1. All water service materials shall be as listed on the City of Eureka Approved Materials List (or approved equal).

2. Factory manufactured fittings shall be used exclusively.

3. All water main fittings shall have all exposed nuts and bolts completely covered with spray-on rubberized undercoating, and all fittings shall be wrapped with 6 mil polyethylene plastic prior to trench backfill.

4. #10 copper tracer wire with blue insulation shall be taped to all water mains and fittings. Tracer wire running up to a valve box or other mid-line access point shall be securely connected to the water main tracer wire at one end with a water proof, corrosion proof connection, and shall terminate in a loop just below the lid in the traffic box at the other end.

5. All main line gate valves shall be mechanically restrained. Thrust blocks shall only be installed when specifically approved by the Engineer.

6. Contractor shall place a 12" layer of 3/4" crushed rock (3/4" sieve size, 90-100 percent passing) over wet concrete thrust block and around valve assembly before compacting 12" lifts of base material per Trench Detail. Rounded rock material that shows little evidence of the crushing process is not acceptable and will be rejected.

7. Division gate valve box lids shall have a 3" diameter circle of weld bead placed on them, with the center of the circle being on the center of the valve box lid. This weld shall not exceed 1/4" in width or height.

8. The new traffic box shall not come into contact with the riser pipe.

9. New gate valve assemblies shall be supported during installation either by resting the assembly on cast-in-place concrete piers or a precast pier block. Other support methods used during installation, such as bridging beams or boom cranes, are subject to approval by the Engineer.

10. All valves connecting to fittings shall be flanged to the fitting.

11. Valve stem extension, when required, shall be hot dip galvanized or stainless steel as manufactured by Mueller, Kennedy, or approved equal for use with approved valve box. Stem diameters shall be 1 3/8"; stem guides shall be spaced such that slenderness ratio of stem body does not exceed 200.