

NOTES:

1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% $\pm$ 1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC), AS ADOPTED BY AUTHORITY HAVING JURISDICTION (AHJ). CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS. PER CUBIC YARD. ALL MATERIALS SHALL CONFORM TO SSPWC, AS ADOPTED BY AHJ.
2. TAPPING SLEEVE
HOT-TAP TAPPING SLEEVES SHALL BE FULL-CIRCLE ASTM A 240, TYPE 304 STAINLESS STEEL WITH FULL CIRCUMFERENCE GASKETS THROUGHOUT SLEEVE LENGTH WITH AWWA C207 CLASS D ANSI 150 LB. DRILLING ASTM A 240, TYPE 304 STAINLESS STEEL FLANGE. TYPE 304 STAINLESS STEEL STUD BOLTS, HEAVY HEX NUTS, AND WASHERS SHALL BE INCLUDED. HEAVY HEX NUTS AND STUD BOLTS SHALL BE COATED TO PREVENT GALLING. TYPE 304 STAINLESS STEEL TEST PLUG SHALL BE INCLUDED WITH THREADS COATED TO PREVENT GALLING. TAPPING SLEEVE SHALL BE RATED FOR A TEST PRESSURE OF 300 PSI AND WORKING PRESSURE OF 200 PSI. TAPPING SLEEVE SHALL BE ROMAC STYLE "SST" STAINLESS STEEL TAPPING SLEEVE AS MANUFACTURED BY ROMAC INDUSTRIES, INC.; SMITH-BLAIR 663 STAINLESS STEEL FLANGE TAPPING SLEEVE AS MANUFACTURED BY SMITH-BLAIR, INC.; OR EQUAL.

ALL WATER MAIN SHUT DOWNS AND/OR INSTALLATION OF TAPPING SLEEVES SHALL BE COORDINATED WITH THE WATER PURVEYOR IN THE AREA AND CONFORM TO THEIR REQUIREMENTS. TAPPING SLEEVES ARE TO BE USED ONLY FOR EXISTING INSTALLATIONS.
3. GATE VALVE
GATE VALVE SHALL BE 6-INCH, FLG X FLG AND SHALL MEET AWWA C515, DUCTILE IRON BODY, NON-RISING STEM, RESILIENT-SEATED VALVE. GATE VALVE SHALL BE EQUIPPED WITH A 2-INCH OPERATING NUT FOR BURIED SERVICE. GATE VALVE SHALL BE FUSION EPOXY LINED AND COATED. ALL VALVES FOR BURIED SERVICE SHALL BE POLYETHYLENE ENCASED PER AWWA C105. GATE VALVE SHALL BE A MUELLER A-2361 RESILIENT WEDGE GATE VALVE; AMERICAN AVK COMPANY SERIES 65 AWWA C515 DUCTILE IRON GATE VALVE; OR APPROVED EQUAL.
4. 6" VALVE BOX SHALL BE D&L #8044 & #8056 OR APPROVED EQUAL. CASTINGS SHALL BE CAST IRON GRAY AND MEET THE REQUIREMENTS OF ASTM A48-74, CLASS 30B, NO PAINT.
5. 6-INCH FLG X MRJ ADAPTOR
6-INCH FLG X MRJ ADAPTOR SHALL BE DUCTILE IRON AND MEET THE REQUIREMENTS OF AWWA STANDARDS C110/C153 AND C104. ALL FITTINGS SHALL BE POLYETHYLENE ENCASED PER AWWA C105. ADAPTOR SHALL BE ASPHALTIC COATED WITH CEMENT-MORTAR LINING PER AWWA C110/C153 AND C104.
6. 6-INCH MINIMUM DUCTILE IRON LATERAL PIPE
ALL DUCTILE IRON PIPE SHALL MEET THE REQUIREMENTS OF AWWA STANDARDS C151, C104, AND C111 WITH PRESSURE CLASS 350, STANDARD CEMENT LINING, BITUMINOUS COATING, AND SHALL BE NSF-61 CERTIFIED. ALL DUCTILE IRON PIPE SHALL BE POLYETHYLENE ENCASED WITH THICKNESS OF 4 MIL AND BE BLACK IN COLOR. MATERIAL SHALL BE HIGH-DENSITY, CROSS-LAMINATED FILM CONFORMING TO SECTION 4.1.3 OF AWWA STANDARD C105. TUBE SIZE SHALL BE AS LISTED IN TABLE 1 OF SAME STANDARD. DUCTILE IRON PIPE SHALL BE EQUIPPED WITH TYTON TYPE BELL AND SPIGOT JOINTS. DUCTILE IRON PIPE SHALL BE TYTON DUCTILE IRON PIPE AS MANUFACTURED BY U.S. PIPE, GRIFFIN TYTON JOINT DUCTILE IRON PIPE AS MANUFACTURED BY GRIFFIN PIPE PRODUCTS CO., INC., OR APPROVED EQUAL. EXCEPTIONS FOR PRIVATE INSTALLATION UPON APPROVAL FROM AHJ.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION

DRAWING No.



**NOTES -
FIRE HYDRANT**

S-301B

APPROVED BY: JE | DATE: 1/2020