PROPOSAL SUBMITTED BY:		
Ziebell Water Service Products, Inc.		
Contractor's Name		
1405 W. Fullerton Avenue		
Street		P.O. Box
Addison	Illinois	60101
City	State	Zip Code
-		2.9 0000



CITY OF AURORA

KANE COUNTY

STATE OF ILLINOIS

#### PROPOSAL AND SPECIFICATIONS FOR

2025 Water & Sewer Division Materials and Supplies Bid 24-110

> PROPOSALS DUE October 30, 2024 At 11:00 AM

AURORA, ILLINOIS

October 2024

BCHWEIP BCHWEI

Nadia L. Schweisthal

10/11/2024

PREPARED BY CITY OF AURORA Engineering Division 77 S. Broadway Avenue AURORA, ILLINOIS 60507

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# City of Aurora Bid 24-110

### **NOTICE TO BIDDERS**

#### Time and Place of Opening of Bids

Sealed proposals for the improvement described below will be received at the office of the City Clerk, 44 E Downer Place, First Floor, Aurora, IL 60505 until 11:00 AM, Wednesday, October 30, 2024. Quotes will not be opened publicly.

# **Description of Work**

Name: 2025 Water & Sewer Division – Materials and Supplies

<u>Proposed Improvement:</u> The City of Aurora is requesting quotations for the anticipated purchase of certain materials and supplies to be used by the Water & Sewer Maintenance Division during 2025.

#### **Bidder Instructions**

- 1. Plans, specifications, and proposal forms will be available on Monday, October 14, 2024 and may be obtained online at: <a href="https://www.aurora-il.org/bids.aspx">https://www.aurora-il.org/bids.aspx</a>.
- The City of Aurora reserves the right to reject any or all of the bids and to waive any and all irregularities and technicalities whenever such rejection is in the best interest of the City of Aurora.
- 3. All bid items will be evaluated separately and the supplier for each bid item will be chosen based on cost and availability of the item at the time of need.
- 4. Any bidder who owes the City money may be disqualified at the City's discretion.
- The City encourages minority business firms to submit proposals and encourages the successful contract bidder to utilize minority businesses as subcontractors for supplies, equipment, services, and construction.
- 6. The City of Aurora has a local preference ordinance that would apply to this contract.

By Order of City Clerk City of Aurora

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# CITY OF AURORA SPECIAL PROVISIONS

Revised 1/2024

The following Special Provisions supplement the General Specifications, the Illinois Department of Transportation's Standard Specifications For Road and Bridge Construction (herein after called the Standard Specifications), the City of Aurora's Standard Specifications for Improvements, the Supplemental Specifications and Recurring Special Provisions, the Standard Specifications for Water And Sewer Main Construction in Illinois, Seventh Edition, the Standard Specifications for Traffic Control Items, Part 890 of the Illinois Plumbing Code (77 IL Admin Code 890.1150) and the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways and the Illinois Supplement to the National Manual on Uniform Traffic Control Devices in effect on the date of invitation for proposals. These special provisions apply to and govern the proposed improvement designated as the Water & Sewer Maintenance Division - 2025 Materials and Supplies Request for Quotations, Bid 24-110 and in case of conflict with any part or parts of said specifications; these Special Provisions shall take precedence and shall govern.

All questions should be received by the Purchasing Division, in writing at <a href="PurchasingDL@aurora.il.us">PurchasingDL@aurora.il.us</a>, by 4 pm Wednesday, October 23, 2024. Questions will be answered via addendum and posted to the City's website at <a href="https://www.aurora-il.org/bids.aspx">https://www.aurora-il.org/bids.aspx</a> by 4:00 pm, Thursday, October 24, 2024 if required. All questions received after Wednesday will not be addressed.

All appropriate parts shall be lead free and be stamped "NL". Materials are to be manufactured in the United States. Any variation from the special provisions below should be approved prior to providing bid pricing.

All materials shall be delivered to the Water & Sewer Maintenance Division within 5 business days of being ordered.

#### **SP 1 - FIRE HYDRANT ASSEMBLY**

These specifications are to be used in conjunction with the AWWA Standard C502 for fire hydrants for ordinary water works service, and the City of Aurora's Standard Specifications for Improvements.

All materials used in the production of fire hydrants for ordinary service shall conform to the specifications designated for each material listed in AWWA Standard C502.

The hydrant shall be Waterous Pacer WB-67 (5 1/4" barrel) of a pattern approved by the Engineer. The seat must be bronze. The name or mark of the manufacturer, size of the valve opening shall be plainly cast in raised letters and so placed on the hydrant barrel as to be visible after the hydrant has been installed.

Hydrant markers shall be RoDon Hydra-Finder Hydrant Markers or an engineer approved equal. The marker shall be a 3/8" diameter white laminar matrix fiberglass shaft with 6" wide high reflectivity red striping tape. The hydrant marker shall have a standard length of 5'. The fiberglass shaft shall be attached to a heavy duty MIL SPEC chrome-plated spring mount connected to a 5/8" diameter bolt-on steel flat mounting bracket.

See the Figure 6 attached at the end for a diagram showing the specific hydrant replacement parts.

The ALPHA restraint joint shall have a working pressure of 350 psi and be as licensed and manufactured by Romac Industries, Inc.

#### **SP 2 - HYDRANT METER**

The Hydrant Meter shall be designed to measure a wide variety of cold potable water flows from hydrants where flows are in one direction. The hydrant meter provided shall be a Zenner FHZ30S or approved equal. The hydrant meter shall comply with AWWA C701 Class II performance standards. The only moving parts in the meter shall be the rotor assembly and vertical shaft. All components of the meter shall be lead free. The optional NC2530B-CV check valve assembly shall be included with the hydrant meter. The meters shall be 3" and read in century cubic feet.

#### SP 3 - VALVES

The minimum requirements for all valves shall, in design, material and workmanship, conform to the standards of the latest AWWA C509-87, and C504. All materials used in the manufacture of waterworks valves shall conform to the AWWA standards designed for each material listed.

<u>Gate Valve</u>: Gate valves shall be resilient wedge with cast iron body, fully bronze mounted, non-rising stem with upper and lower thrust collars. Waterways shall be smooth. All valves shall open by turning counterclockwise. Valves shall meet or exceed ANSI/AWWA C-515-99 latest revision. Gate valves shall be Waterous series 2500 Resilient Wedge Gate Valves. All nuts, bolts, and threaded rods shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

All gate valves shall be furnished with O-Ring Stem Seals. Number, size and design shall conform to the AWWA Standard for R/W valve O-Ring Stem Seals.

<u>Cutting in Valve</u>: Cutting in valves shall be resilient wedge with cast iron body, fully bronze mounted, non-rising stem with upper and lower thrust collars. Waterways shall be smooth. All valves shall open by turning counterclockwise. Valves shall meet or exceed ANSI/AWWA C-509 latest revision. Cutting in valves shall be Clow Model 2640 cutting in joint (MCJ) end Valves. All nuts, bolts, and threaded rods shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

All cutting in valves shall be furnished with O-Ring Stem Seals. Number, size and design shall conform to the AWWA Standard for R/W valve O-Ring Stem Seals.

The ALPHA restraint joint shall have a working pressure of 350 psi and be as licensed and manufactured by Romac Industries, Inc.

#### **SP 4 - VALVE BOXES**

Valve boxes and extensions must be cast iron only. Valve boxes shall be 6850 Series as manufactured by Tyler Union. Adjustable cast iron valve boxes shall be screw type. The screw type valve box shall be adjustable by screwing the upper section over the lower section. As shown on the schedule of prices, this item shall be bid as a complete system and as spare parts for purchase as needed. Castings with cast iron ring and cover, and cast iron parts of valve boxes, shall conform to the requirements of Standard Specifications for Gray Iron Castings, ASTM Designation A-48.

#### **SP 5 - MISSION COUPLING**

Mission repair couplings shall be Style CNSS non-shear sewer couplings as manufactured by Cascade Water Works, Mfg. Co. of Yorkville, IL. The coupling shall be constructed with an outer shell of T-304 (ASTM A-240/ASME SA-240) stainless steel with three stainless steel heavy duty worm gear fasteners (SAE J-1508 - MIL 5059-A) permanently welded in place and passivated per ASTM A-380. The shell shall fully encircle a 40 durometer ribbed gasket made from virgin SBR (ASTM D2000) rubber formulated for sewer service.

#### SP 6 - REPAIR CLAMP

Repair clamps shall be manufactured by The Ford Meter Company, Inc. (FS1), Cascade Waterworks MFG. (CR1), Smith/Blair (261), or an approved equal. All repair clamps shall have type 304 stainless steel components and an 18/8 grade. All clamps shall have a Nitrile (Buna-N) gasket. The lugs shall also be type 304 stainless steel.

#### **SP 7 - DUCTILE IRON SLEEVE FITTINGS**

All fittings shall be ductile iron conforming to the latest ANSI specifications A21.10 for short body fittings, twelve inches (12") or less, and AWWA C110 for fittings fourteen inches (14") or larger. Long body sleeves shall be provided unless directed otherwise. When specified to have mechanical joints, Mega Lug wedge action retaining glands, or approved equal shall be included. All nuts and bolts used for jointing shall be stainless steel, Grade 304 bolts, and Grade 316 nuts. Ductile Iron sleeves shall be manufactured by Tyler Union or an approved equal.

#### SP 8 - CAST COUPLINGS

Cast Couplings shall be manufactured by The Ford Meter Company, Inc. (Style FC1), Cascade Waterworks MFG. (Omega Coupling), Smith/Blair (441), or an approved equal. All couplings shall meet or exceed requirements of AWWA C-219 and should have a minimum working pressure of 250 psi. All couplings shall be certified to NSF/ANSI 61-G with Nitrile (Buna N) gaskets. An approved equal is to come with stainless steel Grade 304 bolts and Grade 316 nuts.

# SP 9 - SINGLE BOLT CAST COUPLINGS

Single Bolt Cast Couplings shall be Alpha restrained joint manufactured by Romac Industries, Inc. or an approved equal. All couplings shall meet or exceed requirements of AWWA A 536, grade 65-45-12 and should have a minimum working pressure of 350 psi. All couplings shall contact gaskets certified by UL to meet NSF/ANSI 61. An approved equal is to come with stainless steel Grade 304 bolts and Grade 316 nuts.

# SP 10 - MEGALUG RETAINER GLAND

MegaLug retainer glands shall be Series 1100 (DI) or Series 2000PV (PVC) as manufactured by EBBA Iron Inc. or approved equal (set screw retainer glands will not be accepted). The mechanical joint restraint shall be constructed of ductile iron meeting ASTM A536 and it shall have a pressure rating of 350 PSI. All nuts and bolts shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

# SP 11 - MECHANICAL JOINT ACCESSORY KIT

The mechanical joint accessory kit shall include a rubber gasket and a ductile iron backing flange of the size specified in the pay item and the appropriate number of bolts required for the kit size. The kit manufacturer shall be Tyler Union, or an approved equal, and the components shall be for use with ductile iron pipe. The mechanical joint restraint shall be constructed of ductile iron meeting ASTM A536 and it shall have a pressure rating of 350 PSI. All items shall be manufactured in the U.S.A. All nuts and bolts shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

# **SP 12 - DUCTILE IRON BORED OUT FLANGE**

Ductile iron bored out flanges shall be manufactured by Tyler Union or an approved equal.

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#### SP 13 - SDR-26 PVC PIPE

All pipe shall meet the requirements of ASTM D3034 for 4" through 15" and F679 for 18" through 36" pipe. All pipe shall be made from quality PVC resin, compounded to provide physical and mechanical properties that equal or exceed cell class 12454 or 12364 as defined in ASTM D1784. The bell shall consist of an integral wall section with a solid cross section elastomeric gasket which meets the requirements of ASTM F477. SDR-26 PVC plastic pipe shall be tested as follows:

Manufacturer shall submit certified copies of all reports of tests conducted by an independent laboratory of PVC Plastic Pipe. Tests shall be conducted in accordance with Standard Method of Test for "External Loading Properties of Plastic Pipe by Parallel-Plate Loading", ASTM Standard D2412. Tests shall also be conducted in accordance with ASTM D 3212 to demonstrate joint performance at 5% maximum diametric deflection of the spigot, as specified in Article 7.4 of ASTM D 3212.

Maximum allowable ordinate as measured from the concave side of the pipe shall not exceed 1/16 inch per foot of length. Pipe shall be so constructed that the initial internal vertical diameter does not decrease by more than 5% in order to provide the complete hydraulic carrying capacity conceived by the design engineer, and to obtain the joint performance at 5% maximum diametric deflection as specified in Article 7.4 of ASTM D 3212.

# SP 14 - CLASS 52 DUCTILE IRON PIPE

Ductile-iron pipe shall conform to ANSI Specification A21.51 or AWWA C151. Class 52, thickness designation, casting, marking, testing, etc. shall be provided in accordance with applicable ANSI or AWWA standards.

Cement lining shall be included in accordance with ANSI A21.4 (AWWA C-104). All pipe, specials and fittings shall be cement mortar lined in the shop with centrifugally spun lining in accordance with AWWA C205-85 or cement mortar lined mechanically in accordance with AWWA C602-83. Use ASTM C150, Type II, cement for lining. Field joints shall be made in accordance with AWWA C205, Appendix A.

Pipe joints shall be either push-on (rubber gasket) type as recommended by the pipe manufacturer. All pipe shall be furnished with a depth mark to assure that the spigot end is inserted to the full depth of the joint.

#### **SP 15 - CORPORATION STOP**

Corporation stops shall have flared connections conforming to ANSI/AWWA C-800 and shall be the following brands or approved equal: A.Y. McDonald 4701 or Ford F-600. All appropriate parts shall be lead free and be stamped "NL".

#### SP 16 - CURB BOX

All curb boxes shall be Minneapolis pattern with flared connections conforming to ANSI/AWWA C800 and shall be the following brands or approved equal: A.Y. McDonald 6104, Ford B22-444M, or Mueller H-15151. All curb boxes shall be 5'6" bury Minneapolis pattern with minimum 1-1/4" upper section equal to: A.Y. McDonald 5614 or Ford EM-55-56. (Accepted Brands: Mueller, Star Pipe Products, Sigma/Nappco, Bingham & Taylor or approved equal). All appropriate parts shall be lead free and be stamped "NL".

#### **SP 17 - METER HORN**

Meter horns shall be CH88-33 style as manufactured by The Fort Meter Box Company, Inc. or engineer approved equal. All brass shall conform to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600-85-5-5-5). Meter threads shall conform to AWWA C700. Copper shall conform to ASTM B-75 and shall consist of copper alloy #122

### SP 18 - BALL VALVE

Ford ball valves shall be manufactured in accordance with AWWA C800. The valve shall be designed to withstand water pressure up to 300 psi and maintain a watertight seal. The valve shall include a fluorocarbon-coated ball that is supported by molded Buna-N or EPDM rubber seats.

# **SP 19 - METER COUPLING**

Meter couplings shall be C38-11-2-NL 5/8", C38-23-2-75-NL 3/4", or C38-44-2-625-NL 1" models as style as manufactured by The Fort Meter Box Company, Inc. or engineer approved equal. This item shall be bid per Package with 50 per package for the 5/8" size, 25 per package for the 3/4", and 15 per package for the 1" couplings. The 5/8" and 3/4" meter couplings shall have a 3/4" male thread size and the 1" meter couplings shall have a 1" male thread size. Couplings shall be Ford Meter Box no-lead brass products manufactured from UNS/CDA No. 89833 alloy.

#### SP 20 - TYPE K COPPER

Type K copper pipe shall be supplied in the diameter and length as specified. The type K copper shall have a color code of green and shall be in accordance with ASTM B 88 & AWWA publication M-22 entitled, "Water Service Lines And Meters".

# **SP 21 - WATER METER FLANGE KIT**

The flange kit shall include two water meter flanges, two gaskets, four stainless steel nuts and bolts for the 1 ½" and 2" flanges, eight stainless steel nuts and bolts for the 3" and sixteen stainless steel nuts and bolts for the 4" flanges. All parts and components manufactured 100% in USA. Parts shall be manufactured in accordance with the following specifications: Bronze casting C87850 ECOBRASS (.09% lead max), Round flanges conforming to ANSI B16.1, Gaskets ANSI/AWWA C111/A21.11, Bolts ANSI B18.2.1, Nuts SAE J995 Grade 5 with dimensional tolerances ANSI B182.2.2, & plating ASTM F1491. All appropriate parts shall be lead free and be stamped "NL".

#### **SP 22 - MARKING PAINT**

Marking paint provided shall be Krylon Industrial Quik-Mark (or approved equal) for inverted use, water based, 20 ounces in size (net weight 17 oz), and of the color specified. The paint shall also be environmentally safe.

# SP 23 - NEENAH FRAMES AND GRATES

Frames and lids shall be manufactured by NEENAH and the type specified. All manhole type B covers shall have "CITY OF AURORA" cast into the top in two (2) inch high lettering and shall be the concealed pick hole type. All type B covers shall have a machined surface and a watertight rubber gasket seal.

#### **SP 24 - HYDRAULIC CEMENT**

Hydraulic cement shall be Speccrete W-10 Waterstopper Plug Cement or an engineer approved equal. The compressive strength shall be a minimum 4,200 P.S.I. after 28 days per ASTM C-109. The hydraulic cement shall have a final set time of 3-5 minutes per CRD C-621. The requested material shall come in a 50 pound pail. The cost supplied shall be for each 50-pound pail of hydraulic cement.

#### **SP 25 – STORM STRUCTURES**

New storm structures shall be constructed of pre-cast reinforced concrete in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois.

# SP 26 - TYPE I BARRICADE

All type I barricades shall be in conformance with the Illinois Department of Transportation's "Standard Specifications For Road and Bridge Construction" (current edition) and be equipped with a yellow light that is battery operated.

#### SP 27 - GROUND CLAMP

Ground clamps shall be Burndy C11N model or engineer approved equal. The ground clamp shall be cast bronze for cable to water pipe or copper tube connection using a 10 - 2 AWG. It shall connect to a  $\frac{1}{2}$ " to 1" water pipe with a torque of 50 of-in.

# SP 28 - BUTYL MASTIC SEALANT

Butyl Mastic Sealant shall be NPC-Bidco C-56 Trelleborg or engineer approved equal. Each roll of Butyl Mastic Sealant shall be thickness, width and length as specified in the individual pay items. All approved equals shall meet or exceed the following:

- Federal Specifications SS-S-210 A "Sealing Compound, Preformed Plastic for Pipe Joints", Type 1, Rope Form
- AASHTO Designation M-198 75 I, Type B, Flexible Plastic Gasket (Bitumin)
- ASTM Designation C-990-91.

#### SP 29 - MASTIC SEALING BAND

Mastic Sealing Band shall be used to externally seal manhole cone and barrel sections. The band shall have an outer layer of rubber or polyethylene with an under layer of rubberized mastic (with a protective film), meeting the requirements of ASTM C-877, \*\*type II or \*type III.

### SP 30 - ADS PIPE

Pipe shall consist of N-12 Dual Wall WT IB HDPE Pipe as manufactured by Advanced Drainage Systems (ADS) or approved equal. The pipe supplied shall utilize water tight joints meeting ASTM D3212. The pipe shall be joined using a bell & spigot joint meeting AASHTO M252 for 4-10 inch diameter pipe, AASHTO M294 for 12-60 inch diameter pipe, and ASTM F2306 for 12-60 inch diameter pipe. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. Material for pipe and fitting production shall be high-density polyethylene confirming with the minimum requirements of cell classification 424420C for 4-10 diameters, and 435400C for 12-60 inch diameters, as defined and described

# Bid Number 24-110

in the latest version of ASTM D3350, except that carbon black content shall not exceed 4%.

# <u>SP 31 – COMPOSITE ADJUSTMENT RINGS</u>

The acceptable manufacturer shall be PRO-RING by Cretex Specialty Products or an approved equal. The grade adjustment rings shall be manufactured from ARPRO Expanded Polypropylene, (EPP), black. 5000 series meeting ASTM D3575 and ASTM D48-1913; B6D7G4L3M<sub>2</sub>4S2T<sub>1</sub>7W7. The rings shall be manufactured using a high compression molding process to produce a finished density of 120 g/l ((7.5pcf). "Grade" adjustment rings may contain either an upper or lower keyway (tongue and groove) for vertical alignment and/or an adhesive trench on the underside with a flat top. The grade adjustment rings shall be capable of supporting the minimum requirements of AASHTO M-306, H-25 and HS-25, be UV stable and be resistant to chemicals and corrosion commonly associated with the sanitary and storm sewer environments. Composite rings shall be set with 3/8"x3.5" butyl rope between each ring, frame and/or top of structure.

#### SP 32 - T-BOLTS AND NUTS

All T-Bolts and Nuts shall be manufactured per ANSI/AWWA C111/A21.11. The acceptable manufacturer shall be Active Waterworks Industries or an approved equal. T-Bolts shall be stainless steel grade 304 and nuts shall be stainless steel grade 316. The size shall be <sup>3</sup>/<sub>4</sub>" x 3.5". The cost supplied shall be per each case of 125 T-Head Bolts and Nuts.

#### SP 33 - INLET FILTERS

All inlet filters shall be Flex Storm Catch-it models as manufactured by Advanced Drainage Systems or an approved equal. The models provided shall fit inside the IDOT frame types listed.

#### SP 34 - CHIMNEY SEALS

All chimney seals shall be bandless and be Adaptor-Seal, Infi-Shield, CanUSA (wrapid seal), Flexrib or approved equal external chimney seal.

#### SP 35 - WATER SERVICE COUPLINGS

All water service repair couplings shall be the model and manufacturer listed in the attached table below or an engineer approved equal. All connections to copper pipes shall utilize a flared fitting.

Water Service Coupling Models				
Part	A.Y. McDonald Mfg. Co.			
3/4" Flare Copper to 3/4" Flare Copper Coupling	Q22-33-NL	74758 3/4"		
3/4" Flare Copper to 1" Flare Copper Coupling	Q22-34-NL	74758 3/4"x1"		
1" Flare Copper to 1" Flare Copper Coupling	Q22-44-NL	74758 1"		
5/8" Double Extra Strong Lead (XXS) or 3/4" Strong Lead (S) to 3/4" Flare Copper Lead-Pack Coupling	Q12-33-Q32-23- NL	74758C-68 3/4"x5/8", 74758C- 66 3/4"		
3/4" XS to 3/4" Flare Copper Lead-Pack Coupling	Q22-33-NL	74758C-67 3/4"		

3/4" XXS to 3/4" Flare Copper Lead-Pack Coupling	Q32-33-NL	74758C-68 3/4"
5/8" XXS or 3/4" S to 1" Flare Copper Lead-Pack Coupling	Q12-34-Q32-24- NL	74758C-68 1"x5/8", 74758C-66 1"x3/4"
3/4" XS to 1" Flare Copper Lead-Pack Coupling	Q22-34-NL	74758C-67 1"x3/4"
1" S to 1" Flare Copper Lead-Pack Coupling	Q12-44-NL	74758C-66 1"
1" XS to 1" Flare Copper Lead-Pack Coupling	Q22-44-NL	74758C-67 1"
1" XXS to 1" Flare Copper Lead-Pack Coupling	Q32-44-NL	74758C-68 1"

# SP 36 - HIGH PERFORMANCE HYDRANT GREASE FOR FOOD PROCESSING EQUIPMENT

The product shall be a high performance multipurpose grease used for food and beverage processing equipment. The acceptable product shall be FM Grease 387 as manufactured by Fuchs Lubricants Co. or an approved equal. This product shall be acceptable as a grease with incidental food contact (H1) according to the NSF International Registration Guidelines for Proprietary Substances and Nonfood Compounds (2013). This product shall be provided in the 1 pound size and shall be paid for as an each pay item.

# SP 37 - MINERAL OIL LUBRICANT

The product shall be a medium SAE 20 grade oil used for general oiling or hydraulics. The acceptable product shall be FMO-350, ISO Grade 68, USP White Mineral Oil as manufactured by Lubriplate Lubricants or an approved medium SAE 20 grade oil equal. This product shall be acceptable for use as a release agent (3H) and as a lubricant with incidental food contact (H1) according to the NSF International Registration Guidelines for Proprietary Substances and Nonfood Compounds (2013). This product shall be provided in the 5 gallon pail size and shall be paid for as an each pay item.

# SP 38 - HYMAX PRO DEDICATED SIZE COUPLINGS

HYMAX Pro dedicated size coupling shall be of Standard EPDM gasket material and accommodate a variety of pipe material, AISI 304 stainless steel, two/four-bolt stab-fit design as manufactured by HYMAX a Mueller brand or an approved equal. All nuts and bolts shall be stainless steel.

# SP 39 - ANODE BAGS

The product shall be a 17 lb Magnesium SuperMAG High Potential Anode packaged in either bags or cardboard cartons in low resistivity, quick wetting, prepared backfill consisting of 75% hydrated gypsum, 20% bentonite, and 5% sodium sulphate. Connecting wire should be standard 10 ft. of solid or stranded #13 AWG copper lead. The acceptable manufacturer should be Galvotec Alloys Inc. – specify SuperMAG.

# SP 40 - STAINLESS STEEL CLAMP FOR ANODE BAGS - "EZ Strap"

The acceptable manufacturer shall be Cathodic Protection Management (CPM). The acceptable product shall be a stainless steel clamp with a lug diameter that allows a maximum #10 AWG wire with a stainless steel set screw used to make contact with the connected metallic structure. Acceptable vendors currently include: Water Products Company, Mid-American Water Inc, and Core & Main – specify "EZ-Strap".

# <u>SP 41 – TPS ULTRA SLEEVE – JOINT REPAIR SLEEVE</u>

The acceptable product shall be an ULTRA-SLEEVE Wide Range Bell Joint Repair Sleeve. The acceptable manufacturer shall be Total Piping Solutions, Inc. (TPS).

# **PROPOSAL**

TO: THE HONORABLE MAYOR AND CITY COUNCIL CITY OF AURORA 44 EAST DOWNER PLACE AURORA, ILLINOIS 60507

i.	Proposal of	Ziebell Water Service Products, Inc.
	for the impro	vement known as the 2025 Water & Sewer Division - Materials and Supplies, Bid 24-110,

- 2. The plans and specifications for the proposed improvements are those prepared by the City of Aurora Engineering Division and approved by the City Council of Aurora, Illinois.
- 3. In submitting this proposal, the undersigned declares that the only persons or parties interested in the proposal as principals are those named herein, and that the proposal is made without collusion with any person, firm, or corporation.
- 4. The undersigned further declares that he has carefully examined the proposals, plans, specifications, form of contract and contract bond, and special provisions, if any, and that he has inspected in detail the site of the proposed work and that he has familiarized himself with all of the local conditions affecting the contract and detailed requirements of construction, and understands that in making this proposal he waives all right to plead any misunderstanding regarding the same.
- 5. The undersigned further understands and agrees that if the proposal is accepted, he is to furnish and provide all necessary machinery, tools, apparatus and other means of construction and to do all of the work and to furnish all of the materials and labor required.
- 6. The undersigned declares that he understands that the quantities mentioned are approximate only, and that they are subject to increase or decrease; that he will take in full payment therefore the amount of the summation of the actual quantities, as finally determined, and multiplied by the unit prices shown in the schedule of prices contained herein.
- 7. The undersigned agrees that the unit prices submitted herewith are for the purpose of obtaining a gross sum and for use in computing the value of extras and deductions; that if there is a discrepancy between the gross sum bid and that resulting from the summation of the quantities multiplied by their respective unit prices, the latter shall apply.
- 8. The undersigned agrees that if the City decides to extend or shorten the improvement, or otherwise alter it by extras or deductions, including the elimination of any one or more of the items, as provided in the specifications, he will perform the work as altered, increased or decreased, at the contract unit prices without claim for profits lost as a result of any work or items eliminated by the City of Aurora.
- 9. The undersigned agrees that the Engineer may, at any time during the progress of the work covered by this contract, order other work or materials incidental thereto, and that all such work and materials as do not appear in the proposal or contract as a specific item accompanied by a unit price, and which are not included under the bid price for other items in this contract, shall be performed as extra work, and that he will accept as full compensation therefore the actual cost plus ten percent (10%), the actual cost to be determined as provided for in the specifications.
- 10. The City of Aurora reserves the right to reject any or all of the bids and to waive any and all irregularities and technicalities. The City of Aurora shall either award the project or reject the bids within Sixty (60) calendar

days after the bid opening. This time frame may be extended upon mutual agreement of the City and the Bidder.

- 11. The undersigned of this proposal agrees that he or she has examined all sections of this Proposal, Specifications, and Bidding Documents and hereby understands and accepts the provisions for access, or the lack of access, to the construction site and shall claim no compensation other than the prices as bid for this condition of accessibility.
- 12. The undersigned agrees to indemnifying and saving harmless the City of Aurora, its officers, agents, employees, and servants by filing with the City, prior to the execution of the contract, copies of completed Certificates of Insurance satisfactory to the City, with the City of Aurora named as primary, non-contributory additional insured; automobile liability insurance covering owned, non-owned, and hired vehicles with limits of liability as stated in the attached Special Provisions.
- 13. No contract will be awarded to any bidder where that bidder or any principal or supervisory personnel of the bidder has been personally involved with another business that has been delinquent or unfaithful in any former contract with the City or where that bidder or any supervisory personnel of the bidder has been personally involved with another business that is a defaulter as surety or otherwise upon obligation to the City.
- 14. The entire set of specifications shall be submitted with each proposal.
- 15. The City has the right to terminate this Contract, in whole or in part, for any reason or if sufficient funds have not been appropriated to cover the estimated requirement of the Services not yet performed, by providing Bidder with thirty (30) days notice specifying the termination date. On the date specified, this Contract will end. If this Contract is terminated by the City, as provided herein, the City shall pay the Bidder only for services performed up the date of termination. After the termination date, Bidder has no further contractual claim against the City based upon this Contract and any payment so made to the Bidder upon termination shall be in full satisfaction for Services rendered. Bidder shall deliver to the City all finished and unfinished documents, studies and reports and shall become the property of the City.
- 16. The City of Aurora has a local preference ordinance that would apply to this contract. O18-070 approved August 28, 2018 defines "Local business" to mean a vendor or contractor who has a valid, verifiable physical business address located within the corporate boundaries of the City of Aurora at least twelve months prior to a bid or proposal opening date, from which the vendor, contractor or consultant operates or performs business on a daily basis, including manufacturing production or distribution. The business must disclose the percentage of workforce in the City of Aurora; be registered with the City of Aurora, if applicable; be subject to City of Aurora taxes (inclusive of sales taxes); be current with property tax payments and sales tax payments; not have any outside cited code violations; not have any outstanding debts to the City of Aurora; have adequately qualified and trained staff to service the bid of interest.
- 17. In submitting this Offer, the Bidder acknowledges that:

	All bid documents have been examined: Instructions to bidders, Specifications and the following addenda:
	No, No, No, No, No, No(Bidder to acknowledge addenda here).
18	. The undersigned submits herewith this <b>Schedule of Prices</b> covering the work to be performed under this contract:
	Aris Halikias Vice President
	Ziebell Water Service Products, Inc.
	847-364-0670

Bid 24-110
City of Aurora Water & Sewer Maintenance Division
2025 Materials and Supplies
Proposals Due by 11:00AM: October 30, 2024

# ADDENDUM NO. 1 Page 1 of 13

TO:

All Bidders

FROM:

**Engineering Division, City of Aurora** 

DATE:

October 11, 2024

# THIS ADDENDUM FORMS A PART OF THE BIDDING AND CONTRACT DOCUMENTS.

1. The following pay items have been removed from the bid schedule:

- Pay Item 70 American Flow Control Gate Valve, 2" w/ ALPHA Standard Restrained Joint Ends
- Pay Item 76 American Flow Control Gate Valve, 14" w/ ALPHA Standard Restrained Joint Ends
- Pay Item 77 American Flow Control Gate Valve, 16" w/ ALPHA Standard Restrained Joint Ends
- Pay Item 84 American Flow Control Gate Valve, 14" w/ ALPHA XL Restrained Joint Ends
- Pay Item 85 American Flow Control Gate Valve, 16" w/ ALPHA XL Restrained Joint Ends

An updated Bid Schedule of Prices has been included at the end of the Addendum.

Sincerely,

Nadia L. Schweisthal, PE CPII

Nadia L. Schweisthal

Professional Engineer I

City of Aurora Engineering Division

PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE BID FORM. FAILURE TO DO SO MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

Bid 24-110
City of Aurora Water & Sewer Maintenance Division
2025 Materials and Supplies
Proposals Due by 11:00AM: October 30, 2024

# ADDENDUM NO. 2 Page 1 of 1

TO:

All Bidders

FROM:

**Engineering Division, City of Aurora** 

DATE:

October 22, 2024

# THIS ADDENDUM FORMS A PART OF THE BIDDING AND CONTRACT DOCUMENTS.

1. The following special provisions have been updated:

# SP 39 - ANODE BAGS

The product shall be a 17 lb Magnesium SuperMAG High Potential Anode packaged in either bags or cardboard cartons in low resistivity, quick wetting, prepared backfill consisting of 75% hydrated gypsum, 20% bentonite, and 5% sodium sulphate. Connecting wire should be standard 10 ft. of solid or stranded #13 AWG copper lead. The acceptable manufacturer should be Galvotec Alloys Inc. – specify SuperMAG, <u>Cathodic Protection Management Inc. or approved equal.</u>

# SP 40 - STAINLESS STEEL CLAMP FOR ANODE BAGS - "EZ Strap"

The acceptable manufacturer shall be Cathodic Protection Management (CPM). The acceptable product shall be a stainless steel clamp with a lug diameter that allows a maximum #10 AWG wire with a stainless steel set screw used to make contact with the connected metallic structure. Acceptable vendors currently include: Water Products Company, Mid-American Water Inc, Core & Main — specify "EZ-Strap", Ferguson or approved equal.

Sincerely,

Nadia L. Schweisthal, PE CPII

Professional Engineer I

City of Aurora Engineering Division

Nadia L. Schweisthal

PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE BID FORM. FAILURE TO DO SO MAY SUBJECT THE BIDDER TO DISQUALIFICATION.



# RETURN WITH BID

	<u>ITEM</u>	UNIT	UNIT COST
	ydrants & Related Parts		1
1	Waterous Fire Hydrant Assembly, 4 1/2' Bury	EA	4400.00
2	Waterous Fire Hydrant Assembly, 5' Bury	EA	4250.00
3	Waterous Fire Hydrant Assembly, 5 1/2' Bury	EA	4325.00
4	Waterous Fire Hydrant Assembly, 6' Bury	EA	4425.00
5	Waterous Fire Hydrant Assembly, 4 1/2' Bury w/Alpha Standard Base	EA	4500.00
6	Waterous Fire Hydrant Assembly, 5' Bury w/Alpha Standard Base	EA	4350.00
7	Waterous Fire Hydrant Assembly, 5 1/2' Bury w/Alpha Standard Base	EA	4425.00
8	Waterous Fire Hydrant Assembly, 6' Bury w/Alpha Standard Base	EA	4600.00
9	Waterous Fire Hydrant Assembly, 4 1/2' Bury w/Alpha XL Base	EA	4500.00
10	Waterous Fire Hydrant Assembly, 5' Bury w/Alpha XL Base	EA	4350.00
11	Waterous Fire Hydrant Assembly, 5 1/2 Bury w/Alpha XL Base	EA	4425.00
12	Waterous Fire Hydrant Assembly, 6' Bury w/Alpha XL Base	EA	4600.00
13	Waterous Fire Hydrant Extension, 6"	EA	1000.00
14	Waterous Fire Hydrant Extension, 12"	EA	1200.00
15	Waterous Fire Hydrant Extension, 18"	EA	1400.00
16	Waterous Fire Hydrant Extension, 24"	EA	1575.00
17	Waterous Traffic Kit, Old Style (K525/10")	EA	590.00
18	Waterous Traffic Kit, New Style (KS28/16")	EA	475.00
19	Waterous Hydrant Kit K834, Hydrant Head w/Traffic Kit	EA	5100.00
20	Waterous Hydrant Kit K836, Hydrant Head	EA	2775.00
21	Waterous Hydrant Part #60 (Hydrant Head)	EA	1050.00
22	RoDon Hydra-Finder Hydrant Marker, 60"	EA	40.00
23	Drain Plunger #7	EA	50.00
24	Nozzle Cap Hose #10	EA	160.00
25	Nozzle Cap Pumper #10	EA	380.00
26	Cap Gasket Hose #11	EA	18.00
27	Cap Gasket Pumper #11	EA	25.00
28	Nozzle - Hose #12	EA	199.00
29	Nozzle - Pumper #12	EA	550.00
30	Lower Operating Nut #17A	EA	95.00
31	Upper Operating Nut #17B	EA	160.00
32	Crossarm #30	EA	175.00
33	Valve Seat #31	EA	<del></del>
34	Upper Valve Washer #34	EA	169.00



# (For complete information covering these items, see specifications)

# RETURN WITH BID

NO.	ITEM	UNIT	UNIT COST
35	Main Valve Rubber #35	EA	165.00
36	Lower Valve Washer #36	EA	85.00
37	O-Ring (Support wheel), 1-1/8 x 1-3/8 #59	EA	7.50
38	Flange Lock Ring #64	EA	23.00
39	Coupling Sleeve (2 halves) #57	EA	35.00
40	Solid Coupling #67B	EA	175.00
41	O-Ring (Lower tube seal), 1-7/8 x 2-1/8 #83	EA	7.50
42	Support Wheel Gasket #84	EA	7.50
43	Brass Lock Nuts #87	EA	13.00
44	Hydrant Coupling Stud #88	EA	25.00
45	Nozzle Section Bushing Assembly #89	EA	72.00
46	Thrust Ring #90	EA	18.00
47	Upper Standpipe Gasket #92	EA	26.00
48	Breakable Flange #113	EA	130.00
49	O-Ring (Pumper Nozzle) 5-1/4 X 5-5/8 #116	EA	30.00
50	Pumper Nozzle Retainer #117	EA	75.00
51	O-Ring (Hose Nozzle) 3-1/4 X 3-5/8 #118	EA	30.00
52	Hose Nozzle Retainer #119	EA	65.00
53	T-Bolts and Nuts (Per Case)	EA	1000.00
54	High Performance Hydrant Grease for Food Processing Equipment (1 lb)	EA	75.00
55	Mineral Oil Lubricant (5 Gal)	EA	850.00



# RETURN WITH BID

NO. ITEM		UNIT	UNIT COST
/alves and Related Parts		1	
56 Clow Cutting in Valve, 2'		EA	No bid
57 Clow Cutting in Valve, 4		EA	No bid
58 Clow Cutting in Valve, 6'		EA	No bid
59 Clow Cutting in Valve, 8		EA	No bid
60 Clow Cutting in Valve, 10	) II	EA	No bid
61 Clow Cutting in Valve, 13	j#	EA	No bid
62 American Flow Control (	iate Valve, 2" w/ Mechanical Joint Ends	EA	777.00
63 American Flow Control (	iate Valve, 4" w/ Mechanical Joint Ends	EA	999.00
64 American Flow Control (	iate Valve, 6" w/ Mechanical Joint Ends	EA	1333.00
65 American Flow Control (	ate Valve, 8" w/ Mechanical Joint Ends	EA	2250.00
66 American Flow Control (	ate Valve, 10" w/ Mechanical Joint Ends	EA	3555,00
67 American Flow Control (	iate Valve, 12" w/ Mechanical Joint Ends	EA	4488.00
68 American Flow Control C	ate Valve, 14" w/ Mechanical Joint Ends	EA	13500,00
69 American Flow Control (	ate Valve, 16" w/ Mechanical Joint Ends	EA	11666.00
70 American Flow Control C	ate Valve, 2" w/ ALPHA Standard Restrained Joint Ends	EA	No bid
71 American Flow Control C	ate Valve, 4" w/ ALPHA Standard Restrained Joint Ends	EA	1111.00
72 American Flow Control C	ate Valve, 6" w/ ALPHA Standard Restrained Joint Ends	EA	1475.00
73 American Flow Control C	iate Valve, 8" w/ ALPHA Standard Restrained Joint Ends	EA	2450.00
74 American Flow Control (	iate Valve, 10" w/ ALPHA Standard Restrained Joint Ends	EA	3800.00
75 American Flow Control 6	ate Valve, 12" w/ ALPHA Standard Restrained Joint Ends	EA	4800.00
76 American Flow Control (	ate Valve, 14" w/ ALPHA Standard Restrained Joint Ends	EA	No bid
77 American Flow Control 6	ate Valve, 16" w/ ALPHA Standard Restrained Joint Ends	EA	No bid
78 American Flow Control C	ate Valve, 2" w/ ALPHA XL Restrained Joint Ends	EA	No bid
79 American Flow Control 6	ate Valve, 4" w/ ALPHA XŁ Restrained Joint Ends	EA	1111.00
80 American Flow Control 6	ate Valve, 6" w/ ALPHA XL Restrained Joint Ends	EA	1475.00
81 American Flow Control C	ate Valve, 8" w/ ALPHA XL Restrained Joint Ends	EA	2450.00
82 American Flow Control C	ate Valve, 10" w/ ALPHA XL Restrained Joint Ends	EA	3800.00
83 American Flow Control 6	ate Valve, 12" w/ ALPHA XL Restrained Joint Ends	EA	4800.00
84 American Flow Control 6	ate Valve, 14" w/ ALPHA XL Restrained Joint Ends	EA	No bid
85 American Flow Control 6	ate Valve, 16" w/ ALPHA XL Restrained Joint Ends	EA	No bid
86 Tyler Valve Box, 664-S Co	omplete w/Lid	EA	350.00
87 Tyler Valve Box, 664-5 To	p Section Only	EA	175.00
88 Tyler Valve Box, 664-S Bo	ottom Section Only	EA	150.00
89 Tyler Valve Box Extension		EA	85.00



# RETURN WITH BID

NO.	ITEM	UNIT	UNIT COST
90	Tyler Valve Box Extension, #59-A	EA	95.00
91	Tyler Valve Box Extension, #60-A	EA	105.00
92	Tyler Valve Box Extension, #69A - 9"	EA	95.00
93	Tyler Valve Box Extension, #69A - 18" (Foreign OK)	EA	125.00
94	Tyler Valve Box Extension, #69A - 24" (Foreign OK)	EA	150.00



# RETURN WITH BID

	ITEM	UNIT	UNIT COST
Repai	r Parts and Fittings		
95	4" Non-Shear Mission Coupling (Clay to Plastic)	EA	No bid
96	6" Non-Shear Mission Coupling (Clay to Plastic)	EA	No bid
97	8" Non-Shear Mission Coupling (Clay to Plastic)	EA	No bid
98	10" Non-Shear Mission Coupling (Clay to Plastic)	EA	No bid
99	12" Non-Shear Mission Coupling (Clay to Plastic)	EA	No bid
100	15" Non-Shear Mission Coupling (Clay to Plastic)	EA	No bid
101	4" Non-Shear Mission Coupling (Plastic to Plastic)	EA	No bid
102	6" Non-Shear Mission Coupling (Plastic to Plastic)	EA	No bid
103	8" Non-Shear Mission Coupling (Plastic to Plastic)	EA	No bid
104	10" Non-Shear Mission Coupling (Plastic to Plastic)	EA	No bid
105	12" Non-Shear Mission Coupling (Plastic to Plastic)	EA	No bid
106	15" Non-Shear Mission Coupling (Plastic to Plastic)	EA	No bid
107	2" x 8" Repair Clamp	EA	55.00
108	4" x 8" Repair Clamp	EA	68.00
109	6" x 8" Repair Clamp	EA V	79.00
110	6" x 8" Repair Clamp w/ 3/4" Tap	EA	107.75
111	6" x 8" Repair Clamp w/ 1" Tap	EA	107.75
112	6" x 10" Repair Clamp	EA	107.00
113	6" x 12" Repair Clamp	EA	127.50
114	6" x 24" Repair Clamp	EA	274.00
115	6" x 36" Repair Clamp	EA	460.00
116	8" x 8" Repair Clamp	EA	92.50
117	8" x 8" Repair Clamp w/ 3/4" Tap	EA	122.00
118	8" x 8" Repair Clamp w/ 1" Tap	EA	122.00
119	8" x 10" Repair Clamp	EA	122.50
120	8" x 12" Repair Clamp	EA	147.50
121	8" x 16" Repair Clamp	EA	170.00
122	8" x 24" Repair Clamp	EA	307.25
123	8" x 36" Repair Clamp	EA	525,00
124	10" x 8" Repair Clamp w/ 3/4" Tap	EA	149.00
125	10" x 8" Repair Clamp w/ 1" Tap	EA	149.00
126	10" x 10" Repair Clamp	EA	159.00
127	10" x 12" Repair Clamp	EA	189,00
128	10" x 16" Repair Clamp	EA	218.50



# (For complete information covering these items, see specifications)

# RETURN WITH BID

NO.	ITEM	UNIT	UNIT COST
129	10" x 24" Repair Clamp	EA	371.00
130	12" x 8" Repair Clamp w/ 3/4" Tap	EA	174.00
131	12" x 8" Repair Clamp w/ 1" Tap	EA	174.00
132	12" x 12" Repair Clamp	EA	228.00
133	12" x 16" Repair Clamp	EA	260.00
134	12" x 24" Repair Clamp	EA	425.00
135	12" x 36" Repair Clamp	EA	875.00
136	4" Tyler Cut in Sleeve	EA	750.00
137	6" Tyler Cut in Sleeve	EA	950.00
138	8" Tyler Cut in Sleeve	EA	1400.00
139	10" Tyler Cut in Sleeve	EA	1700,00
140	12" Tyler Cut in Sleeve	EA	2100.00
141	4" Full Body MJ Ductile Iron Solid Sleeve	EA	360.00
142	6" Full Body MJ Ductile Iron Solid Sleeve	EA	415,00
143	8" Full Body MJ Ductile Iron Solid Sleeve	£Α	530.00
144	10" Full Body MJ Ductile Iron Solid Sleeve	EA	900.00
145	12" Full Body MJ Ductile Iron Solid Sleeve	EA	1125.00
146	14" Full Body MJ Ductile Iron Solid Sleeve	EA	1666.00
147	16" Full Body MJ Ductile Iran Solid Sleeve	EA	2155.00
148	2" Cast Couplings	EA	68.00
149	4" Cast Couplings	EA	135.00
150	6" Cast Couplings	EA	165.00
151	8" Cast Couplings	EA	200.00
152	10" Cast Couplings	EA	265.00
153	12" Cast Couplings	EA	320.00
154	14" Cast Couplings	EA	525.00
155	16" Cast Couplings	EA	700.00
156	2" Single Bolt Standard Cast Couplings	EA	No bid
157	4" Single Bolt Standard Cast Couplings	EA	No bid
158	6" Single Bolt Standard Cast Couplings	EA	No bid
159	8" Single Bolt Standard Cast Couplings	EA	No bid
160	10" Single Bolt Standard Cast Couplings	EA	No bid
161	12" Single Bolt Standard Cast Couplings	EA	No bid
162	14" Single Bolt Standard Cast Couplings	EA	No bid
163	16" Single Bolt Standard Cast Couplings	EA	No bid



# (For complete information covering these items, see specifications)

# RETURN WITH BID

NO.	ITEM	UNIT	UNIT COST
164	2" Single Bolt XL Cast Couplings	EA	No bid
165	4" Single Bolt XL Cast Couplings	EA	No bid
166	6" Single Bolt XL Cast Couplings	EA	No bid
167	8" Single Bolt XL Cast Couplings	EA	No bid
168	10" Single Bolt XL Cast Couplings	EA	No bid
169	12" Single Bolt XL Cast Couplings	EA	No bid
170	14" Single Bolt XL Cast Couplings	EA	No bid
171	16" Single Bolt XL Cast Couplings	EA	No bid
172	2" Single Bolt Transition Cast Couplings	EA	No bid
173	4" Single Bolt Transition Cast Couplings	EA	No bid
174	6" Single Bolt Transition Cast Couplings	EA	No bid
175	8" Single Bolt Transition Cast Couplings	EA	No bid
176	10" Single Bolt Transition Cast Couplings	EA	No bid
177	12" Single Bolt Transition Cast Couplings	EA	No bid
178	14" Single Bolt Transition Cast Couplings	EA	No bid
179	16" Single Bolt Transition Cast Couplings	EA	No bid
180	4" Megalug Restraint for Ductile Iron Pipe	EA	65.00
181	4" Megalug Restraint for PVC Pipe	EA	65,00
182	6" Megalug Restraint for Ductile Iron Pipe	EA	85.00
183	6" Megalug Restraint for PVC Pipe	EA	85.00
184	8" Megalug Restraint for Ductile Iron Pipe	EA	105,00
185	8" Megalug Restraint for PVC Pipe	EA	105.00
186	10" Megalug Restraint for Ductile Iron Pipe	EA	150.00
187	10" Megalug Restraint for PVC Pipe	EA	150.00
188	12" Megalug Restraint for Ductile Iron Pipe	EA	185.00
189	12" Megalug Restraint for PVC Pipe	EA	185.00
190	2" Tyler Mechanical Joint Accessory Kit	EA	No bid
191	4" Tyler Mechanical Joint Accessory Kit	EA	60.00
192	6" Tyler Mechanical Joint Accessory Kit	EA	67.00
193	8" Tyler Mechanical Joint Accessory Kit	EA	75.00
194	10" Tyler Mechanical Joint Accessory Kit	EA	95.00
195	12" Tyler Mechanical Joint Accessory Kit	EA	105.00
196	4" Ductile Iron Tyler Bored Out Flange	EA	No bid
197	6" Ductile Iron Tyler Bored Out Flange	EA	No bid
198	8" Ductile Iron Tyler Bored Out Flange	EA	No bid



# RETURN WITH BID

NO.	ITEM	UNIT	UNIT COST
199	10" Ductile Iron Tyler Bored Out Flange	EA	No bid
200	12" Ductile Iron Tyler Bored Out Flange	EA	No bid
201	6" Hymax Coupling	EA	500.00
202	8" Hymax Coupling	EA	600.00
203	10" Hymax Coupling	EA	777,00
204	12" Hymax Coupling	EA	900.00
205	16" Hymax Coupling	EA	2400.00
206	4" TPS Ultra Sleeve - Joint Repair Sleeve	EA	1500.00
207	6" TPS Ultra Sleeve - Joint Repair Sleeve	EA	1650.00
208	8" TPS Ultra Sleeve - Joint Repair Sleeve	EA	1950.00
209	10" TPS Ultra Sleeve - Joint Repair Sleeve	EA	2525.00
210	12" TPS Ultra Sleeve - Joint Repair Sleeve	EA	2700.00



# (For complete information covering these items, see specifications)

# RETURN WITH BID

	ITEM	UNIT	UNIT_COST
	rmain Pipe Items		
211	4" CL 52 Ductile Iron Pipe, 18'	EA	No bid
212	6" CL 52 Ductile Iron Pipe, 18'	EA	No bid
213	8" CL 52 Ductile Iron Pipe, 18'	EA	No bid
214	10" CL 52 Ductile Iron Pipe, 18'	EA	No bid
215	12 <sup>™</sup> CL 52 Ductile Iron Pipe, 18 <sup>™</sup>	EA	No bid
216	16" CL S2 Ductile Iron Pipe, 18'	EA	No bid
217	Magnesium SuperMAG High Potential Anode-17 Lb	EA	245.00
218	Stainless Steel Clamp for Anode Bags - "EZ Strap"	EA	55.00
Vate	r Service Related Items		
219	3/4" Flared Corporation Stop	EA	65.00
220	1" Flared Corporation Stop	EA	85.00
221	1 1/2" Flared Corporation Stop	EA	270.00
222	2" Flared Corporation Stop	EA	444.00
223	3/4" Full Port Flared Curb Box	EA	155.00
224	1" Full Port Flared Curb Box	EA	175.00
225	1 1/2" Full Port Flared Curb Box	EA	425.00
226	2" Full Port Flared Curb Box	EA	675.00
227	1 1/4" Curb Sox	EA	55,00
228	1 1/2" Curb Box	EA	75.00
229	1 1/4" Curb Box Top	EA	14.95
230	Curb Box Extension Replacement Slip Sleeve	EA	18.50
231	3/4" Type K Copper - 60' Roll	EA	No bid
232	3/4" Type K Copper - 100' Roll	EA	No bid
233	1" Type K Copper - 60' Roll	EA	No bid
234	1" Type K Copper - 100' Roll	EA	No bid
235	1 1/2" Type K Copper - 60' Roll	EA	No bid
236	1 1/2" Type K Copper - 100' Roll	EA	No bid
237	2" Type K Copper - 40' Roll	EA	
238	2" Type K Copper - 60' Roll	EA	No bid No bid
	3/4" Copper to 3/4" Copper Coupling	EA	<del>-</del>
	3/4" Copper to 1" Copper Coupling	EA	35.00
	1" Copper to 1" Copper Coupling	EA	48.00
	3/4" Copper to 3/4" Strong Lead-Pack Coupling		55.00
	3/4" Copper to 3/4" Extra Strong Lead-Pack Coupling	EA EA	60.00



# RETURN WITH BID

NO.	ITEM	UNIT	UNIT COST
244	3/4" Copper to 3/4" Double Extra Strong Lead-Pack Coupling	EA	80.00
245	1" Copper to 3/4" Strong Lead-Pack Coupling	EA	95.00
246	1" Copper to 3/4" Extra Strong Lead-Pack Coupling	EA	95.00
247	1" Copper to 1" Strong Lead-Pack Coupling	EA	95.00
248	1" Copper to 1" Extra Strong Lead-Pack Coupling	EA	95.00
249	1" Copper to 1" Double Extra Strong Lead-Pack Coupling	EA	105.00



# RETURN WITH BID

NO.	ITEM	UNIT	UNIT COST
Vlete	ritems		
250	3/4" Ford Meter Horn	EA	95.00
251	1" Ford Meter Horn	EA	155.00
252	3/4" Ford Ball Valve (Check Specifications)	EA	90.00
253	1" Ford Ball Valve (Check Specifications)	EA	130.00
254	5/8" x 1/2" Pipe Thread Ford Meter Coupling	Pkg	750.00
255	5/8" x 3/4" Pipe Thread Ford Meter Coupling	Pkg	775.00
256	3/4" Ford Meter Coupling	Pkg	425.00
257	1" Ford Meter Coupling	Pkg	385.00
258	1 1/2" Large Bronze Meter Flange Kit	EA	195.00
259	2" Large Bronze Meter Flange Kit	EA	250,00
260	3" Large Bronze Meter Flange Kit	EA	375.00
261	4" Large Bronze Meter Flange Kit	EA	625.00
262	3" Zenner FHZ30S Hydrant Meter w/Check Valve	EA	No bid
263	Ground clamp, 1 1/2"	EA	No bid
torn	1 Sewer Items		
264	Manhole Frame & Solid Lid, 4", R-1647-B	EA	440.00
265	Manhole Frame & Solid Lid, 7", R-1772-B	EA	440.00
266	Manhole Frame & Solid Lid, 9", R-1713-B	EA	455.00
267	Combination Inlet Frame, Grate, & Curb Box, R-3015-R	EA	No bid
268	Beehive Grate, R-4340-B	EA	275.00
269	Beehive Grate, R-4341-A	EA	No bid
270	Beehive Grate, R-4342	EA	No bid
271	Solid Cover R-1712	EA	195.00
272	Open Cover R-2502, Type D	EA	No bid
273	Curb Box - R-3015	EA	No bid
274	Curb Frame R-3015	EA	No bid
275	Grate - R-3015	EA	No bid
276	Inlet Filter for IDOT Type 1 Frame (Manhole Frame)	EA	195.00
277	Inlet Filter for IDOT Type 8 Frame (Behive Frame)	EA	195.00
278	Inlet Filter for IDOT Type 23 Frame (Combination Curb Frame)	EA	210.00
279	HOPE Adjusting Ring, .75" to 1.5"	EA	90.00
280	HDPE Adjusting Ring, 1.25"	EA	75.00
281	HDPE Adjusting Ring, 1.5"	EA	88.00
202	HDPE Adjusting Ring, 2"	EA	105.00



# RETURN WITH BID

NO.	<u>ITEM</u>	UNIT	UNIT COST
283	HDPE Adjusting Ring, 4"	EA	190.00
284	2' x 24" Catch Basin with Base	EA	No bid
285	2' x 30" Catch Basin with Base	EA	No bid
286	2' x 36" Catch Basin with Base	EA	No bid
287	2' x 48" Catch Basin with Base	EA	No bid
288	3' x 36" Catch Basin with Base	EA	No bid
289	3' x 16" Barrell Section	EA	No bid
290	3' x 24" Barrell Section	EA	No bid
291	3' x 36" Barrell Section	EA	No bid
292	3'x 48" Barrel Section	EA	No bid
293	3' x 18" Cone Offset	EA	No bid
294	3' Flat Top Eccentric Opening, Non-Tongue and groove	EA	No bid
295	3' Flat Top Concentric Opening, Non-Tongue and groove	EA	No bid
296	3' Flat Top Eccentric Opening, Tongue and Groove	EA	No bid
297	3' Flat Top Concentric Opening, Tongue and groove	EA	No bid
298	3' Diameter Base	EA	No bid
299	4' Flat Top, 6" Thickness, Concentric Opening, Tongue and Groove	EA	No bid
300	4' Flat Top, 6" Thickness Eccentric Opening Tongue and Groove	EA	No bid
301	4' Flat Top, 6" Thickness, Concentric Opening, Non-Tongue and Groove	EA	No bid
302	4' Flat Top, 6" Thickness Eccentric Opening Non-Tongue and Groove	EA	No bid
303	4' Flat Top, 12" Thickness, Concentric Tongue and Groove	EA	No bid
304	4' Flat Top, 12" Thickness, Eccentric Tongue and Groove	EA	No bid
305	4' Flat Top, 12" Thickness, Concentric Non-Tongue and groove	EA	No bid
306	4' Flat Top, 12" Thickness, Eccentric Non-Tongue and groove	EA	No bid
307	4' x 32" Manhole with Base	EA	No bid
308	4' x 48" Barrel Section	EA	No bid
309	4' Base	EA	No bid
310	5' Flat Top, 6" Thickness, Concentric Opening, Tongue and Groove	EA	
311	5' Flat Top, 6" Thickness Eccentric Opening Tongue and Groove	EA	No bid No bid
312	5' Flat Top, 6" Thickness, Concentric Opening, Non-Tongue and Groove	EA	No bid
313	5' Flat Top, 6" Thickness Eccentric Opening Non-Tongue and Groove	EA	
314	S' Flat Top, 12" Thickness, Concentric Tongue and Groove	EA	No bid No bid
315	5' Flat Top, 12" Thickness, Eccentric Tongue and Groove	EA	No bid
316	5' Flat Top, 12" Thickness, Concentric Non-Tongue and groove	EA	No bid
	5' Flat Top, 12" Thickness, Eccentric Non-Tongue and groove	EA	No bid



# RETURN WITH BID

NO.	ITEM	UNIT	UNIT COST
318	5' x 32" Manhole with Base	EA	No bid
319	5' x 48" Barrel Section	EA	No bid
320	S' Base	EA	No bid
321	12" Diameter ADS N-12 (Water Tight Joints, 20' Sticks)	EA	No bid
322	15" Diameter ADS N-12 (Water Tight Joints, 20' Sticks)	EA	No bid
323	12" Diameter RCP	EA	No bid
324	15" Diameter RCP	EA	No bid
325	18" Diameter RCP	EA	No bid
326	24" Diameter RCP	EA	No bid
327	12" Diameter RCP Flared End Section	EA	No bid
328	15" Diameter RCP Flared End Section w/Grate	EA	No bid
329	18" Diameter RCP Flared End Section w/Grate	EA	No bid
330	24" Diameter RCP Flared End Section w/Grate	EA	No bid



# RETURN WITH BID

	ITEM	UNIT	UNIT COST
	ary Sewer Items		
331	6" MaxAdaptor Universal Sewer Repair Coupling	EA	108.00
332	8" MaxAdaptor Universal Sewer Repair Coupling	EA	143.00
333	10" MaxAdaptor Universal Sewer Repair Coupling	EA	178.00
334	12" MaxAdaptor Universal Sewer Repair Coupling	EA	215,00
335	Sanitary Manhole Chimney Seals	EA	295.00
336	4" SDR-26 PVC 11 Degree Bend	EA	55.00
337	4" SDR-26 PVC 22.5 Degree Bend	EA	47.75
338	4" SDR-26 PVC 45 Degree Bend	EA	36.00
339	6" SDR-26 PVC 11 Degree Bend	EA	90.00
340	6" SDR-26 PVC 22.5 Degree Bend	EA	90,00
341	6" SDR-26 PVC 45 Degree Bend	EA	66.00
342	6"x6" SDR-26 PVC WYE	EA	132.00
343	6"x6" SDR-26 PVC Tee	EA	116,50
344	8" SDR-26 PVC 11 Degree Bend	EA	170.00
345	8" SDR-26 PVC 22.5 Degree Bend	EA	165.00
346	8" SDR-26 PVC 45 Degree Bend	EA	164.00
347	8"x6" SDR-26 PVC WYE	EA	171.00
348	8"x6" SDR-26 PVC Tee	EA	163.00
349	10" SDR-26 PVC 22.5 Degree Bend	EA	350.00
350	10" SDR-26 PVC 4S Degree Bend	EA	323.00
351	10"x6" SDR-26 PVC WYE	EA	363.00
352	10"x6" SDR-26 PVC Tee	EA	355.00
353	4" SDR-26 PVC Pipe, 14'	EA	64.05
354	6" SDR-26 PVC Pipe, 14'	EA	129.99
355	8" SDR-26 PVC Pipe, 14"	EA	232.40
356	10" SDR-26 PVC Pipe, 14'	EA	362.60
357	12" SDR-26 PVC Pipe, 14'	EA	521.50
358	15" SDR-26 PVC Pipe, 14'	EA	782.60
359	18" SDR-26 PVC Pipe, 14'	EA	1190.00



# RETURN WITH BID

NO. ITEM	UNIT	UNIT COST
Miscellaneous Items		
360 Krylon Industrial Quik-Mark Blue Marking Paint, 17 Oz	EA	No bid
361 Krylon Industrial Quik-Mark Green Marking Paint, 17 Oz	EA	No bid
362 Krylon Industrial Quik-Mark White Marking Paint, 17 Oz	EA	No bid
363 Hydraulic Cement, SO LB Pail	EA	115.00
364 Masonary Mortar Type M, 80lb Bag	EA	No bid
365 Concrete Precast Brick - 2.25" x 3.5" x 7.5"	Pallet	No bid
366   Concrete Precast Block - 3.5" x 7.5" x 15.5"	Pallet	No bid
367 Mastic Sealing Band, 3"x50"	Roll	No bid
368 Mastic Sealing Band, 6"x50"	Roll	No bid
369 Mastic Sealing Band, 9"x50"	Roll	No bid
370 Mastic Sealing Band, 12"x50"	Roll	No bid
371 Butyl Rubber Sealant, 3/8"x3.5"x16"	Roll	No bid
372 Butyl Rubber Sealant, 3/4"x3/4"x16'	Roll	No bid
373 Type I Barricade	EA	No bid
374 Magnetic Locator - Schonstedt (Or Equivalent) Magnetic Locator w/ Hard Case	EA	No bid

(If an individual)	)

				Signatures
(If an individual)	Signature of B	idder		
		-		
		·/		
(If a partnership)				
	Firm Name			
	Business Add	ress		
	Insert Names and			
	Addresses of All Partners			
		4 - 30 0 - 740 0.		
(If a corporation)				
	Corporate Nar	ne Ziebe	Water Service Products, In	IC.
	Signed By	AHI	elep-	
	Business Add	1405	W. Fullerton Avenue	9 President
	Business Add			
			dison Illinois 60101	
		President_	:	
		Secretary _		
( James	)	Treasurer_	Bob Charl	

Bid Number 24-110

Paula Marie Bernacki

#### **BIDDER'S CERTIFICATION**

IWe hereby certify that:

- A. A complete set of bid papers, as intended, has been received, and that I/We will abide by the contents and/or information received and/or contained herein.
- B. I/We have not entered into any collusion or other unethical practices with any person, firm, or employee of the City which would in any way be construed as unethical business practice.
- C. I/We have adopted a written sexual harassment policy which is in accordance with the requirements of Federal, State and local laws, regulations and policies and further certify that I/We are also in compliance with all other equal employment requirements contained in Public Act 87-1257 (effective July 1, 1993) 775 ILCS 5/2-105 (A).
- D. I/We operate a drug free environment and drugs are not allowed in the workplace or satellite locations as well as City of Aurora sites in accordance with the Drug Free Workplace Act of January, 1992.
- E. I/We will abide by all other Federal, State and local codes, rules, regulations, ordinances and statutes.
- F. I/We have in place a:

written program which moets or exceeds the program requirements of the Substance abuse Prevention on Public Works Projects Act (Public Act 95-0635), and will provide a written copy thereof to the City of Aurora or

☑ collective bargaining agreement which deals with the subject matter of the Substance Abuse Prevention on Public Works Projects Act (Public Act 95-0635) – <u>Contractor shall check the box for the policy that applies.</u>

ucts, Inc.
Aris Halikias
PLEASE TYPE OR PRINT CLEARLY
XHBUIL-
Subscribed and Sworn to
Before me this 29 day
of Octoper . 20 24
Notary Public Berneuk
Paula Marie Bernacki
OFFICIAL SEAL PAULA MARIE BERNACKI Nedara Studin Consequentiliuseus

# Certification Regarding Debarment, Suspension and Other Responsibility Matters

The prospective participant to the best of its knowledge and belief that it and its principles:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Aris Halikias Vice President October 29, 2024

(Signature of Authorized Representative) (Date)

I am unable to certify the above statements. My explanation is attached.

EPA FORM 5700-49 (11-88)

# **Bidder Certification In Compliance with Article 33E to the "Criminal Code of 1961"**

I	Aris Halikias		, do h	ereby certify that:
	(Name)			
1.	(Position)		Ziebell Water Service F	Products, Inc.
	and have authority to execute this certifi	ication	on behalf of the firm	
2.	This firm is not barred from bidding on the Bid-rigging, or Section 33E-4, Bid Rotation 1961."			
Name	of Firm Ziebell Wester Service Products,I	nc.	<u>.</u>	
Signat	ure <b>Stally</b>			
Title _	Vice President			
Date _ Corporat	October 29, 2024 e Seal (where appropriate)			
/	s 29 day of October Aris Halikias		to me personally	appeared (Name) known, who, being duly
(Name	, did execute the foregoing affidavit, and (e) of Firm) <u>Ziebell Water Service Products, and deed.</u>	did sta <u>, Inc.</u>	ite that he or she was p to execute the af	properly authorized by fidavit and did so as his or
	Public Tacla M. Bernus	Re	Commission Expires	January 29 2028
Notary	Paula Marie Bernacki <sup>'</sup> Seal			~
	***********			
	OFFICIAL SEAL	7		

PAULA MARIE BERNACKI Notary Public, State of Illinois Commission No. 412870 My Commission Expires January 29, 2026



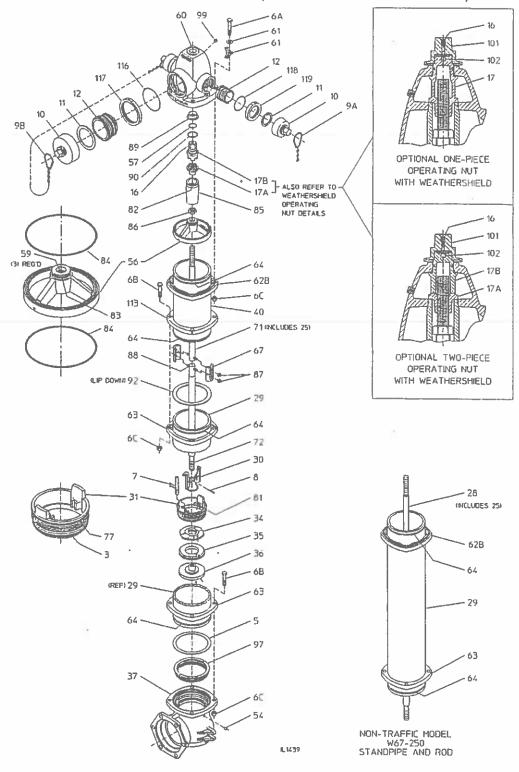
# City of Aurora, IL - Local Vendor Preference Application

The business identified below is requesting to be placed on the City of Aurora, Illinois Local Vendor Preference list, in accordance with ordinance O20-029 approved April 28, 2020.

1) - Date Submitted	
2) - Name of Business:	
3)Address of Lord Office:-	
4) City, State, Zip:	
5) Company's Web Address	
6) - Phones	Fox:
7) County your Local Business is Lo	ocated In:
Submitted By (Signature)	
Print Name and Title	
	- And
Sec. 2-410Prequalification; local l	oidder.
prequalification application along wit City Council, to the Finance Departm a. Evidence that the business has es the ownership or lease of all or ap- prior to the submission of the pre- b. Evidence demonstrating that the la- the City of Aurora, and has a bus c. Evidence that the business is not defined as having outstanding fe- or more past due, or has outstandi	tablished and maintained a physical presence in the City of Aurora, by virtue of portion of a building for a period of not less than twelve (12) consecutive month.
Please note for (a) cabove the C	id (a) b. must accompany this submittal or application will be rejected. Ity of Aurora will verify internally that your company does not have an ould make sure that to the best of its knowledge all bills are current.
Return completed application, with	n all required backup documentation to: Division, 44 E. Downer Place, Aurora, 11, 60507
Do not write below this line: For City	of Aurora use ONLY
(a) a. (a) b	
(n) to	
Date:	
Approved:	Denied:
Letter Sent:	Initials:

# Parts List - Ductile Iron Pacer

Figure 6. 250 PSI Working Pressure Ductile Iron Pacer (Models W67–250 and WB67–250)



TRAFFIC MODEL WB67-250 SHOWN

Table 3. Parts List for 250 PSI Working Pressure Ductile Iron Pacer (Models W67–250 and WB67–250)

DEENO	PERCENTION	
REF NO.	DESCRIPTION	MATERIAL
3	O-ring (Lower valve seat), 5-5/8 x 5-7/8	Buna N
5	Lower standpipe gasket	Neoprene
6A	Hex hd bolt, 5/8-11 x 3-3/4 in.	Zinc plated steel
6B	Hex hd bolt. 5/8-11 x 3 in.	Zinc plated steel
6C	Hex nut, 5/8–11	Zinc plated steel
7	Drain plunger	Red brass
8	Cotter pin, 1/4 x 1–1/2 in.	Stainless steel, Type 304
9A, 9B	Nozzle cap chain, single or double	Zinc-plated steel
10	Nozzle cap, hose or pumper	Ductile iron
11	Cap gasket, hose or pumper	
12	Nozzie, hose or pumper	Neoprene Brass
16	Flat hd screw, 1/4–20 x 1/2 in.	
17	Operating nut (one-piece)	Stainless steel, Type 304
17A	Lower operating nut	Bronze
17B		Bronze
25	Upper operating nul	Ductile iron**
28	Valve rod bushing (included with 71 & 28)	Red brass
29	Rod Assembly (includes 25) (non-Traffic model)	Steel rod
29	Lower standpipe (Traffic model)	Centrifugally cast ductile iron pipe
	Standpipe (non-Traffic model)	Centrifugally cast ductile iron pipe
30	Crossam	Bronze
31	Valve seal	Bronza
34	Upper valve washer	Ductile iron
35	Main valve rubber	Urethane
36	Lower valve washer	Ductile iron
37	Hydrant bottom	Ductile iron
40	Upper standpipe (Traffic model)	Centrifugally cast ductile iron pipe*
54	Drain bushing	Brass
56	Support wheel	Ductile iron
57	O-ring (Operating nut), 1-1/2 x 1-3/4	Buna N
59	O-ring (Support wheel), 1-1/8 x 1-3/8	Buna N
60	Nozzle section	Ductile iron
61	Bury depth plate	Aluminum
61	Bury depth plate washer	Zinc plated steel
62B	Upper standpipe flange	Ductile iron
63	Standpipe flange	Ductile iron
64	Flange lock ring	Stainless steel, Type 430
67	Coupling sleeve (2 halves)	Cast Iron
71	Upper rod assembly (includes 25) (Traffic model)	Steel rod
72	Lower rod (Traffic model)	Steel rod
77	O-ring (Upper valve seat), 5-7/8 x 6-1/8	Buna N
81	Groove pin, 3/32 x 7/16 in.	Beryllium copper
82	O-ring (Upper tube seal), 2-3/8 x 2-5/8	Buna N
83	O-ring (Lower tube seal), 1-7/8 x 2-1/8	Buna N
84	Support wheel gasket	Buna N
85	Support tube	Ductile Iron
86	Stop nut, 1"- 8	Zinc plated steel
87	Coupling nut, 1/2–20	Brass
88	Coupling stud, 1/2-20 x 2-9/16 in.	Stainless steet, Type 430
89	Nozzle section bushing assembly	Brass
90	Thrust ring	Teflon
92	Upper standpipe gasket	Neoprene
97	Valve seat insert	Bronze
99	Pipe plug, 1/4 NPT	Brass
101	Weathershield nut	Ductile iron
102	Spirol pin, hvy, 1/4 x 2-1/4 in.	Stainless steel
113	Breakable flange	Ductile iron
116	O-ring (pumper nozzle), 5-1/4 x 5-3/4	Buna N
117	Pumper nozzle retainer	Ductile iron
118	O-ring (hose nozzle), 3-1/4 x 3-5/8	Buna N
119	Hose nozzle retainer	Ductile iron

<sup>\*</sup>AWWA Standard C151 (ANSI 21.51)

<sup>\*\*</sup>Bronze or Iron optional on some nut sizes.