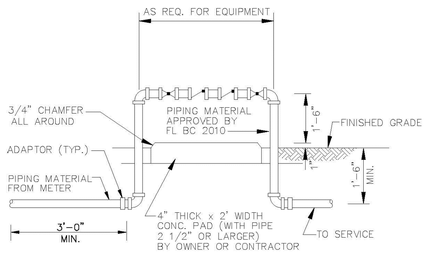


BACKFLOW PREVENTER

USE MEGALUGS AT ALL PIPE JOINTS 3" AND LARGER
PLEASE SEE METER INSTALL DIMENSION LIST ON STANDARD NO. 106-4
SMALL UNITS UNI-STRUT SUPPORT

ENGINEERING STANDARDS 2022

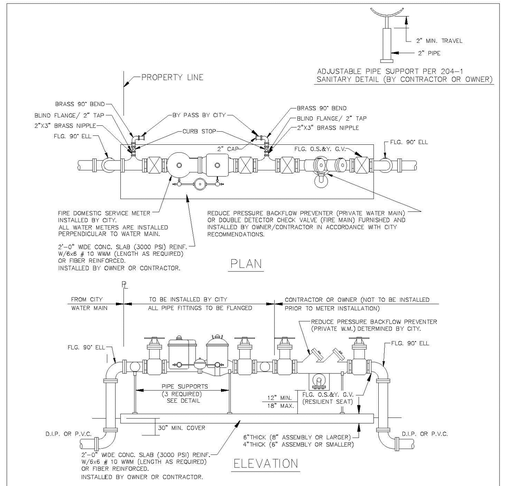
REVISIONS BY	DATE
T.W.	04-2008
S.S.	03-2009
S.S.	11-2012
S.S.	01-2013

ENGINEERING DIVISION
CITY OF POMPANO BEACH

SCALE: N.T.S.

BACKFLOW PREVENTER

DATE: MAY 2022
DWG. NO. 106-1



MASTER METER AND BACKFLOW DEVICE DETAILS
FIRE AND DOMESTIC COMBINED SOURCE

NOTES

1. THE BACKFLOW PREVENTOR FOR THE BY-PASS SHALL BE DDCV OR RPZ.
2. PLEASE NOTE THAT WATER METERS 3" AND LARGER ARE SUBJECT TO AN APPROXIMATE ORDER LEAD TIME OF 60 TO 75 DAYS AFTER FULL PAYMENT. PLEASE CONTACT CUSTOMER SERVICE AT 954-786-4637 TO ARRANGE FOR METER PROCUREMENT AND INSTALLATION.
3. USE MEGALUGS AT ALL PIPE JOINTS
4. PLEASE SEE METER INSTALL DIMENSION LIST ON STANDARD NO. 106-4

ENGINEERING STANDARDS 2022

REVISIONS BY	DATE
S.S.	05-2011
S.S.	11-2012
S.S.	12-2013
S.S.	11-2016

ENGINEERING DIVISION
CITY OF POMPANO BEACH

SCALE: N.T.S.

MASTER METER AND BACKFLOW DEVICE

DATE: MAY 2022
DWG. NO. 106-2

FIRE METERS - OS & Y VALVES, GASKETS & METER					2" MIN. TRAVEL
(NEPTUNE MACH 10 Ultrasonic Meter)					
			METER w/ Strainer	TOTAL LENGTH	
SIZE	VALVES (2)	GASKETS (4)			
3" w/ 4" X 3" Reducer **	16"	1/2"	30" **	46 1/2"	
4"	18"	1/2"	27 1/2"	46"	
6"	21"	1/2"	33"	54 1/2"	
8"	23"	1/2"	30"	53 1/2"	
10"	26"	1/2"	41"	67 1/2"	
FIRE &/or Domestic Water SERVICE METERS - TEES, OS & Y VALVES, GASKETS & METERS					
(NEPTUNE MACH 10 Ultrasonic Meter)				Meter w/ Strainer	TOTAL LENGTH
SIZE	TEES (2)	VALVES (2)	GASKETS (6)		
3" w/ 4" X 3" Reducer **	3" X 3" - 22"	16"	3/4"	30" **	68 3/4"
4"	4" X 3" - 26"	18"	3/4"	27 1/2"	72 1/4"
6"	6" X 4" - 32"	21"	3/4"	33"	86 3/4"
8"	8" X 4" - 36"	23"	3/4"	30"	89 3/4"
10"	10" X 6" - 44"	26"	3/4"	41"	111 3/4"

*All fittings, valves and meters are flanged & all dimensions are from face of flange to face of flange.

NOTE:
PLEASE NOTE THAT WATER METERS 3" AND LARGER ARE SUBJECT TO AN APPROXIMATE ORDER LEAD TIME OF 60 TO 75 BUSINESS DAYS AFTER FULL PAYMENT. PLEASE CONTACT CUSTOMER SERVICE AT 954-786-4637 TO ARRANGE FOR METER PROCUREMENT AND INSTALLATION. LARGE METERS MUST BE AT MINIMUM ORDERED PRIOR TO INITIAL INSPECTIONS.

ENGINEERING STANDARDS 2022

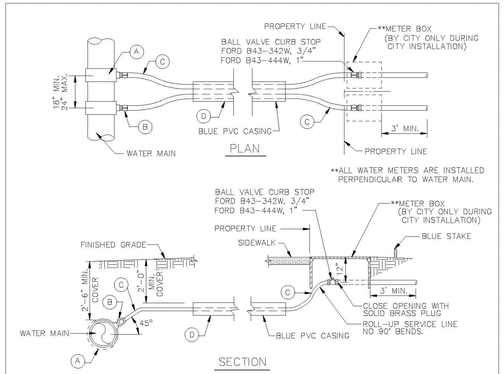
REVISIONS BY	DATE
T.W.	02-2008
S.S.	11-2016
A.S.	01-2022

ENGINEERING DIVISION
CITY OF POMPANO BEACH

SCALE: N.T.S.

METER INSTALL DIMENSION LIST

DATE: JAN. 2022
DWG. NO. 106-4



SINGLE SERVICE

- (A) 1" TAPPING SADDLE CC THREAD FORD
- (B) 1" CORPORATION STOP FORD TYPE F1000-4 NL THREADS
- (C) 1" POLYETHYLENE SOLID BLUE CTS SDR 18 (200 PSI)
- (D) 1 1/2" SCH. 40 FOR 1" SERVICE 2 1/2" SCH. 40 FOR 2" SERVICE PAINTED BLUE

DOUBLE SERVICE

- (A) 1" TAPPING SADDLE (2) FORD FC-202 OR EQUAL.
- (B) 1" CORPORATION STOP (2) FORD TYPE F1000
- (C) 1" POLYETHYLENE SOLID BLUE C.T.S. (2)
- (D) 2 1/2" SCH. 40 FOR 1" SERVICE 6" SCH. 40 FOR 2" SERVICE PAINTED BLUE

TYPICAL 3/4" AND 1" WATER SERVICE

ENGINEERING STANDARDS 2022

REVISIONS BY	DATE
T.W.	11-2007
S.S.	05-2012
S.S.	11-2015
A.S.	08-2021

ENGINEERING DIVISION
CITY OF POMPANO BEACH

SCALE: N.T.S.

TYPICAL 1" WATER SERVICE

DATE: MAY 2022
DWG. NO. 107-1

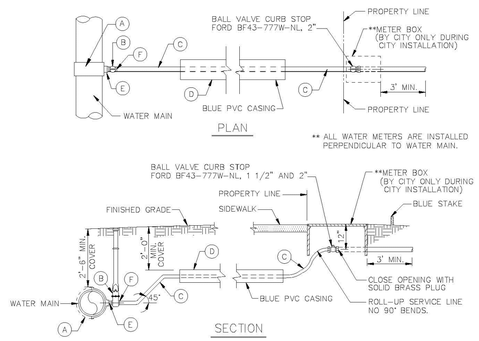
REVISIONS BY	DATE
REVISIONS	DATE: BY
FILE NAME: XXXXXXXXXXXX.DWG	

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

OAKS @ PALM AIRE

WATER DISTRIBUTION & SANITARY SEWER DETAILS

POMPANO BEACH, FLORIDA



(A) 2" TAPPING SADDLE IRON PIPE THREADED FORD FC-202 OR EQUAL.
(B) 2" RESILIENT SEATED GATE VALVE CLOW F61-03 MUELLER A-23-60-8 2" OPERATING NUT BOXED TO GRADE - C.I. BOX
(C) 2" POLYETHYLENE BLUE
(D) 2 1/2" SCH. 40
(E) 2" X 3" BRASS NIPPLE
(F) 2" MIP COUPLING C-84-77 - PACK JOINT - CTS

TYPICAL 1 1/2" AND 2" WATER SERVICE

ENGINEERING STANDARDS 2022

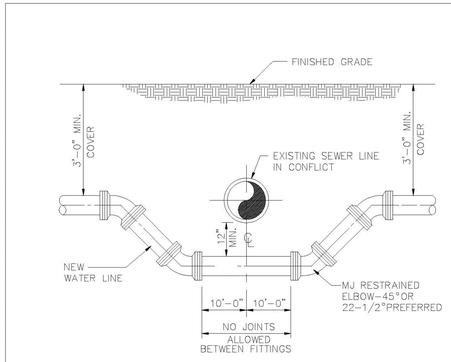
REVISIONS BY	DATE
S.S.	03-2011
S.S.	05-2012
S.S.	11-2018
A.S.	08-2021

ENGINEERING DIVISION
CITY OF POMPANO BEACH

SCALE: N.T.S.

TYPICAL 2" WATER SERVICE

DATE: APRIL 2022
DWG. NO. 107-2



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 2022

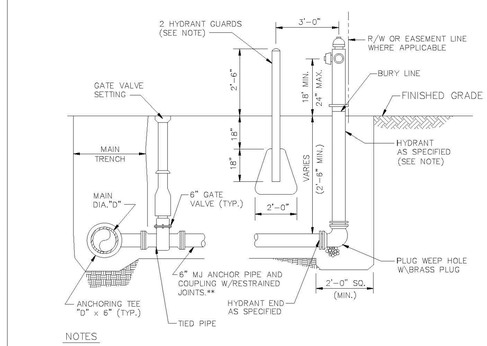
REVISIONS BY	DATE
S.S.	04-2005
S.S.	01-2012

ENGINEERING DIVISION
CITY OF POMPANO BEACH

SCALE: N.T.S.

TYPICAL CONFLICT (WATER)

DATE: MAY 2022
DWG. NO. 108-1



NOTES

HYDRANT GUARDS TO BE 6" DIAMETER GALVANIZED STEEL PIPE PAINTED YELLOW FILLED WITH CONCRETE. OMIT GUARDS IN LOCATIONS WHERE SIDEWALKS EXIST.

**USE 2-3/4" S.S. TIE RODS WHEN DISTANCE BETWEEN MAIN AND HYDRANT < 10'. TIE RODS WILL BE USED W/RESTRAINED JOINTS OR USE MEGALUGS AT ALL PIPE JOINTS

HYDRANTS INSTALLED ON EXISTING WATER MAINS MUST USE A MUELLER MJ DI TAPPING SLEEVE, H-615 OR APPROVED EQUAL.

HYDRANTS CONNECTED TO NEW MAINS SHALL BE CONNECTED USING A HYDRANT TEE.

ALL POMPANO BEACH HYDRANTS SHALL BE PAINTED RED.

TYPICAL FIRE HYDRANT ASSEMBLY

ENGINEERING STANDARDS 2022

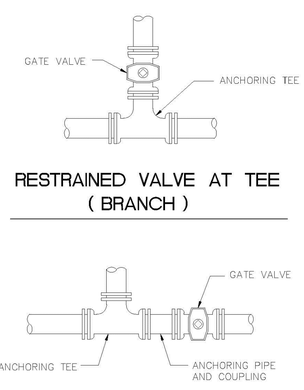
REVISIONS BY	DATE
T.W.	11-2007
T.W.	10-2010
S.S.	2-2012
S.S.	11-2012

ENGINEERING DIVISION
CITY OF POMPANO BEACH

SCALE: N.T.S.

FIRE HYDRANT ASSEMBLY

DATE: MAY 2022
DWG. NO. 109-1



USE MEGALUGS AT ALL PIPE JOINTS

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

ENGINEERING STANDARDS 2022

REVISIONS BY	DATE
S.S.	JUNE 2005

ENGINEERING DIVISION
CITY OF POMPANO BEACH

SCALE: N.T.S.

RESTRAINED VALVE AT TEE

DATE: MAY 2022
DWG. NO.

DATE	06/12/23
DRAWN BY	RHT
F.B./ PG.	N/A
SCALE	n.t.s.

Digitally signed by Ryan Wheeler
Date: 2025.06.20 11:51:34 -04'00'
Adobe Acrobat version: 2024.002.20687

RYAN D. WHEELER
PROFESSIONAL ENGINEER
LICENSE NO. 71477
STATE OF FLORIDA
- FOR THE FIRM -
DATEMay 20, 2025

JOB #10326
SHT.NO. WS.03
OF 8 SHEETS

P&Z

PZ23-12000017

06-25-2025

Drawing: P:\10326-00-00\drawings\engineer\10326WS.dwg\WS.03