

**Phelan Pinon Hills Community Services District
Standard Details List**

No.	Standard Drawing No.	Description
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3	W-2b	1" Meter Service Assembly
4	W-2c	1-1/2" Meter Service Assembly
5	W-2d	2" Meter Service Assembly
6	W-3	5-1/4" Fire Hydrant Assembly
7	W-4	5-1/4" Fire Hydrant / Blow-off Assembly
8	W-5	Valve Can Assembly for D.I.P. and PVC Pipe Installation
9	W-6	Valve Operator Extension
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19	W-16	3/4" to 2" Reduced Pressure Backflow Device Assembly
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27	W-24	3" Meter Service Assembly
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29	W-26	Concrete Blanket Detail
30	W-27	Backfill Slope Stabilizer
31	W-28	Blank
32	W-29	Blank
33	W-30	Blank

	EXISTING AC PAVEMENT		CENTERLINE
	CONCRETE		PROPERTY LINE
	GRASS		RIGHT-OF-WAY
	DIRT TRAVELED WAY		BENCHMARK
	EXISTING CURB AND GUTTER		SURVEY MONUMENT
	SLOPE		ELECTRICAL MANHOLE
	CHAIN-LINK FENCE		SEWER MANHOLE
	WOOD FENCE		STORM DRAIN MANHOLE
	FUTURE IMPROVEMENTS		TELEPHONE MANHOLE
	BLOCK WALL / PLANTER WALL		FIRE HYDRANT
	BUILDING OUTLINE		GATE VALVE
	POWER POLE		PROPOSED FIRE HYDRANT
	GUY POLE		PROPOSED GATE VALVE
	GUY WIRE		BLOW-OFF
	PEDESTAL		AIR RELEASE VALVE
	STREET LIGHT		WATER METER
	SIGNAL LIGHT		REDUCER
	STREET SIGN		END PLUG / CAP
	TRAFFIC LOOP		CLOSED VALVE
	TRAFFIC SIGNAL BOX		SEWER LINE
	MAILBOX		WATER LINE
	CACTUS / CHOLLA		PROPOSED WATER LINE
	JOSHUA TREE		GAS LINE
	JUNIPER TREE		TELEPHONE LINE
	PINE TREE		FIBER OPTIC LINE
	TREE		ELECTRICAL LINE
	YUCCA TREE		CABLE TV LINE
	BUSH / SHRUB		STORM DRAIN
			OVERHEAD ELECTRICAL

Revised: April 22, 2020

RECOMMENDED BY:	REV.	DATE	BY
Engineering			
Date			
APPROVED BY:			
Operations			
Date			

PHELAN PIÑON HILLS
 COMMUNITY SERVICES DISTRICT
 STANDARD DISTRICT SYMBOLS

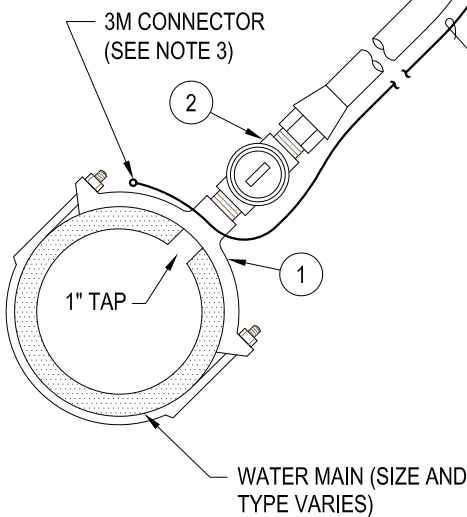
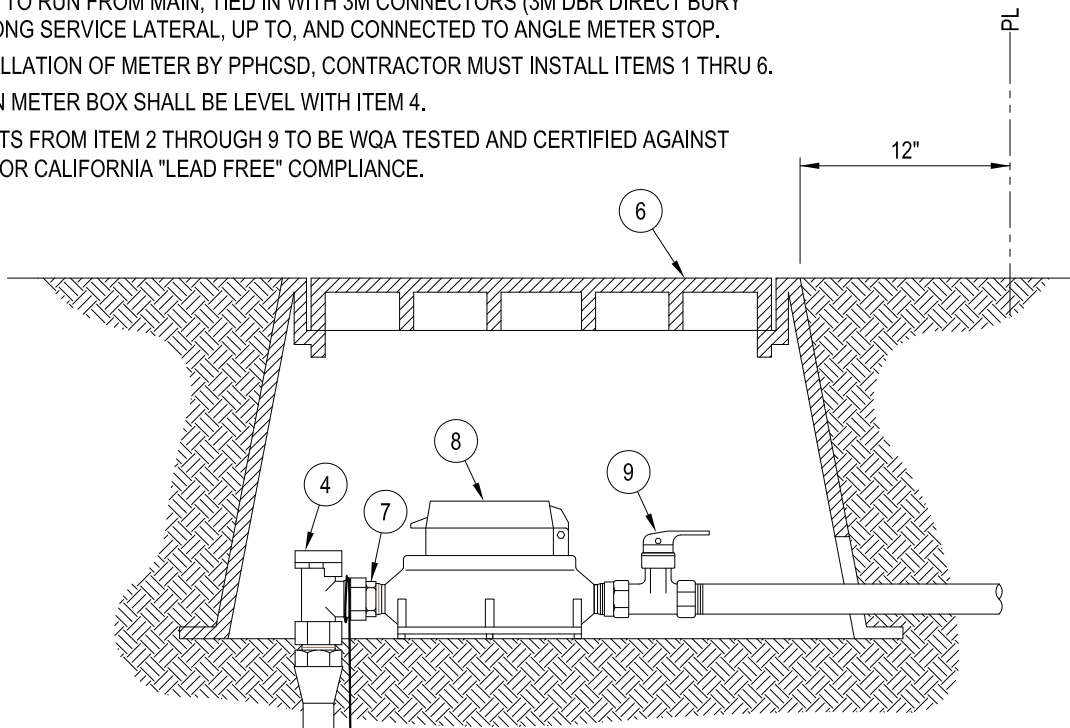


STD. DWG. No.

W-1

GENERAL NOTES

1. ALL SERVICE LINES SHALL HAVE A MINIMUM DEPTH OF 24-INCHES BELOW FINISHED GRADE.
2. ALL SERVICE MATERIAL SHALL BE NEW.
3. LOCATING WIRE TO RUN FROM MAIN, TIED IN WITH 3M CONNECTORS (3M DBR DIRECT BURY SPLICE KIT), ALONG SERVICE LATERAL, UP TO, AND CONNECTED TO ANGLE METER STOP.
4. PRIOR TO INSTALLATION OF METER BY PPHCSD, CONTRACTOR MUST INSTALL ITEMS 1 THRU 6.
5. ALL MATERIAL IN METER BOX SHALL BE LEVEL WITH ITEM 4.
6. ALL COMPONENTS FROM ITEM 2 THROUGH 9 TO BE WQA TESTED AND CERTIFIED AGAINST WQA ORD0902 FOR CALIFORNIA "LEAD FREE" COMPLIANCE.



MATERIALS

- 1 "MAIN SIZE" x "TAP SIZE" SERVICE SADDLE, MUELLER (FIPT OUTLET THREAD); C900 (BRONZE DOUBLE STRAP, SS DOUBLE STRAPS) AC (BRONZE DOUBLE STRAP) OR APPROVED EQUAL
- 2 1" CORP. STOP (BRASS), MUELLER "INSTA-TITE" H-15026 (NO EQUAL)
- 3 1" MUNICIPEX POLY SDR9, CLASS 200, (NO EQUAL)
- 4 1" ANGLE METER STOP (BRASS), MUELLER "INSTA-TITE" H-14266 (NO EQUAL)
- 5 14-GAUGE INSULATED COPPER LOCATING WIRE
- 6 METER BOX, APPLIED ENGINEERING PRODUCTS SERIES 1320 RECTANGULAR PLASTIC BODY 12" HIGH WITH SOLID COVER OR APPROVED EQUAL
- 7 1" x 3/4" METER ADAPTER, A.Y. McDONALD 710J34 (NO EQUAL)
- 8 METER SUPPLIED BY PPHCSD
- 9 3/4" BALL VALVE, BRASS (METER SWIVEL NUT x FIPT), MUELLER BR2B OR APPROVED EQUAL

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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT

3/4" METER SERVICE ASSEMBLY

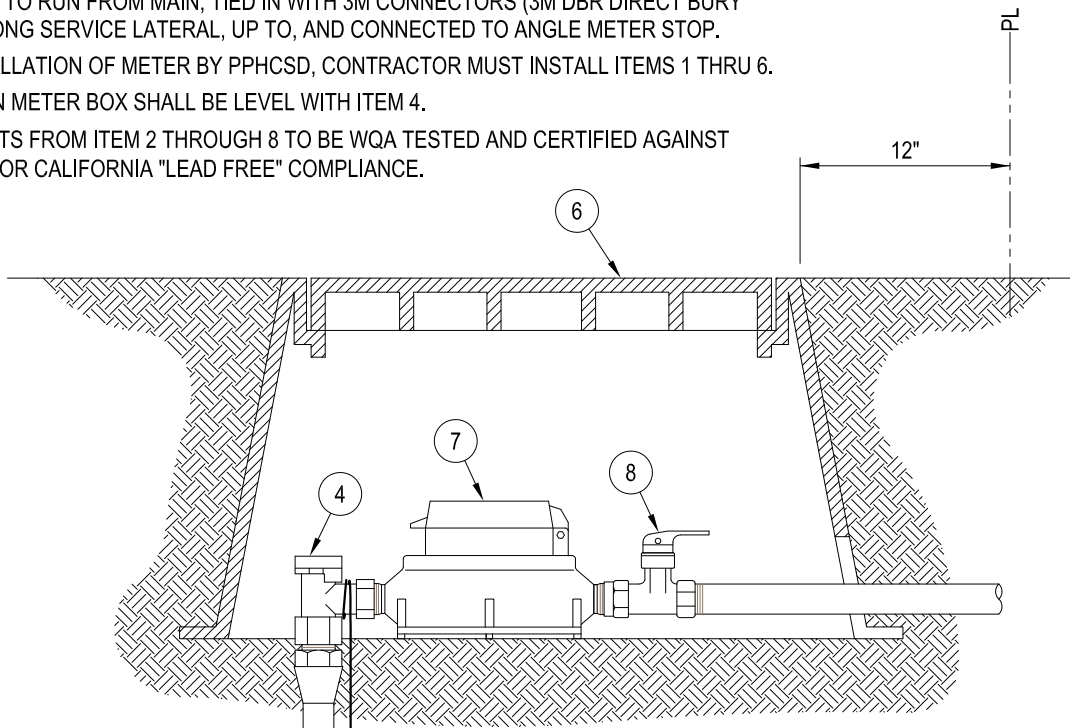


STD. DWG. No.

W-2a

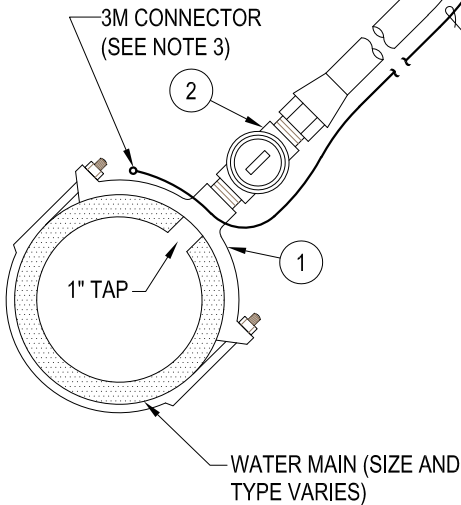
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4. PRIOR TO INSTALLATION OF METER BY PPHCSD, CONTRACTOR MUST INSTALL ITEMS 1 THRU 6.
5. ALL MATERIAL IN METER BOX SHALL BE LEVEL WITH ITEM 4.
6. ALL COMPONENTS FROM ITEM 2 THROUGH 8 TO BE WQA TESTED AND CERTIFIED AGAINST WQA ORD0902 FOR CALIFORNIA "LEAD FREE" COMPLIANCE.



MATERIALS

- 1 "MAIN SIZE" x "TAP SIZE" SERVICE SADDLE, MUELLER (FIPT OUTLET THREAD): C900 (BRONZE DOUBLE STRAP, SS DOUBLE STRAPS) AC (BRONZE DOUBLE STRAP) OR APPROVED EQUAL
- 2 1" CORP. STOP (BRASS), MUELLER "INSTA-TITE" H-15026 (NO EQUAL)
- 3 1" MUNICIPEX POLY SDR9, CLASS 200, (NO EQUAL)
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- 6 METER BOX, APPLIED ENGINEERING PRODUCTS SERIES 1320 RECTANGULAR PLASTIC BODY 12" HIGH WITH SOLID COVER OR APPROVED EQUAL
- 7 METER SUPPLIED BY PPHCSD
- 8 1" BALL VALVE, BRASS (METER SWIVEL NUT x FIPT), MUELLER OR APPROVED EQUAL



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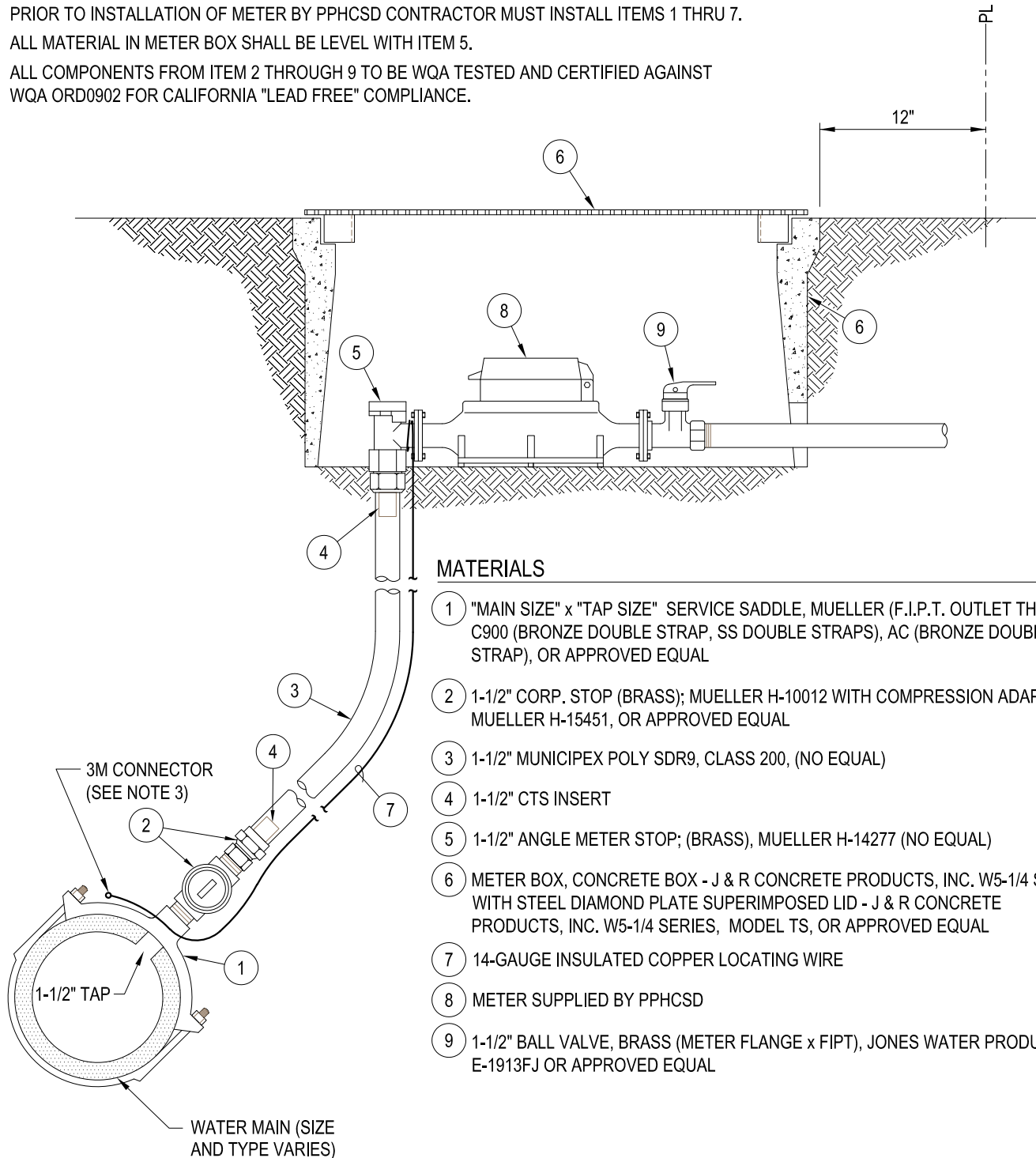
PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
1" METER SERVICE ASSEMBLY



STD. DWG. No.
W-2b

GENERAL NOTES

1. ALL SERVICE LINES SHALL HAVE A MINIMUM DEPTH OF 24-INCHES BELOW FINISHED GRADE.
2. ALL SERVICE MATERIAL SHALL BE NEW.
3. LOCATING WIRE TO RUN FROM MAIN, TIED IN WITH 3M CONNECTORS (3M DBR DIRECT BURY SPLICE KIT), ALONG SERVICE LATERAL, UP TO, AND CONNECTED TO ANGLE METER STOP.
4. PRIOR TO INSTALLATION OF METER BY PPHCSD CONTRACTOR MUST INSTALL ITEMS 1 THRU 7.
5. ALL MATERIAL IN METER BOX SHALL BE LEVEL WITH ITEM 5.
6. ALL COMPONENTS FROM ITEM 2 THROUGH 9 TO BE WQA TESTED AND CERTIFIED AGAINST WQA ORD0902 FOR CALIFORNIA "LEAD FREE" COMPLIANCE.



MATERIALS

- 1 "MAIN SIZE" x "TAP SIZE" SERVICE SADDLE, MUELLER (F.I.P.T. OUTLET THREAD); C900 (BRONZE DOUBLE STRAP, SS DOUBLE STRAPS), AC (BRONZE DOUBLE STRAP), OR APPROVED EQUAL
- 2 1-1/2" CORP. STOP (BRASS); MUELLER H-10012 WITH COMPRESSION ADAPTER, MUELLER H-15451, OR APPROVED EQUAL
- 3 1-1/2" MUNICIPEX POLY SDR9, CLASS 200, (NO EQUAL)
- 4 1-1/2" CTS INSERT
- 5 1-1/2" ANGLE METER STOP; (BRASS), MUELLER H-14277 (NO EQUAL)
- 6 METER BOX, CONCRETE BOX - J & R CONCRETE PRODUCTS, INC. W5-1/4 SERIES WITH STEEL DIAMOND PLATE SUPERIMPOSED LID - J & R CONCRETE PRODUCTS, INC. W5-1/4 SERIES, MODEL TS, OR APPROVED EQUAL
- 7 14-GAUGE INSULATED COPPER LOCATING WIRE
- 8 METER SUPPLIED BY PPHCSD
- 9 1-1/2" BALL VALVE, BRASS (METER FLANGE x FIPT), JONES WATER PRODUCTS E-1913FJ OR APPROVED EQUAL

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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT

1-1/2" METER SERVICE ASSEMBLY

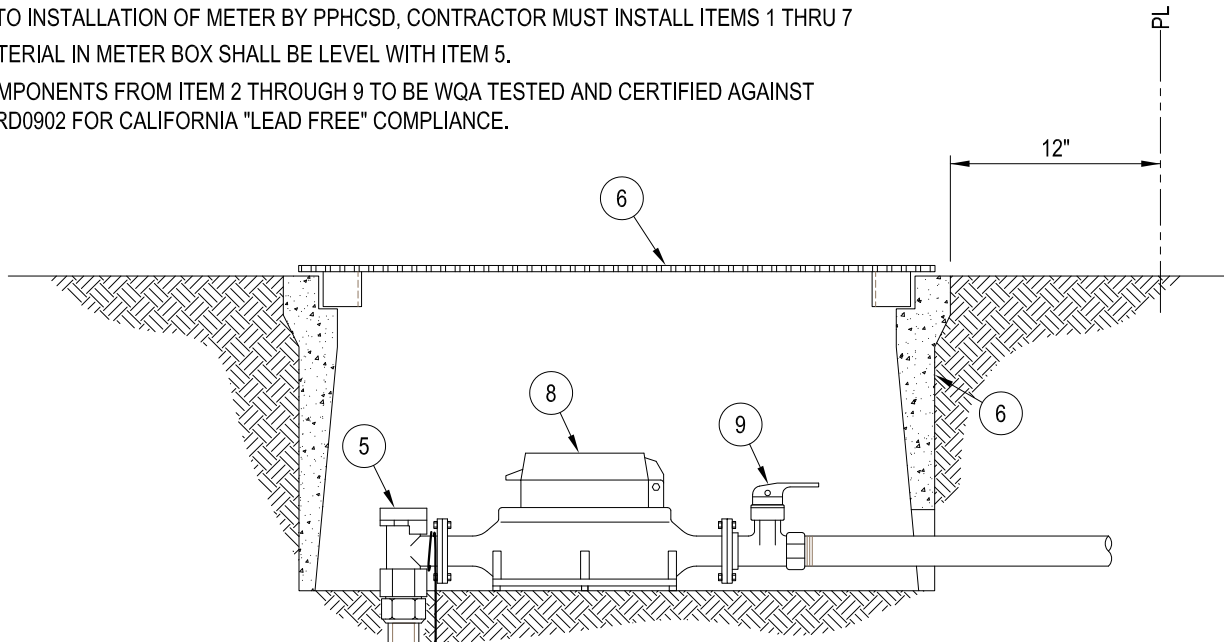


STD. DWG. No.

W-2c

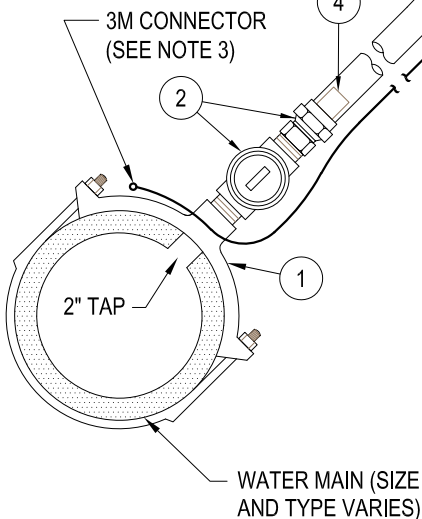
GENERAL NOTES

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2. ALL SERVICE MATERIAL SHALL BE NEW.
3. LOCATING WIRE TO RUN FROM MAIN, TIED IN WITH 3M CONNECTORS (3M DBR DIRECT BURY SPLICE KIT), ALONG SERVICE LATERAL, UP TO, AND CONNECTED TO ANGLE METER STOP.
4. PRIOR TO INSTALLATION OF METER BY PPHCSD, CONTRACTOR MUST INSTALL ITEMS 1 THRU 7
5. ALL MATERIAL IN METER BOX SHALL BE LEVEL WITH ITEM 5.
6. ALL COMPONENTS FROM ITEM 2 THROUGH 9 TO BE WQA TESTED AND CERTIFIED AGAINST WQA ORD0902 FOR CALIFORNIA "LEAD FREE" COMPLIANCE.



MATERIALS

- 1 "MAIN SIZE" x "TAP SIZE" SERVICE SADDLE, MUELLER (F.I.P. T. OUTLET THREAD): C900 (BRONZE DOUBLE STRAP, SS DOUBLE STRAPS), AC (BRONZE DOUBLE STRAP) OR APPROVED EQUAL
- 2 1-1/2" CORP. STOP (BRASS); MUELLER H-10012 WITH COMPRESSION ADAPTER, MUELLER H-15451, OR APPROVED EQUAL
- 3 2" MUNICIPEX POLY SDR9, CLASS 200, (NO EQUAL)
- 4 2" CTS INSERT
- 5 2" ANGLE METER STOP; (BRASS), MUELLER H-14277 (NO EQUAL)
- 6 METER BOX, CONCRETE BOX - J & R CONCRETE PRODUCTS, INC. W5-1/4 SERIES WITH STEEL DIAMOND PLATE SUPERIMPOSED LID - J & R CONCRETE PRODUCTS, INC. W5-1/4 SERIES, MODEL TS, OR APPROVED EQUAL
- 7 14-GAUGE INSULATED COPPER LOCATING WIRE
- 8 METER SUPPLIED BY PPHCSD
- 9 2" BALL VALVE, BRASS (METER FLANGE x FIPT), JONES WATER PRODUCTS E-1913FJ OR APPROVED EQUAL



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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
2" METER SERVICE ASSEMBLY



STD. DWG. No.

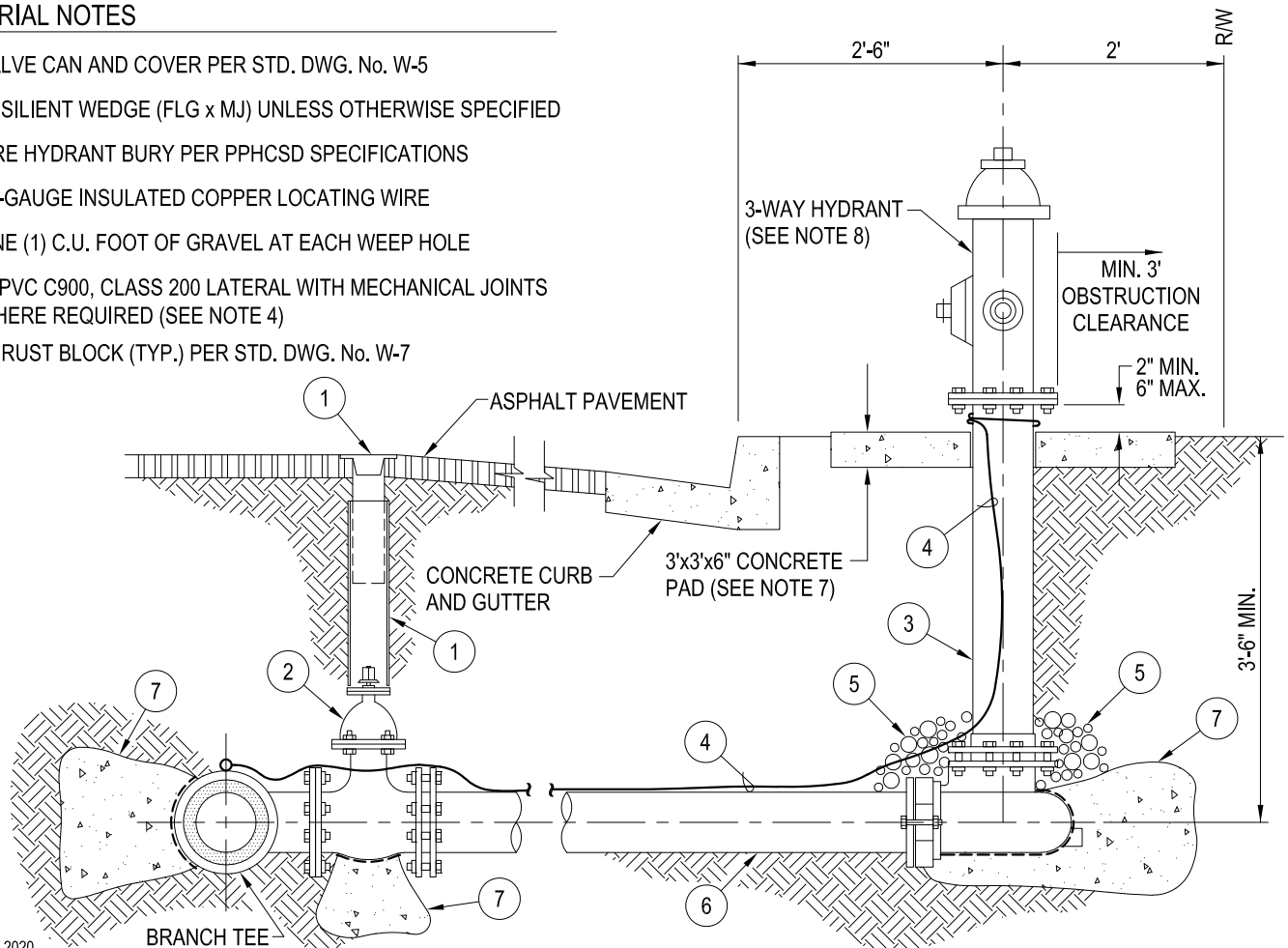
W-2d

GENERAL NOTES

1. WRAP 8 MIL POLYETHYLENE AROUND PARTS REQUIRING THRUST BLOCK OR PIERS.
2. WEEP HOLE ON HYDRANT BARREL MUST BE CLEAR OF OBSTRUCTIONS.
3. CENTER OF HYDRANT IS TO BE PLACED AT PROPERTY LINE, AND 2' FROM RIGHT-OF-WAY WHERE CURB, GUTTER AND SIDEWALK IS NOT TO BE CONSTRUCTED. WHERE CURB, GUTTER AND SIDEWALK IS EXISTING OR TO BE CONSTRUCTED, CENTER OF HYDRANT IS TO BE LOCATED PER PPHCSD OR COUNTY REQUIREMENTS.
4. 6" PVC C900 CLASS 200 HYDRANT LATERAL LENGTH IS VARIABLE. TO BE SPECIFIED ON PLAN DRAWINGS. LATERAL MUST BE INSTALLED LEVEL, WITH NO DEFLECTIONS AT JOINTS ALLOWED. ALL JOINTS TO BE RESTRAINED.
5. ALL PVC HYDRANT LATERALS SHALL INCLUDE RESILIENT WEDGE VALVES (FLG x MJ) MUELLER A2360-16 OR APPROVED EQUAL AND MECHANICAL JOINT (MJ) FIRE HYDRANT SHOES.
6. LOCATING WIRE TO RUN FROM MAIN, TIED IN WITH 3M CONNECTORS (3M DBR DIRECT BURY SPLICE KIT) ALONG HYDRANT LATERAL, UP TO, AND CONNECT WITH, HYDRANT CAP CHAIN.
7. ELEVATION OF FIRE HYDRANT CONCRETE PAD SHALL BE DETERMINED BY PROPOSED CONSTRUCTION PLANS OR EXISTING GROUND ELEVATIONS IN PREVIOUSLY DEVELOPED AREAS.
8. 3-WAY HYDRANTS TO BE MUELLER SUPER CENTURION No. A-423, OR APPROVED EQUAL.
9. HYDRANT ASSEMBLY TO BE INSTALLED PLUMB, LATERAL TO BE INSTALLED LEVEL AND STRAIGHT.
10. HYDRANT SHALL BE PAINTED YELLOW (FED. No. 13655 OSHA / YELLOW, HIGH VISIBILITY).
11. MECHANICAL JOINT(S) (MJ) TO BE EBBA IRON MEGALUG, ROMAC GRIP RING OR APPROVED EQUAL.
12. DEAD END LINES REQUIRE A FIRE HYDRANT AT THE END OF PIPE FOR CUL-DE-SAC'S. DEAD END LINES FOR MAIN LINE EXTENSIONS REQUIRE TEE AT FIRE HYDRANT LATERAL WITH INLINE VALVE, 5-FOOT STUB WITH END CAP.
13. HYDRANT SHALL NOT HAVE MORE THAN ONE (1) EXTENSION TO RAISE TO PROPER HEIGHT.
14. ALL MATERIALS SHALL BE NEW

MATERIAL NOTES

- 1 VALVE CAN AND COVER PER STD. DWG. No. W-5
- 2 RESILIENT WEDGE (FLG x MJ) UNLESS OTHERWISE SPECIFIED
- 3 FIRE HYDRANT BURY PER PPHCSD SPECIFICATIONS
- 4 14-GAUGE INSULATED COPPER LOCATING WIRE
- 5 ONE (1) C.U. FOOT OF GRAVEL AT EACH WEEP HOLE
- 6 6" PVC C900, CLASS 200 LATERAL WITH MECHANICAL JOINTS WHERE REQUIRED (SEE NOTE 4)
- 7 THRUST BLOCK (TYP.) PER STD. DWG. No. W-7



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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT

5-1/4" FIRE HYDRANT ASSEMBLY



STD. DWG. No.

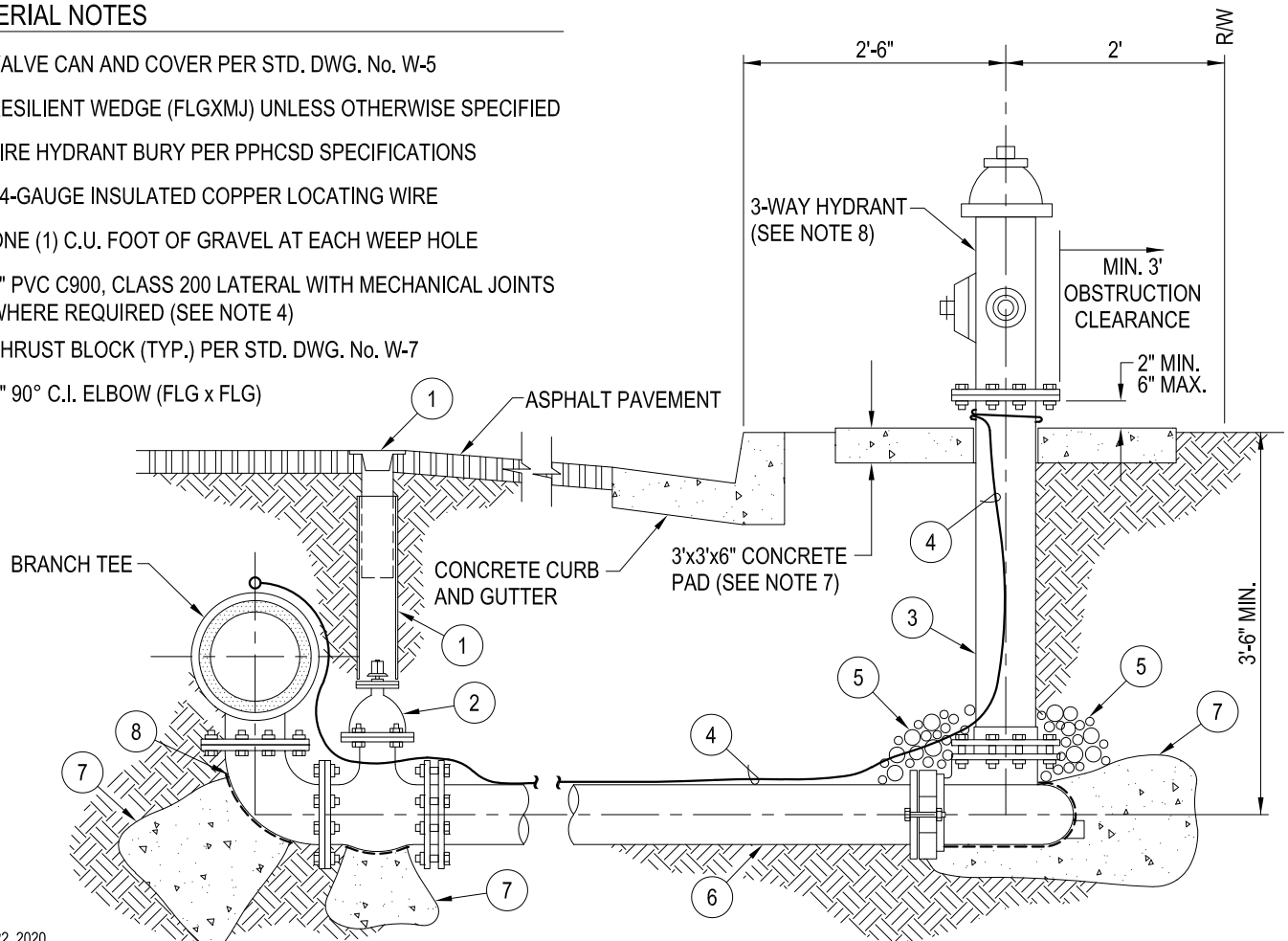
W-3

GENERAL NOTES

1. WRAP 8 MIL POLYETHYLENE AROUND PARTS REQUIRING THRUST BLOCK OR PIERS.
2. WEEP HOLE ON HYDRANT BARREL MUST BE CLEAR OF OBSTRUCTIONS.
3. CENTER OF HYDRANT IS TO BE PLACED AT PROPERTY LINE, AND 2' FROM RIGHT-OF-WAY WHERE CURB, GUTTER AND SIDEWALK IS NOT TO BE CONSTRUCTED. WHERE CURB, GUTTER AND SIDEWALK IS EXISTING OR TO BE CONSTRUCTED, CENTER OF HYDRANT IS TO BE LOCATED PER PPHCSD OR COUNTY REQUIREMENTS.
4. 6" PVC C900 CLASS 200 HYDRANT LATERAL LENGTH IS VARIABLE. TO BE SPECIFIED ON PLAN DRAWINGS. LATERAL MUST BE INSTALLED LEVEL, WITH NO DEFLECTIONS AT JOINTS ALLOWED. ALL JOINTS TO BE RESTRAINED.
5. ALL PVC HYDRANT LATERALS SHALL INCLUDE RESILIENT WEDGE VALVES (FLG x MJ) MUELLER A2360-16 OR APPROVED EQUAL AND MECHANICAL JOINT (MJ) FIRE HYDRANT SHOES.
6. LOCATING WIRE TO RUN FROM MAIN, TIED IN WITH 3M CONNECTORS (3M DBR DIRECT BURY SPLICE KIT) ALONG HYDRANT LATERAL, UP TO, AND CONNECT WITH, HYDRANT CAP CHAIN.
7. ELEVATION OF FIRE HYDRANT CONCRETE PAD SHALL BE DETERMINED BY PROPOSED CONSTRUCTION PLANS OR EXISTING GROUND ELEVATIONS IN PREVIOUSLY DEVELOPED AREAS.
8. 3-WAY HYDRANTS TO BE MUELLER SUPER CENTURION No. A-423, OR APPROVED EQUAL.
9. HYDRANT ASSEMBLY TO BE INSTALLED PLUMB, LATERAL TO BE INSTALLED LEVEL AND STRAIGHT.
10. HYDRANT SHALL BE PAINTED YELLOW (FED. No. 13655 OSHA / YELLOW, HIGH VISIBILITY).
11. MECHANICAL JOINT(S) (MJ) TO BE EBBA IRON MEGALUG, ROMAC GRIP RING OR APPROVED EQUAL.
12. DEAD END LINES REQUIRE A FIRE HYDRANT AT THE END OF PIPE FOR CUL-DE-SAC'S. DEAD END LINES FOR MAIN LINE EXTENSIONS REQUIRE TEE AT FIRE HYDRANT LATERAL WITH INLINE VALVE, 5-FOOT STUB WITH END CAP.
13. HYDRANT SHALL NOT HAVE MORE THAN ONE (1) EXTENSION TO RAISE TO PROPER HEIGHT.
14. ALL MATERIALS SHALL BE NEW

MATERIAL NOTES

- 1 VALVE CAN AND COVER PER STD. DWG. No. W-5
- 2 RESILIENT WEDGE (FLGXMJ) UNLESS OTHERWISE SPECIFIED
- 3 FIRE HYDRANT BURY PER PPHCSD SPECIFICATIONS
- 4 14-GAUGE INSULATED COPPER LOCATING WIRE
- 5 ONE (1) C.U. FOOT OF GRAVEL AT EACH WEEP HOLE
- 6 6" PVC C900, CLASS 200 LATERAL WITH MECHANICAL JOINTS WHERE REQUIRED (SEE NOTE 4)
- 7 THRUST BLOCK (TYP.) PER STD. DWG. No. W-7
- 8 6" 90° C.I. ELBOW (FLG x FLG)



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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
5-1/4" FIRE HYDRANT / BLOW-OFF
ASSEMBLY



STD. DWG. No.

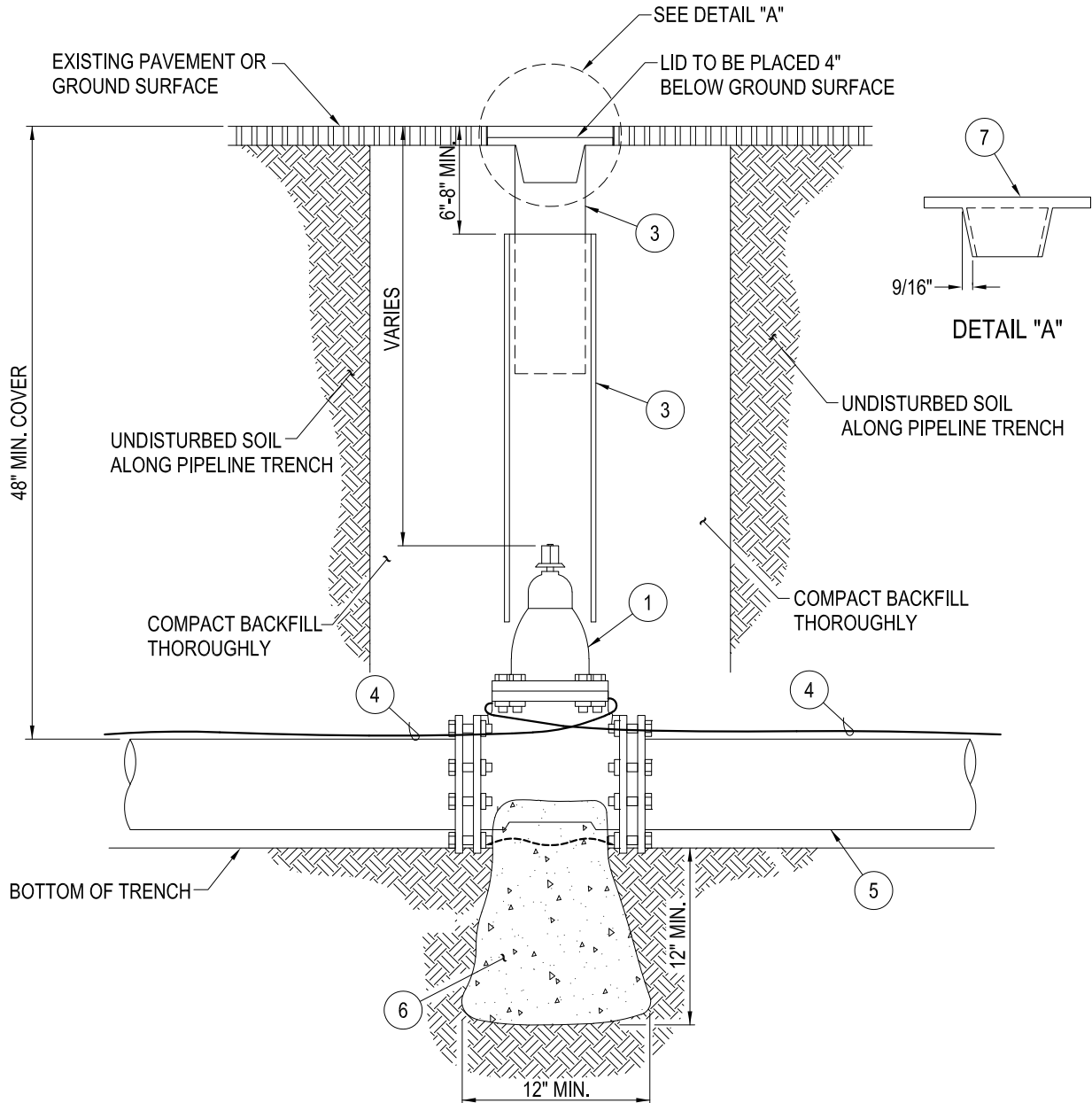
W-4

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RAISING VALVE CANS AFTER STREET PAVING OR GRADING IS COMPLETED
2. GATE VALVES ARE NOT TO BE INSTALLED UNLESS APPROVED BY THE DISTRICT
3. 14-GAUGE INSULATED COPPER LOCATING WIRE TO BE TAPED TO TOP OF PIPE EVERY 5-PIPE AND RUN ALONG OUTSIDE OF VALVE CAN
4. THRUST BLOCK SHALL ALWAYS BE INSTALLED ON VALVES
5. PROVIDE VALVE STEM EXTENSIONS WHERE DEPTH OF OPERATOR NUT EXCEEDS 60"
6. ALL MATERIALS SHALL BE NEW
7. WRAP 8 MIL POLYETHYLENE AROUND PARTS REQUIRING THRUST BLOCKS OR PIERS

MATERIAL NOTES

- 1 AWWA C-905 (LATEST) MJ RESILIENT WEDGE GATE VALVE, MANUFACTURED BY MUELLER OR APPROVED EQUAL
- 2 RESIL6" DIAMETER SDR 35 PIPE (LENGTH VARIES)
- 3 FIRE HY18" GALVANIZED SLIP CAN (ADJUST TO GRADE)
- 4 LOCATING WIRE (SEE NOTE 3)
- 5 PROPOSED WATER PIPELINE (PVC OR D.I.P. CLASS 200)
- 6 CONCRETE THRUST BLOCK PER STD. DWG. No. W-7
- 7 6" O.D. CAST IRON VALVE CAN LID MARKED "WATER"



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**PHELAN PIÑON HILLS
 COMMUNITY SERVICES DISTRICT**
**VALVE CAN ASSEMBLY FOR
 D.I.P. AND PVC PIPE INSTALLATION**

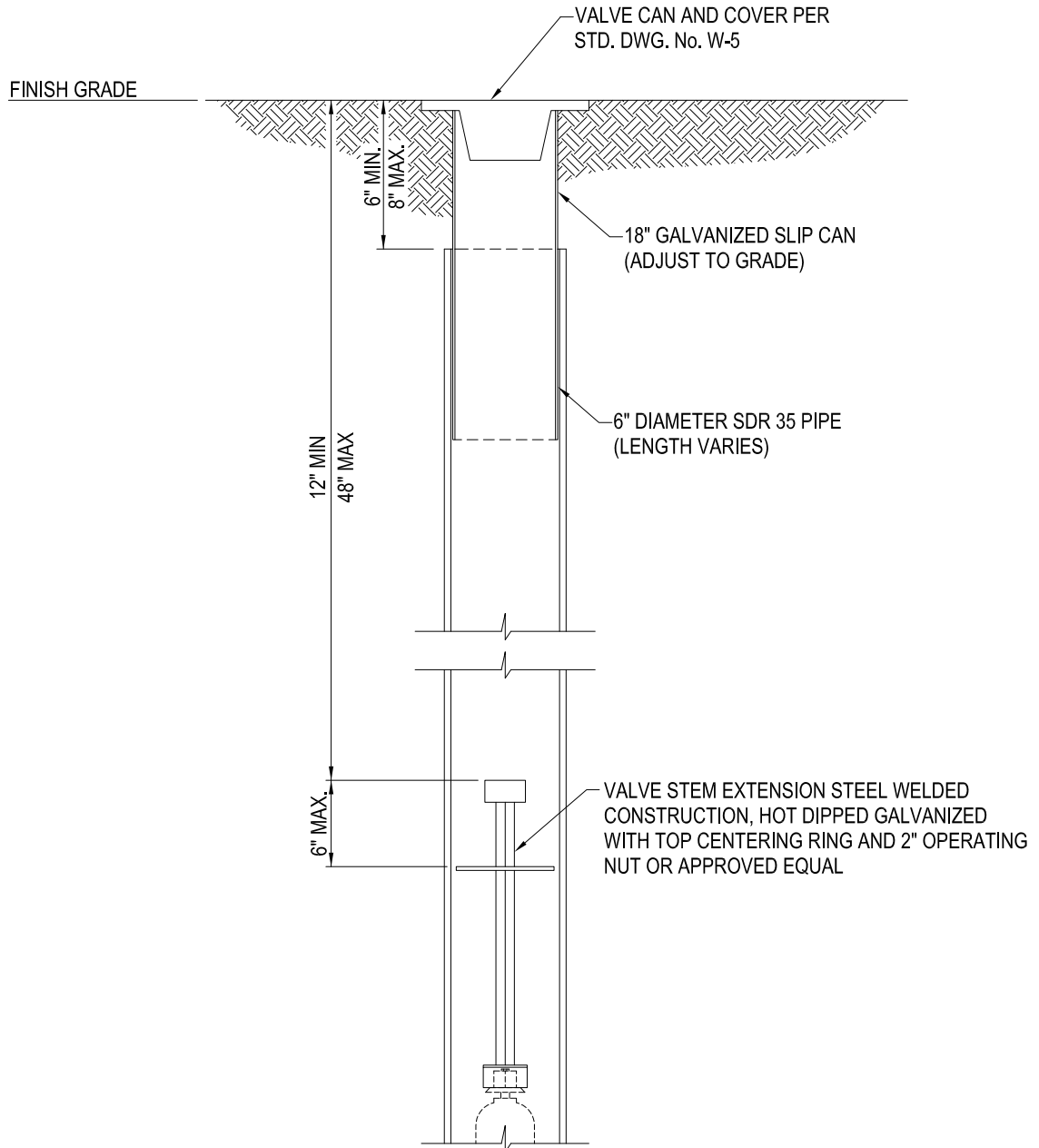


STD. DWG. No.

W-5

GENERAL NOTES

1. EXTEND 2" NUT TO WITHIN 5-FEET OF FINISH GRADE WHEN VALVE NUT IS DEEPER THAN 6-FEET FROM FINISH GRADE
2. WHERE LENGTH OF EXTENSION IS OVER 6-FEET, A SECOND PLATE SHALL BE INSTALLED IN THE CENTER OF THE EXTENSION STEM
3. EXTENSION STEM SHALL BE OF SOLID DESIGN, NO PINNED COUPLINGS PERMITTED
4. EXTENSION STEM SHALL NOT BE ATTACHED TO THE OPERATING NUT OF THE VALVE
5. ALL MATERIALS SHALL BE NEW



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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
VALVE OPERATOR EXTENSION

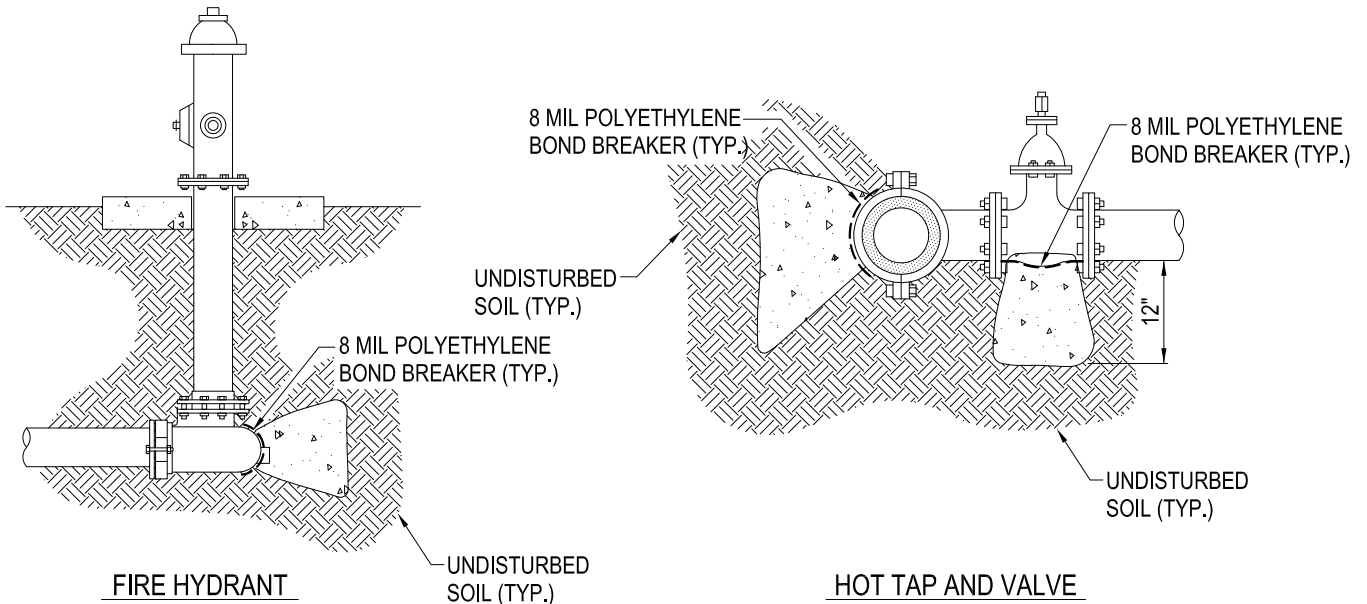


STD. DWG. No.
W-6

GENERAL NOTES

1. PIPE INSTALLED UNDER CONDITIONS DIFFERENT FROM THOSE NORMALLY ENCOUNTERED SHALL REQUIRE THRUST BLOCK DESIGNED FOR THOSE PARTICULAR CONDITIONS
2. ALL THRUST BLOCKS SHALL BE CLASS 520-C-2000 CONCRETE AND PLACED AGAINST UNDISTURBED SOIL. PPHCSD WILL DETERMINE SIZES NOT SHOWN
3. THRUST BLOCKS ON CROSSES SHALL BE USED WHENEVER PIPE SIZES DIFFER OR WHEN ONE OR MORE OPENINGS ARE PLUGGED, OR AS DIRECTED BY PPHCSD
4. REINFORCING STEEL SHALL CONFORM TO A.S.T.M. SPECIFICATIONS A15 AND A305 INTERMEDIATE GRADE
5. ALL FITTINGS TO BE WRAPPED WITH 8 MIL POLYETHYLENE, PER PPHCSD SPECIFICATIONS
6. ALL MATERIALS SHALL BE NEW

MINIMUM BEARING SURFACE AREA (SQ. FT.)					
PIPE SIZE	BENDS				TEE OR DEAD END
	11 1/4°	22 1/2°	45°	90°	
6"	1.0	1.5	2.5	4.5	3.5
8"	1.5	2.5	4.5	8.0	5.5
12"	3.0	4.5	9.0	16.5	12.0



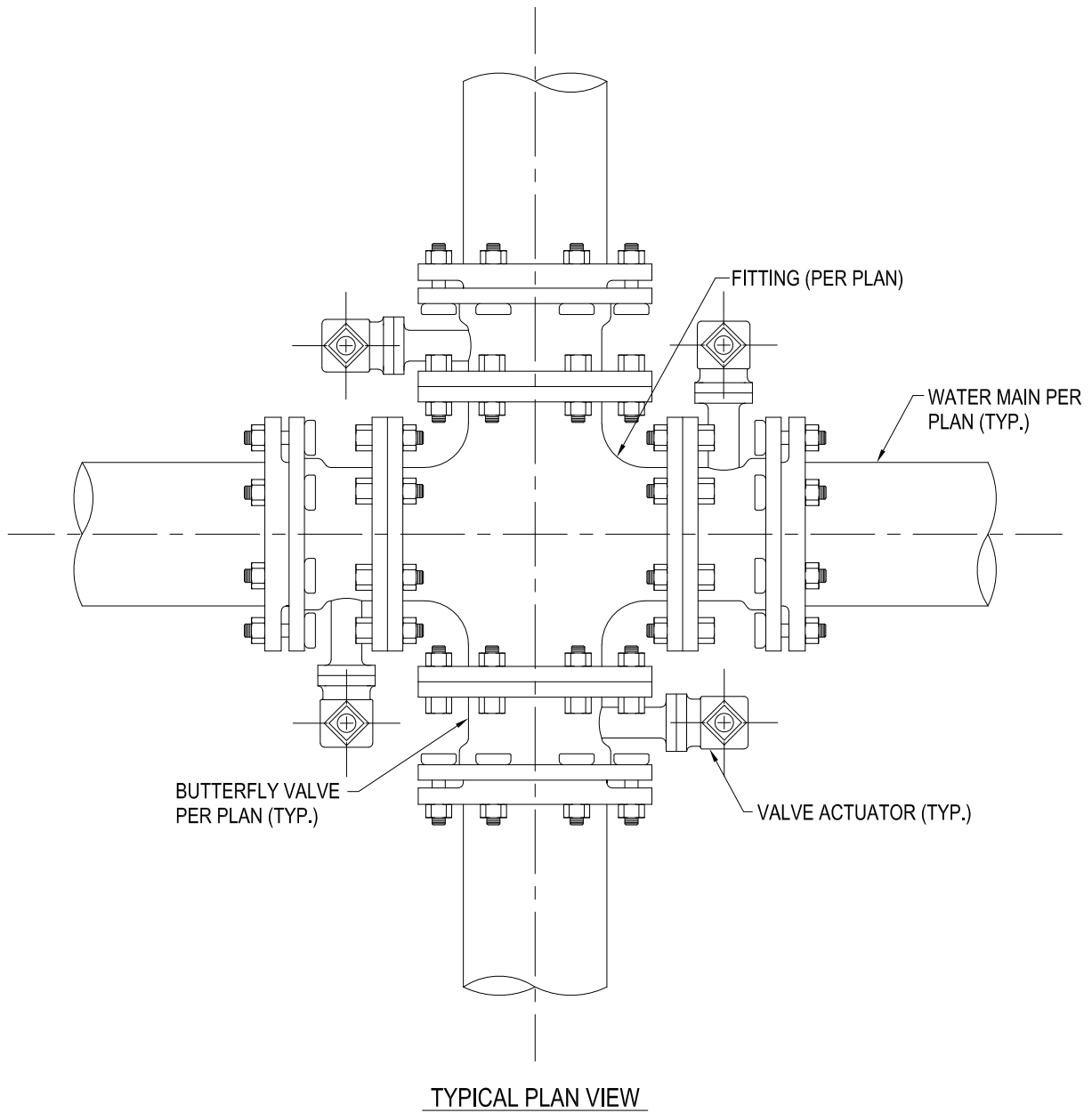
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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
CONCRETE THRUST BLOCK DETAILS



STD. DWG. No.
W-7



NOTE

BUTTERFLY VALVE ACTUATORS TO BE ON THE LEFT SIDE, WHEN VIEWED FROM THE FITTING THROUGH THE VALVE, AS SHOWN ABOVE

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PHELAN PIÑON HILLS
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BUTTERFLY VALVE ACTUATORS
LOCATION AND INSTALLATION



STD. DWG. No.

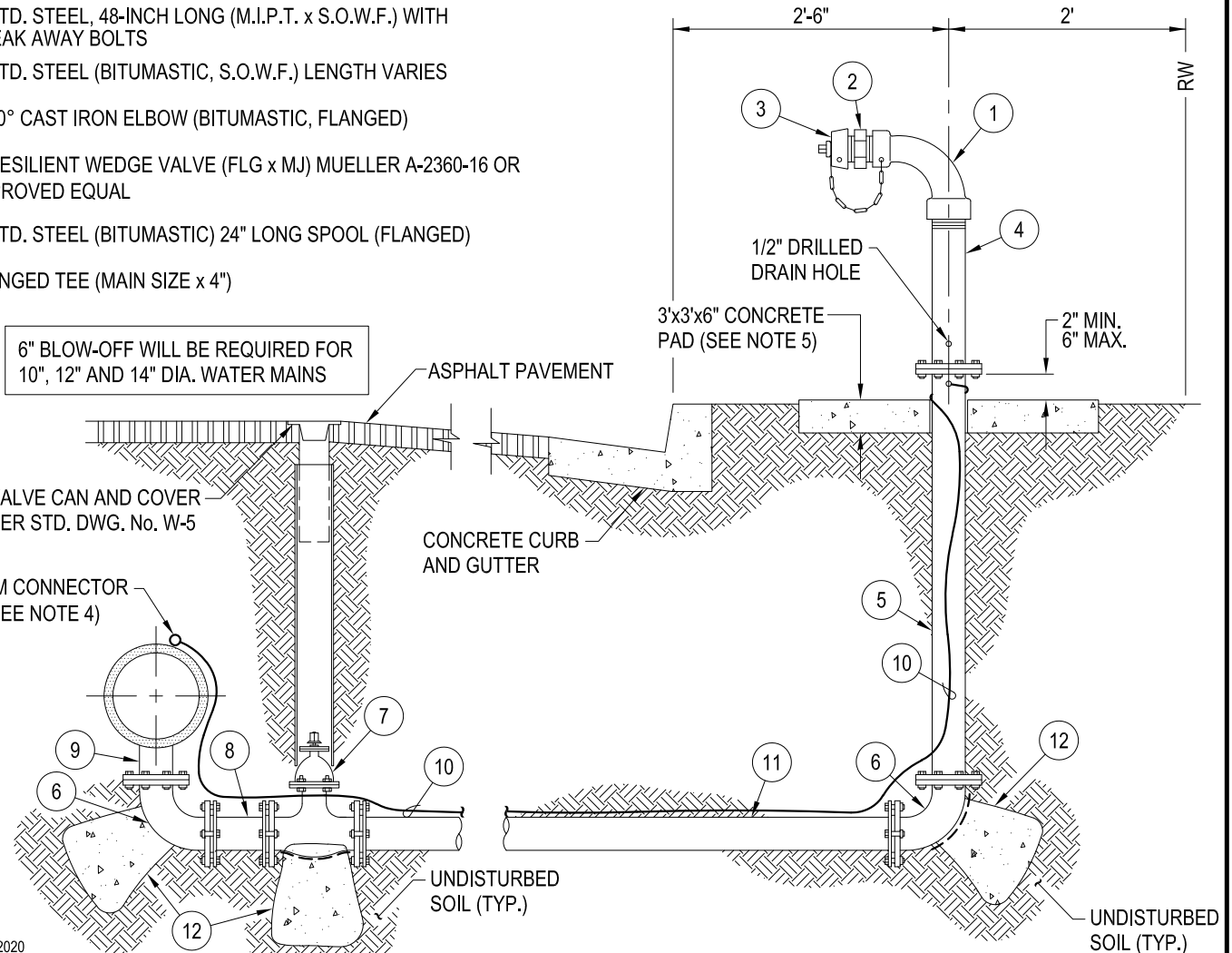
W-8

GENERAL NOTES

1. ALL BURIED STEEL PIPE TO BE WRAPPED WITH 8 MIL. PIPE WRAP TAPE
2. CENTER OF BLOW-OFF IS TO BE PLACED 2' FROM RIGHT-OF-WAY WHERE CURB, GUTTER AND SIDEWALK IS NOT TO BE CONSTRUCTED. WHERE CURB, GUTTER AND SIDEWALK IS EXISTING OR TO BE CONSTRUCTED, CENTER OF BLOW-OFF IS TO BE LOCATED PER PPHCSD OR COUNTY REQUIREMENTS.
3. RESILIENT WEDGE VALVE (FLANGED) SHALL BE MUELLER No. A2360-16 OR APPROVED EQUAL.
4. 14-GAUGE INSULATED COPPER LOCATING WIRE TO RUN FROM MAIN, TIED IN WITH 3M CONNECTORS (3M DBR DIRECT BURY SPLICE KIT) AND CONNECTED TO TAPPING SLEEVE BOLT.
5. ELEVATION OF CONCRETE PAD SHALL BE DETERMINED BY PROPOSED CONSTRUCTION PLANS OR EXISTING GROUND ELEVATIONS IN PREVIOUSLY DEVELOPED AREAS.
6. BLOW-OFF ASSEMBLY TO BE INSTALLED PLUMB, LATERAL TO BE INSTALLED LEVEL AND STRAIGHT, (NO DEFLECTION AT JOINTS ALLOWED).
7. EXPOSED COMPONENTS SHALL BE PAINTED YELLOW.
8. CONTRACTOR TO PROVIDE 1/2" DRILLED DRAIN HOLE ON 4" STD. STEEL BLOW-OFF RISER
9. MECHANICAL JOINT(S) (MJ) TO BE EBBA IRON MEGALUG, ROMAC GRIP RING OR APPROVED EQUAL.

MATERIAL NOTES

- | | |
|--|--|
| <ul style="list-style-type: none"> ① 4"x2-1/2" 90° REDUCING ELBOW CAST OR BLACK IRON (F.I.P.T. x F.I.P.T.) ② 2-1/2" M.I.P.T. x 2-1/2" N.S.T. (HOSE COUPLING THREAD) ADAPTER, BRONZE ③ 2-1/2" HOSE NOZZLE CAP, PLASTIC WITH CHAIN ④ 4" STD. STEEL, 48-INCH LONG (M.I.P.T. x S.O.W.F.) WITH BREAK AWAY BOLTS ⑤ 4" STD. STEEL (BITUMASTIC, S.O.W.F.) LENGTH VARIES ⑥ 4" 90° CAST IRON ELBOW (BITUMASTIC, FLANGED) ⑦ 4" RESILIENT WEDGE VALVE (FLG x MJ) MUELLER A-2360-16 OR APPROVED EQUAL ⑧ 4" STD. STEEL (BITUMASTIC) 24" LONG SPOOL (FLANGED) ⑨ FLANGED TEE (MAIN SIZE x 4") | <ul style="list-style-type: none"> ⑩ LOCATING WIRE (SEE NOTE 4) ⑪ 4" PVC C900 CLASS 200 PIPE (MJ x MJ) ⑫ THRUST BLOCK PER STD. DWG. No. W-7 |
|--|--|



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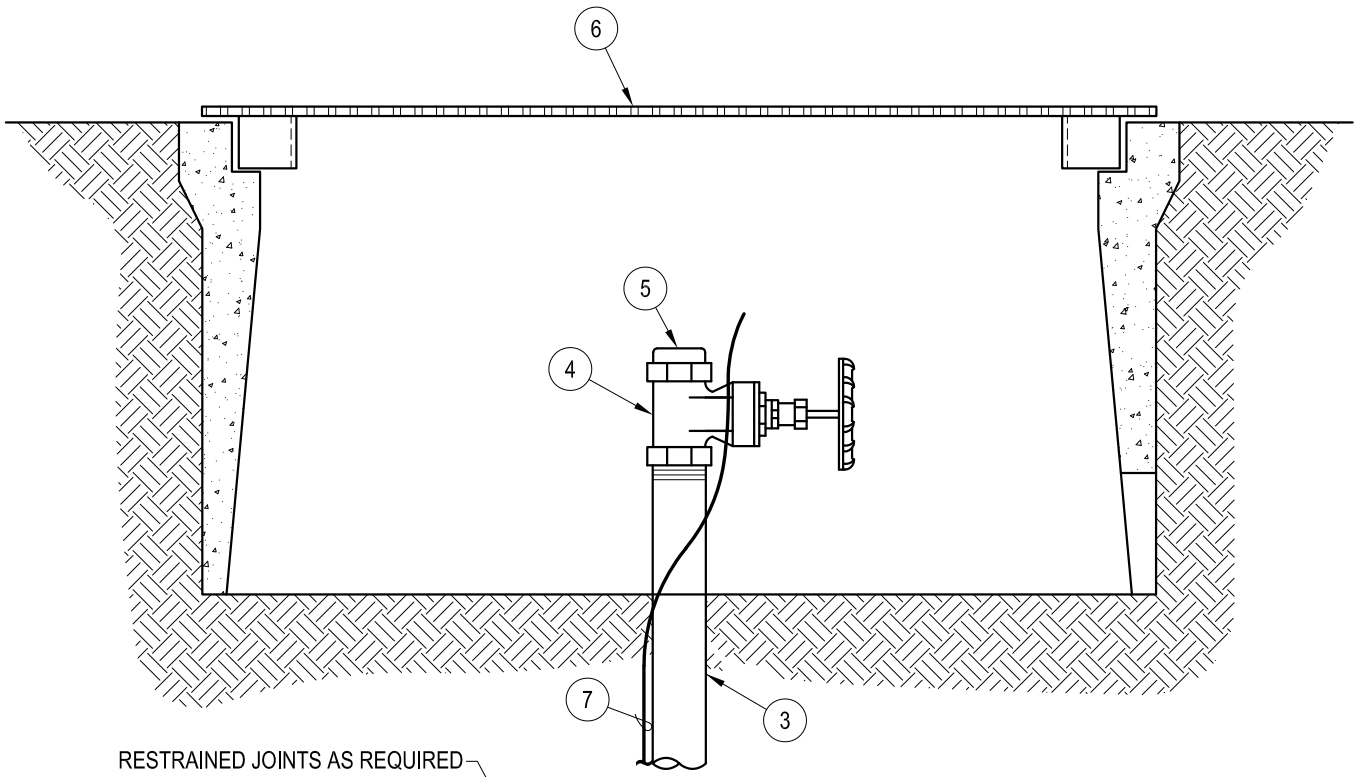
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Engineering			
APPROVED BY:			
Operations			

PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
4" BLOW-OFF ASSEMBLY



STD. DWG. No.

W-9



NOTE
 INSTALL BLOW-OFF 30" BACK OF CURB FACE, AS SHOWN ON PLANS, OR AS DIRECTED BY DISTRICT INSPECTOR

MATERIAL NOTES

- ① RESTRAINED MJ END CAP W/ 2" FIPT TAP
- ② 2" GALVANIZED 90° "STREET" ELBOW
- ③ 2" GALVANIZED PIPE (MIPT X MIPT) X REQUIRED LENGTH
- ④ 2" BRASS GATE VALVE, (F.I.P.T X F.I.P.T.) MILWAUKEE VALVE UP105 OR APPROVED EQUAL
- ⑤ 2" PLUG
- ⑥ METER BOX No. 3 REINFORCED CONCRETE BOX, #4 CONCRETE BOX WITH TWO-PIECE POLYMER LID IF INSTALLED IN SIDEWALK
- ⑦ 14-GUAGE INSULATED COPPER LOCATING WIRE

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Operations			

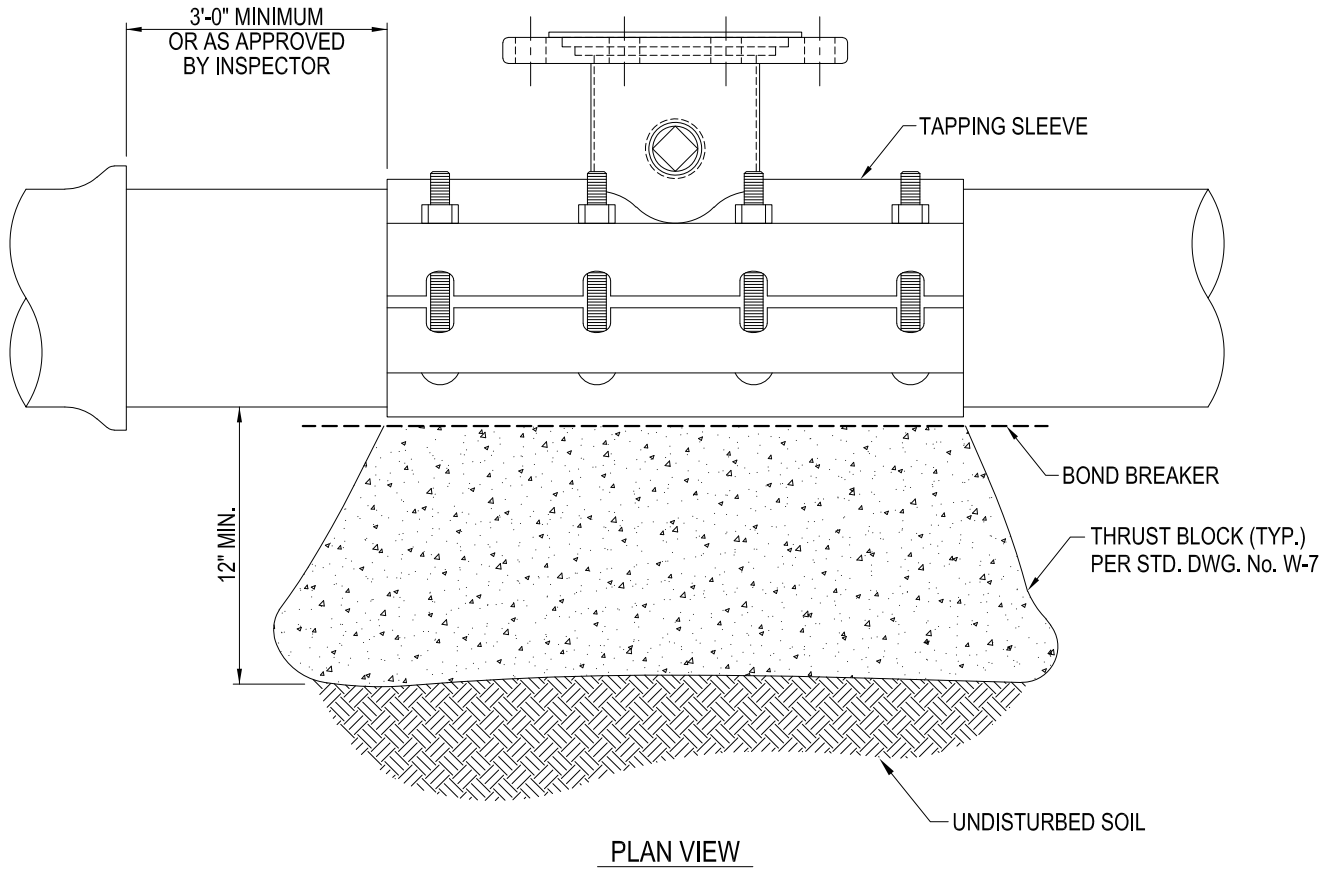
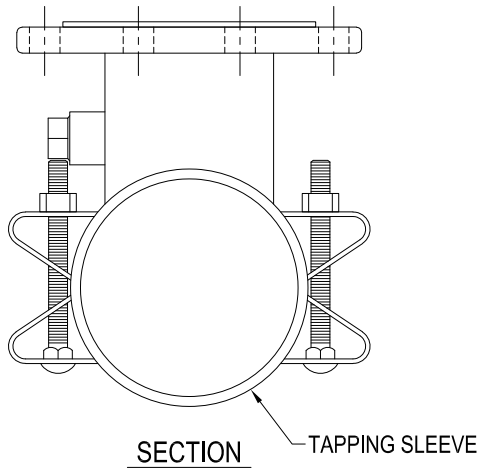
PHELAN PIÑON HILLS
 COMMUNITY SERVICES DISTRICT

TEMPORARY 2" BLOW-OFF ASSEMBLY



STD. DWG. No.

W-11



GENERAL NOTES

1. SIZE ON SIZE TAPS ARE NOT ALLOWED ON CLASS 150 PVC C-900
2. STAINLESS STEEL TAPPING SLEEVE - MUELLER SERIES H-304SS
REFER TO MANUFACTURER'S SPECIFICATION FOR SIZING

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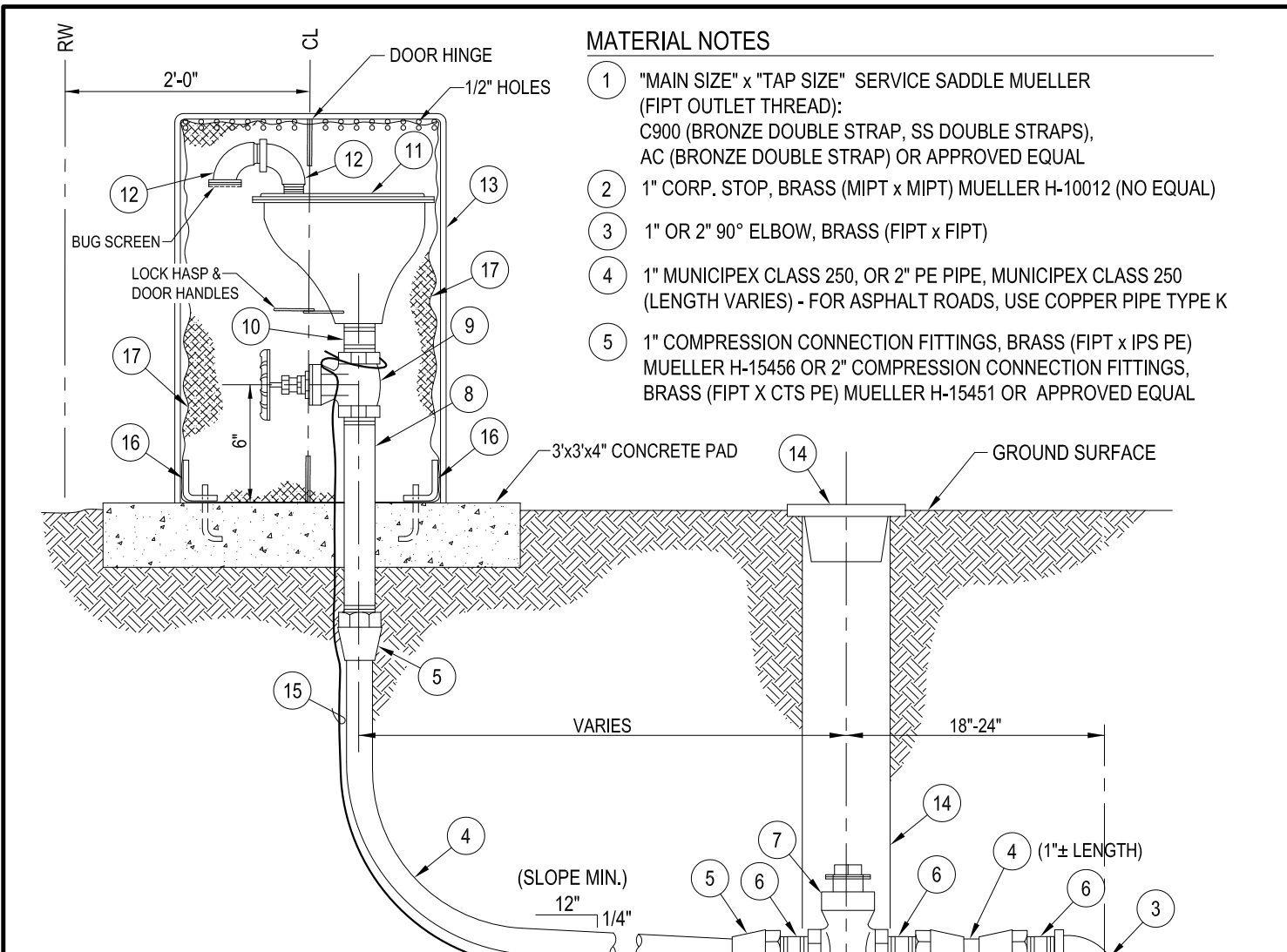
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Operations			

PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
STAINLESS STEEL TAPPING SLEEVE



STD. DWG. No.

W-12



MATERIAL NOTES

- ① "MAIN SIZE" x "TAP SIZE" SERVICE SADDLE MUELLER (FIPT OUTLET THREAD): C900 (BRONZE DOUBLE STRAP, SS DOUBLE STRAPS), AC (BRONZE DOUBLE STRAP) OR APPROVED EQUAL
- ② 1" CORP. STOP, BRASS (MIPT x MIPT) MUELLER H-10012 (NO EQUAL)
- ③ 1" OR 2" 90° ELBOW, BRASS (FIPT x FIPT)
- ④ 1" MUNICIPEX CLASS 250, OR 2" PE PIPE, MUNICIPEX CLASS 250 (LENGTH VARIES) - FOR ASPHALT ROADS, USE COPPER PIPE TYPE K
- ⑤ 1" COMPRESSION CONNECTION FITTINGS, BRASS (FIPT x IPS PE) MUELLER H-15456 OR 2" COMPRESSION CONNECTION FITTINGS, BRASS (FIPT X CTS PE) MUELLER H-15451 OR APPROVED EQUAL

MATERIAL NOTES (CONTINUED)

- ⑥ 1" OR 2" NIPPLES (6" LENGTH), BRASS (MIPT x MIPT)
- ⑦ 1" OR 2" RESILIENT SEATED VALVE, 200 PSI, (FIPT x FIPT) AMERICAN AVK (#03-032-35 OR #03-063-35)
- ⑧ 1" OR 2" NIPPLE (18" LENGTH), BRASS (MIPT x MIPT)
- ⑨ 1" OR 2" GATE VALVE, BRASS (FIPT x FIPT), MILWAUKEE VALVE UP105 OR APPROVED EQUAL
- ⑩ 1" OR 2" x CLOSE NIPPLE, BRASS (MIPT x MIPT)
- ⑪ 1" OR 2" AIR AND VACUUM COMBINATION VALVE (FIPT) CRISPIN (UL10 OR UL20) OR APPROVED EQUAL
- ⑫ 1" OR 2" 90° ELBOW, GALVANIZED
- ⑬ INSTALL ENCLOSURE WITH DOUBLE DOORS, PIPELINE PRODUCTS 1" (VCDD-1624) OR 2" (VCDD-2436)
- ⑭ 6" VALVE CAN SET PER STD. DWG. No. W-5
- ⑮ 14-GAUGE INSULATED COPPER LOCATING WIRE (SEE NOTE)
- ⑯ BOLTED TO CONCRETE PAD
- ⑰ BACKFLOW BUDDY OR APPROVED EQUAL

NOTE

14-GAUGE INSULATED COPPER LOCATING WIRE TO RUN FROM MAIN, TIED IN WITH 3M CONNECTORS (3M DBR DIRECT BURY SPLICE KIT) AND CONNECTED TO TAPPING SLEEVE BOLT

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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
STANDARD 1" AND 2" AIR AND VACUUM
COMBINATION VALVE ASSEMBLY

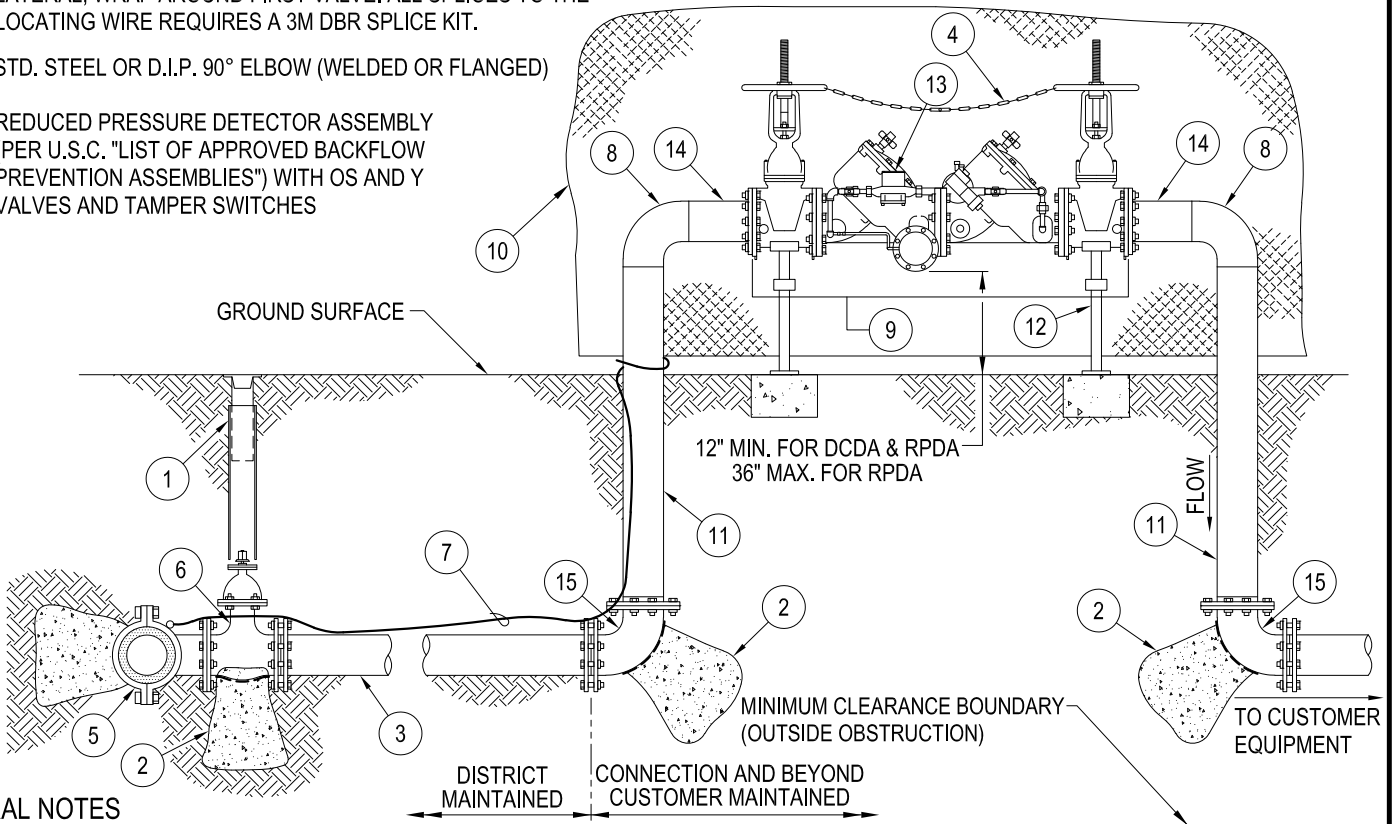


STD. DWG. No.

W-14

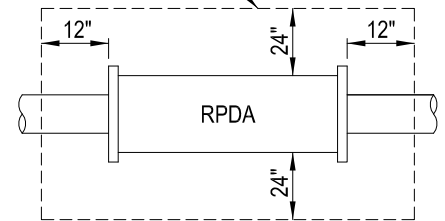
MATERIAL NOTES

- 1 VALVE CAN AND COVER PER STD. DWG. No. W-5
- 2 THRUST BLOCK (TYP.) PER STD. DWG. No. W-7
- 3 C-900 PVC OR D.I.P. PIPE (LENGTH VARIES) WITH ADAPTOR FLANGES AND RESTRAINT COUPLINGS (EBBA ADAPTORS AND RESTRAINT COUPLINGS OR PPHCSD APPROVED EQUAL)
- 4 INSTALL CHAIN WITH BREAK AWAY LOCKS (YALE 196)
- 5 TAPPING SLEEVE PER STD. DWG. No. W-12
- 6 RESILIENT WEDGE GATE VALVE (FLG x MJ) MUELLER A-2360-16 OR APPROVED EQUAL
- 7 14-GAUGE COATED COPPER LOCATING WIRE. CONNECT TO WATER MAIN LOCATING WIRE RUN ALONG FIRE SERVICE LATERAL, WRAP AROUND FIRST VALVE. ALL SPLICES TO THE LOCATING WIRE REQUIRES A 3M DBR SPLICE KIT.
- 8 STD. STEEL OR D.I.P. 90° ELBOW (WELDED OR FLANGED)
- 9 REDUCED PRESSURE DETECTOR ASSEMBLY (PER U.S.C. "LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES") WITH OS AND Y VALVES AND TAMPER SWITCHES
- 10 THERMAL INSULATING COVER WITH RESISTANT/WEATHER-PROOF EXTERIOR, TEAR-PROOF INTERIOR. BACKFLOW BUDDY, BDI, OR APPROVED EQUAL
- 11 STD. STEEL PIPE, WELDED (FLG x PE OR FLG x FLG)
- 12 ADJUSTABLE PIPE SUPPORT (REQUIRED FOR 6" AND LARGER)
- 13 BY-PASS LINE ASSEMBLY WITH 3/4" METER (TO BE READ IN CU. FT.) REDUCED PRESSURE PRINCIPLE ASSEMBLY FOR REDUCED DETECTOR ASSEMBLY.
- 14 STD. STEEL SPOOL, 6" MIN. IN LENGTH, WELDED (FLG x PE OR FLG x FLG)
- 15 DUCTILE IRON 90° ELBOW (MJ x FLG)



GENERAL NOTES

- 1. REDUCED PRESSURE DETECTOR BACKFLOW ASSEMBLY SHALL BE INSTALLED IN LOCATION APPROVED BY PPHCSD AND THE FIRE DEPARTMENT HAVING JURISDICTION
- 2. REDUCED PRESSURE DETECTOR BACKFLOW ASSEMBLY SHALL BE INSTALLED HORIZONTAL AND PLUMB
- 3. ASSEMBLIES MUST BE USC AND CDPH APPROVED
- 4. ALL ASSEMBLIES SHALL BE FLANGED
- 5. DETECTOR METER TO READ IN CUBIT FEET
- 6. GUARD POSTS (PER STD. DWG. No. W-17) REQUIRED IF INSTALLING WHERE ACCESSIBLE TO TRAFFIC
- 7. RESTRAIN ALL JOINTS
- 8. INSTALL THRUST BLOCK PER PPHCSD STD. DWG. No. W-7 AS REQUIRED
- 9. IT IS THE CUSTOMER'S RESPONSIBILITY TO PROTECT DEVICE FROM FREEZING TEMPERATURES AND TO PROVIDE ACCESS FOR TESTING
- 10. RPBD MUST BE TESTED BY A CERTIFIED BACKFLOW TESTER PRIOR TO WATER SERVICE BEING ACTIVATED. A COPY OF THE TEST MUST BE SUBMITTED TO THE INSPECTOR



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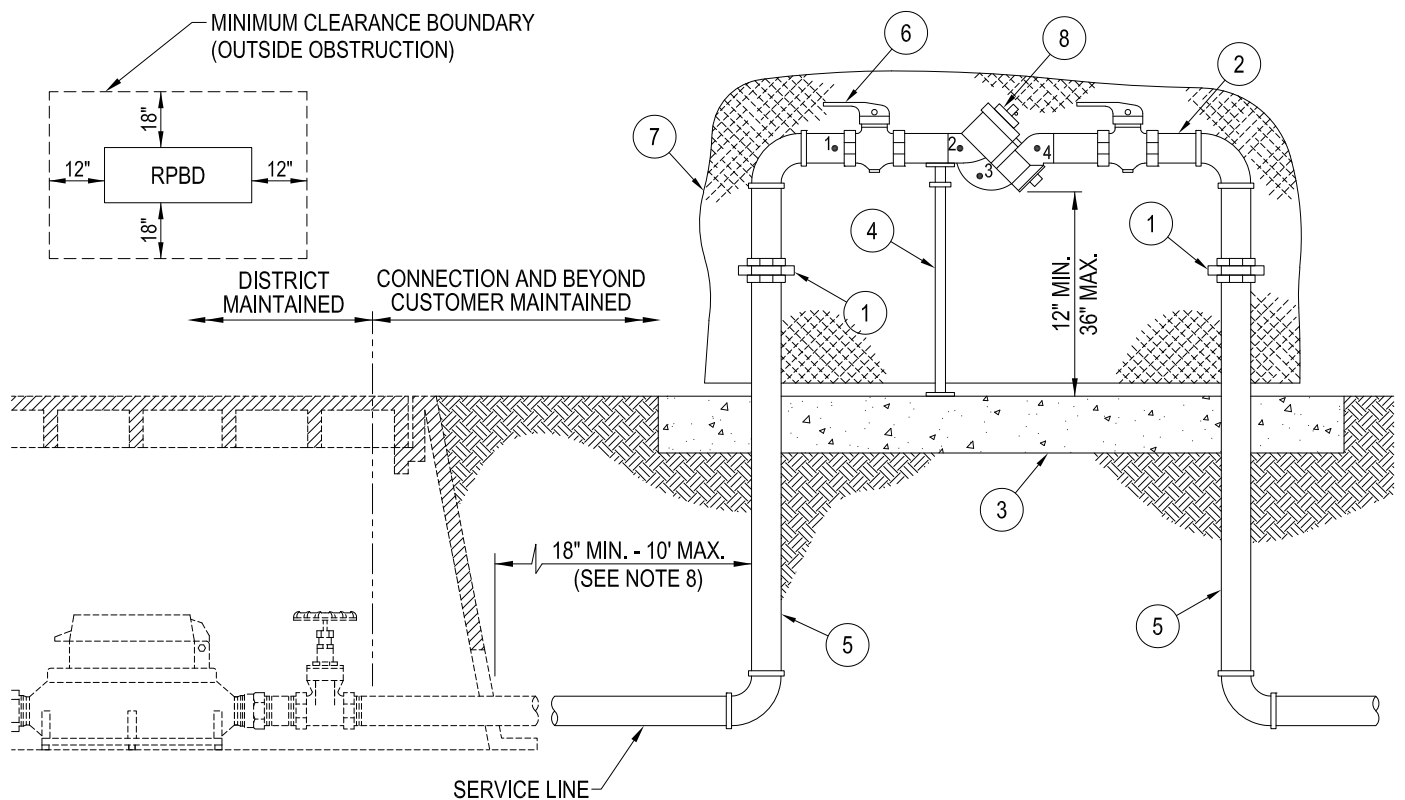
PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
4" TO 10" FIRE SERVICE - REDUCED
PRESSURE DETECTOR ASSEMBLY



STD. DWG. No.
W-15

GENERAL NOTES

1. RPBD AND PIPING SHALL BE THE SAME DIAMETER AS THE METER
2. PLACE BOTTOM OF VALVE A MINIMUM OF 12" AND A MAXIMUM OF 30" ABOVE FINISHED GRADE
3. CUSTOMER SHALL PROTECT DEVICE FROM FREEZING AND MAINTAIN ACCESS FOR TESTING
4. RPBD SHALL BE LOCATED AS CLOSE TO THE METER AS POSSIBLE. LOCATION SHALL BE APPROVED BY INSPECTOR
5. NO CONNECTIONS OF ANY KIND WILL BE ALLOWED IN THIS AREA. INSPECTION BY THE DISTRICT MUST TAKE PLACE PRIOR TO BACKFILL
6. RPBD MUST BE TESTED BY A CERTIFIED BACKFLOW TESTER PRIOR TO WATER SERVICE BEING ACTIVATED A COPY OF THE TEST MUST BE SUBMITTED TO THE INSPECTOR
7. WHEN PRESSURE IS GREATER THAN 100 PSI, A PRESSURE REGULATOR MUST BE INSTALLED
8. LENGTH TO BE PRE-DETERMINED AND INSPECTED BY DISTRICT



MATERIAL NOTES

- 1 UNION BRASS (TYP.)
- 2 NIPPLE (TYP.)
- 3 CONCRETE PAD (OPTIONAL)
- 4 PIPE SUPPORT (OPTIONAL)
- 5 BRASS OR COPPER (TYPE K) PIPE AND FITTINGS, OR APPROVED EQUAL
- 6 GATE OR BALL VALVE (BRASS) HANDLES REMOVED (TYP.)
- 7 THERMAL INSULATING COVER WITH WATER RESISTANT/WEATHERPROOF EXTERIOR, TEAR-PROOF INTERIOR. BACKFLOW BUDDY, BDI OR APPROVED EQUAL
- 8 REDUCED PRESSURE BACKFLOW DEVICE AS APPROVED BY STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH SERVICES DPHS (USC) LIST

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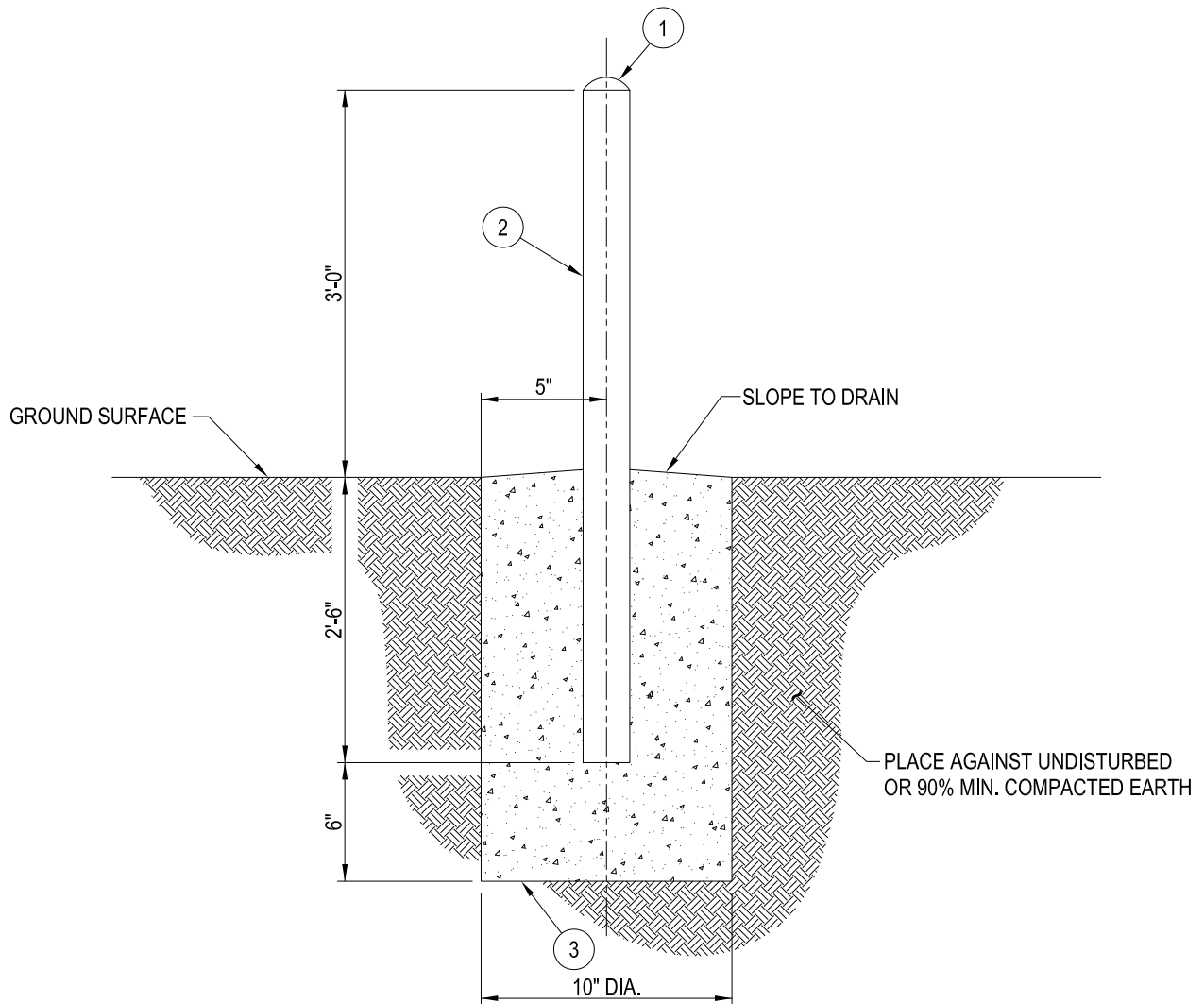
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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
3/4" TO 2" REDUCED PRESSURE
BACKFLOW DEVICE ASSEMBLY



STD. DWG. No.

W-16



MATERIAL NOTES

- 1 CONCRETE FILLED PIPE AND ROUND TOP TO FORM CAP
- 2 4" DIA. x 5'-6" LONG STD. WEIGHT STEEL PIPE - PAINTED YELLOW
- 3 CONCRETE FOOTING, 10" IN DIAMETER

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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT

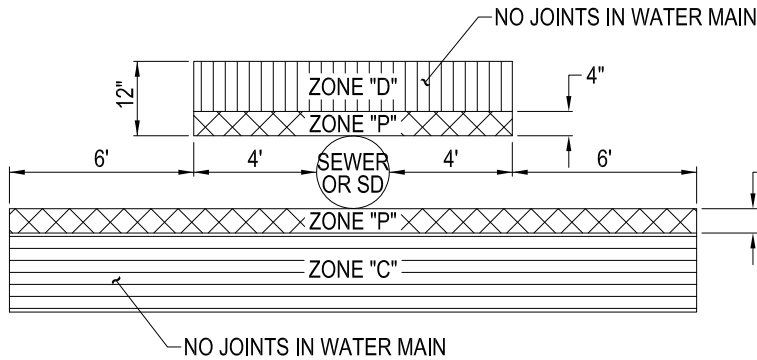
STANDARD BOLLARD DETAIL



STD. DWG. No.
W-17

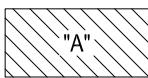
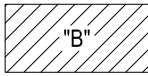
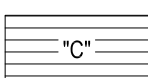

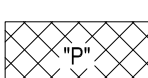
GENERAL NOTES

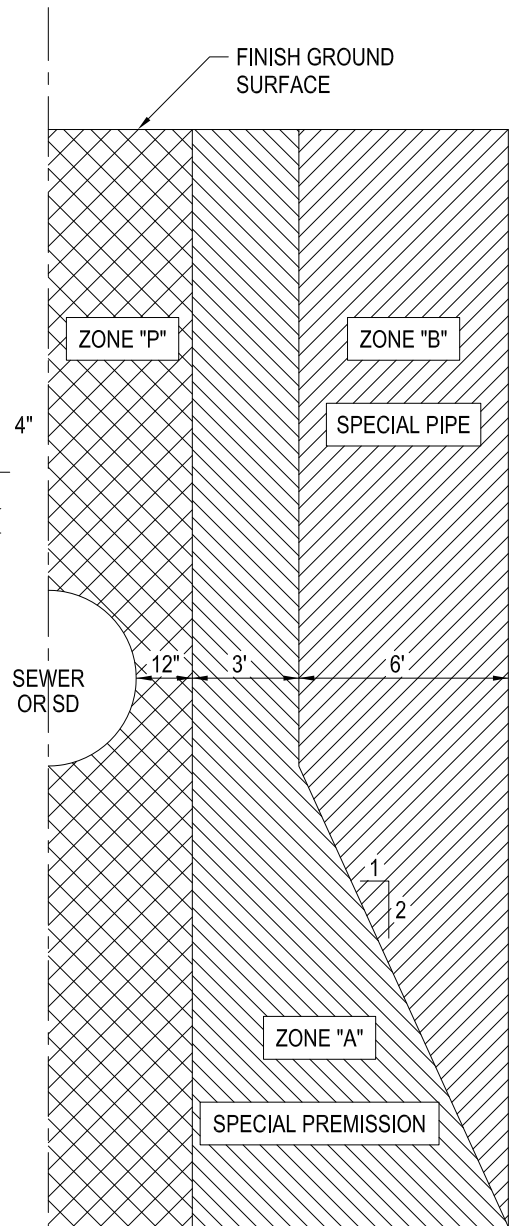
1. DIMENSIONS ARE FROM OUTSIDE OF WATER PIPE TO OUTSIDE OF SEWER OR STORM DRAIN (SD) PIPE
2. WATER SERVICE LATERALS SHALL BE INSTALLED 4" OR MORE ABOVE SEWER MAIN OR STORM DRAIN. IF THIS CONDITION CANNOT BE MET, SPECIAL CONSTRUCTION WILL BE REQUIRED



CROSSING
WATER MAIN AND SANITARY
SEWER OR STORM DRAIN

LEGEND

-  "A" SEWER MAINS WILL NOT BE PERMITTED IN THIS ZONE WITHOUT SPECIAL PERMISSION FROM THE DEPARTMENT OF PUBLIC HEALTH, STATE OF CALIFORNIA
-  "B" WATER MAINS WILL NOT PERMITTED IN THIS ZONE WITHOUT SPECIAL PERMISSION FROM PHELAN PINON HILLS COMMUNITY SERVICES DISTRICT
-  "C" WATER MAINS IN THIS ZONE SHALL BE CONSTRUCTED OF CML&C STEEL PIPE WITH NO JOINTS OR DUCTILE IRON PIPE (CLASS 350 MIN.) WITH HOT DIP BITUMINOUS COATING, INSTALLED WITHIN A 1/4-INCH STEEL WELDED CASING
-  "D" THE WATER MAIN SHALL HAVE NO JOINTS WITHIN FOUR FEET FROM EITHER SIDE OF THE SEWER OR STORM DRAIN
-  "P" ZONE "P" IS A PROHIBITED ZONE, SECTION 64630 (e) (2) CALIFORNIA ADMINISTRATIVE CODE, TITLE 22



PARALLEL
WATER MAIN AND SANITARY
SEWER OR STORM DRAIN

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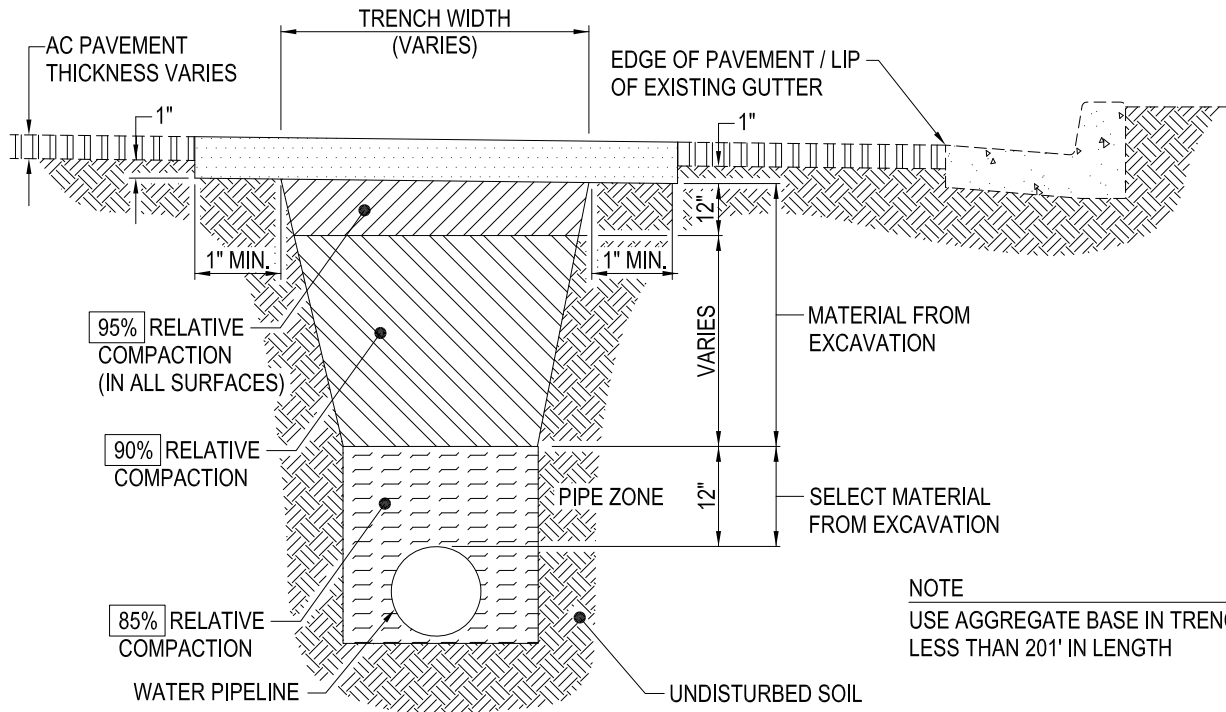
**PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT**

**SEPARATION CRITERIA FOR NEW WATER MAINS
FROM EXISTING SEWER AND STORM DRAINS**



STD. DWG. No.

W-19



GENERAL NOTES

1. ALL TRENCHES SHALL BE BACKFILLED AND CONSOLIDATED IN ACCORDANCE WITH THE ABOVE DETAIL UNLESS OTHERWISE SPECIFIED BY THE PPHCSD INSPECTOR
2. UNLESS OTHERWISE INSTRUCTED BY THE PPHCSD INSPECTOR, ALL JOINTS SHALL BE VERTICAL BUTT JOINTS
3. UNLESS OTHERWISE INSTRUCTED BY THE PPHCSD INSPECTOR, TRENCH PATH SHALL BE STRAIGHT GRADE ACROSS WIDTH, AND SHALL NOT BE CURVED AT CENTER
4. WHERE TRENCH EXTENDS BEYOND THE PAVED TRAVEL LANE, AGGREGATE BASE OR SLURRY BACK FILL SHALL EXTEND 5' BEYOND EDGE OF PAVEMENT OR TO THE RIGHT-OF-WAY LINE WHICHEVER IS LESS, UNLESS OTHERWISE SPECIFIED BY THE PPHCSD INSPECTOR
5. 1-SACK SAND/CEMENT SLURRY MAY BE SUBSTITUTED FOR AGGREGATE BASE
6. PIPE BEDDING TO BE PER PPHCSD TECHNICAL SPECIFICATIONS.
7. FREQUENCY OF COMPACTION TESTING SHALL BE NO LESS THAN ONE TEST PER 300 LINEAL FEET OF MAIN LINE, ONE TEST MINIMUM FOR EVERY THREE (3) FEET OF VERTICAL FILL. ADDITIONAL TESTING MAY BE REQUIRED AT THE DISCRETION OF THE PPHCSD INSPECTOR

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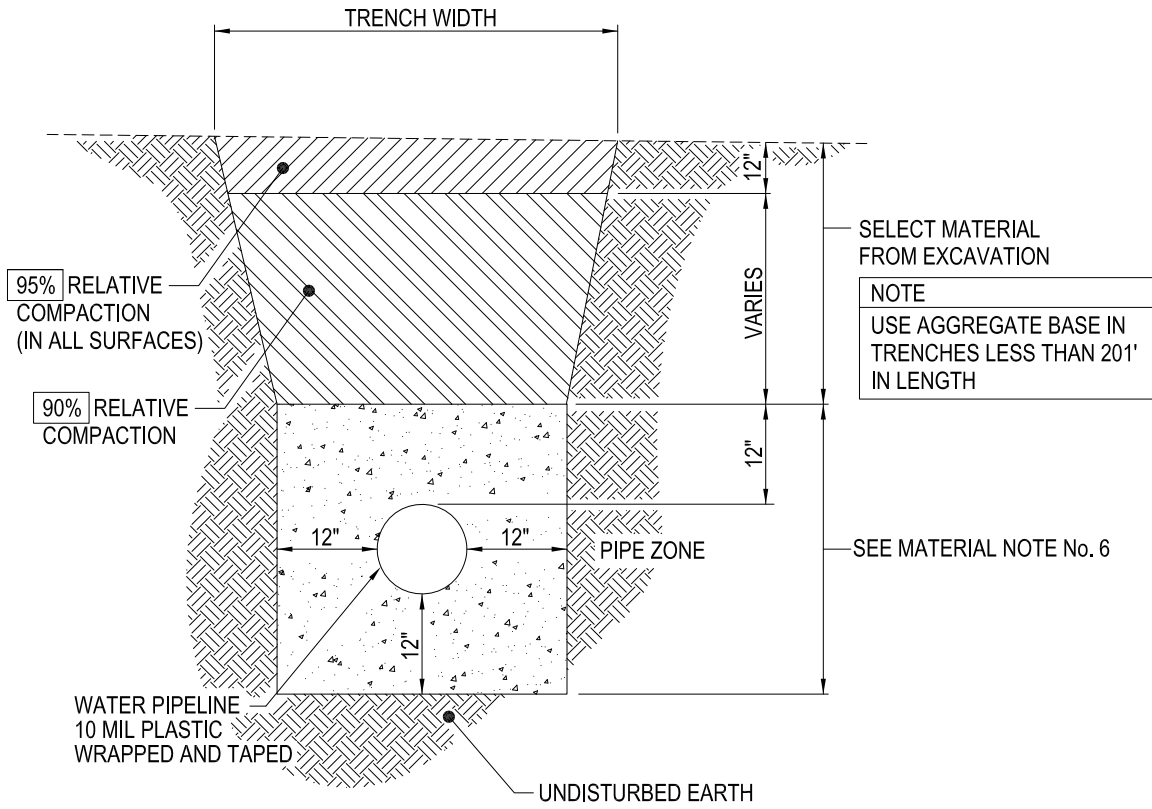
PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT

STANDARD TRENCH REPAIR



STD. DWG. No.

W-21



GENERAL NOTES

1. WATER PIPELINE IN WASHED OUT AREAS TO BE REPLACED WITH DUCTILE IRON PIPE WITH RESTRAINED JOINTS AND FITTINGS. NEW PIPELINE TO BE WRAPPED AND TAPED WITH 10 MIL PLASTIC
2. ALL TRENCHES SHALL BE BACKFILLED AND CONSOLIDATED IN ACCORDANCE WITH THE ABOVE DETAIL UNLESS OTHERWISE SPECIFIED BY THE PPHCSD INSPECTOR
3. UNLESS OTHERWISE INSTRUCTED BY THE PPHCSD INSPECTOR, ALL JOINTS SHALL BE VERTICAL BUTT JOINTS
4. UNLESS OTHERWISE INSTRUCTED BY THE PPHCSD INSPECTOR, TRENCH PATH SHALL BE STRAIGHT GRADE ACROSS WIDTH. CURVED PIPELINE ALIGNMENT WILL NOT BE ALLOWED.
5. WHERE TRENCH EXTENDS BEYOND THE PAVED TRAVEL LANE, AGGREGATE BASE OR SLURRY BACK FILL SHALL EXTEND 5' BEYOND EDGE OF PAVEMENT OR TO THE RIGHT-OF-WAY LINE WHICHEVER IS LESS, UNLESS OTHERWISE SPECIFIED BY THE PPHCSD INSPECTOR
6. 3-SACK 1/2" ROCK 1500 PSI MIX SAND/CEMENT SLURRY
7. FREQUENCY OF COMPACTION TESTING SHALL BE NO LESS THAN ONE TEST PER 300 LINEAL FEET OF MAIN LINE, ONE TEST MINIMUM FOR EVERY THREE (3) FEET OF VERTICAL FILL. ADDITIONAL TESTING MAY BE REQUIRED AT THE DISCRETION OF THE PPHCSD INSPECTOR

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PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
STANDARD WASH TRENCH REPAIR



STD. DWG. No.

W-23

MATERIAL NOTES

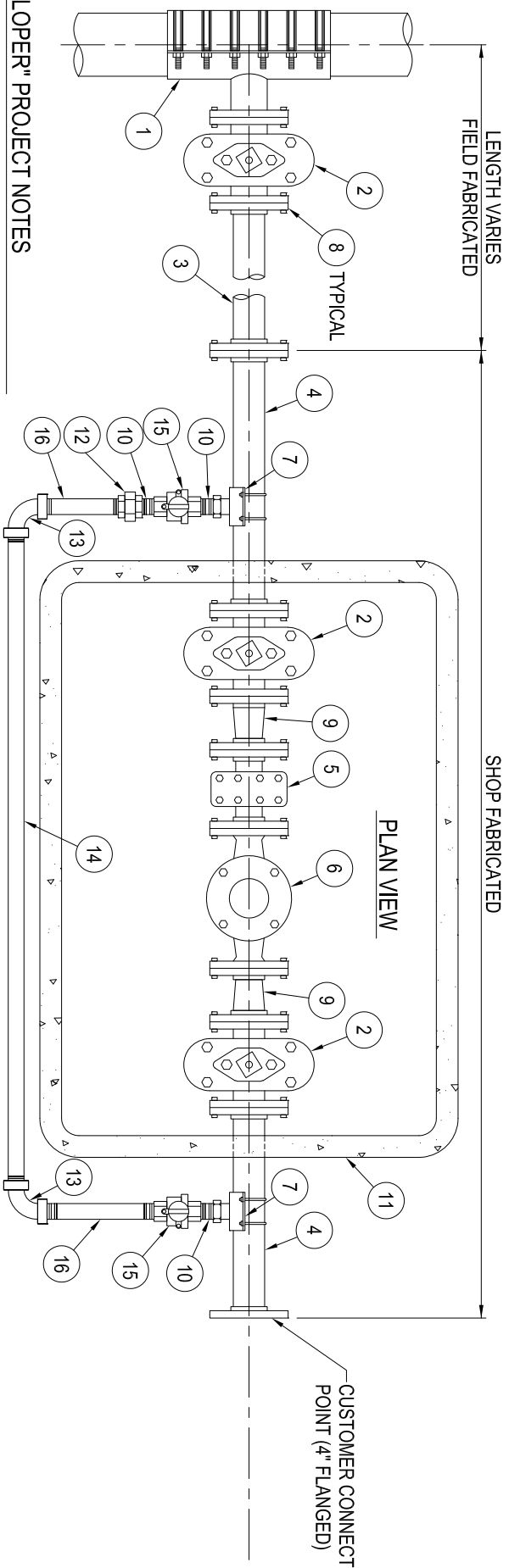
- 1 "MAIN SIZE" x 4" TAPPING SLEEVE PER STD. DWG. No. W-12
- 2 4" RESILIENT WEDGE GATE VALVE (FLG x FLG) MUELLER A-2360-6 (SEE NOTE 3)
- 3 4" STD. STEEL SPOOL, WELDED (FLG x FLG) LENGTH VARIES, FIELD VERIFY
- 4 4" STD. STEEL COAL TAR ENAMEL (BITUMASTIC) COATED SPOOL, WELDED (FLG x FLG) 24-INCHES LONG
- 5 3" HERSEY STRAINER, BRONZE (FLG x FLG) W/ BRASS BOLTS
- 6 3" HERSEY RADIO READ TURBO METER, BRONZE (FLG x FLG) W/ BRASS BOLTS
- 7 4" STD. STEEL x 2" SADDLE (F.I.P.T.), DOUBLE STRAP, BRONZE, MUELLER OR APPROVED EQUAL
- 8 4" NUTS, BOLTS, AND GASKET SET
- 9 COAL TAR ENAMEL (BITUMASTIC) COATED 3"x4" BELL REDUCER, WELDED FLANGE
- 10 2" CLOSE NIPPLE, BRASS
- 11 4x6x4" METER BOX WITH LID, PER PPHOCD SPECIFICATIONS, CENTERED IN BOX

MATERIAL NOTES (CONTINUE)

- 12 2" UNION, BRONZE (F.I.P.T. x F.I.P.T.)
- 13 2" 90° ELBOW, BRONZE (F.I.P.T. x F.I.P.T.)
- 14 2" PIPE, BRASS (M.I.P.T. x M.I.P.T.), 60" LONG, PLACED OUTSIDE OF BOX
- 15 2" BALL VALVE CURB STOP, BRONZE (F.I.P.T. x F.I.P.T.) W/ PADLOCK WINGS MUELLER B-20200, OR APPROVED EQUAL, WITH IRRIGATION / VALVE CAN WITH LID
- 16 2" PIPE, BRASS (M.I.P.T. x M.I.P.T.) LENGTH AS REQ'D, PLACED OUTSIDE OF BOX

GENERAL NOTES

1. ALL SERVICE LINES SHALL HAVE A MINIMUM DEPTH OF 24"
2. PROVIDE (2" MIN. THICKNESS) GRAVEL BASE FOR METER BOX
3. PROVIDE STANDARD VALVE CAN ASSEMBLY FOR EACH GATE VALVE PER STD. DWG. No. W- 5 (REQUIRED FOR VALVES OUTSIDE OF METER BOX)
4. CONTRACTOR TO PROVIDE BACKFLOW DEVICE AT CUSTOMER CONNECTION POINT
5. ALL MATERIALS SHALL BE NEW



"DEVELOPER" PROJECT NOTES

1. WHEN A DEVELOPER'S CONTRACTOR INSTALLS A NEW WATER MAIN, CONTRACTOR WILL INSTALL ITEMS No. 1, 2, 3, AND 8 (FIELD FABRICATION)
2. WHEN A DEVELOPER'S PROJECT DOES NOT REQUIRE A NEW WATER MAIN, ALL ITEMS WILL BE INSTALLED BY PPHOCD STAFF

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RECOMMENDED BY: Engineering Date	REV.	DATE	BY
APPROVED BY: Operations Date			

**PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT**

3" METER SERVICE ASSEMBLY



STD. DWG. No.
W-24

MATERIAL NOTES

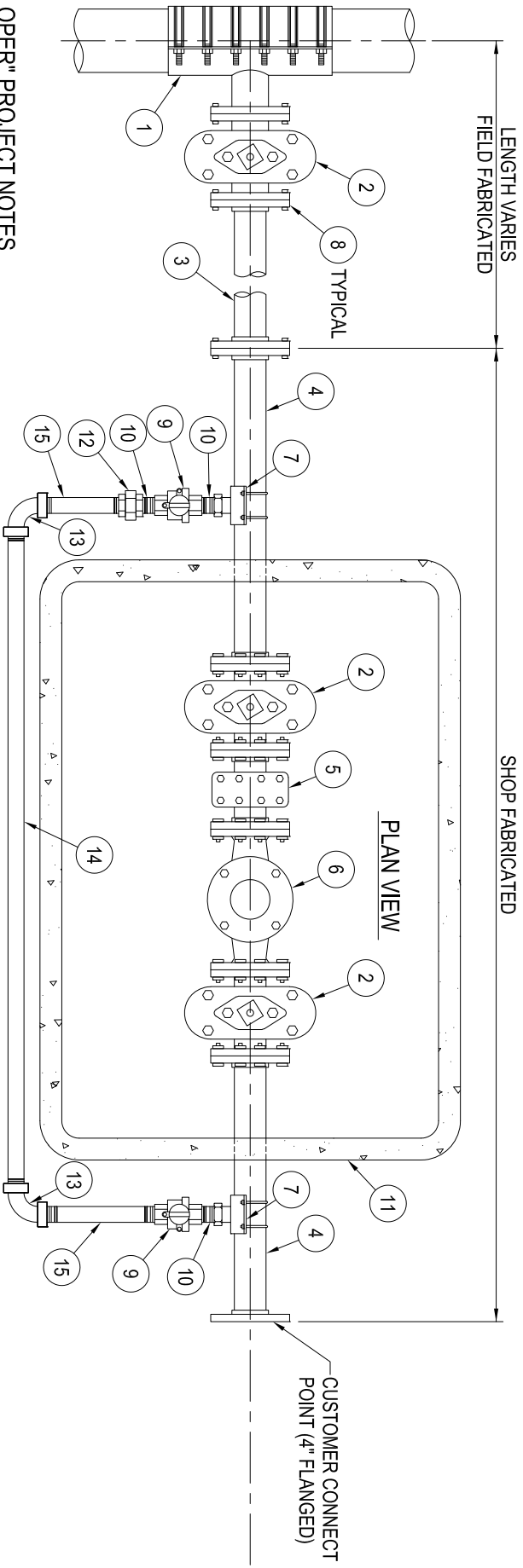
- 1 "MAIN SIZE" x 4" TAPPING SLEEVE PER STD. DWG. No. W-12
- 2 4" RESILIENT WEDGE GATE VALVE (FLG x FLG) MUELLER A-2360-6 (SEE NOTE 3)
- 3 4" STD. STEEL SPOOL, WELDED (FLG x FLG) LENGTH VARIES, FIELD VERIFY
- 4 4" STD. STEEL COAL TAR ENAMEL (BITUMASTIC) COATED SPOOL, WELDED (FLG. x FLG.) 24-INCHES LONG
- 5 4" HERSEY STRAINER, BRONZE (FLG x FLG) W/ BRASS BOLTS
- 6 4" HERSEY RADIO READ TURBO METER, BRONZE (FLG x FLG) W/ BRASS BOLTS
- 7 4" STD. STEEL x 2" SADDLE (F.I.P.T.) DOUBLE STRAP, BRONZE, MUELLER OR APPROVED EQUAL
- 8 4" NUTS, BOLTS, AND GASKET SET
- 9 2" BALL VALVE CURB STOP, BRONZE (F.I.P.T. x F.I.P.T.) W/ PADLOCK WINGS, MUELLER B-20200, OR APPROVED EQUAL, WITH IRRIGATION / VALVE CAN WITH LID
- 10 2" CLOSE NIPPLE, BRASS

MATERIAL NOTES (CONTINUE)

- 11 4x6x4" METER BOX WITH LID, PER PPHCSO SPECIFICATIONS, CENTERED IN BOX
- 12 2" UNION, BRONZE (F.I.P.T. x F.I.P.T.)
- 13 2" 90° ELBOW, BRONZE (F.I.P.T. x F.I.P.T.)
- 14 2" PIPE, BRASS (M.I.P.T. x M.I.P.T.) 60" LONG, PLACED OUTSIDE OF BOX
- 15 2" PIPE, BRASS (M.I.P.T. x M.I.P.T.) LENGTH AS REQD, PLACED OUTSIDE OF BOX

GENERAL NOTES

- 1. ALL SERVICE LINES SHALL HAVE A MINIMUM DEPTH OF 24"
- 2. PROVIDE (2" MIN. THICKNESS) GRAVEL BASE FOR METER BOX
- 3. PROVIDE STANDARD VALVE CAN ASSEMBLY FOR EACH GATE VALVE PER STD. DWG. No. W-5 (REQUIRED FOR VALVES OUTSIDE OF METER BOX)
- 4. CONTRACTOR TO PROVIDE BACKFLOW DEVICE AT CUSTOMER CONNECTION POINT
- 5. ALL MATERIALS SHALL BE NEW



"DEVELOPER" PROJECT NOTES

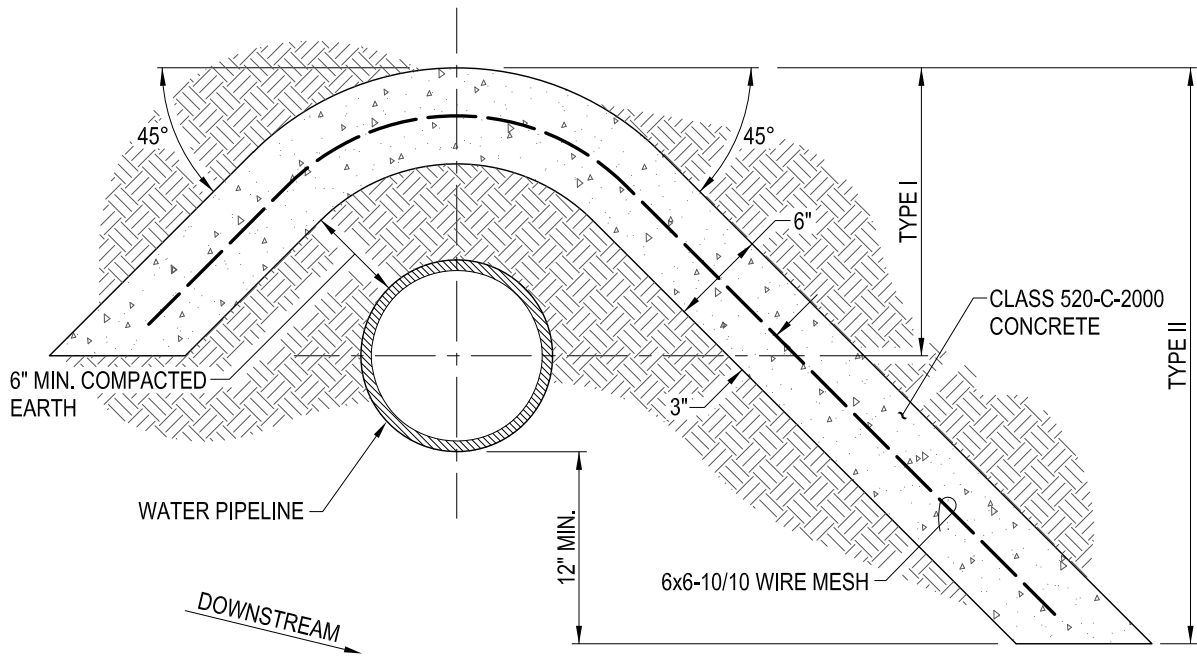
- 1. WHEN A DEVELOPER'S CONTRACTOR INSTALLS A NEW WATER MAIN, CONTRACTOR WILL INSTALL ITEMS No. 1, 2, 3, AND 8 (FIELD FABRICATION)
- 2. WHEN A DEVELOPER'S PROJECT DOES NOT REQUIRE A NEW WATER MAIN, ALL ITEMS WILL BE INSTALLED BY PPHCSO STAFF

RECOMMENDED BY:	REV.	DATE	BY
Engineering	Date		
APPROVED BY:			
Operations	Date		

PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
4" METER SERVICE ASSEMBLY



STD. DWG. No.
W-25



GENREAL NOTES

1. THE DOWNSTREAM TOE OF TYPE I CONCRETE BLANKET ENDS AT THE CENTERLINE OF PIPE AS SHOWN ABOVE
2. THE DOWNSTREAM TOE OF TYPE II CONCRETE BLANKET ENDS 12" BELOW THE BOTTOM OF PIPE AS SHOWN ABOVE

Revised: April 22, 2020

RECOMMENDED BY:	REV.	DATE	BY
Engineering			
APPROVED BY:			
Operations			

**PHELAN PINON HILLS
 COMMUNITY SERVICES DISTRICT**
CONCRETE BLANKET DETAIL

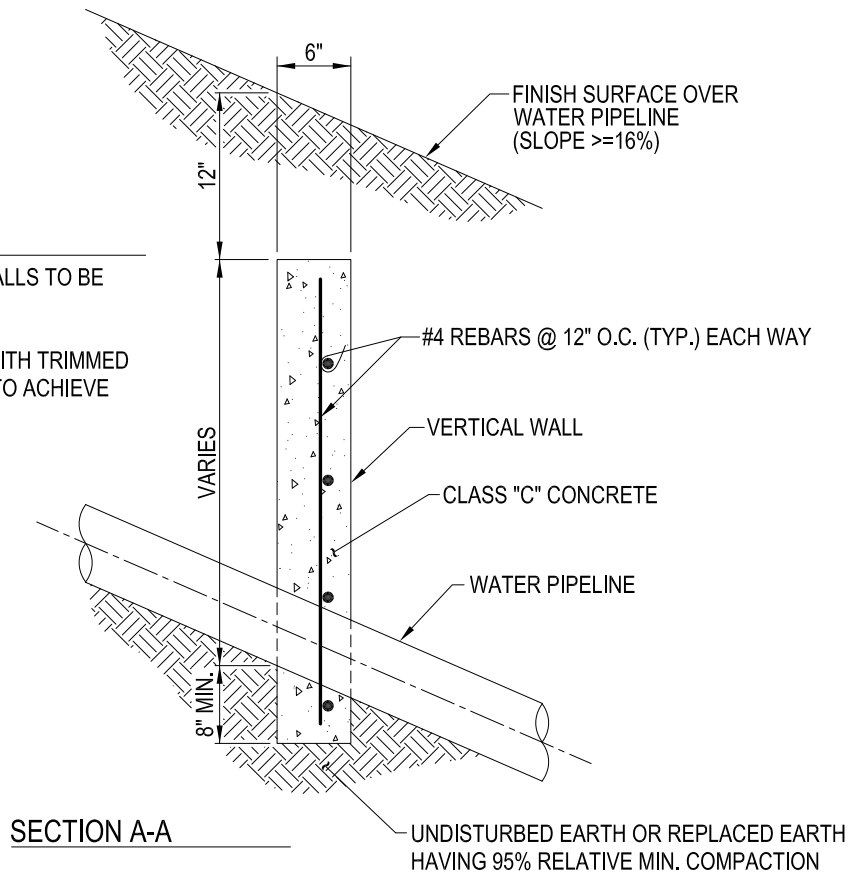


STD. DWG. No.

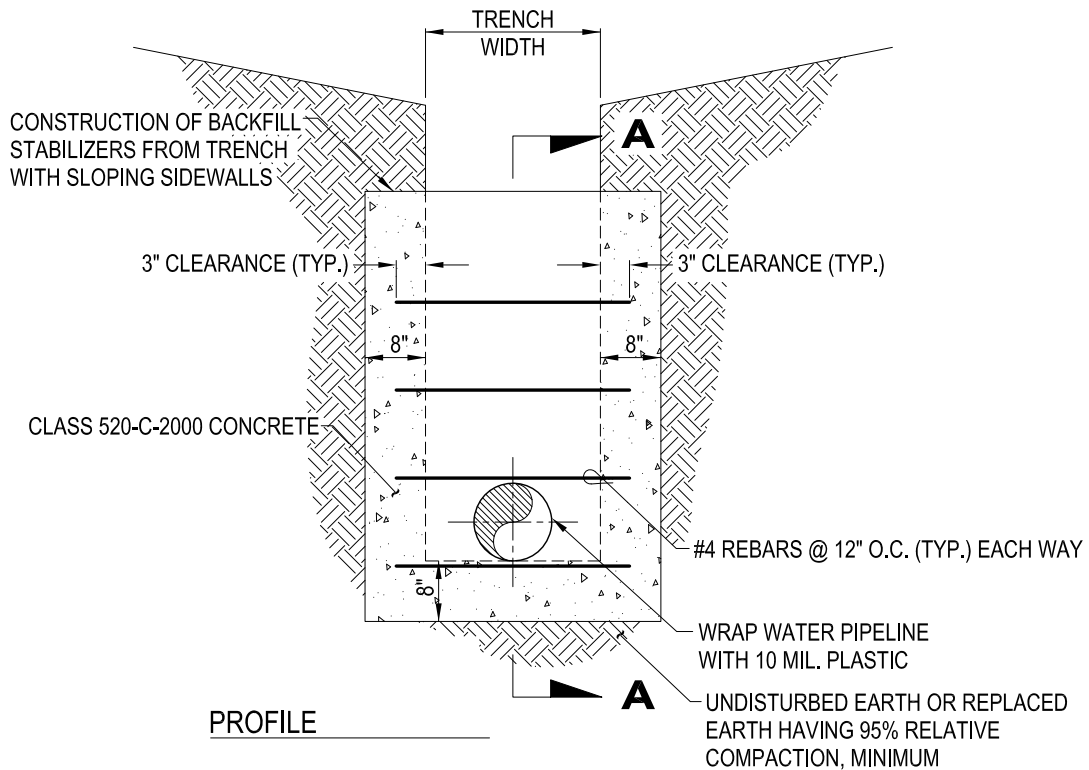
W-26

GENERAL NOTES

1. SLOPE PROTECTION CUT-OFF WALLS TO BE INSTALLED WHERE SPECIFIED
2. CONCRETE SHALL BE FORMED WITH TRIMMED EARTH, SANDBAGS OR LUMBER TO ACHIEVE REQUIRED CONFIGURATION



SECTION A-A



PROFILE

Revised: April 22, 2020

RECOMMENDED BY:	REV.	DATE	BY
Engineering			
APPROVED BY:			
Operations			

PHELAN PIÑON HILLS
COMMUNITY SERVICES DISTRICT
BACKFILL SLOPE STABILIZER



STD. DWG. No.

W-27