SECTION 15310.PPR – FIRE PROTECTION PIPING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes service entrance, standpipes, combination risers, and sprinkler piping.

1.2 GENERAL

A. All fire protection materials and equipment shall be approved by Factory Mutual Research Corporation.

B. Components required for a complete installation that are not available with the FM approval shall be listed by Underwriters Laboratories, Inc.

C. All fire protection materials and equipment shall be in conformance with NFPA standards.

PART 2 - PRODUCTS

2.1 PIPING MATERIALS

A. Schedule 40 black steel with threaded joints.

2.2 PIPING, FITTINGS, AND JOINTS

A. Buried Fire Service Entrance: Ductile iron, Class 52, cement-lined with mechanical joints. Provide restrained mechanical joints at changes of direction.

B. Fire Feed Main Piping in Pump Room: Black steel Schedule 40 with flanged joints or rigid couplings.
   2. Flanges: ANSI B16.3.

C. Fire Feed Main Piping:
   1. Black steel Schedule 40, ASTM A53 with flanged, threaded, or grooved joints.

D. Wet System Sprinkler Piping:
   1. Steel: ASTM 135 Schedule 40 black steel with grooved or threaded joints.
2. Copper: Type K or L copper with 95-5 soldered or brazed joints in compliance with NFPA 13. Provide dielectric fittings between copper and ferrous piping.

E. Dry Pipe Sprinkler Systems
1. ASTM A795 Schedule 40 galvanized steel pipe with galvanized steel or malleable iron screwed fittings.
2. Galvanized cast iron fittings shall be used only in drip legs at system low points.

F. Preaction Sprinkler Systems
1. ASTM A795 Schedule 40 galvanized steel pipe with galvanized steel or malleable iron screwed fittings.

G. Fittings:
   a. Flange joints shall use weld neck or threaded flanges.

H. Grooved Fittings and Couplings: Minimum working pressure of 300 psi.
1. Grinnell Fig. 7000
2. Gustin-Bacon No. 105
3. Victaulic Style 75.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install all fire protection materials and equipment in compliance with published FM installation requirements, UL listing requirements, and with the manufacturer’s installation requirements.

END OF SECTION