

Sun City Fire District Underground Fireline Requirements

Within Sun City Fire District, Underground Firelines must meet the minimum following requirements (in accordance with MAG Standards):

[If EPCOR has an easement to install Firelines, EPCOR'S requirements must be followed.]

<u>Piping</u>: Piping shall be sized per design requirements and shall be <u>Restrained Ductile Iron Pipe</u> (pressure class 350 minimum) OR <u>PVC Class C-900 Pipe with elastomeric Gasket Bell End</u>.

<u>Fittings</u>: All Fittings on DIP or PVC C-900 shall be Ductile Iron Pipe fittings with Mega-Lugs. This shall include any Bends, Tee's, Valves, Risers.

<u>Joint Restraints</u>: Bell joints must be restrained at the first coupling beyond any bend of 45 or 90 degrees, on both sides of the bell coupling.

<u>Thrust Blocks</u>: Any Bends, Tee's, Valves, Risers shall be fitted with concrete thrust blocks against undisturbed soil behind the fitting and beneath the fitting in the case of Tees, and Valves.

<u>Pipe Wrap</u>: All Ductile Iron Pipe and Fittings shall be wrapped with polyethylene wrap for the entire length and secured with poly tape to not expose any of the metallic pipe to the soil.

<u>Tracer Wire</u>: All Fire Lines shall have Tracer Wire attached to the pipe (on top of the pipe wrap) to entire length of the piping and extending upward to the device on either end.

<u>Caution Tape</u>: Caution tape shall be installed in the trench at a minimum of 6" above the pipe or 18" below ground surface in all trenches.

<u>Water Pressure Testing</u>: All Fire Lines shall be pressure tested by Hydro test at 200 psi for 2 hours. SCFD inspector shall witness the pressure test.

<u>Fireline Flush</u>: After pressure test, the fire line flush shall be witnessed by SCFD prior to connection to a fire riser.

Fire Marshal Sun City Fire District