



City of St. Marys
Villa Nova Loop

ADDENDUM 3

August 19, 2024

Planholders on the City of St Marys, Villa Nova Loop are hereby notified of the following amendments to the Contract Documents. This Addendum is hereby made a part of the Contract Documents.

SPECIFICATIONS

Replace the following specifications with the attached:

C-800 –Supplementary Conditions

02555 – Pressure Pipe

RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED ON PAGE C-410-1 OF THE BID.

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SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-700 (2013 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

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 thereto.

ARTICLE 2 – PRELIMINARY MATTERS

SC-2.02 Copies of Documents

SC-2.02 Delete Paragraph 2.02.A in its entirety and insert the following new paragraph in its place:

- A. Owner shall furnish to Contractor three (3) copies of conformed Contract Documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies of the conformed Contract Documents will be furnished upon request at the cost of reproduction.

SC-2.06 Electronic Submittals

SC-2.06 Add the following new paragraphs immediately after Paragraph 2.06 C.

- D. Electronic files are provided to you for your convenience. Because electronic files can deteriorate or be damaged or be modified inadvertently or information from the electronic documents may be presented to you on your system differently than the original because of your software or system setup, these files may not be accurate. Any conclusion or information obtained or derived from such electronic files will be at your sole risk.
- E. Information contained in the electronic documents is for information and reference in connection with this project only. The information is not intended or represented to be suitable for reuse on extensions of the original project or on any other project.
- F. You should perform an acceptance test of the electronic documents immediately and inform us of any problems with the electronic documents. Jones & Henry will not be responsible for providing additional copies of these electronic files to you after 60 days from the date the documents are provided to you.

ARTICLE 3 – DOCUMENTS; INTENT, REQUIREMENTS, REUSE

SC-3.01 Intent

SC-3.01.C Delete Paragraph 3.01.C in its entirety and insert the following new paragraph in its place:

- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version, as printed by Engineer, shall govern.

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

SC-5.03 Subsurface and Physical Conditions

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

- C. The following reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to Owner:
1. Report dated April 12, 2024, prepared by Bowser Morner, Toledo, Ohio: "Soil Exploration; Proposed St. Marys Water Main St. Marys, Auglaize County, Ohio. The Technical Data contained in such report upon whose accuracy Contractor may rely are boring method, plan and logs; level of subsurface water; laboratory test methods and results, if any; and similar factual data, all as of the dates made.
 - a. Bowser Morner
1419 Miami Street
Toledo, Ohio 43605
419-691-4800
attn: Ahmad Rashid, PE
arashid@bowser-morner.com
- D. The following drawings of physical conditions relating to existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities) are known to Owner:
1. None
- E. Contractor may examine copies of reports and drawings identified in SC 5.03.C and SC 5.03.D that were not included with the Bidding Documents at 4357 Ferguson Drive, Suite 220, Cincinnati, OH 45245 during regular business hours, or may request copies from Engineer.

SC-5.03 Subsurface and Physical Conditions

SC 5.03 Delete Paragraph 5.03.A in its entirety and insert the following new paragraph in its place:

- A. No reports of explorations or tests of subsurface conditions at or adjacent to the Site, or drawings of physical conditions relating to existing surface or subsurface structures at the Site, are known to Owner.

SC-5.06 Hazardous Environmental Conditions

SC 5.06 Delete Paragraphs 5.06.A and 5.06.B in their entirety and insert the following new paragraphs in their place:

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.
- B. Not Used.

ARTICLE 6 – BONDS AND INSURANCE

SC-6.01 Performance, Payment, and Other Bonds

SC 6.01 Add the following new paragraph immediately after Paragraph 6.01.F:

- G. The Contractor shall furnish a Performance Bond and a Maintenance and Guarantee Bond, each in the amount of at least 100% of the Contract Price as security for the faithful performance and payment of all Contractor's obligations.

SC-6.02 Insurance – General Provisions

SC 6.02 Add the following new paragraph immediately after Paragraph 6.02.J:

- K. The additional insured shall be:
 - 1. The Owner; and
 - 2. The Engineer - Jones & Henry Engineers, Ltd.; and
 - 3. The Engineer's consultants; and
 - 4. Others if specifically required by special provision in the Contract Documents.

SC-6.03 Contractor's Insurance

SC 6.03 Delete Paragraph 6.03.I of the General Conditions and substitute the following in its place:

- I. General provisions: The policies of insurance required by these Paragraphs 6.03, 6.04 and 6.05 shall:

SC 6.03 Delete Paragraph 6.03.J of the General Conditions and substitute the following in its place:

- J. If an umbrella liability policy is used to satisfy the minimum limits of liability requirements, the combined limits must equal these minimum limits of liability.

SC 6.03 Add the following new paragraph immediately after Paragraph 6.03.J:

K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers' Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:

State:	<u>Statutory</u>
Federal, if applicable (e.g., Longshoreman's):	<u>Statutory</u>
Jones Act coverage, if applicable:	
Bodily injury by accident, each accident	\$ <u>1,000,000</u>
Bodily injury by disease, aggregate	\$ <u>1,000,000</u>
Employer's Liability:	
Bodily injury, each accident	\$ <u>1,000,000</u>
Bodily injury by disease, each employee	\$ <u>1,000,000</u>
Bodily injury/disease aggregate	\$ <u>1,000,000</u>
For work performed in monopolistic states, stop-gap liability coverage shall be endorsed to either the worker's compensation or commercial general liability policy with a minimum limit of:	<u>Statutory</u>
Foreign voluntary worker compensation	<u>Statutory</u>

2. Contractor's Commercial General Liability under Paragraphs 6.03.B, 6.03.C and 6.04 of the General Conditions:

General Aggregate	\$ <u>2,000,000</u> Addendum 3, August 19, 2024
Products - Completed Operations Aggregate	\$ <u>1,000,000</u> Addendum 3, August 19, 2024
Personal and Advertising Injury	\$ <u>1,000,000</u> Addendum 3, August 19, 2024
Each Occurrence (Bodily Injury and Property Damage)	\$ <u>1,000,000</u> Addendum 3, August 19, 2024

3. Automobile Liability under Paragraph 6.03.D. of the General Conditions:

Bodily Injury:	
Each person	\$ <u>2,000,000</u>
Each accident	\$ <u>2,000,000</u>
Property Damage:	
Each accident	\$ <u>2,000,000</u>
<i>[or]</i>	
Combined Single Limit of	\$ <u>4,000,000</u>
4. Excess or Umbrella Liability:	
Per Occurrence, for a total of	\$ <u>5,000,000</u>
Addendum 3, August 19, 2024	
General Aggregate	\$ <u>5,000,000</u>
5. Contractor's Pollution Liability:	
Each Occurrence	\$ <u>1,500,000</u>
General Aggregate	\$ <u>1,500,000</u>
<input type="checkbox"/>	If box is checked, Contractor is not required to provide Contractor's Pollution Liability insurance under this Contract
6. Additional Insureds: In addition to Owner and Engineer, include as additional insureds the following:	
7. Contractor's Professional Liability:	
Each Claim	\$ _____
Annual Aggregate	\$ _____

SC-6.03 Add the following new paragraph immediately after Paragraph 6.03.K:

L. During construction, the contractor shall maintain a Railroad Protective Liability Insurance policy naming R.J. Corman Railroad Company as insured with limits of \$2,000,000 per Occurrence and \$6,000,000 aggregate. **Addendum 1, August 13, 2024**

SC-6.04 Owner's Liability Insurance

SC-6.04 Delete Paragraph 6.04.A and B of the General Conditions and substitute the following in its place:

- A. The Contractor shall purchase and maintain during the entire term of this Contract one separate policy providing Owner's and Contractor's Protective Liability coverages. The named insured on this policy shall be:
 - 1. The Owner; and
 - 2. The Engineer - Jones & Henry Engineers, Ltd.; and
 - 3. Others if specifically required by special provision in the Contract Documents.
- B. The policy shall be provided on a form commonly referred to in the insurance industry as an "occurrence" type of policy form. (Claims made policy forms are not acceptable.)
- C. This insurance policy shall be a separate policy in addition to the coverage required in 6.03. No other insurance policy may substitute for or contribute to the coverage or limits afforded by this insurance policy, except a separate excess Owner's and Contractor's Protective Policy.
- D. This policy shall cover the total project and include explosion, collapse, and underground coverages for the entire Work provided by the Contractor and Subcontractors.
- E. The policy shall stipulate that the "designated Contractor" includes the Contractor and all Sub-contractors engaged in the Work.
- F. The original policy shall be submitted to and filed with the Owner or its designated representative.

SC-6.05 Property Insurance

SC-6.05 Delete Paragraph 6.05 in its entirety and insert the following new paragraphs in its place.

- A. Contractor shall provide either property insurance in the form of Builder's Risk or installation floater as appropriate for the work as required herein.
- B. Installation Floater: Contractor shall provide and maintain installation floater insurance for property under the care, custody, or control of Contractor. The installation floater insurance shall be a broad form or "all risk" policy providing coverage for all materials, supplies, machinery, fixtures, and equipment that will be incorporated into the Work. Coverage under the Contractor's installation floater will include:
 - 1. any loss to property while in transit,
 - 2. any loss at the Site, and
 - 3. any loss while in storage, both on-site and off-site.

Coverage cannot be contingent on an external cause or risk, or limited to property for which the Contractor is legally liable. The Contractor will be solely responsible for any

deductible carried under this coverage and claims on materials, supplies, machinery, fixture, and equipment that will be incorporated into the Work while in transit or in storage. 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.

- C. Builder's Risk: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
1. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
 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 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 partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
 7. allow for the waiver of the insurer's subrogation rights, as set forth below.
 8. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
 9. not include a co-insurance clause.
 10. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
 11. include performance/hot testing and start-up.
 12. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
 13. include for the benefit of Owner loss of profits and soft cost coverage including, without limitation, fixed expenses and debt service for a minimum of 12 months with a maximum deductible of 30 days, plus attorneys fees and engineering or other consultants' fees, if not otherwise covered;
 14. 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. **None**
- D. Notice of Cancellation or Change: All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- E. Deductibles: The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- F. Partial Occupancy or Use by Owner: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Contractor will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, provided they are substantially completed as provided in Paragraph 15.03., while those portions of the Work not yet occupied or used by Owner and those not substantially completed as provided in Paragraph 15.03. shall remain covered by the builder's risk insurance.

- G. *Additional Insurance*: If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - a. In addition to Owner, Contractor, and all Subcontractors, include as insureds the following:
 - (i) The Engineer - Jones & Henry Engineers, Ltd.; and
 - (ii) The Engineer's consultants; and
 - (iii) Others if specifically required by special provision in the Contract Documents.
- H. *Insurance of Other Property*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

SC-7.02 Labor, Working Hours

SC-7.02.C. Add the following new paragraph immediately after Paragraph 7.02.B:

- C. 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 work day. 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-7.09 Taxes

SC 7.09 Add a new paragraph immediately after Paragraph 7.09.A:

ARTICLE THE CONTRACTOR SHALL CONTACT THE OWNER'S PURCHASING AGENT WHO WILL ISSUE A CERTIFICATE EXEMPTING THE CONTRACTOR FROM PAYMENT OF SALES TAX ON ALL MATERIALS ENTERING INTO THIS CONTRACT. 9 – OWNER'S RESPONSIBILITIES

SC-9.13 Owner's Site Representative

SC-9.13 Add the following new paragraph immediately after Paragraph 9.12 of the General Conditions:

SC-9.13 Owner will furnish an "Owner's Site Representative" to represent Owner at the Site and assist Owner in observing the progress and quality of the Work. The Owner's Site Representative is not Engineer's consultant, agent, or employee. Owner's Site Representative will be city employees. The authority and responsibilities of Owner's Site Representative follow: interpret construction plans and specifications, inspect work performed, direct changes necessitated by field conditions, act as liaison to the Owner and the Engineer, participate in construction meetings, oversee testing and other duties typically assigned to a Resident Project Representative.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

SC-10.03

SC-10.03 Project Representative

- A. On this Project, by agreement with the Owner, Engineer will not furnish a Resident Project Representative to represent Engineer at the Site or assist Engineer in observing the progress and quality of the Work.

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

SC-

SC-13.03 Unit Price Work

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

- E. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:
1. if 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 25 percent from the estimated quantity of such item indicated in the Agreement; and
 1. if there is no corresponding adjustment with respect to any other item of Work; and

2. if Contractor believes that Contractor has incurred additional expense as a result thereof, Contractor may submit a Change Proposal, or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, Owner may make a Claim, seeking an adjustment in the Contract Price.

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

SC-14.02 Tests, Inspections and Approvals

SC 14.02.B Delete Paragraph 14.02.B in its entirety and insert the following in its place:

- B. Contactor shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Contractor, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.

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

SC-15.01 Progress Payments

SC 15.01.A Add the following new subparagraph to Paragraph 15.01.A:

1. Mobilization for Contractor and any tier of subcontractor(s) shall be considered collectively and shall not exceed 10 percent of the Contract Price. Mobilization shall be those costs associated with the initiation of the project and site work, including but not limited to, transporting of personnel, equipment, materials, supplies, incidental items; establishment of the field offices, temporary facilities necessary for the project, bonds and insurances, submittal requirements, permits, field supervision, final cleanup and demobilization. Mobilization does not include such items as, contract negotiations and bid preparation.
 - a. Where the work is covered by unit price and no item has been included for mobilization as defined in Section 01010., then this work is considered incidental to the work and will not be paid separately.
 - b. Where the work is covered by unit prices, and item(s) for mobilization, as described in Section 01010 have been included, the maximum allowable amount shall be ten percent of the aggregate of all items excluding mobilization. Where mobilization is included as multiple items, then the aggregate amount of all mobilization items shall not exceed the allowable 10 percent.
2. Costs for submittal requirements, field office and supervision, where identified separately in the schedule of values shall be considered for payment monthly. When the cost is a lump sum as submitted in accordance with 2.6, the monthly cost shall be established by dividing the lump sum by the number of monthly estimates based on the original contract time. No adjustments shall be made for any contract time extensions.

3. Mobilization shall be included in the progress payments, in accordance with the schedule of values and unit prices. When the work, excluding mobilization and inventory, has progressed to an amount equal to five percent or more of the contract price, then an amount of not more than 50 percent of the mobilization cost will be considered for inclusion in the progress payment. Prior to the established five percent, Owner may consider payment on invoices for bonds and insurances and permits; this amount shall be subtracted for the total amount from mobilization.

Up to an additional 40 percent of the mobilization cost will be considered for inclusion in the progress payments once the work, excluding mobilization and inventory, has progressed to an amount equal to 50 percent of the Contract Price. The remaining mobilization payment will be paid as part of the final payment.

15.03 Substantial Completion

SC 15.03.B 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, shall 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 Article 15.

END OF SECTION

EXHIBIT 1
WAGE RATES

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PAYROLL SUBMITTALS AND WAGE DETERMINATION

1. PAYROLL SUBMITTALS

Amended House Bill No. 1170 amended Section 4115.99 and enacted Section 4115.071 of the Revised Code to improve detection of violations of Ohio's Prevailing Wage Law. This Law is effective September 26, 1974.

Amended House Bill No. 1171 amended Sections 4115.04 and 411.05 of the Revised Code to require adjustments in the prevailing wage due to new collective bargaining agreements. This law is effective September 26, 1974.

Amended House Bill No. 1171 provided for an escalator in the prevailing wage rate. Each time a new prevailing wage rate is established by the Department of Industrial Relations, then the rate is required to be paid on all ongoing public improvement projects. Contractors shall include these escalators in his bid proposal. There will be no addition to a contractor's contract due to a new prevailing wage rate being provided. Refer to Revised Section 4115.05.

The following wage information shall be furnished to the Department of Administrative Services, Division of Public Works, Office of State Architect and Engineer.

- a) Every contractor or subcontractor who is subject to Laws pertaining to the wages and hours on Public Works projects shall, at the beginning of performance under the contract, submit the dates during the life of his contract when payments of wages to employees are to be made.
 - b) Each contractor or subcontractor, within three weeks after each pay date, shall furnish a certified copy of his complete payroll for each date, exhibiting for each employee paid any wages, the employee's name, current address, social security number, number of hours worked each day during the pay period, the total for each week, his hourly rate of pay, his job classification, fringe payments, and deduction from his wages.
 - c) The prime contractor shall be responsible for the submission of copies of payrolls of all subcontractors.
 - d) The payroll submitted shall be executed by the prime contractor or subcontractor or a duly appointed agent thereof and shall recite that the payroll is correct and that the wage rates shown are not less than those required by the contract.
2. SECTION 4115.99 (A) Whoever violates Section 4115.08 or 4115.09 of the Revised Code shall be fined not less than twenty-five dollars or more than five hundred dollars. (B) Whoever violates Section 4115.071, 4115.10, or 4115.11 of the Revised Code shall be fined five hundred dollars for the first offense; for each subsequent offense such person shall be fined one thousand dollars.

3. WAGE DETERMINATION (Obtain wage rates prior to advertising)

The attached pages are Prevailing Rates of Wages as ascertained by the Department of Industrial Relations for this project as provided in Section 4115.03 through 4115.14 of the Ohio Revised Code.

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EXHIBIT 2
FUNDING REQUIREMENTS

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**SECTION 02555
PRESSURE PIPE**

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes furnishing and installing pressure pipe of the materials, class, size, and length as shown on the Drawings, specified, or directed.
- B. Pressure pipelines constructed under this Section shall include but not be limited to water mains and sewer force mains.
- C. This Section shall include furnishing and installing all required pipe, fittings, specials, adaptors, blind flanges, reducing flanges, closure pieces, tees, bends, joint restraints, granular pipe bedding material, Class B concrete used for encasement or bedding, removing and relaying existing pressure pipe as required, providing temporary services and temporary blocking or harnessing, making connections to new and existing pressure pipe, installing temporary bulkheads and plugs, testing pipe, cleaning and sterilizing water mains, and other work incidental to the pressure pipe installation, unless specifically included under other Items.

1.02 SUBMITTALS

- A. Submittals shall be in accordance with the requirements of Section 01300 and shall include:
 - 1. Shop Drawings for Review:
 - a. Manufacturer's Shop Drawing indicating physical dimensions, joint details, fittings, and special details for each size, type, and class of pipe furnished for the project. Shop Drawings shall also note salient features of a specific pipe, i.e., concrete strength and reinforcing details.
 - b. Samples, if requested by the Engineer.
 - 2. Information for the Record:
 - a. Manufacturer's certification indicating that the pipe and joints meet Specifications for each production run for each size, type, and class of pipe furnished. The Engineer may request test results to verify certification.

1.03 PRODUCT HANDLING

- A. Care shall be taken in handling and transporting to avoid damaging pipes and their coatings. Loading and unloading shall be accomplished with the pipe under control at all times and under no circumstances shall the pipe be dropped. Pipe shall be securely wedged and restrained during transportation and supported on blocks when stored in the shop or field.

PART 2 PRODUCTS

2.01 PRESSURE PIPE SPECIFICATIONS

A. Ductile Iron Pressure Pipe:

1. Ductile Iron Pressure Pipe (DIP) shall conform to ANSI A21.51 or AWWA C151 and shall be pressure class 350 psi for sizes 12-inch and below, and pressure class 300 psi for larger sizes unless otherwise specified herein. Mechanical joint fittings shall be ductile iron and conform to ANSI A21.10 or AWWA C110 and ANSI A21.53 or AWWA C153. Flanged fittings shall be ductile iron and conform to ANSI A21.15 or AWWA C115. All fittings shall have a pressure rating of 250 psi for all pipe sizes unless otherwise specified. Ductile iron pipe buried underground, unless otherwise specified or shown, shall have rubber gasket (slip-on) type joints in straight runs and mechanical joints with retainer glands each way from bends as shown on the Drawings. The gasket shall be a single molded rubber ring fitted into a specially shaped recess in the bell forming a pressure tight seal. The spigot end of each pipe shall be marked to indicate when the pipe is "home." Fittings shall have mechanical joints with retainer glands unless otherwise specified or shown. Retainer glands shall be ductile iron. The restraining mechanism shall impart multiple wedging action against the pipe. Restraining devices shall be of heat treated ductile iron. Twist-off nuts shall be used to ensure proper actuation of the restraining device. The mechanical joint retainer gland shall be Ebaa Iron, Inc., Series 1100 Megalug, or equal.
2. Ductile iron pipe inside buildings or structures shall be joined with flanged, or mechanical joints as shown on the Drawings, or as indicated in the pipe schedule. All mechanical joints shall have retainer glands. Flanges shall comply with ANSI 21.15 or AWWA C115 and shall be ANSI 125-pound drilling, unless otherwise specified. Flanged joints shall have full face 1/8-inch rubber gaskets or of thickness and type approved by the Engineer. The pipe shall not be threaded or flanged in the field. Flanges shall be firmly bolted with machine, stud, or tap bolts of the proper size and number. Within buildings the bolts and nuts shall be of the best quality mild steel, with true threads, meeting the requirements of ANSI B16.1.

B. Polyvinyl Chloride Pipe:

1. Pressure pipes and fittings 3 inches or smaller in diameter shall be PVC material and shall consist of Class 12454-B rigid PVC compound in conformance with ASTM D1784. Pipe shall be ASTM D1785 Schedule 80 or ASTM D2241, SDR 21 with hydrostatic design stress of 2,000 psi. All joints for ASTM 1785 pipe, unless otherwise shown on the Drawings, shall be solvent welded in conformance with ASTM D2855. Joint solvent shall be as recommended by the pipe manufacturer. Joints for ASTM D2241 pipe shall be push-on gasketed. Joint restraint for ASTM D2241 pipe shall be provided where specified or shown on the Drawings and shall be United Series 1300 or 1350, or equal. The fittings for ASTM D1785 pipe

shall be Schedule 80 and shall conform to ASTM D2467. Fittings for ASTM D2241 pipe shall be ductile cast iron and shall conform to ANSI 21.10/AWWA C110 with mechanical joint.

2. PVC pipe 4 inches to 12 inches in diameter shall meet the requirements of AWWA C900, and unless otherwise specified, shall be Class 235, and have a standard thermoplastic pipe dimension ratio (D.R.) of 18.0.
3. PVC pipe 14-inch diameter and larger shall meet the requirements of AWWA C905 and unless otherwise specified shall have a standard thermoplastic pipe dimension ratio (D.R.) of 21 or less. Pipe OD shall be compatible with ductile iron pipe.
4. All fittings and specials shall be as specified, herein, for ductile iron pipe.

2.02 PRESSURE PIPE JOINTS

A. Ductile Iron Pipe:

1. Pipe buried underground, unless otherwise specified, shall be jointed with rubber gasket (push-on) type joints and shall meet the requirements of AWWA C111 for push-on joints. The gasket shall be a single molded rubber ring fitted into a specially shaped recess in the bell forming a pressure tight seal. The spigot end of each pipe shall be marked to indicate when the pipe is "home." Fittings shall have mechanical joints with retainer glands unless otherwise specified or shown. Retainer glands shall be ductile iron. The restraining mechanism shall impart multiple wedging actions against the pipe. Restraining devices shall be of heat treated ductile iron. Twist-off nuts shall be used to ensure proper actuation of the restraining device. The mechanical joint retainer gland shall be Ebaa Iron, Inc., Series 1100 Megalug, or equal.
2. Pipe inside buildings or structures shall be joined with flanges unless otherwise specified. Flanges shall be ANSI 125 pounds drilling, unless otherwise specified. Flanged joints shall be made up with full face 1/8-inch rubber gaskets, or of thickness and type to be approved by the Engineer. Flanges shall not be installed on the pipe in the field. Flanges shall be firmly bolted with machine, stud, or tap bolts of the proper size and number. Flange bolts shall meet the requirements of ANSI B16.1.
3. Mechanical joints, wherever specified or shown, shall conform to ANSI A21.11 (AWWA C111), except as specified herein.
4. Mechanical couplings, if required or permitted, shall be Dresser Style 38, or equal.
5. Victaulic or equal joints, if required or permitted, shall be of the shouldered type, unless otherwise specified. If a grooved joint is permitted, a thicker pipe shall be used.
6. Restrained joints, wherever shown or required, shall be mechanical joint with retainer glands, US Pipe TR Flex Joint System, US Pipe Field LOK Gasket System, or equal.

7. Flange adapters for plain end pipe (not fittings), where specified, shown on Drawings, or approved by Engineer shall be a restrained flange adapter. The restraining mechanism shall be multiple gripping wedges set against the pipe wall. Twist off nuts shall be used to ensure proper actuation of the restraining device. The restrained flange adapter shall be Series 2100 Megaflange by Ebaa Iron, Inc., or equal.
- B. Molecularly Oriented Polyvinyl Chloride Pipe:
1. Pressure pipes and fittings 4 inches to 24 inches in diameter molecularly oriented polyvinyl chloride pipe (PVCO) shall meet the requirements of AWWA C909, and unless otherwise specified, shall be Class 235. Joints for pipe shall be push-on gasketed. Gaskets shall meet the requirements of ASTM F477 for high-head (50 feet of head or higher) applications. Fittings for pipe shall be ductile cast iron and shall conform to ANSI 21.10/AWWA C110 with mechanical joint.
- C. Polyvinyl Chloride Pipe:
1. Pipe shall have integral bell push-on type joints meeting the requirements of ASTM D3139. Gaskets shall be rubber ring type meeting the requirements of ASTM F477 (AWWA C900).
 2. Fittings shall have mechanical joints meeting all requirements of ANSI A21.11 (AWWA C111).
 3. Restrained Joints, where required or shown, shall meet the requirements of the UNI-Bell Plastic Pipe Association Performance Standard UNI-B-13, similar to EBAA Iron Sales, Inc., Series 2000 PV for mechanical joints and Series 1500 for push-on joints.

2.03 ACCESSORIES

- A. Nuts and bolts for buried pipe shall be as follows:
1. Nuts and bolts used in wall castings shall be of stainless steel Type 316.
 2. Nuts and bolts encased in grout on concrete pressure pipe shall conform to recommendations of the pipe manufacturer.
 3. Nuts and bolts used on buried pressure pipe and fittings in contact with earth shall be Cor-Blue coated low alloy steel and have a minimum yield strength of 45,000 psi complying with ANSI A21.11 and AWWA C111.
 4. All other nuts and bolts shall be low carbon steel in conformance with the chemical and mechanical requirements of ASTM A307, Grade B. Higher strength bolts will be acceptable.
- B. Tracing Wire shall be installed on all pipe.
1. Direct Burial No. 12 AWG Solid (0.0808-inch diameter), 21% conductivity copper-clad annealed high carbon steel high strength tracer wire, 1150-pound average tensile break load, 45 mil, high molecular weight, high density polyethylene jacket complying with ASTM D1248, 30 volt rating. SoloShot™

extra high strength No. 1245 as manufactured by Copperhead Industries, LLC, or equal. Wire shall be secured to the pipe with tape at intervals not to exceed 10 feet.

- a. Tracer wire installed on pipe by horizontal directional drilling shall be continuous without any splices.
 - b. Heat shrink splices are permissible only on tracer wire at pipe connection.
 - c. Connectors shall be Copperhead Industries, LLC model 3WB-01 or approved equal.
2. Tracer wires shall terminate inside all structures including but not limited to, air relief structures, valve box assemblies, indicated on plans. Tracer wire shall extend 4-feet above the opening on structures.
 3. Tracer wire shall be tested for continuity after installation and considered acceptable when a continuous read is obtained between terminals.
- C. Utility Markers and Locator stations shall be installed as noted in Part 4 and on the drawings.
1. Utility Markers shall be flexible above ground, impact resistant, UV stabilized fiberglass Reinforce composite material. Utility markers shall be a minimum of 3-3/4 inches wide and 66 inches long. Color shall be integral to the material and selected by the Owner.
 2. Locator stations shall be impact resistant, UV stabilized, and fiberglass reinforced composite material, 3 inches in diameter. Locator stations shall have a polycarbonate cap assembly with brass or stainless-steel terminal board for tracer wire. The cap assembly color shall be selected by the Owner.
 3. Utility markers and locator stations shall have a 3-inch-wide by 13-inch-long label readable from 100 feet. Label color shall be selected by the Owner. The wording of the label shall be as specified in Part 4.
 4. A polypropylene identification tape marked "buried water main" shall be installed 24 inches above all water mains installed by open-cut methods. The tape shall be blue.

2.04 COATINGS AND LININGS OF PRESSURE PIPE

- A. Ductile Iron Pipe:
1. Interior Linings/Cement Lining - Unless otherwise specified, pipe interiors shall be covered with a standard thickness cement lining meeting ANSI A21.4 and AWWA C104. A seal coat of petroleum asphaltic material shall be applied in conformance with the above Specifications. Pipe used for compressed air shall not receive a concrete lining.
 2. Exterior Coating:

- a. All cast pipe buried underground shall be coated on the outside with a standard petroleum asphaltic coating, 1 mil thick, unless otherwise specified. The finished coating shall be continuous, smooth, neither brittle when cold nor sticky when exposed to the sun, and shall be strongly adherent to the pipe. The coating materials, after drying 48 hours, shall impart no objectionable color, odor, or taste to water standing in contact with the coating for a minimum of 48 hours.
 - b. Where approved, the petroleum asphaltic material specified for interior lining may be used for exterior coating of pipe buried underground.
 - c. Painting - All cast pipe used within buildings and structures and which are to receive field coats of paint shall not be coated with any black bituminous paint. Such pipe, after proper cleaning, shall be painted with one coat of primer paint that will be compatible with the field coats. Painting specifications shall be followed for cleaning and painting.
- B. Polyvinyl Chloride Pipe shall require no special interior or exterior lining or coating less otherwise specified.

2.05 POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE

- A. Buried ductile iron pipe shall be encased in a loose wrapping of polyethylene film at the time of installation. The polyethylene material and method of installation shall meet the requirements of AWWA C105/A21.5.

2.06 SOURCES QUALITY CONTROL

- A. Pipe Manufacturer's Certification:
1. The pipe manufacturer's certificate shall state that the materials have been sampled and tested in accordance with the provision for and meet the requirements of the designated specification and shall be signed by an authorized agent of the seller or the manufacturer.
 2. A test results report shall accompany the manufacturer's certificate, if requested by the Engineer. The report shall compare test results to Specification requirements. Test specimens shall be selected in conformance with the designated specification for each production run of each size, type, and class of pipe furnished and further, that in case tests are unsatisfactory, additional tests shall be made to the maximum number in the referenced ASTM Specification.

PART 3 EXECUTION

3.01 COORDINATION

- A. Construction in Highway Properties
1. Construction in highway properties shall conform to the requirements of Section 02200.

3.02 PREPARATION OF TRENCH

- A. Trench excavation shall conform to requirements of Section 02200.
- B. Unless otherwise specified or called for on the Drawings, the width of trench at the top of pipe 24 inches in diameter or less shall not exceed the outside diameter of the pipe or encasement, plus 9 inches on each side of the pipe measured to the face of the trench or to the back of the sheeting when used. For pipe having a diameter greater than 24 inches, the width of trenches at the top of the pipe shall not exceed the outside diameter of the pipe or encasement, plus 15 inches on each side of the pipe measured as specified above.
- C. Unless otherwise directed or called for on the Drawings, all sewer trenches shall be excavated below the proposed pipe invert as required to accommodate the depths of pipe bedding material as scheduled on the Drawings.

3.03 PIPE INSTALLATION

- A. All pipe fittings and specials shall be laid in accordance with the manufacturer's instructions, with AWWA C600, and as supplemented herein.
- B. Precautions shall be taken during construction to protect the pipe interiors, fittings, and valves against contamination. Pipe interiors shall be thoroughly cleaned of dirt and foreign matter before laying, by brushing, swabbing or other method approved by the Engineer, and means shall be provided to prevent entry of dirt during the progress of installation. Groundwater shall be kept out of the pipe at all times.
- C. Bedding and Backfilling:
 - 1. Bedding and backfilling shall be in conformance with Section 02200.
 - 2. At joints, enough depth and width shall be provided to permit working entirely around the pipe as needed to make the joints in the proper manner.
- D. Handling and Cutting:
 - 1. Suitable tools and appliances for cutting, handling, and laying of the pipes and special castings shall be used and care shall be taken to prevent damage to pipe coatings.
 - 2. Where new or existing pipe requires cutting in the field it shall be done in a manner to leave a smooth end at right angles to the pipe centerline. The finished cut must be approved by the Engineer.
- E. Pipe Laying:
 - 1. Pipe and appurtenances shall be installed true to line, grade, and location; with joints centered, spigots home; pipe properly supported and restrained against movement; and all valve stems plumb.
 - 2. All elbows, tees, plugs, etc., shall be properly anchored, blocked, or otherwise restrained to prevent movement of the pipe in the joints due to internal or external pressure.

3. The open ends of all pipes and special castings shall be plugged or otherwise closed with a watertight plug to the approval of the Engineer before leaving the Work for the night, and at other times of interruption of the Work. All pipe ends which are to be permanently closed shall be plugged or capped and restrained against internal pressure.
- F. Pipe Jointing:
1. Gaskets - Just prior to joining the pipes, the surfaces of the joint rings shall be wiped clean and the joint rings and rubber gaskets shall be liberally lubricated with an approved type of vegetable oil soap. The spigot end, with the gasket placed in the groove, shall be entered into the bell of the pipe already laid, making sure that both pipes are properly aligned. Before the joint is fully "home," the position of the gasket in the joint shall be determined by means of a suitable feeler gauge supplied by the pipe manufacturer. If the gasket is found not to be in proper position, the pipes shall be separated and the damaged gasket replaced. The pipe is then forced "home" firmly and fully. In its final position, the joint between the pipes shall not be deflected more than 1/2 inch at any point.
- G. Anchoring Pipe:
1. Disjointing hydrostatic pressure at bends, plugs, tees, and wyes shall be counteracted by thrust blocks, restrained joints, or reinforced concrete anchorage as directed on the Drawings or specified.
 2. Thrust blocks shall be installed only where directed or specifically called for on the Drawings, unless otherwise specified. Installation shall be in conformance with Drawings.
 3. Approved joint restraints shall be installed in locations shown or scheduled on the Drawings.
- H. Supports - Where shown on the Drawings, or ordered, pipelines shall be supported in an approved manner by concrete piers, hangers, or inserts. The method selected, and the types and design of hangers and inserts shall be subject to the Engineer's approval.

3.04 PIPE PROTECTION

- A. Detectable marking tape shall be installed in the trench of each non-metallic pipe. The tape shall be installed directly above the force main at the depth recommended by the manufacturer. The tape shall extend the full length of the force main, and shall be imprinted with a continuous warning message repeated at least every 36 inches. The warning message shall state that a sewer line is buried below. The tape shall consist of one layer of aluminum foil laminated between two layers of inert plastic film. The lamination bond shall be strong enough that the layers cannot be separated by hand. The tape shall be inductively located and conductively traceable using a standard pipe and cable locating device.

- B. Utility markers and locator stations shall be installed with 42 inches to 48 inches above ground.

3.05 FIELD INSPECTION

- A. All pipe sections, specials, and jointing materials shall be carefully examined for defects and no piece shall be laid that is known to be defective. Any defective piece discovered installed shall be removed and replaced with a sound one in a manner satisfactory to the Engineer at the Contractor's expense.
- B. Defective material shall be marked with lumber crayon and removed from the job site before the end of the following day.

3.06 PRESSURE AND LEAKAGE TESTS

- A. The Contractor shall furnish the pump, pipe connections, taps, gauges, auxiliary water container, bulkheads, plugs, and other necessary equipment and make pressure and leakage tests of all lines unless otherwise directed by the Engineer.
- B. Tests shall be conducted on all pipelines or valved sections thereof as directed by the Engineer. Testing of pipelines laid in embankments or bedded in concrete shall be done prior to backfilling or placing concrete cover unless otherwise permitted by the Engineer. Tests on lines anchored or blocked by concrete shall not be conducted until the concrete has taken permanent set.
- C. The line or section thereof to be tested shall be filled slowly with water to expel all air. Hydrostatic pressure shall be applied by pumping water from an auxiliary supply. The test pressure shall be maintained two hours minimum and additional time as required for thorough inspection to find any leaks or defects in the force main and appurtenances. The test pressure shall be 150 pounds per square-inch or 50% above the normal operating pressure, whichever is greater. Should the pipe section fail to pass the tests, the Contractor shall find and correct failures and repeat the tests until satisfactory results are obtained.
- D. Leakage tests shall be made simultaneously with or following completion of pressure tests of all lines or valved sections thereof. Leakage is defined as the quantity of water added to the pipe under test to maintain the required test pressure for a specified time.
- E. Pressure testing shall be performed in accordance with AWWA C600 and C605.

3.07 DISINFECTION OF POTABLE WATER PIPING

- A. After the pressure test and prior to disinfecting, the lines shall be thoroughly flushed through hydrants or by other means as approved by the Engineer.
- B. The Contractor shall furnish required materials and apparatus and perform the Work of disinfection.
- C. All water piping shall be cleaned and disinfected in accordance with AWWA C651 and one of the following:

1. Liquid sodium hypochlorite by means of a suitable solution feed machine or pump. Sodium hypochlorite storage conditions and durations shall be controlled to minimize deterioration.
 2. Calcium hypochlorite as tablets, powder. Tablets or powder shall be placed in the water line during construction. The water line shall be filled, carefully, with potable water to produce a uniform solution.
 3. Calcium hypochlorite as a water mixture. The calcium hypochlorite powder shall be mixed with water to form a paste and then thinned to a slurry, to be introduced into the pipe by pumping.
- D. The dosage of chlorinating agent shall be of the amount to produce a chlorine residual of 40 to 50 parts of chlorine per million. Tests with the DPD drop dilution method shall be made at selected points to determine the residual.
- E. Treated water shall be retained in the lines for sufficient time to accomplish the desired disinfection but not less than 12 hours. Valves in the line shall be operated during the retention period.
- F. Following disinfection, all treated water shall be flushed from the lines at their extremities until the replacement water throughout the lines shall, upon testing, be chemically and bacteriologically acceptable.
1. Two or more successive sets of samples taken at 24-hour intervals shall indicate microbiologically satisfactory water before the lines are placed into service.
 2. Should the initial treatment prove ineffective, the disinfection shall be repeated until the test shows acceptable results.
 3. The disposal of heavily chlorinated water shall be coordinated with the Owner and regulatory agencies. The heavily chlorinated water may require the addition of a dechlorinating chemical prior to release to a storm sewer or the environment. The dechlorinating method shall be approved by the Owner and Engineer. The heavily chlorinated water shall not be released to sanitary sewers without permission from the Owner of the sanitary sewer system.
- G. All testing shall be done by a laboratory acceptable to the public authority having jurisdiction, and all costs shall be paid for by the Contractor.

PART 4 SPECIAL PROVISIONS

4.01 UTILITY MARKERS/LOCATORS

- A. Utility Markers or Location Station shall be installed along pipeline.
- B. Utility Markers and Locator Stations labels shall have the following wording on the labels. "Buried Water Main "

4.02 PIPING SCHEDULE

- A. The following letter designations are used in the Piping Schedule:

Material Designation:

- DIP - Ductile Iron Pipe
- PVC - Polyvinyl Chloride
- HDPE - High Density Polyethylene **Addendum 3, August 19, 2024**

B. Schedule:

Service	Size	Pressure Class Thickness Class	Material	Remarks
Water Main	12"	DR 11	HDPE	Installed by Horizontal Directional Drill, Open Cut and Jack & Bore - See Sections 02790 and 02955

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- C. Schedules are not guaranteed to be complete. All piping shown on the Drawings or specified shall be furnished and installed by the Contractor whether or not listed in the above schedule.

4.03 PERMANENT AND TEMPORARY BLOWOFFS/TAPS

- A. The Contractor shall provide all blowoffs and taps as necessary to properly exhaust air from test sectioned, flush and disinfect the new pressure pipe system.

4.04 PRESSURE PIPE ELEVATIONS

- A. Elevations shown on the plans shall be checked as specified in this Section.
- B. Any deviation in the pipe elevations shall be brought to the Engineer's attention to permit the Engineer to evaluate the impact upon air release mechanism placements.

END OF SECTION

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