DRC
PZ25-12000043
03/04/2026

BROWARD COUNTY
PUBLIC WORKS DEPARTMENT
WATER & WASTEWATER SERVICES
ENGINEERING DIVISION
2555 WEST COPANS ROAD
POMPANO BEACH, FL 33069
PHONE NO. 954-831-0745
FAX: 954-831-0928

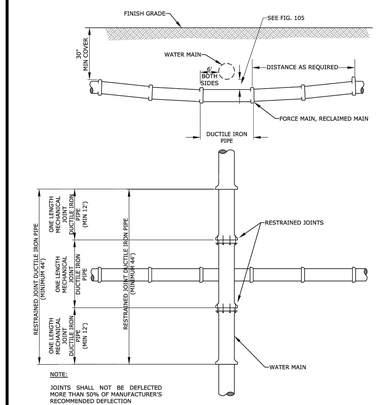
STANDARD DETAIL

WATER MAIN SEPARATION IN ACCORDANCE WITH F.A.C. RULE 62-555.314

	JOINT SPACING @ CROSSINGS (FULL LENGTH CENTERED)	CROSSINGS (1) (4)	HORIZONTAL SEPARATION
WATER MAIN	Alternate 3 ft. minimum	12 inches preferred 6 inches minimum, except for storm sewer, then 12 inches preferred 6 inches minimum, except for storm sewer, then 12 inches is preferred	3 ft. minimum
VACUUM SANITARY SEWER	Alternate 3 ft. minimum	12 inches preferred 6 inches min	10 ft. preferred 3 ft. minimum
GRAVITY SANITARY SEWER (3), SANITARY SEWER FORCE MAIN, RECLAIMED WATER	Alternate 6 ft. minimum	12 inches is the minimum, except for storm sewer, then 12 inches preferred 6 inches minimum, except for storm sewer, then 12 inches is preferred	6 ft. preferred 3 ft. minimum
STORM SEWER, STORM WATER FORCE MAIN, RECLAIMED WATER (2)	—	—	10 ft. minimum

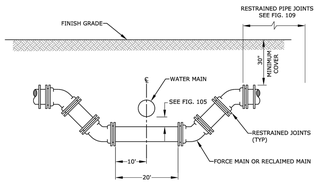
(1) WATER MAIN, SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
(2) SEPARATION REQUIREMENTS APPLY TO PARALLEL INSTALLATIONS ONLY. NO SEPARATION REQUIRED FOR CROSSINGS.
(3) 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
(4) 18" VERTICAL MINIMUM SEPARATION REQUIRED BY WWS, UNLESS OTHERWISE APPROVED.

REVISED		FIGURE
7/7/2021	WATER MAIN SEPARATION	105



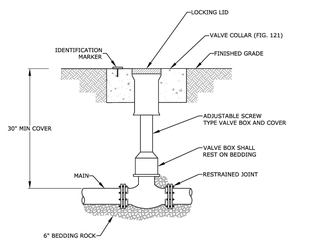
NOTE:
JOINTS SHALL NOT BE DEFLECTED MORE THAN 50% OF MANUFACTURER'S RECOMMENDED DEFLECTION

REVISED		FIGURE
7/7/2021	STANDARD UTILITY CROSSING	106



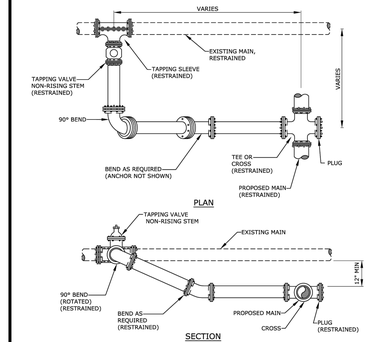
WHEREVER POSSIBLE DEFLECTION OF THE PIPE WILL BE USED TO AVOID EXISTING OBSTRUCTIONS. THIS CROSSING SHALL BE USED ONLY WHEN APPROVED BY WWS.

REVISED		FIGURE
7/7/2021	SPECIAL UTILITY CROSSING	107



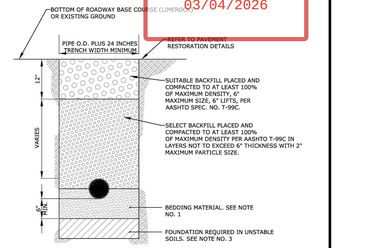
1. WHEN VALVE IS NOT LOCATED IN PAVEMENT, PLACE A WHITE REFLECTIVE RAISED PAVEMENT MARKER IN THE DRIVE LANE, ADJACENT TO THE VALVE.
2. OPERATOR EXTENSION SHAFT SHALL BE PROVIDED WHEN OPERATING NUT IS MORE THAN 24" BELOW TOP OF VALVE BOX.
3. PVC PIPE OR DUCTILE IRON PIPE IS NOT ACCEPTABLE FOR VALVE BOX RISER.

REVISED		FIGURE
7/7/2021	VALVE BOX DETAIL	123



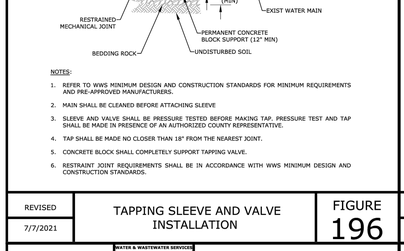
NOTES:
1. ALL JOINTS TO BE RESTRAINED BY APPROVED METHODS.
2. IF CONNECTION IS PRIOR TO PDEP CLEARANCE THEN A SECOND VALVE WITH VENT IS REQUIRED.

REVISED		FIGURE
7/7/2021	TYPICAL CONNECTION TO EXISTING MAIN	131



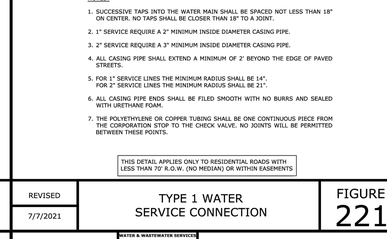
NOTES:
1. UNLESS OTHERWISE SPECIFIED, BEDDING MATERIAL SHALL CONSIST OF SELECT BACKFILL MATERIAL 2" MAXIMUM PARTICLE SIZE, COMPACTED TO AT LEAST 100% OF MAX. DENSITY, 6" LIFTS, PER AASHTO SPEC. NO. T-99C.
2. WHERE REQUIRED, SHEETING AND SHORING SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS.
3. WHERE UNSTABLE SOILS ARE ENCOUNTERED, INCLUDING PEAT, MUCK OR OTHER ORGANIC SOILS, ELASTIC SILT AND CLAYS, A FOUNDATION IS REQUIRED AS DETERMINED BY THE ENGINEER OF RECORD.

REVISED		FIGURE
7/7/2021	TYPICAL TRENCH BACKFILL	180



NOTES:
1. REFER TO WWS MINIMUM DESIGN AND CONSTRUCTION STANDARDS FOR MINIMUM REQUIREMENTS AND PRE-APPROVED MANUFACTURERS.
2. MAIN SHALL BE CLEANED BEFORE ATTACHING SLEEVE
3. SLEEVE AND VALVE SHALL BE PRESSURE TESTED BEFORE MAKING TAP. PRESSURE TEST AND TAP SHALL BE MADE IN PRESENCE OF AN AUTHORIZED COUNTY REPRESENTATIVE.
4. TAP SHALL BE MADE NO CLOSER THAN 18" FROM THE NEAREST JOINT.
5. CONCRETE BLOCK SHALL COMPLETELY SUPPORT TAPPING VALVE.
6. RESTRAINT JOINT REQUIREMENTS SHALL BE IN ACCORDANCE WITH WWS MINIMUM DESIGN AND CONSTRUCTION STANDARDS.

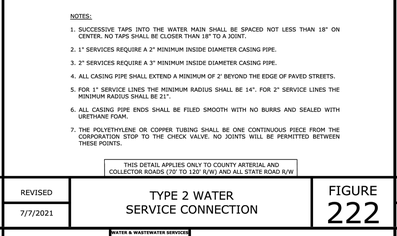
REVISED		FIGURE
7/7/2021	TAPPING SLEEVE AND VALVE INSTALLATION	196



NOTES:
1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED NOT LESS THAN 18" ON CENTER. NO TAPS SHALL BE CLOSER THAN 18" TO A JOINT.
2. 1" SERVICE REQUIRE A 2" MINIMUM INSIDE DIAMETER CASING PIPE.
3. 2" SERVICE REQUIRE A 3" MINIMUM INSIDE DIAMETER CASING PIPE.
4. ALL CASING PIPE SHALL EXTEND A MINIMUM OF 2' BEYOND THE EDGE OF PAVED STREETS.
5. FOR 1" SERVICE LINES THE MINIMUM RADIUS SHALL BE 14". FOR 2" SERVICE LINES THE MINIMUM RADIUS SHALL BE 21".
6. ALL CASING PIPE ENDS SHALL BE FILED SMOOTH WITH NO BURRS AND SEALED WITH URETHANE FOAM.
7. THE POLYETHYLENE OR COPPER TUBING SHALL BE ONE CONTINUOUS PIECE FROM THE CORPORATION STOP TO THE CHECK VALVE. NO JOINTS WILL BE PERMITTED BETWEEN THESE POINTS.

THIS DETAIL APPLIES ONLY TO RESIDENTIAL ROADS WITH LESS THAN 70' R.O.W. (NO MEDIAN) OR WITHIN EASEMENTS

REVISED		FIGURE
7/7/2021	TYPE 1 WATER SERVICE CONNECTION	221



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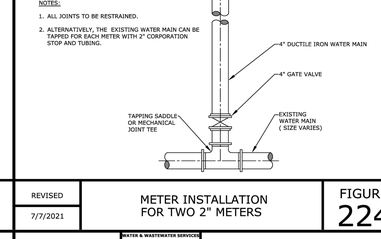
7. THE POLYETHYLENE OR COPPER TUBING SHALL BE ONE CONTINUOUS PIECE FROM THE CORPORATION STOP TO THE CHECK VALVE. NO JOINTS WILL BE PERMITTED BETWEEN THESE POINTS.

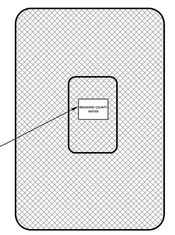
THIS DETAIL APPLIES ONLY TO COUNTY ARTERIAL AND COLLECTOR ROADS (70' TO 120' R/W) AND ALL STATE ROAD R/W

REVISED		FIGURE
7/7/2021	TYPE 2 WATER SERVICE CONNECTION	222

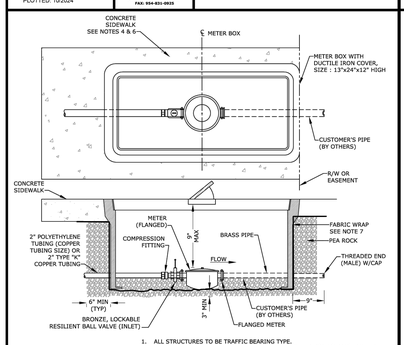


NOTES:
1. ALL JOINTS TO BE RESTRAINED.
2. ALTERNATIVELY, THE EXISTING WATER MAIN CAN BE TAPPED FOR EACH METER WITH 2" CORPORATION STOP AND TUBING.

REVISED		FIGURE
7/7/2021	METER INSTALLATION FOR TWO 2" METERS	224



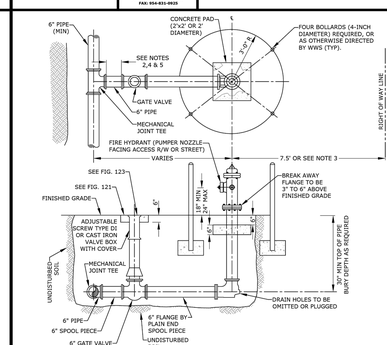
REVISED		FIGURE
7/7/2021	POTABLE WATER METER BOX COVER	225



METER SIZE	LAYING LENGTH (IN)	HEIGHT (IN)
1 ½"	13	6 ⅜"
2"	17	7 ⁷⁄₁₆"

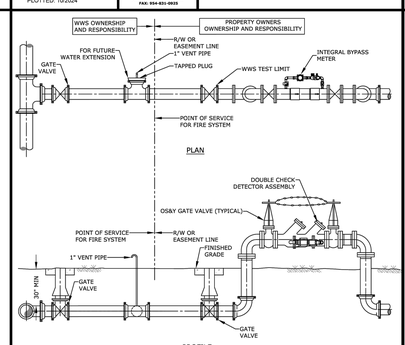
1. ALL STRUCTURES TO BE TRAFFIC BEARING TYPE.
2. CURVE IN SERVICE LINE SHALL BE AS CLOSE TO METER BOX AS PRACTICAL, WITH A MINIMUM RADIUS SHALL BE 21" FOR 2" TUBING.
3. ALL METERS WILL BE SUPPLIED AND INSTALLED BY WWS. METERS ARE FLANGED.
4. WHEN SIDEWALKS ARE PRESENT, OR PLANNED FOR IN THE R/W, THE BACK EDGE OF THE METER BOX SHALL LINE UP WITH THE BACK EDGE OF THE SIDEWALK.
5. METER SHALL BE CENTERED IN BOX DIRECTLY UNDER THE ACCESS LID.
6. WHEN THERE ARE NO SIDEWALKS, CONSTRUCT 6" WIDE x 6' THICK CONCRETE COLLAR AT GRADE.
7. AT BOTH PIPE PENETRATIONS THROUGH THE FABRIC WRAP, THE FABRIC SHALL BE PULLED TIGHT AROUND THE PIPE AND SECURED WITH TWO GRADE 316 STAINLESS STEEL HOSE CLAMPS TO PROVIDE A TIGHT SEAL AROUND PIPE.

REVISED		FIGURE
7/7/2021	WATER METER INSTALLATION FOR 1 ½" OR 2" METERS	228



1. HYDRANT COATED WITH OSHA SAFETY YELLOW REFLECTIVE PAINT.
2. USE RESTRAINED JOINTS FOR THE ENTIRE ASSEMBLY SHOWN.
3. HYDRANT SET BACK SHALL CONFORM TO FDOT AND NCHCED REQUIREMENTS, WHERE APPLICABLE.
4. GATE VALVE IS NORMALLY LOCATED NEXT TO TEE.
5. IF DISTANCE FROM MAIN LINE TO FIRE HYDRANT IS GREATER THAN 20 FEET ANOTHER GATE VALVE WILL BE PROVIDED CLOSE TO THE HYDRANT. THIS SECOND VALVE SHALL BE INSTALLED WITHIN 5' OF THE FIRE HYDRANT.
6. HYDRANT FEED PIPE MAY BE TAPPED FOR A SERVICE LINE UPSTREAM OF THE ISOLATION GATE VALVE.
7. A BLUE RAISED REFLECTIVE PAVEMENT MARKER SHALL BE PLACED AT THE CENTER LINE OF THE OUTSIDE ROADWAY LANE TO IDENTIFY THE FIRE HYDRANT LOCATION.

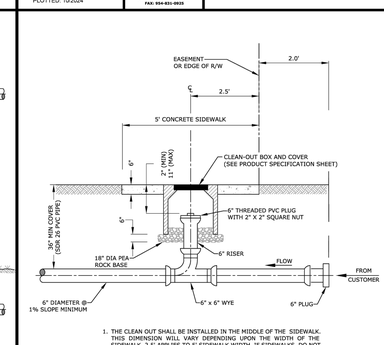
REVISED		FIGURE
10/17/2021	FIRE HYDRANT INSTALLATION	231



1. THE DOUBLE CHECK DETECTOR ASSEMBLY SHALL BE PRIVATELY OWNED BY PROPERTY OWNER. WWS WILL ONLY MAINTAIN THE BYPASS METER.
2. FIRE SYSTEM TO BE CONSTRUCTED/TESTED IN ACCORDANCE WITH NFPA STDS. & ALL APPLICABLE CODES.
3. 1" VENT PIPE TO BE REMOVED AFTER WWS APPROVAL.
4. INTEGRAL BYPASS METER MUST COME WITH A RED REGISTER CAP METER.
5. PROVIDE RED POLYURETHANE COATING.

DEDICATED FIRE SYSTEM

REVISED		FIGURE
7/7/2021	TYPE 1 PRIVATE FIRE PROTECTION 4", 6" AND 8" DIAMETER CONNECTION	235



1. THE CLEAN OUT SHALL BE INSTALLED IN THE MIDDLE OF THE SIDEWALK. THIS DIMENSION WILL VARY DEPENDING UPON THE WIDTH OF THE SIDEWALK. 2.5' APPLIES TO 5' SIDEWALK WIDTH. IF SIDEWALKS DO NOT EXIST, THE CLEAN OUT SHALL BE INSTALLED 2.5' FROM THE RIGHT OF WAY LINE.
2. A NEW SECTION OF SIDEWALK SHALL BE POURED AROUND THE CLEAN-OUT BOX WHEN WORKING IN AN AREA WITH EXISTING SIDEWALKS.
3. IN GRASS AREA USE 24"x24" OR 24" DIAMETER CONCRETE COLLAR.

REVISED		FIGURE
7/7/2021	SEWER SERVICE CONNECTION AT PROPERTY LINE OR EASEMENT LINE PROFILE	341

MICHAEL P. CARR
LICENSE
No. 72424
STATE OF FLORIDA
PROFESSIONAL ENGINEER
SIGNATURE
DATE SIGNED
MICHAEL CARR
PROFESSIONAL ENGINEER FL Lic. No. 72424

This item has been digitally signed and sealed by Michael Carr, PE. on the date adjacent to the seal
Signature must be verified on any electronic copies.

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Project
FESTIVAL SOUTH
NW 33RD ST
POMPANO BEACH
BROWARD COUNTY FLORIDA

Drawing Title
UTILITY DETAILS

Project No.	Drawing No.
330134202	C-6.0
Date: JANUARY 2026	
Drawn By: DMP	
Checked By: CL	

Date	Description	No.

Revisions

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Project No. 330134202
Date: 1/27/2026 Time: 21:01 User: ewhitemarin Style Table: Langan.stb Layout: C-6.0 Document Code: 330134202-0501-CU501-0101