

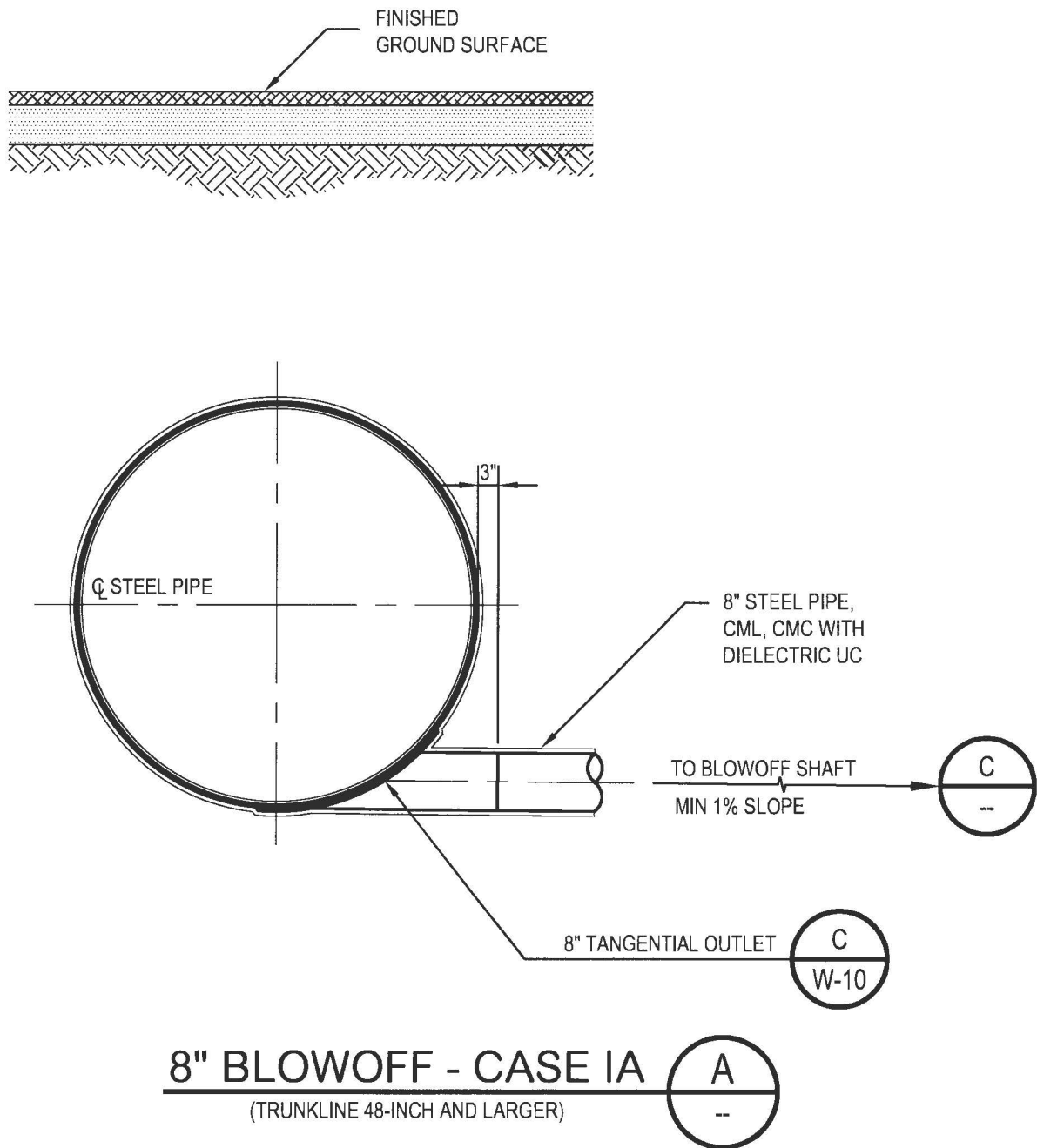




Standard Drawings and Details

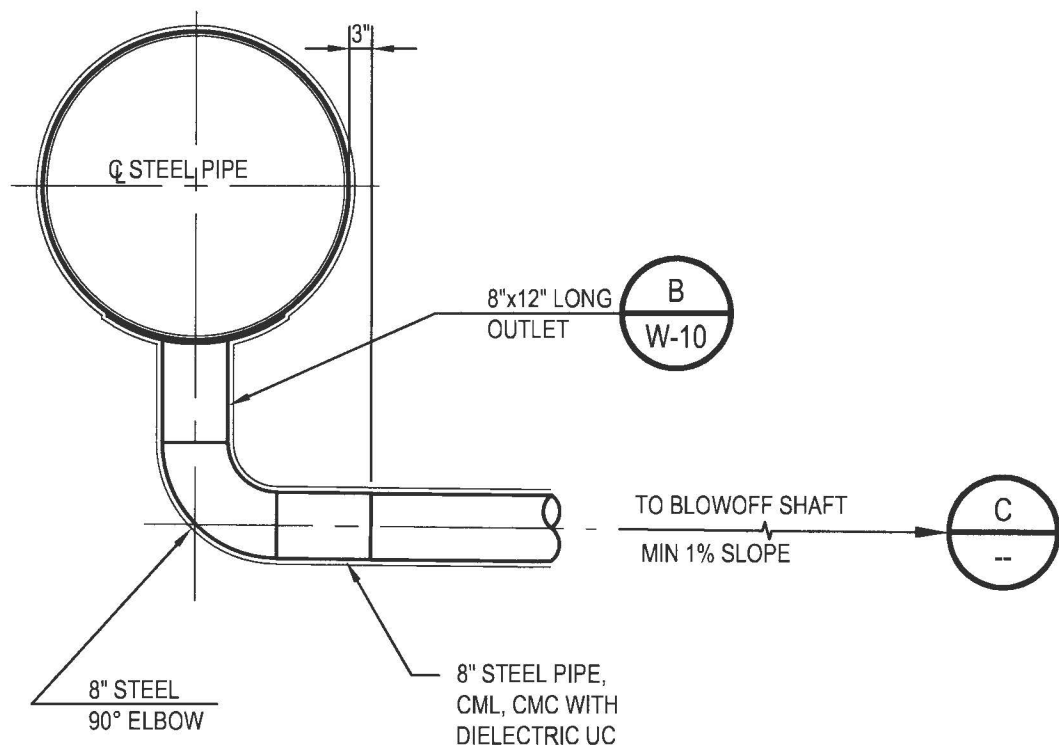
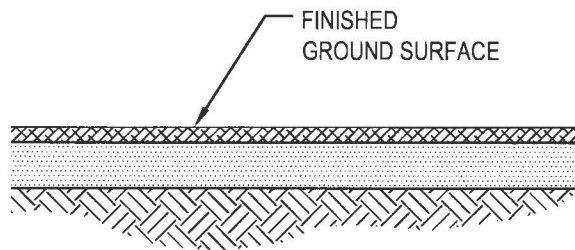
TVMWD STANDARD DRAWINGS

TABLE OF CONTENTS



<u>Drawing No.</u>	<u>Description</u>
W-0	Construction Sign
W-01	Typical Concrete Thrust Block
W-02	Typical Trench Excavation and Backfill, Pavement Resurfacing Area, Trench Plate Detail (within City of La Verne and City of Claremont)
W-03	Valve Box, Cover and Valve Stem Extension Detail (Gate Valve & Butterfly Valve)
W-04	Access Manway Detail
W-05	Direct Buried Butterfly Valve
W-06	Single 6" Combination Air Valve
W-07	Double 6" Combination Air Valve
W-08	8" Blowoff (Cases IA and IB)
W-09	8" Blowoff (Cases IIA and IIB)
W-10	Radial Outlet – Flanged End, Plain End, Tangential Outlet, Reducer & Enlarger, and Steel Flanges)
W-11	Mechanical Coupling and Joint Harness Assembly
W-12	Mechanical Coupling and Anchor Box Assembly
W-13	Maintenance Hole Shaft
W-14	Wall-Mounted Ladder
W-15	Ladder Bracket

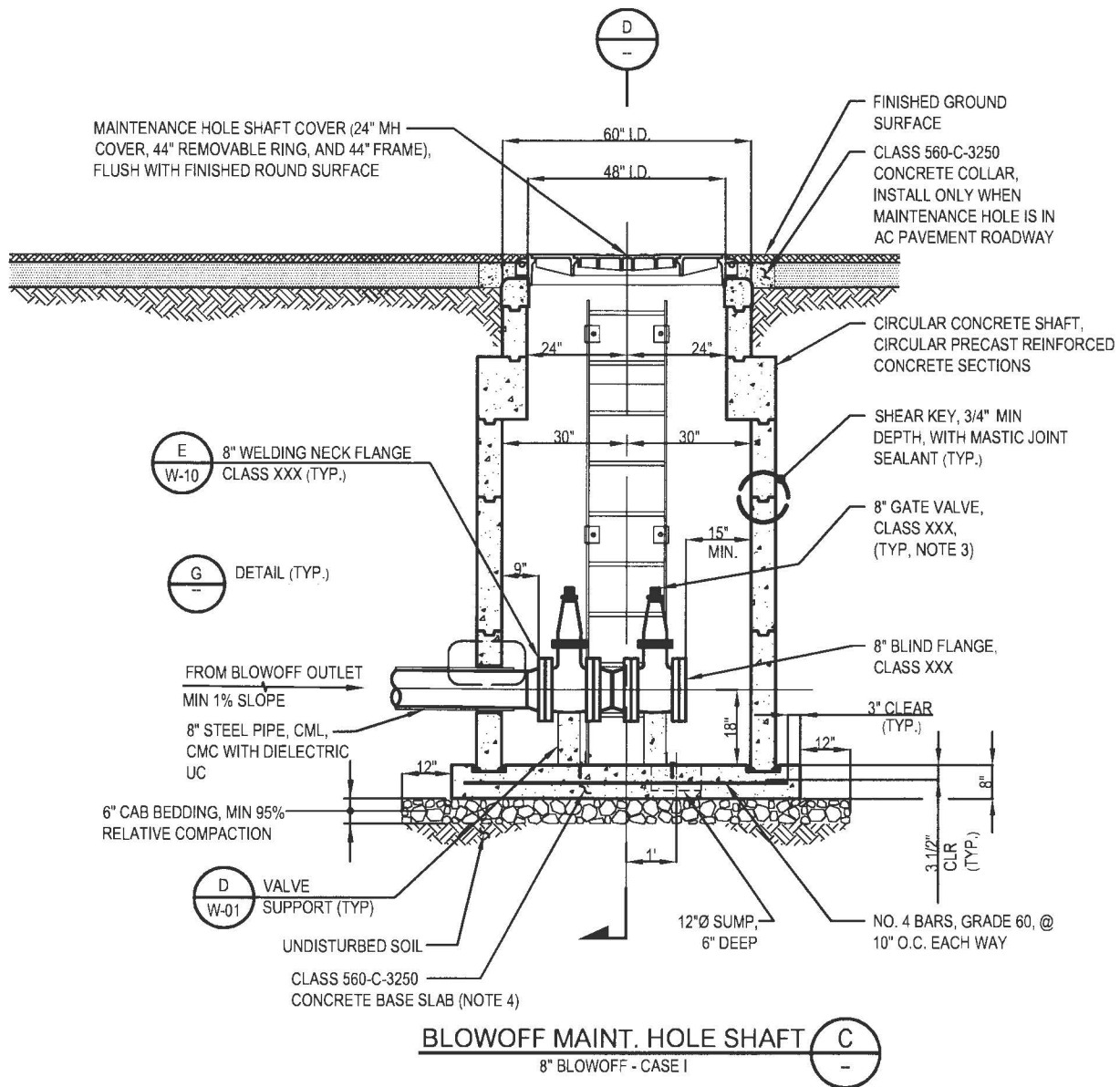




			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			8" BLOWOFF - CASE IA	TVMWD
TVMWD	FEB./2020			W-08
REVISION	DATE	APPROVED		DATE 3/18/2021
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079		
		SHEET 1 OF 9		

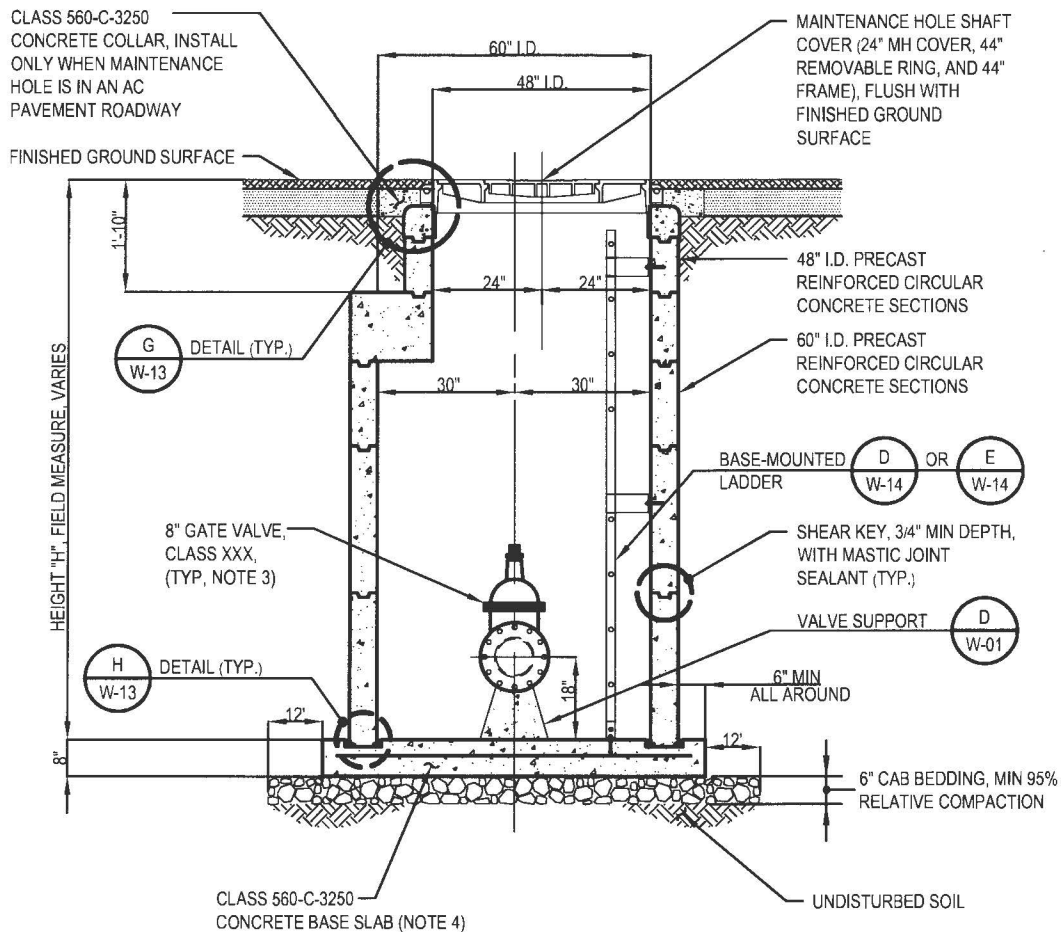


8" BLOWOFF - CASE IB B -- (TRUNKLINE LESS THAN 48-INCH)

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			8" BLOWOFF - CASE IB	TVMWD W-08
TVMWD	FEB./2020			
REVISION	DATE	APPROVED 	DATE <u>3/18/2021</u>	SHEET 2 OF 9
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079		





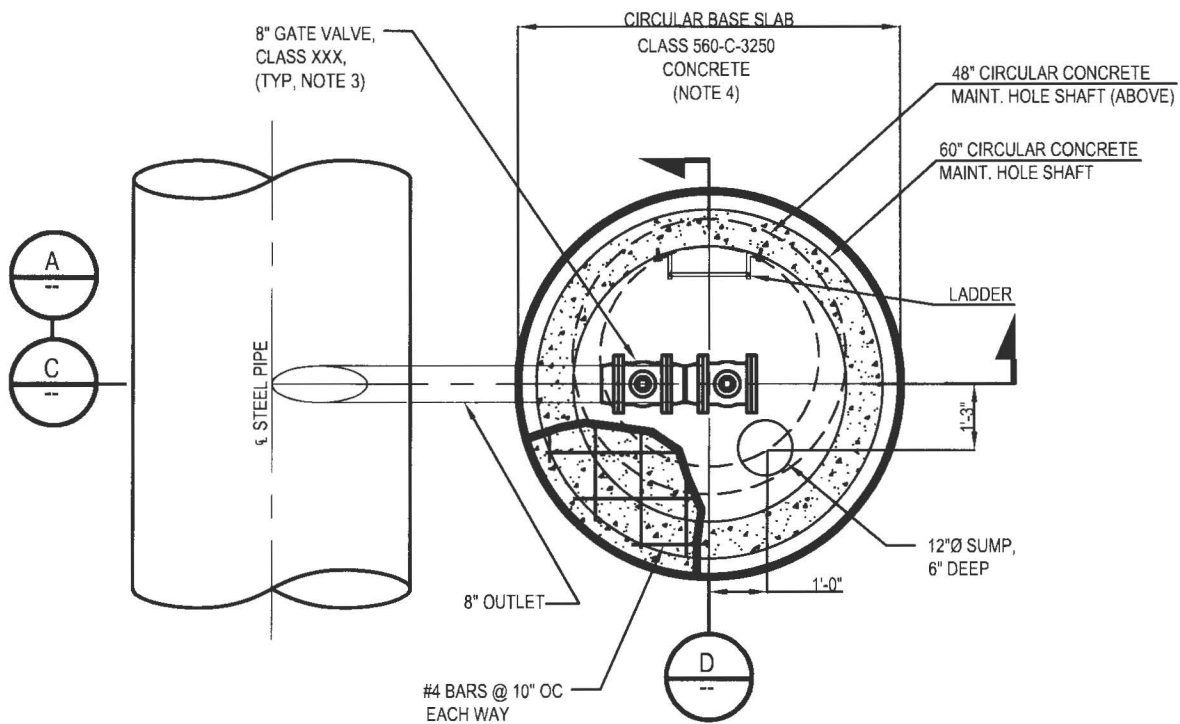
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			BLOWOFF MAINT. HOLE SHAFT - DETAIL C	TVMWD
TVMWD	FEB./2020			W-08
REVISION	DATE	APPROVED 	DATE <u>3/18/2021</u>	SHEET 3 OF 9
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079		



SECTION - BLOWOFF MAINT. HOLE SHAFT D



8" BLOWOFF - CASE I

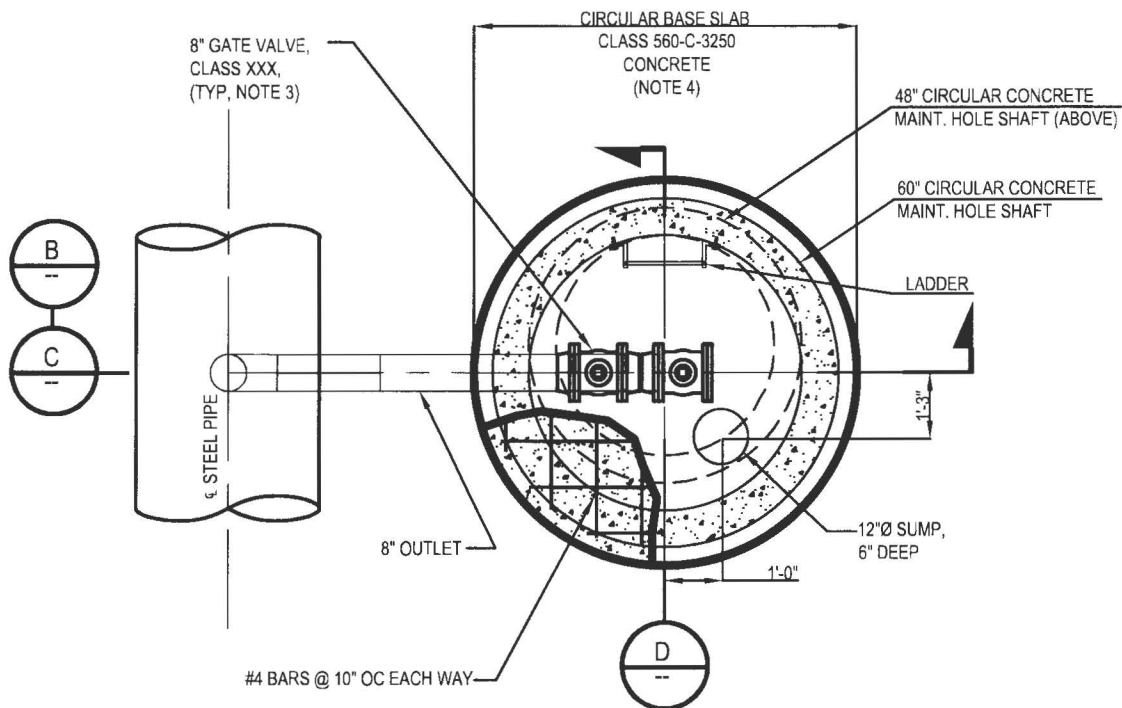
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			BLOWOFF MAINT. HOLE SHAFT - SECTION D	TVMWD
TVMWD	FEB./2020		DATE 3/18/2021	W-08
REVISION	DATE			
SCALE: NONE		APPROVED	MATTHEW H. LITCHFIELD, P.E. RCE 58079	SHEET 4 OF 9



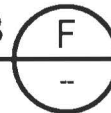
PLAN - 8" BLOWOFF CASE IA
(TRUNKLINE 48-INCH AND LARGER)





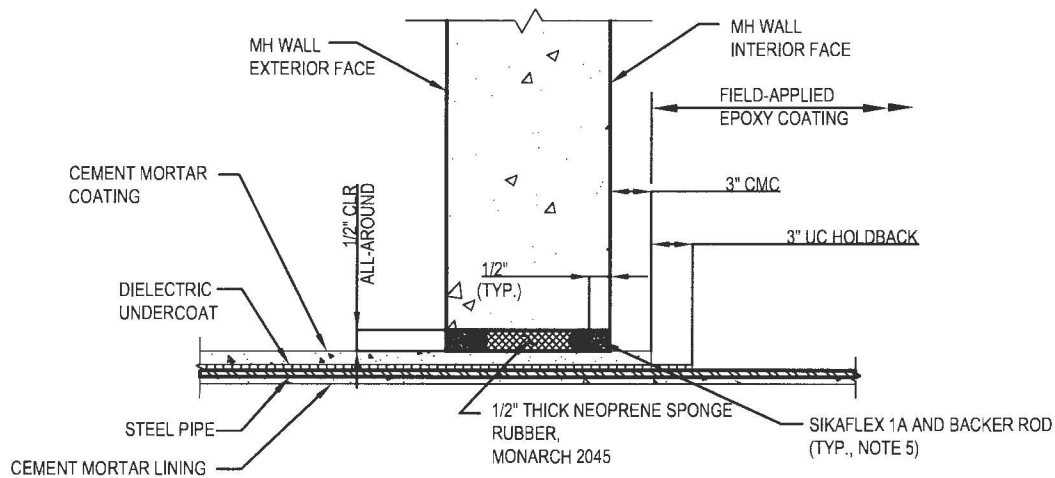
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			8" BLOWOFF CASE IA - DETAIL E	TVMWD W-08	
TVMWD	FEB./2020				
REVISION	DATE	APPROVED		DATE 3/18/2021	
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 5 OF 9



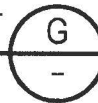
PLAN - 8" BLOWOFF CASE IB
(TRUNKLINE LESS THAN 48-INCH)





			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			8" BLOWOFF CASE IB - DETAIL F	TVMWD W-08
TVMWD	FEB./2020		DATE <u>3/18/2021</u>	SHEET 6 OF 9
REVISION	DATE		APPROVED	
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		





PIPE THROUGH MH WALL SHAFT



			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			PIPE THROUGH MH WALL SHAFT - DETAIL G		TVMWD W-08
TVMWD	FEB./2020				
REVISION	DATE	APPROVED			DATE <u>3/18/2021</u>
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		SHEET 7 OF 9	



NOTES:

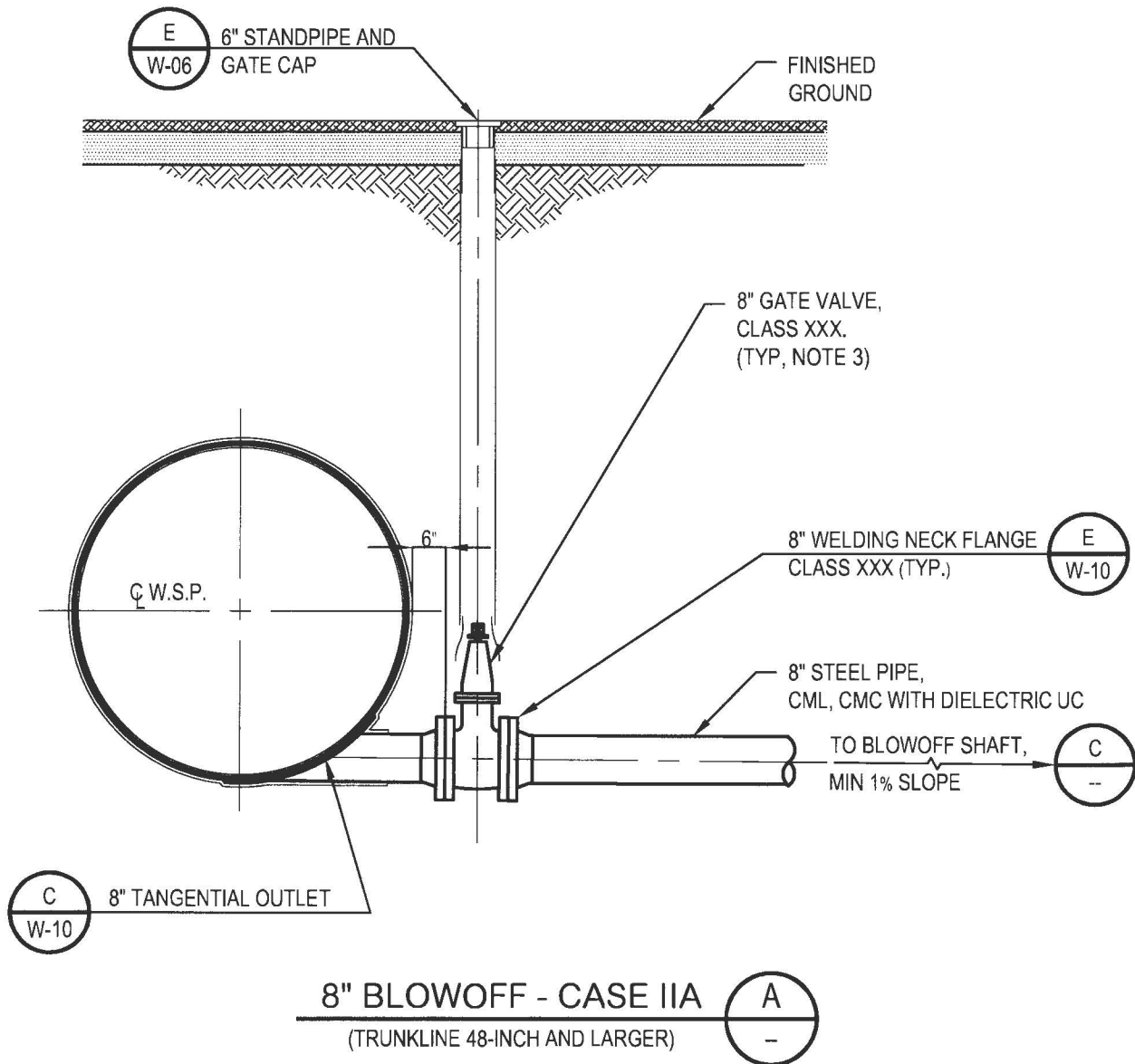
1. PRECAST CONCRETE CIRCULAR MAINTENANCE HOLE SHAFT SECTIONS SHALL BE DESIGNED FOR AASHTO HS 20-44 TRAFFIC LOADING AND SHALL COMPLY WITH ASTM C478
2. SUPPLY ALL BOLTS, NUTS, AND GASKETS FOR INSTALLING GATE VALVES AND BLIND FLANGES.
- 3A. CLEAN AND PREPARE ALL BARE METAL PIPE AND APPURTENANCE SURFACES. THEN COAT WITH POWERCRETE J EPOXY (FOR DIRECT-BURIED) OR AMERLOCK 2 VOC EPOXY (FOR INSIDE SHAFT AND DIRECT BURIED BOLTS, NUTS AND WASHERS.). THEN APPLY TRENTON WAX TAPE #1 (FOR DIRECT-BURIED) OR #2 (FOR INSIDE SHAFT) OVER ALL EPOXY-COATED SURFACES, INCLUDING SHOP-COATED GATE VALVES AND COUPLINGS, AND FLANGED CONNECTIONS. PRIOR TO THE PLACEMENT OF THE WAX TAPE, APPLY TRENTON FILL-PUTTY TO THE CONTOURS OF IRREGULAR FITTINGS OR SURFACES. WHERE WAX TAPE IS APPLIED TO DIRECT-BURIED PIPE AND PIPE APPURTENANCES, WRAP THE PIPE AND PIPE APPURTENANCES WITH TRENTON MC OUTERWRAP.
- 3B. CLEAN AND PREPARE ALL BARE METAL PIPE AND APPURTENANCE SURFACES INCLUDING BOLTS, NUTS AND WASHERS. THEN COAT WITH POWERCRETE J EPOXY (FOR DIRECT-BURIED). THEN APPLY TRENTON WAX TAPE #1 (FOR DIRECT-BURIED) OR #2 (FOR INSIDE SHAFT) OVER ALL EPOXY-COATED SURFACES, INCLUDING SHOP-COATED GATE VALVES AND COUPLINGS, AND FLANGED CONNECTIONS. PRIOR TO THE PLACEMENT OF THE WAX TAPE, APPLY TRENTON FILL-PUTTY TO THE CONTOURS OF IRREGULAR FITTINGS OR SURFACES. WHERE WAX TAPE IS APPLIED TO DIRECT-BURIED PIPE AND PIPE APPURTENANCES, WRAP THE PIPE AND PIPE APPURTENANCES WITH TRENTON MC OUTERWRAP.
4. CONCRETE SPECIFIED BY CLASS SHALL BE IN ACCORDANCE WITH SECTION 201-1.1.2 OF SSPWC.
5. APPLY SILKAFLEX 1A AND BACKER ROD AS RECOMMENDED BY MANUFACTURER.
6. PIPE SHALL BE CUT TO FIT IN FIELD. APPLY FIELD-WELDED JOINTS BY CONTINUOUS STRINGER BEADS OUTSIDE OF THE PIPE FOR A FULL PENETRATION WELD.



			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			NOTES		TVMWD W-08
TVMWD	FEB./2020				
REVISION	DATE	APPROVED			DATE <u>3/18/2021</u>
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 8 OF 9

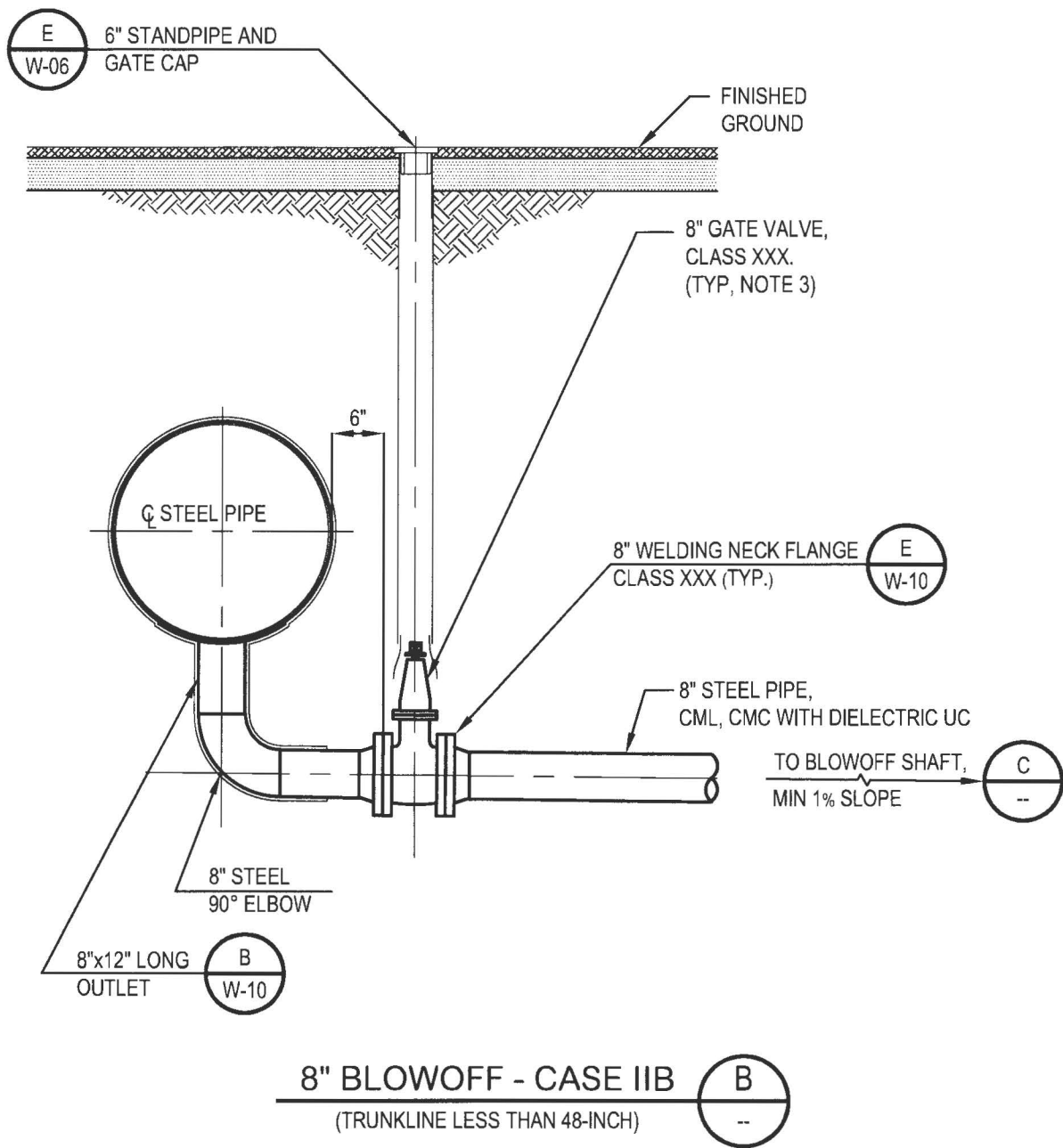
NOTES TO DESIGNER (DO NOT PRINT)



1. VERIFY THAT GEOTECHNICAL ENGINEER DOES NOT RECOMMEND ADDITIONAL DEPTH OF CAB BEDDING. REVISE PROJECT DETAILS ACCORDINGLY.
2. A 60-INCH ID x 3/8 INCH STEEL STANDPIPE CAN BE USED IF SPACE IS AN ISSUE.
3. DETAIL 'G' SHALL ONLY BE USED WHEN GROUNDWATER IS NOT PRESENT. IF GROUNDWATER IS PRESENT THEN REDESIGN DETAIL 'G' BY REPLACING SIKAFLEX 1A WITH LINK-SEAL MODULAR SEAL. THE PENETRATING WATER PIPE SHALL NOT HAVE CMC AT THE EXACT PLACEMENT OF THE LINK-SEAL.
4. DETAILS HEREON DEPICT CONCENTRIC MH FRAME, RING AND COVER.
5. BLOW OFF COULD BE A DIFFERENT SIZE THAN THE 8" BLOWOFF SHOWN HERE
6. USE NOTE 3A IF PROJECT IS BUILT BY DISTRICT FORCES. USE NOTE 3B IF PROJECT IS CONTRACT OUT.

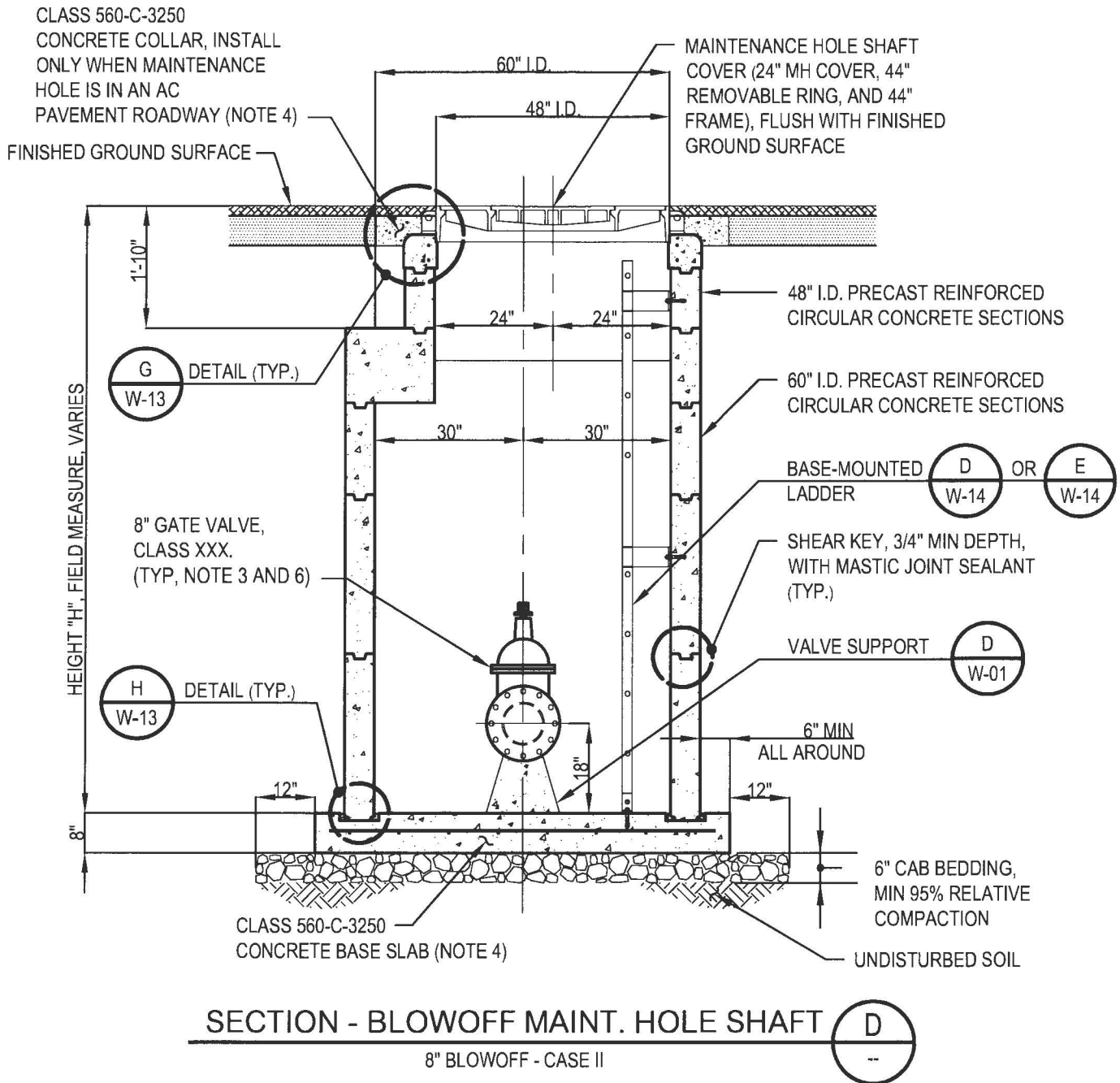
			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			NOTES TO DESIGNER		TVMWD W-08
TVMWD	FEB./2020				
REVISION	DATE	APPROVED			DATE <u>3/18/2021</u>
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 9 OF 9





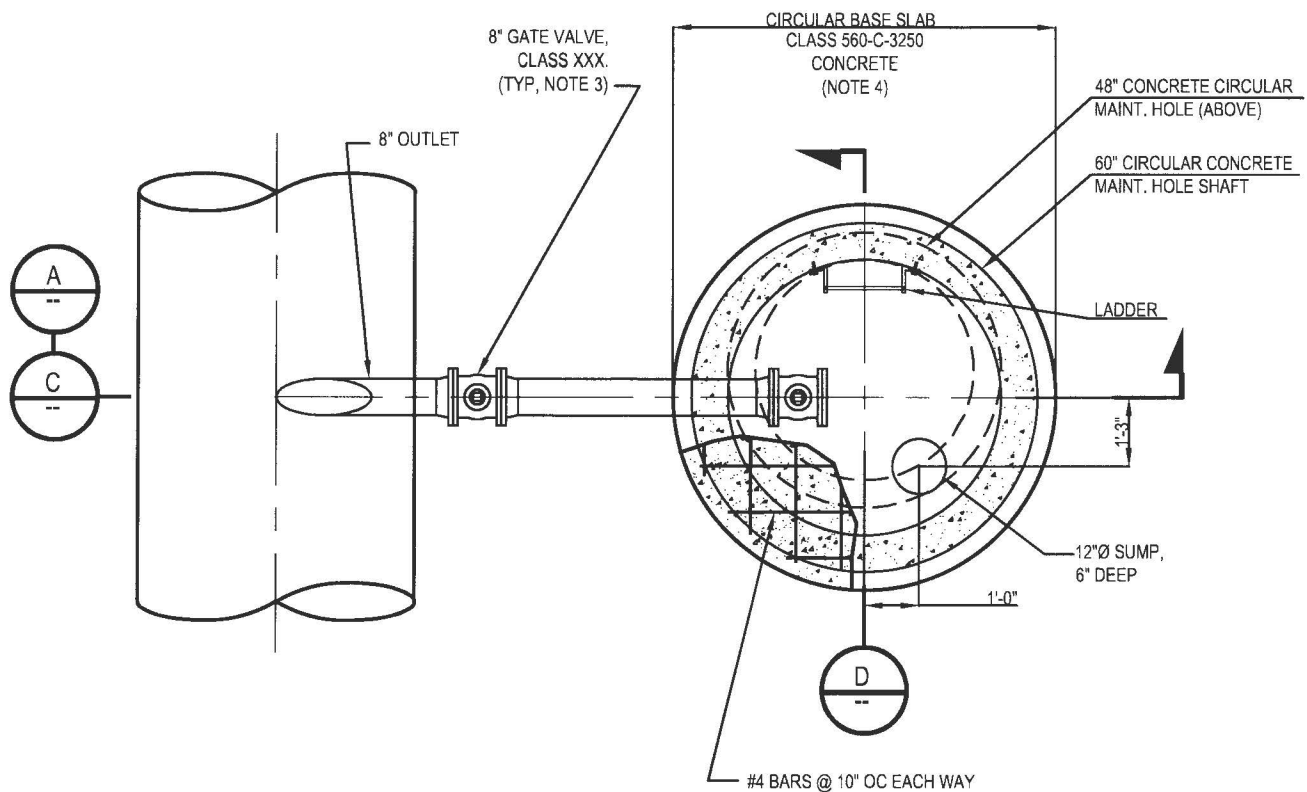
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING	
			8" BLOWOFF - CASE IIA	TVMWD W-09	
TVMWD	FEB./2020				
REVISION	DATE	APPROVED		DATE <u>3/18/2021</u>	
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 1 OF 9



			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			8" BLOWOFF - CASE IIB	TVMWD
TVMWD	FEB./2020			W-09
REVISION	DATE	APPROVED 	DATE 3/18/2021	SHEET 2 OF 9
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079		





			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			BLOWOFF MAINT. HOLE SHAFT - SECTION D	TVMWD W-09
TVMWD	FEB./2020			
REVISION	DATE	APPROVED 	DATE <u>3/18/2021</u>	SHEET 4 OF 9
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079		





PLAN - 8" BLOWOFF CASE IIA

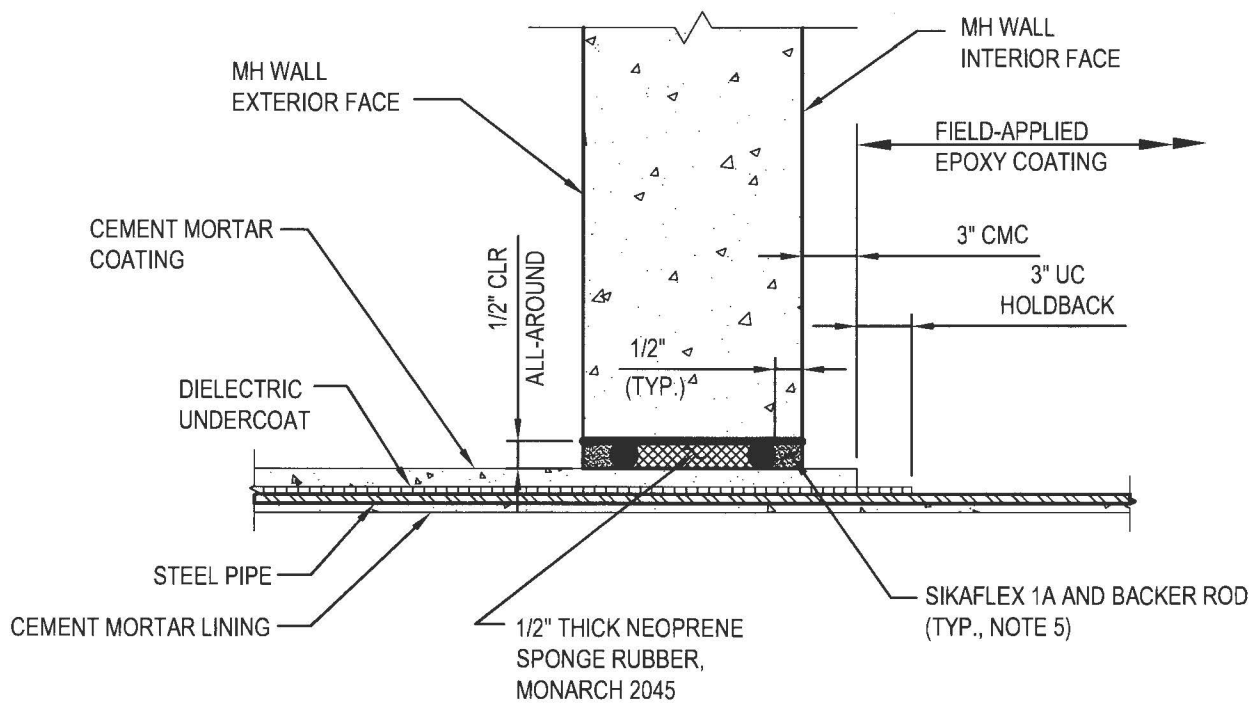
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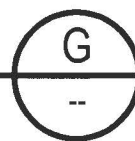
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
TVMWD	FEB./2020		8" BLOWOFF CASE IIA	TVMWD W-09
REVISION	DATE	APPROVED 	DATE <u>3/18/2021</u>	SHEET 5 OF 9
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079		





			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			8" BLOWOFF CASE IIB	TVMWD W-09
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 6 OF 9
REVISION	DATE		MATTHEW H. LITCHFIELD, P.E. RCE 58079	
SCALE:	NONE			





PIPE THROUGH MH WALL SHAFT



			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			PIPE THROUGH MH WALL SHAFT	TVMWD W-09
TVMWD	FEB./2020		DATE <u>3/18/2021</u>	SHEET 7 OF 9
REVISION	DATE			
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		



NOTES:

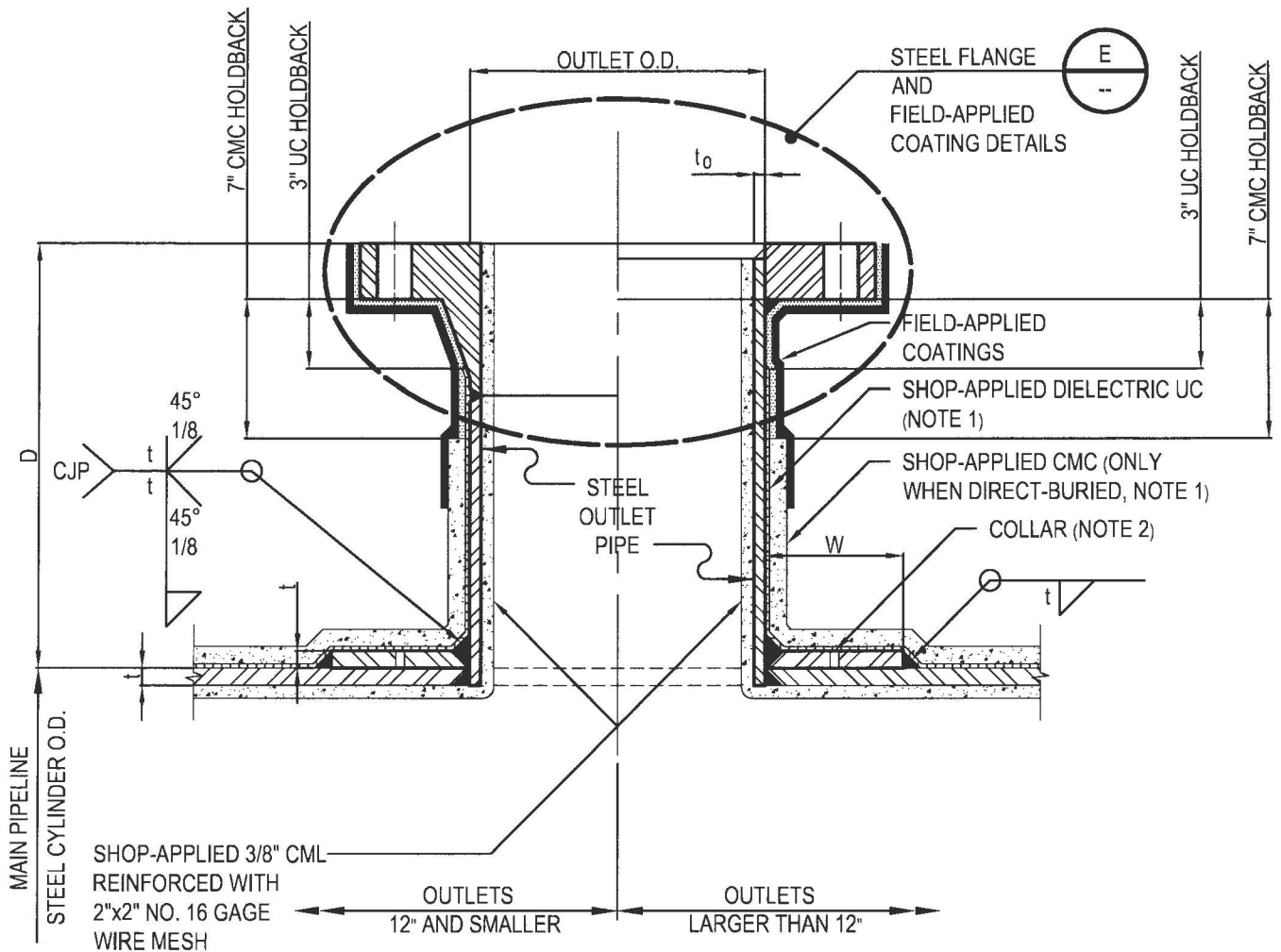
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2. SUPPLY ALL BOLTS, NUTS, AND GASKETS FOR INSTALLING GATE VALVES AND BLIND FLANGES.
- 3A. CLEAN AND PREPARE ALL BARE METAL PIPE AND APPURTENANCE SURFACES. THEN COAT WITH POWERCRETE J EPOXY (FOR DIRECT-BURIED) OR AMERLOCK 2 VOC EPOXY (FOR INSIDE SHAFT AND DIRECT BURIED BOLTS, NUTS AND WASHERS,). THEN APPLY TRENTON WAX TAPE #1 (FOR DIRECT-BURIED) OR #2 (FOR INSIDE SHAFT) OVER ALL EPOXY-COATED SURFACES, INCLUDING SHOP-COATED GATE VALVES AND COUPLINGS, AND FLANGED CONNECTIONS. PRIOR TO THE PLACEMENT OF THE WAX TAPE, APPLY TRENTON FILL-PUTTY TO THE CONTOURS OF IRREGULAR FITTINGS OR SURFACES. WHERE WAX TAPE IS APPLIED TO DIRECT-BURIED PIPE AND PIPE APPURTENANCES, WRAP THE PIPE AND PIPE APPURTENANCES WITH TRENTON MC OUTERWRAP.
- 3B. CLEAN AND PREPARE ALL BARE METAL PIPE AND APPURTENANCE SURFACES INCLUDING BOLTS, NUTS AND WASHERS. THEN COAT WITH POWERCRETE J EPOXY (FOR DIRECT-BURIED). THEN APPLY TRENTON WAX TAPE #1 (FOR DIRECT-BURIED) OR #2 (FOR INSIDE SHAFT) OVER ALL EPOXY-COATED SURFACES, INCLUDING SHOP-COATED GATE VALVES AND COUPLINGS, AND FLANGED CONNECTIONS. PRIOR TO THE PLACEMENT OF THE WAX TAPE, APPLY TRENTON FILL-PUTTY TO THE CONTOURS OF IRREGULAR FITTINGS OR SURFACES. WHERE WAX TAPE IS APPLIED TO DIRECT-BURIED PIPE AND PIPE APPURTENANCES, WRAP THE PIPE AND PIPE APPURTENANCES WITH TRENTON MC OUTERWRAP.
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			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			NOTES		TVMWD W-09
TVMWD	FEB./2020				
REVISION	DATE	APPROVED			DATE <u>3/18/2021</u>
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 8 OF 9

NOTES TO DESIGNER (DO NOT PRINT)

1. VERIFY THAT GEOTECHNICAL ENGINEER DOES NOT RECOMMEND ADDITIONAL DEPTH OF CAB BEDDING. REVISE PROJECT DETAILS ACCORDINGLY.
2. A 60-INCH ID x 3/8 INCH STEEL STANDPIPE CAN BE USED IF SPACE IS AN ISSUE.
3. DETAIL 'G' SHALL ONLY BE USED WHEN GROUNDWATER IS NOT PRESENT. IF GROUNDWATER IS PRESENT THEN REDESIGN DETAIL 'G' BY REPLACING SIKAFLEX 1A WITH LINK-SEAL MODULAR SEAL. THE PENETRATING WATER PIPE SHALL NOT HAVE CMC AT THE EXACT PLACEMENT OF THE LINK-SEAL.
4. DETAILS HEREON DEPICT CONCENTRIC MH FRAME, RING AND COVER. ECCENTRIC MH FRAME, RING AND COVER ARE AVAILABLE FOR USE. CONSIDER WHETHER TO USE CONCENTRIC OR ECCENTRIC MH FRAME, RING AND COVER.
5. BLOW OFF COULD BE A DIFFERENT SIZE THAN THE 8" BLOWOFF SHOWN HERE
6. USE NOTE 3A IF PROJECT IS BUILT BY DISTRICT FORCES. USE NOTE 3B IF PROJECT IS CONTRACT OUT.

			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			DESIGNER NOTES		TVMWD W-09
TVMWD	FEB./2020				
REVISION	DATE	APPROVED			DATE <u>3/18/2021</u>
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 9 OF 9





HALF SECTIONS

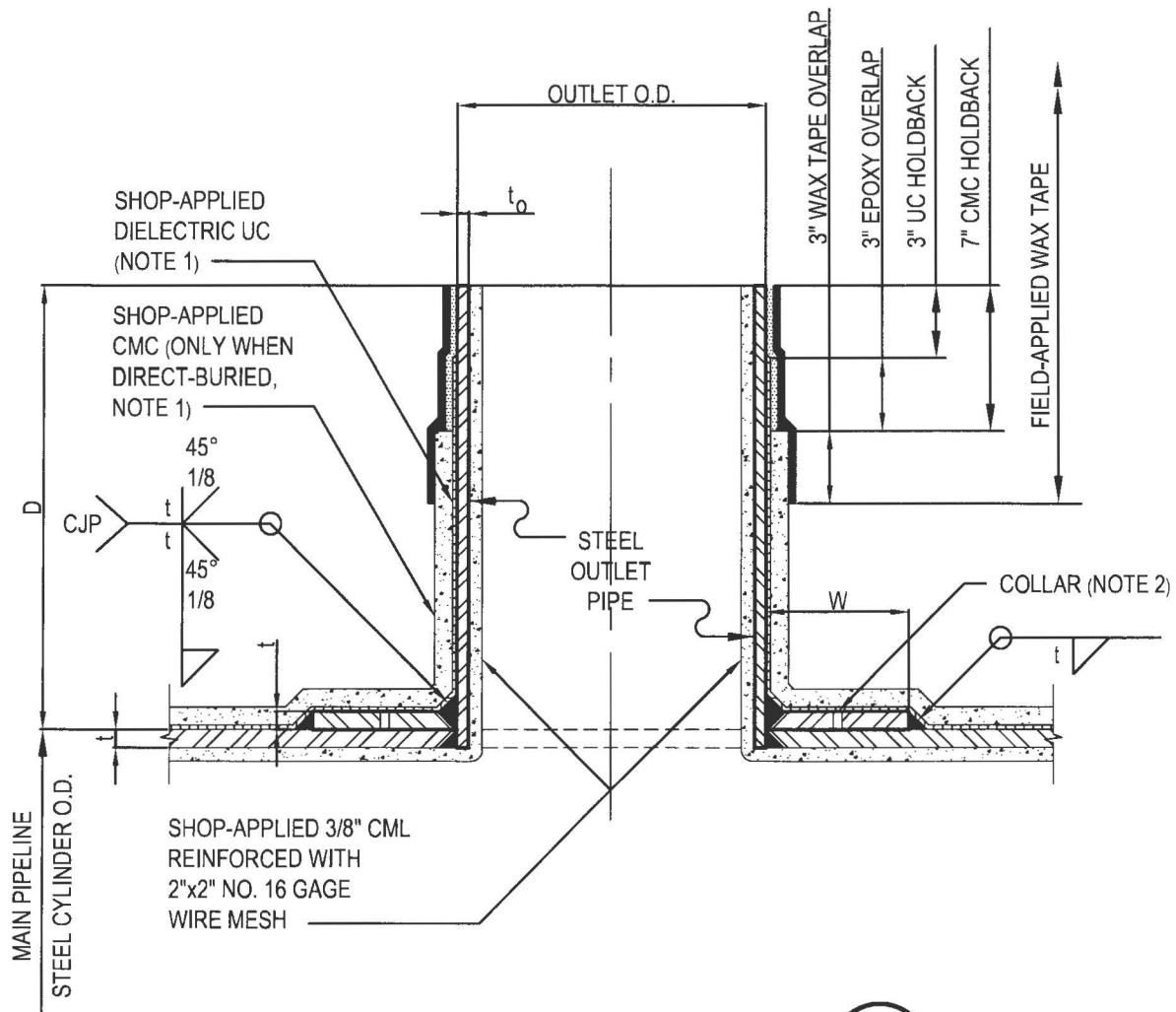
RADIAL OUTLET - FLANGED END

(SEE TABLE 1 HEREON FOR DIMENSIONS AND RADIAL OUTLET NOTES ON DETAIL B)

TABLE 1: OUTLET DIMENSIONS

NOMINAL PIPE SIZE	MAXIMUM "D"	t_o	W	NOMINAL PIPE SIZE	MAXIMUM "D"	t_o	W
4"	12"	0.337"	3"	12"	12"	0.375"	6"
6"	12"	0.432"	3"	16"	28"	0.375"	8"
8"	12"	0.322"	4"	24"	28"	0.500"	12"



			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			RADIAL OUTLET - FLANGED END - DETAIL A		TVMWD W-10
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>		SHEET 1 OF 6
REVISION	DATE				
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			

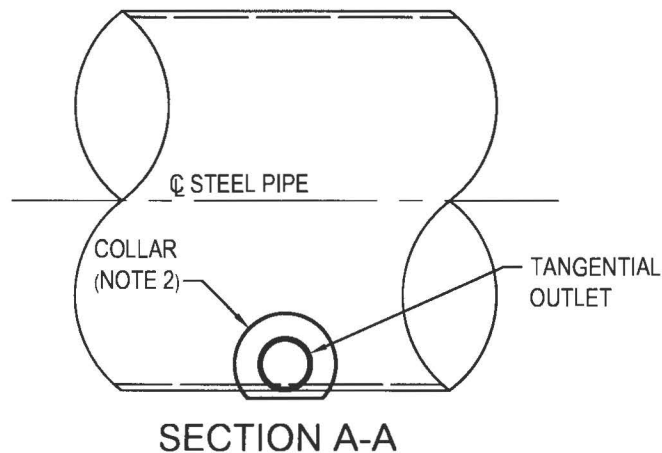
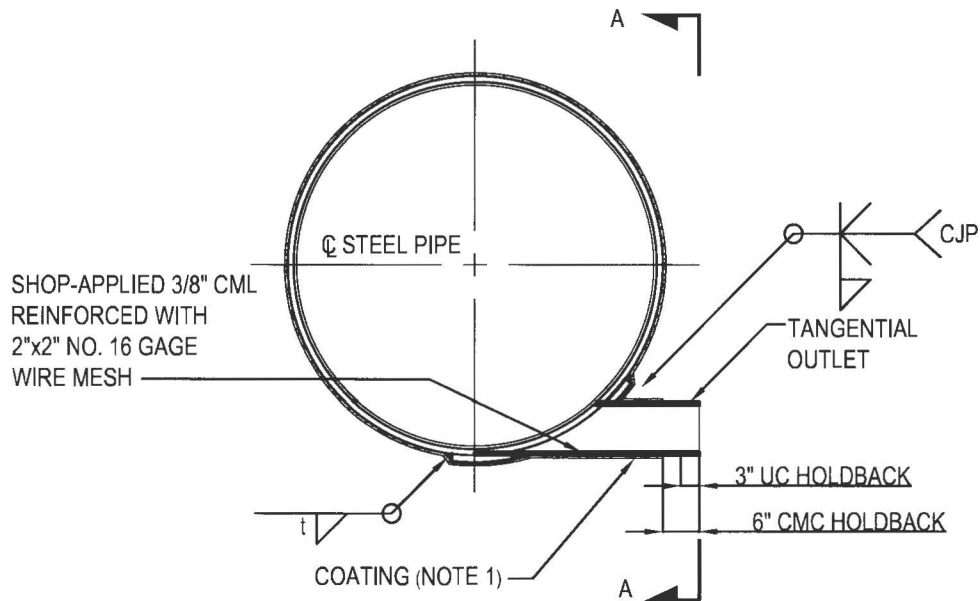


RADIAL OUTLET - PLAIN END (B)
(SEE TABLE 1 ON DETAIL A FOR DIMENSIONS)

RADIAL OUTLET NOTES:

1. OUTLET PIPE COATINGS SHALL BE THE SAME AS THOSE FOR THE MAIN PIPELINE UNLESS OTHERWISE INDICATED.
2. PERFORM SOAP AND AIR TEST ON OUTLET REINFORCEMENT COLLAR: DRILL AND TAP 2 HOLES IN COLLAR, 1/4-INCH N.P.T., 180° APART, FOR 1/4-INCH PIPE. WELD HOLES AFTER SUCCESSFUL COMPLETION OF TEST AT 40 PSI.



			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			RADIAL OUTLET - PLAIN END - DETAIL B	TVMWD W-10
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 2 OF 6
REVISION	DATE			
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		

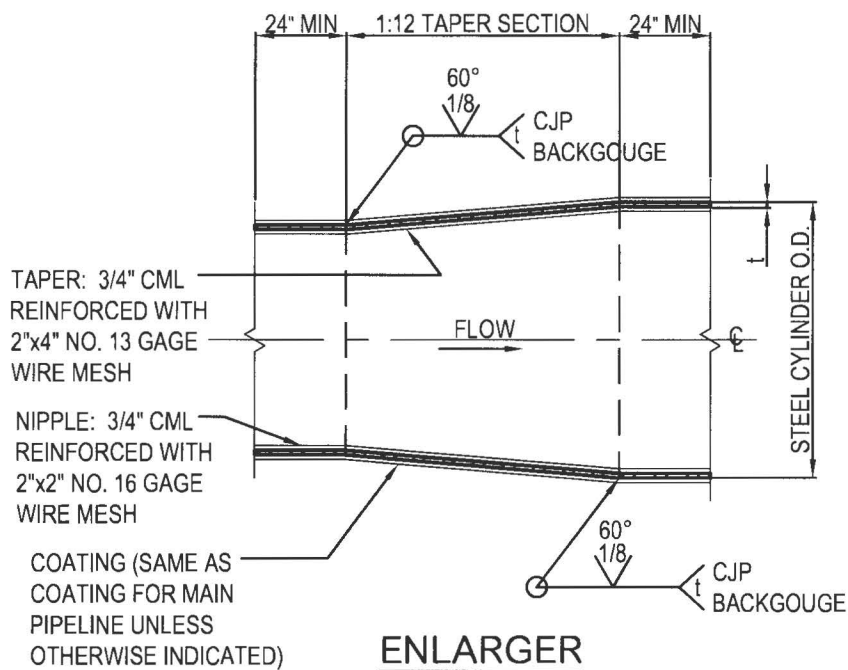
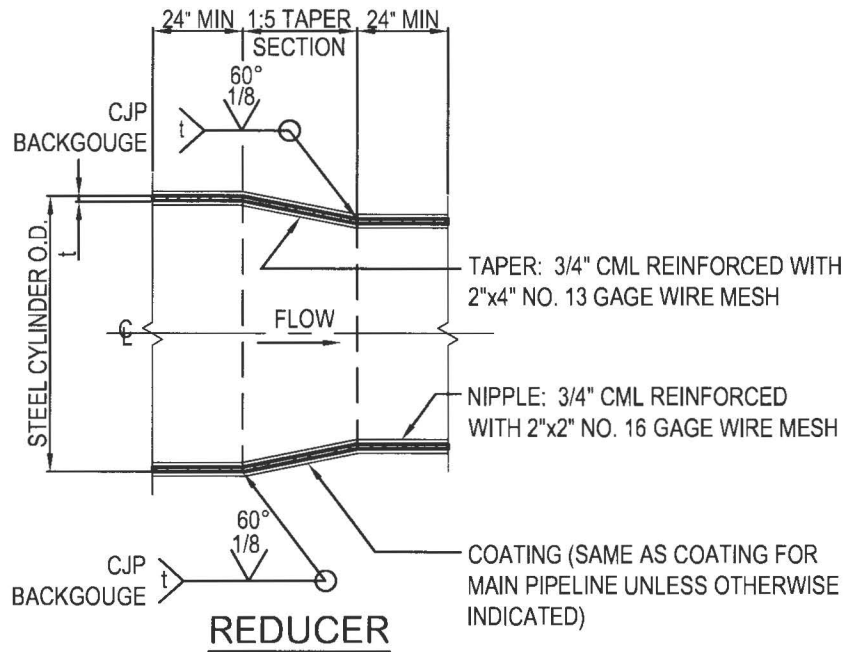


TANGENTIAL OUTLET C
(SEE TABLE 1 ON DETAIL A FOR DIMENSIONS)

TANGENTIAL OUTLET NOTES:



1. OUTLET PIPE COATINGS SHALL BE THE SAME AS THOSE FOR THE MAIN PIPELINE UNLESS OTHERWISE INDICATED.
2. PERFORM SOAP AND AIR TEST ON OUTLET REINFORCEMENT COLLAR: DRILL AND TAP 2 HOLES IN COLLAR, 1/4-INCH N.P.T., 180° APART, FOR 1/4-INCH PIPE. WELD HOLES AFTER SUCCESSFUL COMPLETION OF TEST AT 40 PSI.

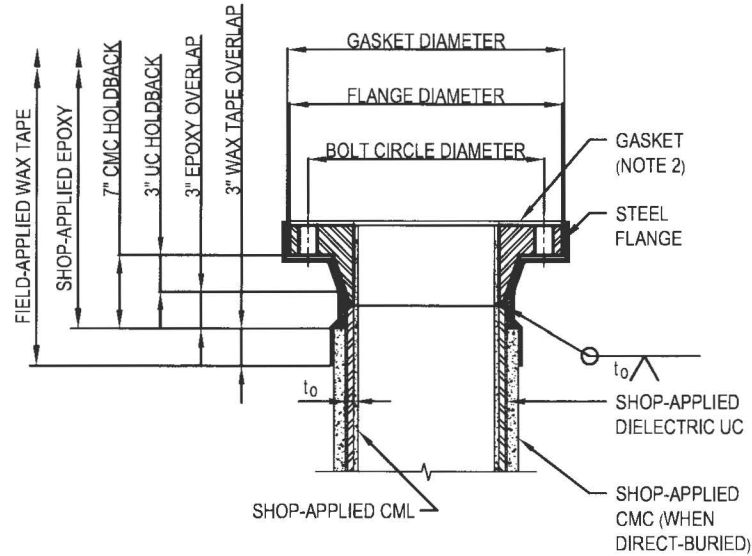
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			TANGENTIAL OUTLET - DETAIL C	TVMWD W-10
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 3 OF 6
REVISION	DATE			
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		



REDUCER AND ENLARGER DETAILS

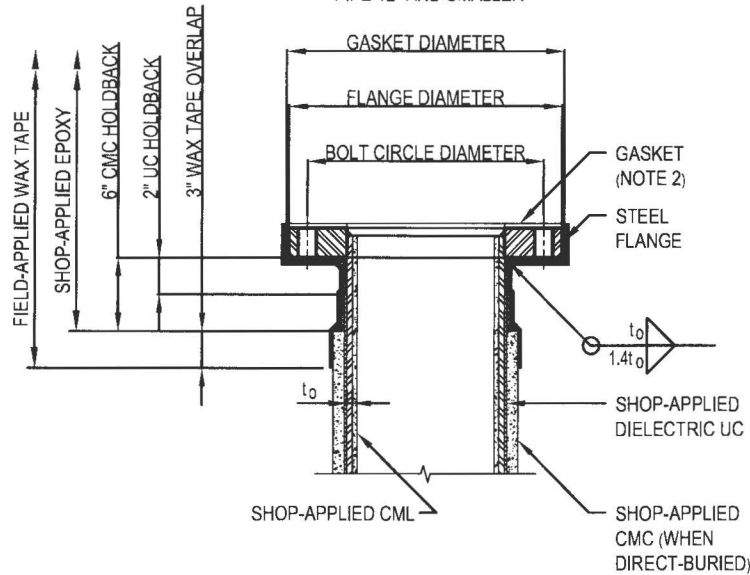


			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			REDUCER AND ENLARGER DETAILS - DETAIL D		TVMWD W-10
TVMWD	FEB./2020				
REVISION	DATE	APPROVED			DATE <u>3/18/2021</u>
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079			
SHEET 4 OF 6					



WELDING NECK FLANGE



PIPE 12" AND SMALLER



SLIP-ON AND RING FLANGE

PIPE LARGER THAN 12"

STEEL FLANGES E

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			STEEL FLANGES - DETAIL E	TVMWD W-10
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 5 OF 6
REVISION	DATE			
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		

STEEL FLANGE NOTES:



1. A. FOR PIPE DIAMETERS 24 INCHES AND SMALLER:

- (1) WHERE CLASS 150 FLANGES ARE SPECIFIED, THE FLANGE THICKNESS SHALL CONFORM TO ANSI B16.5 CLASS 150 AND THE FLANGE DIAMETER AND DRILLING SHALL CONFORM TO ANSI B16.1 CLASS 125;
- (2) WHERE CLASS 300 FLANGES ARE SPECIFIED, THE FLANGE THICKNESS SHALL CONFORM TO ANSI B16.5 CLASS 300 AND THE FLANGE DIAMETER AND DRILLING SHALL CONFORM TO ANSI B16.1 CLASS 250.


B. FOR PIPE DIAMETERS LARGER THAN 24 INCHES:

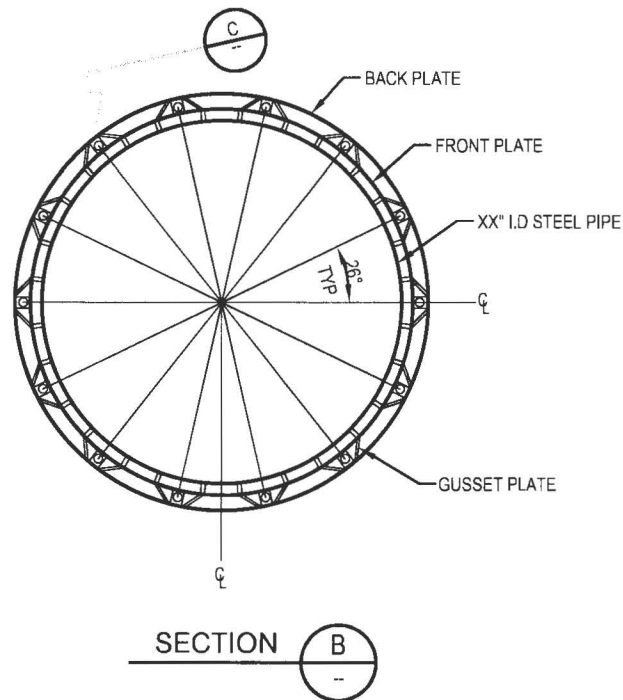
- (1) WHERE CLASS 175 FLANGES ARE SPECIFIED, THE FLANGES SHALL CONFORM TO AWWA C207 CLASS D.
- (2) WHERE CLASS 275 FLANGES ARE SPECIFIED, THE FLANGES SHALL CONFORM TO AWWA C207 CLASS E.
- (3) WHERE CLASS 300 FLANGES ARE SPECIFIED, THE FLANGES SHALL CONFORM TO AWWA C207 CLASS F.

- 2. THE FLANGE GASKET OUTSIDE DIAMETER SHALL EXTEND NOT LESS THAN 1/8 INCH BEYOND THE OUTSIDE CIRCUMFERENCE OF THE FLANGE, AND THE FLANGE GASKET INSIDE DIAMETER SHALL BE FLUSH WITH THE CIRCUMFERENCE OF THE FLANGE BORE.
- 3. SHOP-COAT MACHINED FLANGE MATING SURFACES WITH TNESEC SERIES 94-H20 HYDRO-ZINC PRIMER. THE PRIMER SHALL HAVE A DFT OF 1 MILS (MAX) AND SHALL BE REMOVED PRIOR TO FIELD ASSEMBLY.

			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING	
			STEEL FLANGE NOTES		TVMWD W-10	
TVMWD	FEB./2020					
REVISION	DATE	APPROVED			DATE <u>3/18/2021</u>	
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079				SHEET 6 OF 6



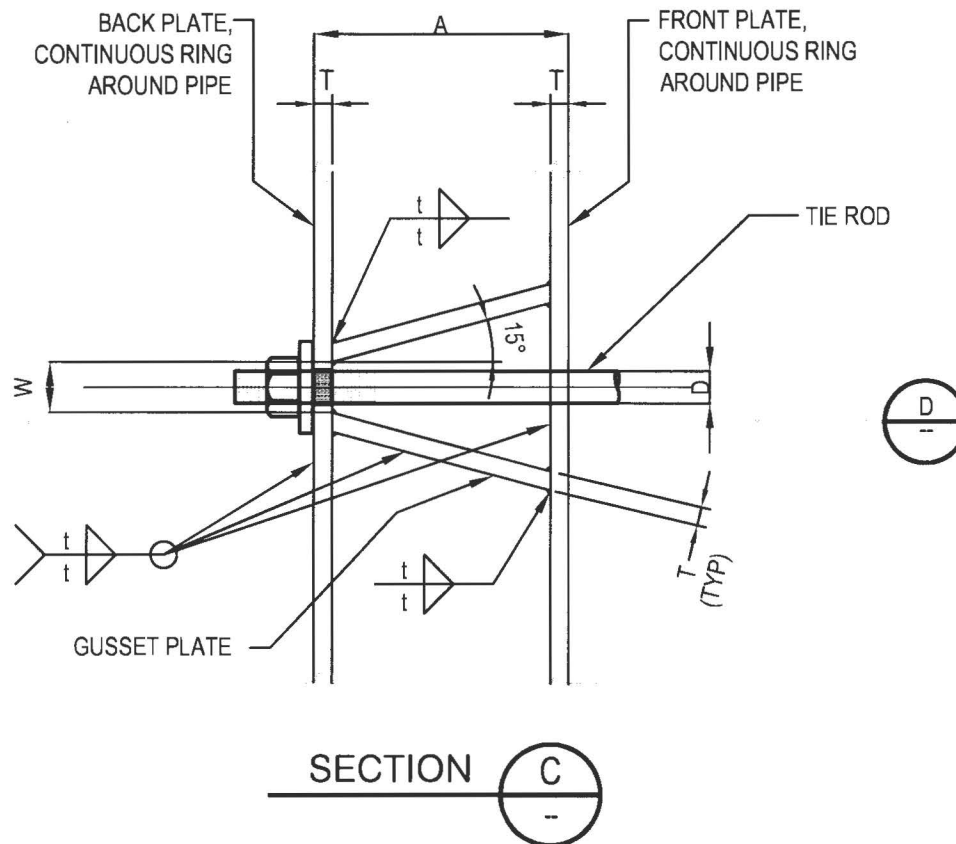
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			MECHANICAL COUPLING AND JOINT HARNESS ASSEMBLY	TVMWD W-11
TVMWD	FEB./2020			
REVISION	DATE	APPROVED	 MATTHEW H. LITCHFIELD, P.E. RCE 58079	DATE <u>3/18/2021</u>
SCALE:	NONE			SHEET 1 OF 9





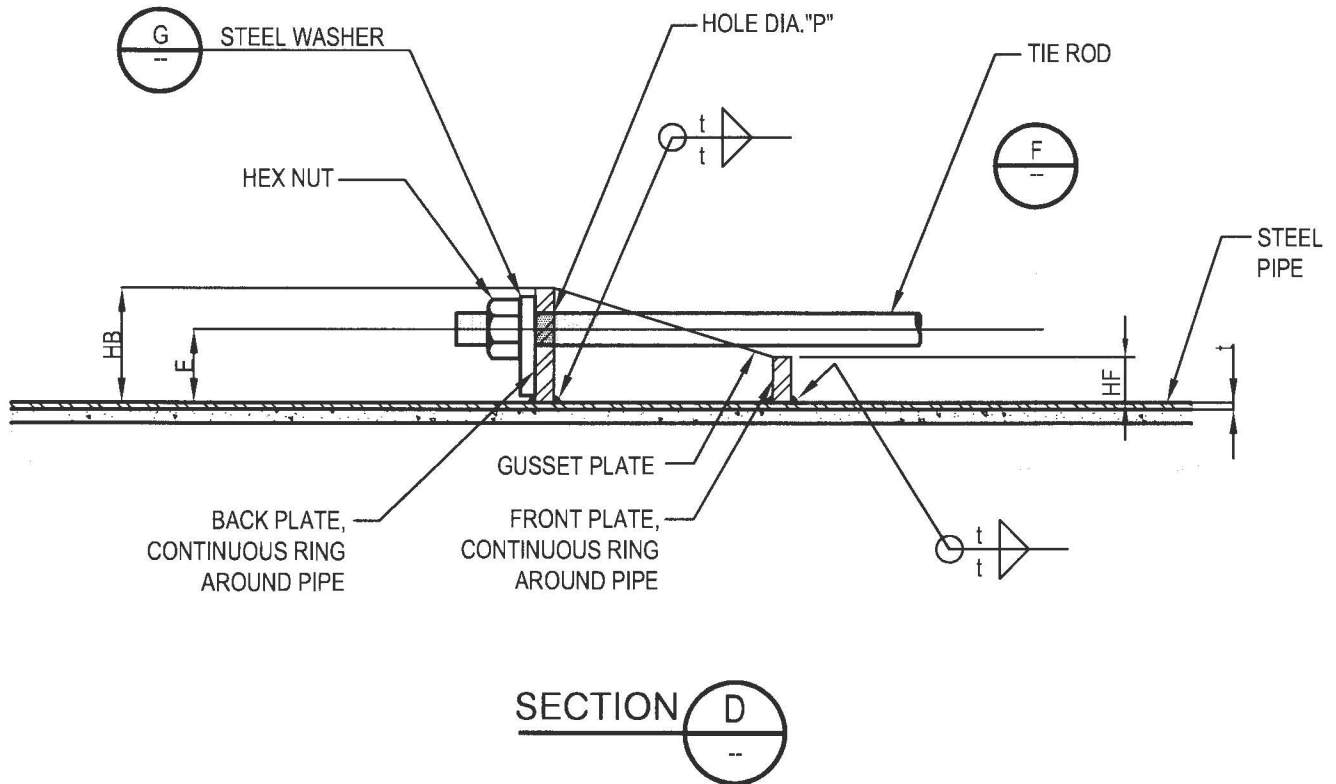
NOTES TO DESIGNER (DO NOT PRINT)



1. JOINT HARNESS ON DETAIL A AND B IS SHOWN AS A 14-ROD ASSEMBLY. DESIGNER SHALL MODIFY DETAILS TO REFLECT THEIR DESIGNED NUMBER OF RODS.
2. CONSIDER THE FOLLOWING ITEMS:
 - A) DOES THE JOINT HARNESS ASSEMBLY REQUIRE INSULATION OR NON-INSULATION
 - B) DOES THE MECHANICAL COUPLING REQUIRE INSULATION OR NON-INSULATION

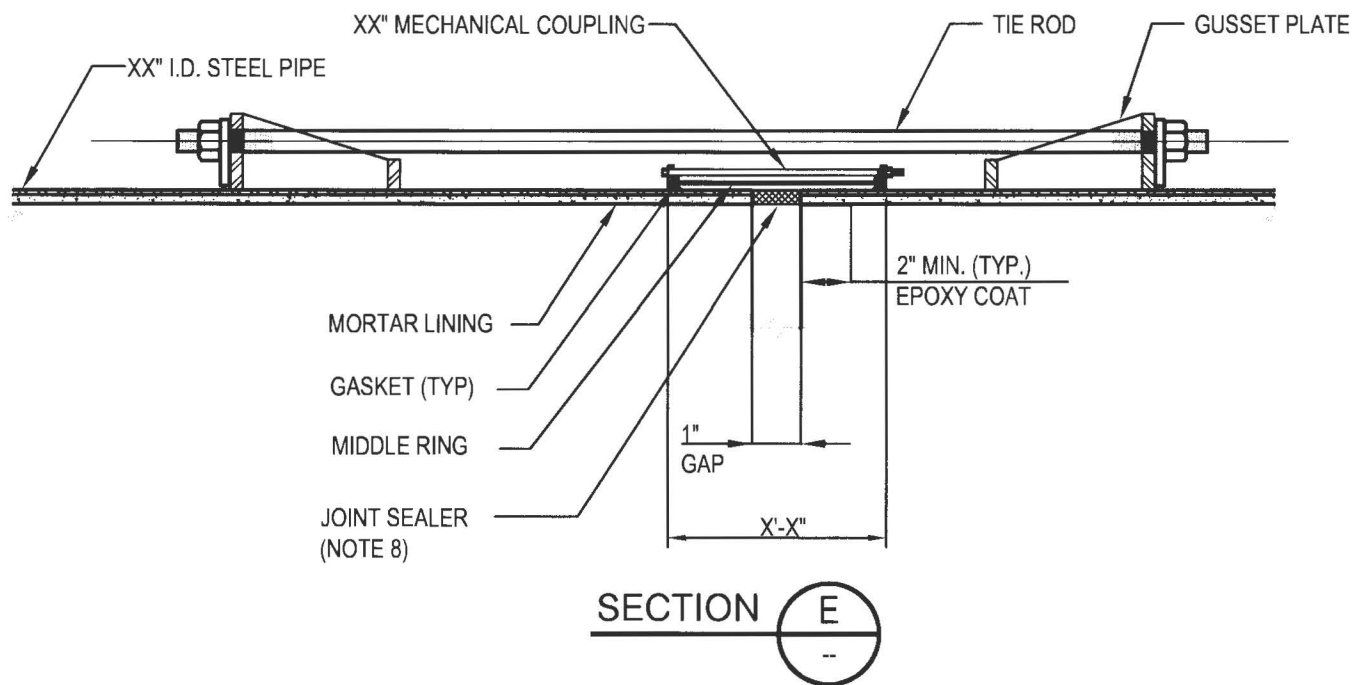
			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			MECHANICAL COUPLING AND JOINT HARNESS ASSEMBLY - SECTION AND NOTES		TVMWD W-11
TVMWD	FEB./2020				
REVISION	DATE	APPROVED 		DATE <u>3/18/2021</u>	
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 2 OF 9



			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING	
			MECHANICAL COUPLING AND JOINT HARNESS ASSEMBLY - SECTION C	TVMWD W-11	
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 3 OF 9	
REVISION	DATE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		
SCALE: NONE					




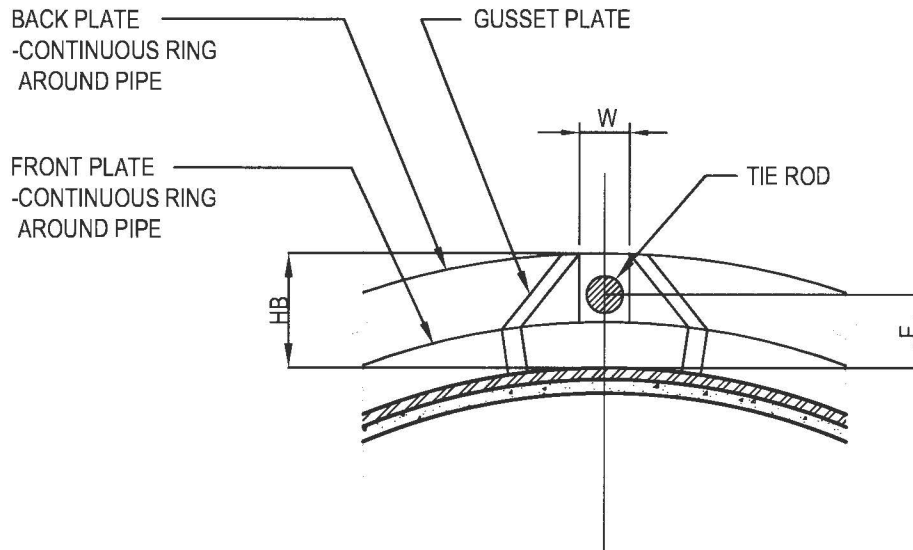
			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			MECHANICAL COUPLING AND JOINT HARNESS ASSEMBLY - SECTION D		TVMWD
TVMWD	FEB./2020		DATE 3/18/2021		W-11
REVISION	DATE		APPROVED		
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 4 OF 9



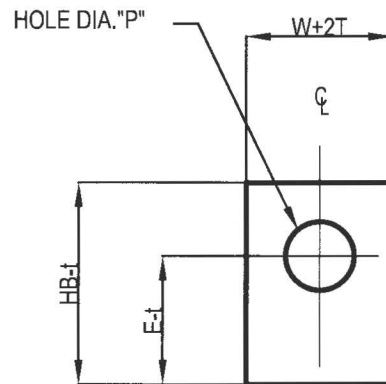
NOTES TO DESIGNER (DO NOT PRINT)

3. CONSIDER THE FOLLOWING ITEMS:
- A) SHOULD THE JOINT HARNESS ASSEMBLY PROVIDE FLEXIBILITY OR RIGIDITY TO THE TRUNK LINE
 - B) IF THE JOINT HARNESS ASSEMBLY IS RECOMMENDED TO PROVIDE FLEXIBILITY TO THE TRUNK LINE, CONSIDER ADDING A RUBBER WASHER(S) BETWEEN THE NUT AND LUG (ANCHOR PLATE). IF A RUBBER WASHER(S) IS USED, VERIFY THAT THE LENGTH OF THE MECHANICAL COUPLING IS PROPERLY DESIGNED TO ALLOW COMPRESSION OF THE WASHER(S).

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			MECHANICAL COUPLING AND JOINT HARNESS ASSEMBLY - SECTION D	TVMWD W-11
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 5 OF 9
REVISION	DATE			
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		




			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			MECHANICAL COUPLING AND JOINT HARNESS ASSEMBLY - SECTION F		TVMWD W-11
TVMWD	FEB./2020		APPROVED 		DATE <u>3/18/2021</u>
REVISION	DATE	MATTHEW H. LITCHFIELD, P.E. RCE 58079			
SCALE: NONE		SHEET 6 OF 9			



MATERIAL: 3/4" THICK A36 STEEL

BACK PLATE STEEL WASHER G
--

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			MECHANICAL COUPLING AND JOINT HARNESS ASSEMBLY - SECTION G	TVMWD W-11
TVMWD	FEB./2020		<div style="display: flex; justify-content: space-between; align-items: center;"><div>APPROVED </div><div>DATE <u>3/18/2021</u></div></div>	SHEET 7 OF 9
REVISION	DATE			
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079		



JOINT HARNESS ASSEMBLY

PIPE I.D.	PIPE THK. t	HARNESS PLATES											TIE RODS				OTHER DIMENSIONS	
		QTY	DESIGN PRESS.	LUG TYPE	T	A	W	HB	Y	E	HF	HOLE DIA. "P"	QTY.	Thd/in.	D	L	K	J
XX	X/X	XX	XXX psi	RR	X/X	XX	X X/X	X X/X	RING	X X/X	X X/X	X X/X	XX	8 UN	X X/X	XX X/X	XX	XX X/X

ALL DIMENSIONS IN INCHES



NOTES TO DESIGNER (DO NOT PRINT)

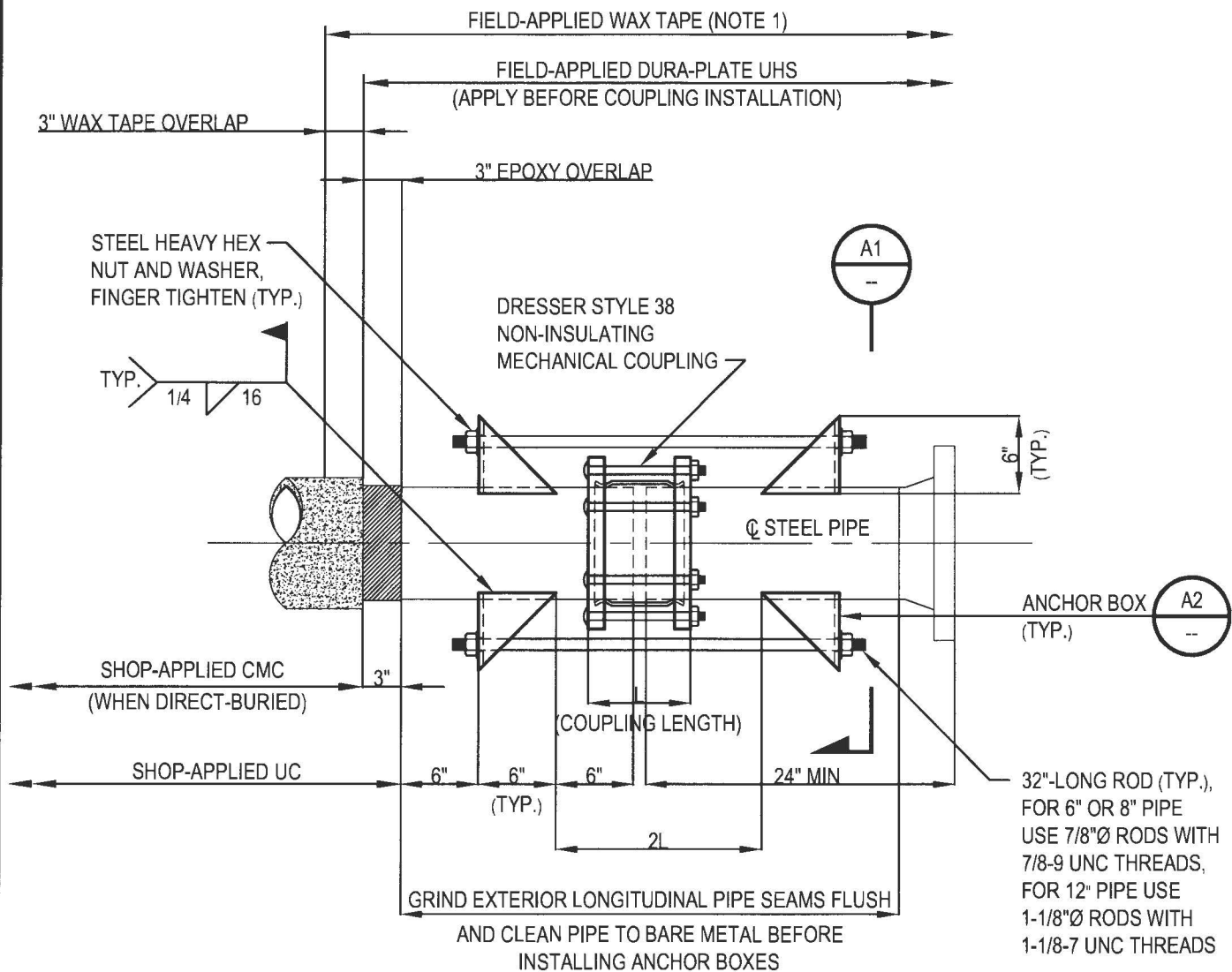
4. FOR SELECTION OF JOINT HARNESS ASSEMBLY DESIGN DIMENSIONS, SEE TABLE 13-4, 13-5 AND 13-5A OF AWWA M11.
5. FOR MECHANICAL COUPLINGS DESIGN DIMENSIONS, SEE VENDOR CATALOG.
6. FOR TRUNK LINE CONSTRUCTION (TLC) PROJECTS, INDICATE MAKE AND MODEL OF MECHANICAL COUPLING

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			JOINT HARNESS ASSEMBLY AND NOTES TO DESIGNER	TVMWD W-11
TVMWD	FEB./2020			
REVISION	DATE	APPROVED	 MATTHEW H. LITCHFIELD, P.E. RCE 58079	DATE <u>3/18/2021</u>
SCALE: NONE		SHEET 8 OF 9		

NOTES:

1. TIE RODS SHALL CONFORM TO ASTM A193, ALLOY STEEL GRADE B7.
2. HEX NUTS SHALL CONFORM TO ASTM A194 GRADE 2H ALLOY STEEL.
3. FRONT, BACK AND GUSSET PLATE SHALL CONFORM TO ASTM A36 STEEL.
4. "t" EQUALS PIPE WALL THICKNESS AND SIZE OF FILLET ATTACHMENT WELD. FILLET WELDS CONNECTING BACK PLATES, FRONT PLATES, AND GUSSET PLATES SHALL BE 1/4 INCH MINIMUM.
5. THE THREADS OF THE TIE RODS SHALL PROTRUDE A MINIMUM OF 1/2 INCH FROM THE NUTS.
6. APPLY TRENTON WAX TAPE #1 OVER ALL EPOXY-COATED SURFACES. PRIOR TO THE PLACEMENT OF THE WAX TAPE, APPLY TRENTON FILL-PUTTY TO THE CONTOURS OF IRREGULAR FITTINGS OR SURFACES. WHERE WAX TAPE IS APPLIED, WRAP THE PIPE AND PIPE APPURTENANCES WITH A FLAT SHEET OF TRENTON POLY-PLY TAPED DOWN WITH 10-MIL THICK DIELECTRIC ADHESIVE TAPE.
7. SEAL JOINTS WITH SIKAFLEX-2C NS EZ MIX SEALANT IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS AND INSTRUCTIONS.

			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			NOTES		TVMWD W-11
TVMWD	FEB./2020				
REVISION	DATE	APPROVED			DATE <u>3/18/2021</u>
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 9 OF 9



MECHANICAL COUPLING AND ANCHOR BOX ASSEMBLY - PLAN

FOR 6" THRU 12" MECHANICAL COUPLINGS

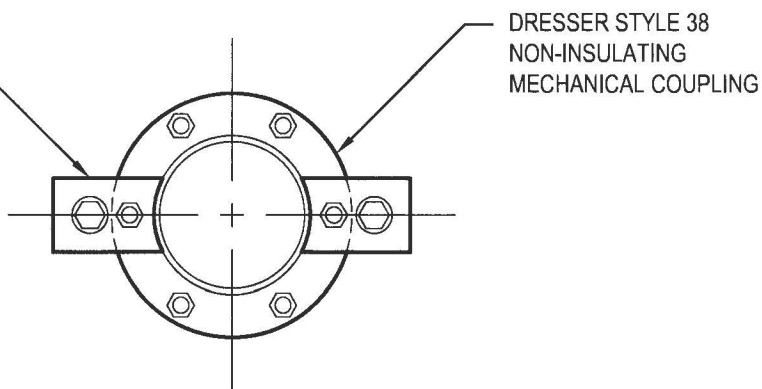
A

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			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			MECHANICAL COUPLING AND ANCHOR BOX ASSEMBLY - PLAN A	TVMWD W-12
TVMWD	FEB./2020		DATE 3/18/2021	SHEET 1 OF 3
REVISION	DATE			
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		

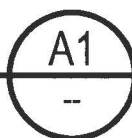


ANCHOR BOX
(TYP.)



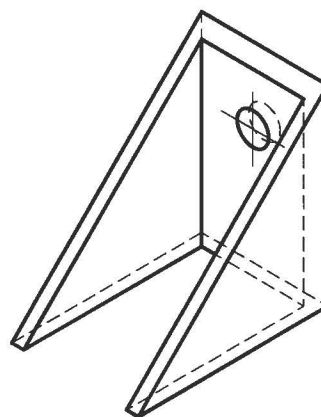
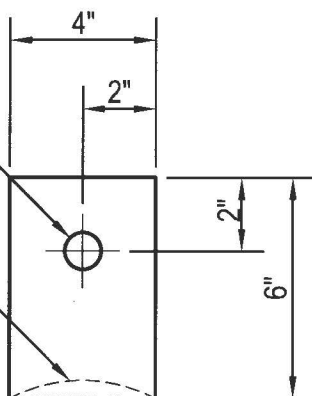
DRESSER STYLE 38
NON-INSULATING
MECHANICAL COUPLING

SECTION



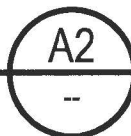
1"Ø HOLE FOR 7/8"Ø
ROD OR 1-1/4"Ø HOLE
FOR 1-1/8"Ø ROD



TORCH CUT IN FIELD
TO MATCH PIPE RADIUS



ANCHOR BOX,
FABRICATED FROM
6"x4"x3/8" HOLLOW
STEEL STRUCTURAL
SECTIONS

ANCHOR BOX DETAILS





			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			SECTION A1 AND ANCHOR BOX DETAIL A2	TVMWD W-12
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 2 OF 3
REVISION	DATE		MATTHEW H. LITCHFIELD, P.E. RCE 58079	
SCALE:	NONE			

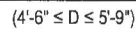
NOTE:



1. APPLY TRENTON WAX TAPE #1 (FOR DIRECT-BURIED) OR #2 (FOR INSIDE SHAFT) OVER ALL EPOXY-COATED SURFACES. PRIOR TO THE PLACEMENT OF THE WAX TAPE, APPLY TRENTON FILL-PUTTY TO THE CONTOURS OF IRREGULAR FITTINGS OR SURFACES. WHERE WAX TAPE IS APPLIED TO DIRECT-BURIED PIPE AND PIPE APPURTENANCES, WRAP THE PIPE AND PIPE APPURTENANCES WITH A FLAT SHEET OF TRENTON POLY-PLY TAPED DOWN WITH 10-MIL THICK DIELECTRIC ADHESIVE TAPE.

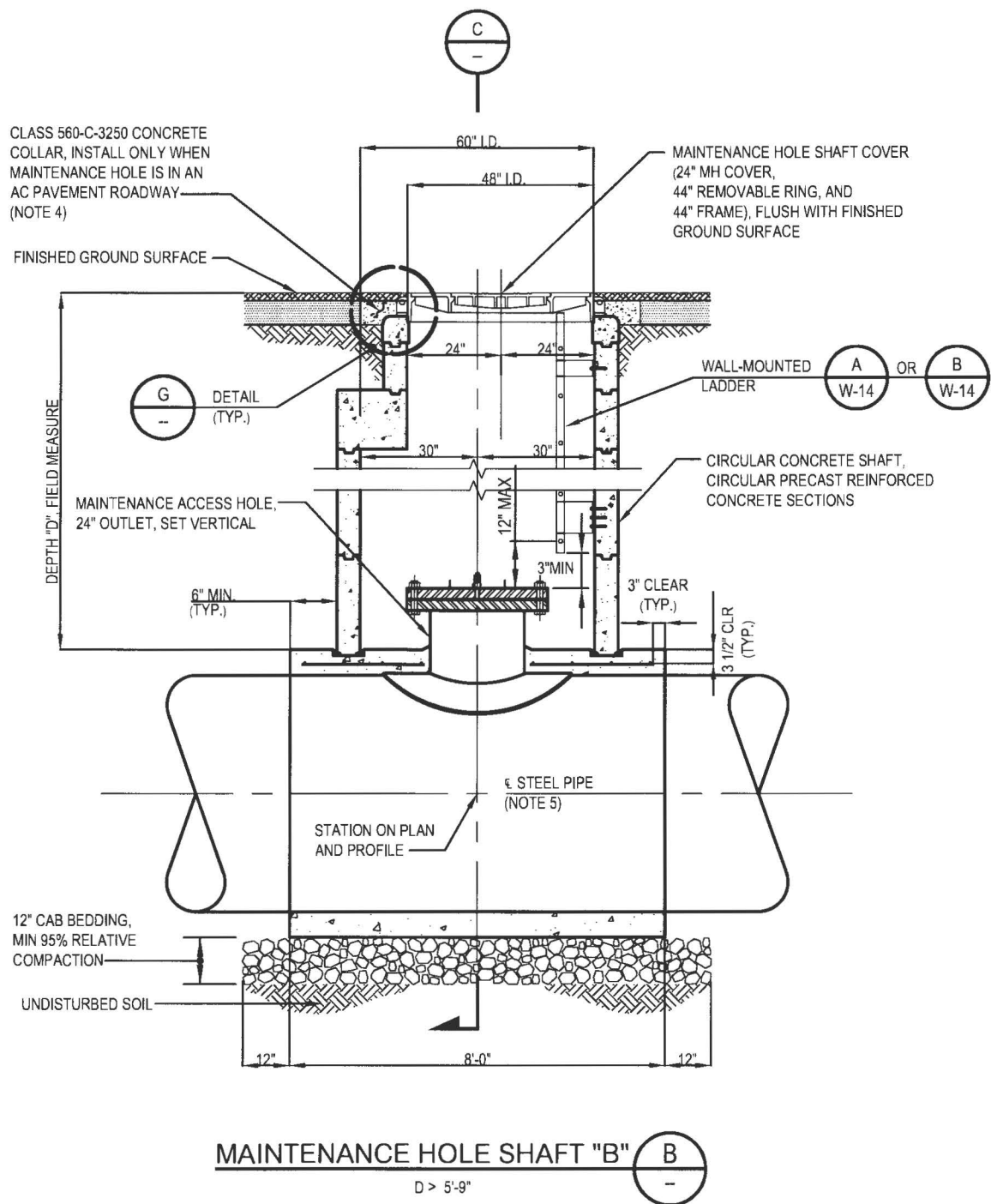
NOTES TO DESIGNER (DO NOT PRINT)



1. CONSIDER THE FOLLOWING ITEMS:
 - A) DOES THE JOINT HARNESS ASSEMBLY REQUIRE INSULATION OR NON-INSULATION
 - B) DOES THE MECHANICAL COUPLING REQUIRE INSULATION OR NON-INSULATION

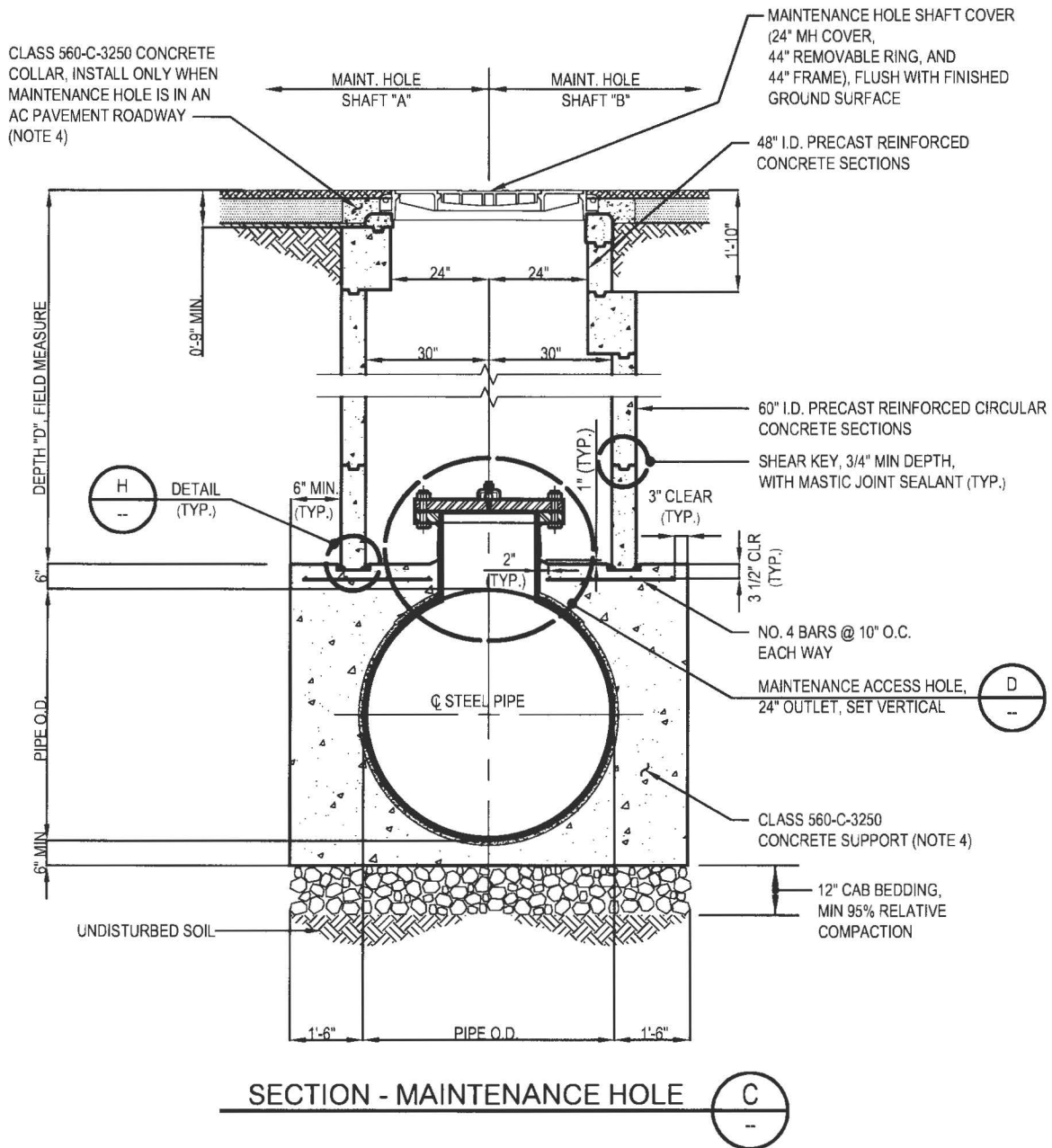
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			NOTES AND NOTES TO DESIGNER	TVMWD W-12
TVMWD	FEB./2020			
REVISION	DATE	APPROVED 	DATE <u>3/18/2021</u>	
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079		
SHEET 3 OF 3				





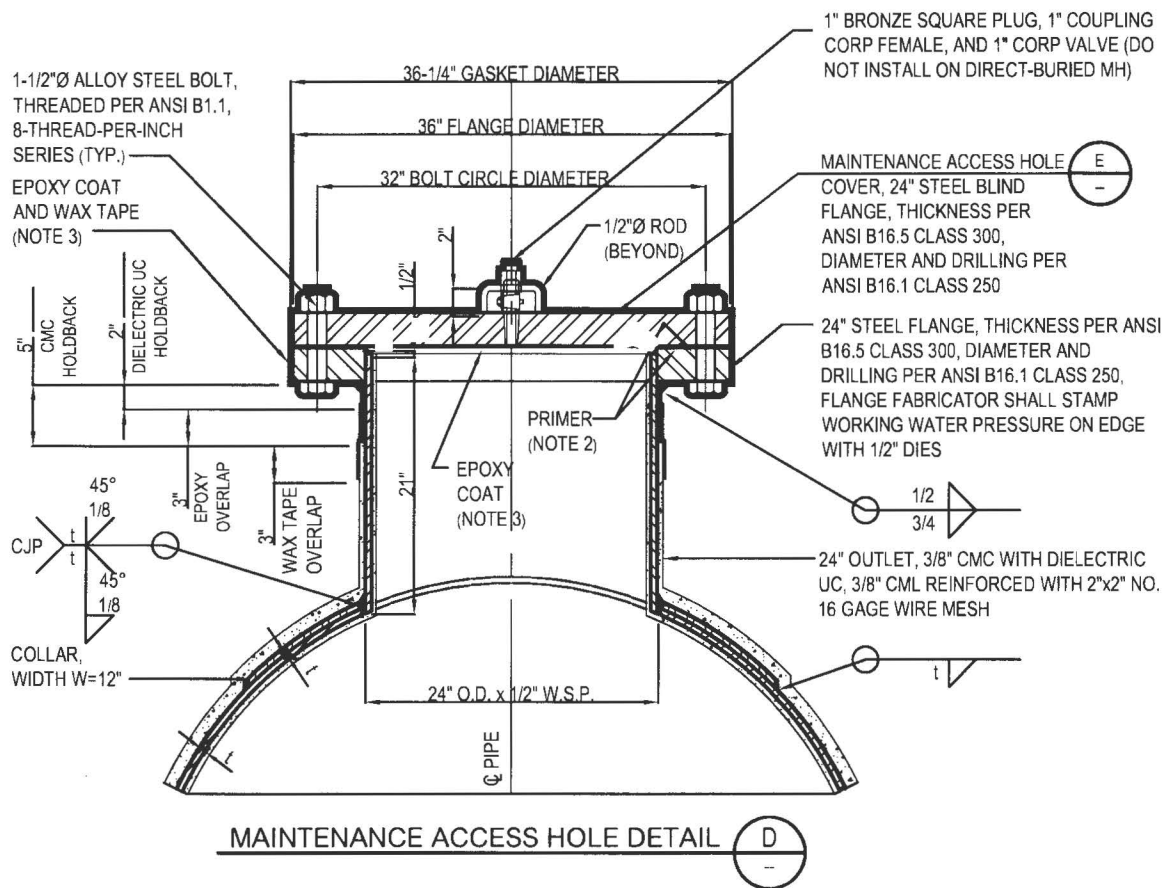
			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			MAINTENANCE HOLE SHAFT "A"		TVMWD W-13
TVMWD	FEB./2020				
REVISION	DATE	APPROVED		DATE	3/18/2021
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 1 OF 9





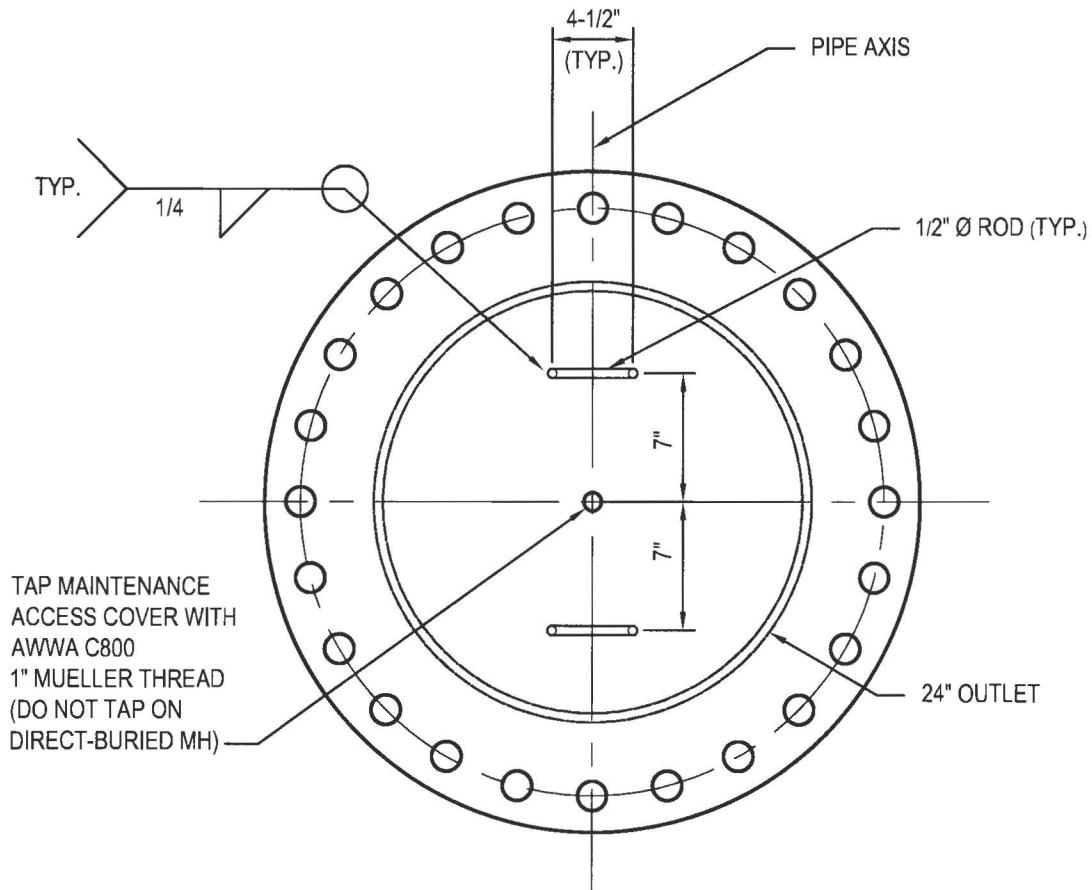
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			MAINTENANCE HOLE SHAFT "B"	TVMWD
TVMWD	FEB./2020	APPROVED 		DATE <u>3/18/2021</u>
REVISION	DATE			
SCALE: NONE			MATTHEW H. LITCHFIELD, P.E. RCE 58079	
SHEET 2 OF 9				



			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			MAINTENANCE HOLE - SECTION C	TVMWD
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	W-13
REVISION	DATE		DATE <u>3/18/2021</u>	
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		





			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING	
			MAINTENANCE ACCESS HOLE - DETAIL D	TVMWD	
TVMWD	FEB./2020	<div>APPROVED </div> <div>MATTHEW H. LITCHFIELD, P.E. RCE 58079</div>	DATE <u>3/18/2021</u>	W-13	
REVISION	DATE				
SCALE:	NONE				SHEET 4 OF 9

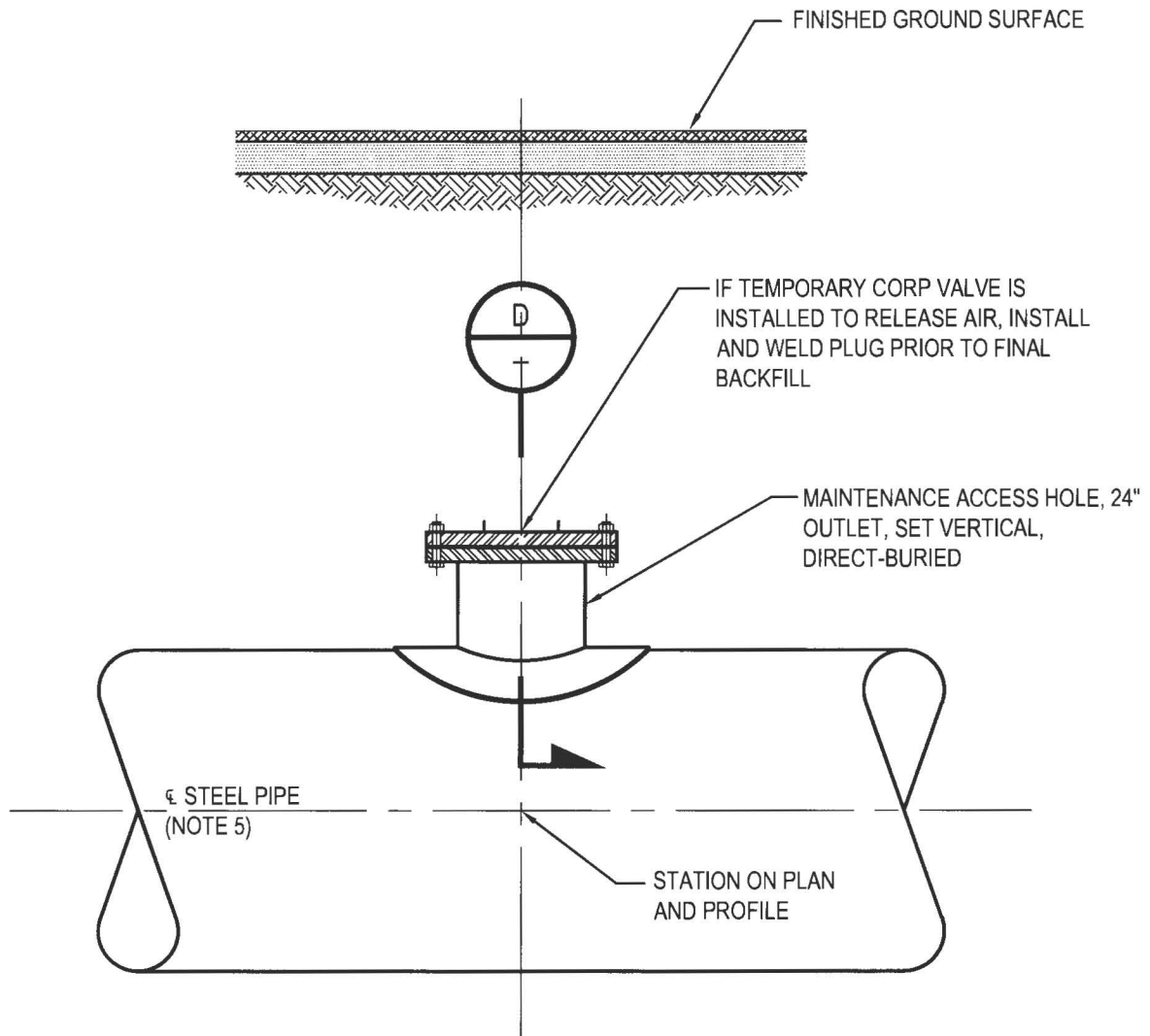


MAINTENANCE ACCESS HOLE COVER

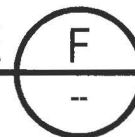
STEEL BLIND FLANGE



E

			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			MAINTENANCE ACCESS HOLE COVER		TVMWD W-13
TVMWD	FEB./2020		APPROVED 		DATE <u>3/18/2021</u>
REVISION	DATE	MATTHEW H. LITCHFIELD, P.E. RCE 58079			
SCALE: NONE					
SHEET 5 OF 9					



DIRECT-BURIED MAINTENANCE HOLE



			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			DIRECT-BURIED MAINTENANCE HOLE	TVMWD W-13
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 6 OF 9
REVISION	DATE			
SCALE:	NONE			

12" WIDE x 6" THICK,
2" BELOW FINISHED GROUND,
INSTALL ONLY WHEN
MAINTENANCE HOLE IS IN AN
AC PAVEMENT ROADWAY

FINISHED
GROUND SURFACE

MAINTENANCE HOLE
SHAFT COVER

12"

2"

5-3/4"

6"

MAX

PACKED
CEMENT
MORTAR
(NOTE 1)



VARIES

CIRCULAR
PRECAST
CONCRETE
SECTIONS

NO. 4 CIRCUMFERENTIAL REBAR, 15"
MIN. ACI 318 CLASS B LAP SPLICE



SHEAR KEY, 3/4" MIN. DEPTH, WITH
MASTIC JOINT SEALANT

DETAIL G

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			DETAIL G AND H	TVMWD W-13
TVMWD	FEB./2020	APPROVED  MATTHEW H. LITCHFIELD, P.E. RCE 58079	DATE <u>3/18/2021</u>	SHEET 7 OF 9
REVISION	DATE		SCALE: NONE	



NOTES:

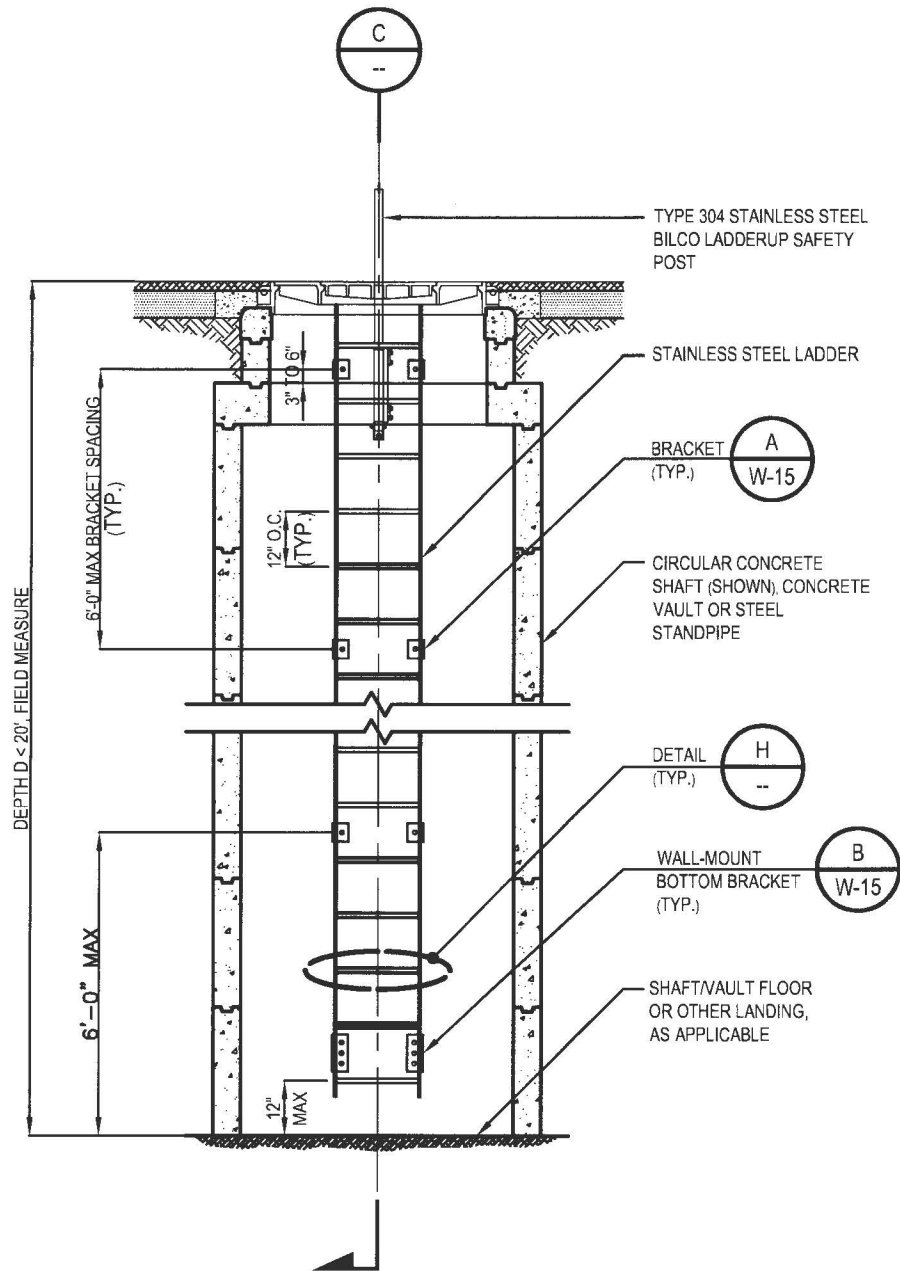
1. PACKED CEMENT MORTAR: USE 1 PART CEMENT TO 2 PARTS SAND WITH SUFFICIENT QUANTITY OF WATER TO PRODUCE A WORKABLE MIXTURE.
2. SHOP-COAT MACHINED FLANGE MATING SURFACES WITH TNEMEC SERIES 94-H20 HYDRO-ZINC PRIMER. THE PRIMER SHALL HAVE A DFT OF 1 MILS AND SHALL BE REMOVED PRIOR TO FIELD ASSEMBLY.
- 3A. CLEAN AND PREPARE THE BARE INSIDE FACE OF THE BLIND FLANGE IN CONTACT WITH POTABLE WATER THEN COAT WITH DURA-PLATE UHS EPOXY. CLEAN AND PREPARE ALL BARE METAL PIPE AND APPURTENANCE SURFACES, THEN COAT WITH POWERCRETE J EPOXY (FOR DIRECT-BURIED) OR AMERLOCK 2 VOC EPOXY (FOR INSIDE SHAFT, VAULT, AND DIRECT BURIED BOLTS, NUTS, & WASHERS). THEN APPLY TRENTON WAX TAPE #1 (FOR DIRECT-BURIED) OR #2 (FOR INSIDE SHAFT OR VAULT) OVER ALL EPOXY-COATED SURFACES, INCLUDING FLANGED CONNECTIONS. PRIOR TO THE PLACEMENT OF THE WAX TAPE, APPLY TRENTON FILL-PUTTY TO THE CONTOURS OF IRREGULAR FITTINGS OR SURFACES. WHERE WAX TAPE IS APPLIED TO DIRECT-BURIED PIPE AND PIPE APPURTENANCES, WRAP THE PIPE AND PIPE APPURTENANCES WITH TRENTON MC OUTERWRAP.
- 3B. CLEAN AND PREPARE THE BARE INSIDE FACE OF THE BLIND FLANGE IN CONTACT WITH POTABLE WATER THEN COAT WITH DURA-PLATE UHS EPOXY. CLEAN AND PREPARE ALL BARE METAL PIPE AND APPURTENANCE SURFACES INCLUDING BOLTS, NUTS, & WASHERS. THEN COAT WITH POWERCRETE J EPOXY (FOR DIRECT-BURIED) OR AMERLOCK 2 VOC EPOXY (FOR INSIDE SHAFT OR VAULT). THEN APPLY TRENTON WAX TAPE #1 (FOR DIRECT-BURIED) OR #2 (FOR INSIDE SHAFT OR VAULT) OVER ALL EPOXY-COATED SURFACES, INCLUDING FLANGED CONNECTIONS. PRIOR TO THE PLACEMENT OF THE WAX TAPE, APPLY TRENTON FILL-PUTTY TO THE CONTOURS OF IRREGULAR FITTINGS OR SURFACES. WHERE WAX TAPE IS APPLIED TO DIRECT-BURIED PIPE AND PIPE APPURTENANCES, WRAP THE PIPE AND PIPE APPURTENANCES WITH TRENTON MC OUTERWRAP.
4. CONCRETE SPECIFIED BY CLASS SHALL BE IN ACCORDANCE WITH SECTION 201-1.1.2 OF SSPWC.
5. PRECAST CONCRETE CIRCULAR MAINTENANCE HOLE SHAFT SECTIONS SHALL BE DESIGNED FOR AASHTO HS 20-44 TRAFFIC LOADING AND SHALL COMPLY WITH ASTM C478.

			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			NOTES		TVMWD W-13
TVMWD	FEB./2020				DATE <u>3/18/2021</u>
REVISION	DATE			APPROVED	
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			



NOTES TO DESIGNER (DO NOT PRINT)

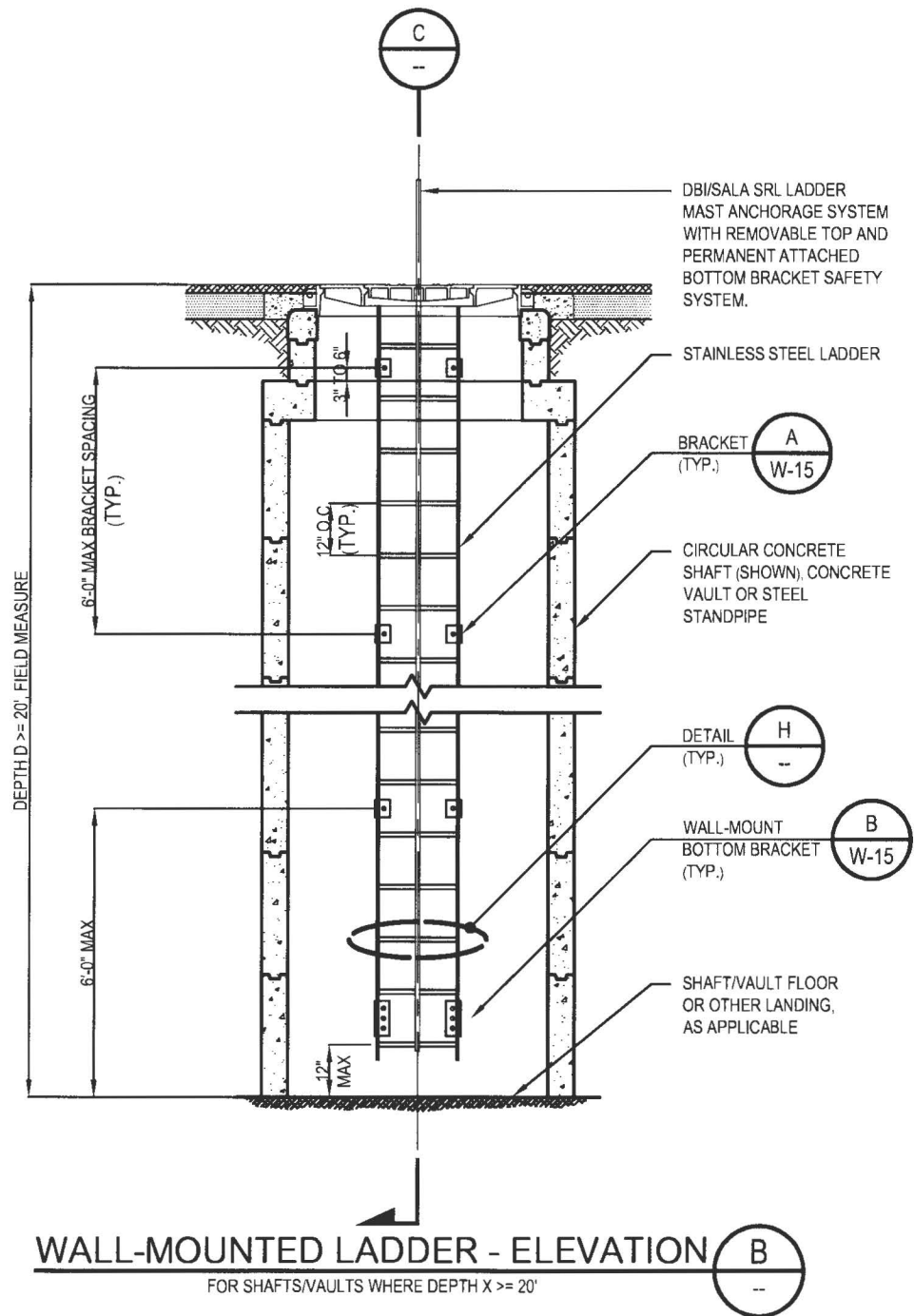
1. DETAILS HEREON DEPICT CONCENTRIC MH FRAME, RING AND COVER.
2. VERIFY THAT A CORP VALVE ASSEMBLY ON A DIRECT-BURIED MH IS NOT NEEDED.
3. USE NOTE 3A IF PROJECT IS BUILT BY DISTRICT FORCES. USE NOTE 3B IF PROJECT IS CONTRACT OUT.



			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			NOTES TO DESIGNER	TVMWD W-13
TVMWD	FEB./2020			
REVISION	DATE	APPROVED	 MATTHEW H. LITCHFIELD, P.E. RCE 58079	DATE <u>3/18/2021</u>
SCALE: NONE		SHEET 9 OF 9		

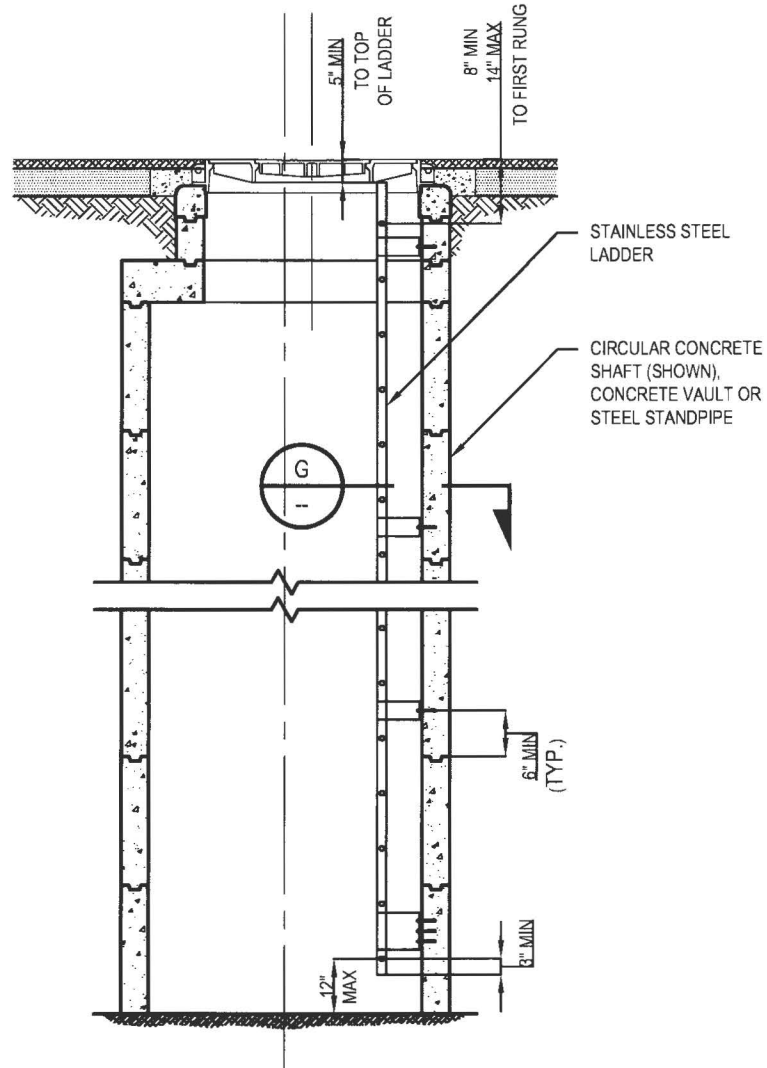


WALL-MOUNTED LADDER - ELEVATION A
FOR SHAFTS/VAULTS WHERE DEPTH X < 20'

			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			WALL-MOUNTED LADDER - ELEVATION "A"		TVMWD W-14
TVMWD	FEB./2020				
REVISION	DATE	APPROVED 		DATE <u>3/18/2021</u>	SHEET 1 OF 8
SCALE:	NONE	MATTHEW H. LITCHFIELD, P.E. RCE 58079			

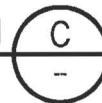




			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			WALL-MOUNTED LADDER - ELEVATION "B"		TVMWD W-14
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>		SHEET 2 OF 8
REVISION	DATE				
SCALE: NONE			MATTHEW H. LITCHFIELD, P.E. RCE 58079		

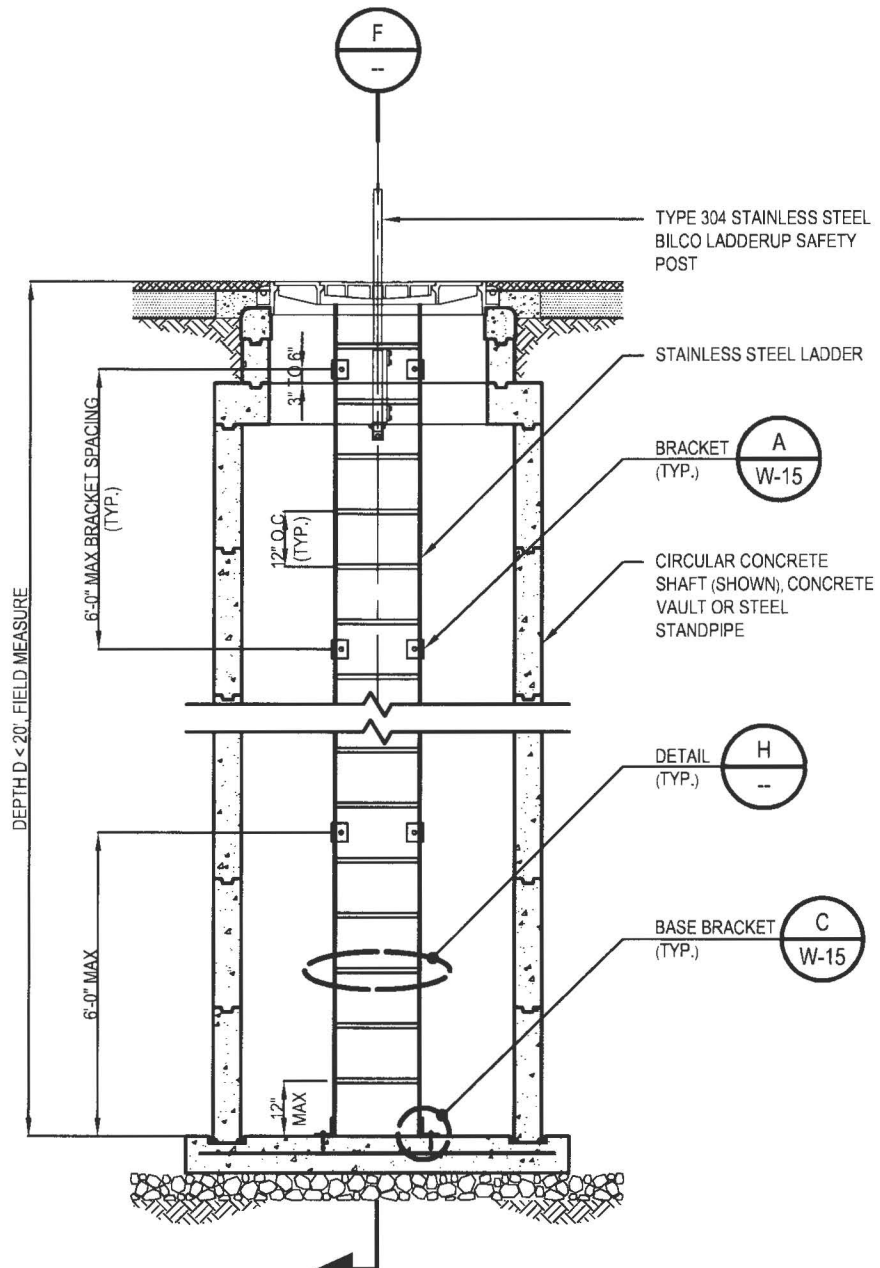


WALL-MOUNTED LADDER - SECTION

BILCO LADDERUP OR DBI/SALA SRL NOT SHOWN





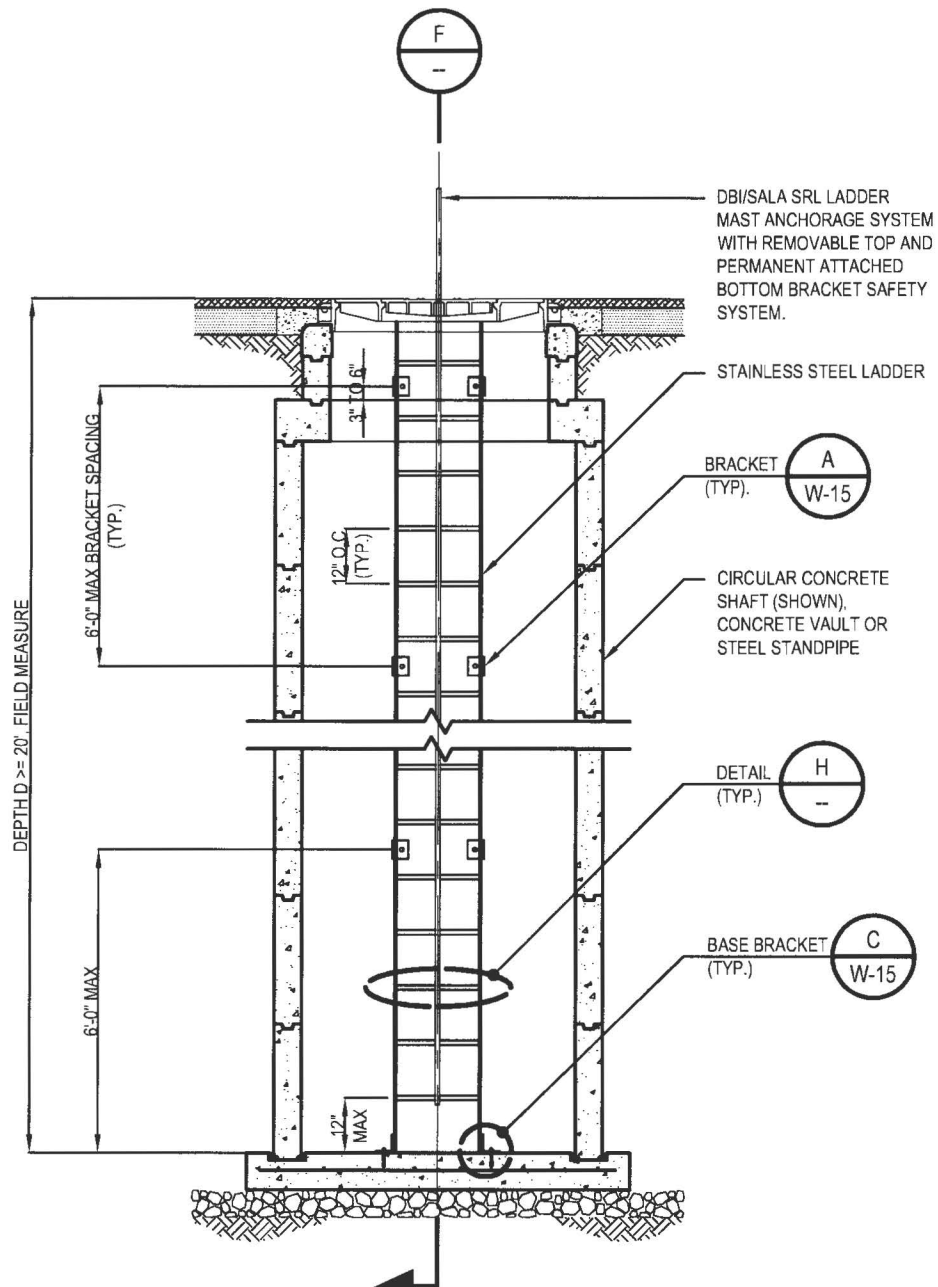
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			WALL-MOUNTED LADDER - SECTION "C"	TVMWD W-14
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 3 OF 8
REVISION	DATE			
SCALE: NONE				



BASE-MOUNTED LADDER - ELEVATION **D**



FOR SHAFTS/VAULTS WHERE DEPTH X < 20'

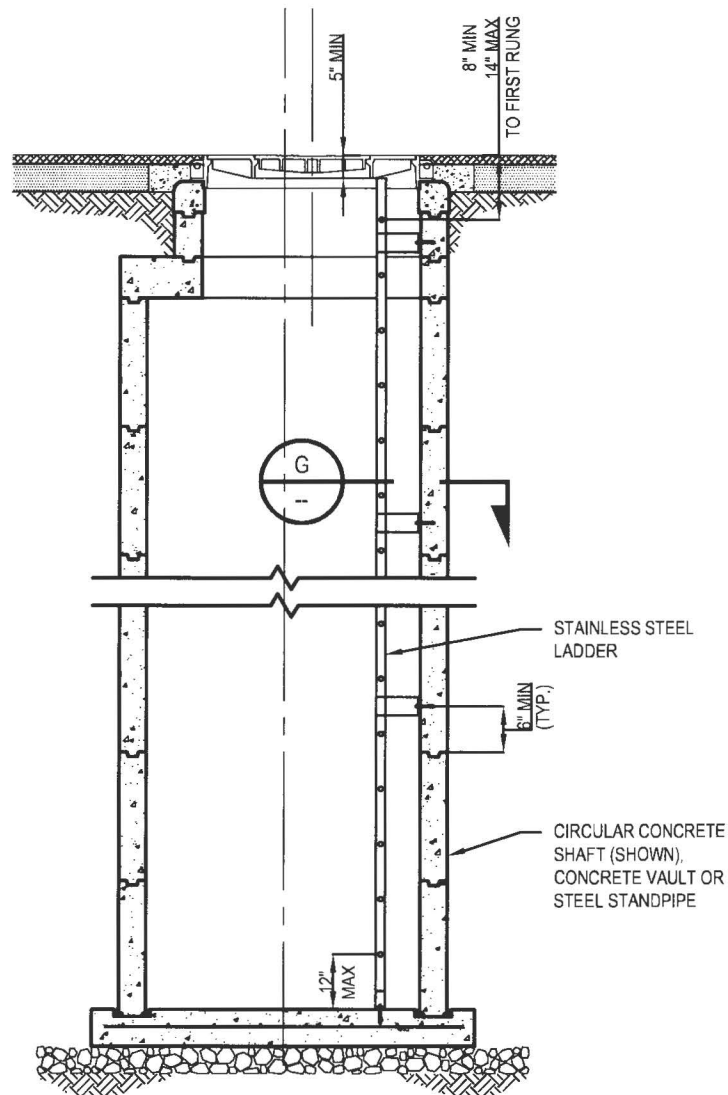
			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			BASE-MOUNTED LADDER - ELEVATION "D"		TVMWD W-14
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>		SHEET 4 OF 8
REVISION	DATE				
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			



BASE-MOUNTED LADDER - ELEVATION E

FOR SHAFTS/VAULTS WHERE DEPTH \geq 20'



			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
TVMWD	FEB./2020		BASE-MOUNTED LADDER - ELEVATION "E"	TVMWD W-14
REVISION	DATE	APPROVED	 DATE <u>3/18/2021</u>	SHEET 5 OF 8
SCALE:	NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079	

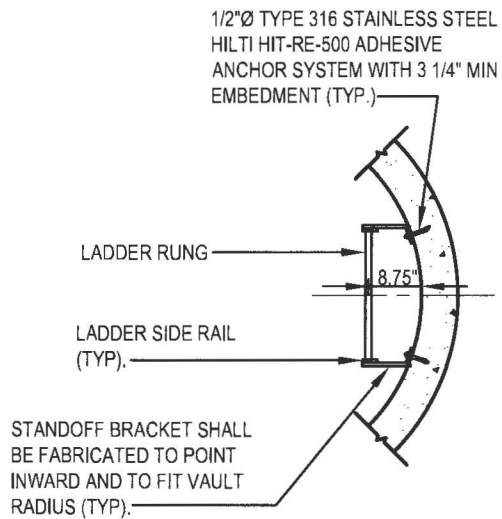


BASE-MOUNTED LADDER - SECTION

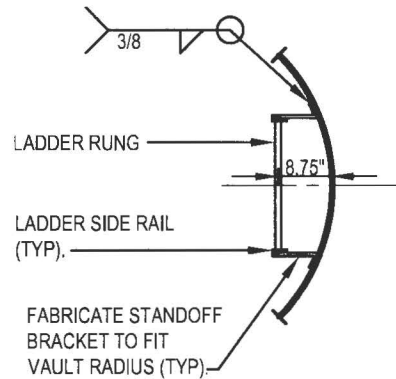
BILCO LADDERUP OR DBI/SALA SRL NOT SHOWN



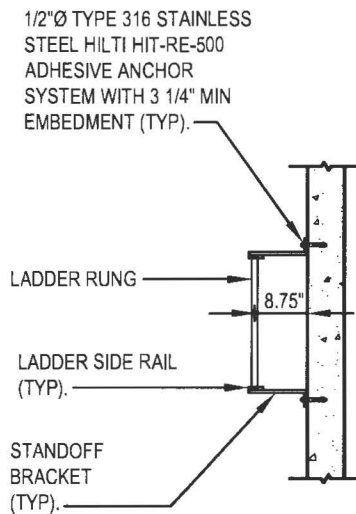
			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			BASE-MOUNTED LADDER - SECTION "F"	TVMWD W-14
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 6 OF 8
REVISION	DATE		MATTHEW H. LITCHFIELD, P.E. RCE 58079	
SCALE:	NONE			



CIRCULAR CONCRETE SHAFT





STEEL STANDPIPE

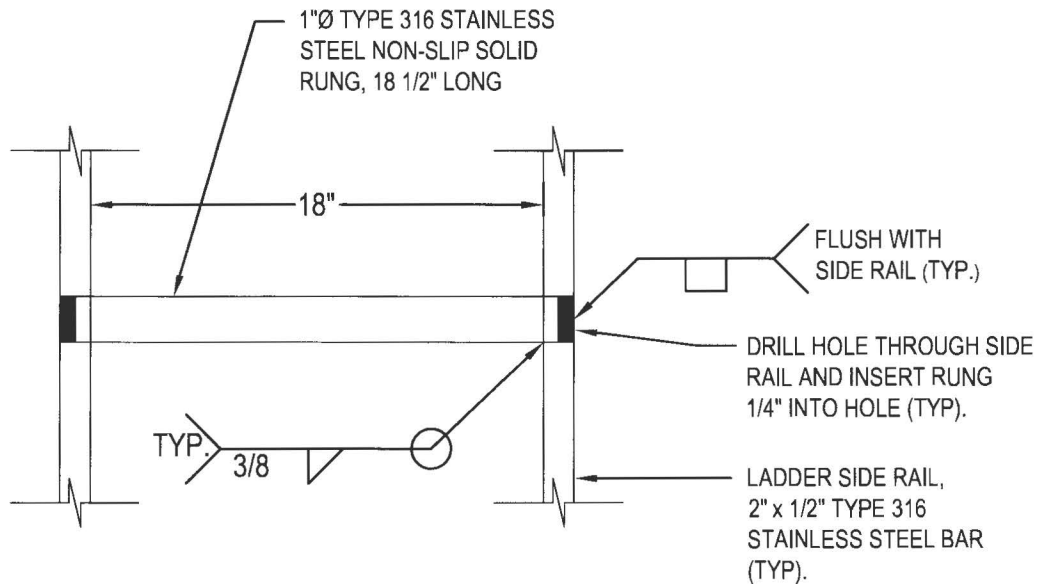


CONCRETE VAULT

LADDER MOUNTING - DETAIL

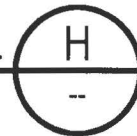


			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING	
			LADDER MOUNTING - DETAIL "G"	TVMWD W-14	
TVMWD	FEB./2020		DATE <u>3/18/2021</u>	SHEET 7 OF 8	
REVISION	DATE				APPROVED
SCALE:	NONE				MATTHEW H. LITCHFIELD, P.E. RCE 58079





ELEVATION

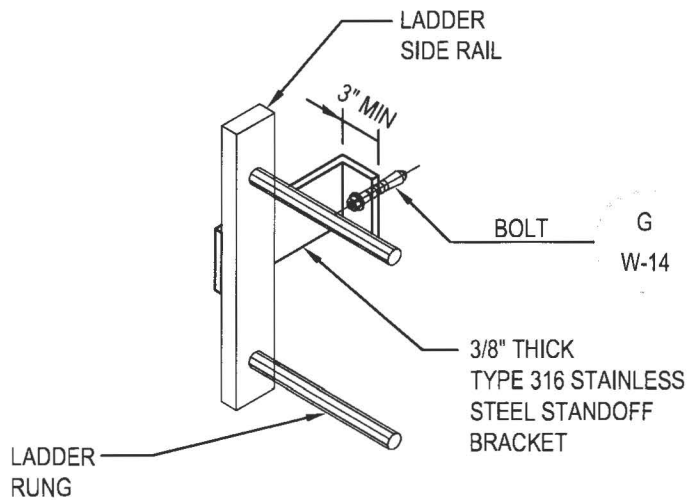
LADDER FABRICATION DETAIL



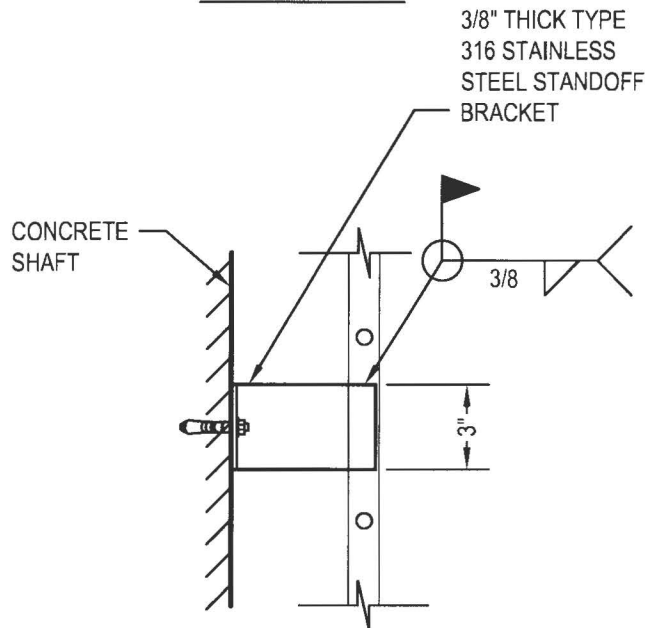
NOTES:

1. COAT OUTSIDE OF BRACKET BOLTS, BOLT HOLES, AND NUTS WITH EPOXY AS SPECIFIED IN SECTION 207-11.5.2 OF SSPWC.

			THREE VALLEYS MUNICIPAL WATER DISTRICT		STANDARD DRAWING
			LADDER FABRICATION DETAIL "H" AND NOTES		TVMWD W-14
TVMWD	FEB./2020		 APPROVED		DATE <u>3/18/2021</u>
REVISION	DATE				
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079			SHEET 8 OF 8





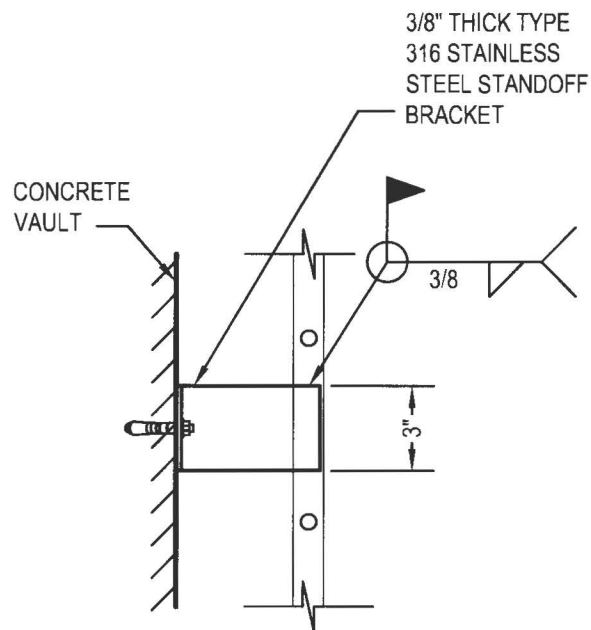
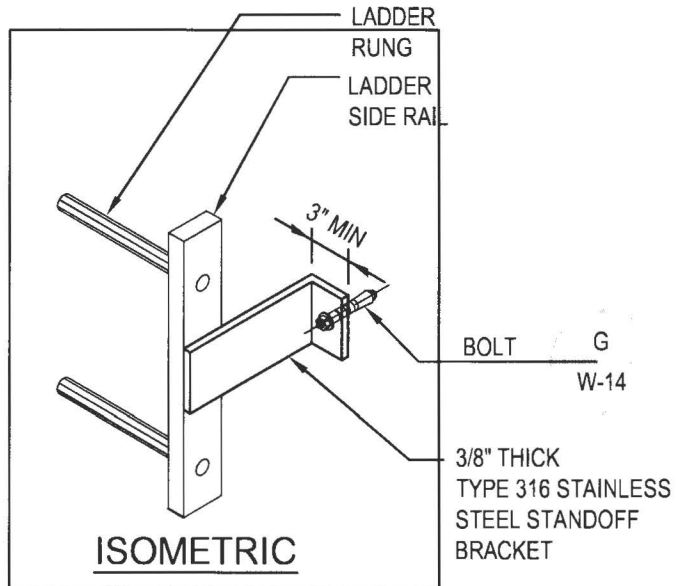
ISOMETRIC





ELEVATION

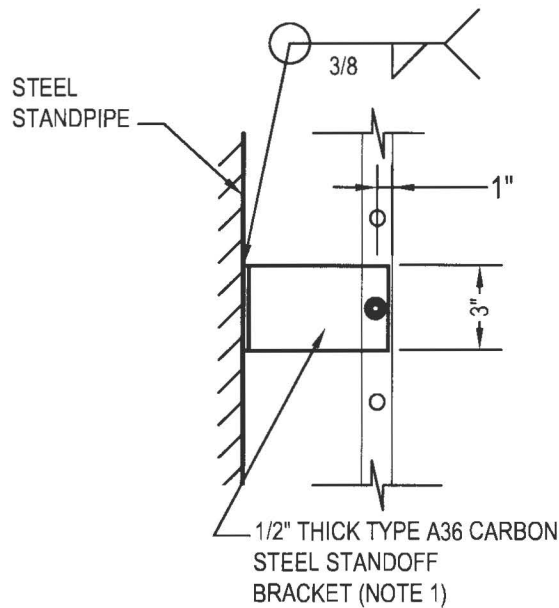
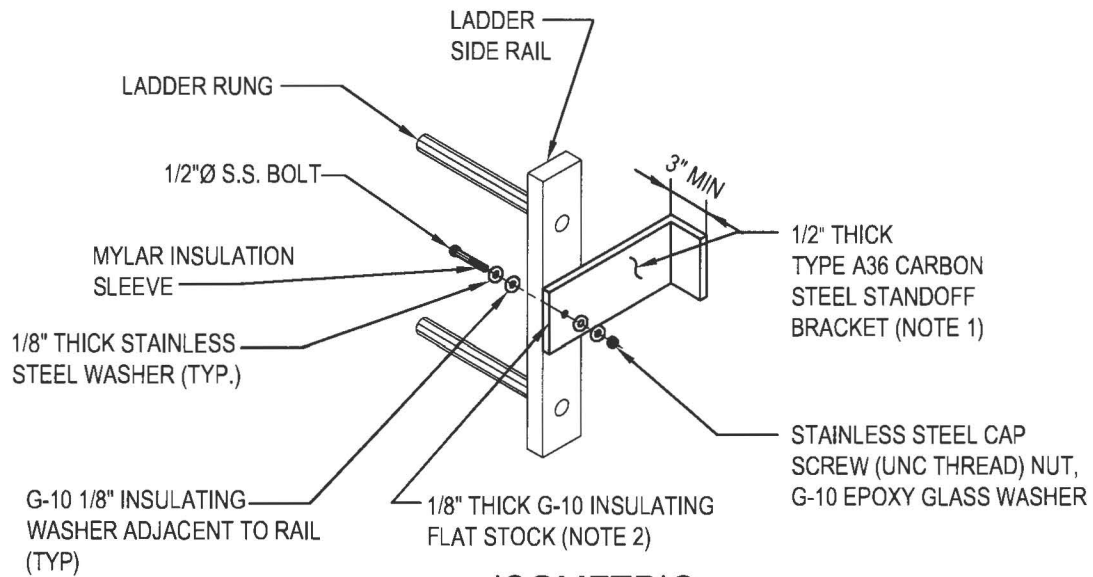
CIRCULAR CONCRETE SHAFT

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
TVMWD	FEB./2020		LADDER BRACKET - DETAIL "A"	TVMWD W-15
REVISION	DATE	APPROVED	 MATTHEW H. LITCHFIELD, P.E. RCE 58079	DATE <u>3/18/2021</u>
SCALE:	NONE			
				SHEET 1 OF 7





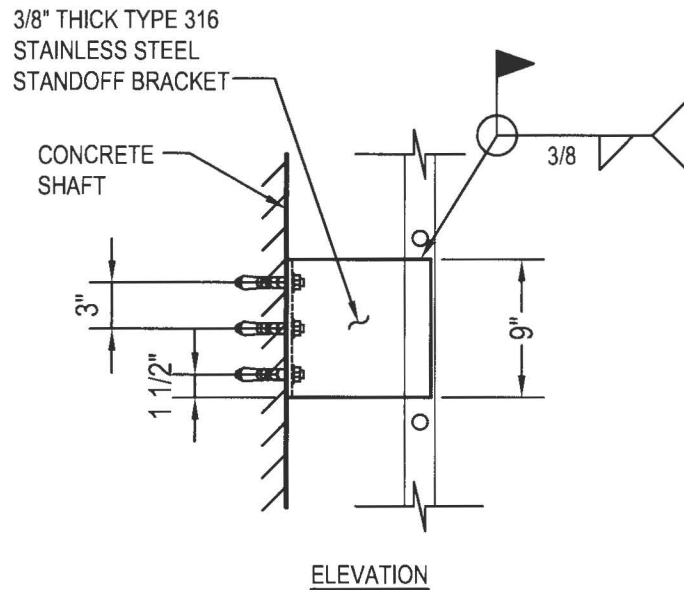
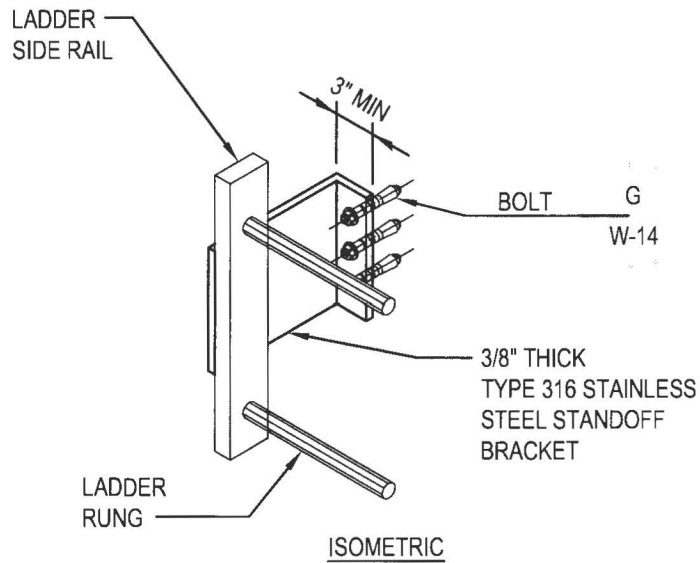
CONCRETE VAULT

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
TVMWD	FEB./2020		LADDER BRACKET - DETAIL "A"	TVMWD W-15
REVISION	DATE	APPROVED	 MATTHEW H. LITCHFIELD, P.E. RCE 58079	DATE <u>3/18/2021</u>
SCALE: NONE		SHEET 2 OF 7		





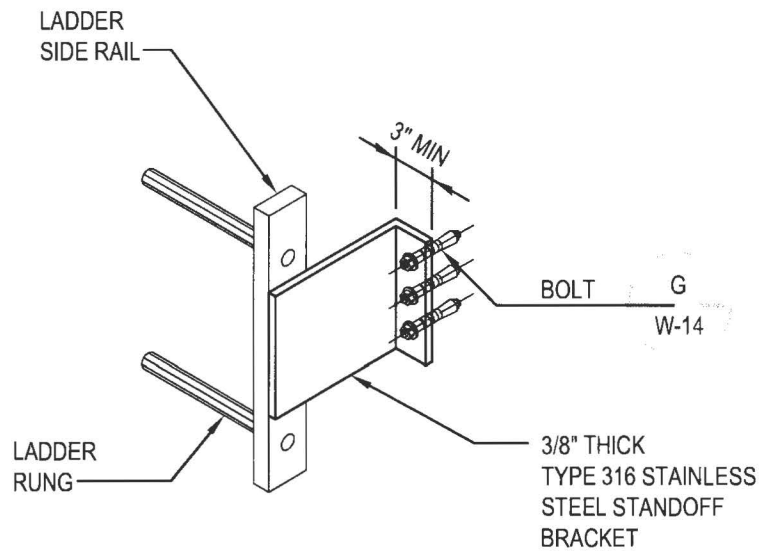
STEEL STANDPIPE

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
TVMWD	FEB./2020		LADDER BRACKET - DETAIL "A"	TVMWD
REVISION	DATE	APPROVED	DATE 3/18/2021	W-15
SCALE: NONE		 MATTHEW H. LITCHFIELD, P.E. RCE 58079		
		SHEET 3 OF 7		

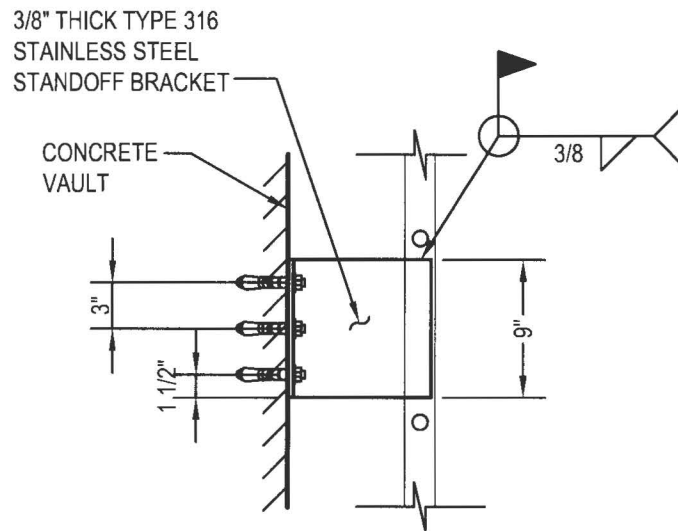


CIRCULAR CONCRETE SHAFT

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			LADDER BOTTOM BRACKET - DETAIL "B"	TVMWD W-15
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 4 OF 7
REVISION	DATE		MATTHEW H. LITCHFIELD, P.E. RCE 58079	
SCALE: NONE				





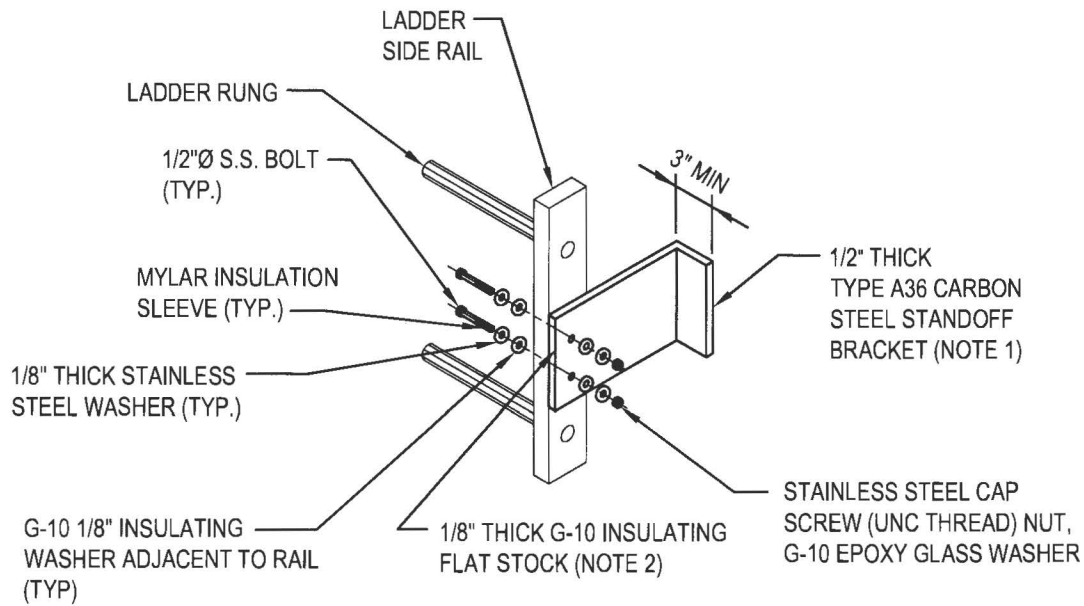
ISOMETRIC



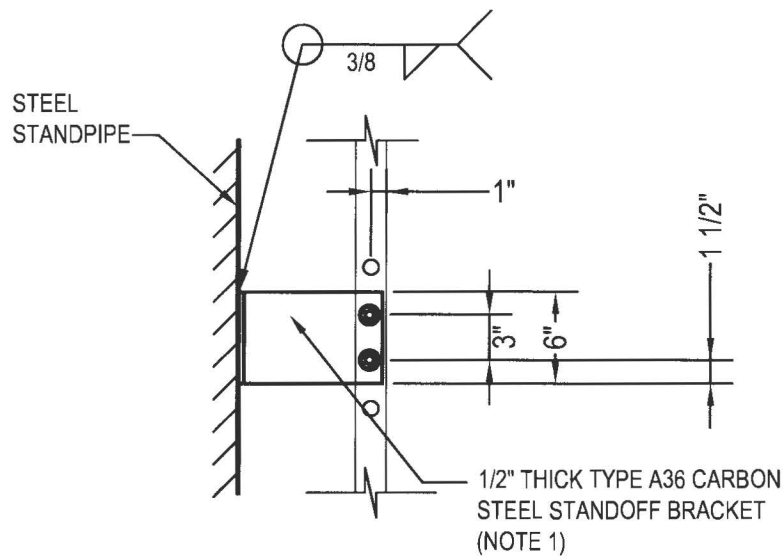
ELEVATION

CONCRETE VAULT

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			LADDER BOTTOM BRACKET - DETAIL "B"	TVMWD W-15
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 5 OF 7
REVISION	DATE			
SCALE: NONE		MATTHEW H. LITCHFIELD, P.E. RCE 58079		





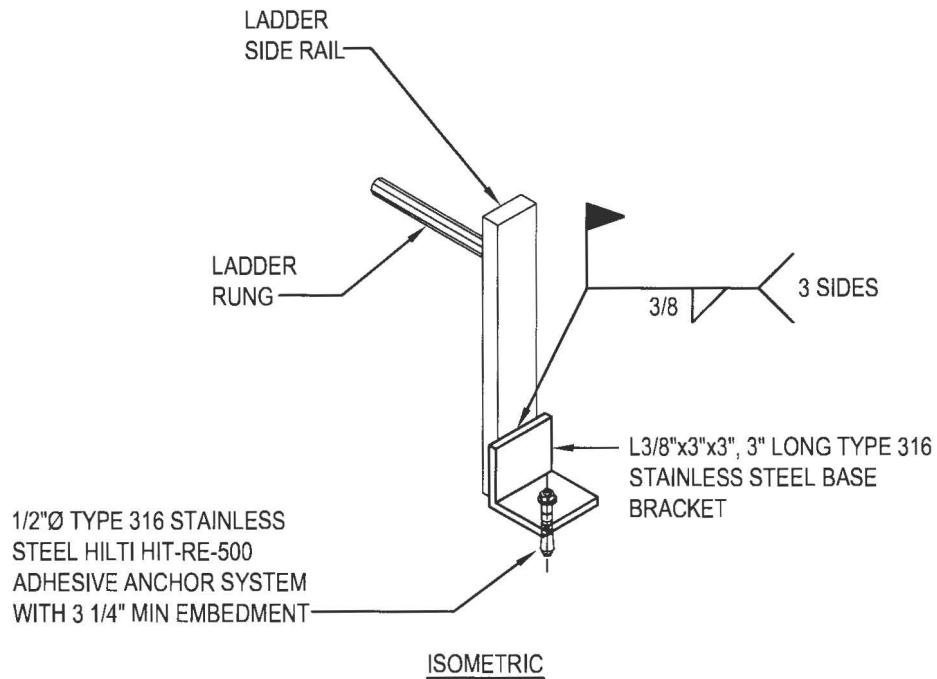
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ELEVATION

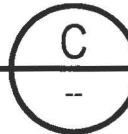
STEEL STANDPIPE

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			LADDER BOTTOM BRACKET - DETAIL "B"	TVMWD W-15
TVMWD	FEB./2020		APPROVED  MATTHEW H. LITCHFIELD, P.E. RCE 58079	DATE <u>3/18/2021</u>
REVISION	DATE			
SCALE:	NONE			





LADDER BASE BRACKET

BASE-MOUNTED LADDERS



NOTES:

1. COAT OUTSIDE OF BRACKET BOLTS, BOLT HOLES, AND NUTS WITH EPOXY AS SPECIFIED IN SECTION 207-11.5.2 OF SSPWC.
2. FLAT STOCK MATERIAL SHALL EXTEND NOT LESS THAT 1/8 INCH BEYOND THE OUTSIDE EDGE OF THE LADDER AND SHALL BE FLUSHED WITH THE OUTSIDE DIAMETER OF THE BRACKET BORE.

			THREE VALLEYS MUNICIPAL WATER DISTRICT	STANDARD DRAWING
			LADDER BASE BRACKET - DETAIL "C" AND NOTES	TVMWD W-15
TVMWD	FEB./2020	APPROVED 	DATE <u>3/18/2021</u>	SHEET 7 OF 7
REVISION	DATE		MATTHEW H. LITCHFIELD, P.E. RCE 58079	
SCALE: NONE				