



Date: March 8, 2023

PROJECT: Water Valve & Sanitary Sewer Main Improvements

SUBMITTAL DATE: 2:00 pm on March 14, 2023

ADDENDUM NO. 1: Bid Documents for this project are being modified, supplemented, clarified or augmented as follows as part of this addendum. All revisions will hereby be made a part of the proposed Contract Documents.

The following attachments are issued with this addendum.

Drawings: No drawings re-issued with this addendum

Specifications: Bid document new pages 18-Add 2 and 19-Add 2

MODIFICATION NO.	SUMMARY
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1	REPLACE current Bid Proposal Page 18 and 19 with the attached REVISED Pages 18 - Add 2 and 19 – Add 2. Changes is highlighted in gray and noted below.
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Page 18 Changes:

- 1) Updated Highlighted Bid Items to remove the notation for C900 DR18 Pipe. Pipe types required shall be as noted in the Sanitary Sewer Standard starting on Page 66 of the Specification.

Alternate: The attached alternate is acceptable for Insert Valves on this project.

Sincerely,

Kristin L. Bauer, P.E.
City Engineer – 517-437-6479

ITEM DESCRIPTION	EST. QUANT.	UNIT	UNIT COST	TOTAL COST
Traffic Control – Water Detour	1	Per Detour		
Traffic Control – 2 Flaggers w/ advance warning signs	22	Per 4 Hours		
Traffic Control – MDOT Lane Closure	1	LS		
SECTION 1 – WATER MAIN SYSTEM SUBTOTAL:				

Section 1 - Water Main System Subtotal Written Out in Words. In case of discrepancy, the amount shown in words will govern.

SECTION 2 - Sanitary Sewer System Construction:

Reconstruct Sanitary Sewer, New Force Main/Lift Station & Spot Replacements:

ITEM DESCRIPTION	QUANT	UNIT	UNIT COST	TOTAL COST
Mobilization – Sanitary Section 2 (Max. 5% of Bid Amount)	1	LS		
Pav't, Rem	90	SY		
HMA, Rem	2,800	SY		
Curb & Gutter, Rem	975	LF		
Bulkhead Ex Sanitary Sewer	1	EA		
Abandon Ex Manhole	3	EA		
Pav't Sawcut – Street Surface	4,600	LF		
By-Pass Pumping	700	LF		
<u>Willow Street</u> San. Sewer 8"	360	LF		
<u>Willow Street</u> New 48" Dia. Doghouse MH	2	EA		
<u>W. St. Joe Street</u> San. Sewer 8"	305	LF		
<u>W. St. Joe Street</u> New 48" Dia. Doghouse MH	2	EA		
<u>Mechanic Street</u> San. Sewer 10"	325	LF		
<u>Mechanic Street</u> New 48" Dia. Doghouse MH	2	EA		

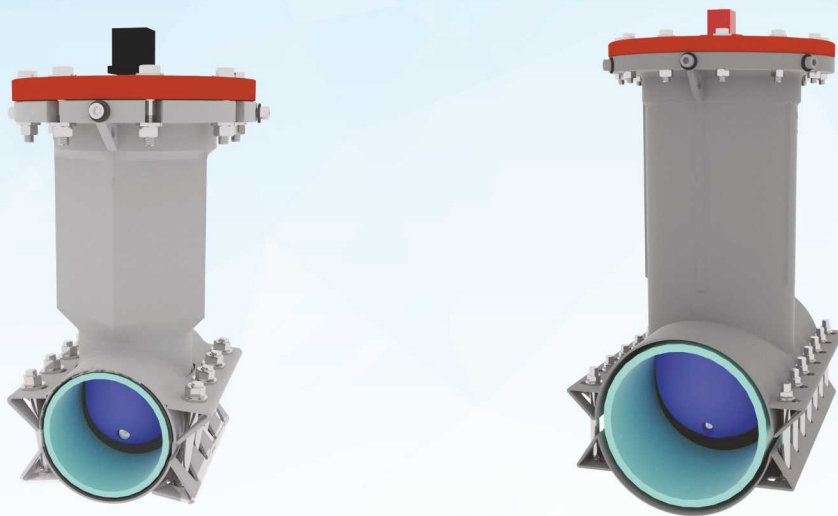
ITEM DESCRIPTION	QUANT	UNIT	UNIT COST	TOTAL COST
<u>Mechanic Street</u> New 48" Dia. Sanitary MH	1	EA		
<u>Marion Street</u> Force Main Sewer, 6"	950	LF		
<u>Marion Street</u> New 48" Dia. Doghouse MH	1	EA		
<u>Marion Street</u> Lift Station Construction	1	LS		
Sanitary Sewer Service Connection	14	EA		
Sanitary Service Connection @ MH	2	EA		
HMA, LVSP	750	TON		
Hand Patching, LVSP	35	TON		
MDOT - HMA, LVSP, 12" thick	70	TON		
Pav't Repr, Nonreinf, Conc, 12", Modified	40	SY		
Sidewalk/Driveway, Conc, 6"	450	SF		
Aggregate Base, 8", 22A	2,800	SY		
Curb & Gutter, F4	975	LF		
Turf Restoration	1	LS		
Project Cleanup	1	LS		
Traffic Control – Willow Street	1	LS		
Traffic Control – W. St. Joe Street	1	LS		
Traffic Control – Marion Street	1	LS		
Traffic Control – Mechanic Street	1	LS		
Traffic Control – Sanitary Spot Replacements	6	Per Site		
Traffic Control – MDOT Lane Shift	1	LS		
SECTION 2 – SANITARY SEWER SYSTEM CONSTRUCTION SUBTOTAL:				

Section 2 - Sanitary Sewer System Construction Subtotal Written Out in Words. In case of discrepancy, the amount shown in words will govern.



INSTA-VALVE 250 **INSERTION VALVES**

4"–12" AIS-Compliant Insertion Valve Specifications — Revised March 2021



All insertion valves shall conform to the following:

Insertion valve shall be a stainless steel body resilient wedge gate valve, designed for permanent use in potable water, sewage, raw water, reclaimed water, irrigation, and backflow control systems. The design will allow the valve to be installed into an existing pressurized pipeline while maintaining constant pressure and service without system shutdown. No restraining devices, restraining fasteners, or transition gaskets shall be required for the installation or operation of the valve.

Installation Method:

- Traditional line tapping methods shall be used for the installation of all insertion valves to allow removal of a single coupon for system evaluation. Reaming the pipe, complete removal of a section of pipe (top and bottom), or milling a slot in the pipe shall be prohibited.

Trained and Authorized Installer:

- All insertion valves must be installed by companies trained and authorized by the approved valve manufacturer. This will ensure high-quality installation and guarantee the warranty of the product.

Valve Body Construction:

- All insertion valves shall have a stainless steel body and a reinforced composite polymer valve cartridge to provide superior corrosion resistance, strength, and a pressure rating that meets or exceeds the requirements of resilient seated gate valves. The insertion valve shall be stainless steel construction for corrosion resistance, maximum toughness, and strength.
- All insertion valves must be capable of working on Cast/Grey Iron or Ductile Iron Class A, B, C and D, IPS PVC, C900 and C909 PVC, Steel and AC pipe diameters without changing either top or bottom portion of split valve body or using a transition gasket.
- All insertion valves must provide a solid support of the host pipe through the entire laying length of the valve body. No gaps or space between the valve body and host pipe shall be accepted.
- All insertion valves shall be rated for 250 psig maximum working pressure. The pressure rating must be permanently marked into the body.
- All insertion valves must be hydrostatically pressure tested to 1.25 times of the system operating pressure (minimum) or 1.5 times of the insertion valves 250 psig maximum pressure rating. The test shall be sustained for a minimum of 15 minutes. Once the pressure test is effectively achieved the insertion valve body must not be moved in accordance with AWWA Standards. If the insertion valve body is moved the pressure test must be completed again. Any movement, repositioning, loosening, and/or re-tightening must be retested before the pipe is tapped.

Bonnet Construction:

- All insertion valves shall have a carbon steel epoxy-coated bonnet.

Resilient Wedge Gate Assembly:

- Insertion valves shall have an EPDM-molded resilient wedge seal. The resilient wedge seal will be affixed into a reinforced nylon composite polymer valve cartridge. The entire assembly shall be inert and impervious to corrosion.
- The nylon composite polymer valve cartridge shall be engineered to contact the interior of the host pipe and an engineered sealing surface in the valve body to create a seal. The resilient wedge shall be reinforced to resist abrasion, thus extending the life and quality of the shutdown where the wedge contacts the host pipe.
- Pressure equalization on the down or upstream side of the closed wedge shall not be necessary to open the valve.
- The wedge shall be symmetrical and seal equally well with flow in either direction.
- The resilient wedge must ride inside a minimum of four body channels to maintain wedge alignment throughout its travel and to achieve maximum fluid control regardless of high or low flow pressure or velocity.
- Insertion valves shall have a full size, full port flow way that is unobstructed, and free of depressions to provide optimum flow and sealing and not trap tuberculation or debris.

Valve Dimensions and Weight:

- Maximum height of the valve from the **center** of the host pipe to the top of the operating nut shall not exceed the following dimensions:
 - 4" = 18.6"
 - 6" = 21.5"
 - 8" = 24.6"
 - 10" = 30"
 - 12" = 33"
- Maximum laying length of the valve body shall not exceed the following dimensions:
 - 4" = 12"
 - 6" = 12"
 - 8" = 16"
 - 10" = 24"
 - 12" = 24"
- Maximum weight of the valve shall not exceed the following weight:
 - 4" = 138 lbs.
 - 6" = 173 lbs.
 - 8" = 229 lbs.
 - 10" = 370 lbs.
 - 12" = 425 lbs.

Fusion-Bonded Epoxy / E Coating:

- Insertion valves shall have all stainless steel bodies and fasteners with an epoxy-coated carbon steel valve bonnet. The use of epoxy coatings for protection against corrosion is deemed insufficient for any component other than the valve bonnet.

Gaskets and Stem Seals:

- Insertion valves shall utilize four O-rings to seal between valve body to valve bonnet and valve stem. These O-rings are installed to ensure the 250-psig pressure worthiness and prevent ground water and/or foreign materials from entering the valve.

Valve Stem:

- Insertion valves shall be NRS (non-rising stem) and operate with standard 3 turns per diameter inch to open and close.
- Insertion valves shall be operated by a 2" square wrench nut — open left or open right.
- The gate valve stem shall be made of stainless steel.
- The gate valve stem shall be able to withstand torque of 700 ft. lbs. of torque without compromising operation.
- The NRS stem must have an integral stem collar manufactured of no lead bronze. Two-piece stem collars are not acceptable. The stem shall be affixed into the valve cartridge to maintain stem alignment, low torque, and continuous operation of the valve.

Hardware:

- All bonnet and valve body fastener hardware shall be stainless steel.
- Valve cartridge locking pins shall be made of 304 domestic stainless steel and coated to prevent galling.

Split Restraint Devices and Fasteners:

- Insertion valves that require the use of external or integral split restraint devices and or restraint fasteners is prohibited.

Quality Assurance:

- Insertion valves shall be factory pressure tested and serialized for traceability before leaving the manufacturing facility to assure quality. Proof of successful factory pressure test must be made available upon customer request within three business days.

American Iron and Steel Act:

- The Insta-Valve 250 insertion valve is manufactured in the USA and meets requirements specified in the "Buy American Act", "Made in USA", "Buy America", and "American Iron and Steel" requirements.

Value Added Features and Benefits:

- All moving and operating parts must be removable, repairable, and/or replaceable under pressure to ensure easy repair of broken or damaged parts.
- Insertion valves must have the ability to be converted to a line stop fitting in the field without modification.

The 4"–12" insertion valve shall be a Hydra-Stop Insta-Valve 250 (patents pending) or written preapproved equal.

APPROVED BY:

Name: _____

Title: _____

Date: ____/____/____