

SECTION 02740 - SEWAGE FORCE MAINS

PART 1 - GENERAL

SUMMARY

Section Includes. This Work shall consist of the installation of sewage force mains, valves and connections of the size and character and at the locations shown on the Drawings and specified hereinafter, and shall include excavation, bedding, backfill, and testing.

Products Installed But Not Supplied Under This Section. Unless otherwise noted on the Drawings, or stated in this Section, all piping 4 inches in diameter and larger shall be furnished under Section 15070, Pressure Process Piping, and installed under this Section of the Work.

Unless otherwise noted on the Drawings, or stated in this Section, all valves 4 inches in diameter and larger shall be furnished under Section 15110, Process Valves, and installed under this Section of the Work.

All necessary joint and coupling materials, including bolts, nuts and gaskets, wall castings or sleeves, supports, anchors, blocking, harnesses and other necessary closure pipe sections and standard or special fittings, shall be furnished under Section 15070, Pressure Process Piping, or Section 15110, Process Valves, and installed under this Section of the Work.

Related Work Specified Elsewhere.

Section 02210 - Excavation and Backfill (Sewers and Water Main)

Section 02345 - Casing Pipe

Section 02735 - Horizontal Directional Drilling

REFERENCES

Reference Standards. Reference standards are under the individual items of Work.

SUBMITTALS

Shop Drawings. Furnish shop drawings covering the items included under this Section of the Contract.

As-constructed Drawings. CONTRACTOR shall submit one complete set of drawings showing the location of pipe valves, and fittings as installed. The location of all valve boxes shall be witnessed to at least two permanent reference points such as utility poles, building, etc. Other valve boxes shall not be used as reference points.

QUALITY ASSURANCE

All Work under this Section shall be done in accordance with standard practices as recommended by the manufacturer and AWWA.

PART 2 - PRODUCTS

MATERIALS

Piping shall be as specified under Section 15070, Pressure Process Piping, and shall be of the types listed below or as shown on the Drawings:

- Ductile Iron Pipe (DIP), Thickness Class 52 with P.E. Encasement
- Ductile Iron Pipe (DIP), Pressure Class 350 with P.E. Encasement
- Polyvinyl Chloride Pressure Pipe (PVCP) SDR 21
- High Density Polyethylene (HDPE) DR 11

Process Valves shall be as specified under Section 15110, Process Valves, and shall be of the types listed below or as shown on the Drawings:

- Resilient Seated Gate Valves (RA)
- Combination Air and Vacuum Release Valves (ARV)

Plastic Pipe Utility Marker System shall consist of tracer wire as specified in section 15070, Pressure Process Piping. For conventional open cut construction, the tracer wire shall be a minimum thickness of 6 gauge copper wire. For applications where the pipe is to be directionally drilled, the tracer wire shall be 6 gauge stainless steel wire.

PART 3 - EXECUTION

INSTALLATION

CONTRACTOR's attention is directed to Section 15070, Pressure Process Piping, and Section 15110, Process Valves, for installation, field quality control, field repair and field testing of items of Work to be installed under this Section of the Work.

Special Fittings. CONTRACTOR shall set crosses, tees, bends, sleeves and other special fittings in the main where shown on the Drawings or directed by ENGINEER. All unconnected openings of such specials shall be closed by standard plugs.

Painting. All pipe, valves, bolts and any other portions of pressure main exposed inside manholes or other structures shall receive two coats of Inertol No. 49, or equal. If necessary, heat shall be provided to maintain good drying conditions. All items to be painted shall be dry and clean before application of the paint. Any rust or scale shall be removed by wire brushing or scraping.

END OF SECTION 02740