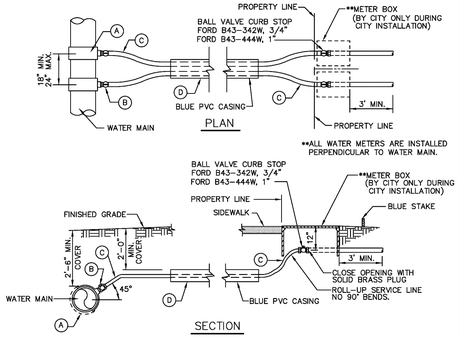
FIRE METERS - OS & Y VALVES, GASKETS & METER					2" MIN. TRAVEL
(NEPTUNE MACH 10 Ultrasonic Meter)					
			METER w/	TOTAL	
SIZE	VALVES (2)	GASKETS (4)	Strainer	LENGTH	
3" w/ 4" X 3" Reducer **	16"	1/2"	30" **	46 1/2"	
4"	18"	1/2"	27 1/2"	46"	
6"	21"	1/2"	33"	54 1/2"	
8"	23"	1/2"	30"	53 1/2"	
10"	26"	1/2"	41"	67 1/2"	
FIRE &/or Domestic Water SERVICE METERS - TEES, OS & Y VALVES, GASKETS & METERS					
(NEPTUNE MACH 10 Ultrasonic Meter)			Meter w/	TOTAL	
SIZE	TEES (2)	VALVES (2)	GASKETS (6)	Strainer	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 2025

REVISIONS		ENGINEERING DIVISION CITY OF POMPANO BEACH	METER INSTALL DIMENSION LIST
BY	DATE		DATE: JAN. 2022
T.W.	02-2008		DWG. NO. 106-4
S.S.	11-2016		
A.S.	01-2022	SCALE: N.T.S.	



(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

(A) 1" TAPPING SADDLE (2) FORD FC-202 OR EQUAL.

(B) 1" CORPORATION STOP (2) FORD TYPE F1000

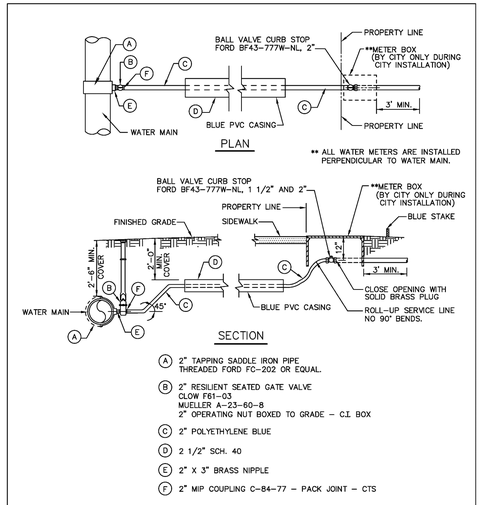
(C) 1" POLYETHYLENE SOLID BLUE C.T.S. (2)

(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 2025

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



(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

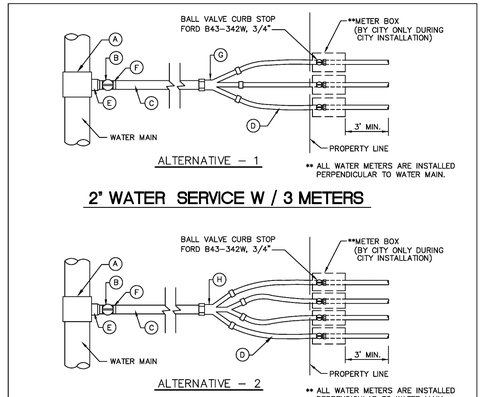
(E) 2" X 3" BRASS NIPPLE

(F) 2" MIP COUPLING C-84-77 - PACK JOINT - CTS

TYPICAL 1 1/2" AND 2" WATER SERVICE

ENGINEERING STANDARDS 2025

REVISIONS		ENGINEERING DIVISION CITY OF POMPANO BEACH	TYPICAL 2" WATER SERVICE
BY	DATE		DATE: APRIL 2022
S.S.	05-2011		DWG. NO. 107-2
S.S.	05-2012		
S.S.	11-2018		
A.S.	08-2021	SCALE: N.T.S.	



2" WATER SERVICE W / 3 METERS

2" WATER SERVICE W / 4 METERS

(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" BLUE POLYETHYLENE

(D) 1" POLYETHYLENE SOLID BLUE C.T.S. (3)

(E) 2" X 4" BRASS NIPPLE

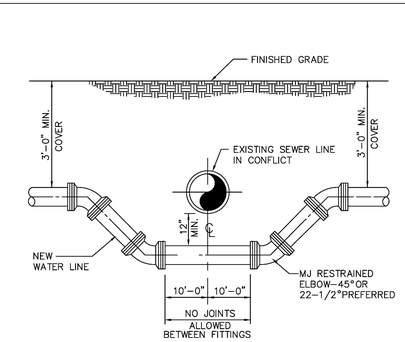
(F) 2" MIP COUPLING C-84-77 - PACK JOINT - CTS

(G) 3 "Y" BRANCHES - Y48-347 FORD

(H) 4 "Y" BRANCHES - 08Y4QQ A.Y. McDONALD

ENGINEERING STANDARDS 2025

REVISIONS		ENGINEERING DIVISION CITY OF POMPANO BEACH	2" WATER SERVICE "Y" BRANCHES ALTERNATIVES
BY	DATE		DATE: MAY 2022
S.S.	11-2012		DWG. NO. 107-3
		SCALE: N.T.S.	



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

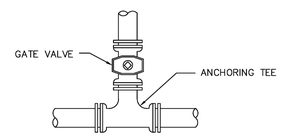
TYPICAL CONFLICT DETAIL

USE MEGALUGS AT ALL PIPE JOINTS

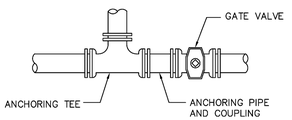
ALL D.I.P. TO BE PAINTED BLUE ON TOP HALF OF PIPE.

ENGINEERING STANDARDS 2025

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



RESTRAINED VALVE AT TEE (BRANCH)



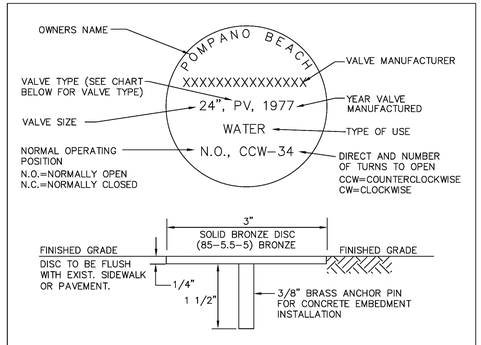
RESTRAINED VALVE AT TEE (IN LINE)

USE MEGALUGS AT ALL PIPE JOINTS

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

ENGINEERING STANDARDS 2025

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



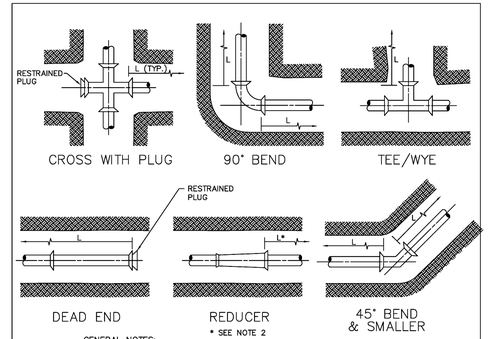
VALVE TYPES
BALL VALVE---BALLV
RESILIENT WEDGE GATE VALVE--RWGV
BUTTERFLY VALVE---BV
PLUG VALVE---PV

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



GENERAL NOTES:
1. VALUES IN TABLE ARE BASED ON 3' OF COVER, 100 PSI INTERNAL PRESSURE, FOR FORCE MAINS, 150 PSI REUSE WATER LINES, ANSI/AWWA C605 & C150/A21.50 LAYING CONDITION 3, ASTM D2487 SAND-SILT SP 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," EBAA 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 TABLE AND RESTRAINED LENGTHS SHOWN ON THE DRAWINGS, THE LONGEST RESTRAINED LENGTH SHALL BE USED.

RESTRAINED JOINT INFORMATION

ENGINEERING STANDARDS 2025

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

DATE:	04/30/25
SCALE:	AS SHOWN
DESIGN BY:	CEE
DRAWN BY:	TR
CHECKED BY:	CEE
APPROVED BY:	CEE

BY:	DATE:	DESCRIPTION:

CRAVEN • THOMPSON AND ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS
3563 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
TEL.: (954) 739-6400 FAX: (954) 739-6409
FLORIDA LICENSED ENGINEERING, SURVEYING & MAPPING BUSINESS No. 271
FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS No. C000314

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1501 WEST ATLANTIC BLVD.
POMPANO BEACH, FLORIDA

PREPARED FOR:
KAJA PROPERTIES INC.

WATER AND SEWER DETAILS

Chad Everett Edwards
Digitally signed by Chad Everett Edwards
Date: 2025.07.07 13:51:47 -04'00'

CHAD E. EDWARDS, P.E.
FLORIDA LICENSE No. 59306
2025-07-02

PROJECT NO.
24-0055-001-01

C-10
SHEET 10 OF 14

CHAD E. EDWARDS LICENSE No. 59306 STATE OF FLORIDA PROFESSIONAL ENGINEER

This document has been digitally signed and sealed by Chad Everett Edwards, P.E. on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

AAC
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08.20.2025

\\ctafile02\Eng\Projects\2024\24-0055-001-01 1501 West Atlantic - Truck Wash\24-0055 WSD.dwg [C-10] Jul 02, 2025 1:22pm TRUBINO