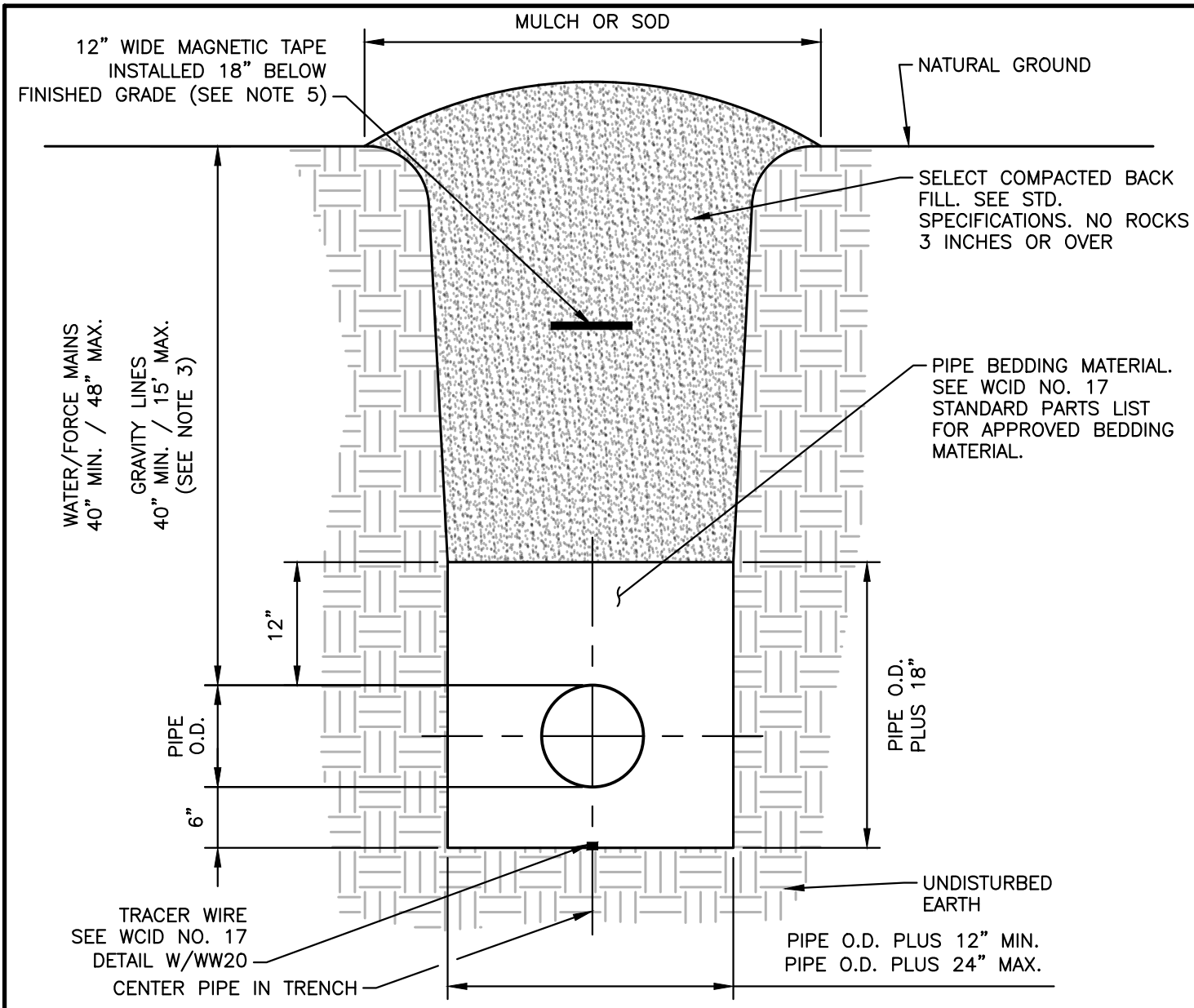


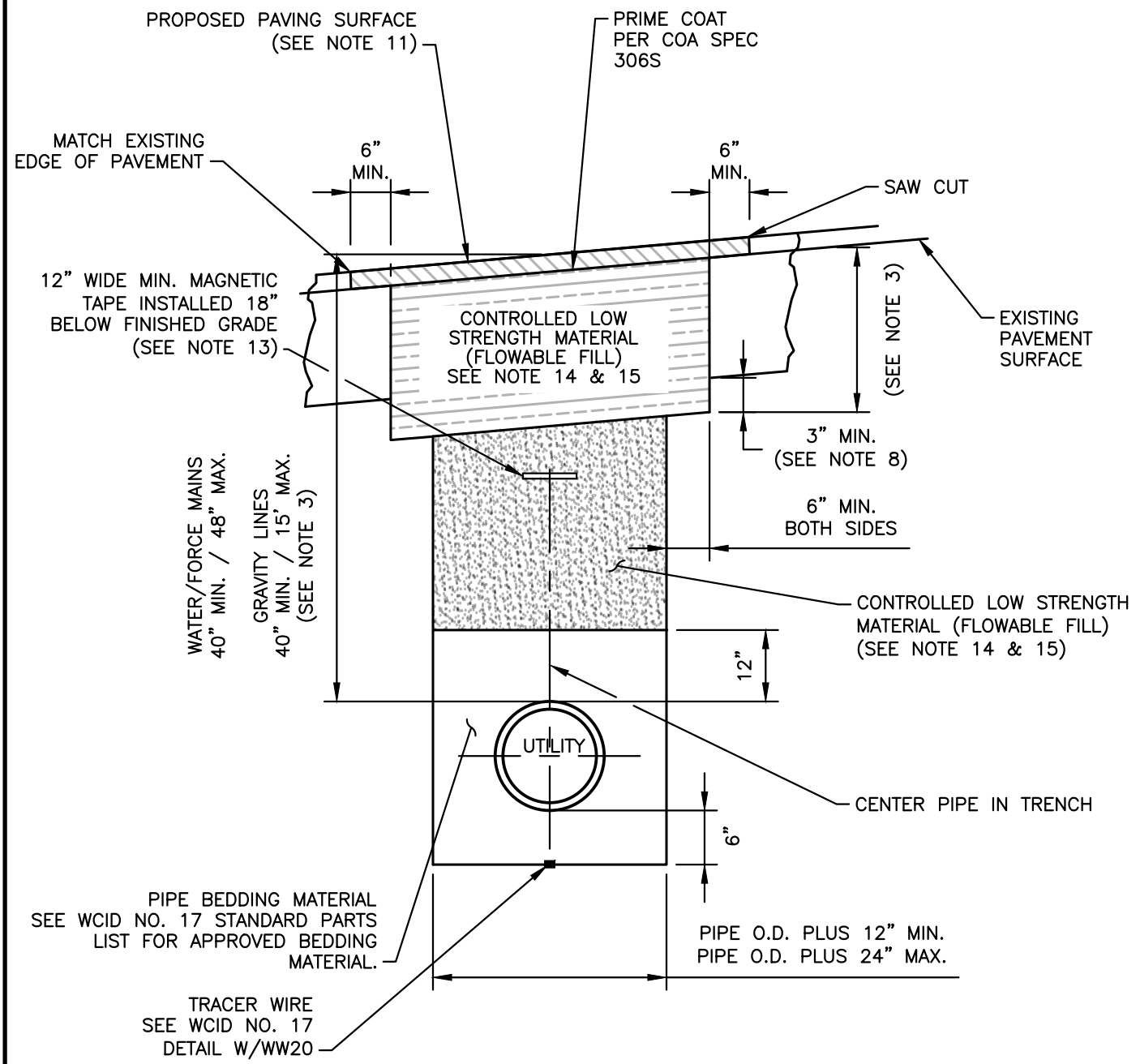
ELEVATION

NOTES:

1. ALL WASTEWATER PVC PIPING SHALL BE COLOR CODED GREEN. NO WATER DESIGNATED PIPE WILL BE USED IN WASTEWATER.
2. ALL WATER PIPING SHALL BE C900 DR14 UNLESS SPECIFIED OTHERWISE. WATER PVC PIPING SHALL BE COLOR CODED BLUE.
3. ALL WATER LINES AND WASTEWATER FORCEMAIN SHALL HAVE 40" MINIMUM COVER AND 48" MAXIMUM COVER. WASTEWATER GRAVITY LINES SHALL HAVE 40" MINIMUM COVER AND 15' MAXIMUM COVER. IF WITHIN TXDOT ROW, CLEARANCES MUST MEET TXDOT UAR DIMENSIONS.
4. CONTRACTOR SHALL NOT CUT ANY MORE TRENCH PER DAY THEN THEY CAN INSTALL PIPE PER DAY.
5. AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(8)(K)5, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND 18" BELOW FINISHED GRADE, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

NOT A TYPICAL
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	TRENCH WITH UNFINISHED SURFACE	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW01



NOTE: FAST-SET FLOWABLE FILL IS REQUIRED UNDER PAVEMENT AND WITHIN 5-FT OF PAVEMENT.

NOT A TYPICAL
CITY OF AUSTIN STANDARD DETAIL

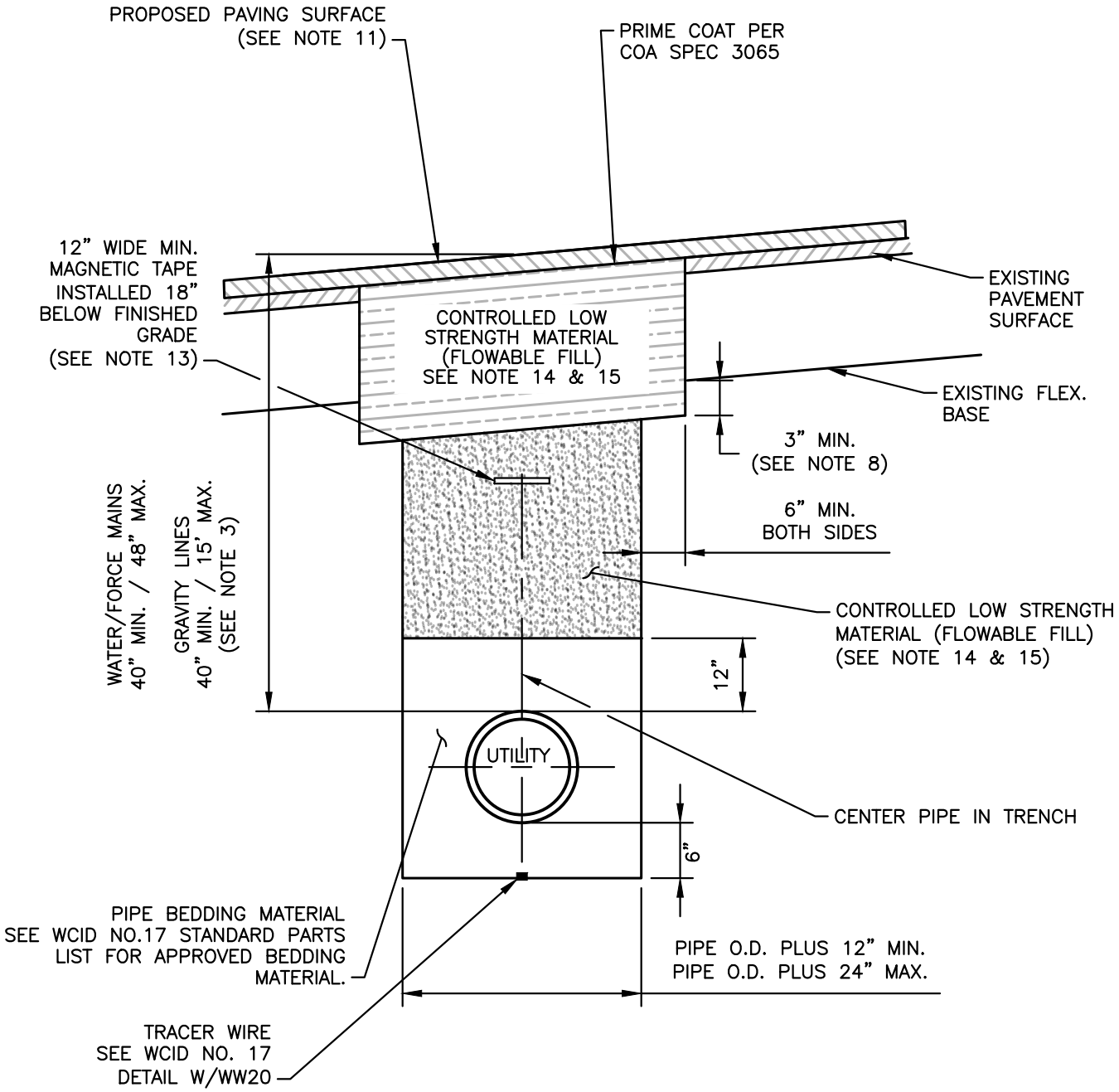
WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	TRENCH - EXISTING ASPHALTIC SURFACE REPAIR (1 OF 2)
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW02

NOTES:

1. ALL WASTEWATER PVC PIPING SHALL BE COLOR CODED GREEN. NO WATER DESIGNATED PIPE WILL BE USED IN WASTEWATER.
2. ALL WATER PIPING SHALL BE C900 DR14 UNLESS SPECIFIED OTHERWISE. WATER PVC PIPING SHALL BE COLOR CODED BLUE.
3. ALL WATER LINES AND WASTEWATER FORCEMAIN SHALL HAVE 40" MINIMUM COVER AND 48" MAXIMUM COVER. WASTEWATER GRAVITY LINES SHALL HAVE 40" MINIMUM COVER AND 15' MAXIMUM COVER.
4. GENERAL CONTRACTOR SHALL CONTACT TRAVIS COUNTY TNR AND SHALL PROCESS, POST FISCAL SURETY, AND HAVE STREET CUT PERMIT ISSUED IN THEIR NAME.
5. CONTRACTOR SHALL NOT CUT ANY MORE TRENCH PER DAY THEN THEY CAN INSTALL PIPE PER DAY.
6. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
7. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH TEMPORARY COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
8. ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3", BUT IN NO CASE LESS THAN 12".
9. DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
10. TACK COAT ALL EXPOSED EDGES AND SURFACES.
11. TYPE AND THICKNESS OF PROPOSED PAVING SURFACE SHALL BE AS NOTED ON PLANS AND SHALL BE AS FOLLOWS:
    - ASPHALT PAVING: SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN SPECIFICATION 340S. HMAC TYPE 'D' FOR THICKNESS UP TO 2", AND TYPE 'C' FOR THICKNESS OVER 2" AND UP TO 3".
12. ALL PAVING SHALL BE ACCOMPLISHED BY A COMPANY/CONTRACTOR WHO SPECIALIZES IN PAVING.
13. REFER TO WCID NO. 17 STANDARD PARTS LIST, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND 18" BELOW FINISHED GRADE, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.
14. THIS AREA SHALL BE CONTROLLED LOW STRENGTH MATERIAL (CLSM) UNLESS SPECIFICALLY STATED OTHERWISE ON THE PLANS AS COMPACTED BACKFILL. IF COMPACTED BACKFILL IS SPECIFIED, IT SHALL BE PER NOTE 8 AND THE STANDARD SPECIFICATIONS, HAVE NO ROCKS 3" OR LARGER, AND BE COMPACTED TO A MINIMUM OF 95% MAX DRY DENSITY AS DETERMINED BY TxDOT TEST METHOD TEX-113-E WITH MOISTURE CONTENT WITHIN 3% OF OPTIMUM.
15. CONTROLLED LOW STRENGTH MATERIAL (CLSM) SHALL BE FAST SET CLSM, UNLESS SPECIFIED OTHERWISE, WITH AN UNCONFINED COMPRESSIVE STRENGTH OF 35PSI MINIMUM AT 3-HOURS AND 300PSI MAXIMUM AT 28-DAYS

NOT A TYPICAL
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	TRENCH - EXISTING ASPHALTIC SURFACE REPAIR (2 OF 2)
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW02



NOTE: FAST-SET FLOWABLE FILL IS REQUIRED UNDER PAVEMENT AND WITHIN 5-FT OF PAVEMENT.

NOT A TYPICAL
CITY OF AUSTIN STANDARD DETAIL

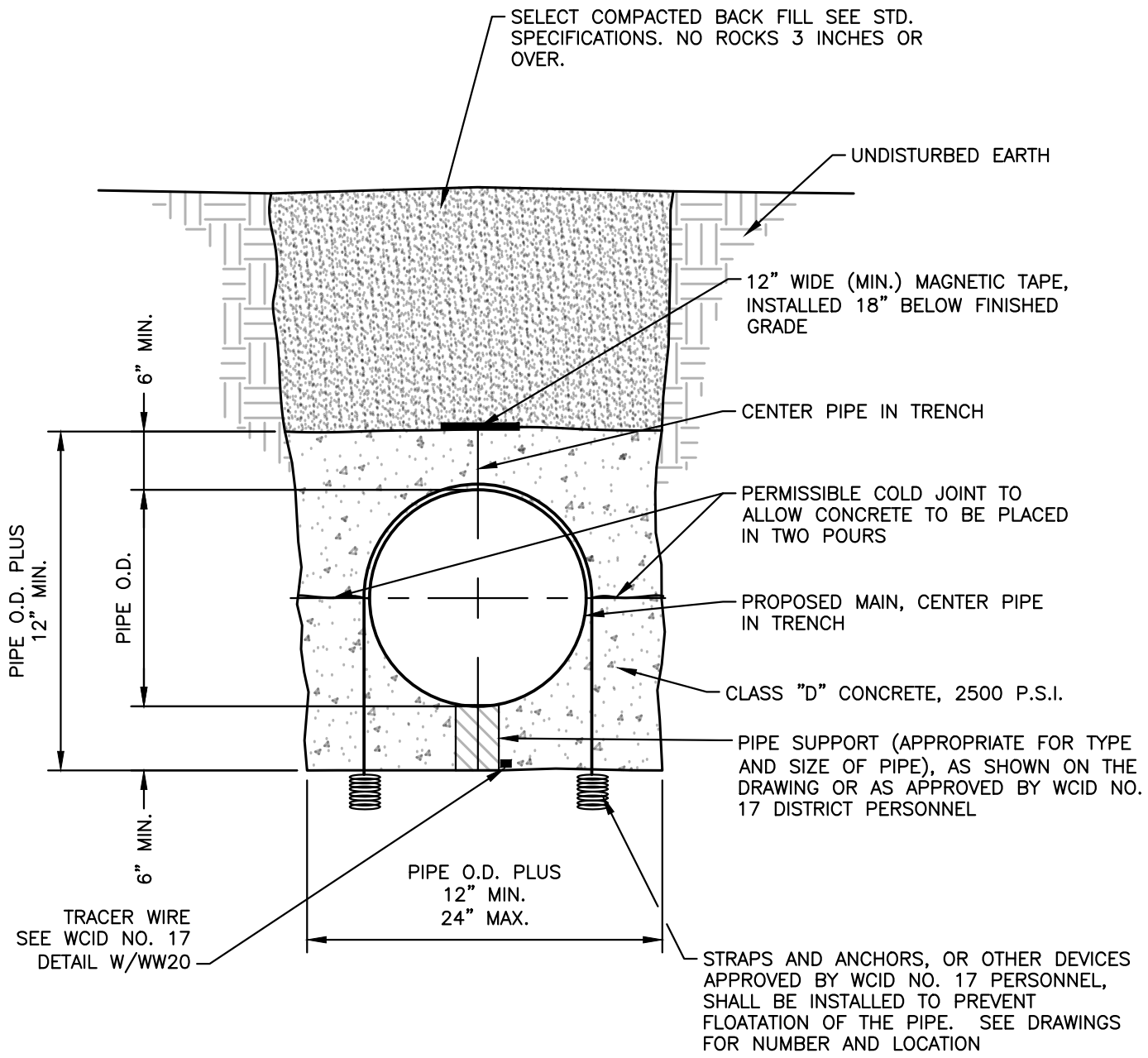
WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	TRENCH - EXISTING ASPHALTIC SURFACE OVERLAY (1 OF 2)
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW03

NOTES:

1. ALL WASTEWATER PVC PIPING SHALL BE COLOR CODED GREEN. NO WATER DESIGNATED PIPE WILL BE USED IN WASTEWATER.
2. ALL WATER PIPING SHALL BE C900 DR14 UNLESS SPECIFIED OTHERWISE. WATER PVC PIPING SHALL BE COLOR CODED BLUE.
3. ALL WATER LINES AND WASTEWATER FORCEMAIN SHALL HAVE 40" MINIMUM COVER AND 48" MAXIMUM COVER. WASTEWATER GRAVITY LINES SHALL HAVE 40" MINIMUM COVER AND 15' MAXIMUM COVER.
4. GENERAL CONTRACTOR SHALL CONTACT TRAVIS COUNTY TNR AND SHALL PROCESS, POST FISCAL SURETY, AND HAVE STREET CUT PERMIT ISSUED IN THEIR NAME.
5. CONTRACTOR SHALL NOT CUT ANY MORE TRENCH PER DAY THEN THEY CAN INSTALL PIPE PER DAY.
6. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
7. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH TEMPORARY COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
8. ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3", BUT IN NO CASE LESS THAN 12".
9. DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
10. TACK COAT ALL EXPOSED EDGES AND SURFACES.
11. TYPE AND THICKNESS OF PROPOSED PAVING SURFACE SHALL BE AS NOTED ON PLANS AND SHALL BE AS FOLLOWS:
    - ASPHALT PAVING: SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN SPECIFICATION 340S. HMAC TYPE 'D' FOR THICKNESS UP TO 2", AND TYPE 'C' FOR THICKNESS OVER 2" AND UP TO 3".
12. ALL PAVING SHALL BE ACCOMPLISHED BY A COMPANY/CONTRACTOR WHO SPECIALIZES IN PAVING.
13. REFER TO WCID NO. 17 STANDARD PARTS LIST, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND 18" BELOW FINISHED GRADE, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.
14. THIS AREA SHALL BE CONTROLLED LOW STRENGTH MATERIAL (CLSM) UNLESS SPECIFICALLY STATED OTHERWISE ON THE PLANS AS COMPACTED BACKFILL. IF COMPACTED BACKFILL IS SPECIFIED, IT SHALL BE PER NOTE 8 AND THE STANDARD SPECIFICATIONS, HAVE NO ROCKS 3" OR LARGER, AND BE COMPACTED TO A MINIMUM OF 95% MAX DRY DENSITY AS DETERMINED BY TxDOT TEST METHOD TEX-113-E WITH MOISTURE CONTENT WITHIN 3% OF OPTIMUM.
15. CONTROLLED LOW STRENGTH MATERIAL (CLSM) SHALL BE FAST SET CLSM, UNLESS SPECIFIED OTHERWISE, WITH AN UNCONFINED COMPRESSIVE STRENGTH OF 35PSI MINIMUM AT 3-HOURS AND 300PSI MAXIMUM AT 28-DAYS

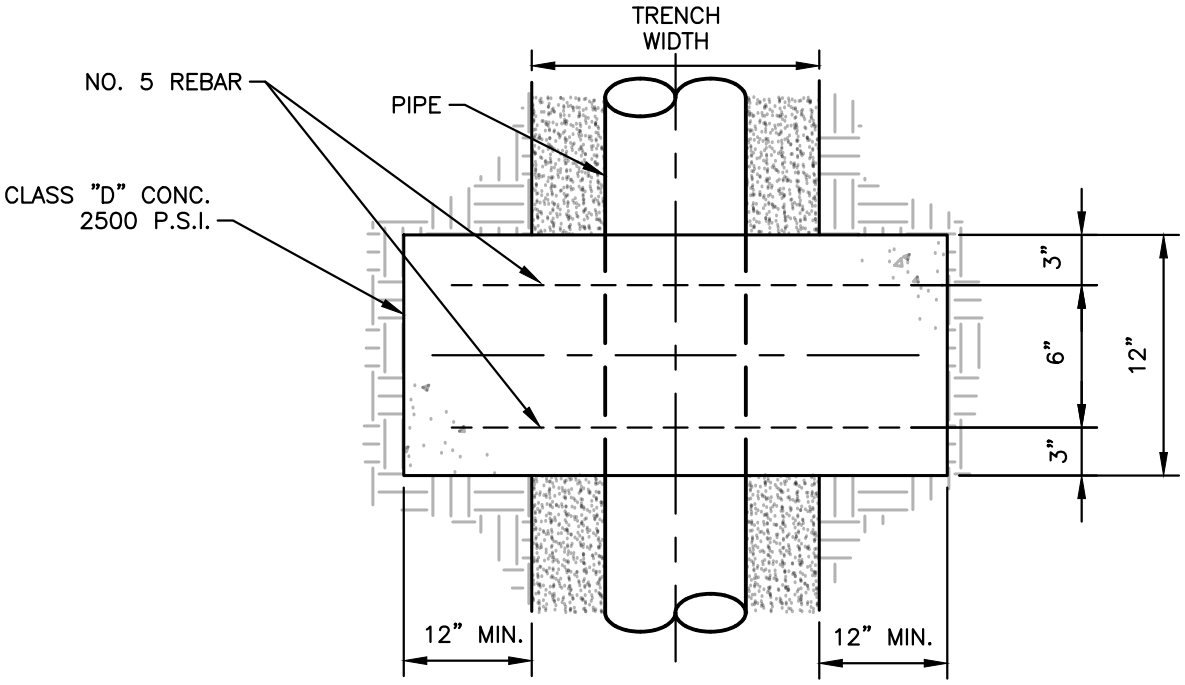
NOT A TYPICAL
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	TRENCH - EXISTING ASPHALTIC SURFACE OVERLAY (2 OF 2)	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW03

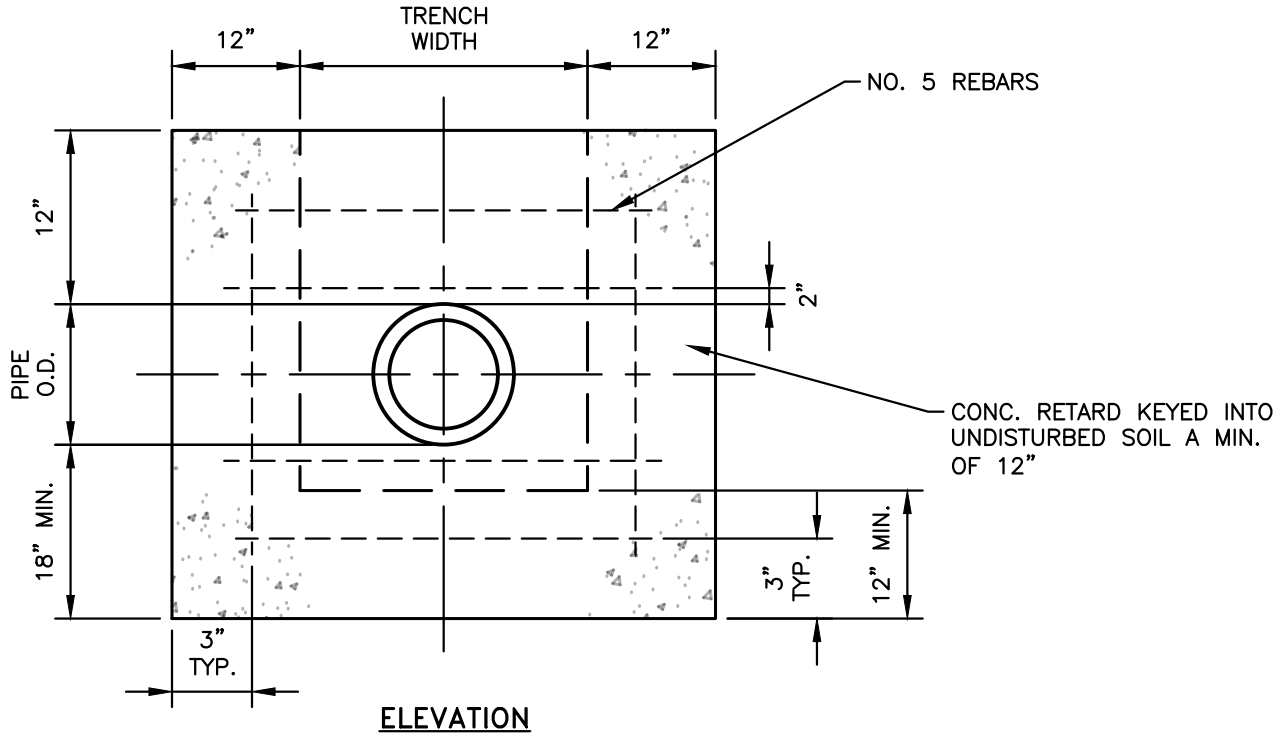


NOT A TYPICAL CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	CONCRETE ENCASEMENT	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW04



TOP VIEW



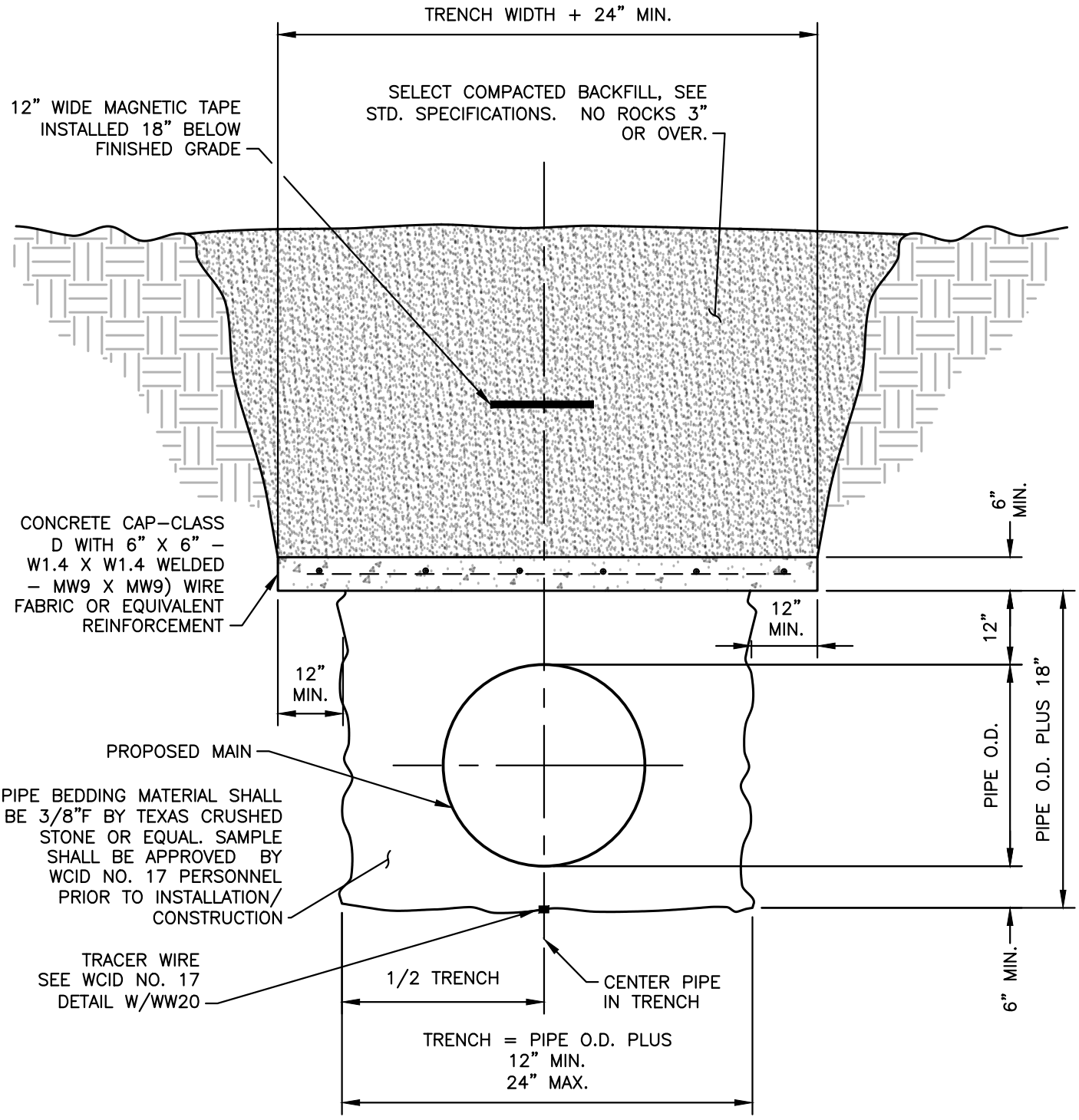
ELEVATION

NOTE:

1. CONCRETE RETARDS ARE REQUIRED ON GRAVITY WASTEWATER LINES WITH SLOPES OF 10% OR GREATER AND INSTALLED AT A MAXIMUM SPACING OF 20 FT.
2. CONCRETE RETARDS ARE REQUIRED ON PRESSSURE MAINS (WATER, FORCE MAINS, EFFLUENT/RECLAIMED LINES, OR OTHER) WITH SLOPES OF 12% OR GREATER AND INSTALLED AT A MAXIMUM SPACING OF 20 FT.
3. WCID NO. 17 MAY DETERMINE THAT ADDITIONAL CONCRETE RETARDS ARE REQUIRED AT SMALLER INTERVALS THAN NOTED ABOVE.

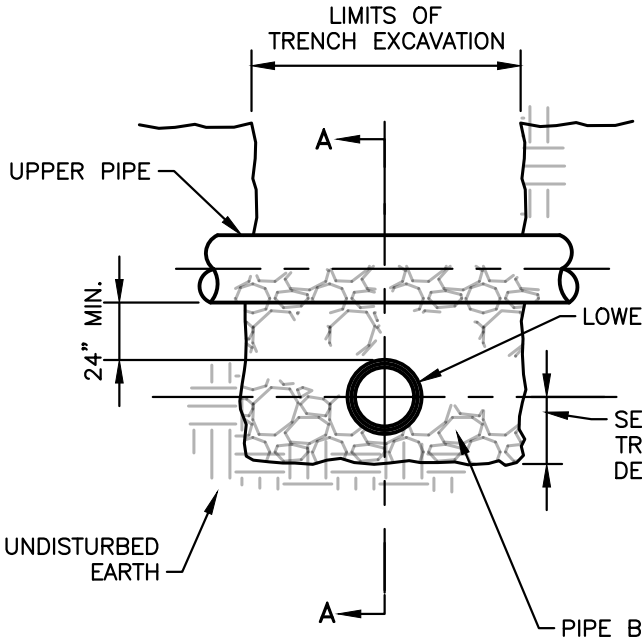
NOT A TYPICAL
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	CONCRETE RETARD
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW05

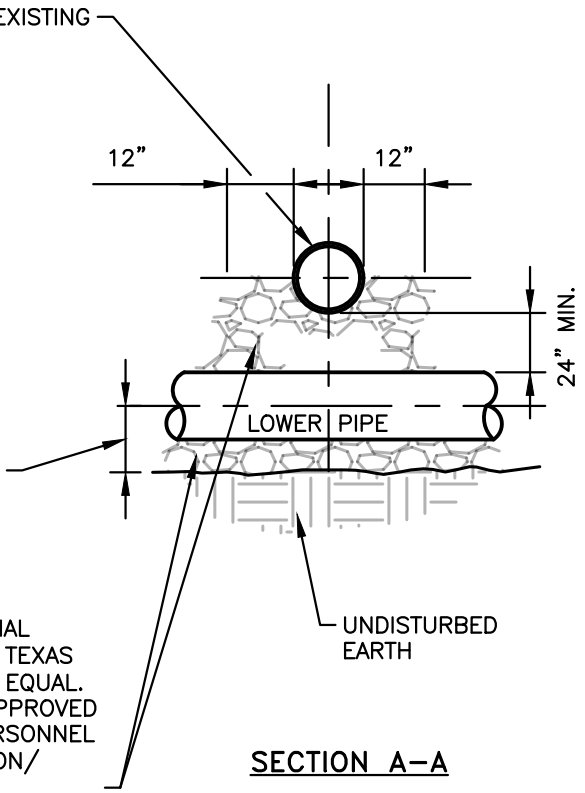


ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	CONCRETE TRENCH CAP
ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW06



TYPICAL SECTION



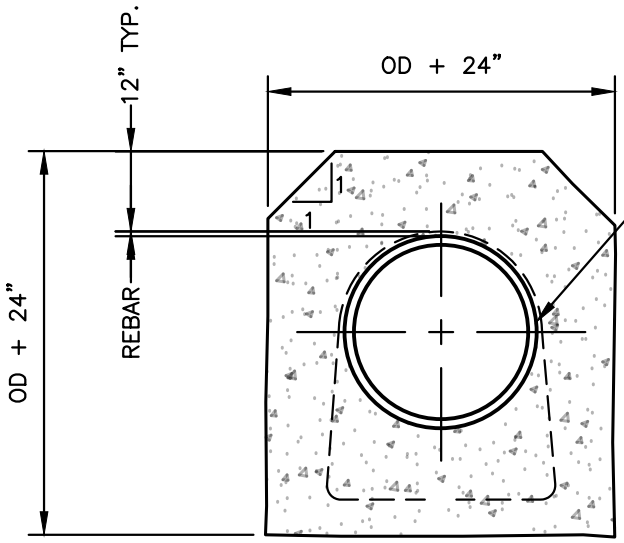
SECTION A–A

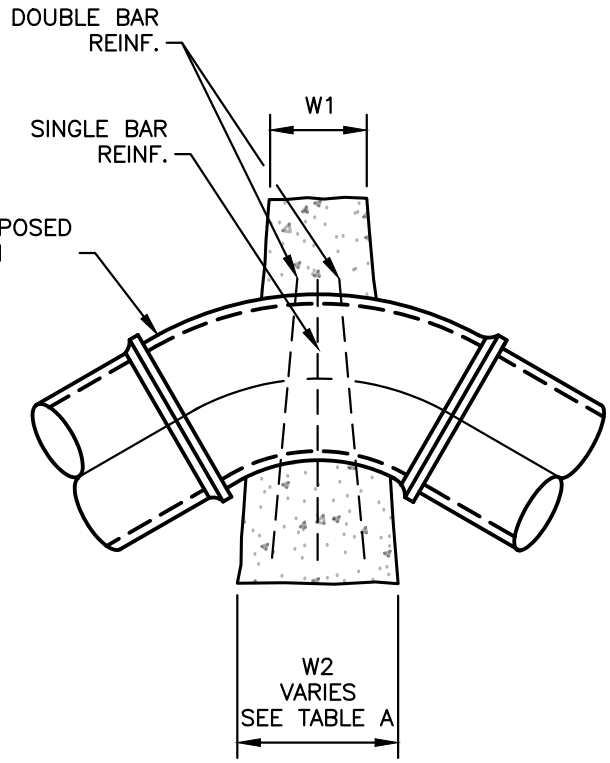
NOTES:

1. T.C.E.Q. RULES AND REGULATIONS ON SANITARY SEWER, STORM SEWER AND WATER MAIN CROSSINGS AND SEPARATIONS WILL BE STRICTLY ENFORCED, 30 TAC, CHAPTER 290, SUBCHAPTER D.
2. ALL OTHER UTILITIES TO MAINTAIN MINIMUM 5 FOOT HORIZONTAL AND 2 FOOT VERTICAL SEPARATION FROM WATER AND WASTEWATER MAINS AND SERVICES. GAS, ELECTRIC, CABLE, ETC. TO BE LOCATED OPPOSITE SIDES OF PROPERTIES.
3. UTILITY CROSSINGS SEPARATED BY LESS THAN 12 INCHES, PIPES SHALL BE ENCASED WITH 6 INCHES OF CONCRETE ALL AROUND AND CENTERED TO CROSSING FOR A MINIMUM LENGTH OF 20 FEET TOTAL.
4. SPECIFICATIONS: BEDDING MATERIAL SHALL BE 3/8"F BY TEXAS CRUSHED STONE OR EQUAL. SAMPLE SHALL BE APPROVED BY WCID NO. 17 PERSONNEL PRIOR TO INSTALLATION/ CONSTRUCTION.
5. AT ANY CREEK CROSSING, THE MAIN SHALL BE STEEL ENCASED AND 6" CONCRETE ENCASEMENT TO WITHIN 10 FEET OUTSIDE OF CREEK OR DRAINAGE DITCH AREA.

NOT A TYPICAL
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	UTILITY CROSSING	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW07





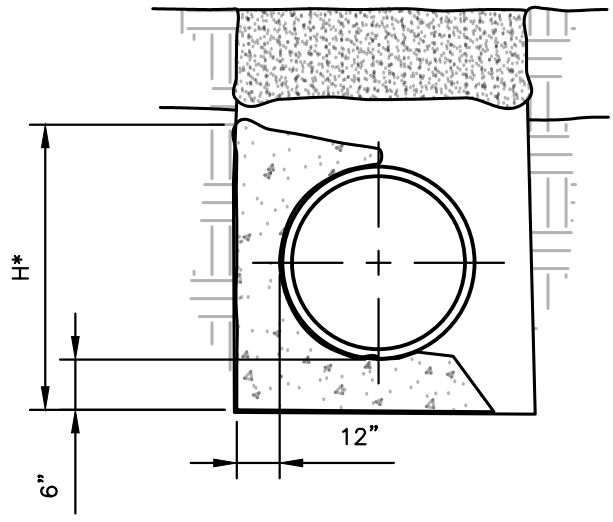
REINFORCEMENT SHALL BE PROVIDED AS FOLLOWS:

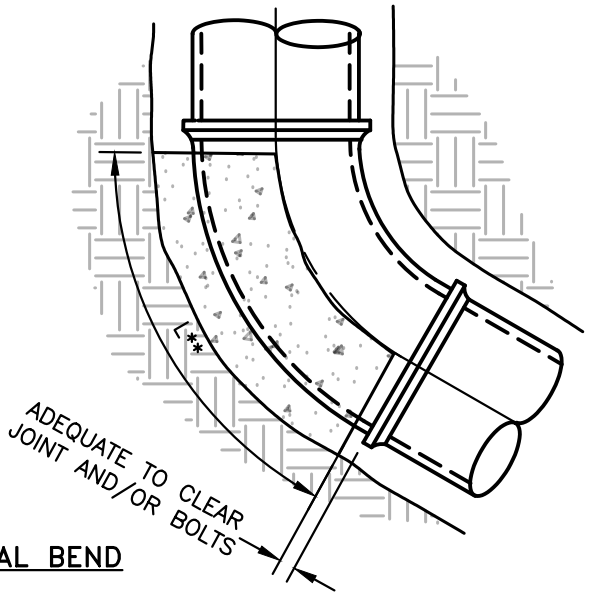
6" – 12" PIPE: 1 – NO. 5

14" – 30" PIPE: 2 – NO. 5s

36" – 48" PIPE: 3 – NO. 7s

VERTICAL DOWN BEND

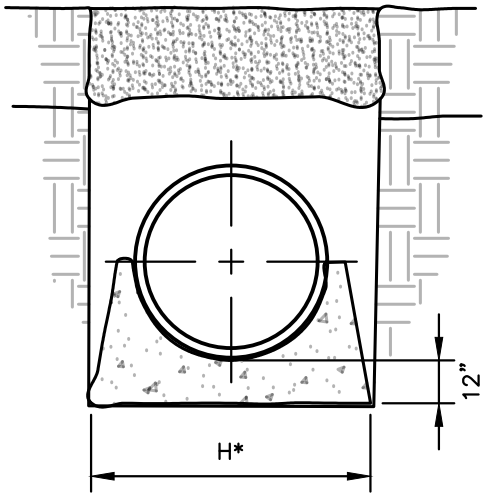


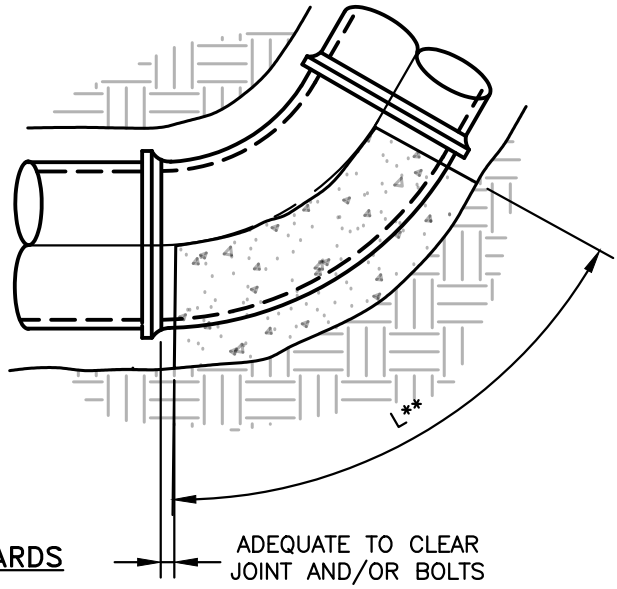


HORIZONTAL BEND

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

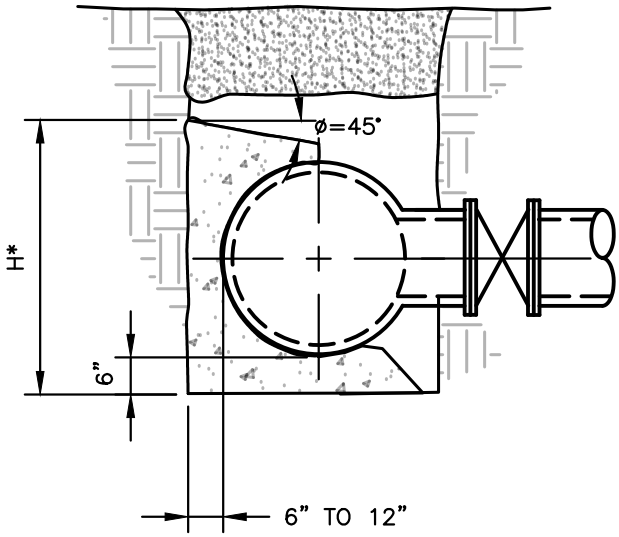
WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	CONCRETE THRUST BLOCKING (1 OF 3)
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW08

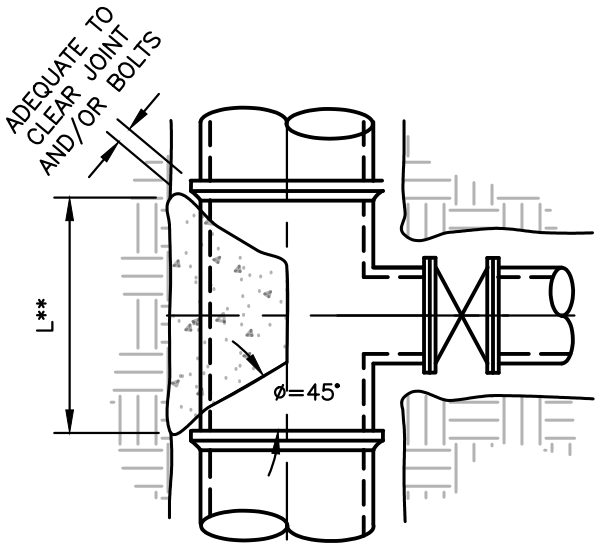




VERTICAL BEND UPWARDS

ADEQUATE TO CLEAR JOINT AND/OR BOLTS





TEE/OUTLET

* THE DIMENSION FOR "H" MUST BE GREATER THAN DIAMETER OF THE PIPE

** LENGTH "L" ALONG THE BEND MUST BE GREATER THAN "H" AND LESS THEN 2 TIMES "H"

NOTES:

1. THE EARTH BEARING SURFACE SHALL BE UNDISTURBED MATERIAL, IF NOT POSSIBLE, THE FILL BETWEEN THE BEARING SURFACE AND THE UNDISTURBED SOIL MUST BE COMPACTED TO A MINIMUM OF 90% STANDARD PROCTOR DENSITY.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ADEQUATE THRUST BLOCKING. THE CONTRACTOR SHALL MAKE THE DETERMINATION IN THE FIELD AS TO TYPE OF SOIL AND USE THE "THRUST BLOCKING DESIGN" TO ADJUST THE AMOUNT OF THRUST BLOCKING REQUIRED AT EACH PLACE OF USE.
3. ALL FITTINGS SHALL BE BLOCKED REGARDLESS OF THE ANGLE OF DIRECTION.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	CONCRETE THRUST BLOCKING (2 OF 3)
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW08

TABLE A
UPWARD THRUST GRAVITY BLOCKS

PIPE DIA.	MIN. TOP WIDTH W1	ANGLE (DEGREES)	BOTTOM WIDTH W2 (IN)
6"	6"	0–5	NOTE 2
		5–15	24
		15–25	48
		>25	NOTE 1
8"	6"	0–5	NOTE 2
		5–9	30
		9–15	36
		>15	NOTE 1
12"	6"	0–5	NOTE 2
		5–15	48
		>15	NOTE 1
16"	12"	0–5	NOTE 2
		5–10	60
		10–15	96
		>15	NOTE 1
24" THRU 36"		>5.0	NOTE 1
42" THRU 48"		>3.0	NOTE 1

THRUST BLOCK DESIGN AS FOLLOWS:

A. PRESSURE OF 200 P.S.I. (ACTUAL IF HIGHER) + 50% SURGE ALLOWANCE

B. MAXIMUM SOIL BEARING SEE TABLE BELOW

SOIL TYPES	PRESSURE
LOOSE OR SPONGY SOIL	1500 Lb/SQ.FT.
UNDISTURBED SOIL, CALICHE	2000 Lb/SQ.FT.
LIMESTONE ROCK	4000 Lb/SQ.FT.

TABLE A NOTES:

1. FOR ANGLES GREATER THEN THOSE INDICATED, RESTRAINT JOINTS SHALL BE INSTALLED.
2. FOR JOINT DEFECTIONS LESS THEN 5 DEGREES, NO HORIZONTAL OR VERTICAL THRUST RESTRAINT IS REQUIRED FOR PIPES LESS THEN 42" IN DIAMETER.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17

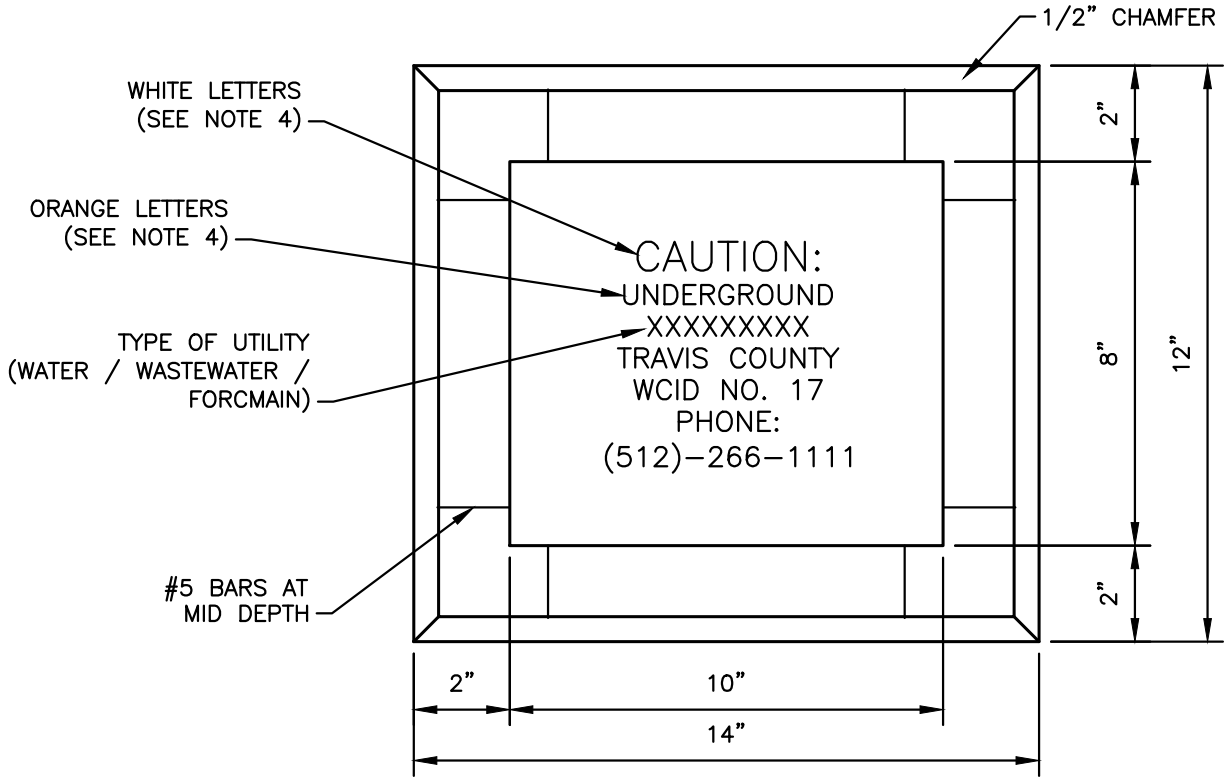
TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17
STANDARD DETAILS

CONCRETE THRUST BLOCKING
(3 OF 3)

ADOPTED:
07/01/2025

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

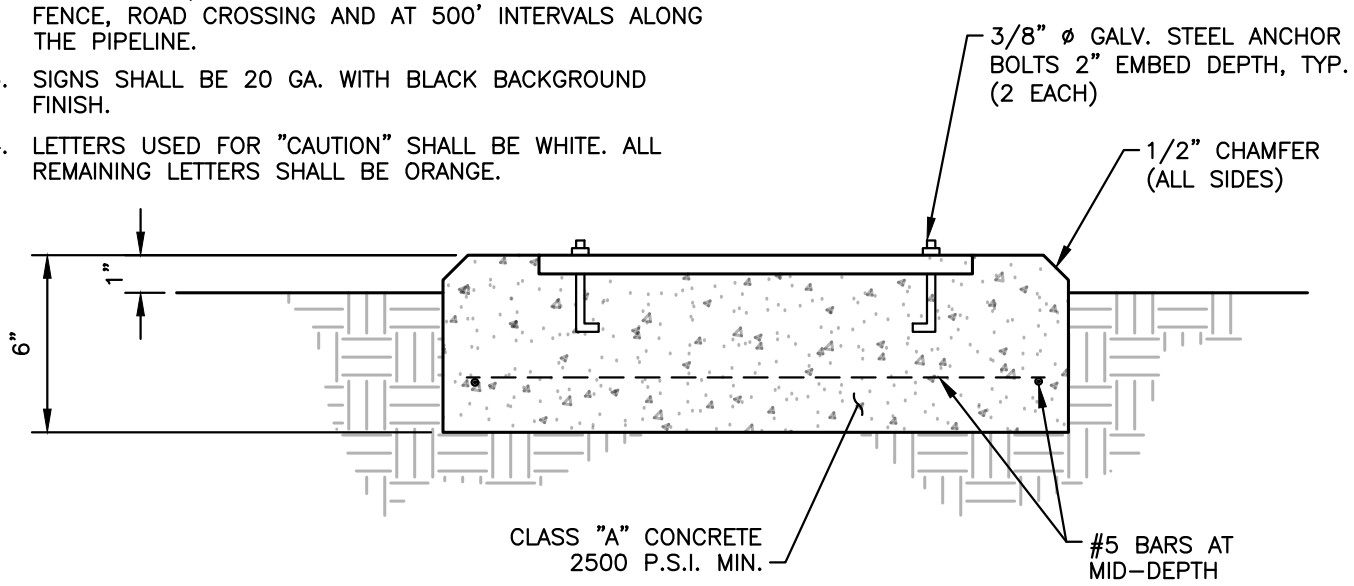
DETAIL NO.
W/WW08



PLAN

NOTES:

1. PLACE VALVE, AIR VALVE AND ACCESS PORT MARKERS AT THE LOCATION OF EACH ITEM.
2. PLACE WATER/WASTEWATER LINE MARKERS AT EVERY FENCE, ROAD CROSSING AND AT 500' INTERVALS ALONG THE PIPELINE.
3. SIGNS SHALL BE 20 GA. WITH BLACK BACKGROUND FINISH.
4. LETTERS USED FOR "CAUTION" SHALL BE WHITE. ALL REMAINING LETTERS SHALL BE ORANGE.

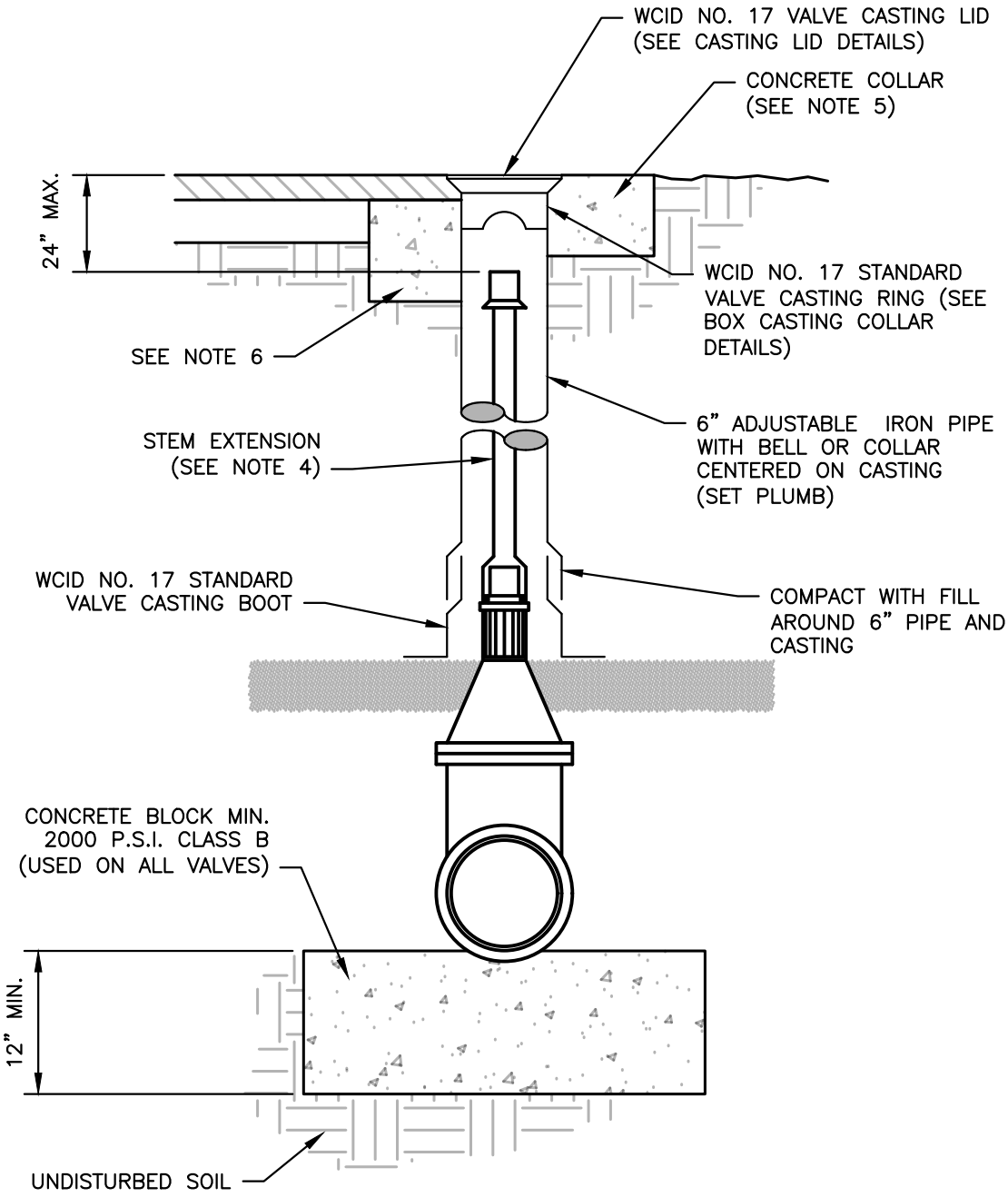


SECTION

REFER TO WICD NO. 17
STANDARD PARTS LIST FOR
MARKERS

NOT A TYPICAL
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	MARKER DETAILS	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW09

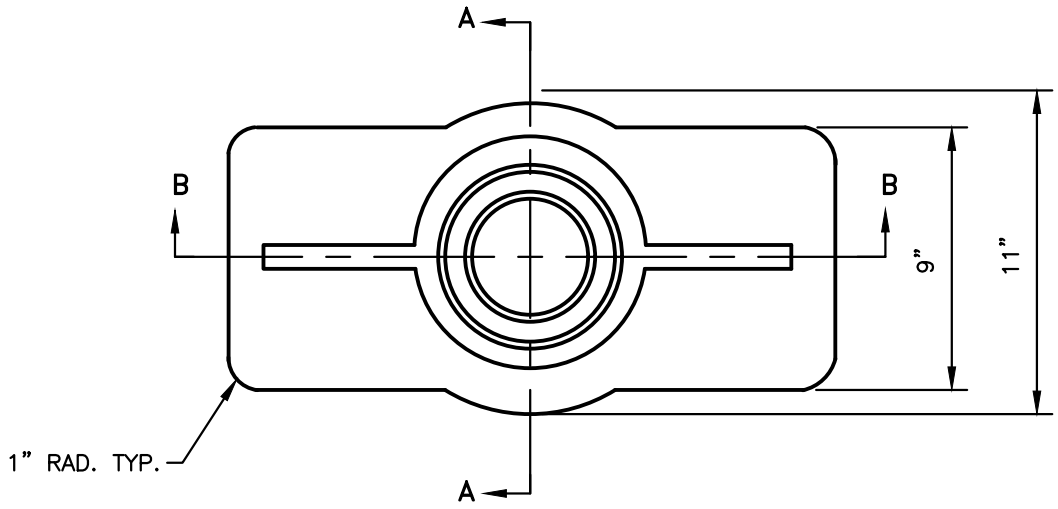


NOTES:

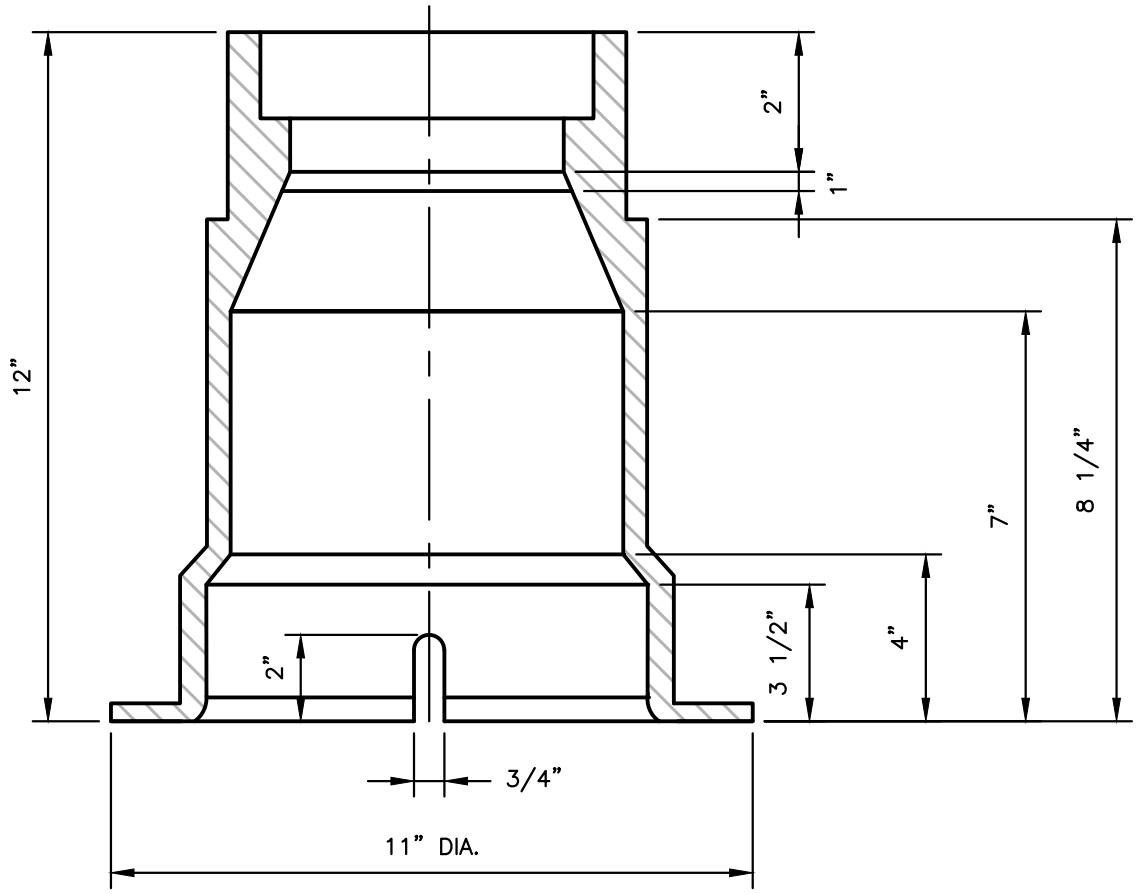
1. WELD SOCKET 2 1/2" X 2" DEEP TO 1" (SCH. 40) ROUND STEM EXTENSION. FITTED ON OPERATING NUT, SCH. 80 FOR LENGTHS OVER 10'.
2. WCID NO. 17 STANDARD VALVE CASTING RING AND METAL LID IN UNPAVED AREAS.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3 FEET DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 18 TO 24 INCHES FROM FINISHED GRADE.
5. CONCRETE COLLARS TO BE INSTALLED ON ALL VALVE BOXES LOCATED OUTSIDE PAVEMENT, SEE APPROPRIATE VALVE BOX ADJUSTMENT DETAILS.
6. FOR VALVE BOXES LOCATED IN PAVEMENT, SEE APPROPRIATE VALVE BOX ADJUSTMENT DETAIL.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	VERTICAL GATE VALVE WITH BOX ASSEMBLY
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW10



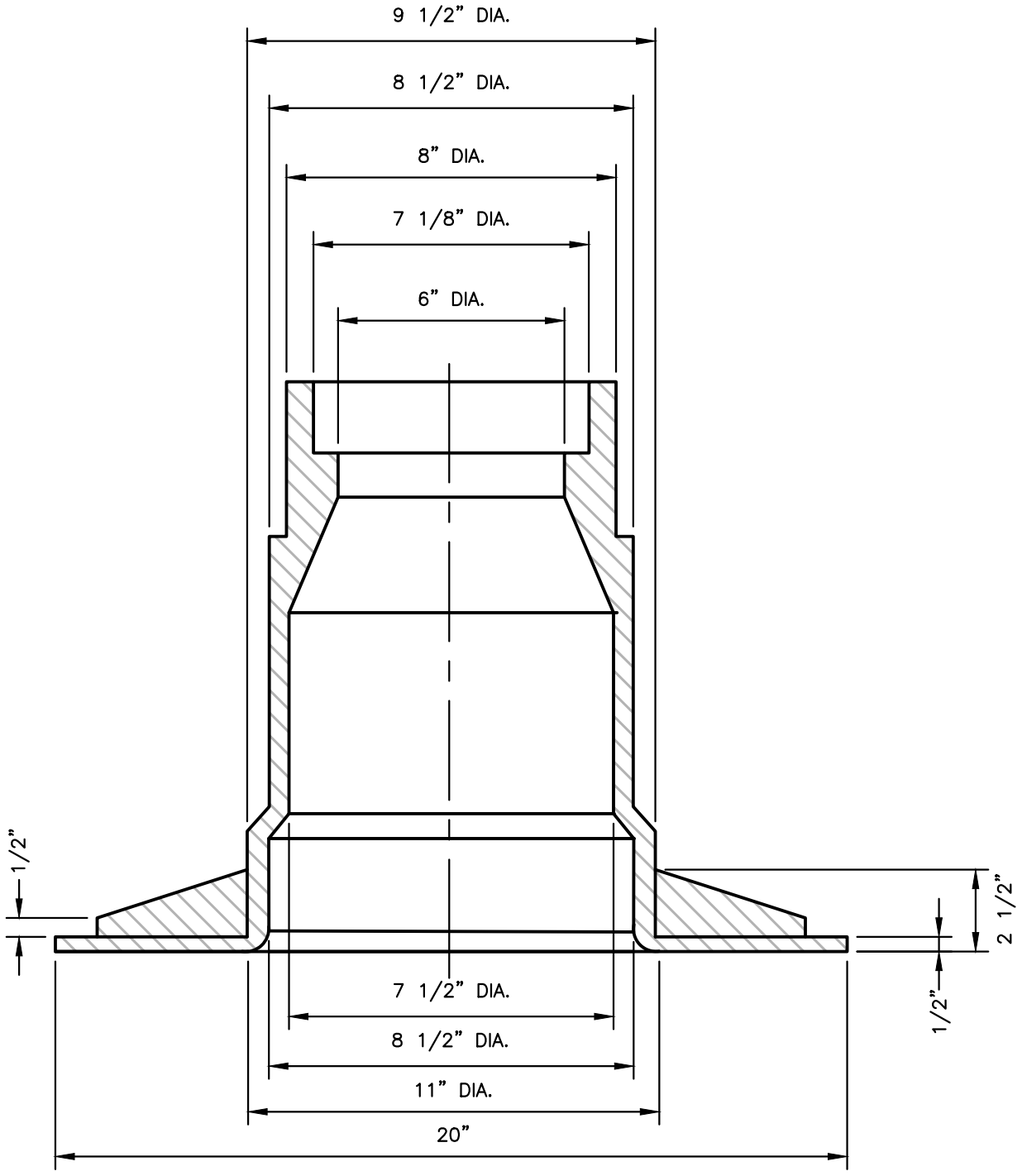
PLAN VIEW



SECTION A–A

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	VALVE BOX CASTING BOOT (1 OF 2)	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW11



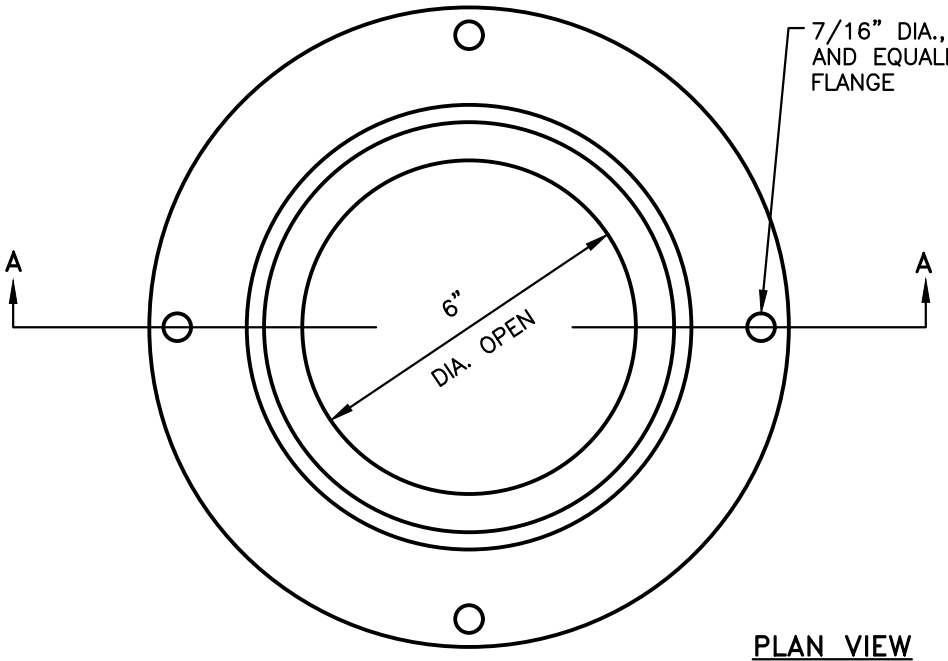
SECTION B–B

NOTES:

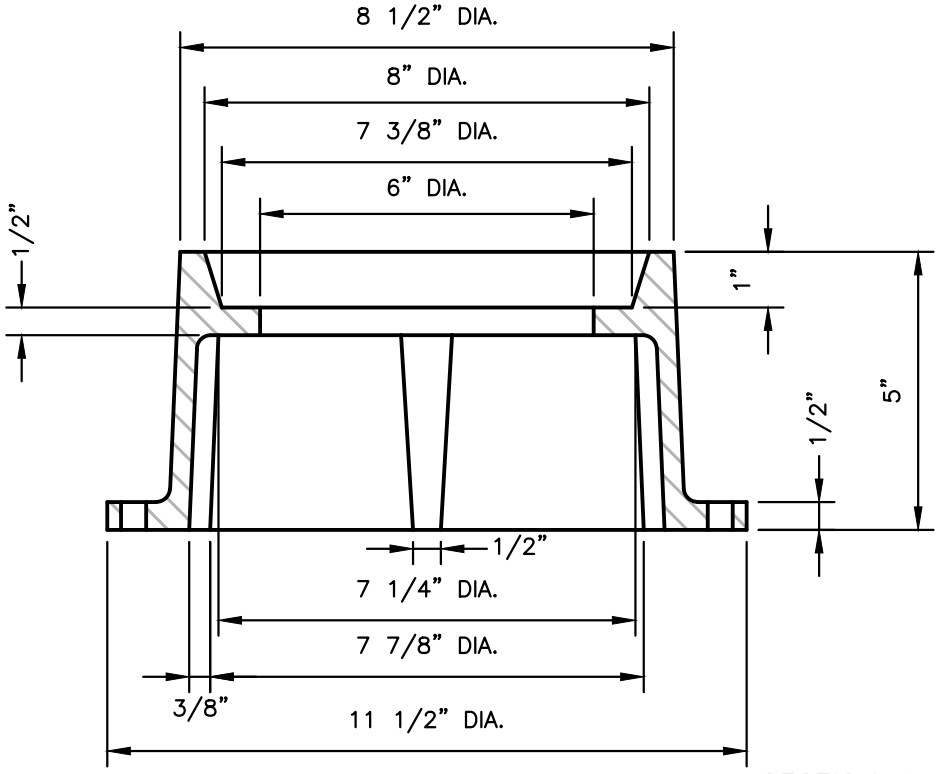
1. MATERIAL SHALL BE GREY CAST IRON, A.S.T.M. A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER AND COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH BOOT.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. FINISH BY REMOVING FINS AND FLASHING: PAINT WITH BLACK ASPHALT COATING.
5. WEIGHT: APPROXIMATELY 78 LBS.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17 Travis County	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	VALVE BOX CASTING BOOT (2 OF 2)
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW11



PLAN VIEW



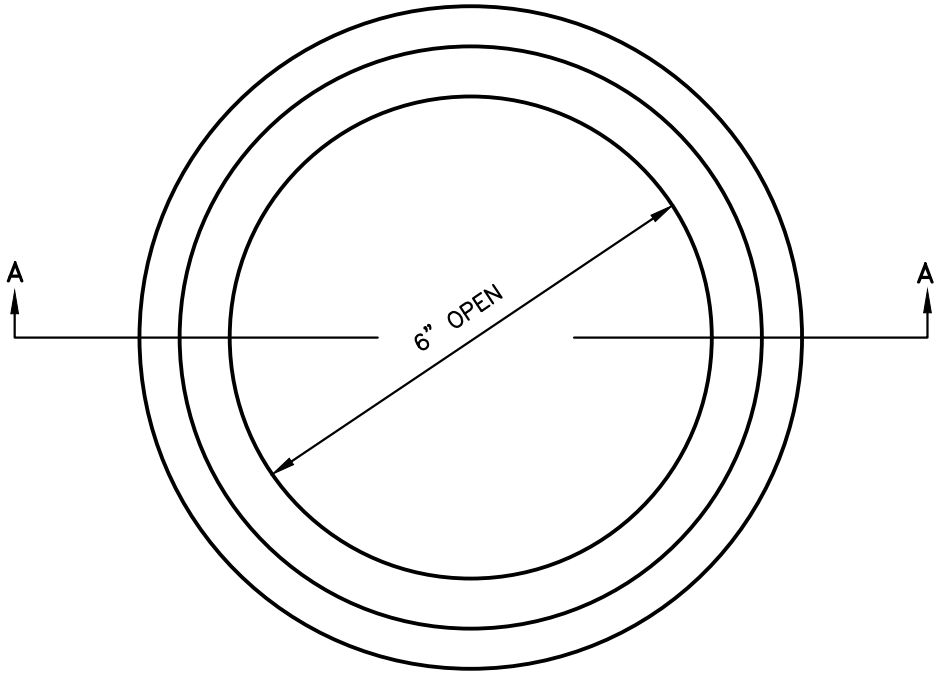
SECTION A–A

NOTE:

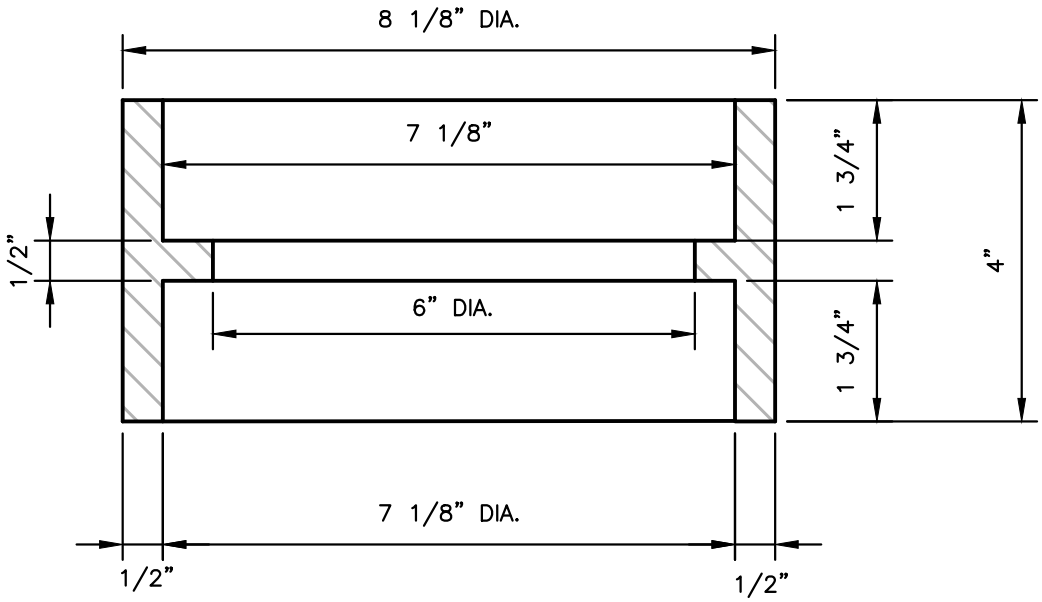
1. MATERIALS SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH RING.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. FINISH BY REMOVING FINS AND FLASHING; PAINT WITH BLACK ASPHALT COATING.
5. WEIGHT: APPROXIMATELY 23 LBS.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	VALVE BOX CASTING COLLAR (PAVING RING)
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW12



PLAN VIEW



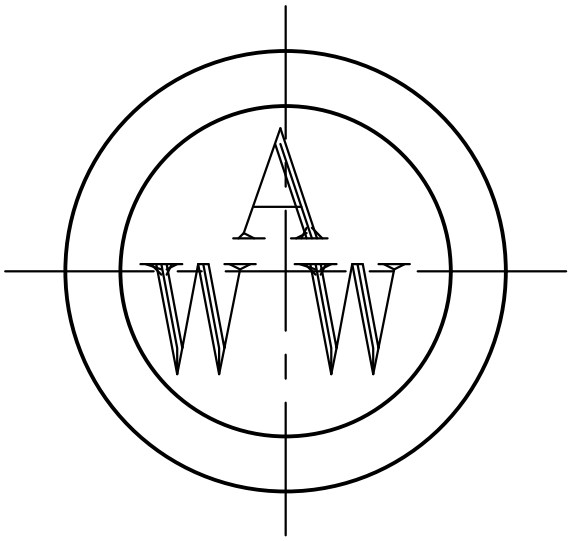
SECTION A–A

NOTES:

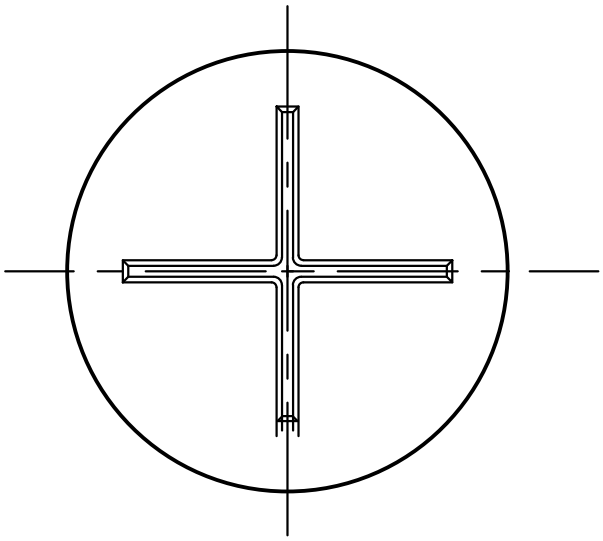
1. MATERIALS SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ON TO EACH COLLAR.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. FINISH BY REMOVING FINS AND FLASHING; PAINT WITH BLACK ASPHALT COATING.
5. WEIGHT: APPROXIMATELY 17 LBS.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

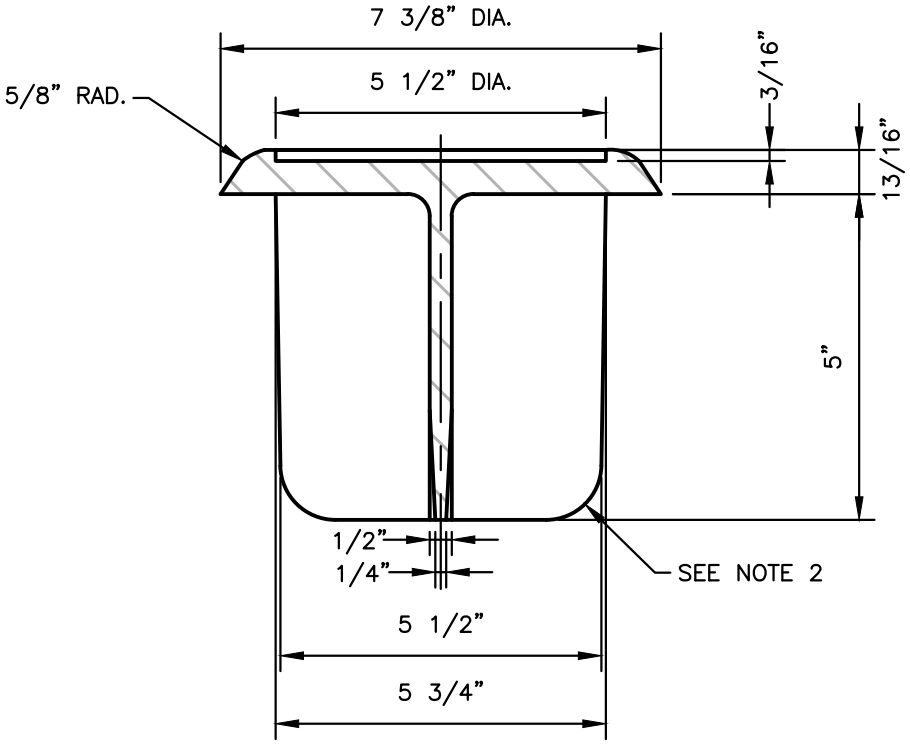
WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	VALVE BOX CASTING COLLAR (NOT IN PAVEMENT)	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW13



PLAN VIEW



BOTTOM VIEW



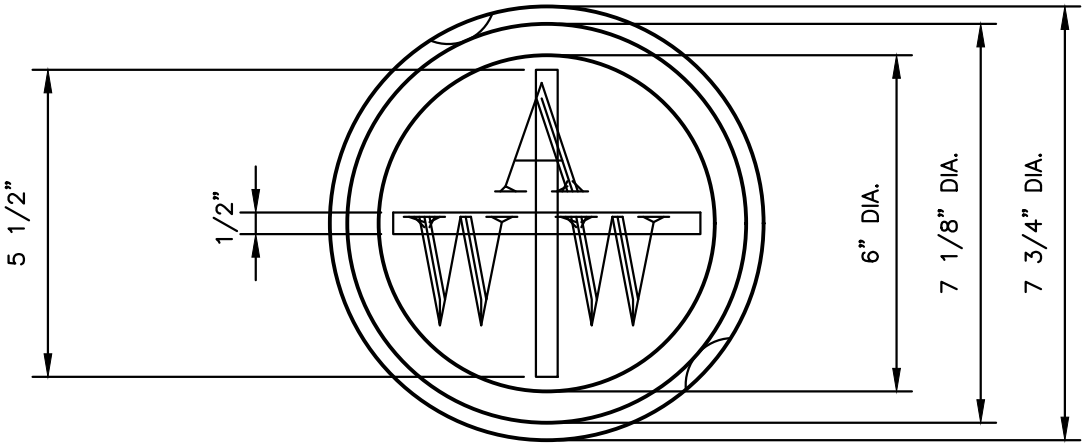
ELEVATION

NOTES:

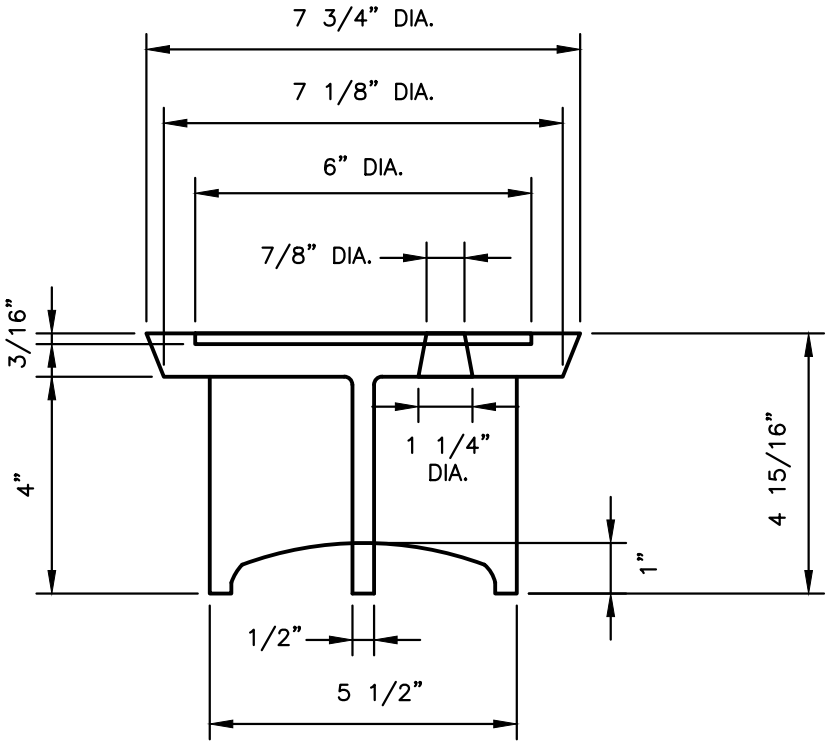
1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. TYPICAL FILLET IS 3/16" RADIUS
3. LETTERING SHALL BE 1 1/2" HEIGHT AND LOCATED AS SHOWN.
4. THIS LID FITS INSIDE 6" I.D. PIPE.
5. THE MANUFACTURER'S IDENTIFICATION, CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID.
6. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
7. FINISH BY REMOVING FINS AND FLASHING; PAINT WITH BLACK ASPHALT COATING.
8. WEIGHT: APPROXIMATELY 13 LBS.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	VALVE BOX CASTING LID (NOT IN PAVEMENT)	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW14



PLAN VIEW



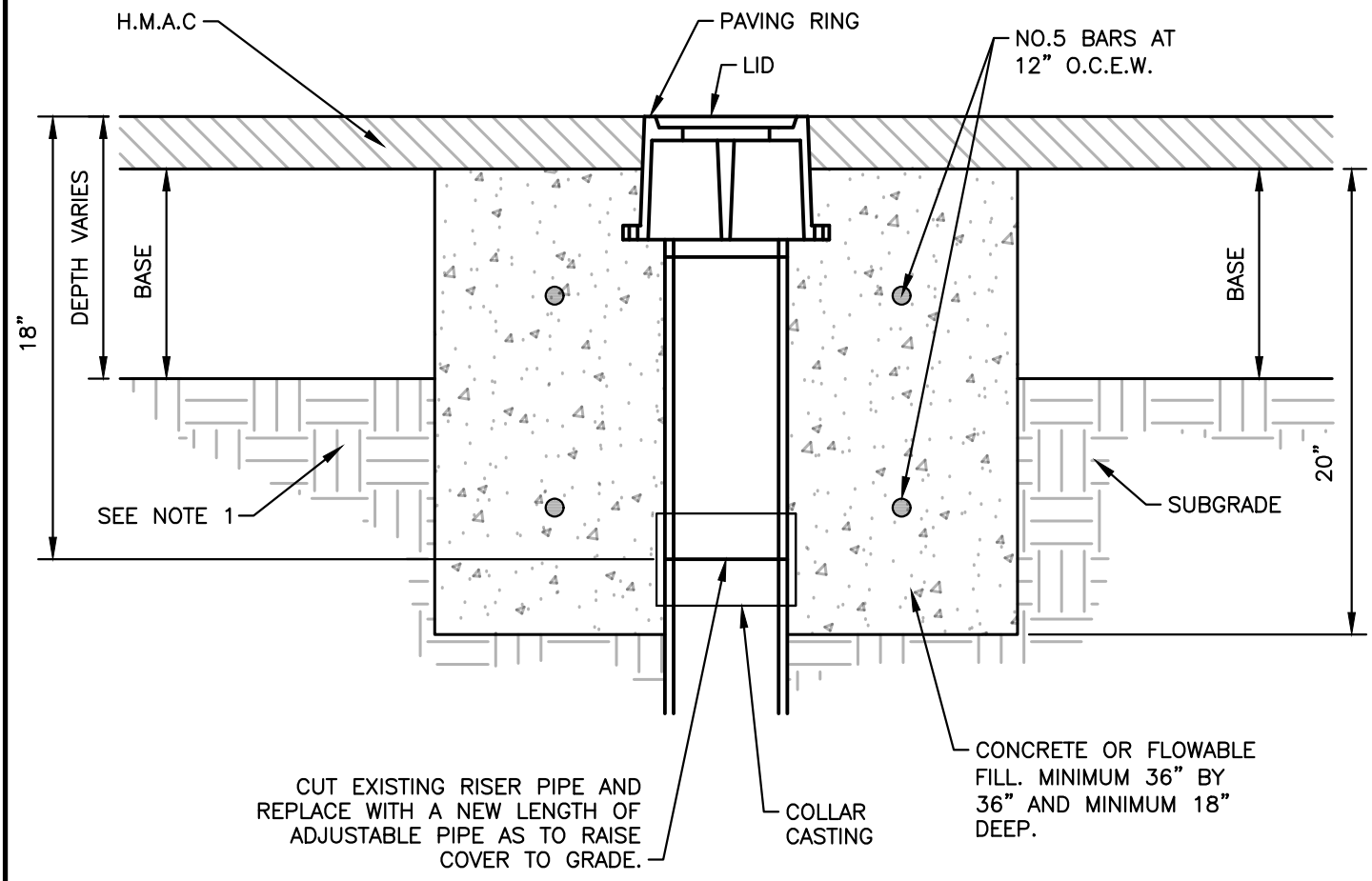
ELEVATION

NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. TYPICAL FILLET IS 3/16" RADIUS.
3. LETTERING SHALL BE 1 1/2" HEIGHT AND LOCATED AS SHOWN.
4. THIS LID REQUIRES TWO (2) PICK SLOTS.
5. THE MANUFACTURER'S IDENTIFICATION, CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID.
6. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
7. FINISH BY REMOVING FINS AND FLASHING; PAINT WITH BLACK ASPHALT COATING.
8. WEIGHT: APPROXIMATELY 13 LBS.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	VALVE BOX CASTING LID (IN PAVEMENT)
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW15



NOTES:

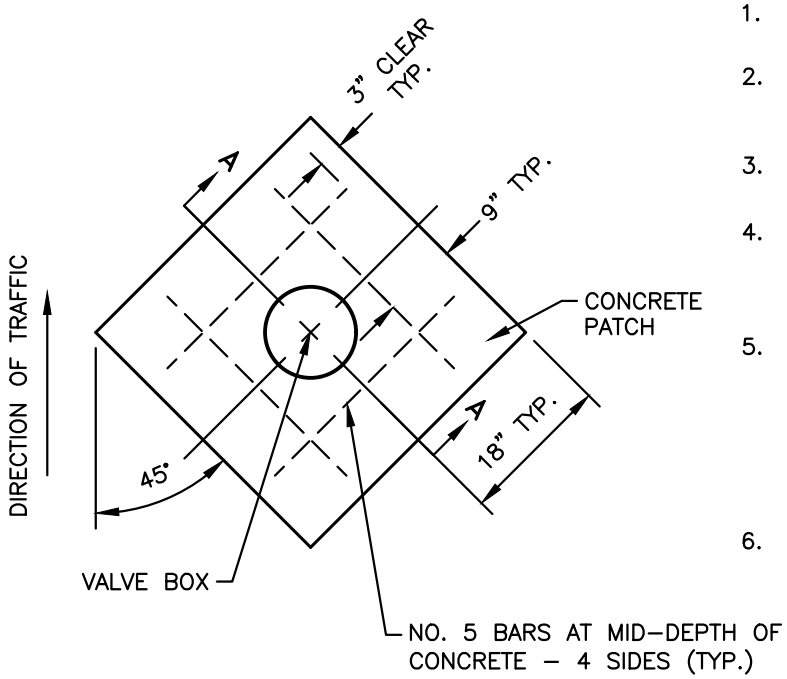
1. SUBGRADE SHALL BE COMPACTED AS PER DETAIL, SUBGRADE PREPARATION.
2. VALVE CASTINGS SHALL BE ADJUSTED TO GRADE AFTER FINAL LIFT OF OVERLAY IS IN PLACE.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE BASE OF THE VALVE.
4. REMOVE EXISTING RISER PIPE DOWN 18" AND REPLACE TO THE NEW ELEVATION USING NEW ADJUSTABLE PIPE AND A CASTING.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

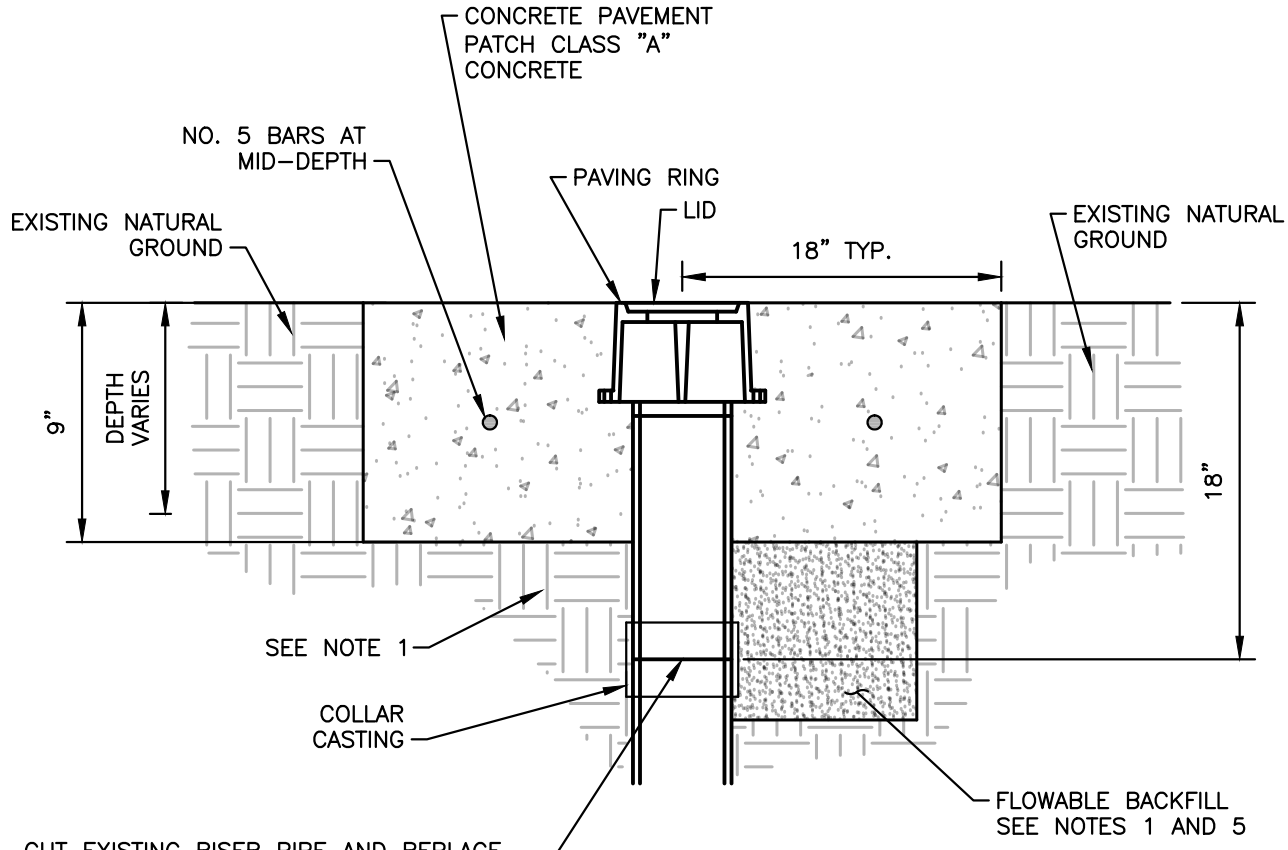
WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	VALVE BOX ADJUSTMENT TO GRADE IN PAVEMENT
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW16

NOTES:

1. SUBGRADE SHALL BE COMPACTED AS PER SPECIFICATIONS, SUBGRADE PREPARATION.
2. VALVE CASTINGS SHALL BE ADJUSTED TO GRADE AFTER FINAL LIFT OF OVERLAY IS IN PLACE.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE BASE OF THE VALVE.
4. REMOVE EXISTING RISER PIPE DOWN 18" AND REPLACE TO THE NEW ELEVATION USING NEW ADJUSTABLE PIPE AND A CASTING.
5. WHERE CAST IRON CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL TO THE UNDERSIDE OF THE CONCRETE PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
6. REINFORCING STEEL SHALL MEET SPECIFICATIONS FOR REINFORCING STEEL.



PLAN VIEW

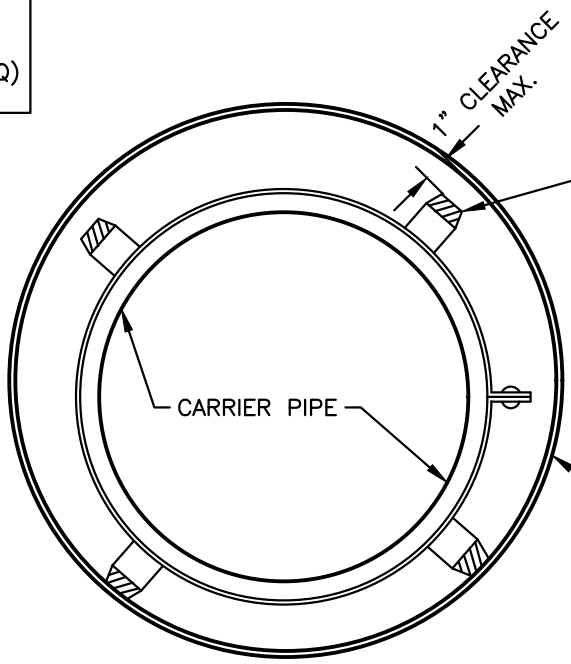


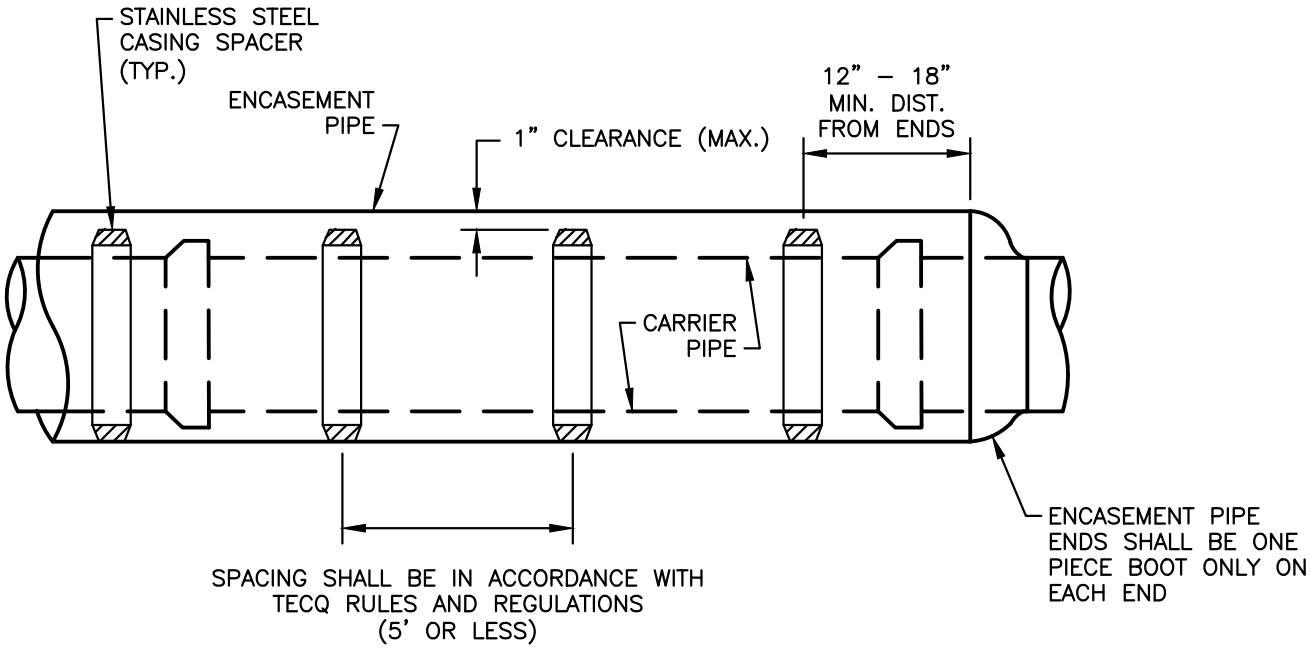
SECTION A–A

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	VALVE BOX ADJUSTMENT TO GRADE OUTSIDE OF PAVEMENT
	ADOPTED: 06/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW17

NUMBER OF RUNNERS AND CONFIGURATION SHALL COMPLY WITH TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (T.C.E.Q) RULES AND REGULATIONS



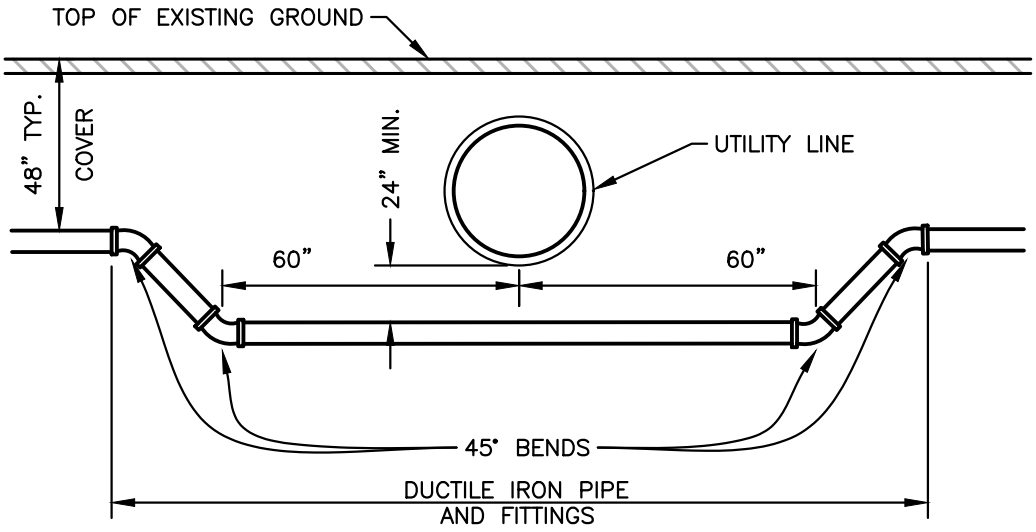


NOTES:

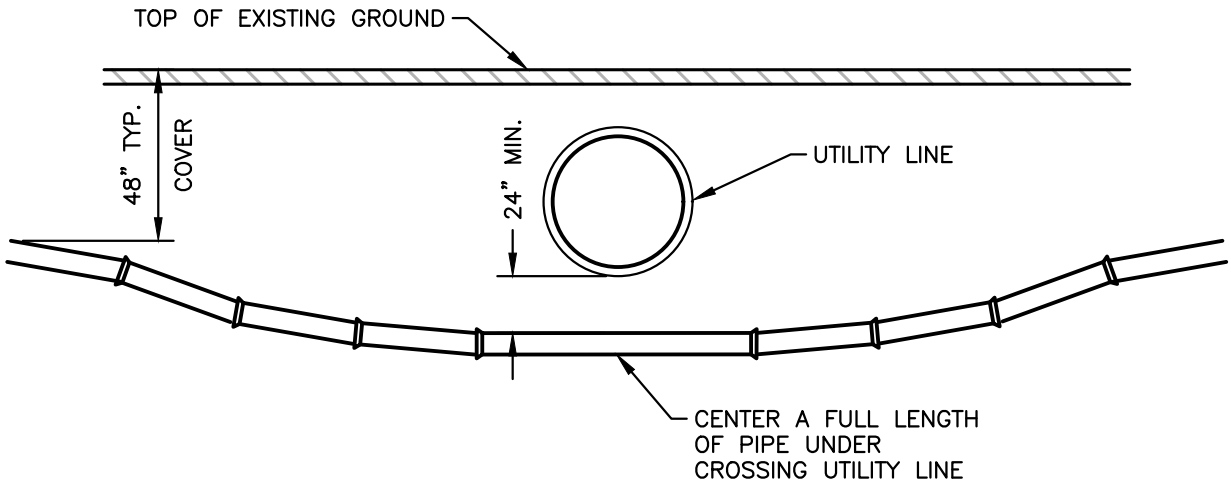
1. T.E.C.Q. RULES AND REGULATIONS ON SANITARY SEWER, STORM SEWER AND WATER MAIN CROSSING AND SEPARATIONS WILL BE STRICTLY ENFORCED TO TAC, CHAPTER 290, SUBCHAPTER D.
2. ALL PIPE IN ENCASEMENT PIPE SHALL BE RESTRAINT JOINT. FOR ENTIRE LENGTH OF THE ENCASEMENT PIPE PLUS 10 FEET ON EACH SIDE.
3. FOR A PIPE 20' IN LENGTH, A MINIMUM OF 5 SPACERS IS REQUIRED. FOR A PIPE 13' IS LENGTH, A MINIMUM OF 3 SPACERS IS REQUIRED.

ACCEPTABLE
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	ENCASEMENT DETAIL WITH CASING SPACERS	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW18



STANDARD UTILITY CROSSING – FITTING TYPE



SPECIAL UTILITY CROSSING – DEFLECTION TYPE

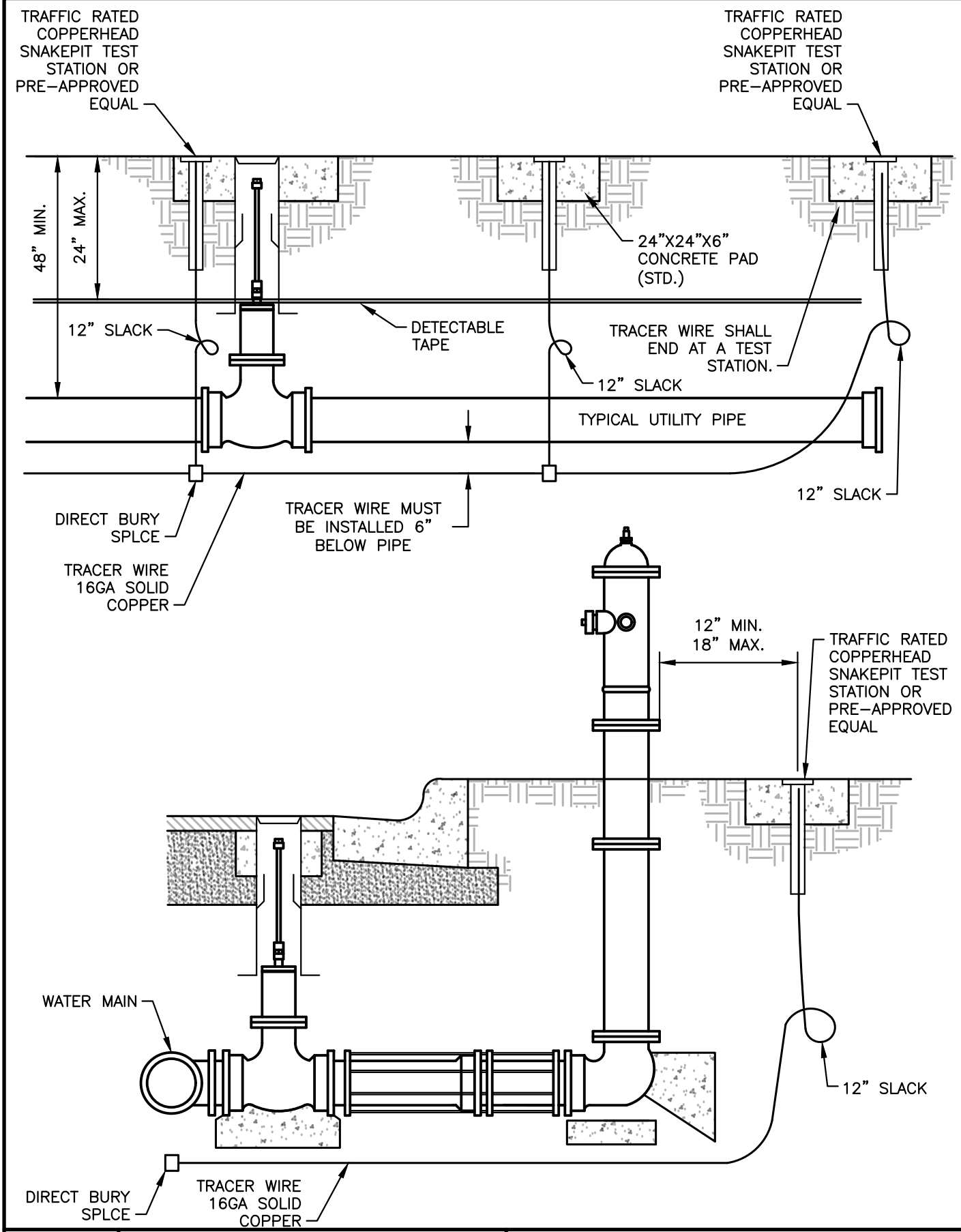
MAY ONLY BE USED WHEN APPROVED AND/OR DIRECTED TO BY WCID NO. 17 PERSONNEL.

NOTES:

1. MAINTAIN 24 INCH (MIN.) SEPARATION FROM STORM DRAIN LINE.
2. RESTRAIN JOINTS AT ALL FITTINGS. 45° BENDS MUST BE THRUSTBLOCKED AT BOTTOM BENDS. SEE STANDARD DETAIL.
3. RESTRAIN PIPE BELLS ON EITHER SIDE OF TOP 45° BENDS.
4. ALL UTILITY CROSSINGS SHALL BE IN ACCORDANCE WITH TCEQ CH. 217 & 290 REGULATIONS.

NOT A TYPICAL
CITY OF AUSTIN STANDARD DETAIL

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	TYPICAL WATER LINE / FORCE MAIN CROSSING UNDER OTHER UTILITIES
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW19



WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	TRACER WIRE (1 OF 3)
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		DETAIL NO. W/WW20

TRACING WIRE GENERAL NOTES:

A TRACING WIRE SHALL BE INSTALLED ON ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER PIPE. THE WIRE SHALL BE INSTALLED SO THAT ALL PIPE, INCLUDING PIPE BRANCHES, CAN BE TRACED WITHOUT LOSS OR DETERIORATION OF SIGNAL OR WITHOUT THE TRANSMITTED SIGNAL MIGRATING OFF THE WIRE. THE CONTRACTOR SHALL BE REQUIRED TO PERFORM A CONTINUITY TEST ON ALL TRACING WIRE IN THE PRESENCE THE DISTRICT'S DESIGNATED REPRESENTATIVE USING A STANDARD HAND HELD DETECTOR TO TRACE THE SIGNAL. IF THE TRACING WIRE IS FOUND TO BE NOT CONTINUOUS AFTER TESTING, CONTRACTOR SHALL REPAIR OR REPLACE THE FAILED SEGMENT OF WIRE.

APPROVED TRACING WIRE MATERIAL:

WIRE FOR DIRECT BURY APPLICATIONS: TRACING WIRE SHALL BE #16 AWG HIGH STRENGTH COPPER CLAD STEEL CONDUCTOR (HS–CCS), INSULATED WITH A 30 MIL, HIGH MOLECULAR WEIGHT – HIGH DENSITY POLYETHYLENE (HMW–HDPE) INSULATION, BREAK LOAD 380# MINIMUM, AND RATED FOR DIRECT BURIAL USE AT 30 VOLTS AS MANUFACTURED BY COPPERHEAD INDUSTRIES, LLC, OR APPROVED EQUAL.

WIRE FOR DIRECTIONAL DRILL APPLICATIONS: TRACING WIRE SHALL BE #16 AWG EXTRA HIGH STRENGTH COPPER CLAD STEEL (EHS–CCS), INSULATED WITH A 45 MIL, HIGH MOLECULAR WEIGHT – HIGH DENSITY POLYETHYLENE (HMW–HDPE) INSULATION, BREAK LOAD 1150# MINIMUM, AND APPROVED FOR DIRECTIONAL DRILL APPLICATIONS SUCH AS SOLOSHOT™ MANUFACTURED BY COPPERHEAD INDUSTRIES, LLC, OR APPROVED EQUAL.

DIRECT BURY WIRE NUTS: SHALL BE DRYCONN™ MANUFACTURED BY KING INNOVATION, DBY OR DBR SERIES MANUFACTURED BY 3M™, SNAKEBITE™ MANUFACTURED BY COPPERHEAD INDUSTRIES, LLC, OR APPROVED EQUAL.

DIRECT BURY LUGS: SHALL BE DRYCONN™ MANUFACTURED BY KING INNOVATION, OR APPROVED EQUAL.

EXECUTION:

DIRECT BURY INSTALLATION: INSTALL IN THE SAME TRENCH WITH PIPE, LAYING TRACING WIRE FLAT. METALLIC FASTENERS ARE NOT TO BE USED. INSTALL WIRE WITH SOME SLACK TO ALLOW FOR BENDS IN LAYING AND FOR FUTURE INSTALLATION OF JOINTS, SPLICES, TAPPING SADDLES, ETC. THE SLACK SHOULD BE SUFFICIENT TO ALLOW FOR SMALL EARTH MOVEMENTS OCCURRING DURING COMPACTION, TRENCH FILL OR NATURAL SUBSIDENCE. NO BREAKS OR CUTS IN THE TRACING WIRE OR WIRE INSULATION IS PERMITTED. AT WATER SERVICE SADDLES, THE WIRE SHALL NOT BE ALLOWED TO BE PLACED BETWEEN THE SADDLE AND THE MAIN.

DIRECTIONAL DRILL INSTALLATION: INSTALL INSIDE THE BORED HOLES AND CASING WITH PIPE DURING INSTALLATION. ALWAYS ATTACH THE TRACING WIRE TO THE LEAD END OF THE PIPE WHEN BORING OR PLOWING AND AVOID KINKING OR TANGLING THE WIRE DURING INSTALLATION. A MINIMUM OF TWO TRACING WIRES SHOULD BE PULLED WITH THE PIPE IN CASE ONE OF THE TWO WIRES BREAK.

ACCESS POINTS: TRACING WIRE ACCESS POINTS SHALL IN GENERAL BE NO MORE THAN FIVE–HUNDRED (500) FEET APART AND AT EVERY FIRE HYDRANT, ARV, BLOW–OFF HYDRANT, SERVICE, OR OTHER APPURTENANCES AS DIRECTED BY DISTRICT STAFF. WIRES SHALL BE INSTALLED TO AVOID BEING TWISTED OR DAMAGED BY VALVE KEYS OR OTHER MEANS RELATIVE TO THE TYPICAL USAGE OF THE APPURTENANCES. ON FORCE MAINS, DEAD END MAINS, LONG UTILITY RUNS THAT EXCEED 500 FEET, AND OTHER SIMILAR APPLICATIONS WITHOUT A VALVE OR METER BOX, WIRE SHALL BE BROUGHT TO THE SURFACE IN A METAL DISTRICT–APPROVED VALVE BOX FOR ACCESSIBILITY. ACCESS POINTS SHALL BE WITHIN PUBLIC RIGHT–OF–WAY OR PUBLIC UTILITY EASEMENTS.

TRACING WIRE IN A VAULT: TRACING WIRE SHALL BE BROUGHT UP ON THE OUTSIDE OF THE VAULT AND PLACED INSIDE THE VAULT THROUGH A GROUT HOLE OPPOSITE ANY ACCESS STEPS. COIL ENOUGH WIRE TO EXTEND A MINIMUM OF 36" ABOVE GROUND. WIRE SHOULD NOT BE PLACED WHERE A PERSON ENTERING THE VAULT COULD TRIP ON THE WIRE.

WCID No. 17	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	TRACER WIRE (2 OF 3)	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW20

CONNECTIONS: EXCEPT FOR APPROVED SPLICE–IN CONNECTIONS, TRACING WIRE SHALL BE CONTINUOUS AND WITHOUT SPLICES FROM EACH TRACING WIRE ACCESS POINT. APPROVED SPLICE–IN CONNECTIONS ARE AS FOLLOWS:

JOINING ENDS OF TRACING WIRE: CONNECTIONS INTO EXISTING TRACING WIRE, CONNECTIONS INTO TRACING WIRE USED DURING PIPE BORES, CONNECTIONS BETWEEN ONE SPOOL OF TRACING WIRE TO ANOTHER, AND OTHER SIMILAR CONNECTIONS SHALL BE MADE USING A DIRECT BURY NUT. WHEN CONNECTING TRACING WIRE ENDS TOGETHER, STRIP 5/8 " OF INSULATION FROM THE END OF EACH WIRE. INSERT THE TWO ENDS FIRMLY INTO THE DIRECT BURY WIRE NUT. TWIST THE WIRE NUT CLOCKWISE WHILE PUSHING THE WIRES FIRMLY INTO THE NUT. DO NOT OVER TORQUE. TIE THE WIRES IN A LOOSE KNOT BELOW THE WIRE NUT.

JOINING TRACING WIRE – BRANCH TO MAIN: CONNECTIONS OF TRACING WIRE AT TEES, CROSSES, AND AT LOCATIONS WHERE THE TRACING WIRE WILL BE BROUGHT TO THE SURFACE SHALL BE CONDUCTED USING A DIRECT BURY LUG.

JACKET COLOR: THE APWA UNIFORM COLOR CODE SHALL BE FOLLOWED. (BLUE – POTABLE WATER; PURPLE – RECLAIMED WATER; GREEN –SANITARY SEWER)

REPAIRS: AT ALL REPAIR LOCATIONS WHERE THERE IS EXISTING TRACING WIRE, THE WIRE SHALL BE PROPERLY RECONNECTED AND SPLICED AS OUTLINED ABOVE. ELECTRICAL TAPE IS NOT AN ACCEPTABLE REPAIR SINCE CORROSION WILL EVENTUALLY OCCUR AND THE LOCATE SIGNAL WILL BE LOST TO GROUND AT THE CONNECTION.

OTHER:

1. TEST STATION SHALL BE HANDLEY INDUSTRIES INC. – TWO INCH (2") CATHODIC TEST STATION OR DISTRICT PRE–APPROVED EQUAL.
2. THE 15" ABS PLASTIC BOX SHALL BE A FLANGED TOP FOR INSTALLATION AT GROUND LEVEL.
3. ALL TERMINALS ARE TO BE MADE OF SOLID BRASS.
4. LIDS SHALL BE TRAFFIC RATED AND PAINTED BLUE FOR WATER, GREEN FOR SEWER, OR PURPLE FOR EFFLUENT.
5. TEST TERMINALS ARE TO BE INCORPORATED WITH HANDLEY VALVE BOXES.
6. BURY SPLICE SHALL BE 3M DIRECT BURY SPLICE (DBR) OR DISTRICT PRE–APPROVED EQUAL ENCLOSED IN ENCASEMENT PIPE.
7. TEST STATION SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION.
8. TEST STATION SHALL BE SET IN 10" X 10" CONCRETE COLLAR.
9. DISTRICT WILL NOT ACCEPT INFRASTRUCTURE UNTIL TRACER WIRE IS TESTED AND WORKS CORRECTLY.

WCID No. 17 Travis County	TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS	TRACER WIRE (3 OF 3)	
	ADOPTED: 07/01/2025	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W/WW20