ROGERS WATER UTILITIES SEWER SYSTEM ROGERS, ARKANSAS

SPECIFICATIONS FOR GRAVITY DUCTILE IRON SEWER PIPE, SEWER SERVICE PIPE & FITTINGS REVISED DECEMBER 2004

1. <u>SCOPE</u>

This specification covers gravity ductile iron sewer pipe, sewer service pipe and fittings for sewage water or other liquids, with push-on and mechanical joints.

2. <u>GENERAL REQUIREMENTS OF GRAVITY SEWER PIPE AND SEWER</u> <u>SERVICE PIPE</u>

- a. This specification covers gravity sewer pipe, 8 in., 10 in., 12 in., 16 in., 18 in., 24 in., 30 in. and 36 in. in sizes and sewer service pipe, 4 inch and 6 inch in sizes. The minimum diameter of gravity ductile iron sewer pipe is 8 inch.
- b. The sewer pipe shall be Class 51 or greater ductile iron pipe and conform to all requirements of AWWA/ANSI C151/A21.51 and ASTM A377.
- c. Dimension and tolerance for each nominal pipe size shall be in accordance with Table 51.5 (push-on) or Table 51.5 (mechanical joint) of AWWA Standard C151 for pipe with nominal laying length of 20 feet.
- d. All pipes shall have a ceramic polymeric or calcium aluminate cement motor interior lining.
- e. Exterior coating shall consist of a nominal one-mil thick asphaltic material applied to the outside of the pipe as described in section 51.8.1 of AWWA C151.
- f. All rubber joint gaskets utilized on ductile iron pipe shall be conformance with ANSI A21.11/AWWA C111, latest revision.
- g. Each length of pipe furnished shall bear identification markings OF "DI", "Ductile" and "Sewer Use".
- h. Lubricant furnished for lubricant joints shall be non-toxic and shall conform to ANSI 21.11. The lubricant container must be labeled with the manufacturer's name.

GRAVITY DUCTILE IRON SEWER PIPE, SEWER SERVICE PIPE & FITTINGS 03-02 SPECIFICATIONS

3. GENERAL REQUIREMENTS DUCTILE IRON OF FITTINGS

- a. This specification covers ductile iron sewer fittings such as tees with an outlet 4 inch branches and end caps, end plugs and bends of 4 inch and 6 inch in size. Ductile iron service tees are allowed in lieu of ductile iron service wyes
- b. Mechanical joint fittings shall be manufactured in accordance of ANSI A21.53/AWWA C153 (compact body).
- c. All fittings shall have a ceramic polymeric or calcium aluminate cement motor interior lining.
- d. Exterior coating of fittings and couplings shall consist of a nominal one-mil thick asphaltic material applied to the outside of the fitting as described in section 51.8.1 of AWWA C151.
- e. All rubber joint gaskets utilized on ductile iron fitting shall be conformance with ANSI A21.11/AWWA C111, latest revision.
- f. Each fitting shall bear identification markings of "DI", "Ductile" and "Sewer Use".
- g. Lubricant furnished for lubricant joints shall be non-toxic and shall conform to ANSI 21.11. The lubricant container must be labeled with the manufacturer's name.

4. **QUALITY ASSURANCE**

- a. The Rogers Water Utilities may, at no cost to the manufacturer, subject random gravity ductile iron sewer pipe, sewer services and fittings to testing by an independent laboratory for compliance with these standards. Any visible defect or failure to meet the quality standards herein will be grounds for rejecting.
- b. All gravity ductile iron sewer pipe, sewer service pipe and fittings shall be domestically manufactured.

The following manufactures are approved for gravity ductile iron sewer pipe, sewer service pipe and fittings.

GRAVITY DUCTILE IRON SEWER PIPE, SEWER SERVICE PIPE & FITTINGS 03-02 SPECIFICATIONS

APPROVED GRAVITY SEWER PIPE AND SEWER SERVICE PIPE MANUFACTURERS LIST

American Cast Iron Pipe Company U.S. Pipe Company McWane, Inc. Griffin Pipe Company Protecto 401 Protecto 401 Protecto 401 Sewper Coat

APPROVED GRAVITY FITTING MANUFACTURERS LIST

American Cast Iron Pipe Company U.S. Pipe Company Tyler Pipe Company Griffin Pipe Company Protecto 401 Protecto 401 Protecto 401 Sewper Coat

Previous Specifications April 16,1997