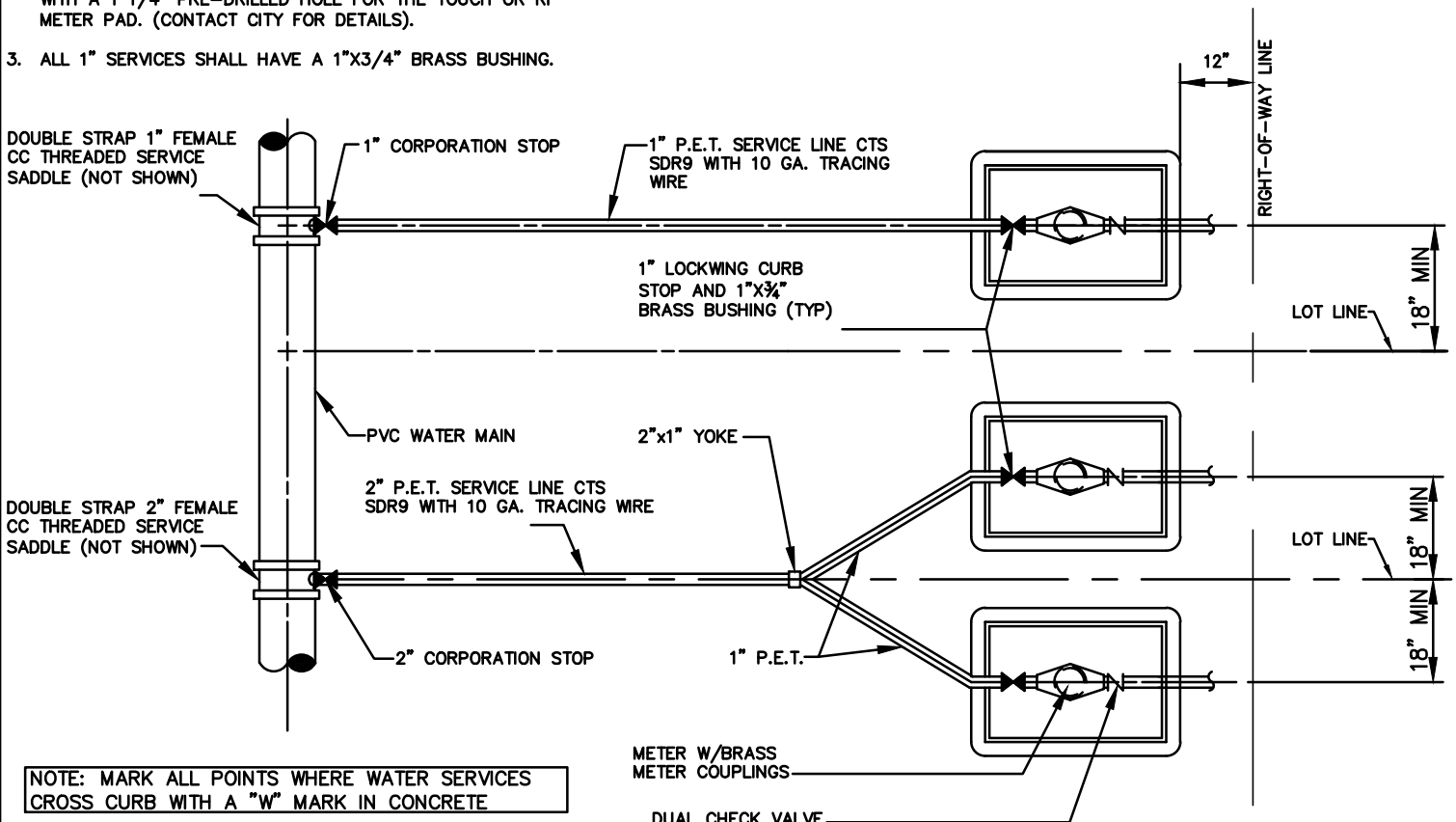


NOTES:

1. METERS TO BE INSTALLED BY THE CITY OF TAVARES.
2. ALL METER BOXES SHALL BE STANDARD PLASTIC RECTANGLE WITH A 1 1/4" PRE-DRILLED HOLE FOR THE TOUCH OR RF METER PAD. (CONTACT CITY FOR DETAILS).
3. ALL 1" SERVICES SHALL HAVE A 1"x3/4" BRASS BUSHING.

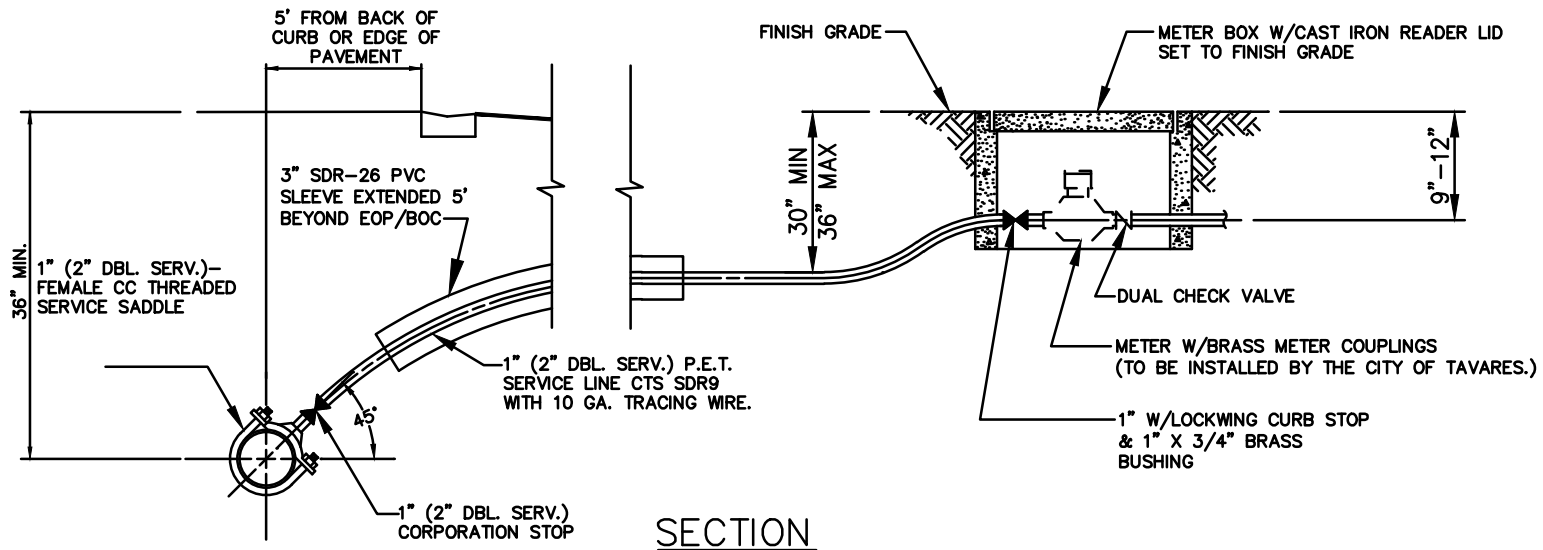


NOTE: MARK ALL POINTS WHERE WATER SERVICES CROSS CURB WITH A "W" MARK IN CONCRETE

METER W/BRASS METER COUPLINGS

DUAL CHECK VALVE

PLAN



SECTION

SERVICE CONNECTION—SINGLE FAMILY

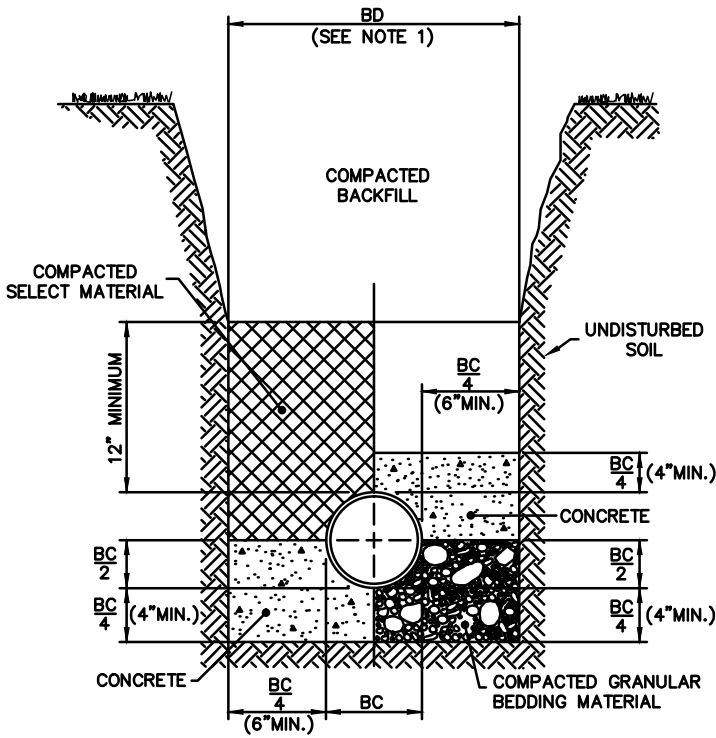
NOT TO SCALE

(NOTE: METERS TO BE INSTALLED BY CITY OF TAVARES.)

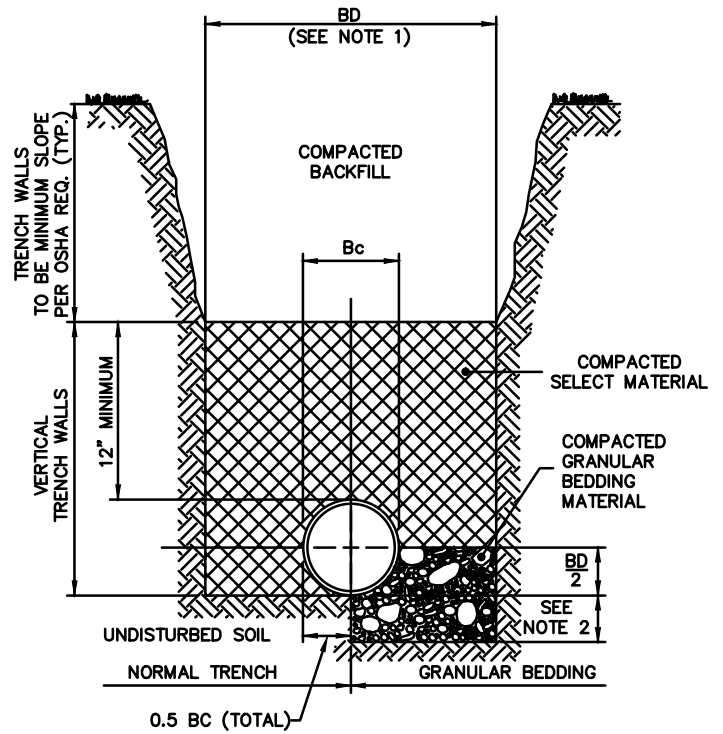


Howey—in—the—Hills
Standard Details

DATE: FEB 2022
DETAIL PW-1



CLASS "A" BEDDING
SPECIAL CONDITIONS



CLASS "B" BEDDING
NORMAL CONDITIONS

NOTES: FOR BEDDING AND TRENCHING

1. DIMENSION BC = PIPE O.D.
DIMENSION BD = TRENCH WIDTH AT TOP OF PIPE
MAXIMUM BD = BC + 30"
MINIMUM BD = MAXIMUM DIMENSION OF BELL + 8" (UNSHETED TRENCH)
2. DEPTH FOR REMOVAL FOR UNSUITABLE MATERIAL SHALL BE AS REQUIRED TO REACH SUITABLE FOUNDATION. FOR ROCK OR OTHER NON-CUSHIONING MATERIAL, DEPTH SHALL BE 6" BELOW BOTTOM OF UTILITY.
3. ALL BACKFILL AND SELECT MATERIAL UNDER ALL ROADWAYS, DRIVES (INCLUDING DIRT DRIVES), AND PARKING AREAS SHALL BE COMPACTED TO 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. (AASHTO T-180). BACKFILL AND SELECT MATERIAL UNDER ALL OTHER AREAS SHALL BE COMPACTED AS FOLLOWS: FROM BOTTOM OF TRENCH TO 12" ABOVE TOP OF PIPE - 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180). FROM 12" ABOVE TOP OF PIPE TO TOP OF BACKFILL - 90% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180)

TRENCHING AND BEDDING

NOT TO SCALE

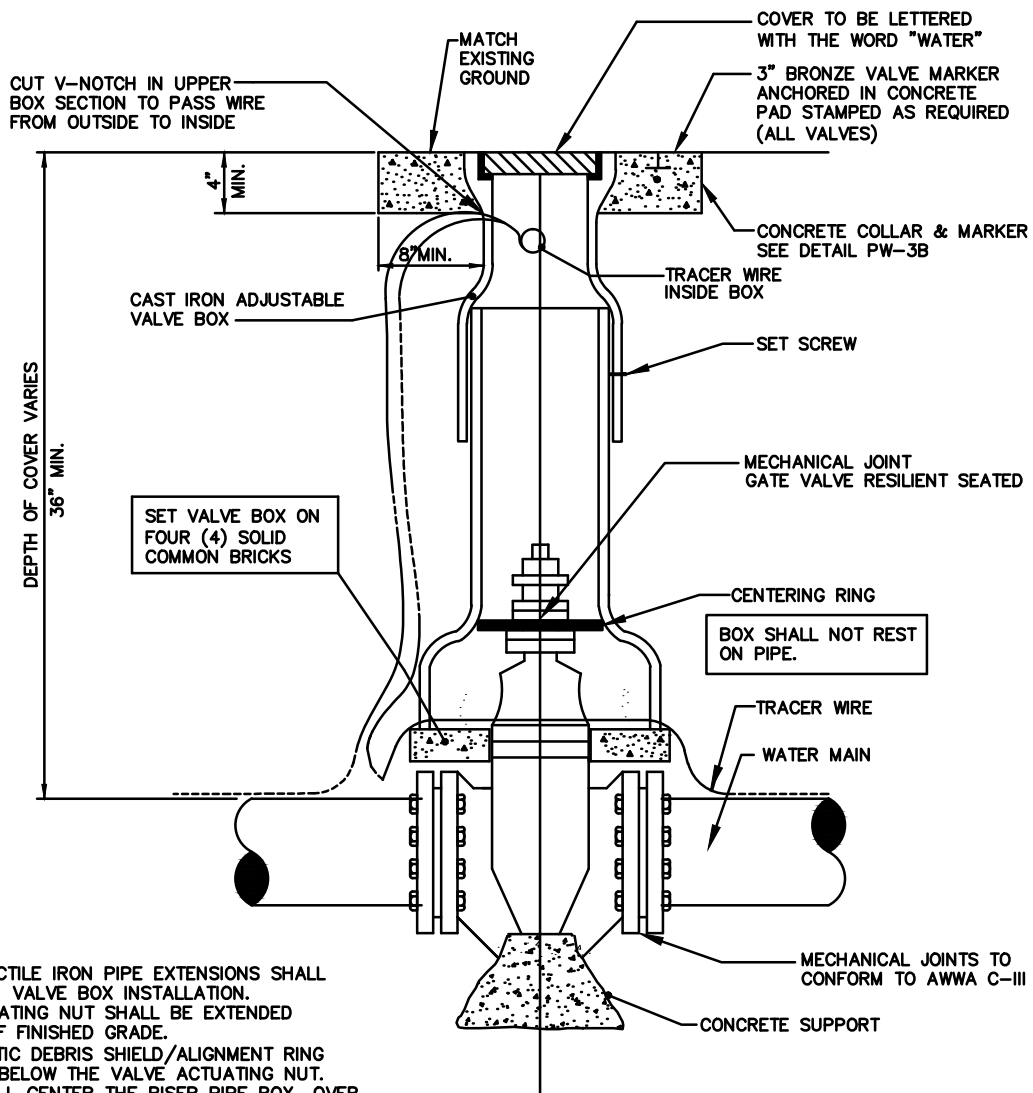


Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-2



NOTES

1. PVC PIPE OR DUCTILE IRON PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED WITHIN 2 FEET OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD/ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
5. VALVE BOX SHALL BE A TWO PIECE SCREW TYPE.

GATE VALVE AND BOX

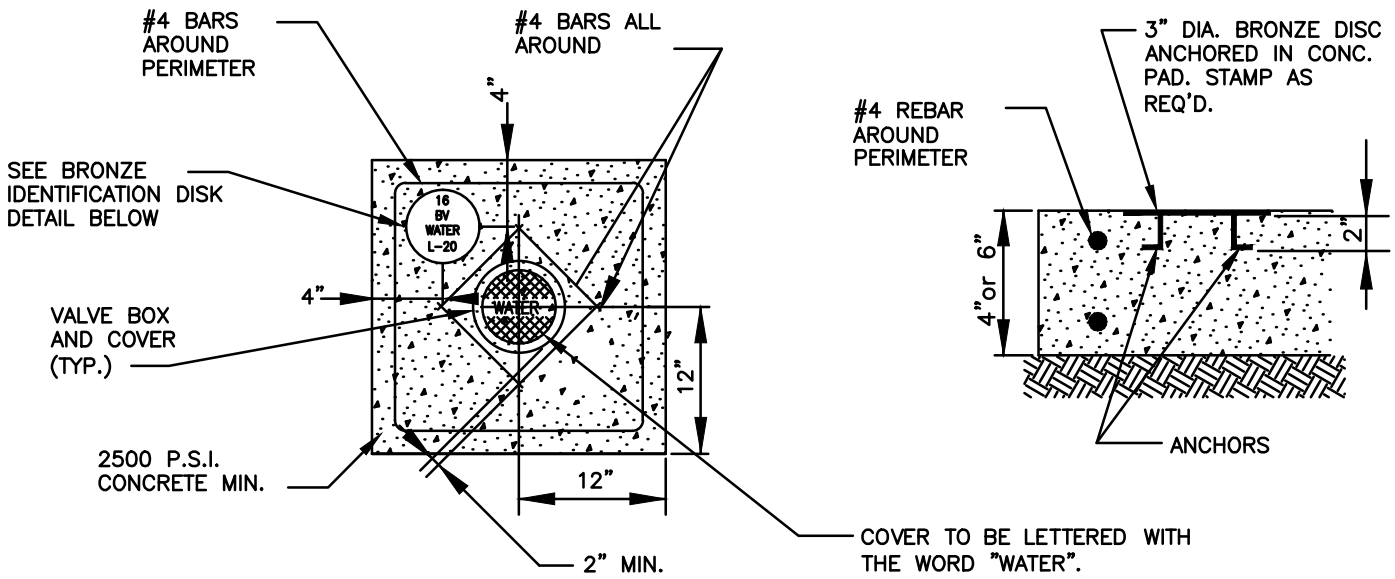
NOT TO SCALE



Howey-in-the-Hills
Standard Details

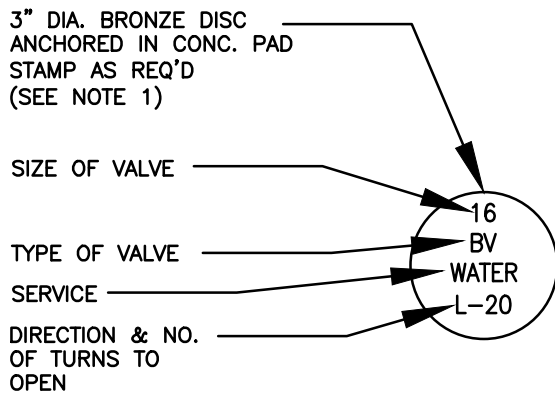
DATE: FEB 2022

DETAIL PW-3A



NOTE:

1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.
2. 6" THICK CONCRETE PAD IN ROADWAY OR PAVED AREAS, 4" THICK CONCRETE PAD IN OTHER AREAS.



BRONZE IDENTIFICATION DISC DETAIL

VALVE COLLAR

NOT TO SCALE

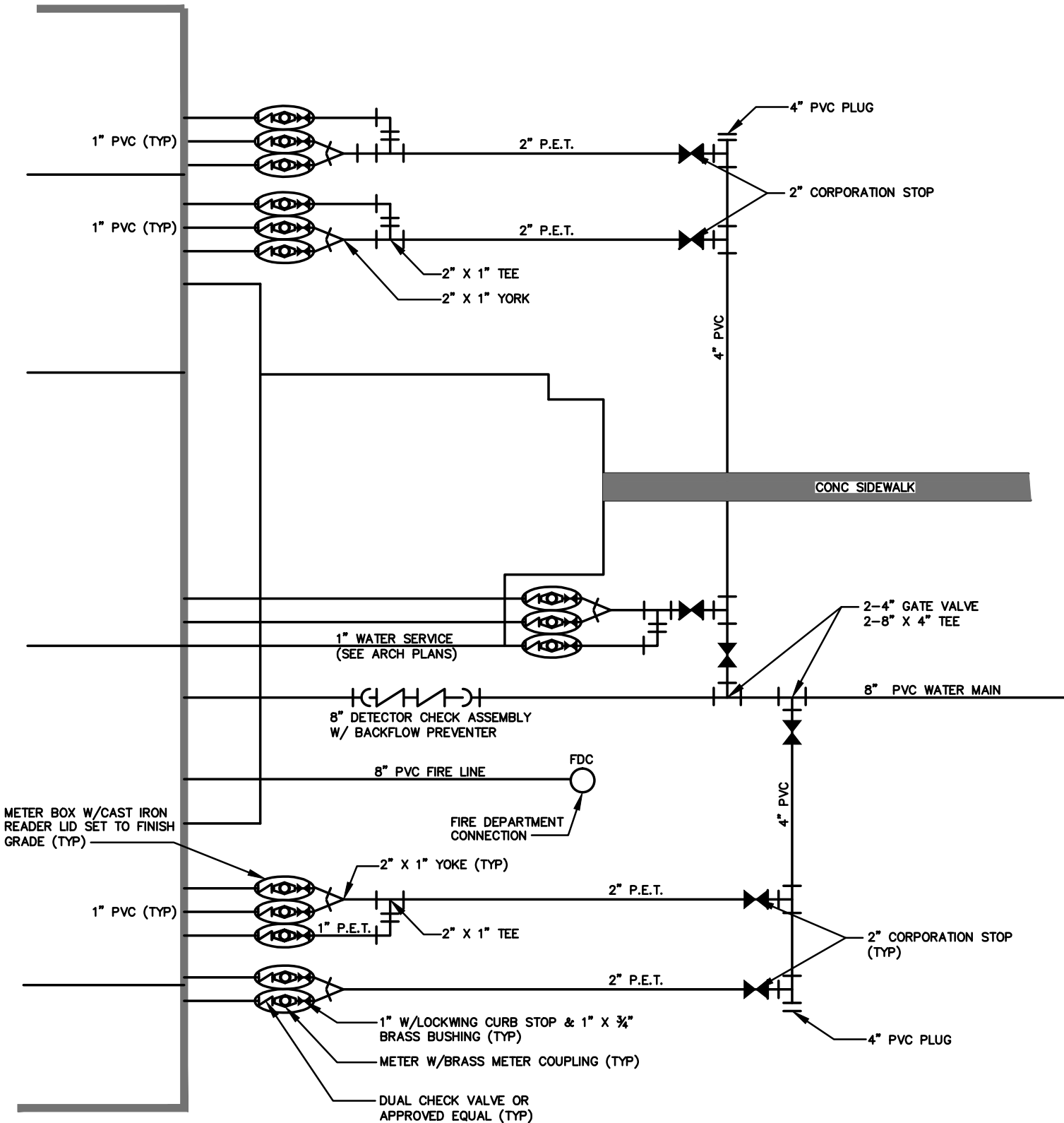


Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-3B

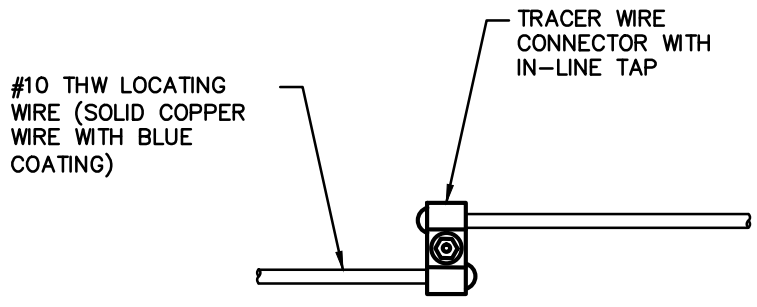


SERVICE CONNECTION—CONDOS
 NOT TO SCALE



Howey—in—the—Hills
 Standard Details

DATE: FEB 2022
DETAIL PW-4



NOTES:

1. TRACER WIRE CONNECTOR SHALL BE DIRECT BURY, SELF-STRIPPING, LOCKING.
2. AFTER INSTALLATION OF THE LOCATING WIRE THE SYSTEM SHALL BE SUBJECTED TO TESTING, IN THE PRESENCE OF CITY UTILITY DIRECTOR OR HIS DESIGNEE PRIOR TO BACKFILL, IN ORDER TO CONFIRM THAT THE SYSTEM IS FUNCTIONAL.

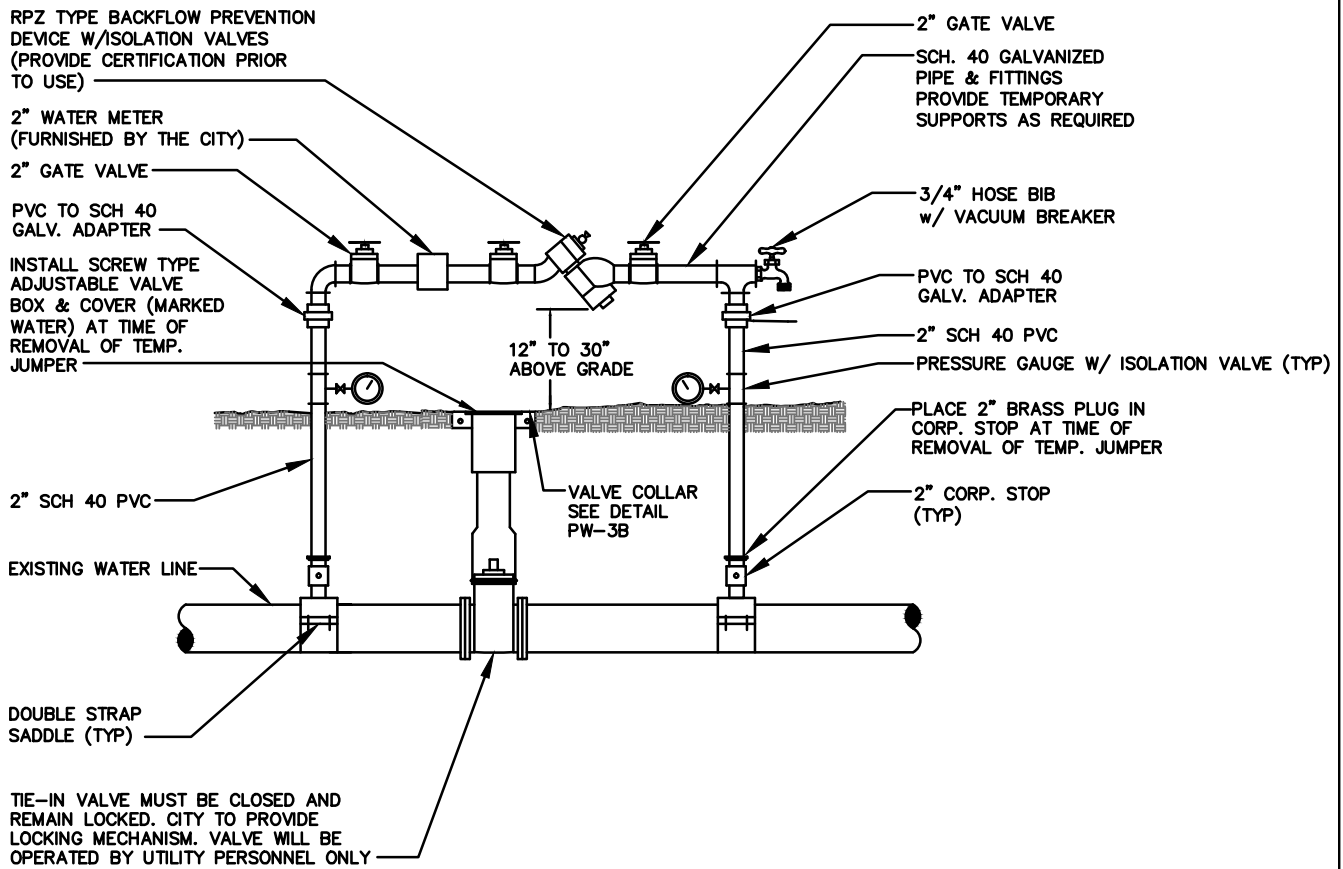
LOCATING WIRE SPLICING
NOT TO SCALE



Howey-in-the-Hills
Standard Details

DATE: FEB 2022

DETAIL PW-5



TEMPORARY JUMPER CONNECTION

NOT TO SCALE

NOTE: LOCATION TO BE DETERMINED AT TIME OF PRECONSTRUCTION CONFERENCE W/ CITY.



Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-6A

TEMPORARY JUMPER CONNECTION NOTES

1. A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS.
2. THE DETAILS TO BE USED FOR FILLING ANY WATER MAIN OF ANY SIZE FROM EXISTING ACTIVE WATER MAINS AND FOR FLUSHING OF NEW MAINS UP TO 8" DIAMETER (2.5 FPS MINIMUM VELOCITY) AND FOR PULLING BACTERIOLOGICAL SAMPLES FROM ANY NEW WATER MAIN OF ANY SIZE. THE JUMPER CONNECTION SHALL BE MAINTAINED UNTIL AFTER FILLING, FLUSHING, TESTING AND DISINFECTION OF THE NEW MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND OTHER PERTINENT AGENCIES HAS BEEN RECEIVED. THE JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI IN THE NEW MAINS ALL THE TIME AFTER DISINFECTION AND UNTIL THE FDEP CLEARANCE LETTER IS OBTAINED. ADEQUATE RESTRAINTS SHALL BE PROVIDED TEMPORARILY, AS REQUIRED. PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION IN ACCORDANCE WITH AWWA C651, LATEST EDITION. THIS TAPPING SLEEVE AND THE EXTERIOR OF THE MAIN TO BE TAPPED SHALL BE DISINFECTED BY SPRAYING OR SWABBING PER SECTION II OF AWWA C561, LATEST EDITION.
3. FLUSHING OF 10" DIAMETER AND LARGE WATER MAINS MAY BE DONE THROUGH THE TIE-IN VALVE, IN THE PRESENCE OF THE UTILITY DIRECTOR OR HIS DESIGNEE. THE UTILITY DEPARTMENT WILL NOTIFIED IN WRITING 48 HOURS PRIOR TO THE FLUSHING OF SAID MAINS.

THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:

- A. THE TIE-IN VALVES SHALL BE OPERATED AND PRESSURE TESTED IN THE PRESENCE OF THE UTILITY COMPANY AND ENGINEER TO VERIFY WATER TIGHTNESS PRIOR TO THE TIE-IN. VALVES WHICH ARE NOT WATERTIGHT SHALL BE REPLACED OR A NEW VALVE INSTALLED IMMEDIATELY ADJACENT TO THE LEAKING VALVE.
 - B. THE TEMPORARY JUMPER CONNECTION SHALL BE CONSTRUCTED AS DETAILED. THE JUMPER CONNECTION SHALL BE USED TO FILL THE NEW WATER MAIN AND FOR PROVIDING WATER FOR BACTERIOLOGICAL SAMPLING OF THE NEW MAIN AS REQUIRED BY THE FDEP PERMIT.
 - FLUSHING SHALL NOT BE ATTEMPTED DURING PEAK DEMAND HOURS OF THE EXISTING WATER MAIN.
 - ALL DOWNSTREAM VALVES IN THE NEW SYSTEM MUST BE OPEN PRIOR TO OPENING THE TIE-IN VALVE.
 - PROVIDE FOR AND MONITOR THE PRESSURE AT THE TIE-IN POINT, THE PRESSURE IN THE EXISTING MAIN MUST NOT DROP BELOW 35 psi.
 - TIE-IN VALVE SHALL BE OPENED A FEW TURNS ONLY, ENSURING A PRESSURE DROP ACROSS THE VALE IS ALWAYS GRATER THAN 10 psi.
 - C. THE TIE-IN VALVE SHALL BE LOCKED CLOSED BY THE CITY UNTIL FLUSHING BEGINS.
 - D. THE TIE-IN VALVE SHALL BE OPENED ONLY A FEW TURNS FOR FLUSHING OF THE NEW MAIN. THE PROCEDURE SHALL BE DIRECTED BY THE CITY AND OBSERVED BY THE ENGINEER.
 - E. AFTER FLUSHING, THE TIE-IN VALVE SHALL BE CLOSED AND LOCKED IN THE CLOSED POSITION BY THE CITY.
4. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION DEMONSTRATING THAT THE RPZ BACKFLOW PREVENTION DEVICE HAS BEEN TESTED WITHIN ONE YEAR AT THE TIME OF INSTALLATION AND IS IN GOOD WORKING ORDER AT THE TIME OF INSTALLATION. THE TEST SHALL BE PERFORMED BY A QUALIFIED BACKFLOW PREVENTION TECHNICIAN.
 5. EXCEPT AS REQUIRED TO FLUSH LINES OF GREATER THAN 8" IN DIAMETER, THE TIE-IN VALVE SHALL REMAIN CLOSED AND SHALL BE LOCKED IN THE CLOSED POSITION BY THE CITY. THE TIE-IN VALVE SHALL REMAIN LOCKED CLOSED UNTIL THE NEW SYSTEM HAS BEEN CLEARED FOR USE BY FDEP AND ALL OTHER PERTINENT AGENCIES.
 6. UPON RECEIPT OF CLEARANCE FOR USE FROM FDEP AND ALL OTHER PERTINENT AGENCIES, THE CONTRACTOR SHALL REMOVE THE JUMPER CONNECTION. THE CORPORATION STOPS ARE TO BE CLOSED AND PLUGGED WITH 2" BRASS PLUGS.
 7. ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACKFLOW PREVENTION DEVICE FITTINGS, VALVE, ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.



Howey-in-the-Hills

Standard Details

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DETAIL PW-6B

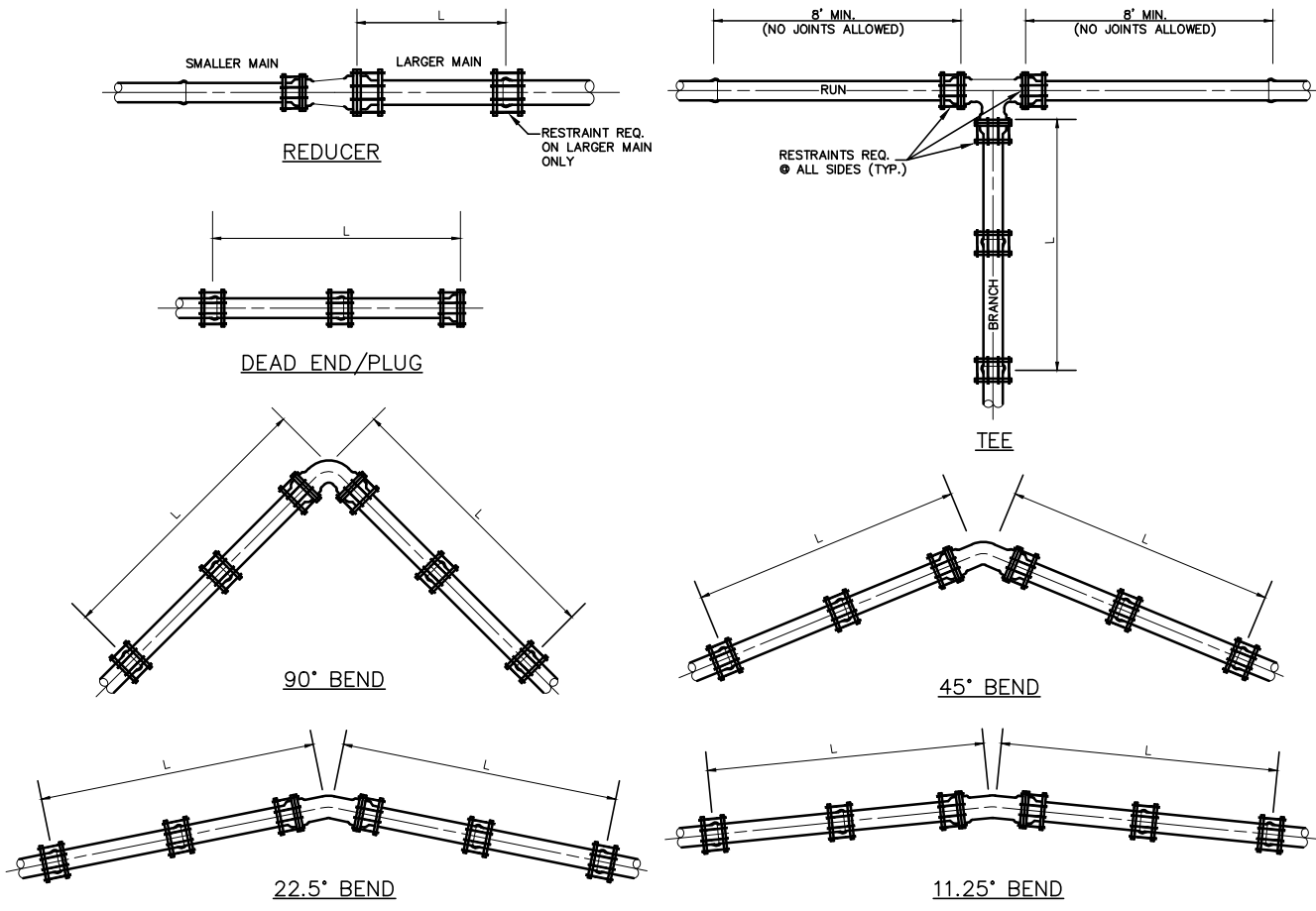


TABLE OF THRUST RESTRAINT LENGTHS

PIPE SIZE (Inches)	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEES		DEAD END & PLUG		REDUCER		
	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	PIPE SIZES	P.V.C. (L)	DUCTILE IRON (L)
4	20'	16'	8'	7'	4'	3'	2'	2'	15'	10'	45'	29'	6" x 4"	33'	21'
6	28'	22'	12'	9'	6'	4'	3'	2'	33'	21'	63'	40'	8" x 6"	34'	22'
8	36'	29'	15'	12'	7'	6'	4'	3'	52'	33'	82'	52'	10" x 8"	33'	21'
10	43'	34'	18'	14'	9'	7'	4'	3'	68'	43'	98'	63'	12" x 10"	34'	22'
12	50'	40'	21'	17'	10'	8'	5'	4'	84'	54'	116'	74'	16" x 12"	63'	40'
16	63'	51'	26'	21'	13'	10'	6'	5'	116'	74'	148'	94'	18" x 16"	33'	21'
18	70'	56'	29'	23'	14'	11'	7'	6'	131'	83'	163'	103'	20" x 18"	33'	21'
20	75'	61'	31'	25'	15'	12'	7'	6'	145'	92'	178'	113'	20" x 20"	62'	39'
24	86'	70'	36'	29'	17'	14'	9'	7'	173'	110'	207'	132'			

THRUST RESTRAINT DESIGN NOTES

1. RESTRAINT JOINTS, FITTINGS, & VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY EBBA IRON SALES, INC.
2. DATA BASED ON MAX. PRESSURE OF 150 p.s.i., THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE SP), THE PIPE BEDDED IN NATIVE SOIL w/ A MINIMUM OF 2.5' COMPACTED FILL OVER THE PIPE, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
3. ALL FITTINGS & VALVES SHALL HAVE RESTRAINED WITH "MEGA-LUG" RESTRAINTS, & ALL BELL & SPIGOT JOINTS TO BE RESTRAINED WITH A RESTRAINING HARNESS WITHIN THE REQUIRED LENGTH OF RESTRAINED PIPE (L).

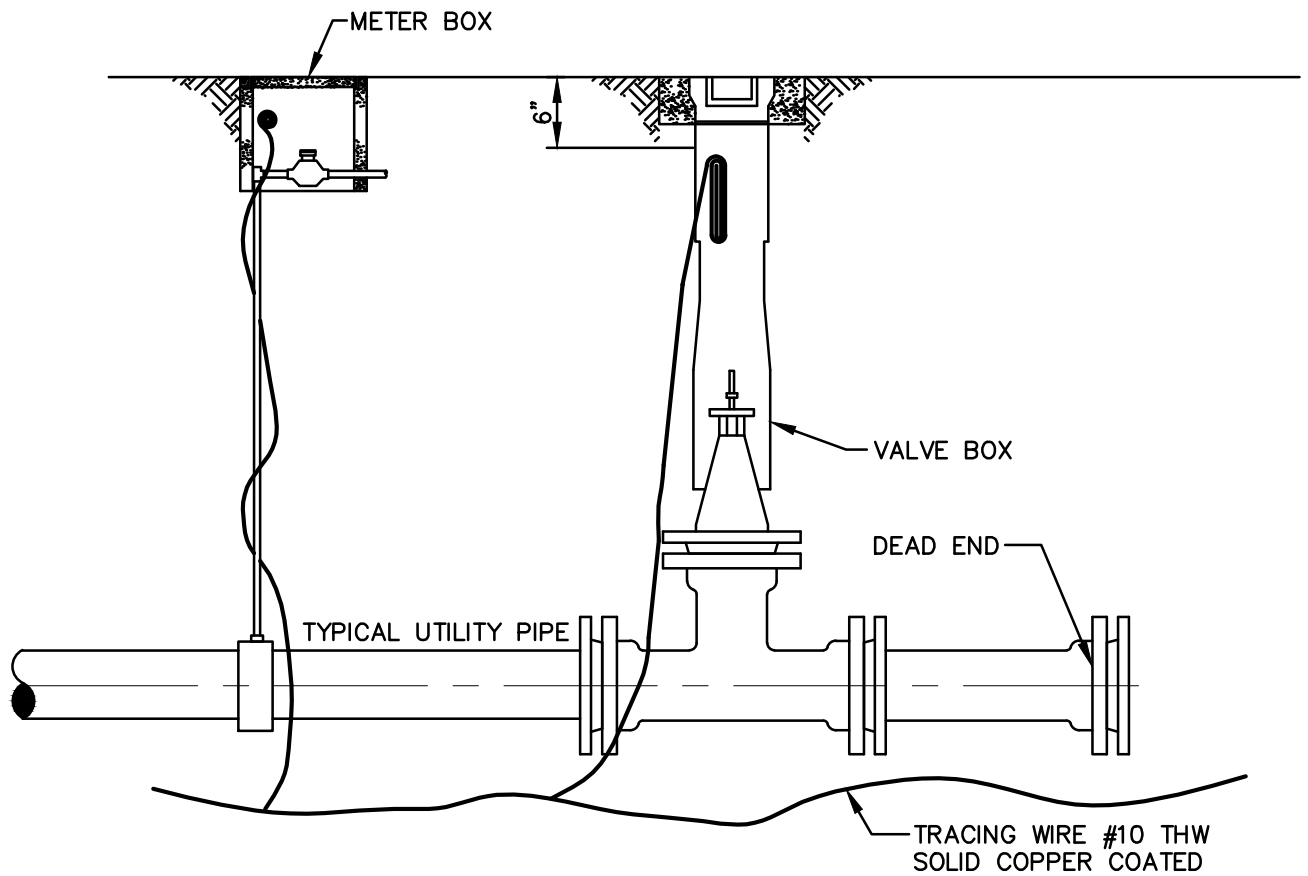
THRUST RESTRAINT
NOT TO SCALE



Howey-in-the-Hills
Standard Details

DATE: FEB 2022

DETAIL PW-7



ALL PIPE INSTALLED VIA OPEN CUT SHALL BE INSTALLED WITH #10 THW SOLID COPPER COATED TRACING WIRE. ALL PIPE INSTALLED VIA HDD SHALL BE INSTALLED WITH TWO #10 COPPER CLAD STEEL WIRES.

THE TRACING WIRE MUST BE INSTALLED DIRECTLY BELOW THE PIPE AND BROUGHT TO THE SURFACE AT 500' MINIMUM INTERVALS. WIRE SHALL EXTEND A MINIMUM OF 12" ABOVE GRADE AT EACH INTERVAL AND BE COILED AND PLACED IN A VALVE BOX, METER BOX, MANHOLE, CLEANOUT, LOCATE WIRE BOX, OR OTHER APPLICABLE STRUCTURE.

COLOR CODING:

POTABLE WATER SYSTEM: BLUE
 REUSE WATER SYSTEM: PANTONE PURPLE
 SANITARY SEWER, FORCE MAINS AND LOW PRESSURE SEWER SYSTEMS: GREEN

1. FOR LOW PRESSURE SEWER, POTABLE WATER AND REUSE WATER SYSTEMS: WIRE SHALL BE INSTALLED BELOW ALL MAINS AND SERVICE LINES AND ATTACHED TO VALVES, HYDRANTS AND FITTINGS. WIRE INSTALLED WITH SERVICE LINES SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE CURB STOP.
2. FIRE SPRINKLER LINES: WIRE SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE RISER CONNECTION.
3. SANITARY SEWER FORCE MAINS: WIRE SHALL BE INSTALLED BELOW THE FORCE MAIN AND ATTACHED TO ALL VALVES AND FITTINGS AND BROUGHT TO THE SURFACE AND PLACED IN A METAL, CITY OF TAVARES APPROVED, VALVE BOX.
4. DEAD END MAINS: WIRE SHALL BE PLACED IN A PROPERLY IDENTIFIED METAL VALVE BOX AT THE END OF THE RUN.
5. WIRE SHALL NOT BE FASTENED OR COILED TO VALVE OPERATING NUT.
6. UTILITY TRACING WIRE SHALL BE IN ACCORDANCE WITH CITY CSM AND PER CITY'S APPROVED MANUFACTURER LIST.

UTILITY PIPE LOCATION MATERIAL – WIRE

NOT TO SCALE



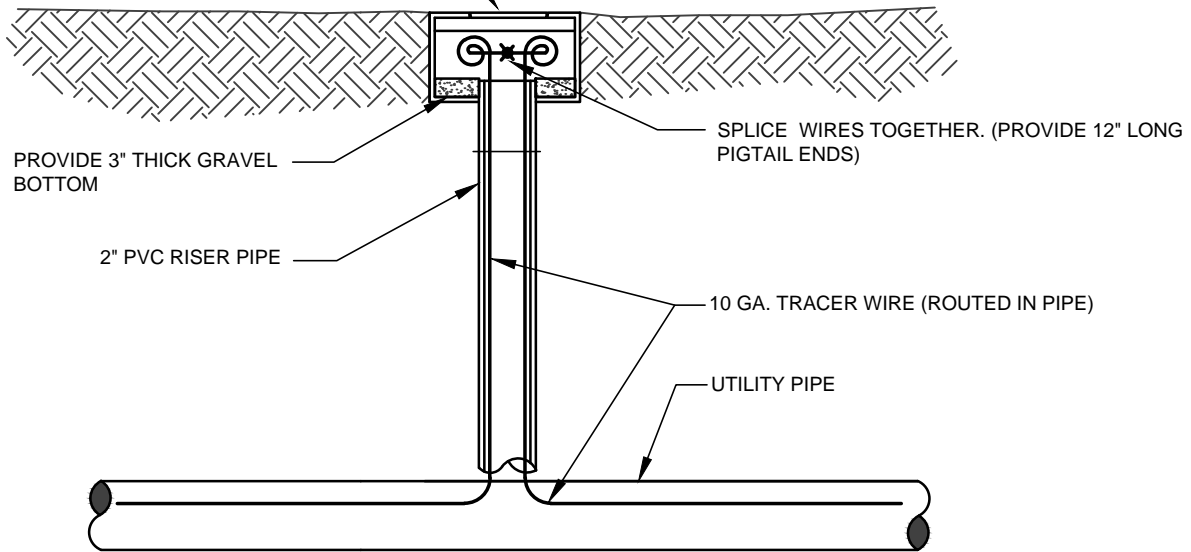
Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-8

INSTALL METER BOX WITH LID. (POSITION BOX PARALLEL WITH MAIN)



TRACER WIRE BOX UTILIZING METER BOX

NOTES:

1. TRACER WIRE STATION BOX TO BE INSTALLED WHERE THE WIRE CANNOT BE BROUGHT TO GRADE IN A VALVE BOX WITHIN THE MANDATORY 500 FOOT INTERVAL OR WHERE A SPLICE MUST BE MADE ON THE TRACER WIRING. NO UNDERGROUND SPLICES.
2. BOXES SHALL NOT BE LOCATED IN ROADWAYS OR DRIVEWAYS.
3. BOX AND LID PER DETAIL PW-19.
4. TRAFFIC RATED LID (STANDARD-NON BOLT DOWN)
5. LID COLOR SHALL BE PRE-MANUFACTURED OR PAINTED TO MATCH SERVICE (BLUE= POTABLE WATER, GREEN=WASTEWATER, PANTONE PURPLE=RECLAIMED WATER)

TRACER WIRE BOX



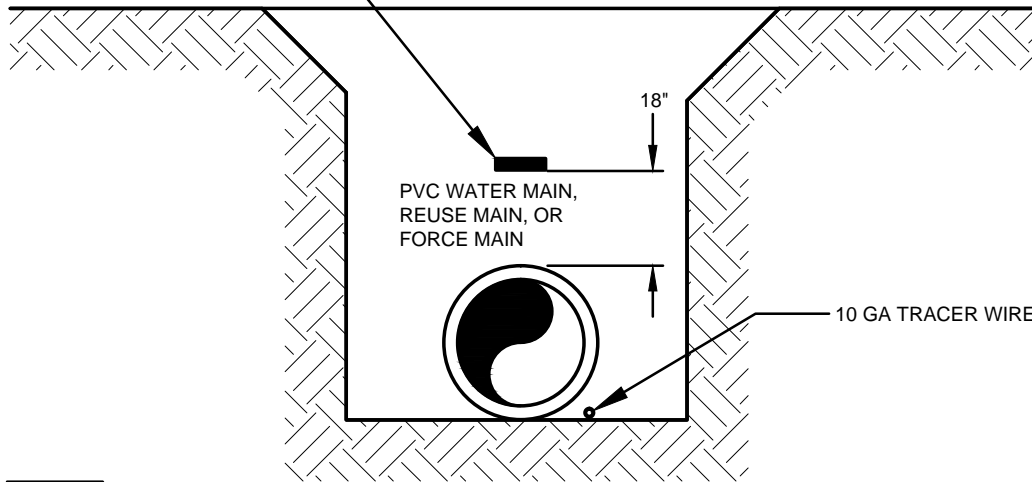
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 NOT TO SCALE
 Standard Details

DATE: FEB 2022

DETAIL PW-9

EARLY WARNING TAPE WITH METALLIC DETECTOR AND/OR WIRE

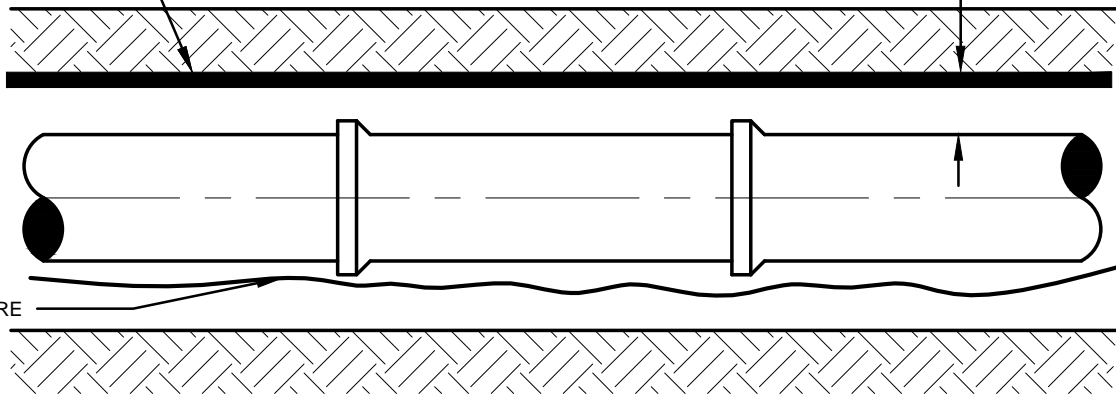
FINISHED GRADE



EARLY WARNING TAPE

FINISHED GRADE

18"



NOTES:

1. ALL MAINS INSTALLED BY OPEN CUT SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE AND WIRE INSTALLED CONTINUOUSLY ALONG THE ALIGNMENT. THE PROTECTION TAPE SHALL BE PER THE CITY'S APPROVED MANUFACTURER LIST. TAPE SHALL BE INSTALLED DURING BACKFILLING 18" ABOVE THE PIPE AND SHALL BE CONTINUOUSLY MARKED FOR THE TYPE OF PIPE (EXAMPLE: CAUTION, WATER MAIN BURIED BELOW"). THE TAPE SHALL HAVE A METALLIC DETECTABLE STRIP INCLUDED AND COLOR CODED AS FOLLOWS:
 BLUE - POTABLE WATER
 GREEN - SANITARY FORCE MAIN, GRAVITY SEWER, LOW PRESSURE MAIN
 PANTONE PURPLE - RECLAIMED WATER
 RED - DEDICATED FIRE LINE
2. ALL PVC MAINS SHALL BE A SOLID COLOR AS DESCRIBED ABOVE.
 ALL DUCTILE IRON MAINS SHALL BE WRAPPED WITH COLOR CODED BAGS.
 ALL POTABLE WATER PIPE SHALL BEAR THE NATIONAL SANITATION FOUNDATION (NSF) SEAL OF APPROVAL.

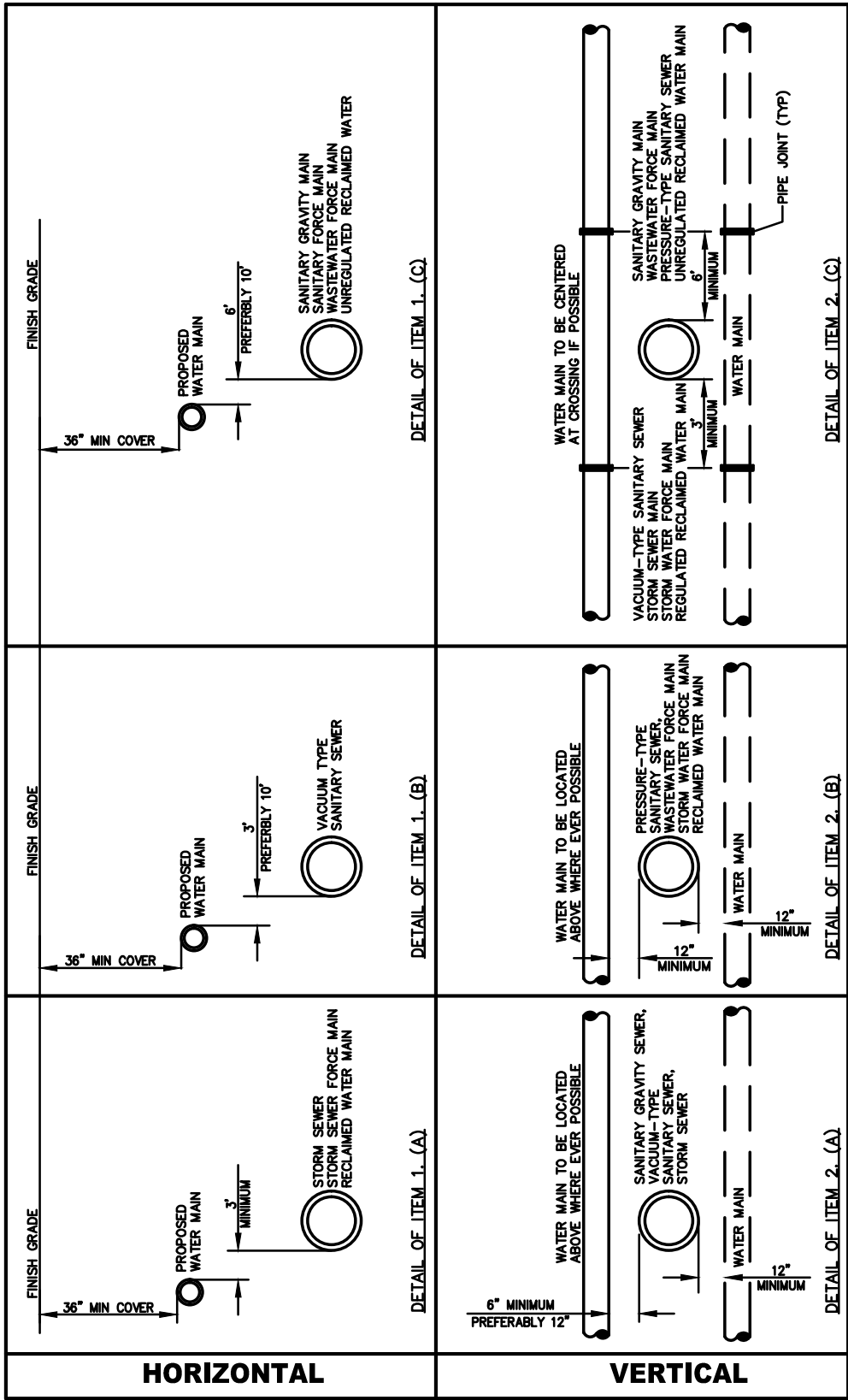
UTILITY PIPE LOCATION MATERIAL – TAPE
 NOT TO SCALE



Howey-in-the-Hills
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DETAIL PW-10



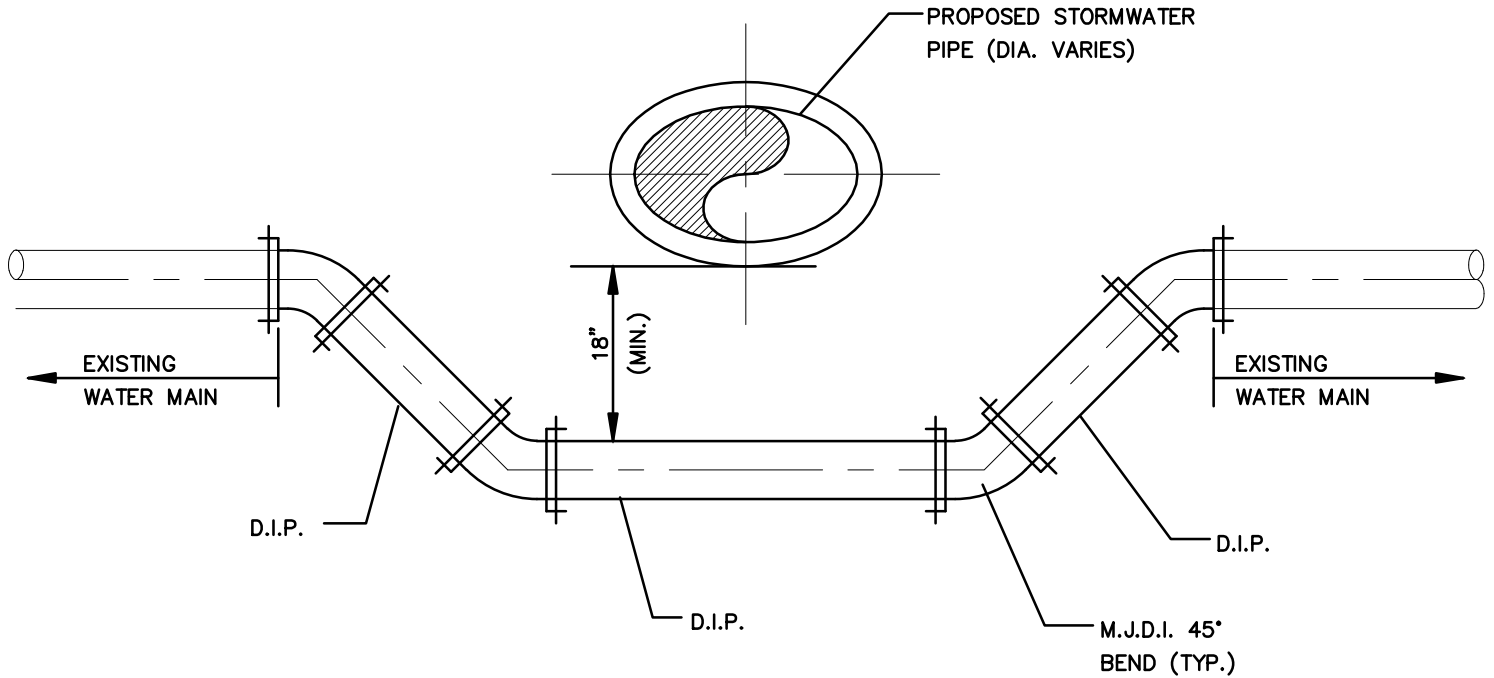
UTILITY SEPARATION
NOT TO SCALE



Howey-in-the-Hills
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DATE: FEB 2022

DETAIL PW-11A



NOTES:

1. ALL PROPOSED JOINTS SHALL BE RESTRAINED.
2. ALL EXISTING JOINTS WITHIN SHALL BE RESTRAINED IN ACCORDANCE WITH GR-6.
3. ALL PIPING CLEARANCES SHALL BE IN ACCORDANCE WITH CHAPTER 62-555.314 F.A.C.

WATER LINE CROSSING

NOT TO SCALE



Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-11B

GENERAL WATER NOTES

1. WATER SYSTEM COMPONENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND CHAPTER 62-555 FLORIDA ADMINISTRATIVE CODE.
2. ALL PIPING SHALL BEAR THE "NSF" SEAL FOR POTABLE WATER.
3. WATER MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR 18 FOR PIPE SIZES 4"-12". PIPES 14" OR LARGER SHALL BE AWWA C-905, DR 18. ALL COUPLINGS, CLEANING COMPOUNDS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION, FOR LAYING, SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S LATEST RECOMMENDATIONS.
4. DEPTH OF WATER LINES TO BE 36" MINIMUM COVER FROM FINISH GRADE.
5. WATER MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
6. ALL WATER MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON.
7. ALL CASINGS UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE BACK OF CURB.
8. DISINFECTING: FOLLOWING THE PRESSURE TESTING, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE NEW WATER DISTRIBUTION SYSTEM. DISINFECTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD C651 "DISINFECTING WATER MAINS", AND ALL APPROPRIATE AGENCY APPROVAL.
9. ALL HYDROSTATIC TESTS SHALL BE IN ACCORDANCE WITH AWWA C600 FOR DUCTILE IRON PIPE AND C605/M23 FOR PVC PIPE.
10. ALL WATER MAINS SHALL BE INSTALLED, PRESSURE AND LEAK TESTED IN ACCORDANCE WITH AWWA C600, (62-555.320(21)(B)1 AND 62-555.330, F.A.C. ALL INSTALLATION, TESTING AND FIELD PROCEDURES MUST BE PROVIDED AND MUST CONFORM TO THE APPLICABLE AWWA STANDARDS.
11. ALL PIPING MATERIALS AND SPECIFICATIONS COVERING PIPES, JOINTS AND PACKING MATERIALS, INTERNAL COATING AND LININGS, FITTINGS, SPECIALS AND APPURTENANCES SHALL ALL BE IN ACCORDANCE WITH THE CORRESPONDING AWWA STANDARDS AND BE CONFORMING TO NSF REQUIREMENTS, AS MAY BE APPLICABLE, WITH EXCEPTIONS ALLOWED ONLY IF DOCUMENTATION AND ASSURANCES ARE PROVIDED IN COMPLIANCE WITH PARAGRAPHS 62-555.320(3) (D), 622-555.320 (3) (B), AND 62-555.320 (21) (C), F.A.C. THE LEAD USE PROHIBITION IN RULE 62-555.322, F.A.C. SHALL ALSO APPLY. POLYETHYLENE TUBING SHALL BE PER AWWA C901. UNDERGROUND SERVICE LINES AND VALVES SHALL BE PER AWWA C800.

COLOR CODING

ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(B)3, F.A.C., USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.) [FAC 62/CELL 555.320(21)(B)3]

UNLESS DESCRIBED IN THE CITY CSM ELSEWHERE, ALL WATER MAINS SHALL BE INSTALLED IN ACCORDANCE WITH **CHAPTER 62-555.314, F.A.C.**, AND ANY UPDATES TO THE F.A.C., AND IN CONFORMANCE WITH ALL SEPARATION REQUIREMENTS AS FOUND THEREIN.

62-555.314 LOCATION OF PUBLIC WATER SYSTEM MAINS.

FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(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 SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER 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 RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.



Howey-in-the-Hills

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GENERAL WATER NOTES

(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" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS AND RECLAIMED WATER PIPELINES.

(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.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES:

(A) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.

(B) EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THIS REQUIREMENT (I.E., WHERE THERE IS A CONFLICT IN THE ROUTING OF A WATER MAIN AND A STORM SEWER AND WHERE ALTERNATIVE ROUTING OF THE WATER MAIN OR THE STORM SEWER IS NOT TECHNICALLY FEASIBLE OR IS NOT ECONOMICALLY SENSIBLE), THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THIS REQUIREMENT (I.E., THE DEPARTMENT SHALL ALLOW CONSTRUCTION OF CONFLICT MANHOLES), BUT SUPPLIERS OF WATER OR PERSONS PROPOSING TO CONSTRUCT CONFLICT MANHOLES MUST FIRST OBTAIN A SPECIFIC PERMIT FROM THE DEPARTMENT AND MUST PROVIDE IN THE PRELIMINARY DESIGN REPORT OR DRAWINGS, SPECIFICATIONS, AND DESIGN DATA ACCOMPANYING THEIR PERMIT APPLICATION THE FOLLOWING INFORMATION:

1. TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH CONFLICT MANHOLE.
2. A STATEMENT IDENTIFYING THE PARTY RESPONSIBLE FOR MAINTAINING EACH CONFLICT MANHOLE.
3. ASSURANCE OF COMPLIANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS IN SUB-PARAGRAPHS A. THROUGH D. BELOW. - 361

A. EACH WATER MAIN PASSING THROUGH A CONFLICT MANHOLE SHALL HAVE A FLEXIBLE, WATERTIGHT JOINT ON EACH SIDE OF THE MANHOLE TO ACCOMMODATE DIFFERENTIAL SETTLING BETWEEN THE MAIN AND THE MANHOLE.

B. WITHIN EACH CONFLICT MANHOLE, THE WATER MAIN PASSING THROUGH THE MANHOLE SHALL BE INSTALLED IN A WATERTIGHT CASING PIPE HAVING HIGH IMPACT STRENGTH (I.E., HAVING IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE).

C. EACH CONFLICT MANHOLE SHALL HAVE AN ACCESS OPENING, AND SHALL BE SIZED, TO ALLOW FOR EASY CLEANING OF THE MANHOLE.

D. GRATINGS SHALL BE INSTALLED AT ALL STORM SEWER INLETS UPSTREAM OF EACH CONFLICT MANHOLE TO PREVENT LARGE OBJECTS FROM ENTERING THE MANHOLE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(A) NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.



Howey-in-the-Hills

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GENERAL WATER NOTES

(5) EXCEPTIONS. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THE REQUIREMENTS IN SUBSECTION (1) OR (2) ABOVE, THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THESE REQUIREMENTS IF SUPPLIERS OF WATER OR CONSTRUCTION PERMIT APPLICANTS PROVIDE TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH EXCEPTION AND PROVIDE ALTERNATIVE CONSTRUCTION FEATURES THAT AFFORD A SIMILAR LEVEL OF RELIABILITY AND PUBLIC HEALTH PROTECTION. ACCEPTABLE ALTERNATIVE CONSTRUCTION FEATURES INCLUDE THE FOLLOWING:

(A) WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE:

1. USE OF PRESSURE-RATED PIPE CONFORMING TO THE AMERICAN WATER WORKS ASSOCIATION STANDARDS INCORPORATED INTO RULE 62-555.330, F.A.C., FOR THE OTHER PIPELINE IF IT IS A GRAVITY- OR VACUUM-TYPE PIPELINE;
2. USE OF WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE; OR
3. USE OF WATERTIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE.

(B) WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THREE FEET HORIZONTALLY FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS BEING LAID LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE:

1. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE WATER MAIN; AND
2. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS CONVEYING WASTEWATER OR RECLAIMED WATER.

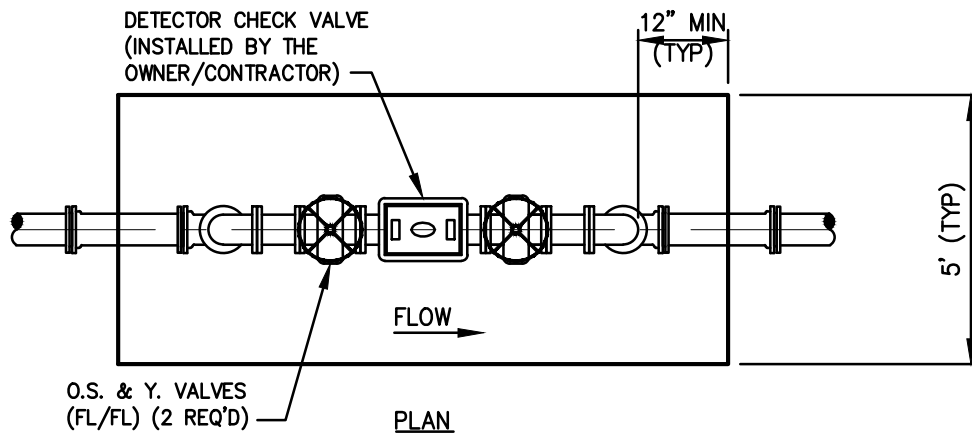


Howey-in-the-Hills

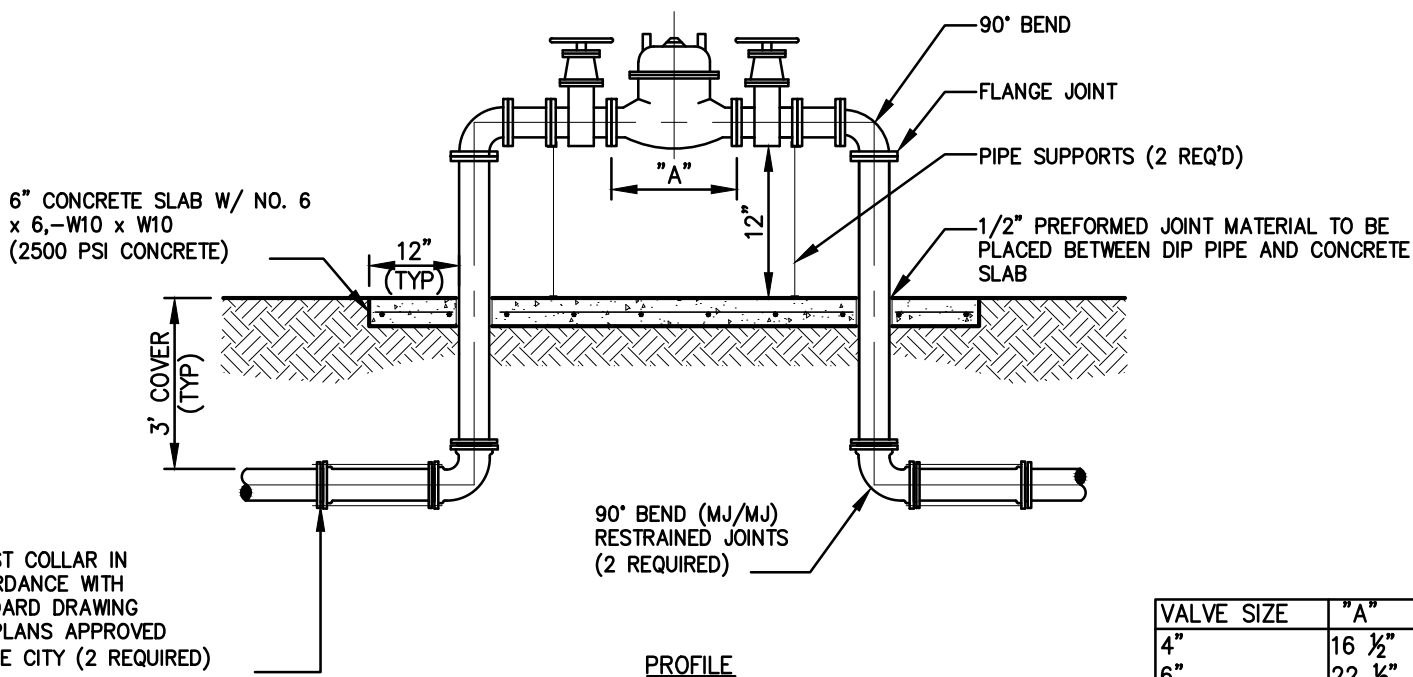
Standard Details

DATE: FEB 2022

DETAIL PW-11E



NOTE:
 INSERT BACKFLOW PREVENTION
 DEVICE WHEN REQUIRED BY CITY



VALVE SIZE	"A"
4"	16 1/2"
6"	22 1/2"
8"	26 1/2"

NOTES:

1. ALL ABOVE GROUND PIPE JOINTS SHALL BE FLANGED.
2. DETECTOR CHECK VALVE SHALL BE INSTALLED BY THE CONTRACTOR.

DETECTOR CHECK VALVE ASSEMBLY

NOT TO SCALE

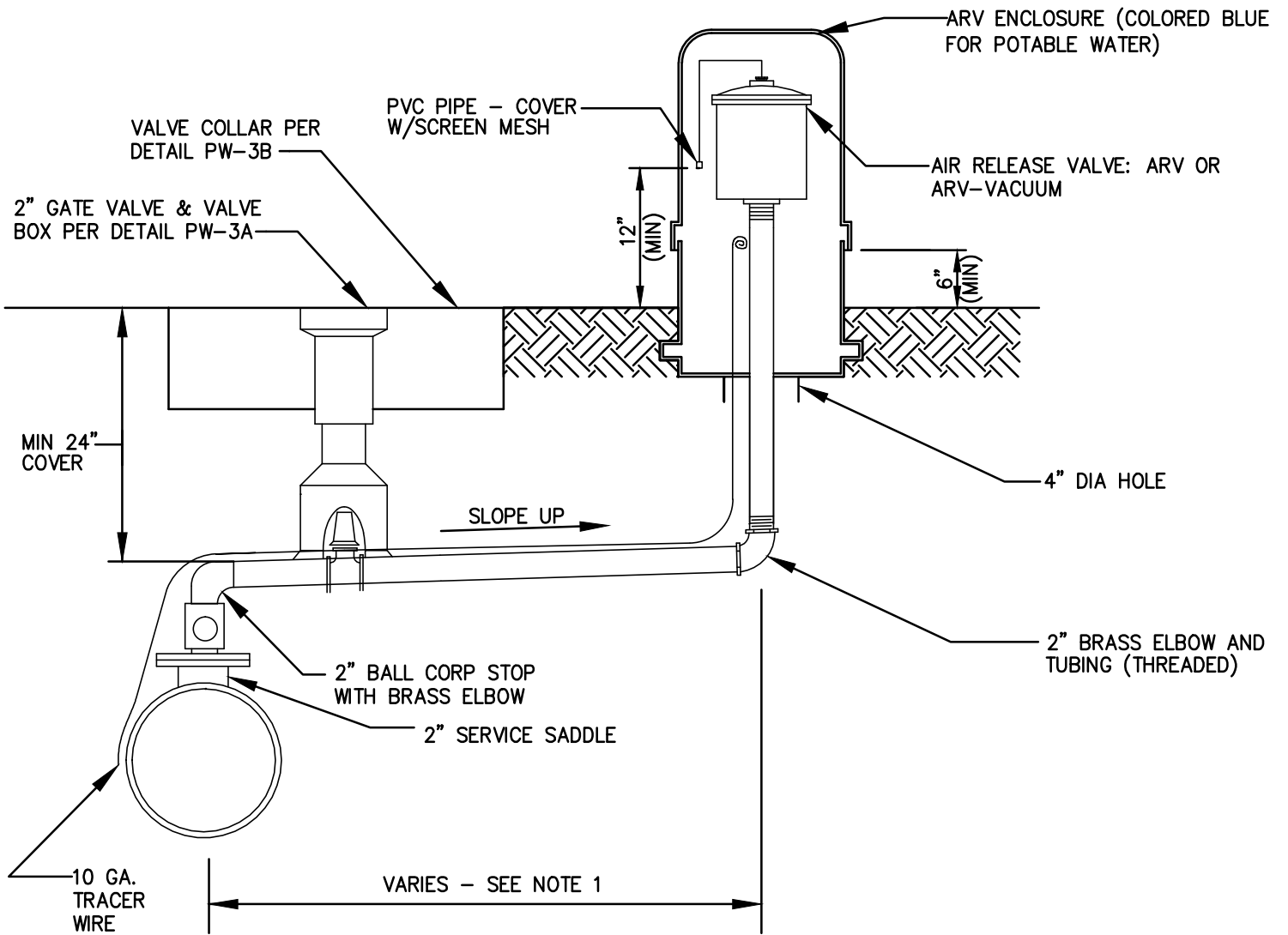


Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-12



NOTES:

1. OFFSET DISTANCE SHOWN ON DRAWINGS.
2. ADJUST HORIZONTAL LOCATION OF ARV ENCLOSURE, AS REQUIRED TO AVOID SIDEWALK. LOCATE ARV ENCLOSURE WITHIN 1' OF R/W OR AS OTHERWISE DETERMINED BY THE CITY.

OFFSET AIR RELEASE VALVE VAULT

NOT TO SCALE

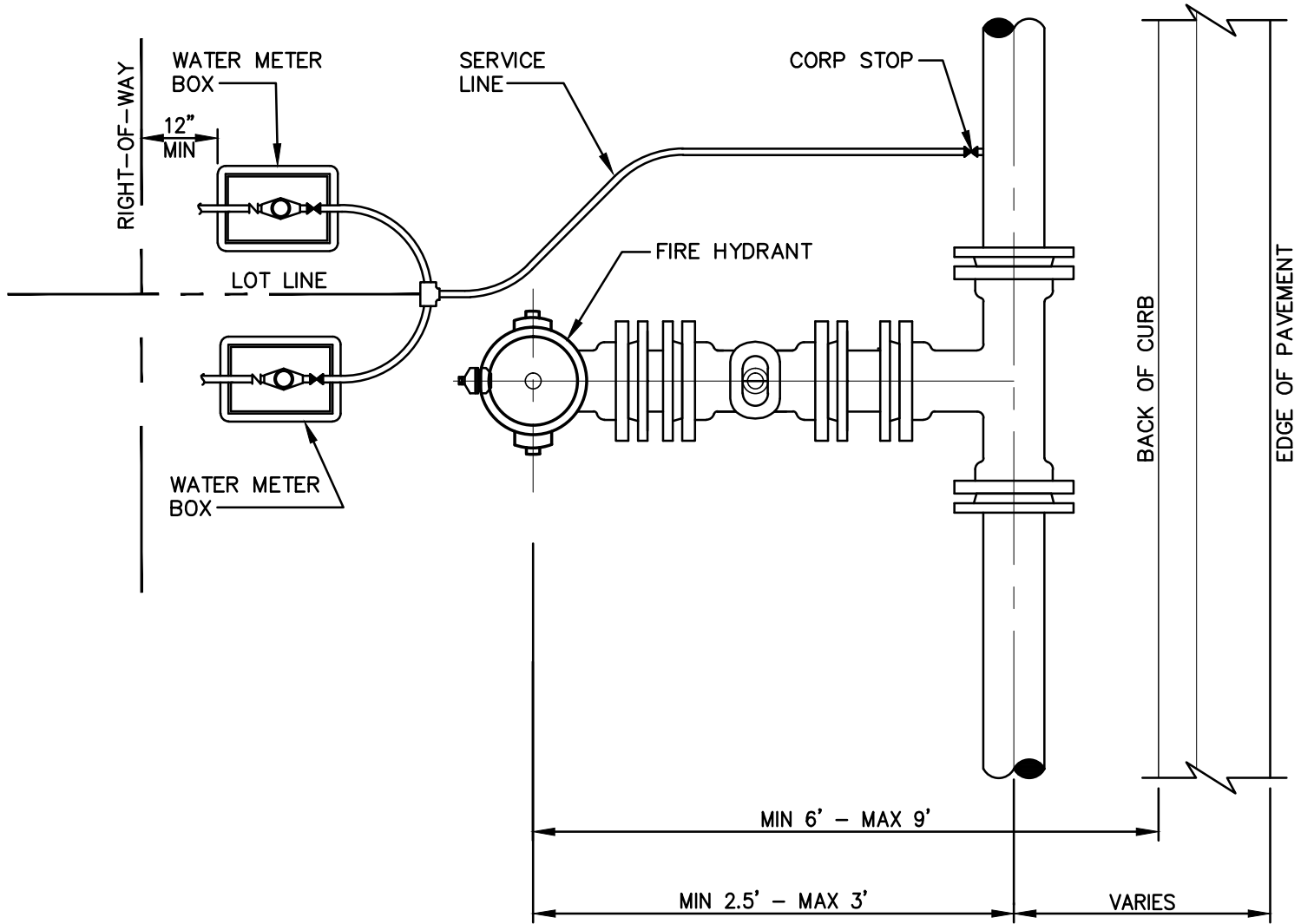


Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-13



NOTES:

1. ALL METER BOXES TO BE LOCATED INSIDE ROAD R/W LINE
2. DETAIL TO BE USED WHERE FIRE HYDRANTS AND WATER SERVICES ARE LOCATED ON PLANS AND CONFLICT APPEARS APPARENT.

TYPICAL WATER SERVICE AND
HYDRANT LOCATION

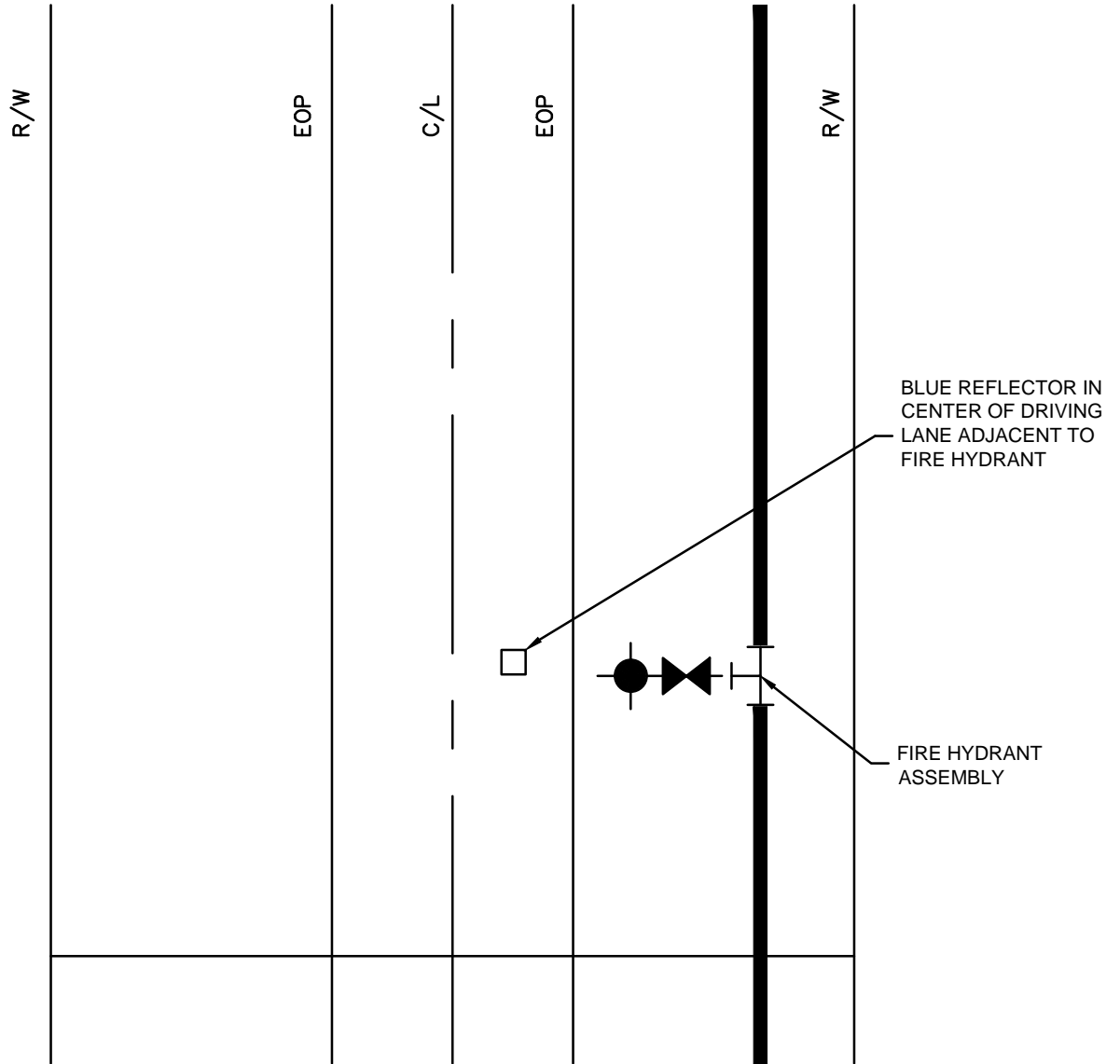
NOT TO SCALE



Howey-in-the-Hills
Standard Details

DATE: FEB 2022

DETAIL PW-14



FIRE HYDRANT REFLECTOR

NOT TO SCALE

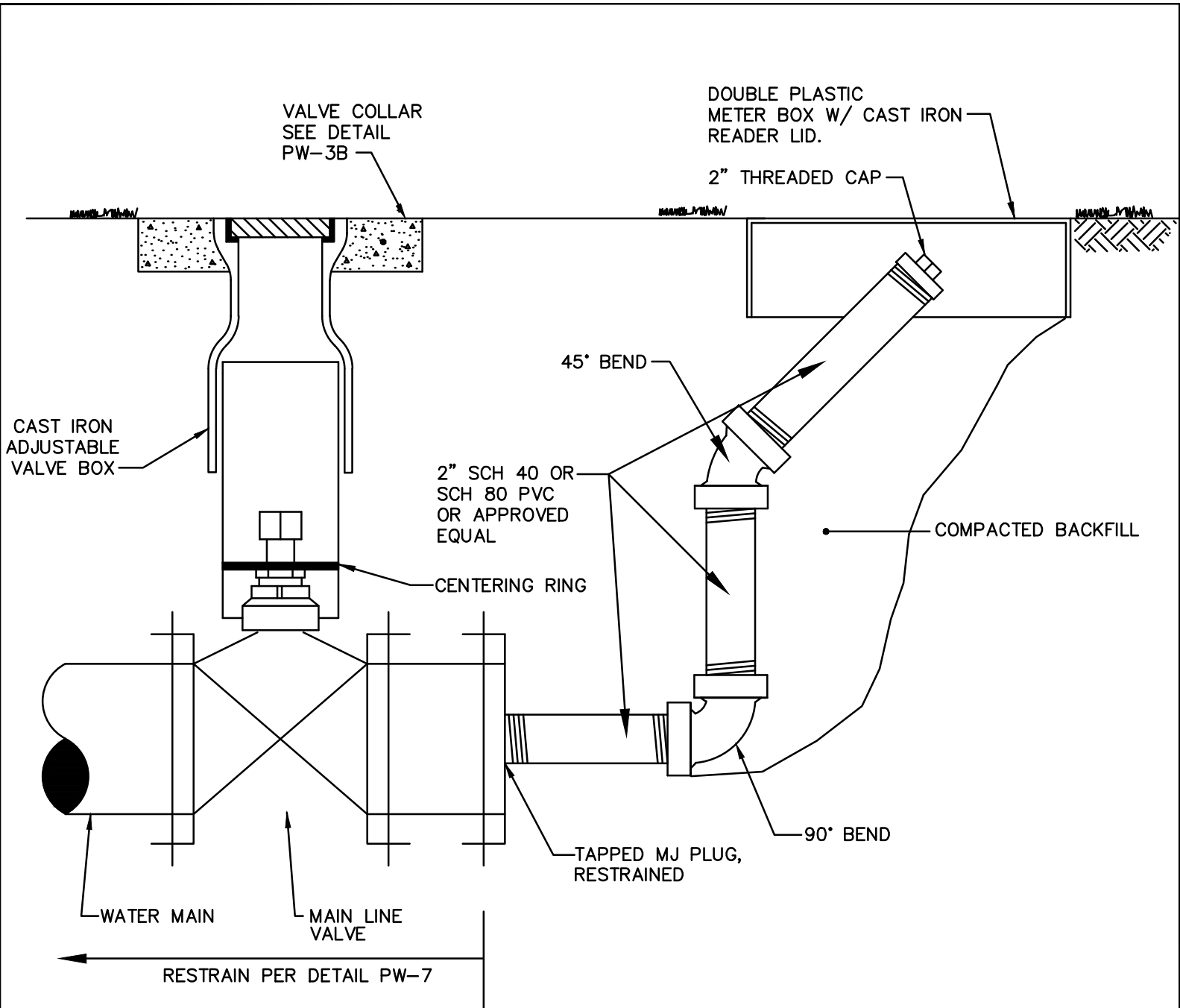


Howey-in-the-Hills

Standard Details

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DETAIL PW-15



BLOWOFF VALVE

NOT TO SCALE



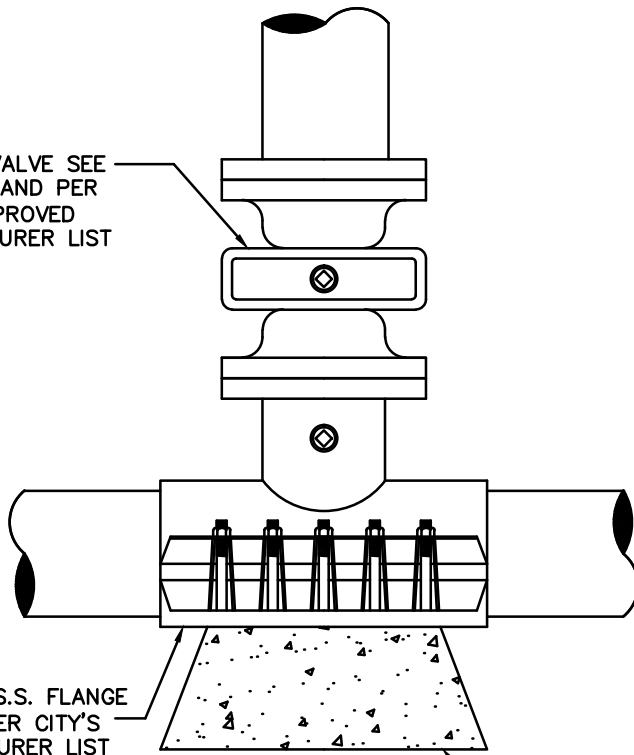
Howey-in-the-Hills

Standard Details

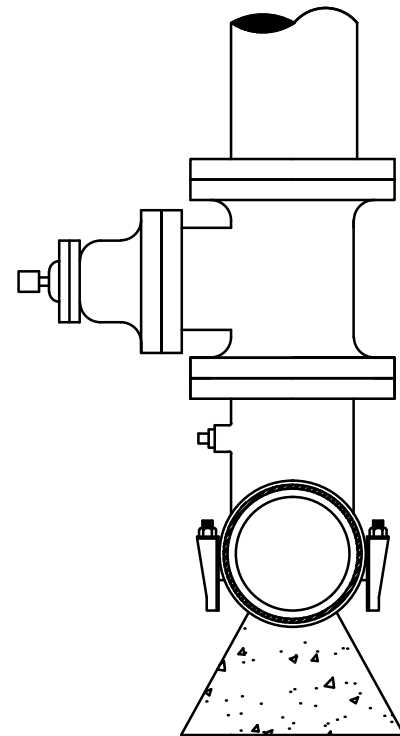
DATE: FEB 2022

DETAIL PW-16

TAPPING VALVE SEE
CITY CSM AND PER
CITY'S APPROVED
MANUFACTURER LIST



TAPPING SLEEVE W/ S.S. FLANGE
SEE CITY CSM AND PER CITY'S
APPROVED MANUFACTURER LIST



1/2 YD. 3000 PSI CONC.

WET TAP SLEEVE AND TAPPING VALVE

NOT TO SCALE



Howey-in-the-Hills

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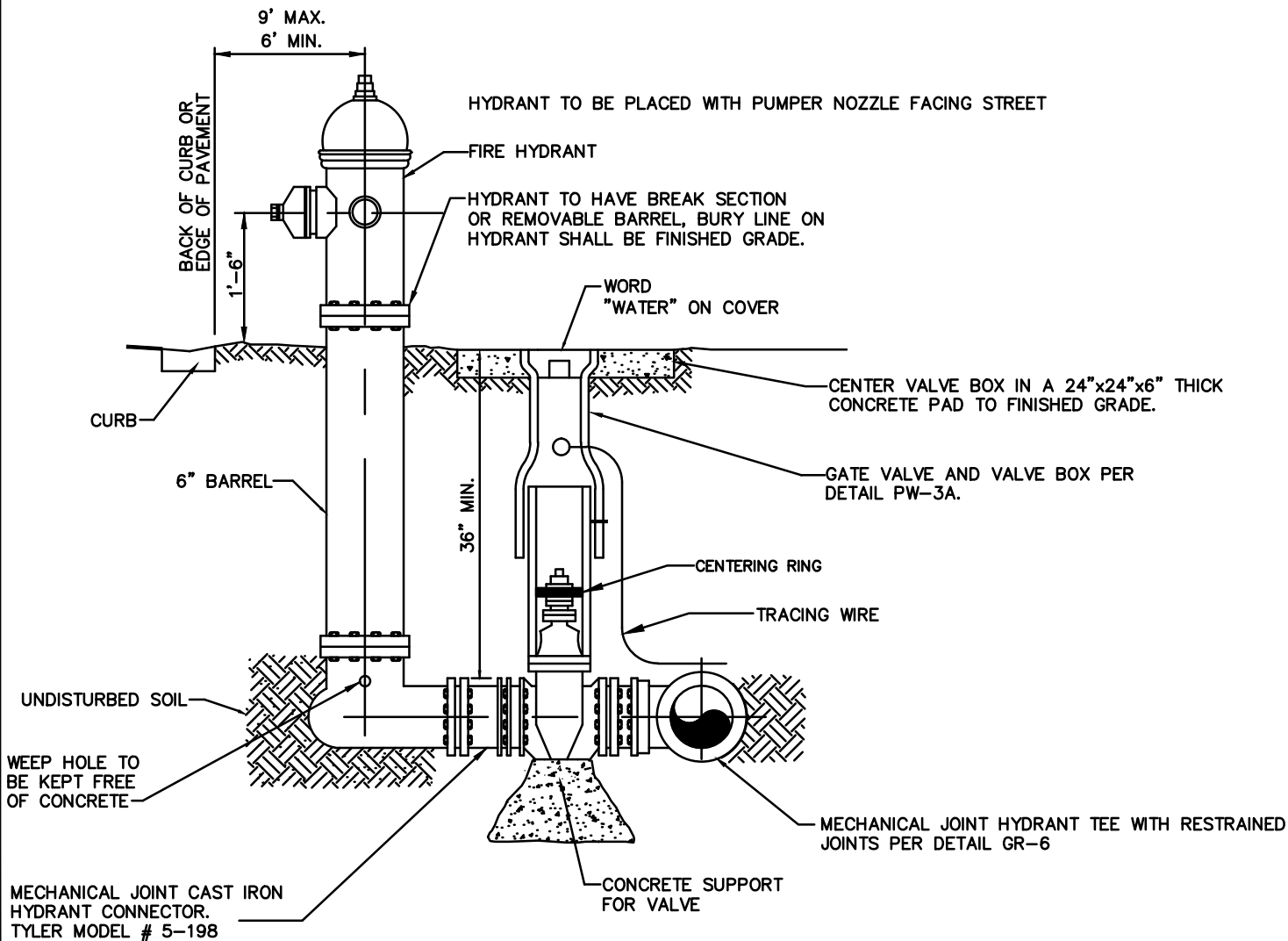
DETAIL PW-17

PAINING

1. APPLY TWO COATS OF OSHA SAFETY INDUSTRIAL RED PAINT TO HYDRANT BARREL.
2. APPLY TWO COATS OF OSHA SAFETY INDUSTRIAL ENAMEL PAINT TO THE BONNET AND NOZZLE CAPS. THE UTILITY DEPARTMENT INSPECTOR WILL DETERMINE THE COLOR TO PAINT THE HYDRANT BONNET AND NOZZLE CAPS BY FLOW TESTING HYDRANT.
 - BLUE 1500 GPM OR MORE (SHERWIN WILLIAMS #SW4086)
 - GREEN 1000 GPM TO 1499 GPM (SHERWIN WILLIAMS #B54614)
 - ORANGE 500 GPM TO 999 GPM (SHERWIN WILLIAMS #B54E39)
 - RED 499 GPM OR LESS (SHERWIN WILLIAMS #B54R38)
 - RED HYDRANT BARREL (SHERWIN WILLIAMS #B54R38)

SPECIFICATIONS

1. AWWA SPECIFICATIONS C-502
2. TWO 2-1/2" HOSE NOZZLE DISCHARGE
3. ONE 4-1/2" PUMPER NOZZLE DISCHARGE
4. ONE 1-1/2" OPERATING NUT, LEFT
5. ALL HYDRANTS SHALL BE EQUIPPED WITH FITTINGS TO ALLOW FOR ELEVATION ADJUSTMENTS.
6. 5 1/4" MAIN VALVE OPENING
7. RESTRAINED JOINTS OR ALL THREADED ROD REQUIRED TO SECURE PIPE, RISER AND VALVE IN THE FIRE HYDRANT ASSEMBLY TO THE MAIN



FIRE HYDRANT WITH VALVE

NOT TO SCALE
(STANDARD FIRE HYDRANT ASSEMBLY)



Howey-in-the-Hills

Standard Details

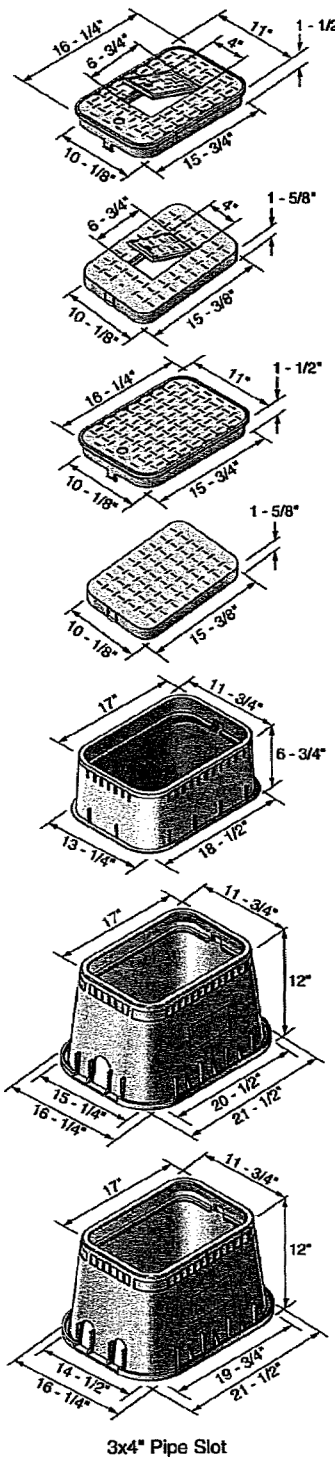
DATE: FEB 2022

DETAIL PW-18

NDS METER BOXES

STANDARD COMMERCIAL GRADE

NDS D1200 Meter Boxes (cont.)



Part Number	Description - Marking	Color (Box/Cover)	Pallet Qty	Weight (Ea)	Product Class
D1200P-DICIRP	14"x19"x12" Standard Box, Drop-in Meter Reader Plastic w/ Cast Iron Reader Cover - Reclaimed Water	Purple/Purple	72	10.20	20ME
D1200-OLSB	14"x19"x12" Standard Box, Overlapping Solid Plastic Cover - Water Meter	Black/Black	72	9.20	20ME
D1200-DUOLSB	14"x19"x12" Standard Dual Pipe Slot Box, Overlapping Solid Plastic Cover - Water Meter	Black/Black	72	9.20	20ME
D1200-OLLOCB	14"x19"x12" Standard Box, Overlapping Locking Solid Plastic Cover - Water Meter	Black/Black	72	9.40	20ME
D1200-CI	14"x19"x12" Standard Box, Overlapping Solid Cast Iron Cover - Water Meter	Black/Black	72	19.00	20ME
D1200-OLSP	14"x19"x12" Standard Box, Overlapping Solid Plastic Cover - Reclaimed Water	Black/Purple	72	9.20	20DV
D1200P-OLSP	14"x19"x12" Standard Box, Overlapping Solid Plastic Cover - Reclaimed Water	Purple/Purple	72	9.20	20DV
D1200-OLRB	14"x19"x12" Standard Box, Overlapping Meter Reader Plastic w/ Plastic Reader Cover - Water Meter	Black/Black	72	9.20	20ME
D1200-OLCIR	14"x19"x12" Standard Box, Overlapping Meter Reader Plastic w/ Cast Iron Reader Cover - Water Meter	Black/Black	72	16.60	20ME
D1200-CICIR	14"x19"x12" Standard Box, Overlapping Meter Reader Cast Iron w/ Cast Iron Reader Cover - Water Meter	Black/Black	72	10.28	20ME
D1200-DISBL	14"x19" Drop-in Solid Plastic Cover - Water Meter	Black	216	2.20	20ME
D1200-DISBSWRL	14"x19" Drop-in Solid Plastic Cover - Sewer	Black	216	2.20	20ME
D1200-DISGSWRL	14"x19" Drop-in Solid Plastic Cover - Sewer	Green	216	2.20	20ME
D1200-DIBLTRBL	14"x19" Drop-in Blue Touch Read Cover - Water Meter	Blue	216	2.20	20ME
D1200-DISPL	14"x19" Drop-in Solid Plastic Cover - Reclaimed Water	Purple	216	2.20	20DV
D1200-DIRBL	14"x19" Drop-in Meter Reader w/ Plastic Reader Cover - Water Meter	Black	216	2.20	20ME
D1200-DIBLRDL	14"x19" Drop-in Meter Reader w/ Plastic Reader Cover - Water Meter	Blue	216	2.20	20ME
D1200-DIRP LID	14"x19" Drop-in Meter Reader w/ Plastic Reader Cover - Reclaimed Water	Purple	216	2.20	20ME
D1200-DICIRLID	14"x19" Drop-in Meter Reader w/ Cast Iron Reader Cover - Water Meter	Black	216	3.40	20ME
D1200-SGWTRL	14"x19" Drop-in Solid Plastic Cover - Water Meter	Green	216	2.20	20ME
D1200-CICIR LD	14"x19" Overlapping Cast Iron Lid w/ Cast Iron Reader - Water Meter	Black	216	2.40	20ME
D1200-OLSB L	14"x19" Overlapping Solid Plastic Cover - Water Meter	Black	216	2.40	20ME
D1200-OLLOCBLD	14"x19" Overlapping Locking Solid Plastic Cover - Water Meter	Black	216	2.60	20ME
D1200-OLBLL	14"x19" Overlapping Solid Plastic Cover - Water Meter	Blue	216	2.40	20ME
D1200-OLSPL	14"x19" Overlapping Solid Plastic Cover - Reclaimed Water	Purple	216	2.40	20DV
D1200-CIL	14"x19" Overlapping Meter Reader Solid Cast Iron Cover - Water Meter	Black	216	12.20	20ME
D1200-OLRBL	14"x19" Overlapping Meter Reader Plastic w/ Plastic Reader Cover - Water Meter	Black	216	2.40	20ME
D1200-OLRBLUL	14"x19" Overlapping Meter Reader Plastic w/ Plastic Reader Cover - Water Meter	Blue	216	2.40	20ME
D1200-OLCIR LD	14"x19" Overlapping Meter Reader Plastic w/ Cast Iron Reader Cover - Water Meter	Black	216	3.80	20ME
D1200-B/O	14"x19"x12" Standard Box	Black	72	6.80	20ME
D1200P-B/O	14"x19"x12" Standard Dual Pipe Slot Box	Black	72	6.80	20ME
D1200-BDB/O	14"x19"x12" Standard Bolt Down Box	Black	72	7.00	20ME
D1200P-B/O	14"x19"x12" Standard Box	Purple	72	6.80	20DV
D1200G-B/O	14"x19"x12" Standard Box	Green	72	6.80	20DV
00000-EXT	14"x19"x6" Extension Only	Black	42	4.20	20DV

SINGLE PLASTIC METER BOX

NOT TO SCALE



Howey-in-the-Hills

Standard Details

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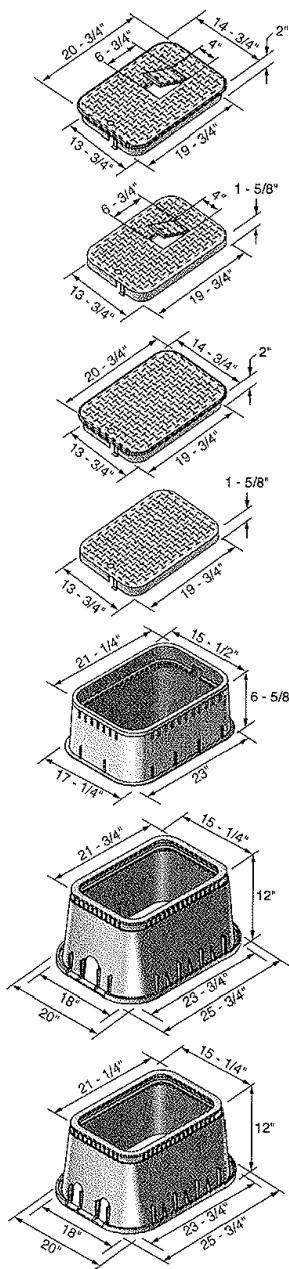
DETAIL PW-19

NDS METER BOXES

STANDARD COMMERCIAL GRADE

NDS D1500 Meter Boxes

Specifications: NDS 13"x20" meter boxes and covers are injection molded of structural foam recycled polyolefin material with a melt index between 10-12. Coloring and UV stabilizers are added, along with processing lubricants when needed. The 13"x20" body shall be tapered and have a minimum wall thickness of .25". The body shall have a double wall at the top cover seat area with a minimum thickness of .187". The cover seat area shall have 30 structural support ribs on the underside of the seat, each with a minimum thickness of 1/50". The bottom of the body shall have a 1" flange. The 13"x20" cover shall have an average thickness of .250".



Part Number	Description - Marking	Color (Box/Cover)	Pallet Qty	Weight (Ea)	Product Class
Drop In Box & Cover					
D1500-DISB	13"x20"x12" Jumbo Box, Drop-in Solid Plastic Cover - Water Meter	Black/Black	48	13.20	20ME
D1500-DUDISB	13"x20"x12" Dual Pipe Slot Jumbo Box, Drop-in Solid Plastic Cover - Water Meter	Black/Black	48	13.49	20ME
D1500-DIRB	13"x20"x12" Jumbo Box, Drop-in Meter Reader Plastic w/ Plastic Reader Cover - Water Meter	Black/Black	48	13.20	20ME
D1500-DUDIRB	13"x20"x12" Dual Pipe Slot Jumbo Box, Drop-in Meter Reader Plastic w/ Plastic Reader Cover - Water Meter	Black/Black	48	13.49	20ME
D1500-DICIR	13"x20"x12" Jumbo Box, Drop-in Meter Reader Plastic w/ Cast Iron Reader Cover - Water Meter	Black/Black	48	14.40	20ME
D1500-DUDICIR	13"x20"x12" Dual Pipe Slot Jumbo Box, Drop-in Meter Reader Plastic w/ Cast Iron Reader Cover - Water Meter	Black/Black	48	13.20	20ME
D1500P-DI-DIOP	13"x20"x12" Dual Pipe Slot Jumbo Box, Drop-in Meter Reader Plastic w/ Cast Iron Reader Cover - Water Meter	Purple/Purple	48	14.60	20ME
Overlapping Box & Cover					
D1500-OLSB	13"x20"x12" Jumbo Box, Overlapping Solid Plastic Cover - Water Meter	Black/Black	48	13.20	20ME
D1500-BDOLSB	13"x20"x12" Jumbo Box, Bolt-Down Overlapping Solid Plastic Cover - Water Meter	Black/Black	48	13.40	20ME
D1500-OLSG	13"x20"x12" Jumbo Box, Overlapping Solid Plastic Cover	Black/Green	48	13.20	20DV
D1500-OLRB	13"x20"x12" Jumbo Box, Overlapping Meter Reader Plastic w/ Plastic Reader Cover - Water Meter	Black/Black	48	13.20	20ME
Drop In Cover Only					
D1500-DISBL	13"x20" Drop-in Solid Plastic Cover - Water Meter	Black	96	3.80	20ME
D1500-DISPL	13"x20" Drop-in Solid Plastic Cover - Reclaimed Water	Purple	96	3.80	20DV
D1500-DIRBL	13"x20" Drop-in Meter Reader Plastic w/ Plastic Reader Cover - Water Meter	Black	96	3.80	20ME
D1500-DICIR LD	13"x20" Drop-in Meter Reader Plastic w/ Cast Iron Reader Cover - Water Meter	Black	96	5.00	20ME
Overlapping Cover Only					
D1500-OLSBL	13"x20" Jumbo Overlapping Solid Plastic Cover - Water Meter	Black	96	3.80	20ME
D1500-OLSGL	13"x20" Jumbo Overlapping Solid Plastic Cover	Green	96	3.80	20DV
Box Only					
D1500-B/O	13"x20"x12" Jumbo Box	Black	48	9.40	20ME
D1500-DUB/O	13"x20"x12" Dual Pipe Slot Jumbo Box	Black	48	8.90	20ME
D1500-DB/O	13"x20"x12" Jumbo Bolt-Down Box	Black	48	9.60	20ME
D1500-EXT	13"x20"x6" Extension Only	Black	36	5.60	20DV

ALL LOCKING LIDS REQUIRE PART NUMBER DKEY FOR UNLOCKING

Note: All dimensions are nominal. All weights are for shipping purposes only. Availability is subject to change.



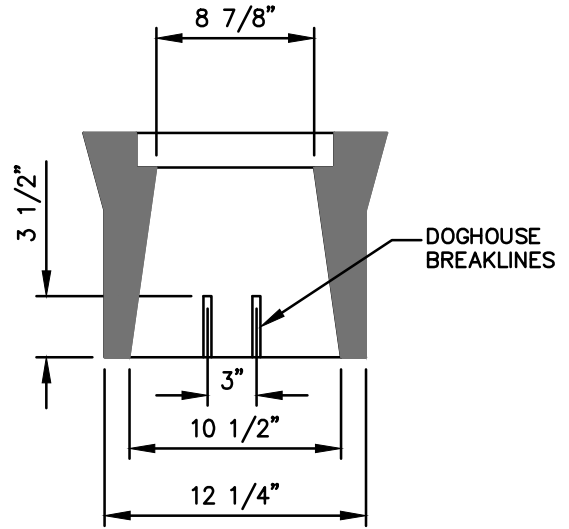
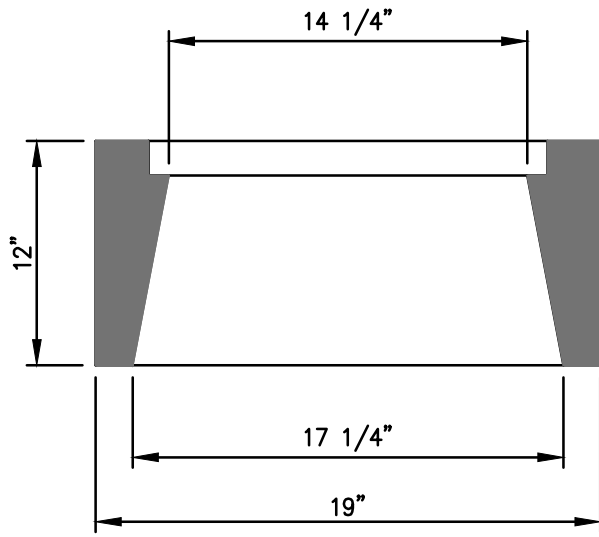
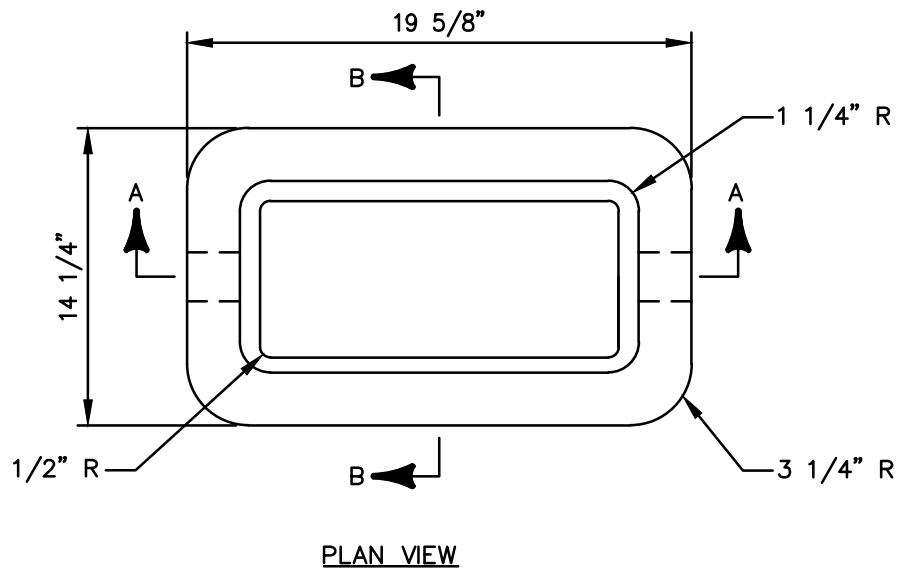
For customer service, please send your fax to: 1-800-726-1998 or call 1-800-726-1994.

JUMBO PLASTIC METER BOX NOT TO SCALE



Howey-in-the-Hills
Standard Details

DATE: FEB 2022
DETAIL PW-20



NOTE:
METER BOX SHALL BE COMPLETE WITH POLYMER COVER LID

SINGLE POLYMER METER BOX

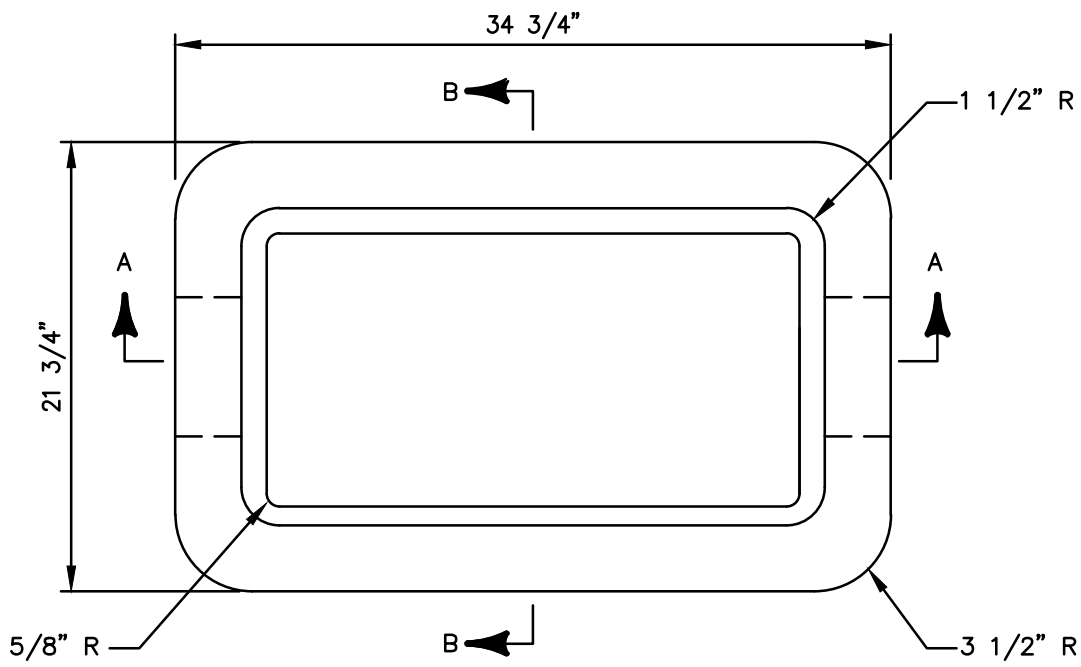
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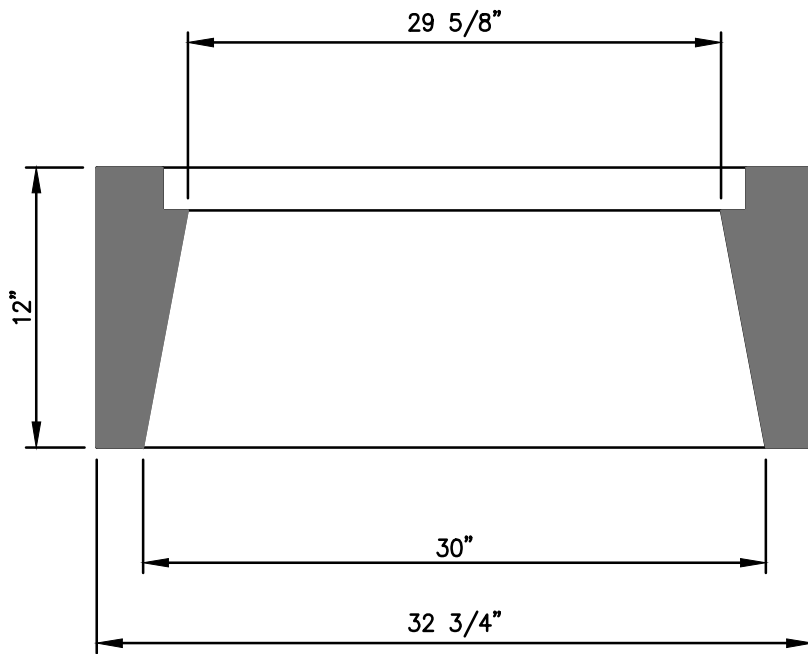
Howey-in-the-Hills
Standard Details

DATE: FEB 2022

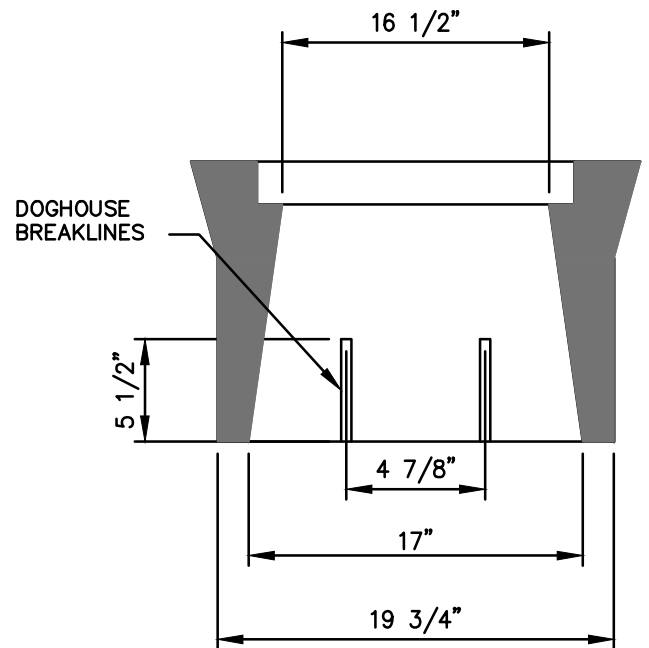
DETAIL PW-21



PLAN VIEW



SECTION VIEW A-A



SECTION VIEW B-B

NOTE:
METER BOX SHALL BE COMPLETE WITH POLYMER COVER AND LID

JUMBO POLYMER METER BOX

NOT TO SCALE

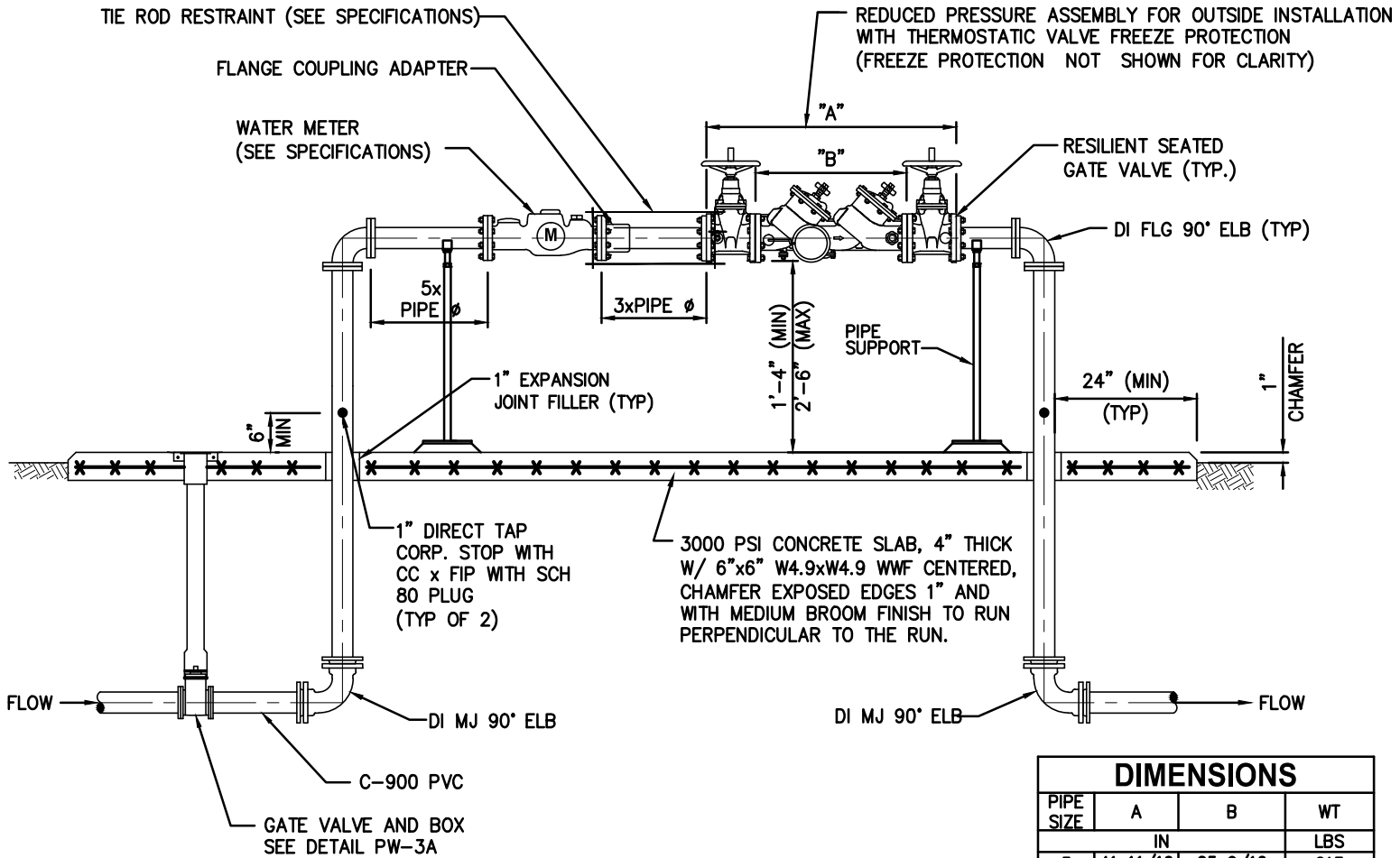


Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-22



DIMENSIONS			
PIPE SIZE	A	B	WT
	IN		LBS
3	41 11/16	25 9/16	213
4	50 7/16	32 5/16	360
6	59 11/16	38 9/16	601
8	69 3/16	46 1/16	892
10	84 3/16	58 1/16	1593

NOTES:
 1. ALL ABOVE GROUND PIPE TO BE PAINTED WITH 2 COATS OF APPROVED BLUE PAINT.

REDUCED PRESSURE BACKFLOW PREVENTER
W/ WATER METER DETAIL

NOT TO SCALE



Howey-in-the-Hills
 Standard Details

DATE: FEB 2022
 DETAIL PW-23