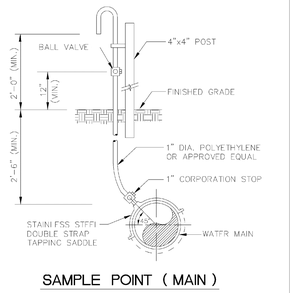
DRC
PZ23-12000042
04/03/2024

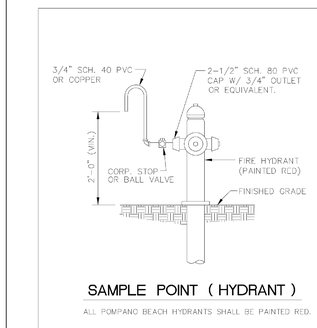


SAMPLE POINT (MAIN)

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

ENGINEERING STANDARDS 2022

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SAMPLE POINT (MAIN)
S.S.	04-2005	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 100-1



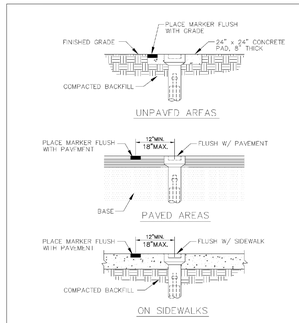
SAMPLE POINT (HYDRANT)

ALL POMPANO BEACH HYDRANTS SHALL BE PAINTED RED.

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

ENGINEERING STANDARDS 2022

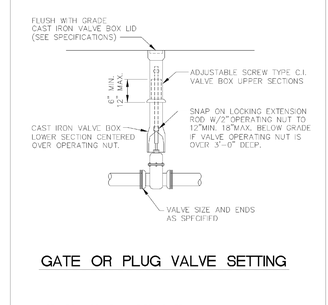
REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	SAMPLE POINT (HYDRANT)
S.S.	04-2005	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 101-1



VALVE BOX SETTINGS

ENGINEERING STANDARDS 2022

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	VALVE BOX SETTINGS
S.S.	04-2005	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 102-1



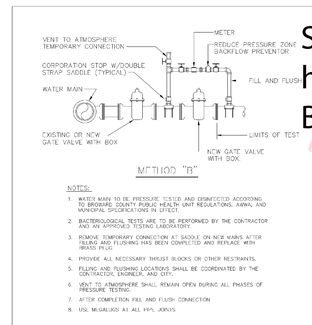
GATE OR PLUG VALVE SETTING

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	ENGINEERING DIVISION CITY OF POMPANO BEACH	GATE OR PLUG VALVE SETTINGS
S.S.	04-2005	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 103-1
T.W.	11-2007		



METHOD "B"

NOTES:

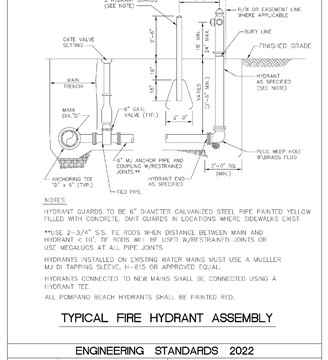
1. WATER MAIN TO BE PRESSURE TESTED AND DISINFECTED ACCORDING TO BROWARD COUNTY PUBLIC HEALTH UNIT REGULATIONS, AWWA, AND MUNICIPAL SPECIFICATIONS IN EFFECT.
2. BACTERIOLOGICAL TESTS ARE TO BE PERFORMED BY THE CONTRACTOR AND AN APPROVED TESTING LABORATORY.
3. REMOVE TEMPORARY CONNECTION AT SADDLE ON NEW MAINS AFTER FILLING AND FLUSHING HAS BEEN COMPLETED AND REPLACE WITH BRASS PLUG.
4. PROVIDE ALL NECESSARY THRUST BLOCKS OR OTHER RESTRAINTS.
5. FILLING AND FLUSHING LOCATIONS SHALL BE COORDINATED BY THE CONTRACTOR, ENGINEER, AND CITY.
6. VENT TO ATMOSPHERE SHALL REMAIN OPEN DURING ALL PHASES OF PRESSURE TESTING.
7. AFTER COMPLETION FILL AND FLUSH CONNECTION
8. USE MEGALUGS AT ALL PVC JOINTS

FILLING AND FLUSHING CONNECTION

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

ENGINEERING STANDARDS 2022

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	FILLING / FLUSHING CONNECTION
S.S.	04-2005	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 104-1
T.W.	11-2007		
S.S.	01-2012		



BACKFLOW PREVENTER

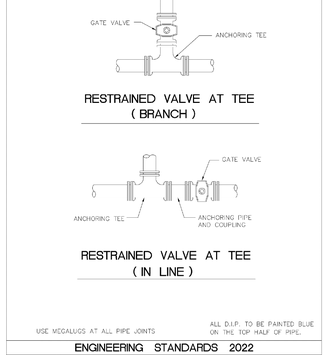
USE MEGALUGS AT ALL PIPE JOINTS 3" AND LARGER

PLEASE SEE METER INSTALL DIMENSION LIST ON STANDARD NO. 106-4

SMALL UNITS UNI-STRUT SUPPORT

ENGINEERING STANDARDS 2022

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	BACKFLOW PREVENTER
T.W.	04-2008	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 106-1
S.S.	03-2009		
S.S.	11-2012		
S.S.	01-2013		



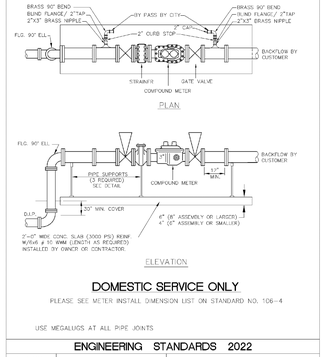
MASTER METER AND BACKFLOW DEVICE FIRE AND DOMESTIC COMBINED SOURCE

NOTES:

1. THE BACKFLOW PREVENTOR FOR THE BY-PASS SHALL BE DCCV 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	ENGINEERING DIVISION CITY OF POMPANO BEACH	MASTER METER AND BACKFLOW DEVICE
S.S.	05-2011	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 106-2
S.S.	11-2012		
S.S.	12-2013		
S.S.	11-2016		



FIRE ONLY METER AND BACKFLOW DEVICE DETAILS

NOTES:

1. THE BACKFLOW PREVENTOR FOR THE BY-PASS SHALL BE DCCV 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	ENGINEERING DIVISION CITY OF POMPANO BEACH	FIRE ONLY METER AND BACKFLOW DEVICE
S.S.	05-2011	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 106-3
S.S.	11-2012		
S.S.	12-2013		
S.S.	11-2016		

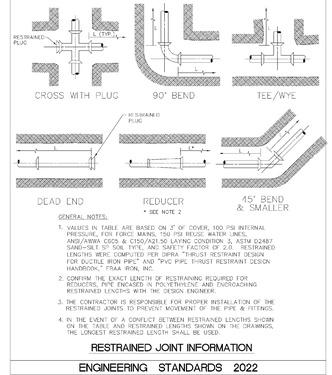
FIRE METERS - OS & Y VALVES, GASKETS & METER (NEPTUNE MACH 10 Ultrasonic Meter)					3" min. travel
SIZE	VALVES (2)	GASKETS (4)	METER w/ Strainer	TOTAL LENGTH	
3" w/ 4" X 3" Reducer **	16"	1/2"	30" **	46 1/2"	
4"	18"	1/2"	27 1/2"	46"	
6"	21"	1/2"	33"	54 1/2"	
8"	23"	1/2"	30"	53 1/2"	
10"	26"	1/2"	41"	67 1/2"	
FIRE &/or Domestic Water SERVICE METERS - TEES, OS & Y VALVES, GASKETS & METERS (NEPTUNE MACH 10 Ultrasonic Meter)					
SIZE	TEES (2)	VALVES (2)	GASKETS (6)	Meter w/ Strainer	TOTAL LENGTH
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	ENGINEERING DIVISION CITY OF POMPANO BEACH	METER INSTALL DIMENSION LIST
T.W.	02-2006	SCALE: N.T.S.	DATE: JAN. 2022 DWG. NO. 106-4
S.S.	11-2016		
A.S.	01-2022		



NOTES:

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

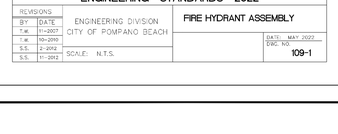
TYPICAL CONFLICT DETAIL

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	ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL CONFLICT (WATER)
S.S.	04-2005	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 108-1
S.S.	11-2012		



NOTES:

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

**USE 2-3/4" S.S. TIE RODS WHEN DISTANCE BETWEEN MAIN AND HYDRANT < 10'. TIE RODS ARE TO 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.

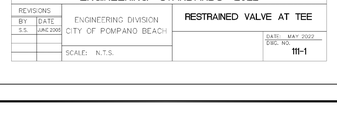
HYDRANTS CONNECTED TO NEW MAINS SHALL BE CONNECTED USING A HYDRANT TEE.

ALL POMPANO BEACH HYDRANTS SHALL BE PAINTED RED.

TYPICAL FIRE HYDRANT ASSEMBLY

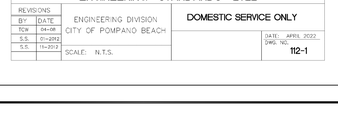
ENGINEERING STANDARDS 2022

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	FIRE HYDRANT ASSEMBLY
T.W.	11-2007	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 109-1
T.W.	10-2010		
S.S.	2-2012		
S.S.	11-2012		



ENGINEERING STANDARDS 2022

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	RESTRAINED VALVE AT TEE
S.S.	JUNE 2005	SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 111-1



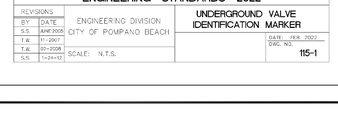
DOMESTIC SERVICE ONLY

PLEASE SEE METER INSTALL DIMENSION LIST ON STANDARD NO. 106-4

USE MEGALUGS AT ALL PIPE JOINTS

ENGINEERING STANDARDS 2022

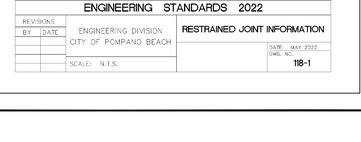
REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	DOMESTIC SERVICE ONLY
TCW	04-08	SCALE: N.T.S.	DATE: APRIL 2022 DWG. NO. 112-1
S.S.	01-2012		
S.S.	11-2012		



UNDERGROUND VALVE IDENTIFICATION MARKER

ENGINEERING STANDARDS 2022

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



* SEE NOTE 2

GENERAL NOTES:

1. VALUES IN TABLE ARE BASED ON 3' OF COVER, 100 PSI INTERNAL PRESSURE, FOS FORCE MAINS, 150 PSI REUSE WATER LINES, ANSI/AWWA C605 & C150/A21.50 LAYING CONDITION 3, ASTM D2487, SAND=SILT, 5% SOIL TYPE, AND SAFETY FACTOR OF 2.0. RESTRAINED LENGTHS WERE COMPUTED PER DIPRA "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AND "PVC PIPE THRUST RESTRAINT DESIGN HANDBOOK," FRAA IRON, INC.
2. CONFIRM THE EXACT LENGTH OF RESTRAINING REQUIRED FOR REDUCERS, PIPE ENCASED IN POLYETHYLENE AND ENCROACHING RESTRAINED LENGTHS WITH THE DESIGN ENGINEER.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPER INSTALLATION OF THE RESTRAINED JOINTS TO PREVENT MOVEMENT OF THE PIPE & FITTINGS.
4. IN THE EVENT OF A CONFLICT BETWEEN RESTRAINED LENGTHS SHOWN ON THE PLANS AND LENGTHS SHOWN IN THE TABLE ON THE DRAWINGS, THE LONGEST RESTRAINED LENGTH SHALL BE VALID.

RESTRAINED JOINT INFORMATION

ENGINEERING STANDARDS 2022

REVISIONS BY	DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	RESTRAINED JOINT INFORMATION
		SCALE: N.T.S.	DATE: MAY 2022 DWG. NO. 118-1

BTE REF DATE: 2-21-2024

REVISIONS #	DATE

Stephen Botek
Digitally signed by Stephen Botek
Date: 2024.02.27 13:13:20 -05'00'

STEPHEN F. BOTEK
LICENSE
No. 55335
STATE OF FLORIDA
PROFESSIONAL ENGINEER
February 27, 2024

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY STEPHEN F. BOTEK, P.E. 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.

Celebrating 15 Years

WATER AND SANITARY SEWER DETAILS

POMPANO HOTEL
101 SOUTH OCEAN BOULEVARD
POMPANO BEACH, FL

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3409 NW 9th Avenue, Suite 1102, Ft. Lauderdale, FL 33309
www.botekthurlow-eng.com p: 954-568-0888 f: 954-568-9757

BTE PROJECT #: 23-0701

PROJECT DATE: 09-05-2023

SHEET #: C-3