000 or less will be settled in accordance with the American Arbitration Association's supplemental rules for Fixed Time and Cost Construction Arbitration. This agreement to arbitrate will be specifically enforceable under the prevailing law of any court having jurisdiction.
- B. The demand for arbitration will be filed in writing with the other party to the Contract and with the selected arbitration administrator, and a copy will be sent to Engineer for information. The demand for arbitration will be made within the specific time required in Article 17, or if no specified time is applicable within a reasonable time after the matter in question has arisen, and in no event will any such demand be made after the date when institution of legal or equitable proceedings based on such matter in question would be barred by the applicable statute of limitations.
- C. The arbitrator(s) must be licensed engineers, contractors, attorneys, or construction managers. Hearings will take place pursuant to the standard procedures of the Construction Arbitration Rules that contemplate in-person hearings. The arbitrators will have no authority to award punitive or other damages not measured by the prevailing party's actual damages, except as may be required by statute or the Contract. Any award in an arbitration initiated under this clause will be limited to monetary damages and include no injunction or direction to any party other than the direction to pay a monetary amount.
- D. The Arbitrators will have the authority to allocate the costs of the arbitration process among the parties, but will only have the authority to allocate attorneys' fees if a specific Law or Regulation or this Contract permits them to do so.
- E. The award of the arbitrators must be accompanied by a reasoned written opinion and a concise breakdown of the award. The written opinion will cite the Contract provisions deemed applicable and relied on in making the award.
- F. The parties agree that failure or refusal of a party to pay its required share of the deposits for arbitrator compensation or administrative charges will constitute a waiver by that party to present evidence or cross-examine witness. In such event, the other party shall be required to present evidence and legal argument as the arbitrator(s) may require for the making of an award. Such waiver will not allow for a default judgment against the non-paying party in the absence of evidence presented as provided for above.
- G. No arbitration arising out of or relating to the Contract will include by consolidation, joinder, or in any other manner any other individual or entity (including Engineer, and Engineer's consultants and the officers, directors, partners, agents, employees or consultants of any of them) who is not a party to this Contract unless:
 - 1. the inclusion of such other individual or entity will allow complete relief to be afforded among those who are already parties to the arbitration;

2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration, and which will arise in such proceedings;
 3. such other individual or entity is subject to arbitration under a contract with either Owner or Contractor, or consents to being joined in the arbitration; and
 4. the consolidation or joinder is in compliance with the arbitration administrator's procedural rules.
- H. The award will be final. Judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal, subject to provisions of the Laws and Regulations relating to vacating or modifying an arbitral award.
- I. Except as may be required by Laws or Regulations, neither party nor an arbitrator may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties, with the exception of any disclosure required by Laws and Regulations or the Contract. To the extent any disclosure is allowed pursuant to the exception, the disclosure must be strictly and narrowly limited to maintain confidentiality to the extent possible.

17.03 *Attorneys' Fees*

SC-17.03 Add the following new paragraph immediately after Paragraph 17.02.

17.03 *Attorneys' Fees*

- A. For any matter subject to final resolution under this Article, the prevailing party shall be entitled to an award of its attorneys' fees incurred in the final resolution proceedings, in an equitable amount to be determined in the discretion of the court, arbitrator, arbitration panel, or other arbiter of the matter subject to final resolution, taking into account the parties' initial demand or defense positions in comparison with the final result.

ARTICLE 18—MISCELLANEOUS

No Supplementary Conditions in this Article.

EXHIBIT A—SOFTWARE REQUIREMENTS FOR ELECTRONIC DOCUMENT EXCHANGE

Item	Electronic Documents	Transmittal Means	Data Format	Note (1)
a.1	General communications, transmittal covers, meeting notices and responses to general information requests for which there is no specific prescribed form.	Email	Email	
a.2	Meeting agendas, meeting minutes, RFI's and responses to RFI's, and Contract forms.	Email w/ Attachment	PDF	(2)
a.3	Contractors Submittals (Shop Drawings, "or equal" requests, substitution requests, documentation accompanying Sample submittals and other submittals) to Owner and Engineer, and Owner's and Engineer's responses to Contractor's Submittals, Shop Drawings, correspondence, and Applications for Payment.	Email w/ Attachment	PDF	
a.4	Correspondence; milestone and final version Submittals of reports, layouts, Drawings, maps, calculations and spreadsheets, Specifications, Drawings and other Submittals from Contractor to Owner or Engineer and for responses from Engineer and Owner to Contractor regarding Submittals.	Email w/ Attachment or LFE	PDF	
a.5	Layouts and drawings to be submitted to Owner for future use and modification.	Email w/ Attachment or LFE	DWG	
a.6	Correspondence, reports and Specifications to be submitted to Owner for future word processing use and modification.	Email w/ Attachment or LFE	DOC	
a.7	Spreadsheets and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	EXC	
Notes				
(1)	All exchanges and uses of transmitted data are subject to the appropriate provisions of Contract Documents.			
(2)	Transmittal of written notices is governed by Paragraph 18.01 of the General Conditions.			
Key				
Email	Standard Email formats (.htm, .rtf, or .txt). Do not use stationery formatting or other features that impair legibility of content on screen or in printed copies			
LFE	Agreed upon Large File Exchange method (FTP, CD, DVD, hard drive)			
PDF	Portable Document Format readable by Adobe® Acrobat Reader Version 2020.13 or later			
DWG	Autodesk® AutoCAD .dwg format Version 2020			
DOC	Microsoft® Word .docx format Version 2011			
EXC	Microsoft® Excel .xls or .xml format Version 2011			

01511

Engineer's Field Office

SECTION 01511 ENGINEER'S FIELD OFFICE

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for a engineer's field office.
- B. Related sections include the following:
 - 1. Section 01500 – Temporary Facilities and Controls for locations and installation of temporary facilities, utility hookups, parking areas, and termination and removal of temporary facilities.

1.2 SUBMITTALS

- A. Action Submittals
 - 1. Product List
 - a. List complete furnishings and products in engineer's field office.
- B. Informational Submittals
 - 1. Coordination Drawings
 - a. Site plan showing engineer's field office, utility hookups, and parking areas for construction personnel.
 - 2. Cleaning
 - a. Office cleaning schedule.

1.3 SCHEDULING

- A. Provide engineer's field office from time of mobilization of equipment and personnel to site through Substantial Completion, unless otherwise agreed by Engineer.

PART 2 - PRODUCTS

2.1 ENGINEER'S FIELD OFFICE

- A. Field Office, General: Of sufficient size to accommodate needs of construction personnel. Shall not have adjoin walls with any other field office. Keep office clean and orderly. Furnish and equip offices as follows:
 - 1. Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
 - 2. One room – 120 SF minimum.

3. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F.
4. Lighting fixtures capable of maintaining average illumination of 20 fc at desk height.
5. Provide electrical power service and 120-V AC duplex receptacles, with not less than 1 receptacle on each wall.
6. Fire extinguishers.
7. First Aid Kit.
8. Smoke detector.
9. Provide weekly interior professional cleaning service.
10. Complaint with IOSHA requirements.
11. Access steps and landing at door.

B. Furnishings and Supplies

1. Furnish Engineer's representative room with desk, chair, sloped plan table, plan rack, trash can, drapes, microwave oven, refrigerator, and one (1) four-drawer fire-rated, locking steel filing cabinet.
2. Locking door(s), keyed separately from other field offices.
3. Provide a plain paper combination printer/scanner/copier unit in Engineer's representative room.
 - a. Provide two sets of color and black print cartridges for the printer/scanner/copier unit.
4. Provide a wired or wireless internet service, minimum 3 MBS speed.
 - a. Wired service shall be provided to Engineer's representative's room.
 - b. Wireless service may be provided from Contractor's Field Office provided signal strength is adequate to ensure reliable service within Engineer's Field Office.
5. Temporary parking for a minimum of two (2) vehicles assigned to Engineer.
6. Drinking water and private toilet.
7. Hand washing and toilet supplies.
8. Coffee machine and supplies.

C. Utilities: Provide and pay for utility services, including:

1. Electrical service.
2. Phone service.
3. Internet service.
 - a. Highest residential-grade speed available locally.
4. Gas service, if required for heating.

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01511

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01512

Contractor's Field Office

SECTION 01512 CONTRACTOR'S FIELD OFFICE

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for a contractor's field office.
- B. Related sections include the following:
 - 1. Section 01500 – Temporary Facilities and Controls for locations and installation of temporary facilities, utility hookups, parking areas, and termination and removal of temporary facilities.

1.2 SUBMITTALS

- A. Action Submittals
 - 1. Product List
 - a. List complete furnishings and products in contractor's field office.
- B. Informational Submittals
 - 1. Coordination Drawings
 - a. Site plan showing contractor's field office, utility hookups, and parking areas for construction personnel.

1.3 SCHEDULING

- 1. Provide contractor's field office from time of mobilization of equipment and personnel to site through Substantial Completion, unless otherwise agreed by Engineer.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S FIELD OFFICE

- A. Field Office, General: Of sufficient size to accommodate needs of construction personnel. Keep office clean and orderly. Furnish and equip offices as follows:
 - 1. Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
 - 2. Minimum 2 rooms – Contractor's general use room, conference room.

3. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F.
4. Lighting fixtures capable of maintaining average illumination of 20 fc at desk height.
5. Furniture required for Project-site documents including file cabinets, plan tables, plan racks, and bookcases.
6. Conference room of sufficient size to accommodate meetings of 10 individuals.
7. Provide electrical power service and 120-V AC duplex receptacles, with not less than 1 receptacle on each wall.
8. Furnish conference room with conference table, chairs, and 4-foot square tack board.
9. Fire extinguishers.
10. First Aid Kit.
11. Smoke detector.
12. Provide weekly interior professional cleaning service.
13. Complaint with IOSHA requirements.
14. Access steps and landing at doors.

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01512

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07221

Hatches

SECTION 07221 HATCHES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Hatches.
 - 2. Roof scuttles.
- B. Related Sections include the following:
 - 1. Section 03300 – Cast-In-Place Concrete.

1.2 REFERENCES

- A. ASTM A36 - Standard Specification for Structural Steel.
- B. ASTM A123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- C. ASTM A153 - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- D. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- E. ASTM A780 - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.
- F. ASTM A786 - Standard Specification for Hot-Rolled Carbon, Low-Alloy, High-Strength Low-Alloy, and Alloy Steel Floor Plates.
- G. ASTM A793 - Standard Specification for Rolled Floor Plate, Stainless Steel.
- H. ASTM A1008 - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable.
- I. NAAMM's "Metal Finishes Manual for Architectural and Metal Products"

1.3 SYSTEM REQUIREMENTS

A. Design Requirements

1. Hatches and scuttles shall have clear openings of the sizes indicated.
2. Hatches shall have the number of leafs and opening direction as indicated.
 - a. Where opening direction is not indicated, provide as directed by Engineer.

1.4 SUBMITTALS

A. Action Submittals

1. Product Data: Provide manufacturer's product data for all materials in this specification.
 - a. Traffic rated hatches shall be certified to meet AASHTO H-20 wheel loading.
 - b. Railing systems shall be certified to withstand minimum 200 pound test load.
2. Shop Drawings: Show profiles, embedment details, attachment details, accessories, location, and dimensions.
3. Samples: Manufacturer to provide upon request; sized to represent material adequately.

B. Informational Submittals

1. Manufacturer's Installation Instructions
2. Product Warranties

C. Project Record Document

1. Product Data
2. Shop Drawings
3. Product Warranties
4. Manufacturer's operations and maintenance literature

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Storage and Protection. Store materials in a dry, protected, well-vented area off the ground.

1.6 WARRANTY

A. Manufacturer's Standard Warranty.

- Contractor shall provide certification from roof manufacturer that installation of any accessories will not void the warranty on the roofing system or any of its components.

PART 2 - PRODUCTS

2.1 HATCH AND SCUTTLE SCHEDULE

Location	Type	Size	Leaves	Type			Accessories
				Standard	Traffic-Rated	Water-tight	
Mechanical Room	Hatch	48"x48"	2	X			
Pump Room	Hatch	30"x36"	1	X			
Clearwell-Pass 1	Scuttle	30"x36"		X			Ladder Post
Clearwell-Pass 2	Scuttle	30"x36"		X			Ladder Post
Clearwell-Pass 3	Scuttle	30"x36"		X			Ladder Post

2.2 STEEL MATERIALS

A. Steel Plates, Shapes, and Bars: ASTM A36.

- ASTM A123 for galvanizing steel and iron products.
- ASTM A153 for galvanizing steel and iron hardware.

B. Rolled-Steel Floor Plate and Diamond Tread Plate: ASTM A786, rolled from plate complying with ASTM A36 or ASTM A283, Grade C or D.

- ASTM A123 for galvanizing steel and iron products.
- ASTM A153 for galvanizing steel and iron hardware.

C. Steel Sheet: Electrolytic zinc-coated, ASTM A591 with cold-rolled steel sheet substrate complying with ASTM A1008, Commercial Steel (CS), exposed.

D. Metallic-Coated Steel Sheet: ASTM A653, Commercial Steel (CS) with A60 (ZF180) zinc-iron-alloy (galvannealed) coating or G60 (Z180) mill-phosphatized zinc coating; stretcher-leveled standard of flatness; with minimum thickness indicated representing specified thickness according to ASTM A924.

E. Steel Finishes: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

1. Surface Preparation for Steel Sheet: Clean surfaces to comply with SSPC-SP 1, "Solvent Cleaning," to remove dirt, oil, grease, or other contaminants that could impair paint bond. Remove mill scale and rust, if present, from uncoated steel, complying with SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning," or SSPC-SP 8, "Pickling."
2. Surface Preparation for Metallic-Coated Steel Sheet: Clean surfaces with nonpetroleum solvent so surfaces are free of oil and other contaminants. After cleaning, apply a conversion coating suited to the organic coating to be applied over it. Clean welds, mechanical connections, and abraded areas, and apply galvanizing repair paint specified below to comply with ASTM A780.
 - a. Galvanizing Repair Paint: High-zinc-dust-content paint for regalvanizing welds in steel, complying with SSPC-Paint 20.
3. Factory-Primed Finish: Apply shop primer immediately after cleaning and pretreating.
4. Baked-Enamel Finish: Immediately after cleaning and pretreating, apply manufacturer's standard two-coat, baked-enamel finish consisting of prime coat and thermosetting topcoat. Comply with paint manufacturer's written instructions for applying and baking to achieve a minimum dry film thickness of 2 mils.
5. Powder-Coat Finish: Immediately after cleaning and pretreating, apply manufacturer's standard thermosetting polyester or acrylic urethane powder coating with cured-film thickness not less than 1.5 mils. Prepare, treat, and coat metal to comply with resin manufacturer's written instructions.

2.3 STAINLESS STEEL MATERIALS

- A. Rolled and Diamond Tread Stainless-Steel Floor Plate: ASTM A793, Type 304 unless otherwise indicated.
 1. Finish: Manufacturer's standard.
- B. Stainless-Steel Sheet, Strip, Plate, and Flat Bars: ASTM A666, Type 304 unless otherwise indicated. Remove tool and die marks and stretch lines or blend into finish.
 1. Finish: Manufacturer's standard.
- C. Stainless Steel Angles: ASTM A276, Type 304.
- D. Compression Springs: ASTM A313, Type 316.
- E. Stainless Steel Fasteners: Type 316 stainless steel.
 1. Bolts: ASTM F593.
 2. Nuts: ASTM F594.

2.4 ALUMINUM

- A. Aluminum Extrusions: ASTM B221, Alloy 6063-T6.
 - 1. Mill finish, AA-M10 (Mechanical Finish: as fabricated, unspecified).
- B. Aluminum Diamond Tread Plate: ASTM B632, 1/4-inch 6061-T6 with mill finish.
- C. Aluminum-Alloy Rolled Tread Plate: ASTM B632, Alloy 6061-T6.
 - 1. Mill finish, AA-M10 (Mechanical Finish: as fabricated, unspecified).
- D. Aluminum Sheet: ASTM B209, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than strength and durability properties of Alloy 5005-H15; with minimum sheet thickness indicated representing specified thickness according to ANSI H35.2.
 - 1. Mill Finish: AA-M10 (Mechanical Finish: as fabricated, unspecified).
 - 2. Class II, Clear Anodic Finish: AA-M12C22A31 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class II, clear coating 0.010 mm or thicker) complying with AAMA 611.
 - 3. Baked-Enamel Finish: AA-C12C42R1x (Chemical Finish: cleaned with inhibited chemicals; Chemical Finish: acid-chromate-fluoride-phosphate conversion coating; Organic Coating: as specified below). Apply baked enamel complying with paint manufacturer's written specifications for cleaning, conversion coating, and painting.

2.5 HATCHES, GENERAL

- A. Cover Leaf: 1/4 inch aluminum diamond plate.
- B. Channel Frame: 1/4 inch aluminum with continuous anchor flange.
- C. Frame Coating: bituminous coating where in contact with concrete.
- D. Locking System
 - 1. Interior: Type 316 stainless steel slam lock with removable key.
 - 2. Exterior: Padlockable with Type 316 stainless steel slam lock with removable key.
- E. Cover equipped with the following stainless steel features:
 - 1. Spring assists.
 - a. Compression spring operators enclosed in telescopic tubes.

- b. Upper tube shall be the outer tube to prevent accumulation of moisture, grit, and debris inside the lower tube assembly.
 - c. Lower tube shall interlock with a flanged support shoe welded or bolted to the frame.
 - 2. SS Type 316 heavy duty hinges.
 - 3. SS Type 316 tamper proof attaching hardware.
 - 4. Automatic SS Type 316 hold open arm with aluminum latch.
- F. Hatches shall be cast into concrete structures.

2.6 STANDARD HATCHES

- A. Load Rating: 300 psf uniform live load with a maximum allowable deflection of 1/150 of the span.
- B. Built-in neoprene gasket to limit the transmission of odors. The gasket shall limit air infiltration to less than 1 cfm per lineal foot of opening perimeter with a pressure differential equal to a 1" column of water.
- C. Drain: 1-1/2 inch drainage coupling located in frame.

2.7 TRAFFIC RATED HATCHES

- A. Loading: Designed to withstand H-20 wheel loadings suitable for use in locations where not subjected to high density traffic.
- B. Drain: 1-1/2 inch drainage coupling located in frame.
- C. Cover Leaf: Reinforced with beams to meet H-20 live load requirements.

2.8 WATERTIGHT HATCHES

- A. Cover Leaf: Reinforced to support 625 pounds per square foot (10 foot water column) live load capacity.
- B. Special water-resistant gasket to prevent intrusion of water.
- C. No drain.

2.9 ROOF SCUTTLES

- A. General

1. Roof scuttles shall be single leaf.
2. Roof scuttle shall be pre-assembled from the manufacturer.
- B. Operation of the cover shall not be affected by temperature.
- C. Entire scuttle shall be weathertight with fully welded corner joints on cover and curb.
- D. Cover: 11 gauge aluminum with a 3" beaded flange with formed reinforcing members.
 1. Provide a heavy extruded EDPM rubber gasket bonded to the cover interior to assure a continuous seal when compressed to the top surface of the curb.
- E. Cover Insulation: Fiberglass, 1" thickness, fully covered and protected by an 18 gauge aluminum liner.
- F. Curb
 1. Twelve inches (12") in height and of 11 gauge aluminum.
 2. Form with a 3-1/2" flange with 7/16" holes provided for securing to the roof deck or concrete structure.
 3. Roof Installations: Equip with an integral metal capflashing of the same gauge and material as the curb, fully welded at the corners, for use with roofing system.
 4. Deck Installations: Equip with aluminum curb cover.
- G. Curb Insulation: Rigid, high-density fiberboard of 1" thickness on outside of curb.
- H. Lifting mechanisms
 1. Compression spring operators enclosed in telescopic tubes to provide, smooth, easy, and controlled cover operation throughout the entire arc of opening and closing.
 2. Upper tube shall be the outer tube to prevent accumulation of moisture, grit, and debris inside the lower tube assembly.
 3. Lower tube shall interlock with a flanged support shoe for aluminum construction: welded to the curb assembly; through bolted to the curb assembly.
- I. Hardware: Type 316 stainless steel.
 1. Heavy-duty pintle hinges shall be provided.
 2. Cover shall be equipped with a spring latch with interior and exterior turn handles.
 3. Interior and exterior padlock hasps or eyelet on cover.

4. Latch strike shall be a stamped component bolted to the curb assembly.
5. Cover shall automatically lock in the open position with a rigid hold open arm equipped with a red vinyl grip handle to permit easy release for closing.
6. Compression spring tubes shall be an anti-corrosive composite, galvanized, or stainless steel material and all other hardware shall be galvanized or stainless steel. Springs shall have an electro-coated acrylic finish for corrosion resistance.
7. Cover hardware shall be bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.

J. Finishes: Factory mill finish aluminum.

K. Roof hatches shall be Bilco Type “S” or equal

2.10 ACCESSORIES

A. Grating Panels

1. Material: Grate shall be constructed of fiberglass or aluminum
 - a. Hardware shall be stainless steel.
2. Loading: 300 psf live load.
3. Grating shall have a 6 inch viewing area on each lateral unhinged side for visual observation and limited maintenance.
4. Operation shall be independent of the access cover.
5. A padlock loop shall be provided for the grate.
6. Grate shall be equipped with torsion rod lift assistance and a automatic hold open arm shall be included to automatically lock the panel in the fully open (90 degrees) position.
 - a. A release handle shall be provided to close the grating panel.
7. Color: High visibility; orange or yellow.

B. Nets

1. Rails: Aluminum
2. Hooks, hardware, and anchors shall be constructed of Type 316 stainless steel.
3. Netting: Heavy-duty polyester
 - a. Color: Orange
 - b. Minimum breaking strength: 5000 pounds.

C. Railing System

1. Top rail, mid rail, and chain or swinging gate, with hatch curb acting as toe plate.
2. Height: Minimum 42 inches above finished roof deck.
3. Maximum opening size: System constructed to prevent passage of a sphere 21 inches in diameter.
4. Pipe: Galvanized, 1-1/4 inch ID, A53 Grade B seamed pipe or galvanized, 1-5/8 inch OD A500 seamed tube.
5. Flat Bar: 2 inch by 3/8 inch thickness, A36 mild steel.
6. Chain System: Galvanized proof coil chain with quick link on fixed end.
7. Pipe Ends and Tops: Covered or plugged with weather and light resistant material.
8. Bolts and Washers: 3/8 inch by 2-1/2 inch, grade Z, zinc plated.
9. Sealant: Recommended by manufacturer.
10. Finish: Factory-applied hot dipped galvanized.

D. Ladder Posts

1. General: Post locks automatically in place on full extension; release mechanism returns post to closed position.
 - a. Safety post shall have controlled upward and downward movement.
 - b. Release lever shall disengage the post to allow it to be returned to its lowered position.
 - c. Post shall have adjustable mounting brackets to fit ladder rung spacing up to 14" on center and clamp brackets to accommodate ladder rungs up to 1-3/4" in diameter.
2. Height: 42 inches above finished roof deck.
3. Material: Aluminum.
 - a. All mounting hardware shall be Type 316 stainless steel.
4. Post: 1-5/8-inch diameter pipe.
 - a. A pull up loop, or other mechanism, shall be provided at the upper end of the post to facilitate raising the post.
5. Finish: Manufacturer's standard.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that hatch and scuttle installation will not disrupt other trades. Verify that the substrate is dry, clean, and free of foreign matter. Report and correct defects prior to any installation.
- B. Verify that other trades with related work are complete before installing hatches and roof scuttles.
- C. Mounting surfaces shall be straight and secure; substrates shall be of proper width.
- D. Coordinate installation with roof membrane and roof insulation manufacturer's instructions before starting.

3.2 INSTALLATION

- A. Installer shall check as-built conditions and verify the manufacturer's roof hatch details for accuracy to fit the application prior to fabrication. Comply with manufacturer's installation instructions.
- B. The installer shall furnish mechanical fasteners consistent with the roof requirements.
- C. Roof Scuttles: Provide silicone sealant between flashing and concrete decks.
- D. Accessories: Install required components per manufacturer's standard installation instructions.

END OF SECTION 07721

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**QUESTIONS AND RESPONSES LIST NO. 1
FOR THE
ANDERSON WHITE RIVER INTERCEPTOR PHASE IIA**

The following questions that did not warrant revisions to the Contract Documents have been presented by potential bidders for the White River Interceptor Phase IIA Project. Responses to these questions are provided below. These questions and responses serve only to clarify the Bidding Documents and the Contract Documents, as applicable. The responses to these questions do not modify in any respect the conditions and provisions of the Contract Documents. In the event of a conflict between these responses and the Contract Documents, the provisions of the Contract Documents shall supersede these responses.

1. Q: Do you have an Engineer's estimate?

A: \$5.4-\$6.4M

2. Q: Is there a M/WDBE goal for this project?

A: No.

3. Q: Will the required MBE/WBE forms be provided in an upcoming addendum?

A: *There are not M/W/DBE goals on this project. Therefore, no forms required.*

4. Q: Is there a Geo Report for Phase IIA?

A: *All Geotech information that is available currently is included in the Project Manual.*

5. Q: Is there a possibility of postponing the bid date?

A: *The bid date has been postponed to December 17, 2020. See Addendum #1 for more details.*

6. Q: In the wetland restoration section, do planted trees need to be set back a certain distance off center line of sanitary lines?

A: *Trees and shrubs cannot be planted directly over the top of the pipe due to limited cover.*

This will result in a reduced planting area within the existing wetland area for trees and shrubs of approximately 0.11 acres. Trees that cannot be planted within designated wetland area due to only allowing 302 trees per acre are to be planted in the adjacent eastern most forested area. Approximately 35 trees and 16 shrubs

will need to be planted in the adjacent forested area. This 0.11 acres should also be seeded with the required wetland mix.

7. For the wetland restoration section, “General Planting Requirement” #6 states ‘Do not plant more than 302 plants per acre but the planted table indicates 724 per acre (1,375 total stems).

- a. Q: Which quantity is correct to use for bidding purposes?

A: Per the updated tables provided via Addendum, a total of 879 plantings are required for mitigation of the disturbed wetland area within Phase 2A of the permitted project. Of the 879 plantings, 585 must be canopy trees and 294 must be shrubs/understory trees.

- b. Q: Containerized trees required?

A: Container stock.

- c. Q: 3-gallon stock or other?

A: 3-gallon container stock.

8. Q: For the wetland section, can straw mulch rather than erosion matting be used in areas where trees are to be planted?

A: Yes, so long as all permit requirements and restrictions are met.

9. Q: In the non-wetland forested section, do planted trees need to be set back a certain distance off center line of sanitary lines within disturbed area?

A: Trees and shrubs cannot be planted directly over the top of the pipe due to limited cover. Additional areas will be needed for planting. Adjacent open areas at Edgewater Park should be utilized before planting at River Bend Park.

When utilizing open spaces at Edgewater Park, care must be taken to not plant trees that are in-line between disc golf tees and targets.

10. For the non-wetland forested section, “General Planting Requirement” #6 states ‘Do not plant more than 302 plants per acre but the planted table indicates 632 per acre (1,845 total stems)

- a. Q: Which quantity is correct to use for bidding purposes?

A: Please note that the permits cover the entire project which is now being bid in two phases. The following provides information regarding the mitigation for Phase 2A:

Type	Phase IIA, Acres	Permit Total, Acres
Wetlands	1.93	3.02
Non-Wetlands	0.89	2.03

Per the updated tables provided via Addendum, a total of 809 plantings are required for mitigation of the disturbed wetland area. Of the 809 plantings, 539 must be canopy trees and 270 must be shrubs/understory trees.

- b. Q: Bareroot seedling trees required?
- A: There was a typo on the original bid set that has now been corrected. These plantings should also be provided as 3-gallon container stock.*
11. Q: For the non-wetland forested section, can straw mulch rather than erosion matting be used in areas where trees are to be planted?
- A: Yes, so long as all permit requirements and restrictions are met.*
12. Q: What diameter of fiber roll is required for the project?
- A: 20" diameter.*
13. Q: Does the cost for Restoration work need to include monitoring for 10 years or will the city be hiring as a separate contract?
- A: No on-going monitoring should be included in this Bid.*
14. Q: Should management costs (invasive species management, establishment management, etc) be included in this cost so the restoration can meet success criteria at the 10-year mark?
- A: Management costs should not be included in this Bid.*
15. Q: What routes should be considered for site access?
- A: For bidding purposes, all Bidders should assume that the only access is via 10th Street off Scatterfield Road. If contractors have other desired routes, a site access routing plan should be provided to the City and Engineer for review as part of the preliminary documents due after contract award.*
16. Q: The entrance road to the park parking lot was described as being the only entrance to the project, however the condition of that road did not appear it would hold up to all the

pipe delivery, aggregate delivery, or triaxle trucks needed to remove spoils. Can the bidder assume any damage to the road will be compensated for later?

A: *The Contractor is responsible for road drivability and condition for the life of the project. It is the Contractor's responsibility to ensure that roadway conditions after construction are restored the pre-construction conditions. The Contractor should take all precautions necessary to help prevent/limit damage to the roadways, including, but not limited to, a reduced speed limit of 20 mph for all construction traffic and full use of third axle for heavy loads. The Measurement and Payment Section includes information on where costs for potential road restoration should be included.*

17. Q: Will PVC pipe be considered as an alternate for RCP for the 42" pipe sections?

A: *For this bid, all contractors should assume RCP for all sections unless stated otherwise in the plans.*

18. Q: Can "T" manholes be used in lieu of standard manholes?

A: *For this bid, all contractors should assume standard manholes are required unless otherwise noted in the plans.*

19. Q: Is there a prevailing wage for this project?

A: *No. This project is being paid with local funds.*

20. Q: Can you provide any details on length, width, depth of the disc golf tee box areas to be replaced?

A: *All concrete tee boxes are marked to be removed and replaced. It is the responsibility of the contractor to document the exact location of the four corners of the tee boxes. Contractor must ensure that all tee boxes are replaced in the same positioning and alignment as were present prior to construction. As for size, the plans are to scale, and bidders have access to the site prior to bidding.*

21. Q: Are the targets concreted in place, or a simple pole in the ground?

A: *It is unknown if the targets are set in concrete. For the purposes of this bid assume the targets are buried 24" and set in 8" diameter concrete.*

22. Q: The word "replaced" is used numerous times on the plan and profile sheets regarding items on the disc golf course. Are these items required to be replaced with new items? Or are they simply required to be reset with replacement only necessary if they are damaged?

A: *Please review the project documents carefully. All disc golf targets are to be removed, stored, and reset. Contractor is also responsible for documenting the vertical and horizontal location of the targets prior to removing these items from the park. Contractor must ensure that all targets are reset in the same horizontal and vertical locations.*

All concrete tee boxes are marked to be removed and replaced. It is the responsibility of the contractor to document the exact location of the four corners of the tee boxes. Contractor must ensure that all tee boxes are replaced in the same positioning and alignment as were present prior to construction.

In addition to the disc golf features there are other features that may be in the construction limits that were not tagged but will need to be removed, stored/protected, and reset, such as existing picnic tables and benches.

23. Q: How many of the existing bollards need to be replaced, as shown on Sheet C3? Are there any details or specifications for what needs to be provided?

A: *All existing bollards are to be replaced and three (3) new bollards will need to be added.*

24. Q: Does the City have any desire to have beauty mounds built in the park for landscaping to keep those spoils close to the pipe? Keeping them onsite would reduce the overall price of the project significantly.

A: *All spoils must be removed from the job site as the entire jobsite falls within a mapped floodplain. Per the permits, spoils will not be allowed to be smoothed out within the project area or surrounding floodplain. Edgewater Park is also included in the mapped floodplain.*

25. Q: The Trench Detail on Sheet C17 states “remove unsatisfactory soil in trench bottom & replace unsatisfactory soil & over-excavations with compacted backfill or fill material as directed by Engineer.” Is the intent of this statement that the successful bidder only needs to perform this work if directed by the Engineer? If so, how is the successful bidder to be compensated for this work?

A: *This is a “typical” detail. This note is included if unsuitable soils are found in the trench that are unknown to the Engineer and Contractor at the time of bidding. Over-excavation should only be performed if there are unsatisfactory soils in the trench and only when approved by the City and Engineer. If this situation is encountered, the City, Engineer, and Project Representative should be informed prior to any over-excavation. Structural backfill is listed as a unit cost. It is anticipated that this unit cost will be utilized to pay for any additional backfill needed due to unsuitable soils. If actions outside of structural backfill are required, those instances will be handled on an individual basis at the time of*

discovery. However, there are no known areas of unsuitable soils identified at the time of bidding and should not be included in the bids.

26. Q: Where is it anticipated that Pay Item No. 9 – Flowable Backfill will be required?

A: This item has been removed from the bid form.

27. Q: Section 01220, Paragraph 3.2.A states “Unauthorized excavation, as well as remedial work directed by Engineer, shall be without additional compensation.” The word “remedial” is not included as a Defined Term in Article 1.01 of the Standard General Conditions. Does “remedial” refer solely to correction of “defective” work, as defined in Paragraph 1.02 D of the Standard General Conditions?

A: A definition for remedial has been added to the Supplementary Conditions via Addendum #2. Remedial work is synonymous with defective work.

28. Q: How is the 333 LF of 24” RCP that will be used for the conflict reroutes to be paid? It is not included in the plan quantity for 24” Gravity Sanitary Sewer and there is no mention of this work in the Project Manual.

A: The Bid Form has been updated.

29. Q: How are the 6 EA Sanitary Manholes that will be used for the conflict reroutes to be paid? They are not included in the pay items and there is no mention of this work in the Project Manual.

A: The Bid Form has been updated to include the manholes for the relocation of the existing 24” sanitary sewer.

30. Q: What peak flow rate is required to be provided for the sanitary relocations?

A: The existing sewers to be relocated are 24” gravity sewer at a slope of approximately 0.13%. For this condition, Bidders can assume a maximum flow rate of 8.75 cfs for the purposes of bidding.

31. Q: Will the proposed 12” and 24” HDPE siphon pipes need to be upsized?

A: No upsizing will be needed. The siphon pipes are designed as IPS HDPE. The required inside diameters required for this project are approximately 10.3 inches and 19.4 inches. These inside diameters correspond to 12” and 24” IPS HDPE pipe.

32. Q: Is there a minimum and maximum spacing requirement for the siphon pipes under the White River?

A: Where installed via HDD under the White River, the twin barrels should not be separated by more than 6 foot. The pipes must enter the siphon structures as shown on Sheet C19 of the plan set with no more than 27-inch separation between pipes. The other governing location is in the wall anchors shown on Sheet C19. Spacing between pipes at wall anchors should be approximately 24 inches.

33. Q: Will grout be allowed to mitigate any joint leakage?

A: Per specification section 02530, grouting of leaking joints is not allowed.

34. Q: Is there a depth category missing for the 42", 12-foot to 14-foot depth, the 174 LF between structure 11 (12.59') and conflict str 3 (12.55')?

A: The bid form has been updated.

35. Q: Please clarify where the 102 LF of 72" is utilized on the project.

A: The bid form has been updated.

36. Q: Please clarify the depths of pipe installation on the bid form.

A: The bid form has been updated.

37. Q: Please clarify the quantity of pipe on the bid form.

A: The bid form has been updated.

38. Q: What is the intent of Pay Item No. 4 – Pavement Removal?

A: Pavement removal is defined in the Measurement and Payment specification as removal of asphalt pavement contained within the defined construction limits. Further information is contained in the Earthwork specification as amended by Addendum #2.

39. Q: How is removal of the existing disc golf tee stations to be paid?

A: Removal of concrete disc golf tee boxes is included in the Disc Golf Course and Park Restoration pay item as indicated in the Measurement and Payment spec.

40. Q: Is this Pavement Removal in accordance with Indiana Department of Transportation Standard Specifications, or something else?

A: Information is contained in the Earthwork specification as amended by Addendum #2.

41. Q: What are the requirements for Pay Item No. 3 – Field Offices and how many are required?

A: *Specifications outlining requirements for field offices have been added to the Project Manual via Addendum #2.*

42. Q: What are the requirements for the watertight hatch on Structure 11C?

A: *Additional information for hatch requirements has been provided in Addendum #2.*

43. Q: Also, what are the dimensions of this hatch? There are no dimensions shown and the details are not to scale.

A: *Dimensions of the hatch are shown on sheet C18 of the plan set. The dimensions are shown on the plan view of the siphon discharge structure in the upper left-hand portion of the page. The plan view has both dimensions typed over the hatch as well as distance from the centerline of the hatch in two directions.*

44. Q: Where is Pay item 16.01 – Core and connect to an existing structure to be used?

A: *The bid form has been updated.*

45. Q: Can a pipe insulation bid item be added to the bid form with a quantity for bidding purposes?

A: *This item has been added to the Bid Form and a pay item added to the measurement and payment specification.*

46. Q: Can provide a copy of the bid tab from the Phase I project?

A: *This item has been added to Addendum #2.*

Project: White River Interceptor - Phase I
Bid Date: 1/26/2010
Owner: City of Anderson

Owner: City of Anderson				Contractor															
				Atlas Excavating, Inc.		Eagle Valley, Inc.		Tranco, Inc.		Dunigan Bros., Inc		Gradex, Inc.		Merryman Excavation		Average Bid Amount			
Ind. Form 96 w/Financial Statement				X		X		X		X		X		X					
Bid Bond				X		X		X		X		X		X					
Acknowledgement of Addenda Received (#)				X		X		X		X		X		X					
Proposed Products List				X		X		X		X		X		X					
Subcontractor's List				X		X		X		X		X		X					
		Unit	Estimated Quantity	Engineer's Estimate	Bid Unit Price	Bid Price	Bid Unit Price	Bid Price	Bid Unit Price	Bid Price	Bid Unit Price	Bid Price	Bid Unit Price	Bid Price	Bid Unit Price	Bid Price	Bid Unit Price	Bid Price	
Administrative																			
	1	Mobilization/Demobilization (not to exceed 5% of base bid)	1 LS	\$ 100,000.00	\$ 96,000.00	\$ 96,000.00	\$ 116,585.00	\$ 116,585.00	\$ 115,000.00	\$ 115,000.00	\$ 103,000.00	\$ 103,000.00	\$ 133,900.00	\$ 133,900.00	\$ 103,775.00	\$ 103,775.00	\$ 111,376.67	\$ 111,376.67	
	2	Maintenance of Traffic	1 LS	\$ 12,000.00	\$ 3,000.00	\$ 3,000.00	\$ 4,000.00	\$ 4,000.00	\$ 7,200.00	\$ 7,200.00	\$ 13,493.00	\$ 13,493.00	\$ 90,000.00	\$ 90,000.00	\$ 11,400.00	\$ 11,400.00	\$ 21,515.50	\$ 21,515.50	
	3	Field Offices	9 Mo	\$ 3,500.00	\$ 1,800.00	\$ 16,200.00	\$ 250.00	\$ 2,250.00	\$ 1,500.00	\$ 13,500.00	\$ 2,060.00	\$ 18,540.00	\$ 2,000.00	\$ 18,000.00	\$ 6,650.00	\$ 59,850.00	\$ 2,376.67	\$ 21,390.00	
Sitework																			
	4	Dewatering	1 LS	\$ 45,000.00	\$ 1.00	\$ 1.00	\$ 25,000.00	\$ 25,000.00	\$ 191,500.00	\$ 191,500.00	\$ 134,930.00	\$ 134,930.00	\$ 274,000.00	\$ 274,000.00	\$ 284,925.00	\$ 284,925.00	\$ 151,726.00	\$ 151,726.00	
	5	Structure Backfill																	
	5.01	Over Gravity Sanitary Sewers above 12-foot depth to 14-foot depth	269 LF	\$ 59.50	\$ 35.00	\$ 9,415.00	\$ 31.00	\$ 8,339.00	\$ 120.00	\$ 32,280.00	\$ 37.10	\$ 9,979.90	\$ 139.00	\$ 37,391.00	\$ 85.00	\$ 22,865.00	\$ 74.52	\$ 20,044.98	
	5.02	Over Gravity Sanitary Sewers above 14-foot depth to 16-foot depth	208 LF	\$ 73.50	\$ 35.00	\$ 7,280.00	\$ 42.00	\$ 8,736.00	\$ 142.00	\$ 29,536.00	\$ 50.50	\$ 10,504.00	\$ 160.00	\$ 33,280.00	\$ 98.00	\$ 20,384.00	\$ 87.92	\$ 18,286.67	
	5.03	Over Gravity Sanitary Sewers above 16-foot depth to 18-foot depth	426 LF	\$ 87.50	\$ 47.00	\$ 20,022.00	\$ 53.00	\$ 22,578.00	\$ 172.00	\$ 73,272.00	\$ 67.00	\$ 28,542.00	\$ 200.00	\$ 85,200.00	\$ 125.00	\$ 53,250.00	\$ 110.67	\$ 47,144.00	
	5.04	Over Gravity Sanitary Sewers above 18-foot depth to 20-foot depth	361 LF	\$ 101.50	\$ 69.00	\$ 24,909.00	\$ 80.00	\$ 28,880.00	\$ 207.00	\$ 74,727.00	\$ 84.50	\$ 30,504.50	\$ 265.00	\$ 95,665.00	\$ 153.00	\$ 55,233.00	\$ 143.08	\$ 51,653.08	
Gravity Sanitary Sewers																			
	6	12-inch Gravity Sanitary Sewers																	
	6.01	12-inch Gravity Sanitary Sewers to 8 Foot Depth	21 LF	\$ 100.00	\$ 100.00	\$ 2,100.00	\$ 76.00	\$ 1,596.00	\$ 58.00	\$ 1,218.00	\$ 240.00	\$ 5,040.00	\$ 95.00	\$ 1,995.00	\$ 55.00	\$ 1,155.00	\$ 104.00	\$ 2,184.00	
	6.02	12-inch Gravity Sanitary Sewers above 8-foot depth to 10-foot depth	9 LF	\$ 120.00	\$ 200.00	\$ 1,800.00	\$ 133.00	\$ 1,197.00	\$ 58.00	\$ 522.00	\$ 240.00	\$ 2,160.00	\$ 150.00	\$ 1,350.00	\$ 99.00	\$ 891.00	\$ 146.67	\$ 1,320.00	
	7	36-inch Gravity Sanitary Sewers																	
	7.01	36-inch Gravity Sanitary Sewers above 12-foot depth to 14-foot depth	11 LF	\$ 170.00	\$ 300.00	\$ 3,300.00	\$ 733.00	\$ 8,063.00	\$ 340.00	\$ 3,740.00	\$ 723.10	\$ 7,954.10	\$ 275.00	\$ 3,025.00	\$ 367.00	\$ 4,037.00	\$ 456.35	\$ 5,019.85	
	8	72-inch Gravity Sanitary Sewers																	
	8.01	72-inch Gravity Sanitary Sewers above 8-foot depth to 10-foot depth	10 LF	\$ 450.00	\$ 260.00	\$ 2,600.00	\$ 424.00	\$ 4,240.00	\$ 237.00	\$ 2,370.00	\$ 372.90	\$ 3,729.00	\$ 375.00	\$ 3,750.00	\$ 409.00	\$ 4,090.00	\$ 346.32	\$ 3,463.17	
	8.02	72-inch Gravity Sanitary Sewers above 10-foot depth to 12-foot depth	363 LF	\$ 500.00	\$ 280.00	\$ 101,640.00	\$ 426.00	\$ 154,638.00	\$ 239.00	\$ 86,757.00	\$ 372.90	\$ 135,362.70	\$ 310.00	\$ 112,530.00	\$ 438.00	\$ 158,994.00	\$ 344.32	\$ 124,986.95	
	8.03	72-inch Gravity Sanitary Sewers above 12-foot depth to 14-foot depth	1089 LF	\$ 550.00	\$ 300.00	\$ 326,700.00	\$ 431.00	\$ 469,359.00	\$ 260.00	\$ 283,140.00	\$ 372.90	\$ 406,088.10	\$ 320.00	\$ 348,480.00	\$ 453.00	\$ 493,317.00	\$ 356.15	\$ 387,847.35	
	8.04	72-inch Gravity Sanitary Sewers above 14-foot depth to 16-foot depth	379 LF	\$ 620.00	\$ 320.00	\$ 121,280.00	\$ 492.00	\$ 186,468.00	\$ 277.00	\$ 104,983.00	\$ 372.90	\$ 141,329.10	\$ 325.00	\$ 123,175.00	\$ 481.00	\$ 182,299.00	\$ 377.98	\$ 143,255.68	
	8.05	72-inch Gravity Sanitary Sewers above 16-foot depth to 18-foot depth	426 LF	\$ 700.00	\$ 400.00	\$ 170,400.00	\$ 518.00	\$ 220,668.00	\$ 307.00	\$ 130,782.00	\$ 372.90	\$ 158,855.40	\$ 330.00	\$ 140,580.00	\$ 515.00	\$ 219,390.00	\$ 407.15	\$ 173,445.90	
	8.06	72-inch Gravity Sanitary Sewers above 18-foot depth to 20-foot depth	443 LF	\$ 800.00	\$ 420.00	\$ 186,060.00	\$ 562.00	\$ 248,966.00	\$ 315.00	\$ 139,545.00	\$ 372.90	\$ 165,194.70	\$ 360.00	\$ 159,480.00	\$ 578.00	\$ 256,054.00	\$ 434.65	\$ 192,549.95	
	9	Sewer Siphon (Double Barrel)																	
	9.01	20-inch River Crossing Pipe	462 LF	\$ 1,000.00	\$ 200.00	\$ 92,400.00	\$ 221.00	\$ 102,102.00	\$ 380.00	\$ 175,560.00	\$ 334.80	\$ 154,677.60	\$ 345.00	\$ 159,390.00	\$ 305.00	\$ 140,910.00	\$ 297.63	\$ 137,506.60	
	9.02	26-inch River Crossing Pipe	462 LF	\$ 1,200.00	\$ 300.00	\$ 138,600.00	\$ 259.00	\$ 119,658.00	\$ 515.00	\$ 237,930.00	\$ 440.80	\$ 203,649.60	\$ 475.00	\$ 219,450.00	\$ 371.00	\$ 171,402.00	\$ 393.47	\$ 181,781.60	
	10	Abandonment																	
	10.01	Headwall Structure Removal and Outfall Pipe Abandonment	2 EA	\$ 2,000.00	\$ 3,000.00	\$ 6,000.00	\$ 1,601.00	\$ 3,202.00	\$ 2,920.00	\$ 5,840.00	\$ 7,416.00	\$ 14,832.00	\$ 3,000.00	\$ 6,000.00	\$ 2,350.00	\$ 4,700.00	\$ 3,381.17	\$ 6,762.33	
	10.02	12" Ex. Sanitary Sewer - Plug and Abandon	2 EA	\$ 500.00	\$ 1,000.00	\$ 2,000.00	\$ 858.00	\$ 1,716.00	\$ 325.00	\$ 650.00	\$ 360.50	\$ 721.00	\$ 1,350.00	\$ 2,700.00	\$ 585.00	\$ 1,170.00	\$ 746.42	\$ 1,492.83	
	11	4-foot Dia. Gravity Sanitary Sewer Manholes																	
	11.01	4-foot Dia. Gravity Sanitary Sewer Manholes to 8 Foot Depth	1 EA	\$ 3,000.00	\$ 4,000.00	\$ 4,000.00	\$ 6,603.00	\$ 6,603.00	\$ 2,600.00	\$ 2,600.00	\$ 5,150.00	\$ 5,150.00	\$ 1,500.00	\$ 1,500.00	\$ 2,510.00	\$ 2,510.00	\$ 3,727.17	\$ 3,727.17	
	12	8.5-foot Dia. Gravity Sanitary Sewer Manholes																	
	12.01	8.5-foot Dia. Gravity Sanitary Sewer Manholes above 10-foot depth to 12-foot depth	1 EA	\$ 10,000.00	\$ 15,000.00	\$ 15,000.00	\$ 14,590.00	\$ 14,590.00	\$ 12,700.00	\$ 12,700.00	\$ 19,055.00	\$ 19,055.00	\$ 10,000.00	\$ 10,000.00	\$ 11,775.00	\$ 11,775.00	\$ 13,853.33	\$ 13,853.33	
	12.02	8.5-foot Dia. Gravity Sanitary Sewer Manholes above 12-foot depth to 14-foot depth	2 EA	\$ 10,600.00	\$ 16,000.00	\$ 32,000.00	\$ 14,790.00	\$ 29,580.00	\$ 12,900.00	\$ 25,800.00	\$ 19,055.00	\$ 38,110.00	\$ 11,000.00	\$ 22,000.00	\$ 12,625.00	\$ 25,250.00	\$ 14,395.00	\$ 28,790.00	
	12.03	8.5-foot Dia. Gravity Sanitary Sewer Manholes above 14-foot depth to 16-foot depth	1 EA	\$ 11,500.00	\$ 16,000.00	\$ 16,000.00	\$ 15,130.00	\$ 15,130.00	\$ 16,500.00	\$ 16,500.00	\$ 20,291.00	\$ 20,291.00	\$ 12,000.00	\$ 12,000.00	\$ 13,550.00	\$ 15,578.50	\$ 15,578.50	\$ 15,578.50	
	12.04	8.5-foot Dia. Gravity Sanitary Sewer Manholes above 18-foot depth to 20-foot depth	1 EA	\$ 14,000.00	\$ 17,000.00	\$ 17,000.00	\$ 15,575.00	\$ 15,575.00	\$ 16,700.00	\$ 16,700.00	\$ 20,497.00	\$ 20,497.00	\$ 15,000.00	\$ 15,000.00	\$ 14,725.00	\$ 14,725.00	\$ 16,582.		