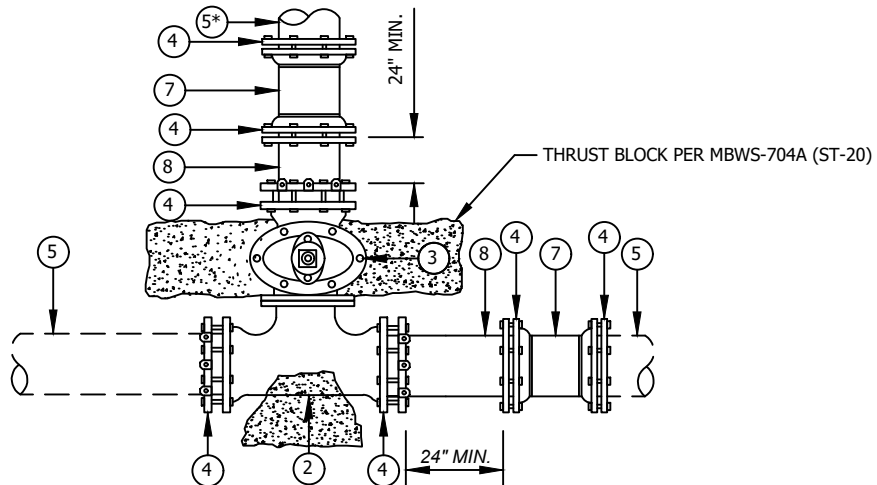


**WITH VALVES**

PLAN VIEW



**WITHOUT VALVES**

PLAN VIEW

NOT TO SCALE

NOTE: ALL VALVE INSTALLATION SHALL INCORPORATE GASKETS PER THE SPECIFICATION AND APPROVED MATERIAL LIST.

**NOTES**

ITEM	MATERIAL
(1)	TEE (FLANGED), SIZED PER PLANS WITH THRUST BLOCK, PER MBWS-704A (ST-20), DESIGNED FOR 100% OF THRUST FORCE
(2)	TEE (MJ x FLG), SIZED PER PLANS WITH THRUST BLOCK, PER MBWS-704A (ST-20), DESIGNED FOR 100% OF THRUST FORCE
(3)	MECHANICAL JOINT FLANGED RESILIENT WEDGE GATE VALVE (FL x MJ) WITH THRUST BLOCK PER MBWS-704A (ST-20)
(4)	MECHANICAL JOINT RESTRAINER GLAND (MEGALUGS)
(5)	EXISTING PIPE (CAST IRON OR DIP)
(6)	NEW PIPE, MATERIAL AND SIZE PER PLANS
(7)	DUCTILE IRON RESTRAINED LONG SOLID SLEEVE, (MJ x MJ)
(8)	DUCTILE IRON PIPE SPOOL MIN. LENGTH 24" (PE x PE)

NOTE: ALL WATER LINES AND FITTINGS SHALL BE DUCTILE IRON PIPE (D.I.P.), CEMENT LINED DOUBLE THICKNESS, PRESSURE CLASS 350 AND COMPLY WITH ANSI A21.51 (AWWA C 151).

ALL METALLIC COMPONENTS TO BE WRAPPED WITH 8 MIL. POLYETHYLENE ENCASEMENT.

\*WHEN CONNECTING TO NEW PIPE, (7) AND (8) ARE NOT REQUIRED; USE (6) IN PLACE OF (8).



DATE REVISED

04-06-2020

**CITY OF MANHATTAN BEACH  
DEPARTMENT OF PUBLIC WORKS**

**CUT-IN TEE (MECHANICAL JOINT) OR CROSS FOR CAST IRON PIPE (CIP), AND DUCTILE IRON PIPE (DIP)**

APPROVED BY

PREM KUMAR, CITY ENGINEER

12/02/2021

DATE

STANDARD PLAN NUMBER

**MBWS-702A-0 (ST-17)**

SHEET 1 OF 1