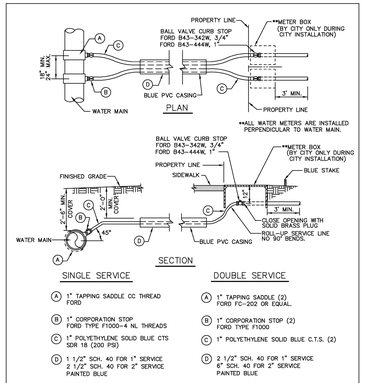
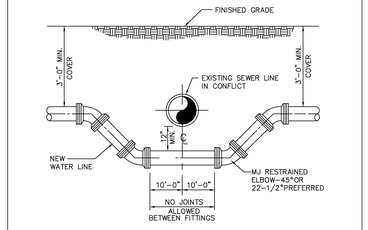


TYPICAL 3/4" AND 1" WATER SERVICE

ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL 1" WATER SERVICE	
T.W. 11-2007			DATE: MAY 2022
S.S. 05-2012			DWG. NO. 107-1
S.S. 11-2015	SCALE: N.T.S.		
A.S. 08-2021			



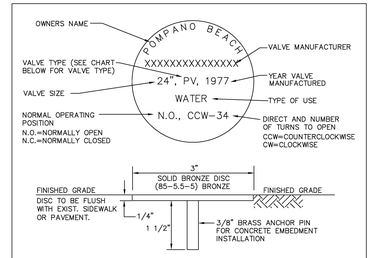
NOTES
WHERE CONDITIONS PERMIT, PIPE DEFLECTION MAY BE USED INSTEAD OF BENDS TO OBTAIN THE MINIMUM CLEARANCE. FACTORY OFFSETS MAY BE USED.

TYPICAL CONFLICT DETAIL

USE MEGALUGS AT ALL PIPE JOINTS

ALL D.I.P. TO BE PAINTED BLUE ON TOP HALF OF PIPE.

ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL CONFLICT (WATER)	
S.S. 04-2005			DATE: MAY 2022
S.S. 01-2012			DWG. NO. 108-1
	SCALE: N.T.S.		

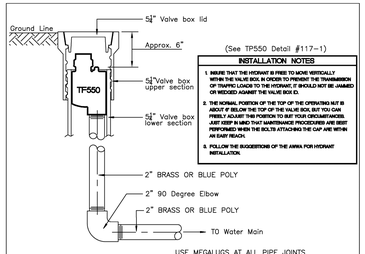


VALVE TYPES
BALL VALVE--BALLY
RESILIENT WEDGE GATE VALVE--RWGV
BUTTERFLY VALVE--BV
PLUG VALVE--PV

NOTES:
1. VALVE INFORMATION TO BE TRIPLE ENGRAVED INTO TOP SURFACE WITH 1/4" CAPITAL LETTERS.
2. ENTIRE MARKER TO BE COATED WITH CLEAR EPOXY TO PREVENT TARNISHING.
3. VALVE INFORMATION TO BE APPROVED BY CITY OF POMPANO BEACH UTILITIES DEPARTMENT.
4. MARKERS SHALL BE MANUFACTURED BY RG WRENCH, OR APPROVED EQUAL

UNDERGROUND VALVE IDENTIFICATION MARKER

ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	UNDERGROUND VALVE IDENTIFICATION MARKER	
S.S. JUNE 2005			DATE: FEB. 2022
T.W. 11-2007			DWG. NO. 115-1
T.W. 02-2008	SCALE: N.T.S.		
S.S. 1-24-12			



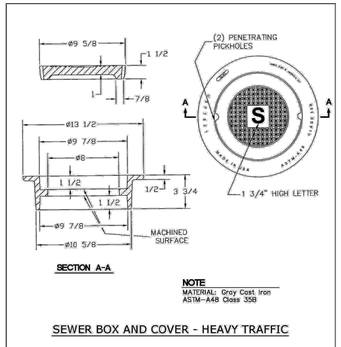
INSTALLATION NOTES
1. ENSURE THAT THE HYDRANT IS FREE TO MOVE VERTICALLY WITHIN THE VALVE BOX. IN ORDER TO PREVENT THE TRANSMISSION OF TRAFFIC LOADS TO THE HYDRANT, IT SHOULD NOT BE JAMMED OR WEDGED AGAINST THE VALVE BOX ID.
2. THE NORMAL PORTION OF THE TOP OF THE OPERATING NUT IS ABOUT 9" BELOW THE TOP OF THE VALVE BOX, BUT YOU CAN FREELY ADJUST THIS PORTION TO SUIT YOUR CIRCUMSTANCES. JUST KEEP IN MIND THAT MAINTENANCE PROCEDURES ARE BEST PERFORMED WHEN THE BOLTS ATTACHING THE CAP ARE WITHIN AN EASY REACH.
3. FOLLOW THE SUGGESTIONS OF THE AWWA FOR HYDRANT INSTALLATION.

USE MEGALUGS AT ALL PIPE JOINTS

SPECIFICATION NOTES
BLOW OFF SHALL HAVE A 2" VERTICAL PIP INLET AND 2" NPT NOZZLE OUTLET. HYDRANT SHALL BE OPERATED BY TURNING A TOP-MOUNTED 5/4" SQUARE OPERATING NUT COUNTER CLOCKWISE TO OPEN, CLOCKWISE TO CLOSE. ALL INTERNAL WORKING PARTS, THE INLET AND THE OUTLET SHALL BE LOW-LEAD BRASS. ALL WORKING PARTS SHALL BE REMOVEABLE FROM ABOVE WITH NO DIGGING REQUIRED. ALL WEAR PARTS (O-RINGS AND VALVE SEAT) SHALL BE OF COMMONLY AVAILABLE DIMENSIONS AND MATERIALS, AND NONE MAY BE OF VENDOR UNIQUE DESIGN. HYDRANT SHALL BE THE TRUFLO MODEL, TP550 AS MANUFACTURED BY THE KUPFERLE FOUNDRY CO., ST. LOUIS MO 63102 OR APPROVED EQUAL.

TF550 INSTALLATION AND SPECIFICATION

ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TF550 INSTALLATION AND SPECIFICATION	
S.S. FEB. 2006			DATE: MAY 2022
T.W. 11-2007			DWG. NO. 117-2
T.W. 07-2008	SCALE: N.T.S.		



GENERAL NOTES:

1. ALL UTILITY PIPE SHALL BE INSTALLED WITH 4"ø MARKING BALLS PLACED EVERY 40' AND AT EVERY FITTING, FOR IDENTIFICATION AND WARNING PURPOSES, BURIED ABOVE THE PIPE AT A MAXIMUM DEPTH OF 24 INCHES OR AS APPROVED BY THE OWNER. IT SHALL BE COLOR CODED AND WORDED AS FOLLOWS:

   POTABLE WATER.
   A. COLOR: BLUE PER 62-555.320(21)(b)(3) F.A.C.
   B. LETTERING: WATER
   C. FREQUENCY OF MARKER BALLS SHALL BE 145.7 Khz.
   D. THE MARKER BALLS CAN BE BURIED IN ANY ORIENTATION.

   THE MARKER BALLS SHALL BE DETECTABLE BY STANDARD METAL DETECTION EQUIPMENT AND SHALL BE MANUFACTURED BY TEMPO OR 3M LOCATOR SYSTEM OR EQUIVALENT (FREQUENCY 145.7 Khz)

2. FOR LARGE DIAMETER PIPE INSTALLED AT DEPTHS BELOW 4'-0" MARKER BALLS SHALL BE PLACED AT A MAXIMUM DEPTH OF 4'-0" BELOW GRADE *.

WATER PIPE IDENTIFICATION

ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	WATER PIPE IDENTIFICATION	
S.S. 01/12			DATE: JAN. 2022
S.S. 06/16			DWG. NO. 119-1
	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.
   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".

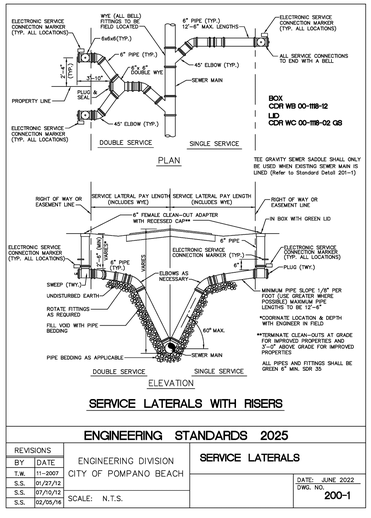
2. VERTICAL SEPARATION
   A. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE 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 / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	POTABLE WATER SUPPLY NOTES	
S.S. 01/12			DATE: JAN. 2022
			DWG. NO. 122-2
	SCALE: N.T.S.		

ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	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

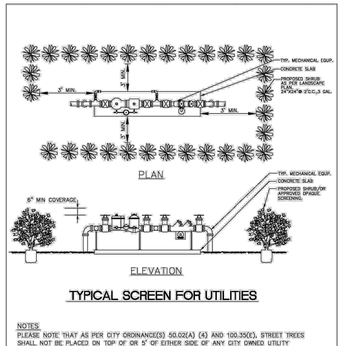
ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SERVICE LATERALS	
T.W. 11-2007			DATE: JUNE 2022
S.S. 01/27/12			DWG. NO. 200-1
S.S. 07/10/12	SCALE: N.T.S.		
S.S. 02/05/16			

SECTION A-A

NOTE
MATERIAL: Gray Cast Iron ASTM-A48 Class 35B

SEWER BOX AND COVER - HEAVY TRAFFIC

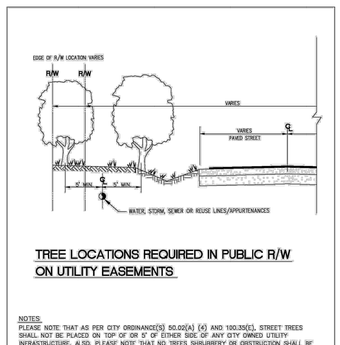
ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SEWER BOX AND COVER HEAVY TRAFFIC	
S.S. 12/04/15			DATE: JUNE 2022
			DWG. NO. 210-3
	SCALE: N.T.S.		



TYPICAL SCREEN FOR UTILITIES

NOTES
PLEASE NOTE THAT AS PER CITY ORDINANCE(S) 50.02(A) (4) AND 100.35(C), STREET TREES SHALL NOT BE PLACED ON TOP OF OR 5' OF EITHER SIDE OF ANY CITY OWNED UTILITY INFRASTRUCTURE. ALSO, PLEASE NOTE THAT NO TREES SHRUBBERY OR OBSTRUCTION SHALL BE PLACED WITHIN A 3' RADIUS OF A CITY OWNED LATERAL CLEANOUT OR WATER & OR REUSE METER.

ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL SCREEN FOR UTILITIES	
TCW APRIL 2010		APPROVED BY:	DATE: MAY 2022
			DWG. NO. 315-1
	SCALE: N.T.S.		



TREE LOCATIONS REQUIRED IN PUBLIC R/W ON UTILITY EASEMENTS

NOTES:
PLEASE NOTE THAT AS PER CITY ORDINANCE(S) 50.02(A) (4) AND 100.35(E), STREET TREES SHALL NOT BE PLACED ON TOP OF OR 5' OF EITHER SIDE OF ANY CITY OWNED UTILITY INFRASTRUCTURE. ALSO, PLEASE NOTE THAT NO TREES SHRUBBERY OR OBSTRUCTION SHALL BE PLACED WITHIN A 3' RADIUS OF A CITY OWNED LATERAL CLEANOUT OR WATER & OR REUSE METER.

ENGINEERING STANDARDS 2025			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	REQUIRED TREE LOCATIONS	
		APPROVED BY:	DATE: MAY 2022
			DWG. NO. 316-1
	SCALE: N.T.S.		

MDC
MUNSON DESIGN AND CONSULTING, INC.
PO BOX 771058
CORAL SPRINGS, FL. 33077
PHONE: 954-340-5291
AUTHORIZATION No. 9327
BUSINESS LICENSE No.7958

CITY STANDARD WATER & SANITARY SEWER SYSTEM DETAILS

REVISIONS:

BIG TREE B.B.Q.

PROJECT ADDRESS:
SWC OF NW 25th STREET AND POWERLINE ROAD
POMPANO BEACH, FLORIDA 33069

Phase:
CITY DRC DOCUMENTS

SIGNATURE AND SEAL

SHANE L. H. MUNSON LICENSE 54719 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Shane Munson
Date: 2026.01.05 22:31:36 -05'00'

DATED: 01/05/2026
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SHANE MUNSON ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Scale: 1"=20'
Job No. 2025-100
Sheet No. C6
Date 02/01/2025
Drawn by SM
Plot Date 01/05/2026
Appr. by SS

AAC
PZ25-12000012
02/03/2026