GENERAL NOTES:

A. All fittings and risers smaller than 3" diameter shall be copper or brass. Fittings and risers larger than 3" shall be ductile iron pipe internally cement lined for fire service and wrapped with two layers of UPC listed plastic tape minimum 1\(\frac{1}{2}\)" or coated with Henry's #204 plastic roof cement or an approved equal.

B. Materials shall be UL listed for fire service.

C. Materials shall be inspected by the State Fire Marshal prior to installation.

D. Fire line shall be tested in accordance with the most current edition of the Office of State Fire Marshal adopted NFPA 13 & 24. No connections may be made until the installation have been tested and inspected.

E. Location of double check and FDC shall be approved by the State Fire Marshal prior to placement.

F. Wrap bolts with \(\frac{1}{4}\)" plastic sheathing prior to placement of thrust blocks.

G. Provide clearances around device per manufacturer's recommendations and adequate access for testing.

H. When adequate space does not exist between the public right-of-way and the building face, the USC approved backflow prevention device may be installed inside the building on the fire sprinkler riser (refer to Engineering Standard 6590 for underground portion.) The backflow preventer shall be located no further than 20' from the street side property line. Other USC-approved devices may appear different than those shown. Exterior installations shall have OS&Y valves. Devices installed inside buildings may have indicating butterfly valves.

I. Double Check Detector meters shall be supplied with registers that measure in "units" (100 cu.ft.)

INSTALLATION NOTES:

1. Backflow preventer shall be Zum Wilkins 350 Double Check Valve Backflow Preventer.

2. Backflow preventer shall include OS&Y valves. Backflow preventers that are USC-approved with butterfly valves may be used with prior written approval of the State Fire Marshal when installed inside a building. Each valve shall include a tamper device for electronic monitoring. Junction boxes shall have tamper-proof screws.

3. All risers and above ground mainline fittings shall be flange type, epoxy coated inside or cement mortar lined.

4. Class 3 PCC pad, 4" thick, 12" minimum around risers, on 4" Class 3 base.

5. Break-away padlock and chain between OS&Y valves, locked in open position.

6. Valve setter or PCC thrust blocks, Class 3, size as required for type of soil.

7. Tracer wire from street valve or double check assembly to hydrant and/or building sprinkler riser per Engineering Standard 6020. See Division 33 for the Office of the State Fire Marshal Notes for Underground Piping for Private Hydrants & Sprinkler. Subject to Current Edition of CBC, CFC, and NFPA 24 with California Amendments.

ANY MODIFICATION TO FIRE WATER REQUIREMENTS SHALL HAVE FORMAL APPROVAL FROM THE STATE FIRE MARSHAL AND A CAL POLY REPRESENTATIVE.