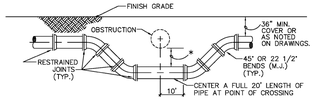
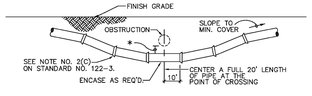


SPECIAL UTILITY CROSSING – FITTING TYPE

* 12" MINIMUM CLEARANCE REQUIRED FOR PRESSURE TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN OR REUSE WATER MAIN CROSSINGS. IF MINIMUM CLEARANCE CANNOT BE OBTAINED, REFER TO "PROTECTION OF POTABLE WATER SUPPLY" FOR WATER MAIN CROSSINGS. SEE NOTE 2(B), ON STANDARD NO. 122–3

6" MINIMUM CLEARANCE REQUIRED FOR WATER AND STORMWATER, SEWER MAIN CROSSINGS. SEE NOTE 2(A), ON STANDARD NO. 122–3.



STANDARD UTILITY CROSSING – DEFLECTION TYPE

NOTES:
1. THE DEFLECTION TYPE CROSSING SHALL BE USED WHEREVER POSSIBLE. ONLY UNDER SPECIFIC ORDERS BY THE ENGINEER SHALL THE FITTING TYPE CROSSING BE ALLOWED.
2. CONSTRUCT STANDARD CROSSING USING NO MORE THAN 75% OF MANUFACTURERS' MAXIMUM JOINT DEFLECTION.
3. FOR POTABLE WATER MAINS, REFER TO "PROTECTION OF POTABLE WATER SUPPLY".

UTILITY CROSSINGS

ENGINEERING STANDARDS 2025			
REVISIONS BY: S.S. DATE: 01/12	ENGINEERING DIVISION CITY OF POMPANO BEACH	UTILITY CROSSINGS	DATE: JAN. 2022 DWG. NO. 122-1
SCALE: N.T.S.			

PROTECTION OF POTABLE WATER SUPPLY NOTES

A. GENERAL
IN ADDITION TO THESE REQUIREMENTS, ALL POTABLE WATER MAINS CONSTRUCTED IN THE VICINITY OF STORM SEWERS, SANITARY SEWERS OR FORCE MAINS SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF FLORIDA ADMINISTRATIVE CODE CHAPTER 62–555, GREAT LAKES–UPPER MISSISSIPPI RIVER BOARD OF STATE SANITARY ENGINEERS (GLUMRB) "RECOMMENDED STANDARDS FOR WATER WORKS", AND GLUMRB "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES".

B. DEFINITIONS
FOR THE PURPOSES OF THIS SPECIFICATION, THE WORDS "OTHER PIPE" OR "OTHER PIPES" SHALL MEAN SANITARY SEWER MAIN, SEWAGE FORCE MAIN, STORMWATER MAIN OR ANY COMBINATION THEREOF.

C. CROSS CONNECTIONS PROHIBITED
THERE SHALL BE NO PHYSICAL CONNECTIONS BETWEEN A PUBLIC OR PRIVATE POTABLE WATER SUPPLY SYSTEM AND ANY OTHER PIPE OR APPURTENANCE THERETO WHICH WOULD PERMIT THE PASSAGE OF ANY WASTEWATER, POLLUTED WATER, OR ANY OTHER WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR STORMWATER MANHOLE.

D. RELATION OF OTHER PIPES TO POTABLE WATER MAINS

1. HORIZONTAL SEPARATION
A. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM WATER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING REUSE WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C.
B. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
C. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING REUSE WATER NOT REGULATED UNDER CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY TYPE SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.

ENGINEERING STANDARDS 2025			
REVISIONS BY: DATE:	ENGINEERING DIVISION CITY OF POMPANO BEACH	POTABLE WATER SUPPLY NOTES	DATE: JAN. 2022 DWG. NO. 122-2
SCALE: N.T.S.			

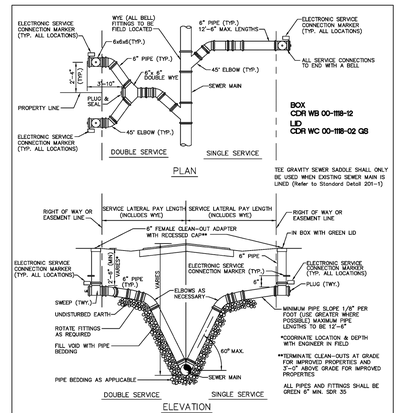
D. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM.

2. VERTICAL SEPARATION
A. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
B. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR PIPELINE CONVEYING REUSE WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES, ABOVE OR BELOW THE OUTSIDE THE OTHER PIPELINE; HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
C. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING REUSE WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING REUSE WATER NOT REGULATED UNDER PART III OR CHAPTER 62-610, F.A.C.

WHERE THE HORIZONTAL CAN BEING LOCATED LESS THAT THE REQUIRED MINIMUM DISTANCES FROM JOINTS IN THE OTHER PIPELINE OR THE HORIZONTAL IS LESS THAT THREE FEET FROM ANOTHER PIPELINE OR THE UNDER GROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY FOR RECOMMENDED SOLUTIONS TO MEET THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS PER CHAPTER 62-555, F.A.C.

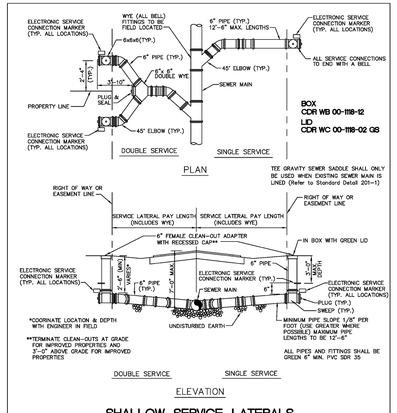
PROTECTION OF POTABLE WATER SUPPLY NOTES

ENGINEERING STANDARDS 2025			
REVISIONS BY: S.S. DATE: 01/12	ENGINEERING DIVISION CITY OF POMPANO BEACH	POTABLE WATER SUPPLY NOTES	DATE: JAN. 2022 DWG. NO. 122-3
SCALE: N.T.S.			



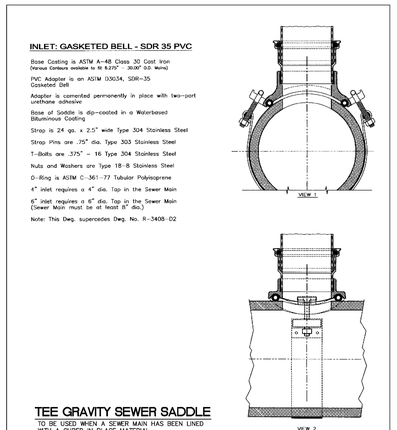
SERVICE LATERALS WITH RISERS

ENGINEERING STANDARDS 2025			
REVISIONS BY: T.W. DATE: 11-2007; S.S. 01/27/12; S.S. 07/10/12; S.S. 02/05/16	ENGINEERING DIVISION CITY OF POMPANO BEACH	SERVICE LATERALS	DATE: JUNE 2022 DWG. NO. 200-1
SCALE: N.T.S.			



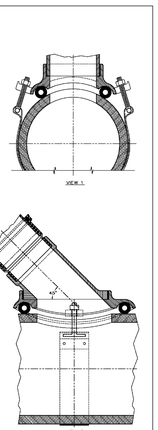
SHALLOW SERVICE LATERALS

ENGINEERING STANDARDS 2025			
REVISIONS BY: T.W. DATE: 11-2007; S.S. 01/27/12; S.S. 07/10/12; S.S. 02/10/16	ENGINEERING DIVISION CITY OF POMPANO BEACH	SERVICE LATERALS	DATE: JUNE 2022 DWG. NO. 200-2
SCALE: N.T.S.			



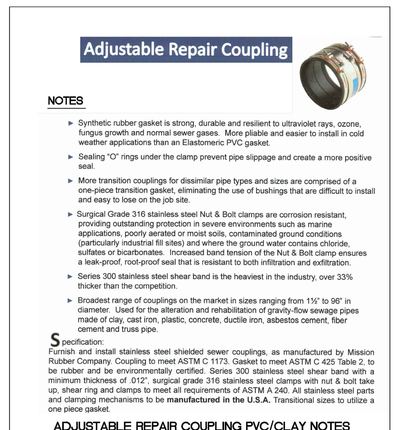
TEE GRAVITY SEWER SADDLE
TO BE USED WHEN A SEWER MAIN HAS BEEN LINED WITH A CURED IN PLACE MATERIAL.

ENGINEERING STANDARDS 2025			
REVISIONS BY: S.S. DATE: 11/23/16	ENGINEERING DIVISION CITY OF POMPANO BEACH	TEE GRAVITY SEWER SADDLE	DATE: MAY 2022 DWG. NO. 201-1
SCALE: N.T.S.			



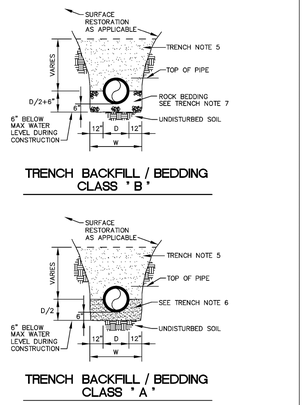
WYE GRAVITY SEWER SADDLE
TO BE USED WHEN A SEWER MAIN HAS BEEN LINED WITH A CURED IN PLACE MATERIAL.

ENGINEERING STANDARDS 2025			
REVISIONS BY: DATE:	ENGINEERING DIVISION CITY OF POMPANO BEACH	WYE GRAVITY SEWER SADDLE	DATE: MAY 2022 DWG. NO. 201-2
SCALE: N.T.S.			

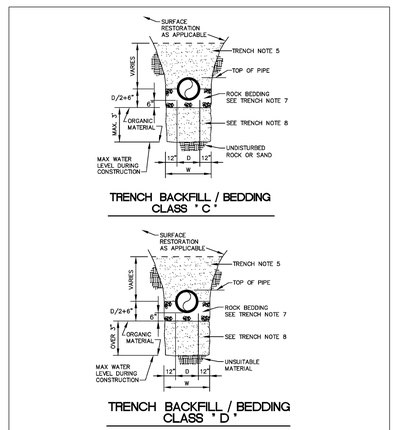


ADJUSTABLE REPAIR COUPLING PVC/CLAY NOTES

ENGINEERING STANDARDS 2025			
REVISIONS BY: DATE:	ENGINEERING DIVISION CITY OF POMPANO BEACH	ADJUSTABLE REPAIR COUPLING	DATE: MAY 2022 DWG. NO. 202-1
SCALE: N.T.S.			



ENGINEERING STANDARDS 2025			
REVISIONS BY: S.S. DATE: JUNE 2005	ENGINEERING DIVISION CITY OF POMPANO BEACH	TRENCH BACKFILL / BEDDING	DATE: JUNE 2022 DWG. NO. 203-1
SCALE: N.T.S.			



ENGINEERING STANDARDS 2025			
REVISIONS BY: S.S. DATE: JUNE 2005	ENGINEERING DIVISION CITY OF POMPANO BEACH	TRENCH BACKFILL / BEDDING	DATE: JUNE 2022 DWG. NO. 203-2
SCALE: N.T.S.			

COSTCO WHOLESALE
POMPANO BEACH

COSTCO WHOLESALE CORPORATION
999 LAKE DRIVE
ISSAQUAH, WA 98027
T: 425.313.8100
www.costco.com

THOMAS ENGINEERING GROUP
6300 NW 31st AVENUE
FORT LAUDERDALE, FL 33309
PH: (954) 202-7000
www.ThomasEngineeringGroup.com

40 20 10 0 40
1"= 40'

Matthew J Cigale
Digitally signed by Matthew J Cigale
DN: c=US, o=Unaffiliated, dnQualifier=A01410C00000192E2C7B6CB800900EEC, cn=Matthew J Cigale
Date: 2025.10.29 13:36:03 -04'00'
FLORIDA BUSINESS CERT. OF AUTH. No. 27326

△	DATE	DESCRIPTION

F240051
OCT. 29, 2025
WATER & SEWER DETAILS
C-11.2

DRC
PZ25-12000023
12/03/2025

COSTCO - POMPANO BEACH
POMPANO BEACH, FLORIDA

WATER & SEWER DETAILS
OCT. 29, 2025

Q:\PROJECTS\2024\F240051 - COSTCO - POMPANO BEACH\DWG\FINAL ENGINEERING PLANS\F240051-WATER & SEWER DETAILS.dwg -----> LAYOUT: WS DETAILS (3)