

**ADDENDUM NO. 01
TO THE
BIDDING REQUIREMENTS AND CONTRACT DOCUMENTS
FOR THE
NEW ALBANY UPHILL RUN LIFT STATION PROJECT**

OWNER: City of New Albany
142 East Main Street
New Albany, IN 47150

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: November 5, 2021

BID DATE: November 10, 2021

This Addendum No. 01, consisting of 2 pages, 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 - SECTION 00410 – BID FORM

- A. Bid Form Attachment A for Alternate 1 has been replaced with the attached. Updates include:
 - 1. Pay Item 18.02 “Corrosion Protection Lining at Receiving Manhole” has been added.
- B. Bid Form Attachment A for Alternate 2 has been added.

1.2 ITEM NO. 2 - SECTION 02541 – SANITARY SEWER STRUCTURE REHABILITATION

- A. This entire section has been added to clarify the proposed corrosion protection lining system.

1.3 ITEM NO. 3 - SECTION 11310 – SUBMERSIBLE LIFT STATION

- A. All references to pump controls and instrumentation in this section shall be superseded by Division 26 – Electrical

PART 2 - DRAWINGS - NONE

PART 3 - ADDITIONAL TECHNICAL INFORMATION

The following technical information is not part of the Contract Documents, but Bidder is entitled to rely upon this “technical data” 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 ITEM NO. 1 – PRE-BID MEETING MINUTES

- A. Pre-bid meeting minutes and sign-in sheet from the October 28th, 2021 meeting are attached to this addendum

3.2 ITEM NO. 1 – QUESTIONS AND RESPONSES LIST NO. 1

- A. Questions and Responses List No. 1 is attached and addresses any questions received by 12:00 PM on November 4, 2021.

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.**



11/5/21

CERTIFIED BY:

Peter Wamsley
Peter Wamsley, P.E.

Registered P.E. No. 11300326
State of Indiana

Encls.: Section 00410 – Bid Form Attachment for Alternate 1
Section 00410 – Bid Form Attachment for Alternate 2
Section 02541 – Sanitary Sewer Structure Rehabilitation
Pre-Bid Meeting Minutes with Sign-in Sheet
Questions and Responses List No. 1 with Attachments

ALTERNATE 1: 16-INCH FORCE MAIN

BID FORM ATTACHMENT A - BID PRICES

OWNER: New Albany

PROJECT: Uphill Run LS

	Estimated Quantity	Unit Type	Unit Price	Estimated Price
Bidder will complete the Work for the following Unit price(s):				
Administrative				
1 Mobilization/Demobilization <i>(not to exceed 5% of base bid)</i>	1	LS		
2 Maintenance of Traffic	1	LS		
Sitework				
3b Rock Excavation	350	CY		
12 Pavement Removal	200	SY		
13 Allowance: County Road Cut Fees	1	LS	\$10,000	\$10,000
14 Dewatering	1	LS		
15 Erosion Control	1	LS		
16 Structure Backfill				
16.01 Over Sewer Force Mains and Laterals	220	LF		
Lift Stations and Force Mains				
17 Sewer Force Mains				
17.01 16" Force Main, Open Cut	314	LF		
17.02 16" Force Main, Horizontal Directional Drill, Shale	1,887	LF		
18 Sewer Force Main Connections				
18.01 Force Main Connection to Existing Manhole	1	EA		
18.02 Corrosion Protection Lining at Receiving Manhole	1	EA		
19 Force Main Valves				
19.01 4-inch Combination Force Main Air Valves	1	EA		
Bases and Pavements				
20 Pavements				
20.01 HMA Patch	200	SY		
20.02 Driveway Repair, Aggregate	25	SY		
Lawns and Grasses				
21 Lawns and Grasses				
21.01 Seeding	300	SY		

BID FORM

Total Unit Price Alternate 1 Amount, inclusive of all Pay Items:

\$ _____
(words)
(numerals)

Bidder: _____

Date: _____

By: _____

(Signature of Bid Form Signatory)

Name (typed or printed): _____

ALTERNATE 2: LIFT STATION CORROSION PROTECTION

BID FORM

BID FORM ATTACHMENT A - BID PRICES

OWNER: City of New Albany

PROJECT: Uphill Run Lift Station - Base Bid

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

Item No. 1 – Wetwell Corrosion Protection

Lump Sum Bid Price: _____ \$ _____
(words) (numerals)

Total Lump Sum Bid Price for Alternate 2, inclusive

Total Alternate 2 Price: _____ \$ _____
(words) (numerals)

Bidder:

By:

(Signature of Bid Form Signatory)

Name (typed or printed):

Date:

02541

Sanitary Sewer Structure Rehabilitation

SECTION 02541 SANITARY SEWER STRUCTURE REHABILITATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes rehabilitation and repair using cementitious materials of the following:
 - 1. Existing sanitary and combined sewer manholes
 - 2. Existing sanitary and combined sewer structures.

1.2 ACRONYMS

- A. ANSI: American National Standards Institute
- B. ASTM – American Society of Testing and Materials
- C. NSF – National Sanitation Foundation

1.3 SUBMITTALS

- A. Approval Submittals
 - 1. Product Data: For each type of product indicated.
- B. Informational Submittals
 - 1. Contractor's Certifications.
 - 2. Product and Material Certificates.
 - 3. Laboratory test results.
 - a. Compressive strength tests.
 - 4. Material safety data sheets
 - 5. Manufacturer's instructions.

1.4 QUALITY ASSURANCE

- A. Qualifications

1. Applicator shall be certified by manufacturer in the handling, mixing and application of products being used where such certifications are provided by manufacturer.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products in accordance with manufacturer's recommendations.

1.6 SCHEDULING

- A. Coordinate structure rehabilitation with the construction of other adjacent sanitary sewer system work.

1.7 ENVIRONMENTAL CONDITIONS

- A. Do not apply materials under the following conditions:
 1. Temperatures exceeding the manufacturer's recommended maximum or minimum allowable.
 2. Dusty or smoke-laden atmosphere.
 3. Over flowing water.
 4. Other conditions considered unsatisfactory to the product manufacturer.

PART 2 - PRODUCTS

2.1 GENERAL

- A. All materials are to be compatible with substrate and with each other. All materials, including additives, shall be approved by manufacturer for use together and in the application to which it is being used.
- B. Approved grouts describe a minimum acceptable product quality. Similar products developed for the intended purpose meeting the minimum acceptable product quality standards will be considered on a case-by-case basis.
- C. Additional materials from same manufacturer may be used with Engineer's prior approval where conditions preclude proper use of indicated products.

2.2 HYDRAULIC REPAIR GROUT

- A. Hydraulic grout shall be designed to be applied in dry powder form, with no prior mixing of water, directly to active leaks under hydrostatic pressure in manholes or related structures. Material may also be mixed with water according to manufacturer's recommendations. Materials shall consist of rapid setting cements, silicious aggregates, and various accelerating agents. Material shall not contain chlorides, gypsum, or metallic particles.
- B. Characteristics:
 - 1. Composition: Blend of hydraulic cements and fillers.
 - 2. Compressive Strength per ASTM C 109:
 - a. 1 Day: 3,500 psi
 - b. 7 Days: 4,900 psi
 - c. 28 Days: 5,500 psi
 - 3. Tensile Strength per ASTM C 190
 - a. 7 Days: 290 psi
 - b. 28 Days: 575 psi
 - 4. Working Time: 45 to 90 seconds at 77 degrees F.
 - 5. Color: Dark gray.
 - 6. Approved hydraulic cement mortar shall be Mainstay ML-10 by Madewell Products Corp. or approved equal.

2.3 STRUCTURAL REPAIR GROUT

- A. All structural repair grout material shall be designed to fill large voids in structure walls. Material shall consist of rapid setting cements, aggregates, and various accelerating agents. Material shall not contain chlorides, gypsum, or metallic particles.
- B. Minimum physical properties:
 - 1. Compressive Strength (ASTM C109): 1,400 psi at 6 hours
- C. Approved structural repair grout shall be Quadex Hyperform by Quadex, Inc., Strong-Seal QSR by Strong-Seal Systems Corporation, Sauereisen SewerGard Trowelable no. 210 by Sauereisen Corporation, or approved equal.

2.4 INVERT REPAIR GROUT

- A. Invert repair grouts shall be quick-setting cementitious material designed to fill large voids and to repair or reconstruct inverts where no hydrostatic pressure exists. Material

shall consist of rapid setting cements, aggregates, and various accelerating agents. Material shall not contain chlorides, gypsum, or metallic particles.

B. Minimum physical properties:

1. Compressive Strength (ASTM C109)
 - a. 1 Hour: 4,000 psi
 - b. 24 Hours: 7,000 psi
2. Flexural Strength (ASTM C348)
 - a. 1 Hour: 450 psi
 - b. 24 Hours: 600 psi
3. Setting Time (Gilmore ASTM C266)
 - a. Initial: 15-18 minutes
 - b. Final: 22-25 minutes

C. Approved invert repair grouts shall be Quadex Hyperform by Quadex, Inc., Strong-Seal QSR by Strong Seal Systems, Sauereisen Underlayment F-120 by Sauereisen Corporation, or approved equal.

2.5 PIPE PENETRATION AND RING SEALER

- A. Pipe penetration and ring sealer shall be a flexible, tough, rubbery hydrophilic foam gasket material that seals using a combination of mechanical and chemical bonds and compression sealing. Sealer shall be NSF approved under Standard 61 for Drinking Water Systems Components.
- B. Approved Pipe Penetration and Ring Sealers shall be Scotch-Seal Chemical Grout 5600 by 3M Products, Avanti AV-333 Injectaflex, or equal.
- C. Oakum shall be oil-free meeting Federal Specification HH-P-177.

2.6 GROUT LINER

- A. Low shrinkage, high strength, polymer modified, sprayable microsilica grout.
 1. Composition: Blend of cements, microsilica, thermoplastic fibers, densifiers, polymer admixtures, and modifiers.
 - a. Grout shall not contain calcium aluminate cements or aggregates.
 2. Compressive Strength per ASTM C 109:
 - a. 2 Days: 3,875 psi
 - b. 7 Days: 4,550 psi
 - c. 14 Days: 5,640 psi
 - d. 28 Days: 6,190 psi
 3. Flexural Strength per ASTM C 78:

- a. 7 Days: 825 psi
 - b. 28 Days: 985 psi
4. Tensile Strength per ASTM C 190:
 - a. 7 Days: 290 psi
 - b. 28 Days: 575 psi
5. Shrinkage per ASTM C 157, Modified:
 - a. 28 Days: 0.04 percent
6. Uniaxial Tensile Bond Strength per ACI 503R, Appendix A:
 - a. 28 Days: Greater than 500 psi over high strength concrete (5,000 psi compression strength concrete -bond strength governed by substrate tensile strength)
 - b. Minimum acceptable bond: 145 psi
 - c. Color: Dark gray
7. Approved restoration grout shall be Mainstay ML-72 Sprayable Microsilica Cement Mortar by Madewell Products Corp. or approved equal.

2.7 CORROSION BARRIER COATING

- A. The materials to be utilized in the lining of wastewater structures shall be designed and manufactured to withstand the severe effects of a wastewater environment. The manufacturer of the corrosion protection products shall have at least 10 years of experience in the production of the lining products utilized, and the products shall have satisfactory installation record.
- B. Equipment for installation of lining materials shall be of high quality and as recommended by the manufacturer.
- C. The lining system to be utilized for wastewater structures shall be a multi-layer 'stress skin panel' liner system as described below:
 1. Liner.

Installation

Liner

Moisture barrier	Modified Polymer (Silicone modified polyurea)
Surfacer	Polyurethane/Polymeric blend foam
Final corrosion barrier	Modified polymer (Silicone modified polyurea)

2. The modified polymer (silicone modified polyurea) shall be sprayable, solvent free, two-component polymeric, moisture/chemical barrier specifically developed for the corrosive wastewater environment.

3. The Polyurethane Rigid Structure Foam, shall be low viscosity two-component, containing flame retardants.
 4. Total thickness of multi-layer liner system shall be a minimum of 500 mils.
- D. The product shall be SPECTRASHIELD, manufactured by CCI Spectrum, Inc. or equal.

2.8 MANHOLE FRAME SEAL

- A. Composition: 100% solids, flexible epoxy trowel-grade mastic
- B. Thickness: Minimum of 1/4"
- C. Number of Components: 2
- D. Finish: Semigloss
- E. Color: Light gray
- F. Approved corrosion barrier coating shall be Madewell 806 Flexible Epoxy by Madewell Products Corp. or approved equal.

PART 3 - EXECUTION

3.1 GENERAL

- A. Determine condition of existing structure. Any item not reported damaged prior to construction shall be considered unbroken prior to the Work and, if broken, must be replaced by Contractor at no additional cost to Owner.
- B. Work involves the application of grouts and liners on existing sanitary, combined, and storm sewer structures.
- C. Use only clean potable water for mixing of grouts. Maintain all mixing equipment in clean condition.
- D. Do not apply grouts during freezing weather conditions. Grouts shall not be placed when:
 1. The ambient temperature is at or below 37 degrees F and falling
 2. When the temperature is anticipated to fall below 32 degrees F during the 24 hours following grout application.
 3. Other conditions exist where application is not recommended by manufacturer.

3.2 SURFACE PREPARATION

- A. Examine surfaces to receive all grouts. Notify the Engineer in writing if surfaces are not acceptable. Do not begin surface preparation, repair, or application until unacceptable conditions have been corrected.
- B. Surface Preparation
 - 1. Prepare surfaces in accordance with manufacturer's instructions.
 - 2. Equipment: Cleaning equipment shall be capable to producing a minimum blast pressure of 3,500 psi at 4 gpm. Pressure shall be adjustable to provide for adequate cleaning and removal of unsound substrate without damage to the structure.
 - 3. Remove deteriorated manhole steps prior to cleaning. Cut steps using a handsaw flush with the manhole wall.
 - 4. Cleaning: Clean structure by using a minimum of 1,500 psi water spray to remove contaminants, dirt, debris, and other foreign materials.
 - 5. When grease and oil are present, use an approved detergent or muriatic acid integrally with the high pressure cleaning water. Provide hot water blasting where required to adequately clean the surface.
 - 6. Remove roots, loose, unsound, and protruding brick, mortar, and concrete. All materials resulting from the cleaning of the structure shall be removed from the structure and sewers prior to application of the grouts.
 - 7. Inspection by Engineer: Before application of each material, surfaces to be sprayed or coated will be inspected by Engineer. Correct defects or deficiencies identified by Engineer before application of subsequent material.

3.3 VOID AND LEAK REPAIR

- A. Dry Voids: Repair and fill dry voids greater than 2 inches in depth with Structural Repair Grout. Apply patching material in accordance with manufacturer's instructions.
- B. Active Leaks:
 - 1. Stop active leaks with Hydraulic Repair Grout. Apply material in accordance with manufacturer's instructions.
 - 2. Chip out area of active leak to provide solid substrate of shape required for adherence of the Hydraulic Repair Grout.
 - 3. Install weep holes as required to localize infiltration during application of Hydraulic Grout.

4. Plug weep holes after application of the Hydraulic Grout material and before application of Cementitious Grout Liner.
5. Severe Infiltration: Drill as required to pressure grout using a cementitious or chemical grout. Apply grout in accordance with manufacturer's instructions.

3.4 PIPE PENETRATION AND RING REPAIR

- A. Seal large cracks and voids around pipe penetrations and rings using oakum (jute fiber) and Pipe Penetration and Ring Sealer.
- B. Clean void around pipe or between rings thoroughly. Use oakum of an appropriate diameter for the crack or void to be sealed. Cut oakum to appropriate length. Apply by saturating oakum in Pipe Penetration and Ring Sealer, then activate by holding oakum in water until the grout starts to foam. Insert saturated oakum in crack or void and drive the oakum in with a screwdriver or similar instrument.
- C. Spray oakum with water to ensure activation of the grout if crack or void is not actively leaking.
- D. Insert additional rings of oakum as required to fill void to the extent possible.
- E. Use accelerator as necessary during cold weather or with cold groundwater.

3.5 INVERT REPAIR

- A. Temporarily restrict flow in sewer with inflatable or mechanical plugs. Use care to prevent damage to property from backups. Provide bypass pumping as required.
- B. Apply Invert Repair Grout to voids in inverts and benches by hand or trowel. Form grout smooth in a manner to facilitate flow.
- C. Remove plugs once grout has set.

3.6 GROUT LINER

- A. Grout liner shall be installed on existing structures by brushing or low velocity spraying on the entire inside surface. The reconstruction process shall provide a monolithic liner capable of stopping infiltration. The grout liner shall extend from the top of the eccentric cone to the invert, including all penetrating pipe joints.
 1. Apply after invert repair and pipe penetration and ring repair.
 2. Apply before manhole frame sealer.

B. Advance Notice: Give Engineer a minimum of 3 days advance notice of start of grout liner application.

C. Application of Liner Material

1. Apply grout liner material in accordance with manufacturer's instructions.
2. Equipment
 - a. Spray apply grout liner material with equipment including an optimized progressive cavity pump capable of producing a minimum of 250 psi pumping pressure, a contrablend mixer with twin ribbon paddles with end discharge. Equipment must be complete with water storage and metering system. Remote delivery systems shall not be used.
 - b. Low Velocity Spray Application: Provide an air supply system for low velocity spray application.
 - c. Centrifugal Spin Cast Application: Material hose shall be coupled to a high speed rotating applicator device.
3. Do not apply grout liner to any other surfaces other than structure to be repaired.
4. Remove any excess material from sanitary sewer and dispose of properly.
5. Mixing:
 - a. Mix liner material with water in accordance with manufacturer's instructions.
 - b. Discharge prepared mix into hopper.
 - c. Continue mixing as liner material is continuously sprayed.
6. Cleaning: Ensure surface is clean and free of foreign material.
7. Saturated Surface: Ensure surface is damp and totally saturated with water without noticeable free water droplets or running water just before application of liner material.
8. Spraying: Spray apply grout liner material in 2 or more passes from bottom of wall to bottom of frame.
 - a. The base coat shall be applied to a nominal 1/8 inch thickness over the substrate. The surface is then rough troweled to fully set base coat. Spray shall fully penetrate into joints, cracks or voids.
 - b. Final coat(s) shall achieve:
 - 1) Minimum Total Thickness: 1/2 inch.
9. Finishing:
 - a. Trowel surface of sprayed liner material to relatively smooth finish. Initial troweling shall be in an upward motion to compress the material into voids and solidify structure wall. Do not over-trowel.
 - b. Apply brush finish to trowel finished surface.

10. Follow manufacturer's instructions whenever more than 24 hours have elapsed between applications.

D. Curing: Cure materials in accordance with manufacturer's instructions.

1. Install manhole cover within twenty (20) minutes after troweling is complete to avoid moisture loss in the grouts due to sunlight and wind.
2. Concrete Curing Compound:
 - a. Apply concrete curing compound recommended by grout liner manufacturer if relative humidity is less than 70 percent within manhole.
 - b. Apply curing compound in accordance with manufacturer's instructions.
3. Cure Time: Allow the minimum hours of cure time recommended by product manufacturer before subjecting manholes to flows. Provide bypass pumping as required.

3.7 CORROSION BARRIER COATING

A. Initial Inspection

1. Applicator shall take appropriate action to comply with all local, state, and federal regulations including those set forth by OSHA, EPA, the Owner and any other applicable authorities.
2. Prior to conducting any work, an initial inspection of the structure shall be preformed to determine need for protection against hazardous gases or oxygen depleted atmosphere and the need for flow control or flow diversion.
3. If required, submit a plan for flow control or bypass to the owner/engineer for approval prior to conducting the work.
4. New Portland cement structures shall have endured a minimum of 28 days since manufacture prior to commencing installation of the liner system.

B. Surface Preparation

1. The surface preparation program will include checking the atmosphere for hydrogen sulfide, methane, low oxygen, or other gases, approved flow control equipment, and surface preparation equipment.
2. Surface preparation for standard manhole structures shall be in accordance with the manufacturer's recommendations and may include high pressure water cleaning and shall provide a surface compatible for installation of the liner system.

3. Surface preparation and methods for other structures shall be in accordance with the manufacturer's recommendations, and may include high pressure water cleaning, hydro blasting, abrasive blasting, grinding, or detergent water cleaning, and shall be suited to provide a surface compatible for installation of the liner system.
4. The surface preparation method shall produce a cleaned, abraded, and sound surface with no evidence of laitance, loose concrete, loose brick, loose mortar, contaminants or debris, and shall display a surface profile suitable for application for the liner system in accordance with the manufacturer's recommendations.
5. After completion of surface preparation, perform the seven-point check list, inspecting for:
 - a. Leaks
 - b. Cracks
 - c. Holes
 - d. Exposed Rebar
 - e. Ring and Cover condition
 - f. Invert Condition
 - g. Inlet and Outlet Pipe condition
6. After the defects in the structure are identified, repair all leaks and severe cracks with Spectra-Grout, or other methods approved by the manufacturer.
7. Upon completion of leak and crack repair, the surface shall be primed in accordance with the manufacturer's recommendations.

C. Material Installation

1. Application procedures shall conform to recommendations of the manufacturer, including materials handling, mixing, environmental controls during application, safety and spray equipment.
2. Spray equipment shall be specifically designed to accurately ratio and apply the liner system.
3. Application of multi-component liner system shall be in strict accordance with manufacturer's recommendation. Final installation minimum total thickness shall be 500 mils. A permanent identification and date of work performed shall be affixed to the structure in a readily visible location.
4. If requested a final written report may be provided to the owner/engineer detailing the location, date of work and description of the work.

D. Final Inspection

1. Final liner system shall be completely free of pinholes or voids. Liner thickness shall be the minimum value as described herein.
2. Visual inspection may be made by the Owner/Engineer. Any deficiencies in the finished liner system shall be marked and repaired according to the procedures set forth by the manufacturer.

E. Warranty

Applicator and Manufacturer must warrant the liner system installation against failure for a period of 10 years from the installation date. Applicator shall correct failures any time prior to 10 years after the installation date. Failure will be deemed to have occurred if the protective liner fails to: (a) prevent the internal corrosion of the structure or (b) prevent groundwater infiltration. Failure does not include damage resulting from mechanical force or the presence of chemical substances not customarily present or used in Wastewater Structures, defects in the workmanship or devices of others upon which the Wastewater Structure functions or act of God. The liner must be installed in accordance with Manufacturer's instructions by Applicators certified by Manufacturer. Executed 10-year Applicator and Manufacturer warranties are to be provided upon completion of the work.

3.8 MANHOLE FRAME SEAL

A. Surface Preparation

1. Manhole Frame: Wire brush clean to SSPC SP-3 (Power Tool Cleaning) condition to remove all loose rust and any restoration mortar or epoxy corrosion barrier coating overspray.
 - a. Surface shall be clean and dry before application of manhole frame seal material.

B. Apply manhole frame seal material to a minimum thickness of 1/4" to top 6 inches of manhole eccentric cone, grade rings and manhole interior frame. Height of application depends on overall height of chimney, but minimum height will be 4" (2" above and below joint).

1. Apply material with a putty knife to a uniform thickness and texture.

C. Allow frame seal material to cure at least 24 hours in load bearing applications.

1. Do not apply below 50°F.
2. Protect from freezing for at least 48 hours after application.

3.9 FIELD QUALITY CONTROL

A. Compressive Strength Test:

1. Applicability: Grout materials indicated for compressive strength test.
2. Cast four 2 inch cubes each day or from each pallet of grout material in presence of Engineer.
3. Package, label, and provide postage for cubes. Mail cubes to manufacturer or testing laboratory.
4. Independent test laboratory shall test cubes for compressive strength in accordance with ASTM C109.

B. Destructive Dry Film Thickness Tests, ASTM D 4138:

1. Applicability: Corrosion barrier coating.
2. Perform one (1) test for every 500 square feet of surface lined. If the thickness is correct, no further testing is required for that area.
3. If the initial thickness test does not indicate correct film thickness, an additional four (4) measurements will be made, the average of which must equal minimum specified thickness, although individual measurements may under run this amount by no more than 20%.
4. Any area that does not meet the specified thickness as tested above, shall receive additional corrosion barrier coating (depending on the time and environment, additional surface preparation may be required).
5. If the areas tested are of proper thickness, destructive test sites shall be repaired with the appropriate barrier mortar at the contractor's expense prior to placing the system into service.

C. Spot Adhesion Testing

1. Applicability: Grout Liner:
2. Perform minimum of one (1) uniaxial pull-off adhesion test for every 500 square feet of surface lined.
3. Remove and replace areas not meeting required 145 psi at 28 days minimum adhesion requirement.
4. If the condition of the substrate is such that minimum pull-off adhesion requirement cannot be met by removal of the upper 1/4" of the substrate, work shall not proceed until a course of corrective action has been determined that effectively produces the required adhesion results.

D. Visual and Electrical Inspection for Holidays

1. Applicability: Corrosion barrier coating:
2. Visual Holiday Inspection: Perform visual inspection for holidays.

- a. Mark areas identified for repair and reapplication of epoxy corrosion barrier coating.
- 3. Electrical Holiday Inspection: Perform spark testing in accordance with NACE RP 0188 or as recommended by the manufacturer.
 - a. Mark areas identified for repair and reapplication of corrosion barrier coating.
- E. Leaks: Visually verify absence of leaks.

END OF SECTION 02541

**Pre-Bid Meeting
New Albany, Indiana
Uphill Run Lift Station Project
October 28, 2021**

**Meeting Location: New Albany WWTP/Virtual
Time: 10:30 AM Local (EST)**

0. SIGN ATTENDANCE SHEET (SEE ATTACHED)

1. INTRODUCTION OF RESPONSIBLE PERSONNEL

1.1 New Albany

- i. Rob Sartell, Wastewater Utility Director
- ii. Ed Wilkinson, Sewer Board President

1.2 Beam, Longest and Neff, L.L.C.

- i. Pete Wamsley, P.E.
- ii. Larry Haag, Project Coordinator (Not present)

2. PROJECT SCOPE

2.1 Uphill Run Lift Station Project

- A. The Base Bid includes replacement of a triplex pump station including precast wet well, valve vault, submersible pumps; installation of a back-up pumping system (Owner furnished); abandonment of existing lift station; site improvements including fill material for flood protection, decorative fence, shelter for electrical equipment; and sewer repair work along existing creek. Alternate 1 includes the installation of approximately 2,200 LF of 16-inch PVC force main, directional drilled as shown in the plans. Alternate 2 (NEW) includes corrosion protection lining system for new wet well and existing receiving manhole. Project is located near the intersection of Payne-Kohler Road and Chapel Lane.

3. PROJECT OVERVIEW

3.1 Funding and Agency Requirements

- i. None - Local Funds

3.2 Project Schedule and Time for Completion

- i. Bid Opening: 11/10/2021
- ii. Scheduled to present recommendations shortly after
- iii. NOA and NTP shortly afterward
- iv. Substantially complete: 180 days
- v. Fully complete: 210 days

3.3 Preceding Work – none.

3.4 Owner-Provided Products: Back-up Pumping System

3.5 Concurrent Work

3.6 Work Restrictions

- i. Work at the site will be performed during regular working hours, Monday through Friday.
- ii. The Contractor will not perform work on a Saturday, Sunday, or any legal holiday.
- iii. The Contractor may perform work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

3.7 Utilities

- i. No temporary utilities will be provided.

3.8 Permits

- A. IDEM Sanitary Sewer Construction Permit: Received
- B. Floyd County Road Cut Permit: By Contractor

3.9 Geotechnical

- A. See Section 00310
 - i. Rock is anticipated at lift station: 900 CY +/-
 - ii. Rock may be present for the force main: 350 CY +/-

3.10 Status of Land Acquisition

- A. Land acquisition at the lift station site is complete – See Section 00312

3.11 Traffic Control

- i. Maintain one lane of traffic.

4. UNIQUE ISSUES

4.1 Phasing:

- A. Maintain sewer service at Uphill Run at all times.

5. ADDENDA

- 5.1 Pre-Bid Meeting Minutes and any other responses issued by November 5, 2021

6. PRE-BID ISSUES

- 6.1 Access to sites – coordinate with Owner
- 6.2 Last Day for Questions: Noon on November 4, 2021

7. BID TYPE

- 7.1 Lift Station: Lump Sum
- 7.2 Force Main: Unit Price

8. ITEMS TO BE SUBMITTED WITH BIDS

- 8.1 Bid Form (Section 00410)
 - i. Include Bidder Qualification Statement with supporting Data (Article 2.01- C)
 - ii. Include evidence of authority to do business in Indiana (Article 2.01 – B)
- 8.2 Bid Schedule (Section 00410 Attachment A)
- 8.3 Bid Proposal Form 96 (Section 00411)
- 8.4 Bid Security (Bid Bond form in Section 00431)
- 8.5 E-Verify
- 8.6 Bidder Qualification Statement

9. ITEMS TO BE SUBMITTED WITHIN 5 DAYS OF BID

- 9.1 Subcontractor's List (Section 00435)
- 9.2 Products/Suppliers List (Section 00434)
- 9.3 Schedule of Values for Lift Station

10. BID DUE DATE

- 10.1 Date: November 9, 2021
- 10.2 Time: 4:00 P.M. Local
- 10.3 Location: Beam, Longest and Neff, LLC; 8320 Craig Street, Indianapolis, IN 46250
– OR- New Albany WWTP, 38 W. 10th Street, New Albany, IN 47150

11. BID OPENING DATE

- 11.1 Date: November 10, 2021
- 11.2 Time: 9:15 A.M. Local
- 11.3 Location: New Albany Sewer Board Meeting (In person)

12. BID HOLDING

- 12.1 Held 60 days
- 12.2 Usually all but lowest 3 returned.

13. OTHER COMMENTS

- 13.1 Electrical Spec: Please defer to Division 26 which shall supersede Section 11310 regarding electrical, controls and instrumentation.
- 13.2 Corrosion Protection Lining: Will be included with the upcoming Addendum as Alternate 2. Spectra Shield system will be basis of design.

14. QUESTIONS

See Questions and Response List No.1

PRE-BID MEETING

NEW ALBANY, INDIANA
UPHILL RUN LIFT STATION PROJECT

October 28, 2021

SIGN-IN SHEET

<u>NAME</u>	<u>ORGANIZATION</u>	<u>PHONE</u>
Rob Spertell	N.A. Whistler	812-948-5320
Chris Conrad	11	11
Ed Wilkinson	Sewer Board	812-948-9844
Leon Poltschmidt	Dave O'Mara Contractor, Inc.	812-346-4135
Tom Bowman (VIRTUAL)	B.L. Anderson	765-463-1518
Chris Jackson (VIRTUAL)	Dan Cristiani Excavating Co. Inc.	812-282-9866
Mark Mathias (VIRTUAL)	Mersino	219-210-3477
Danny Wolfe (VIRTUAL)	MAC Construction	812-941-7895
Jeff Woodcock (VIRTUAL)	Spectra Tech, LLC	317-770-0300
Adam Smith (VIRTUAL)	Mitchell & Stark Construction	812-966-2151
Nathan Buckhart (VIRTUAL)	Toric Engineering	317-718-1800
PETE WAMSLEY	BEAM LONGEST AND NEFF	317-849-5832

**QUESTIONS AND RESPONSES LIST NO. 1
FOR THE
NEW ALBANY UPHILL RUN LIFT STATION PROJECT**

The following questions that did not warrant revisions to the Contract Documents have been presented by potential bidders for the New Albany Uphill Run Lift Station 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 supercede these responses.

1. Q: Can you please clarify where and when the bids are to be received? Local contractors may prefer to turn their bids in to New Albany if possible. Please include date, time, and location.
R: Bids may be received at Beam, Longest, and Neff offices located at 8320 Craig Street, Indianapolis, IN 46250 or at New Albany Wastewater Treatment Plant located at 38 W. 10th Street, New Albany, IN 47150 until 4:00 PM on November 9th, 2021. Bids may also be received in person at the New Albany Sewer Board Meeting held at 9:15 AM on November 10th, 2021 located in the first floor Council Chamber of City Hall at 142 East Main Street, New Albany, IN 47150.
2. Q: Plan Sheet C.09: We assume photo #2 goes with existing structure #2670 and the proposed top of casting elevation will be 453.54 not 953.54. Please confirm.
R: That is correct, Photo #2 does apply to structure #2670 and the proposed top of casting will be 453.54.
3. Q: Plan Sheet C.09: What work is to be done at existing structure #5?
R: Existing structure #5 shall be similarly rehabilitated (see previous question). The proposed top of casting will be 457.12.
4. Q: Spec Section 02532 Sewer Televising, 1.1 A1. Is CCTV of existing sewers required? If so, can you provide which sewers are to be CCTV?
R: CCTV is only required for newly installed sewers per Section 02530-3.7 F.
5. Q: Spec Section 01110-3, 1.8A states the owner will furnish the back-up pump skid assembly and Pay Item #9 description states it will include all appurtenances. Can you provide a bill of material so the contractor knows exactly what materials are being provided? Will the contractor be responsible for filling the fuel tank with fuel? If so, provide quantity.
R: Please see the attached Delivery Ticket for the backup pump and accessories. The backup pump assembly is currently located at the New Albany WWTP. The contractor will be responsible for transporting the assembly (including loading

and unloading) to the jobsite. The contractor shall also provide 300 gallons of diesel fuel during pump start-up.

6. Q: There are specifications for both PVC and HDPE Directional Drilled Force Main in 02545. The plans call out PVC. Please clarify if a PVC (Yellowmine) is desired or HDPE, or is it contractor's choice.
R: Please base your bid on restrained joint PVC for the HDD applications.
If desired, HDPE material can be considered after the bidding phase as a Substitution Request which is defined in Section 006443. But please note that such a substitution would require further hydraulic analysis of the pumping systems.
7. Q: Plan Sheet C.08 shows 8' wide hatch on the wetwell, but the wetwell dimensions are shown as only 7'-4" wide. Please clarify the wetwell/valve vault dimensions and hatch sizes.
R: The wetwell is 7'-4" wide x 9'-4" long and the valve vault is 8'x8'. The hatches for both of these structures shall be 84"x48", not 96"x48"
8. Q: I did not find any details on the shelter required. Is this just a wood framed, shingle roof, like at some of their other stations?
R: Correct, the shelter is wood framed shingle roof like other New Albany stations. Please see Section 01210-3.3 A for additional information.
9. Q: How firm are the completion date requirements? For example, if we experience supply chain issues, can the substantial completion and final completion dates be extended?
R: As long as the schedule is clearly communicated, New Albany will be understanding if the completion date needs to be extended to accommodate supply issues.
10. Q: Can you please confirm the rock excavation quantities for this project?
R: 900 CY of rock removal is anticipated at the lift station site – please use this quantity as the basis for your bid. An additional 350 CY of rock excavation is anticipated for the force main installation at bore pits and other open cut areas.
11. Q: It was noted at the pre-bid meeting that a corrosion protection lining system will be added. Can you please clarify?
R: New Albany would like to include corrosion protection lining system at the downstream receiving manhole (structure #1077) and at the new wet well. The system shall be Spectra Shield or equal. Please assume the receiving manhole is 6' diameter with an eccentric upper riser section. The wet well dimensions are shown on Sheet C.08. The corrosion protection system for the receiving manhole will be included with Alternate 1 and added to the Bid Form 00410A-1. The corrosion protection system for the wet well will be included with a new Alternate 2. Bid Form 00410A-2 and Section 02541 will be included with this addendum.

12. Q: Is there a detail for the HMA driveway at lift station (asphalt and stone thickness, asphalt and stone types)?
R: Please see attached "Bituminous Pavement Repair" detail. As shown, commercial driveways shall be 1.5 inches of HMA surface on 3 inches of HMA intermediate on either 6 inches of HMA base or 8 inches of compacted No. 53s.
13. Q: Please confirm the thickness of the compacted #53 within the fence area. Is it 6"?
R: That is correct, 6" of compacted No. 53s shall be used.
14. Q: Is there a detail for the 6' privacy fence and gates?
R: No detail provided. Please see Key Note 11 on Sheet C.06 for additional information.
15. Q: Is there a detail for the flow meter vault/manhole?
R: No detail provided. Meter vault shall be a precast structure, anticipated to be 4'x4' with a depth suitable for cover depth of the force main. Please assume a 36"x36" hatch for this structure.
16. Q: Is there a detail for the force main air valve?
R: Please provide an ARI D-26 (or equal) combination air valve suitable for sewage. Please see attached "Air Release Valve" detail.
17. Q: Bid Item 3b on Alternate 1: You have 350 CY set up for the alternate and the majority of the force main will be HDD. Please clarify design quantities.
R: That is correct, the 350 CY is anticipated at bore pits or other open cut areas. A majority of the force main will be directional drilled. Please bid Pay Item 17.02 as if shale will be encountered for much of the horizontal directional drilling.
18. Q: Is the schedule of values form to be completed and turn in with the bid?
R: Please complete the schedule of values, but it's only required for the base bid.
19. Q: Could we add an alternate to open cut the force main?
R: Please base your bid on installing the force main via horizontal directional drilling as shown in the bidding documents. If desired, open cut installation can be considered after the bidding phase as a Substitution Request which is defined in Section 006443. But please note that such a substitution would require a Rule V Permit which is currently not required for the directional drill method. The substitution would also require additional road cut fees and patching which would need to be considered.

Enc: Back-up Pump Assembly Delivery Ticket
Bituminous Pavement Repair Detail
Air Release Valve Detail



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115915
New Albany Wastewater Utility
38 W 10th St
New Albany, IN 47150-5918

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115915
New Albany Wastewater Utility
38 W 10th St
New Albany, IN 47150-5918

Date Shipped	Sales Representative	Order Taken By	Order Created By
02-19-2019	Derek McWilliams	Derek McWilliams	Mary Roach
Customer PO	Ordered By	Location Phone	Cell Phone
RSS080318	Mr. Randy Sikes	812-948-5320	502-643-8273
Terms	Site Contact	Delivery Zone	Transaction
Net 30	Chris Conrad	Delivery Zone 4	Sale Contract

Delivery Instructions

Cannot receive on Fridays. Mon -Thurs. 8:00 AM - 4:00 PM.

Qty Ordered	Qty Shipped	Item Code	Description
1	1	PMCD100DCN106	<p>Dri-Prime CD250M Critically Silenced</p> <ul style="list-style-type: none"> • Sound Attenuated Enclosure • 10" suction and discharge • John Deere 6068H285 Tier3 Diesel Engine • Includes PrimeGuard Engine Controller • Skid-mounted, 200 gal fuel tank • Engine/Motor Options <ul style="list-style-type: none"> • Emergency Standby Diesel Engine • Dri-Prime Backup System • PrimeGuard Controller • Block Heater - 110 Volt • Battery Charger - 12 Volt Trickle • Single Gang (1) GFCI Duplex Receptacle • Base Options <ul style="list-style-type: none"> • (1) 12V Light Mounted Over PG w/Switch • Custom <ul style="list-style-type: none"> • 300 Gal Non-UL Fuel Tank <p>Pumpend S/N: 18649280-1 Engine S/N: PE6068N007883 Base S/N: T47517 E-Code: 148542</p>
1	1	CAPRMA011	PrimeGuard Pressure Transducer

Accepted by - Customer's Name: (please print)	Truck#:	Delivered by:	Date:	Time:
Chris Conrad	241		02/19/19	12:00 noon
Customer Signature:	Driver name: (please print)	Lessor/Supplier Signature:		
Chris Conrad	Gordon Walls	Gordon Walls		

This order is subject to the Standard Terms and Conditions of Sale - Xylem Americas effective on the date the order is accepted which terms are available <https://www.xylem.com/en-US/support/xylem-americas-standard-terms-and-conditions/> and incorporated herein by reference and made a part of the agreement between the parties

Home Office:

84 Floodgate Road, Bridgeport, NJ 08014 • www.godwinpumps.com • (856) 467-3636 • (856) 467-4841



Qty Ordered	Qty Shipped	Item Code	Description
			E-Code: 147746
1	1	VLKN120F1S00	12" Stainless Steel Knife Gate Valve • with 150# Flange
1	1	AD120100F1F1F1	12" 150# Flange x 10" 150# Flange Concentric Adapter
2	2	MSG5100F1000	10" 150# Flange Gasket
1	1	VLCK120F1C00	12" Check Valve with 150# Flange
2	2	PARTSNI	10" Standard Steel Flanged Nut & Bolt Kits
1	1	DELIVERYFRT037	Delivery Motor Freight Br 037 • FOB

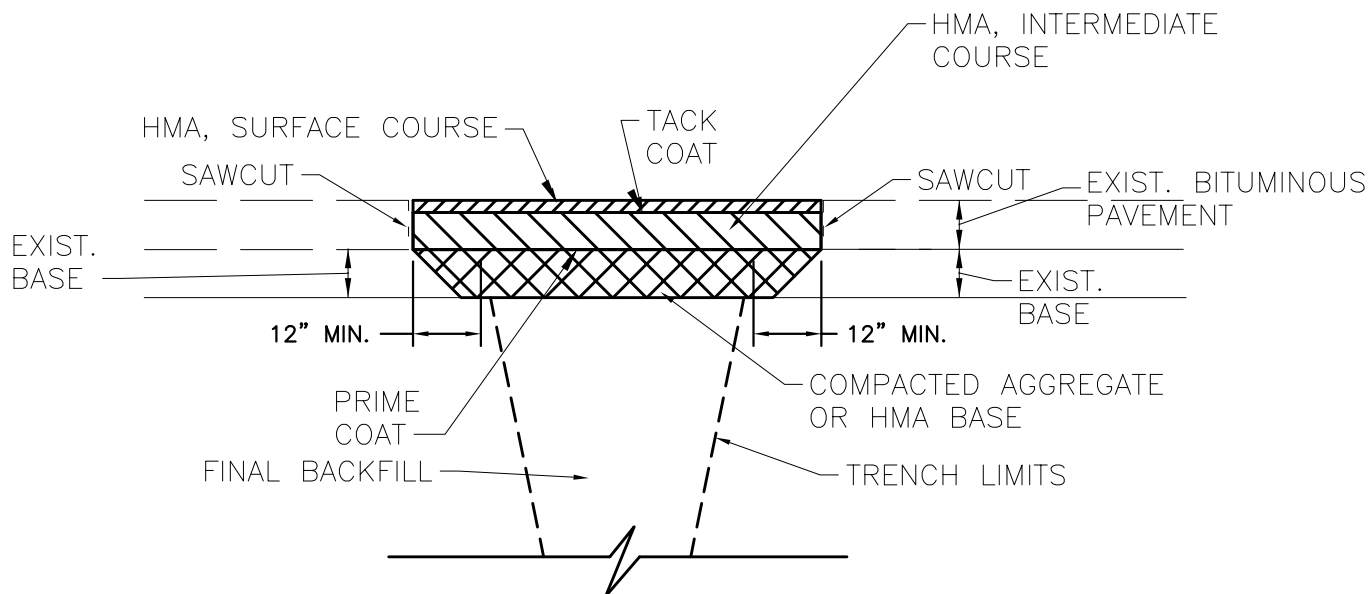
This order is subject to the Standard Terms and Conditions of Sale - Xylem Americas effective on the date the order is accepted which terms are available <https://www.xylem.com/en-US/support/xylem-americas-standard-terms-and-conditions> and incorporated herein by reference and made a part of the agreement between the parties

Home Office:

84 Floodgate Road, Bridgeport, NJ 08014 • www.godwinpumps.com • (856) 467-3636 • (856) 467-4841

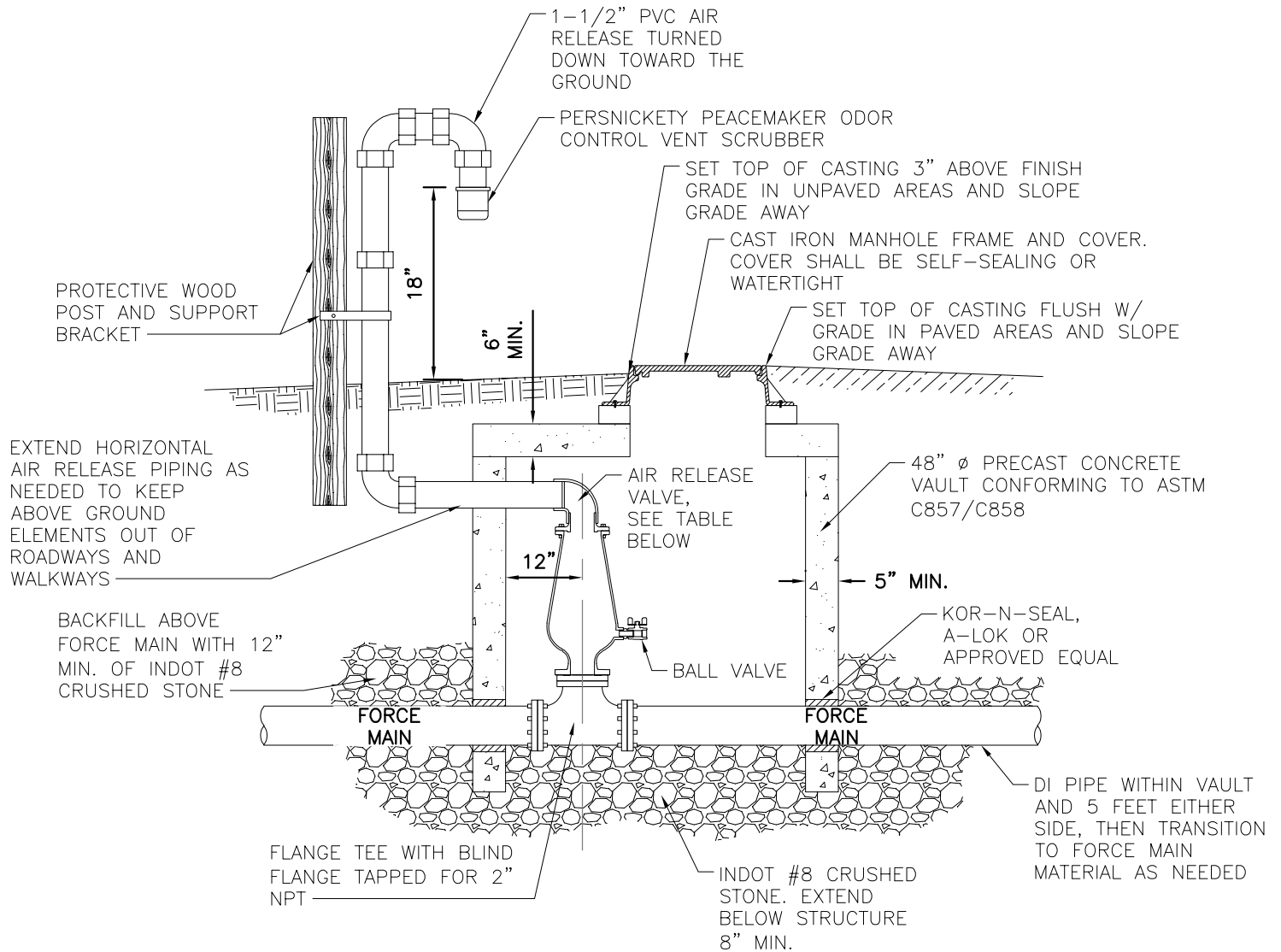
Quotation # 137004908
Picking # 337007332

02-19-2019 08:57



TYPE	BASE		INTERMEDIATE COURSE	SURFACE COURSE
	COMPACTED AGGREGATE	HMA		
SIDEWALK	4"	OR 3"	1½"	1½"
RESIDENTIAL DRIVE	6"	OR 4"	3"	1½"
LIGHT DUTY ROAD*	8"	OR 6"	3"	1½"
INTERMEDIATE DUTY ROAD	8"	OR 6"	4"	2"
HEAVY DUTY ROAD	6"		9"	1"

*ALL ALLEYS, COMMERCIAL DR. & PUBLIC ROADS SHALL BE CONSIDERED LIGHT-DUTY ROADS UNLESS INDICATED OTHERWISE



FORCE MAIN SIZE	ARV SIZE	ARV MODEL
4" Ø OR SMALLER	2" Ø	ARI D-025, ARI D-025L, OR EQUAL
6"-12" Ø	3" Ø	ARI D-025, ARI D-025L, OR EQUAL
12" Ø OR LARGER	3" Ø	ARI D-26 OR EQUAL