



# Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

October 29, 2024

SUBJECT: FAU 1263 (Hazel Avenue)  
Section 20-00108-00-PV (Village of Deerfield)  
Lake County  
Contract No. 61K74  
Item 116  
November 8, 2024 Letting  
Addendum (A)

## NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

- 1. Revised the Schedule of Prices**
- 2. Revised Plan Sheets 5, 6, 15, 16, 18-20, 43-45, 51-59, 64, 65, 69, 70, 72, 77, 78, 81-83, 95-99, 109-113, 118, 122-124, 126, 138-146, 149-151, & 196-221**
- 3. Revised Special Provision Index**
- 4. Revised pages 96 & 105 of the Special Provisions**
- 5. Added page 122A to the Special Provisions**

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Jack A. Elston'.

Jack A. Elston, P.E.  
Bureau Chief, Design and Environment

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## DUCTILE IRON WATER MAIN, [SIZE SPECIFIED]

### Description.

Work includes furnishing and installing ductile iron water main as shown on the plans.

### Materials.

The material shall be Class 52 Cement-Lined Ductile Iron Water Main, pressure class 200 in conformance of ANSI/AWWA standards. All pipes furnished shall be in 18 and 20 foot nominal lengths. Cutting of water main to facilitate construction shall be considered included in the unit price per foot of water main. Cement mortar lining shall conform with the latest revision of ANSI/AWWA standards.

All pipe fittings shall be mechanical joint class 350 compact fittings and shall be cement lined in accordance with ANSI / AWWA. All underground fittings shall be ductile iron. Bolts on all fittings (with the exception of hydrant fittings, locations where connection of the new water main system connects to the existing system and where threaded rods are used) shall be high strength, low alloy steel "Cor-ten" T-bolt as approved by Village. Connections to existing water main piping (existing system) shall be by means of mechanical joints with Grade #304 stainless steel bolts and Grade #300 stainless steel series nuts to conform to ASTM A193 and ASTM A194 or approved push-type joints. The mechanical and push-on joints shall meet ANSI A21.11 (AWWA C111). Where threaded rods are required, they shall be stainless steel Grade #304 with Grade #300 nuts. Fittings shall meet ANSI 21.10 (AWWA C110). Fittings shall have distinctly cast on them pressure ratings, nominal diameters of openings and the number of degrees or fraction of the circle on the bends. Ductile Iron fittings shall have the letters "DI" or "Ductile" cast on them. Cast letters and figures shall be on the outside body of the fitting set forth in the latest revision of ANSI/AWWA specifications. All jointing materials shall be as furnished by manufacturer of pipe and fittings and as specified above. All jointing materials shall be in accordance with ANSI/AWWA. **Any elbows required for placement of hydrant shall be included in the cost of this item.**

Bedding, haunching and initial backfill to 12 inches above the top of pipe, excavation, hauling, and disposal of excess material is included in the cost of this item. In areas where the water main is in non-paved areas, backfilling the trench with native materials is included in the cost of this pay item. Water main shall follow lines and grades per the plan. Testing shall be performed according to the requirements set forth in these specifications and as directed by the Engineer.

All ductile iron pipe shall be zinc coated. The coating materials shall be metallic zinc wire with a zinc content of at least 99.99% by mass, and bituminous paint topcoat compatible with zinc. The mean mass of the metallic zinc coating shall be a nominal of 200 grams per square meter with a minimum of 170 grams per square meter when measured in accordance with the section titled "Test Method for Determining Zinc Mass" of this specification. The mass of the zinc coating shall be verified at the beginning of each shift, at changes to application equipment settings, and at sufficiently frequent intervals to verify conformance to the mass requirements. Results shall be documented and kept on file for a period of one year and the results shall be provided to the Village.

The pipe surface shall be dry and free from dirt, oil, grease, asphalt, loose rust, or any non-adhering particles or foreign material. The metallic zinc shall be applied to the as-cast annealed external pipe surface, or to a blast cleaned or wire brushed surface, at the manufacturer's discretion. The metallic zinc coating shall be applied by an arc spray thermal spray process in which the metallic zinc is heated to a molten state and projected in small droplets by clean and dry compressed air onto the external pipe surface. The metallic zinc coating shall cover the outside exterior pipe surface and shall be free from bare patches or areas with lack of adhesion which reveals bare iron pipe surface. A spiraled appearance is permissible provided the zinc coating masses comply with the requirements described above. Damaged areas of the zinc coating caused by handling are acceptable, provided the area of damage is less than 5 cm squared per square meter and that the minor dimension of the damaged area does not exceed 5mm. Greater areas of damage shall be repaired utilizing either 1) metallic zinc spray complying with this specification, or 2) application of a zinc-rich paint containing more than 85% zinc by mass in the dried film.

**WATER SERVICE LINE 1 ½”**

**Description:**

This work shall be performed in accordance with the details in the plans and Section 562 of the Standard Specifications and with applicable portions of Section 41 of the Water and Sewer Specifications with the following alterations.

**General:**

This work shall consist of the disconnection and disposal of the existing water services between the water main and the meter pit or buffalo box, removal of the existing buffalo box or meter pit, installation of a new 1.5” water service and buffalo box or meter and connection of the new water services to the new water main, new buffalo box, and existing meter pit.

Existing service may be lead piping. Contractor is to provide the Village of Deerfield a list of all properties where lead services are encountered.

Work shall include the installation of a new 1.5” corporation stop and tap connection to the water main, tapping sleeve (*Cascade CS22*), any necessary 1.5” copper tubing, the curb box and curb stop, connections and all fittings, including reducer necessary to reconnect the existing water service (at the property line) to the water main, in accordance with the Village’s water service detail, or as directed by the Engineer as specified herein. This work shall be performed in accordance with the applicable sections of the “Standard Specifications for Water and Sewer Construction in Illinois” and all local codes and ordinances. Where existing service is under trees, service will be re-located (with Village approval) if possible; otherwise service is to be augured under tree, which is included in the cost.

Services shall be installed at a minimum depth to top of pipe of 6 feet, and with a minimum vertical separation from sewers of 18 inches.

Copper pipe shall be copper water tube, Type K, soft temper, for underground service, conforming to ASTM B-88 and B-251. The pipe shall be marked with the manufactures’ name or trademark and a mark indicative of the type of pipe. The outside diameter of the pipe shall conform to ASTM B-251, table 2.

Buffalo boxes in driveways and sidewalks shall be adjusted as needed when work is done. The cost of adjusting the buffalo boxes is incidental to the contract.

Existing meter pits shall remain in place, and a new buffalo box shall be provided near the meter pit and connected to the existing meter pit.

**Method of Measurement:**

Water service lines shall be measured from the water main to the buffalo box and will be measured for payment as FOOT for WATER SERVICE LINE 1 ½”.

**Basis of Payment:**

This item shall be paid for at the contract unit price per FOOT for WATER SERVICE LINE 1 ½”, which price shall be payment in full for performing all work as specified herein and as shown on the detail, including all labor, materials, including excavation, auguring if necessary, disposal of materials, tapping sleeve *and tapping saddle*, corporation stop, copper pipe, curb stop and curb box, necessary connector and any required final curb box adjustments to finished elevations, backfilling including granular trench backfill material for a complete water service operation installation.

Compacted granular trench backfilling (FA-6, fine clean brown beach sand) of all trenches in parkways shall exceed up to 4 inches below the finished grade to allow for topsoil and sod.

## **CONNECTION TO EXISTING WATER MAIN**

### Description.

This work shall consist of making a non-pressure, cut-in connections to existing water mains of the size specified. The work shall be in accordance with Section 561 and Section 563 of the Standard Specifications for Water and Sewer Construction in Illinois, with the following modifications: Water main shutdowns must be scheduled 48-hours in advance with the Village. The Village must provide 24-hour notice to affected residents by notice provided by Engineer. Shutdowns will be one day between the hours of 9:00 AM to 3:00 PM. Shutdowns shall only occur Tuesday through Friday. No shutdown shall be allowed on Monday, unless approved by the Engineer. Contractor will be charged with an extra expense including overtime and mobilization for testing on Saturdays and Sundays for Monday shutdown.

### Materials.

Water main pipe shall be PVC pipe conforming to AWWA C-900, with push-on joints conforming to ASTM D3139, of the diameter required.

Water main fittings shall be ductile iron conforming to ANSI/AWWA C110/A21.10 or ANSI/AWWA C153/A21.53. Fittings shall be cement mortar lined and tar coated in accordance with AWWA C104. Fittings shall have mechanical joint end connections unless otherwise specified. Fitting shall include tees, crosses, reducers, and all other fittings as may be necessary to construct a connection to an existing water main.

Mechanical joint restraints shall be EBBA Iron, Inc., MEGALUG Mechanical Joint Restraints for ductile iron pipe.

### Construction.

The connection to the existing water main shall be accomplished by the use of fittings of the proper types and sizes, sections of new water main pipe of the proper lengths and diameters, water main couplings of the proper sizes, and mechanical joint restraints. The connection shall be made in the most direct configuration possible. The connection may be made to the existing water main or to existing valves or fittings.

Thrust blocking of all fittings shall be in accordance with Article 41-2.08 of the Water and Sewer Specifications and the details on the Plans.

The water main pipe and fittings shall be placed on a bedding of crushed aggregate of CA-11 or CA-13 gradation having a minimum thickness of 4 in. The bedding shall be placed to a minimum of 12 in. above the water main pipe and fittings.

Excavation and bedding, and backfilling will not be paid for separately but shall be included in the cost of this item.

### Measurement and Basis of Payment.

This work will be measured for payment as each connection made, regardless of the depth of the connection, the number or type of fittings required, or any other factors. No separate measurement will be made of pipe, fittings, couplings, hardware, or any other components. This work will be paid for at the contract unit price EACH for CONNECTION TO EXISTING WATER MAIN. Trench Backfill will be paid for separately.

Trench Backfill will be paid for separately.