

SECTION 33 05 05 DUCTILE IRON PIPE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Ductile iron pipe, couplings, fittings, and joint materials.
- B. Related work includes but is not limited to,
 - 1. Excavation, Section 31 23 16.
 - 2. Trench backfill, Section 33 05 20 .

1.2 REFERENCES

- A. AWWA C104: American National Standard for Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.
- B. AWWA C110: American National Standard for Ductile-Iron and Gray Iron Fittings, 3 In. Through 48 In., for Water and Other Liquids.
- C. AWWA C111: American National Standard For Rubber-Gasket Joints for Ductile-Iron and Gray-Iron Pressure Pipe and Fittings.
- D. AWWA C115: American National Standard for Flanged Ductile-Iron and Gray Iron Pipe with Threaded Flanges.
- E. AWWA C151: American National Standard for Ductile-Iron Pipe, Centrifugally Cast in Metal Molds or Sand-Lined Molds, for Water or Other Liquids.
- F. AWWA C600: AWWA Standard for Installation of Ductile-Iron Water Mains and Their Appurtenances.

PART 2 PRODUCTS

2.1 PIPE AND FITTINGS

- A. Buried Applications:
 - 1. Class 52 or pressure class 350 psi ductile iron pipe, AWWA C151 with push-on joints, AWWA C111.
 - 2. Cement lining for all pipe and fittings, AWWA C104.
 - 3. Class 250 fittings, AWWA C110.
 - 4. Coupler with mechanical joint fittings, AWWA C104, C110, and C111.
 - 5. Rubber gasket slip-on pipe joints, AWWA C111 with gasket lubricant.
 - 6. Bronze wedges with current capacity of 400 amps each for each joint as follows:

<u>Pipe Diameter</u>	<u>No. of Wedges</u>
less than 10"	2
10"	3
12"	4
greater than 12"	6

- B. Above Ground Applications: As buried applications, except use bolted flanged fittings, AWWA C104, C110, and C115.

2.2 COVERINGS

A. Buried Mechanical Joints: Grease and 8 mil vinyl wrap plastic cover.

PART 3 EXECUTION

3.1 INSTALLATION A Install pipe per manufacturer's instructions and AWWA C600.

B. Water distribution and transmission, Section 33 12 19.

END OF SECTION