

Addendum 1

City of Canton, Ohio
Purchasing Department
218 Cleveland Ave. SW, 4th floor
Canton, Ohio 44702

Pipe & Pipe Fittings

Item/Project

Water Department

Responsible Department

Friday, February 23, 2018 on or before 2:00 PM local time

Bids Due On or Before

Bid Proposal Submitted By:

Company Name

Street Address

City

State

Zip

Contact Person

Phone No.

Email Address

**Pipe and Pipe Fittings
Water Department**

Request for Information 1:

Question:

Sections 5 and 6 of the City of Canton bid document calls for **AWWA C909 DR-14**. In addition, *the pipes must meet AWWA C909 and must be 150 psi or 200 psi rated.*

We are not sure what pipes to bid as the DR 14 parameter applies to AWWA C900, but it does not apply to AWWA C909. In addition, the AWWA C909 standard does not assign pipe ratings of 150 psi or 200 psi.

In the current version of AWWA C900, DR 14 pipe has a Pressure Class of 305 psi, DR 18 has a Pressure Class of 235 psi and DR 25 has a Pressure Class of 165 psi. Prior to 2016, AWWA C900 calculated Pressure Class differently and assigned the following: DR 14 was Pressure Class 200 psi, DR 18 was Pressure Class 150 psi and DR 25 was Pressure Class 100 psi.

AWWA C909 pertains to “next generation”, molecularly oriented PVC pipe (PVCO) and rather than stipulating acceptable DR values, the standard allows three Pressure Classes: 165 psi, 235 psi and 305 psi.

We suspect the intention of the City of Canton bid document (excerpt attached) is to procure the following...

5. PVC Water Distribution Pipe 4” – 8”

- 1 4” DR 18 AWWA C900 PVC pipe (PC 235 psi)
- 2 6” PC 165 psi AWWA C909 pipe
- 3 8” PC 165 psi AWWA C909 pipe
- 4 4” DR 14 AWWA C900 PVC pipe (PC 305 psi)
- 5 6” PC 265 psi AWWA C909 pipe
- 6 8” PC 265 psi AWWA C909 pipe

6. PVC Water Distribution Pipe 12” – 16”

- 1 12” PC 165 psi AWWA C909 pipe
- 2 16” PC 165 psi AWWA C909 pipe
- 3 12” PC 235 psi AWWA C909 pipe
- 4 16” PC 235 psi AWWA C909 pipe

Answer:

On page 36 of the Invitation to Bid, Item 5 - “PVC Water Distribution Pipe 4”-8” and page 37, Item 6 - “PVC Water Distribution Pipe 12”-16” shall be removed. The following revised items shall be added in their place:

**Pipe and Pipe Fittings
Water Department**

5. PVC WATER DISTRIBUTION PIPE 4”–8” - AWWA C909 MOLECULARLY ORIENTED POLY VINYL CHLORIDE (PVCO) F.O.B. CANTON, OHIO

This specification covers the requirements for AWWA C909 Molecularly Oriented Poly Vinyl Chloride (PVCO) water distribution pipes with integral bell and spigot gasketed joints in Cast Iron Outside Diameter (CIOD) nominal sizes 4", 6", and 8". The pipes must meet the requirements of American Water Works Association standard ANSI/AWWA C-909 and must be 235 psi rated.

The pipe must be manufactured from virgin PVC compound meeting the requirements of cell class 12454 as defined by ASTM D-1784, Standard Specification for Rigid Poly (Vinyl Chloride) PVC Compounds. These compounds must have a hydrostatic design basis rating of 7,100 psi for water at 73.4 degree F. The pipe must be certified by NFS International to ANSI/NSF Standard 61 and must meet all quality assurance testing requirements as specified in ANSI/AWWA C-909.

The pipes must be manufactured to the Cast Iron Outside Diameter nominal size series for use as a pressure conduit. The pipes must be rated as Pressure Class 165 or 235. The pipe must utilize a locked integral gasket joint design meeting the requirements of ASTM D-3139, Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals. The gaskets must be reinforced with a steel band and conform to the requirements of ASTM F-477, Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipes. Markings shall be as specified in ANSI/AWWA C-909.

| <u>Item</u> | <u>Estimated Quantity and Size</u> | <u>Per Foot</u> |
|-------------|---|-----------------|
| 1 | 4" DR18 AWWA C900 PVC pipe (PC 235 psi) | \$ _____ |
| 2 | 6" PC 165 psi, AWWA C909 PVC pipe | \$ _____ |
| 3 | 8" PC 165 psi, AWWA C909 PVC pipe | \$ _____ |
| 4 | 4" DR14 AWWA C900 PVC pipe (PC 305 psi) | \$ _____ |
| 5 | 6" PC 235 psi, AWWA C909 PVC pipe | \$ _____ |
| 6 | 8" PC 235 psi, AWWA C909 PVC pipe | \$ _____ |

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
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**6. PVC WATER DISTRIBUTION PIPE 12"-16" - AWWA C909 MOLECULARLY ORIENTED
POLY VINYL CHLORIDE (PVCO) F.O.B. CANTON, OHIO**

This specification covers the requirements for AWWA C909 Molecularly Oriented Poly Vinyl Chloride (PVCO) water distribution pipes with integral bell and spigot gasketed joints in Cast Iron Outside Diameter (CIOD) nominal sizes 12" and 16". The pipes must meet the requirements of American Water Works Association standard ANSI/AWWA C-909 and must be 165 or 235 psi rated.

The pipe must be manufactured from virgin PVC compound meeting the requirements of cell class 12454 as defined by ASTM D-1784, Standard Specification for Rigid Poly (Vinyl Chloride) PVC Compounds. These compounds must have a hydrostatic design basis rating of 7,100 psi for water at 73.4 degree F. The pipe must be certified by NFS International to ANSI/NSF Standard 61 and must meet all quality assurance testing requirements as specified in ANSI/AWWA C-909.

The pipes must be manufactured to the Cast Iron Outside Diameter nominal size series for use as a pressure conduit. The DR-14 wall thickness class pipes must be rated as Pressure Class 165 or 235. The pipe must utilize a locked integral gasket joint design meeting the requirements of ASTM D-3139, Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals. The gaskets must be reinforced with a steel band and conform to the requirements of ASTM F-477, Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipes. Markings shall be as specified in ANSI/AWWA C-909.

| <u>Item</u> | <u>Estimated Quantity and Size</u> | <u>Per Foot</u> |
|-------------|--|-----------------|
| 1 | 12" PC 165 psi AWWA C909 PVC pipe | \$ _____ |
| 2 | 16" PC 165 psi AWWA C909 PVC pipe | \$ _____ |
| 3 | 12" PC 235 psi AWWA C909 PVC pipe | \$ _____ |
| 4 | 16" PC 235 psi AWWA C909 PVC pipe | \$ _____ |

Terms _____
Manufacturer's Name _____
Delivery _____
Remarks _____