FAYETTE, OHIO
VILLAGEWIDE WATER MAIN REPLACEMENTS – PHASE I PROJECT

Addendum No. 2
April 28, 2023

To: Prospective Bidders

From: **ARCADIS U.S., Inc.**
One Seagate, Suite 700
Toledo, Ohio 43604

Owner: **Village of Fayette, Ohio**
102 West Main Street
Fayette, Ohio 43521

Subject: **Fayette Villagewide Water Main Replacement – Phase I Project**

This Addendum is part of the Bidding Documents and the Contract Documents and modifies the original Bidding Documents advertised dated **March 30, 2023**, as indicated below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification for award of the associated Contract.

This Addendum consists of four pages and the attachments listed on page 4.

NOTE: After END OF ADDENDUM are the following attachments, these attachments are not part of the Bidding Documents or the proposed Contract Documents:

1. Record of Pre-bid Conference (four pages)
2. Pre-bid Conference Sign-in Sheets (two pages).

CHANGES TO PRIOR ADDENDA

None.

CHANGES TO BIDDING REQUIREMENTS

1.01 Page 00 11 13-1 ADVERTISEMENT FOR BIDS, Paragraph 1 – In Paragraph 1, delete the first sentence in its entirety and substitute the following:

"Sealed Bids for the construction of the Villagewide Water Main Replacement, Phase I will be received by the Village, at the office of the Village Administrator, Fayette Village Hall, 102 West Main Street, Fayette, Ohio 43521, until 11:00 AM local time on May 11, 2023 at which time the Bids received will be publicly opened and read."

CHANGES TO SPECIFICATIONS

1.02 Page 01 22 13-24, Subparagraph TT.2.b. – Following this subparagraph, add the following subparagraph:

"UU. Item 47 – Mobilization

1. Measurement: By the lump sum price identified in the Bid Form.
   a. Shall include a portion of initial project start-up costs such as bonding, insurance, construction photographic documentation, stormwater pollution prevention plan development, project identification and signs, and construction field offices.
2. Payment: Lump sum price for Item 47 will represent direct compensation for the items identified.
   a. Mobilization will be paid in two payments, each of 50 percent of total amount to be paid on the initial two partial applications for payment."

1.03 Specification Section 01 71 23-1 FIELD ENGINEERING – Delete this specification in its entirety and substitute with the revised Specification Section, included with this Addendum No. 2.

1.04 Page 03 00 05-6, Subparagraph 3.8.A. – Delete this subparagraph and substitute with the following:

"A. Field Testing Services:

1. OWNER will employ testing laboratory to perform field quality control testing for concrete. ENGINEER will direct the testing requirements.
2. Testing laboratory will perform standard compressive strength testing, slump tests, temperature tests, and entrained air tests, under observation of ENGINEER or Resident Project Representative.
3. Testing laboratory will provide all labor, material, and equipment required for sampling and testing concrete, including scale, glass tray, cones, rods, molds, air tester, thermometer, and other incidentals required.
4. CONTRACTOR shall provide all curing and a designated cylinder storage area on-site."

1.05 Page 31 23 16.13-2, Subparagraph 1.4.A.1.c – Delete the words "and requirements of Section 01 45 29.13 Testing Laboratory Services Furnished by Contractor."

1.06 Page 31 23 16.13-5, Subparagraph 2.1 – Following subparagraph D, Add the following subparagraph:

"E. Low Strength Mortar Backfill

1. ODOT Item 613, Type 1"

1.07 Page 31 23 16.13-17, Subparagraph 3.14.A.5.a.2 – Following the words "Crossing Paved Driveways" add the words "and Roadways".

1.08 Page 31 23 16.13-17, Subparagraph 3.14 – Following subparagraph A.5.a.2), Add the following subparagraph:

" 3) Under Pavement or Within Two Feet of Pavement Edges: One location every 400 linear feet.

b. Aggregate Base: One per 1,000 square feet on every compacted lift."

1.09 Page 32 12 00-2, Subparagraph 1.2.A.2.c – Delete the words “and requirements of Section 01 45 29.13 Testing Laboratory Services Furnished by Contractor.”

1.10 Page 32 12 00-10, Subparagraph 3.5.A.1.a.1) - Delete the sentence in this subparagraph and substitute with the following:

“1) CONTRACTOR shall comply with the testing requirements of ODOT Item 441 and applicable Contract Documents, as directed by the ENGINEER."

1.11 Page 33 05 05-3, Subparagraph 2.1.A. – Delete the first sentence in this subparagraph and substitute with the following:

“A. Piping materials are indicated in Table 33 05 05-A, BURIED PIPING SCHEDULE at the end of this section.”

1.12 Page 33 05 05-12, Subparagraph 3.8.C.1. – In this subparagraph, delete the number “3.8” and replace with the number “3.9”.

1.13 Page 33 05 05-14, Subparagraph 3.11.B.3. -Following this subparagraph, delete the following article title and substitute with “3.12 SCHEDULES”.

1.14 Page 33 05 05-15, Table 33 05 05-A, BURIED PIPING SCHEDULE – In the second row and the third column, delete the words “, HDPE”.

1.15 Page 33 05 23.13-6, Subparagraph 2.2.B. – Delete this subparagraph and substitute with the following:

“B. Piping: Refer to Table 33 05 05-A, BURIED PIPING SCHEDULE at the end of Specification Section 03 05 05.”

1.16 Page 33 05 23.13-9, Subparagraph 3.1.F.1. – In the first sentence, delete the words “Section 40 05 33, High Density Polyethylene Process Pipe and”.

1.17 Specification Section 33 14 17 WATER SERVICE CONNECTION ASSEMBLIES - Delete this Section in its entirety and substitute with the revised Specification Section 33 14 17, included with this Addendum No. 2.

1.18 Page 40 05 19-1, Subparagraph 1.1.A.2. – Delete this subparagraph.

1.19 Page 40 05 31-1, Subparagraph 1.1.A.2. – Delete this subparagraph.

1.20 Page 40 05 53-5, Subparagraph 2.4.C.1. – Delete this subparagraph and substitute with the following:

“1. American Flow Control, Series 2800.”

1.21 Page 40 05 53-5, Subparagraph 2.4.C.2. – Delete this subparagraph and substitute with the following:

“2. Mueller Company, Series H-616 or H-619.”

CHANGES TO DRAWINGS

1.22 Drawing Sheet 32, ALLEY NORTH OF MAIN STREET, STA 0+00 TO 4+00 – At the end of the NOTE, add "ALL WATER SERVICES WITHIN THIS AREA ARE CONSIDERED SHORT WATER SERVICE CONNECTIONS AND MAY BE OPEN CUT."

1.23 Drawing Sheet 33, ALLEY NORTH OF MAIN STREET, STA 4+00 TO 9+00 – At the end of the NOTE, add "ALL WATER SERVICES WITHIN THIS AREA ARE CONSIDERED SHORT WATER SERVICE CONNECTIONS AND MAY BE OPEN CUT."

1.24 Drawing Sheet 34, ALLEY NORTH OF MAIN STREET, STA 9+00 TO 13+00 – At the end of the NOTE, add "ALL WATER SERVICES WITHIN THIS AREA ARE CONSIDERED SHORT WATER SERVICE CONNECTIONS AND MAY BE OPEN CUT."

1.25 Drawing Sheet 45, ALLEY SOUTH OF MAIN STREET, STA -0+50 TO 2+00 – At the end of the NOTE, add "ALL WATER SERVICES WITHIN THIS AREA ARE CONSIDERED SHORT WATER SERVICE CONNECTIONS AND MAY BE OPEN CUT."

1.26 Drawing Sheet 46, ALLEY SOUTH OF MAIN STREET, STA 2+00 TO 7+00 – At the end of the NOTE, add "ALL WATER SERVICES WITHIN THIS AREA ARE CONSIDERED SHORT WATER SERVICE CONNECTIONS AND MAY BE OPEN CUT."

1.27 Drawing Sheet 47, ALLEY SOUTH OF MAIN STREET, STA 7+00 TO 11+50 – At the end of the NOTE, add "ALL WATER SERVICES WITHIN THIS AREA ARE CONSIDERED SHORT WATER SERVICE CONNECTIONS AND MAY BE OPEN CUT."

1.28 Drawing Sheet 106, MISCELLANEOUS DETAILS, DETAILS 2 OF 3, LEAD AND GALVANIZED SERVICE LINE REPLACEMENT DETAIL – In the middle of this detail on the CUSTOMER SIDE, delete the callout "3/4" COPPER OR PVC CTS PIPE WITH TRACE WIRE" and substitute with "3/4" COPPER OR 1" PVC CTS PIPE WITH TRACE WIRE".

ATTACHMENTS

Specification attachments hereto are as follows:

- Specification Section 01 71 23 FIELD ENGINEERING
- Specification Section 33 14 17 WATER SERVICE CONNECTION ASSEMBLIES

Other attachments hereto are as follows:

- Record of Pre-bid Conference (four pages).
- Pre-bid Conference Sign-in Sheets (two pages).

END OF ADDENDUM NO. 2

SECTION 01 71 23

FIELD ENGINEERING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Scope:
   1. This Section includes field engineering, surveying, and layouts by CONTRACTOR, and associated requirements. This Section supplements the General Conditions' provisions on reference points and other matters.
   2. CONTRACTOR shall provide field engineering services, surveying and layout services, and professional services of the types indicated for the Project, including:
      a. Furnishing civil, and other professional engineering services specified or required to execute CONTRACTOR's construction methods.
      b. Developing and making all detail surveys and measurements required for construction; including slope stakes, batter boards, and all other working lines, elevations, and cut sheets.
      c. Providing materials required for benchmarks, control points, batter boards, grade stakes, structure and pipeline elevation stakes, and other items.
      d. Keeping a transit, theodolite, or total station (i.e., theodolite with electronic distance measurement device); leveling instrument; and related implements such as survey rods and other measurement devices, at the Site and having a skilled instrument person available when necessary for laying out the Work.
      e. Being solely responsible for all locations, dimensions and levels. No data other than Change Order, Work Change Directive, or Field Order shall justify departure from dimensions and levels required by the Contract Documents.
      f. Rectifying all Work improperly installed because of not maintaining, not protecting, or removing without authorization established reference points, stakes, marks, and monuments.
      g. Providing such facilities and assistance necessary for ENGINEER and Resident Project Representative (if any) or Owner's Site Representative (if any) to check lines and grade points placed by CONTRACTOR. ~~Do not perform excavation or embankment work until all cross-sectioning necessary for determining payment quantities for Unit Price Work have been completed and accepted by ENGINEER.~~

B. Coordination:
   1. Review requirements of this and other Sections and coordinate installation of items to be installed with or before field engineering, surveying, and layout Work.

1.2 SUBMITTALS

A. Informational Submittals: Submit the following:

~~1. Certificates:~~

~~a. When requested by ENGINEER, submit certificate signed by professional engineer or professional surveyor, as applicable, certifying that elevations and locations of the Work comply with the Contract Documents. Explain each deviation, if any.~~

~~2. Field Engineering:~~

~~a. When requested by ENGINEER, submit documentation verifying accuracy of field engineering.~~

~~3. Surveying:~~

~~a. Complete plan for performing survey work, submitted not less than 10 days prior to beginning survey Work.~~

~~b. Example of proposed survey field books to be maintained by CONTRACTOR's surveyor. Example shall have sufficient information and detail, including example calculations and notes, to demonstrate that field books will be organized and maintained in a professional manner in accordance with the Contract Documents.~~

~~c. Submit original field books within two days after completing survey Work.~~

~~4.~~1. Qualifications Statements:

a. Field ~~Engineer~~Superintendent: Name, employer, and professional address. When requested by ENGINEER, submit qualifications, including resume'.

b. Surveyor: When requested, submit ~~N~~name, employer, and professional address of firm, and resumes of each professional land surveyor and crew chief that will be engaged in survey Work. Submit not less than 10 days prior to beginning survey Work. During the Project, submit resume for each new registered, licensed land surveyor and crew chief employed by or retained by CONTRACTOR not less than 10 days prior to starting on the survey Work.

1.3 CONTRACTOR'S ~~ENGINEERS~~SUPERINTENDENT

A. Qualifications of Field ~~Engineer~~Superintendent:

1. Employ and retain at the Site a field ~~engineer~~ superintendent with experience and capability of performing all field engineering tasks required of CONTRACTOR, as indicated in this Article and elsewhere in the Contract Documents.
2. CONTRACTOR's field ~~engineer~~ superintendent shall possess not less than five years of experience performing duties similar in scope and extent to those required of CONTRACTOR's field ~~engineer~~ superintendent on this Project.

B. Responsibilities of Contractor's Field ~~Engineer~~Superintendent:
   1. Check all piping, other materials and equipment for compliance with the Contract Documents.
   2. Continually inspect the Work to ensure that the quality and quantities required by the Contract Documents are provided.
   3. Cooperate as required with ENGINEER and Resident Project Representative (if any) in observing the Work and performing field inspections.
   4. Check and coordinate the Work for conflicts and interferences, and immediately advise ENGINEER and Resident Project Representative, if any, of all discrepancies of which CONTRACTOR is aware.
   5. Maintain field office files and drawings, record documents, and coordinate field engineering services with Subcontractors and Suppliers as appropriate, and other prime contractors (if any).
   ~~6. Prepare layout and coordination drawings for construction operations.~~
   ~~7.~~6. Review and coordinate the Work with Shop Drawings and CONTRACTOR's other submittals approved or accepted, as applicable, by ENGINEER.

C. Professionals Retained by Contractor (whether or not stationed at the Site):
   1. Delegated Professional Design Services:
      a. Where the Contract Documents require CONTRACTOR to furnish professional engineering or architecture services as delegated professional design, the provisions of the General Conditions regarding delegated professional design services, and the Contract Documents' requirements applicable to the specific delegated professional design, shall apply.
   2. Professional Services that are Not Delegated Professional Design of the Completed Work:
      a. Where the Contract Documents require that CONTRACTOR retain a design professional for to carry out CONTRACTOR's responsibilities for construction means, methods, techniques, sequences and procedures (including temporary construction that will not remain as part of the completed Work), such services shall be performed by a registered professional of the discipline required for specific service on the Project, with valid license in the same jurisdiction as the Site.
      b. OWNER and ENGINEER shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed by such design professionals.

1.4 CONTRACTOR'S SURVEYOR

A. Qualifications:
   1. Employ or retain the services, as needed, at the Site a surveyor with experience and capability of performing surveying and layout tasks required in the Contract Documents and as required for the Work.
   2. CONTRACTOR's surveyor shall possess not less than five years of experience performing duties similar in scope and extent to those required of CONTRACTOR's surveyor on this Project.

B. Responsibilities of Contractor's Surveyor:
   1. Providing required surveying equipment, including transit, theodolite, or total station; level; stakes; and surveying accessories.
   2. Establishing required lines and grades for constructing all facilities, structures, pipelines, and site improvements, including outdoor electrical equipment and feeders.
   3. Preparing and maintaining professional-quality, accurate, well-organized, legible notes of all measurements and calculations made while surveying and laying out the Work.
   ~~4. Prior to backfilling operations, survey, locate, and record on a copy of the Contract Documents accurate representation of buried Work and Underground Facilities provided and encountered.~~
   ~~5.~~4. Locating on a site plan of the Site the actual location of above-ground Work to be indicated on record documents.
   ~~6.~~5. Complying with requirements of the Contract Documents relative to surveying and related Work, including requirements of this Section's Articles 1.5 and 3.1.

~~1.5 RECORDS~~

~~A. Records - General:~~
   ~~1. Maintain at the Site a complete and accurate log of control and survey Work as such Work progresses.~~

~~B. Field Books and Records:~~
   ~~1. Survey data and records shall be in accordance with recognized professional surveying standards, Laws and Regulations, and prevailing standards of practice in the locality where the Site is located.~~
   ~~2. Original field notes, computations, and other surveying data shall be recorded by CONTRACTOR's surveyor in CONTRACTOR-furnished hard-bound field books.~~
   ~~3. Completeness and accuracy of survey Work, and completeness and accuracy of survey records, including field books, shall be responsibility of CONTRACTOR.~~
   ~~4. Failure to organize and maintain survey records in an appropriate manner that allows reasonable and independent verification of calculations, and to allow identification of elevations, dimensions, and grades of the Work, shall be cause for rejecting the survey records, including field books.~~
   ~~5. Illegible notes or data, and erasures on any page of field books, are unacceptable. Do not submit copied notes or data. Corrections by ruling or lining out errors will be unacceptable unless initialed by the surveyor. Violation of these requirements may require re-surveying the data questioned by ENGINEER.~~

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 SURVEYING

A. Reference Points:
   1. Refer the General Conditions, as may be modified by the Supplementary Conditions, for requirements regarding reference points.
   2. OWNER's established reference points that are damaged or destroyed by CONTRACTOR will be re-established by OWNER at CONTRACTOR's expense. OWNER may deduct from payments owed CONTRACTOR such amounts as set-offs in accordance with the Contract Documents.
   3. From OWNER-established reference points, establish lines, grades, and elevations necessary to control the Work. Obtain measurements required for executing the Work to tolerances specified in the Contract Documents.
   4. Establish, place, and replace as required, such additional stakes, markers, and other reference points necessary for control, intermediate checks, and guidance of construction operations.

~~B. Surveys to Determine Quantities for Payment:~~
   ~~1. For each application for progress payment, perform such surveys and computations necessary to determine quantities of Work performed or placed. Perform surveys necessary for ENGINEER to determine final quantities of Work in place.~~
   ~~2. Notify ENGINEER not less than 24 hours before performing survey services for determining quantities to be included in Application for Payment. Unless waived in writing by ENGINEER, perform quantity surveys in presence of ENGINEER or Resident Project Representative (if any).~~

~~C.~~B. Construction Surveying: Comply with the following:
   1. Alignment Staking: Provide alignment stakes at 50-foot intervals on tangent, and at 25-foot intervals on curves.
   2. Slope Staking: Provide slope staking at 50-foot intervals on tangent, and at 25-foot intervals on curves. Re-stake at every ten-foot difference in elevation.
   3. Structure: Stake-out structures, including elevations, and check prior to and during construction.
   4. Pipelines: Stake-out pipelines including elevations, and check prior to and during construction.
   5. Roads, Drives, and Paved Areas: Stake-out roadway, driveway, and paved area elevations at 50-foot intervals on tangent, and at 25-foot intervals on curves.
   ~~5.~~6. Sidewalks: Re-establish and layout proposed sidewalks using locations as shown on the drawings and in coordination with the RPR. Establish elevations to allow for proper drainage and to match existing surrounding grade in coordination with the RPR.
   ~~6. Cross-sections: Provide original, intermediate, and final staking as required, for site work other locations as necessary for quantity surveys.~~

7. Easement Staking: Provide easement staking at 50-foot intervals on tangent, and at 25-foot intervals on curves. Also provide wooden laths with flagging at maximum intervals of 100 feet.
8. Record Staking: Provide permanent stake at each blind flange and each utility cap provided for future connections. Stakes for record staking shall be material acceptable to ENGINEER.

~~D.~~C. Accuracy:

1. Establish CONTRACTOR's temporary survey references points for CONTRACTOR's use to not greater than second-order accuracy (e.g., 1:10000). Construction staking used as a guide for the Work shall be set at not greater than third-order accuracy (e.g., 1:5000). Basis on which such orders are established shall provide the absolute margin for error specified below.
2. Horizontal accuracy of easement staking shall be plus or minus 0.1 feet. Accuracy of other staking shall be plus or minus 0.04 feet horizontally and plus or minus 0.02 feet vertically.
3. Survey calculations shall include an error analysis sufficient to demonstrate required accuracy.

+ + END OF SECTION + +

SECTION 33 14 17

WATER SERVICE CONNECTION ASSEMBLIES

PART 1 - GENERAL

1.1 DESCRIPTION

A. Scope:
   1. CONTRACTOR shall provide all labor, materials, equipment, and incidentals as shown, specified and required to furnish and install water service lines, complete with accessories and operational.
   2. Water service connection assemblies, sizes as shown on the Drawings, shall include service saddle, corporation valve (stop), service connection piping, curb valve (stop) and box, and fittings, as specified herein.

B. Coordination:
   1. Review installation procedures under this and other Sections and coordinate the installation of items that must be installed with, or before the Work required under this Section.

C. Related Sections:
   1. Section 33 05 05, Buried Piping Installation.
   2. Section 33 14 18, Lead and Galvanized Service Line Replacement

1.2 REFERENCES

A. Standards which may be referenced in this Section are:
   1. American National Standards Institute (ANSI) and National Sanitation Foundation (NSF):
      a. ANSI /NSF 61, Drinking Water System Components - Health Effects.
   2. American Society of Mechanical Engineers (ASME):
      a. ASME B16.18, Cast Copper Alloy Solder Joint Pressure Fittings.
      b. ASME B16.22, Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.
   3. American Society for Testing and Materials (ASTM):
      a. ASTM B88, Specification for Seamless Copper Water Tube.
   4. American Water Works Association (AWWA):
      a. AWWA C800, Underground Service Line Valves and Fittings.

1.3 QUALITY ASSURANCE

A. Component Supply and Compatibility:
   1. Valves of the same type shall be the products of a single manufacturer.

B. Regulatory Requirements:
   1. Pipe and fittings that will convey potable water or water that will be treated to become potable, shall be certified by an accredited organization in accordance with ANSI/NSF 61 as being suitable for contact with potable water, and shall comply with requirements of authorities having jurisdiction at the Site.
   2. Pipe and fittings materials and joint types shall comply with requirements of authorities having jurisdiction at Site.

1.4 SUBMITTALS

A. Action Submittals: Submit the following:
   1. Product Data:
      a. Product data sheet.
      b. Complete catalog information, including dimensions, weight, specifications, and identification of materials of construction of parts.

1.5 DELIVERY, STORAGE AND HANDLING

A. Packing, Shipping, Handling and Unloading:
   1. Deliver materials to the Site to ensure uninterrupted progress of the Work.

B. Storage and Protection:
   1. Store materials in accordance with the manufacturer's recommendations and Section 33 05 05, Buried Piping Installation.

1.6 PROPERTY OWNER NOTIFICATION

A. OWNER or ENGINEER shall notify residents at least 7 days in advance of any scheduled water service shut-off associated with service line replacement work, and the intent to work in their front yards and/or in Public Space. This notification shall be given in the form of an approved door hanger or written communication, prior to performing any water service line material verification and/or replacement work.

B. The CONTRACTOR shall notify residents 48-hours in advance of any scheduled water service shut-off associated with service line replacement work and the intent to work in their front yards and/or in Public Space. This notification shall be given in the form of an approved door hanger or written communication, prior to performing any water service line material verification and/or replacement work.

C. No partial replacements shall be performed.

D. No part of a service line shall be replaced without the Property Owner being properly notified.

PART 2 - PRODUCTS

2.1 GENERAL

A. Requirements:
   1. Pressure Rating: 150 psi working pressure.
   2. Service, size, and type: 3/4-inch diameter, copper thru 2-inch diameter, copper, where indicated on Drawings.

B. Closing Direction: Handles on manual valves shall turn clockwise to close.

C. Actuators for Buried Valves:
   1. Provide operating nuts and valve boxes.
   2. Tee handle operating wrenches:
      a. Wrenches shall be painted steel approximately 3.5 feet long.
      b. Provide one operating wrench for each size of valve operating nut.

2.2 SERVICE CONNECTION PIPE

A. Copper Pipe and Fittings:
   1. Pipe Materials: Comply with ASTM B88, seamless, Type K, soft-annealed copper water tube.
   2. Fittings shall be ASME B16.18 cast copper, ASME B16.22 wrought copper, or AWWA C800 service line fittings.
   3. Joints: Compression connections.
   4. Marking: Mark or label all materials with the following:
      a. Metal or alloy designation.
      b. Temper.
      c. Size and schedule.
      d. ASTM reference standard number.
      e. Name and location of Supplier.

B. Copper Tube Size Chlorinated Polyvinyl Chloride (PVC CTS)
   1. Pipe Type: PVC CTS, SDR 9, 250 psi pressure class.
   2. Pipe Materials: Tubing shall be high-density polyethylene conforming to the minimum requirements of cell classification 445574E as defined and described in ASTM D3350, Standard Specification for Polyethylene Plastics Pipe and Fittings Materials. The resin shall have a material designation code of PE4710 by the Plastic Pipe Institute.
   3. Requirements: Tubing shall meet the requirements of ASTM D2737, AWWA C901 and NSF Standards 14 and 61. Pipe dimensions shall meet Copper Tubing Size (CTS) Standards.

2.3 WATER SERVICE CONNECTION VALVES

A. Corporation Valve (Stop):
   1. Size: 2-inch and smaller.
   2. Description: AWWA C800, complete with required coupling and accessories for connection to service pipe; subject to air test at the factory.
   3. Products and Manufacturers: Provide one of the following:
      a. Base Bid: Ford Meter Box Company, Model FB1000.
      b. Or approved equal.

B. Curb Valve (Stop):
   1. Size: 2-inch and smaller.
   2. Description: AWWA C800, complete with required fittings for the type of connection to service pipe.
   3. Options: Minneapolis-style threaded top.
   4. Products and Manufacturers: Provide one of the following:
      a. Base Bid: Ford Meter Box Company, Model B44.
      b. Or approved equal.

2.4 ACCESSORIES

A. Service Saddle: Provide service saddle designed for type of pipe it is to be installed on, and to accept the corporation valve (stop).
   1. Products and Manufacturers: Provide one of the following:
      a. Base Bid: Ford Meter Box Company, Model S90.
      b. Or approved equal.

B. Curb Box:
   1. Provide Minneapolis pattern curb box; steel and cast iron with standard brass pentagon head plug; shut-off rod matching type in system.
   2. Manufacturers: Provide products of one of the following:
      a. Base Bid Manufacturer: Ford Meter Box Company.
      b. Or approved equal.

C. Pipe Sleeve (Through Wall/Foundation): Minimum of one pipe size larger than service line pipe.
   1. PVC or Copper; or
   2. As approved by OWNER

D. Pipe Penetration (Through Wall/Foundation) Sealant.
   1. SikaFIX FM; or
   2. As approved by OWNER

2.5 METER PIT AND FITTINGS:

A. Manufacturers:

1. The Ford Meter Box Company, Inc., Catalog Number ~~PSBH-788-20-60-NL~~ PMBH-788-36HB-48-NL with ~~W3-T~~ MC-36-MB cover.
2. Equivalents as manufactured by Mueller.

B. Description: A pit setter for a 2-inch water meter with pit, inlet connection, inlet valve, outlet valve, outlet connection and pipe, frame, and cover. Suitable for cold climates.

C. Pit: PVC plastic cylinder; ~~20~~ 36-~~-~~inch inside diameter by ~~72~~ 48-inch high, minimum 0.28-inch wall thickness; corrosion resistant crosspiece and plastic ties for securing riser pipes in place at approximately 10 inches below cylinder top.

D. Inlet/Outlet Connections: Brass, MIP; lock in place through the cylinder wall with brass hex nuts; plugged outlet; complete with appropriate coupling.

E. Inlet Valve: Full port, angle ball valve with appropriate pipe and meter connections.

F. Outlet Valve: Full port, angle style check valve with appropriate pipe and meter connections.

G. Pipe: Refer to Paragraph 2.2 this Section.

PART 3 - EXECUTION

3.1 GENERAL CONSTRUCTION GUIDANCE FOR UTILITY AND CUSTOMER WATER SERVICE LINE REPLACEMENTS

A. All work done for the replacement of lead service lines shall conform to AWWA C810-17.

B. A summary of the sequence of construction is as follows:
1. CONTACTOR to refer to OWNER's Lead Service Inventory Map to identify all lead, galvanized, or unknown services in the Work area.
2. Service line material verification must first be completed ~~first~~ for any unknown service. CONTRACTOR will supply lead swab test kits for OWNER to perform interior service line material verification upstream of the water meter.
    a. Whether the test is negative or positive for lead, CONTRACTOR will dig at curb stop to expose a minimum of 2' on the customer side of the water service line. Enough of the line must be exposed to accurately determine the service line material. CONTRACTOR shall open the existing curb box cover and determine the depth of the existing service line prior to excavation. If the CONTRACTOR is uncertain of the existing water main depth (depths can vary but are typically between 4 ft. and 8 ft. for water mains and 3 ft. and 6 ft. for water service lines), or suspects a change in

depth from previous excavations, the CONTRACTOR should measure the depth of the watermain at the nearest accessible valve box.

b. If the lead swab test is negative and no lead is detected, or galvanized piping is visually found, fill in hole in accordance with Section 31 23 16.13, Trenching and Work will be paid by Bid Item 13, Water Service Connection Assemblies, Short Side or Bid Item 14, Water Service Connection Assemblies, Long Side, respectively.

c. If lead is detected, or galvanized material is found, CONTRACTOR will perform necessary replacements, as listed below.

3. Restore private property to original condition.

3.2 INSTALLATION

A. Refer to Section 33 05 05, Buried Piping Installation, for buried piping installation, disinfection, testing and cleaning.

B. Install valves and appurtenances in accordance with the manufacturer's instructions.

C. Comply with appendices of AWWA reference standards, where applicable.

D. Set valves plumb and on solid bearing; center and plumb valve box over valve; set box cover flush with finished grade; provide expansion joint material around portion of box in concrete pavement or sidewalks.

E. Install service connection pipe under street and highway pavements by pushing or boring, with no excavation closer than 5 feet to the edge of pavement. No joints permitted within these limits.

F. CONTRACTOR to document any lead service lines encountered in the field and notify OWNER and ENGINEER, immediately.

1. CONTRACTOR to replace lead service line from curb box to residence.
2. After replacement of lead service line, CONTRACTOR to coordinate final service connection with OWNER.

3.3 LEAK TESTING AND FLUSHING WATER SERVICE PIPING

A. Test all pipelines for water tightness as specified herein. Furnish all labor, testing plugs or caps, pipe connections, gauges and all other equipment required.

B. Testing shall be performed after the line has been constructed in the presence of the ENGINEER, and no backfilling of the access pits or trenches will be permitted until the leakage testing is satisfactorily completed.

C. The interior water service valve shall be closed, and the corporation and curb stop opened. After all the air is expelled, a visual leakage test will be conducted on all exposed unions and connections. The CONTRACTOR shall flush the new service

for 10-minutes in accordance with AWWA C810, disposing of all flush water to the sanitary sewer or in a way that does not damage private property.

D. When flushing is complete, make final connections to the existing meter and perform a final visual leakage test under "system pressure" for 10 minutes and be observed by the ENGINEER. Repair faulty joints or remove defective pipe and fittings and replace as approved by the ENGINEER. Retest until water service line passes.

3.4 FIELD QUALITY CONTROL

A. Site Tests: After installation at the Site, perform functional tests on each valve. The test shall demonstrate that each valve operates correctly.

+ + END OF SECTION + +

VILLAGE OF FAYETTE, OHIO
VILLAGEWIDE WATER MAIN REPLACEMENT PHASE I

PRE-BID CONFERENCE AGENDA
April 20, 2023, 10:00 a.m.
Fayette Village Office

1. **Introductions**
   a. Village of Fayette (Owner): The Village of Fayette's Department of Public Works Superintendent is Zach Lester. Zach and his crew maintain the water system, as well as operate the Water Treatment Plant. The Village Mayor is Dave Borer.
   b. Arcadis U.S., Inc.: Arcadis is the Village's "engineer of record" and designed the Project and will provide construction engineering and RPR services. Project Engineer Neil Spanfellner is the primary contact for Bidder's questions and will continue to be involved throughout construction. Joe Fojtik will likely be the Engineer's Resident Project Representative (RPR) during construction.
   c. Attendees: Attendees made self-introductions
   d. Meeting Record and Attendee List: A written summary of the topics discussed at this meeting, including a list of the attendees, will be distributed via email to all meeting attendees and all entities that obtained the Bidding Documents from the Issuing Office. The sign-in sheet shall be included in the Record.
2. **Description of Project**
   a. Project Funding and Financing
      1) Bid Items 1-44: ODOD ARPA Funds
      2) Bid Items 45 & 46: WSRLA Funds
   b. Single Prime Contract
      1) Bidder Qualifications Form
         i. Village reserves the right to request bidder qualification forms from low bidder. Information is listed in the Instructions to Bidders.
   c. Work Included
      1) Work in WTP Yard
      2) Work at Wellhouse
      3) Work at Elevated Storage Tank
      4) Water Main Installation
         i. Work along Main Street (ODOT)
         ii. Tracer Wire Installation
         iii. Condition of existing valve map
         iv. Condition of existing water mains (poor)
         v. Approximate water service locations (dashed line)
      5) Lead and Galvanized Water Service Replacements
         i. RCAP's Water Service Inventory Mapping efforts
         ii. Private Property Agreements
         iii. Tracer Wire Installation
   d. Bidding Phase Dates, Contract Times, and Damages
      1) Advertisement for Bids: March 30th, 2023

2) Addendum No. 1: April 19th, 2023
3) Bid Opening: May 4th, 2023 @ 11:00 am
4) Substantial Completion: June 30th, 2025
5) Final Payment: September 30th, 2025
6) Liquidated Damages: As stated in Specification Section 00 52 13 – Agreement, Section 4.03 Liquidated Damages

3. Bidding Procedures

a. Availability of Bidding Documents, Other Reports, and Drawings
   a. Newfax Corporation
      i. Bidding Documents can be obtained from the Issuing Office: Newfax Corporation, 333 West Woodruff Avenue, Toledo, Ohio 43604, Phone: (419) 241-5157 (www.newfaxcorp.com). Bidding Documents may be obtained via hardcopy or download.
      ii. Neither Village nor Engineer will be responsible for full or partial sets of the Bidding Documents obtained from sources other than the Issuing Office. Addenda will be transmitted only to entities that have obtained the Bidding Documents from the Issuing Office.
   b. 2013 Sanitary Sewer Geotechnical Report: Geotechnical Data will be made available in PDF format by emailing Neil Spanfellner.

b. Bid Security
   a. Instructions to Bidders Article
      i. Reference Specification Section 00 21 13, Instructions to Bidders, Article 8 for requirements for Bid Security.

c. Wage Rates
   a. Davis Bacon Federal Wage Rate apply to this project.

d. Site Visits/Investigations During Bidding
   a. On request, the Village will allow access to any parts of the project during normal day shift hours. Contact Superintendent Zach Lester (419-630-5307) at least 24-hours in advance to schedule a visit.

e. Required Contents of Bid
   a. Reference Article 7 of Specification Section 00 41 13, Bid Form for a list of required attachments to this bid.
   b. Addendum 1 has changed the quantities of items listed on the bid form. A future addendum will be issued updating the bid form quantities.

f. Requests for Clarification or Interpretation of the Bidding Documents
   a. All questions concerning interpretations and clarifications of the Bidding Documents shall be submitted in writing to Arcadis U.S., One Seagate, Suite 700, Toledo, Ohio 43604, attention Neil Spanfellner, Neil.Spanfellner@Arcadis.com. No interpretations or clarifications will be made orally.
   b. Interpretations, clarifications, and supplemental instructions, if any, will be issued by written Addendum.

g. Submittal of Bid

a. Bids shall be enclosed in a sealed envelope plainly marked on the outside with Project title, the designated portion of the Project, the name and address of the Bidder and its license or registration number (when applicable).
b. Only approved plan holders may submit bids (Instructions to Bidders, Article 3)

4. Post-Bid Considerations and Requirements

a. Bids to Remain Valid: Bids shall be valid for 90 days after the Bid opening. No Bidder may withdraw their Bid during this period unless permitted under Laws and Regulations.
b. Owner's Right to Reject Bids and Evaluation of Bids
    a. The Owner reserves the right to reject any and all Bids. Owner reserves the right to waive any informality not involving price, time, or changes in the Work. Refer to Section 00 21 13, Article 19 in the Instructions to Bidders
c. Potential Award Timeframe of the Contract
    a. Bids will be opened May 4th, 2023. The Successful Bidder will receive a Notice of Award accompanied by the required number of originals of the Contract Documents for execution.
d. Delivery of Bonds and Insurance
    a. Contract bond, insurance policy and certificates will be required to be submitted by the successful bidder, following the notice of award.
e. Execution of the Contract Documents and Notice to Proceed
    a. Execution of Contract Documents: Within 15 days of receipt of the Notice of Award and Contract Documents for signature, Successful Bidder shall execute the Agreement and other Contract Documents and return them to Engineer. When Contract Documents are acceptably executed, Engineer will present them to the Owner for signature.
    b. Notice to Proceed: After execution of the Contract Documents by the Owner, one fully executed set of Contract Documents will be returned to the Contractor with the executed Notice to Proceed.
f. Submittals Prior to Starting the Work
    a. In accordance with Section 01 32 16, Progress Schedule, within 10 days after the Contract Times commence running, Contractor shall submit to Engineer the preliminary Progress Schedule covering the entire Project, with other required schedule documents. Other requirements relative to the Progress Schedule are specified in Section 01 32 16, Progress Schedule.
    b. In accordance with Paragraph 2.03 of the General Conditions, a preliminary Schedule of Submittals shall be submitted by Contractor within 10 days of the Effective Date of the Agreement
    c. Refer to Section 01 31 19.13, Pre-construction Conference, for documents to be furnished by the Contractor at or prior to the pre-construction conference.
    d. Work Sequence Requirements
        i. Refer to Section 01 11 13, Summary of Work, Section 1.4.A.2.C.
        ii. Refer to stages identified on sheet G-02.

5. Administrative Provisions and Miscellaneous

a. Coordination with Owner's Operations
   1) Bidders' attention is called to the Sequence and Progress of Work found in Section 01 11 13, Summary of Work. Work must be sequenced in an order to allow the elevated storage tank to regulate pressures in the pipe and limit the chances of draining the elevated storage tank in case of emergency.
b. Contractor's Use of Site:
   1) Contractor to work with the Village to establish staging, parking, and field office area.

6. **Questions:** Neil Spanfellner, 419-213-1611, Neil.Spanfellner@arcadis.com

Contractor Questions from Pre-Bid Meeting:

1. How will existing water main repairs be addressed during construction?
   a. The Contractor is required to provide protection of existing underground facilities and surface structures per the Contract Documents and in particular Specification Section 01 71 33. In part, Article 3.3 of this Section describes the responsibilities of the Contractor.
2. Bryan Excavation and Vernon Nagel have requested the geotechnical report.
   a. Geotechnical report to be distributed via email.

VILLAGE OF FAYETTE, OHIO
VILLAGEWIDE WATER MAIN REPLACEMENT PHASE I

PRE-BID CONFERENCE SIGN-IN

Thursday, April 20, 2023, 10:00 a.m.
Fayette Village Office

PLEASE WRITE CLEARLY AND LEGIBLY

Name	Employer/ Representing	Phone No.	E-mail Address
Neil Spanfellner	Arcadis	419 213 1611	Neil.Spanfellner@Arcadis.com
Scott Lumbrezer	ARCADIS	419 213 -1634	scott.lumbrezer@arcadis.com
Steve Heinlich	Perrysburg Pipe + Supply	419-260-4703	steve@perrysburgpipe.com sheinlich almve gmail.com
Dave Borer	Village of Fayette	517-403-5235	dborer@villageoffayette.com
JOE FOJTIK	Arcadis	419.480.7902	Joseph.Fojtik@Arcadis.com
Zach Lester	VOF	419-630-5307	ZLESTER@villageofFayette.com
Rick Thormeier	Bryan Ex	419-533-9628	rthormeier@gmail.com

PLEASE WRITE CLEARLY AND LEGIBLY

Name	Employer/ Representing	Phone No.	E-mail Address
Joel Smith	VOF	419-593-6443	jsmith@villageofhaskins.com
Marc Nagel	Vernon Nagel, Inc.	419-592-3861	estimates@nagelinc.com