


1. FITTINGS SHALL BE DUCTILE IRON AND SHALL CONFORM TO AWWA STANDARD C110 **AND RATED AT 350 PSI**. DUCTILE IRON (COMPACT) FITTINGS CONFORMING TO AWWA STANDARD C153 MAY BE SUBSTITUTED IN LIEU OF AWWA C110 FITTINGS FOR FITTING SIZES 3-INCHES THROUGH 24-INCHES IN DIAMETER. FITTINGS SHALL BE MECHANICAL JOINT OR FLANGED AS REQUIRED AND SHOWN ON THE PLANS.
2. DUCTILE IRON FLANGED JOINT FITTINGS SHALL BE PRESSURE RATED FOR 250 PSI.
3. FITTINGS SHALL BE MORTAR LINED AND SEAL COATED.
4. DUCTILE IRON SLEEVES SHALL BE OF THE LONG BODY DESIGN AND BOTH ENDS MECHANICAL JOINT.
5. GASKETS FOR FLANGED JOINTS SHALL BE 1/8" THICK, FULL FACED WITH AT LEAST (3) BULB TYPE RIBS MOLDED INTO BOTH FACES.
6. MECHANICAL JOINT GASKETS SHALL BE STANDARD STYRENE BUTADIENE RUBBER (SBR) GASKETS.
7. BOLTS AND NUTS SHALL BE CARBON STEEL AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307 OR ASTM A193 GRADE B7 WITH ASTM A194 GRADE 2H HEAVY HEX NUTS.
8. GATE VALVES (4" TO 8") - GATE VALVES FOR BURIED SERVICE SHALL BE THE RESILIENT-SEAT TYPE, WITH AN IRON BODY, NON-RISING STEM, BOLTED BONNET, LEFT OPENING AND SHALL CONFORM TO AWWA STANDARD C509 **OR** C515. THE WEDGE SHALL BE TOTALLY ENCAPSULATED WITH RUBBER. ALL GATE VALVES SHALL BE RATED AT 250 PSI FOR AWWA SERVICE. THE INTERIOR AND EXTERIOR SHALL BE FUSION-BONDED EPOXY AND ALL COATINGS AND/OR LININGS SHALL CONFORM TO AWWA STANDARD C550 AND SHALL BE SUITABLE FOR POTABLE WATER SERVICE AND NSF CERTIFIED.
9. BUTTERFLY VALVES (10" AND LARGER) - BUTTERFLY VALVES SHALL BE SHORT BODY CLASS 250 VALVES CONFORMING TO THE REQUIREMENTS OF AWWA STANDARD C504. BUTTERFLY VALVES SHALL BE RUBBER SEATED AND TIGHT CLOSING. VALVE BODIES SHALL BE HIGH STRENGTH CAST IRON OR HIGH STRENGTH DUCTILE IRON. VALVE INTERIOR AND EXTERIOR SURFACES SHALL BE COATED WITH EPOXY IN ACCORDANCE WITH AWWA C504 AND SHALL BE SUITABLE FOR POTABLE WATER SERVICE AND NSF 61 CERTIFIED.
10. THREE VALVES SHALL BE PLACED AT EVERY TEE, AND FOUR VALVES SHALL BE PLACED AT EVERY CROSSING, UNLESS OTHERWISE DIRECTED BY THE CPU INSPECTOR.
11. A **MAXIMUM** DISTANCE OF 1,000 FEET BETWEEN VALVES ON ALL TRANSMISSION AND DISTRIBUTION MAINS.
12. VALVE SHALL BE 2" SQUARE OPERATING NUT.

REVISED JANUARY **2026**

FILE NAME		FITTING & VALVE SPECIFICATIONS	<div>Clark Public Utilities</div> 
0-FV			
SHEET	1 OF 1	STANDARD DETAILS	