



NOTES:

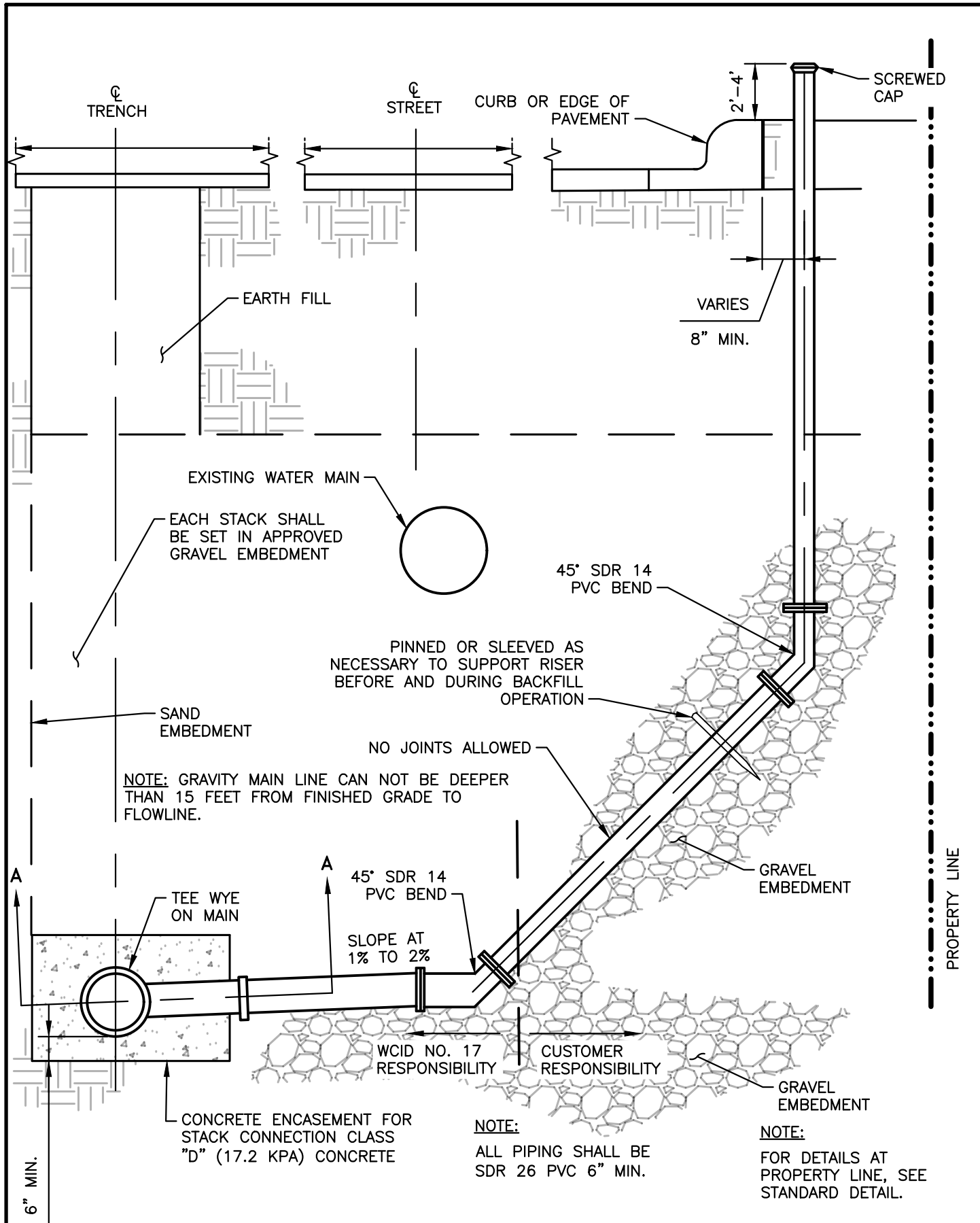
- (A) THESE DIMENSIONS MAY BE INCREASED BY WIDTH OF WALK IF WALK IS LOCATED AT CURB.
- (B) TO BE INSTALLED AND INSPECTED DURING SUBDIVISION CONSTRUCTION.
- (C) BUILDING INSPECTION DEPARTMENT SHALL INSPECT CUSTOMER'S WASTEWATER LINE, EXCEPT CONNECTION AT WYE.
- (D) WCID NO. 17 OFFICE INSPECT CONNECTIONS OF CUSTOMER'S WASTEWATER LINES TO WCID NO. 17 SYSTEMS.


| | | | |
|---|---|--|-------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>WASTEWATER SERVICE CONNECTION DETAIL (1 OF 2)</p> | |
| | <p>ADOPTED:</p> <p>07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO.</p> <p>WW01</p> |

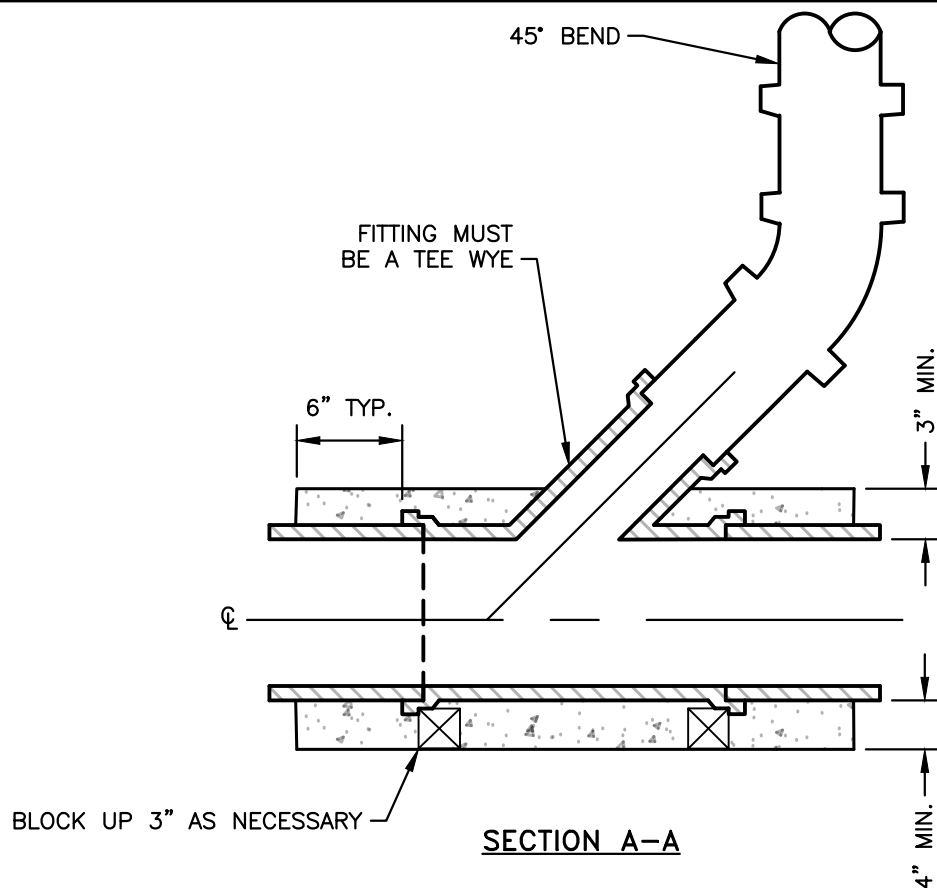
NOTES:

1. UTILITY CONTRACTOR –DURING SUBDIVISION CONSTRUCTION– INSTALLS WASTEWATER CONNECTION TO MAIN, 6” STUB WITH HORIZONTAL WYE FOR DOUBLE SERVICE, 6” BRANCH WITH CLEAN–OUT AND RISER FOR CLEAN–OUTS (CAPPED), AND PLUGS FOR BOTH CLEAN–OUTS AT PROPERTY LINE END. ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SHALL SLOPE DOWNWARD TO MAIN 1% 1/8” PER FOOT MINIMUM TO 45° MAXIMUM. DEPTH OF SERVICE STUB AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 4 FEET , OTHERWISE THE INSTALLED DEPTH WILL TYPICALLY BE 4 TO 6 FEET. IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, ALL SHALL BE MADE IN ACCORDANCE WITH INFORMATION SHOWN ON APPLICABLE STD. DRAWINGS AND WILL BE INSPECTED BY WCID NO. 17 CONSTRUCTION INSPECTION PERSONNEL.
2. CUSTOMERS REMOVE PLUGS FROM CLEAN–OUT, AT PROPERTY LINE, INSTALL MINIMUM 18” LENGTH OF 6” PIPE. IF WASTEWATER WILL NOT SATISFACTORILY FLOW BY GRAVITY TO SEWER MAIN ADJACENT TO PROPERTY, PUMP EQUIPMENT MUST BE PROVIDED BY THE CUSTOMER AS PART OF CUSTOMER’S WASTEWATER SYSTEM.
3. CUSTOMER IS RESPONSIBLE FOR WASTEWATER PIPING SYSTEM AND SHALL GUARANTEE, FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE, THAT CONNECTIONS TO WCID NO. 17 SYSTEMS ARE FREE FROM DEFECTS IN WORKMANSHIP AND/OR MATERIALS. CUSTOMER ALSO HAS THE RESPONSIBILITY TO ASSURE THAT ALL CLEAN–OUTS REMAIN CLEAR OF SIDEWALK AND OTHER OBSTRUCTIONS.
4. WCID NO.17 ACTIVITY IS LIMITED TO THE INSPECTION OF CONNECTIONS TO THE WCID NO. 17 WASTEWATER SYSTEMS FOR MAINTENANCE PURPOSES, THE WCID NO. 17 RESPONSIBILITY ENDS AT THE 45–DEGREE BEND LOCATED CLOSEST TO THE WASTEWATER MAIN AS NOTED IN THE DETAIL AND WCID NO. 17 POLICY MANUAL.
5. PIPING IN STREET RIGHT–OF–WAY AND IN EASEMENT AREAS SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY WCID NO. 17 STANDARD SPECIFICATIONS; MATERIALS SHALL BE AS SPECIFIED IN STANDARD SPECIFICATIONS; BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED; SERVICE LINES IN THESE AREAS SHALL HAVE A MINIMUM COVER BELOW FINAL STREET GRADE OF 42”; ANY EXCEPTION MUST BE SPECIFICALLY APPROVED BY WCID NO. 17.
6. NO CLEAN–OUT SHALL BE SET IN SIDEWALK AREA WITHOUT WRITTEN APPROVAL FROM WCID NO. 17.
7. T.C.E.Q. RULES AND REGULATIONS ON SEPARATION OF WASTEWATER MAINS WILL BE STRICTLY ENFORCED.
8. ALL WASTEWATER PIPING WILL BE COLORED CODED OR DESIGNATED WASTEWATER USE ONLY. NO WATER DESIGNATED PIPE WILL BE USED IN WASTEWATER SYSTEM.

| | | | |
|---|--|---|------------------------|
|  | TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS | WASTEWATER SERVICE CONNECTION DETAIL (2 OF 2) | |
| | ADOPTED: 07/01/2025 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. | DETAIL NO. WW01 |




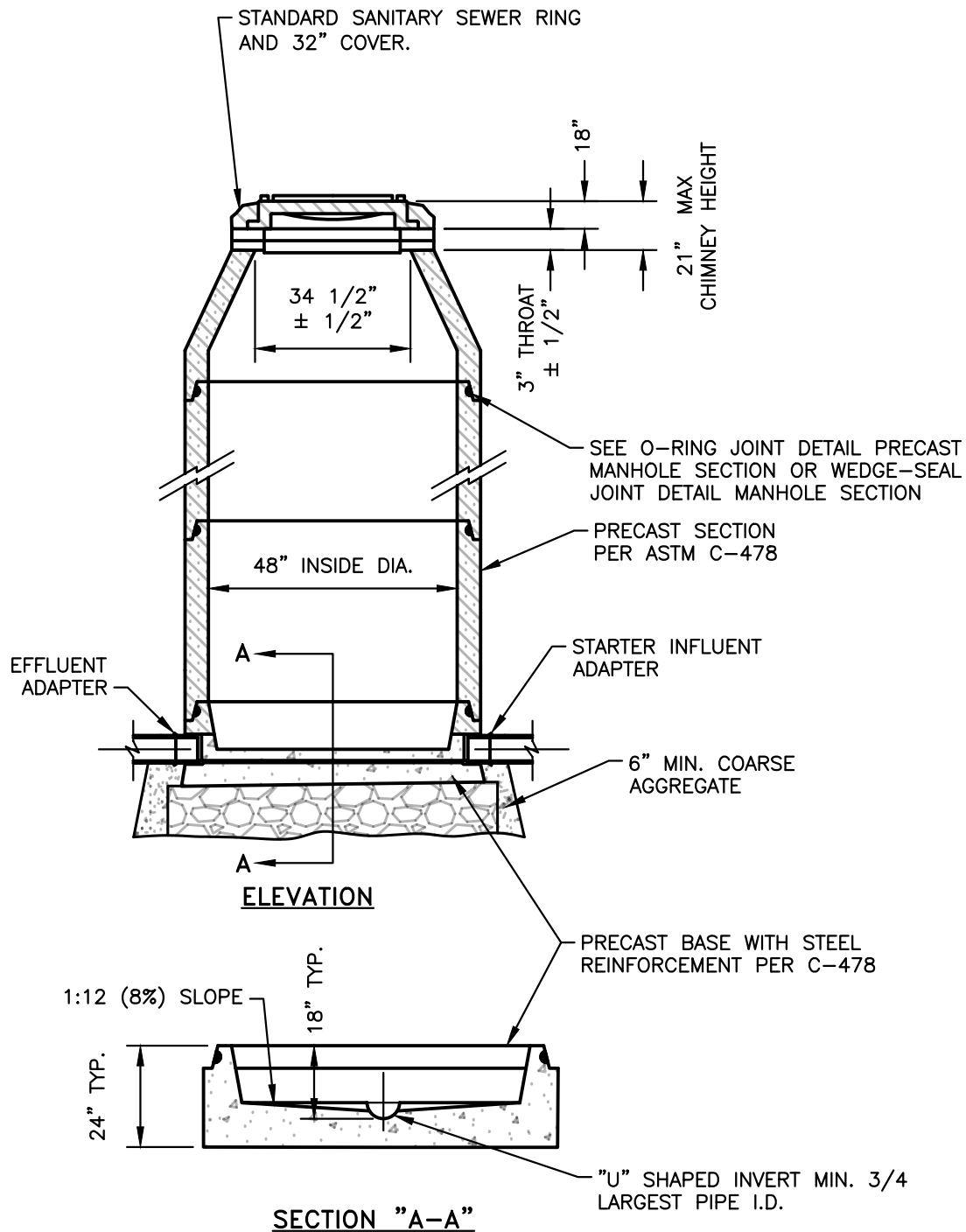
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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>WASTEWATER DEEP SERVICE CONNECTION DETAIL (1 OF 2)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW02</p> |



NOTES:


1. UTILITY CONTRACTOR –DURING SUBDIVISION CONSTRUCTION– INSTALLS WASTEWATER CONNECTION TO MAIN, 6" STUB WITH HORIZONTAL WYE FOR DOUBLE SERVICE, 6" BRANCH WITH CLEAN-OUT AND RISER FOR CLEAN-OUTS (CAPPED), AND PLUGS FOR BOTH CLEAN-OUTS AT PROPERTY LINE END. ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SHALL SLOPE DOWNWARD TO MAIN 1% 1/8" PER FOOT MINIMUM TO 45° MAXIMUM. DEPTH OF SERVICE STUB AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 4 FEET OTHERWISE THE INSTALLED DEPTH WILL TYPICALLY BE 4 TO 6 FEET. IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, ALL SHALL BE MADE IN ACCORDANCE WITH INFORMATION SHOWN ON APPLICABLE STD. DRAWINGS AND WILL BE INSPECTED BY WCID NO. 17 CONSTRUCTION INSPECTION PERSONNEL.
2. CUSTOMERS REMOVE PLUGS FROM CLEAN-OUT, AT PROPERTY LINE, INSTALL MINIMUM 18" LENGTH OF 6" PIPE. IF WASTEWATER WILL NOT SATISFACTORILY FLOW BY GRAVITY TO SEWER MAIN ADJACENT TO PROPERTY, PUMP EQUIPMENT MUST BE PROVIDED BY THE CUSTOMER AS PART OF CUSTOMER'S WASTEWATER SYSTEM.
3. CUSTOMER IS RESPONSIBLE FOR WASTEWATER PIPING SYSTEM AND SHALL GUARANTEE, FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE, THAT CONNECTIONS TO WCID NO. 17 SYSTEMS ARE FREE FROM DEFECTS IN WORKMANSHIP AND/OR MATERIALS. CUSTOMER ALSO HAS THE RESPONSIBILITY TO ASSURE THAT ALL CLEAN-OUTS REMAIN CLEAR OF SIDEWALK AND OTHER OBSTRUCTIONS.
4. WCID NO. 17 ACTIVITY IS LIMITED TO THE INSPECTION OF CONNECTIONS TO THE WCID NO. 17 WASTEWATER SYSTEMS FOR MAINTENANCE PURPOSES, THE WCID NO. 17 RESPONSIBILITY ENDS AT THE 45-DEGREE BEND LOCATED CLOSEST TO THE WASTEWATER MAIN AS NOTED IN THE DETAIL AND WCID NO. 17 POLICY MANUAL.
5. PIPING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREAS SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY WCID NO.17 STANDARD SPECIFICATIONS; MATERIALS SHALL BE AS SPECIFIED IN STANDARD SPECIFICATIONS; BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED; SERVICE LINES IN THESE AREAS SHALL HAVE A MINIMUM COVER BELOW FINAL STREET GRADE OF 42"; ANY EXCEPTION MUST BE SPECIFICALLY APPROVED BY WCID NO. 17.
6. NO CLEAN-OUT SHALL BE SET IN SIDEWALK AREA WITHOUT WRITTEN APPROVAL FROM WCID NO. 17.
7. T.C.E.Q. RULES AND REGULATIONS ON SEPARATION OF WASTEWATER MAINS WILL BE STRICTLY ENFORCED.
8. ALL WASTEWATER PIPING WILL BE COLORED CODED OR DESIGNATED WASTEWATER USE ONLY. NO WATER DESIGNATED PIPE WILL BE USED IN WASTEWATER SYSTEM.

| | | | |
|---|---|--|---------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>DEEP SERVICE CONNECTION DETAIL (2 OF 2)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW02</p> |

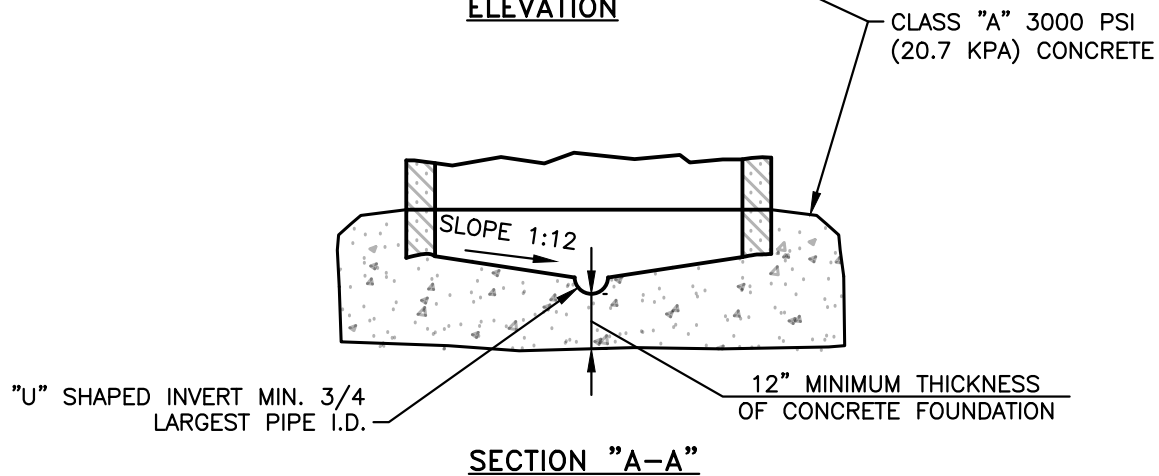
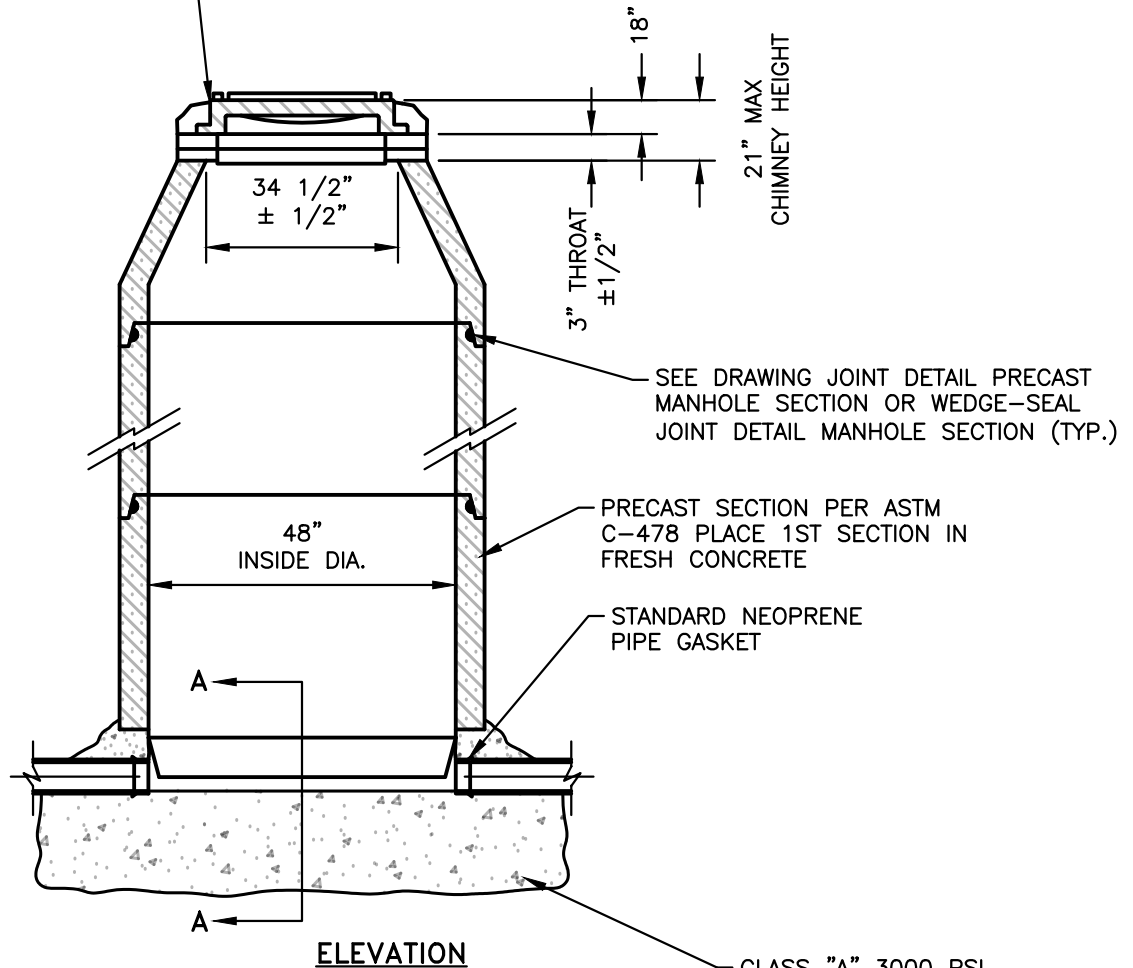


NOTES:

1. THE MANHOLE BASE SHALL BE BEDDED ON 6" COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. ALL PVC PIPES SHALL BE REMOVED FROM INVERT.
3. IF FINISHED SURFACE IS OTHER THAN IMPERVIOUS COVER IT SHALL BE 12 INCHES ABOVE GRADE.
4. SEE STANDARD DETAIL WW10 FOR BACKFILL REQUIREMENTS.

| | | | |
|---|---|--|----------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>PRECAST MANHOLE ON PRECAST BASE</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW03</p> |

STANDARD SANITARY SEWER
RING AND 32" COVER



NOTES:

1. ALL PVC PIPE SHALL BE REMOVED FROM INVERT.
2. IF FINISHED SURFACE IS OTHER THAN IMPERVIOUS COVER IT SHALL BE 12 INCHES ABOVE GRADE.
3. SEE STANDARD DETAIL WW10 FOR BACKFILL REQUIREMENTS.



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

ADOPTED:

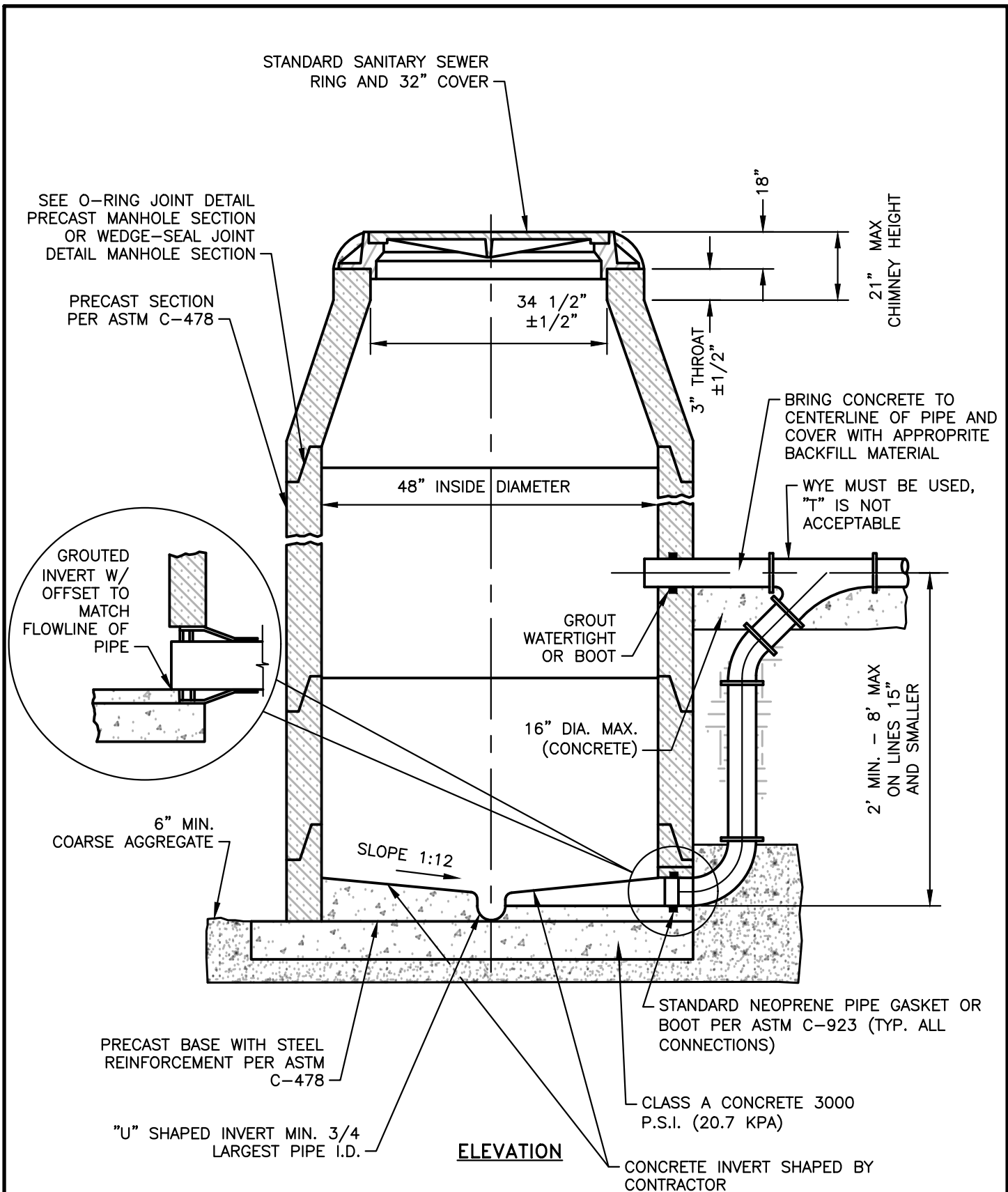
07/01/2025

PRECAST MANHOLE ON
CAST-IN-PLACE FOUNDATION

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


DETAIL NO.

WW04

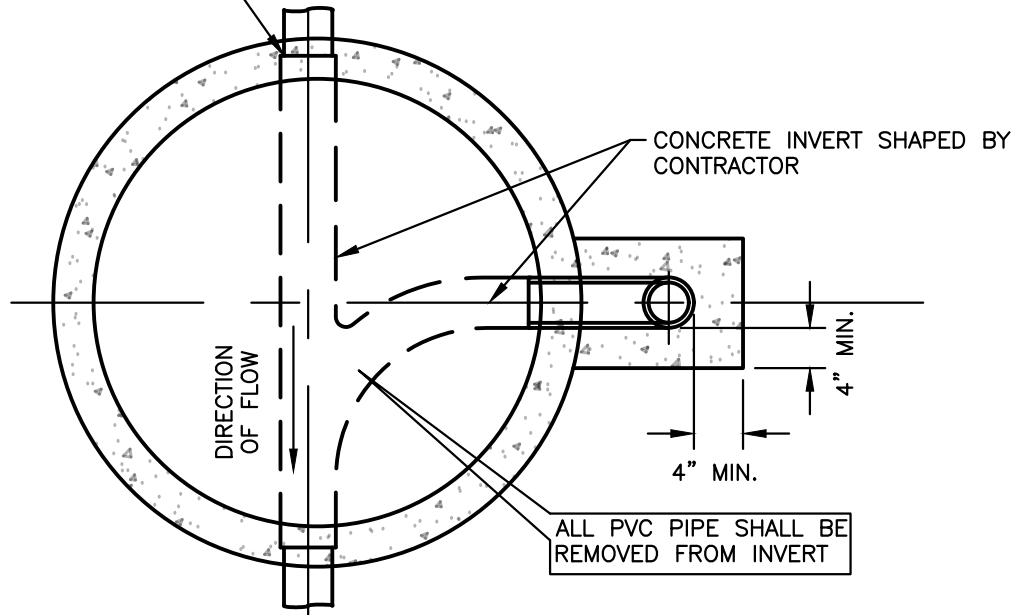


NOTES:

1. SEE DETAIL WW10 FOR BACKFILL REQUIREMENTS.

| | | | |
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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE - NEW CONSTRUCTION (1 OF 2)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW05</p> |

STANDARD NEOPRENE PIPE
GASKET TYP. ALL WALL
PENETRATIONS



BOTTOM PLAN VIEW

NOTE:

1. IF FINISHED SURFACE IS OTHER THAN IMPERVIOUS COVER IT SHALL BE 12 INCHES ABOVE GRADE.



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

PRECAST MANHOLE WITH DROP
INLET ON PRECAST BASE
(2 OF 2)


ADOPTED:

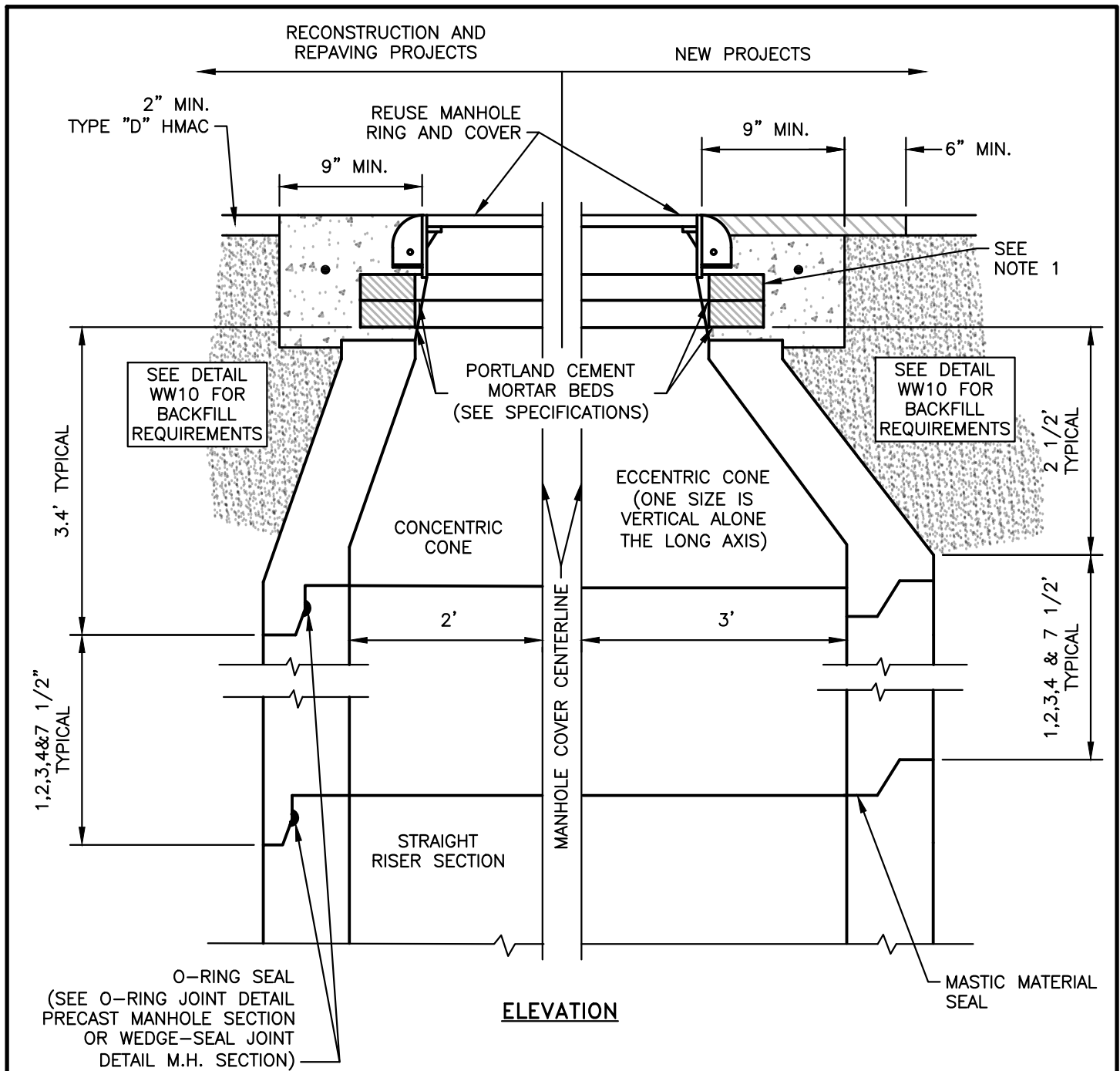
07/01/2025

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

DETAIL NO.


WW05

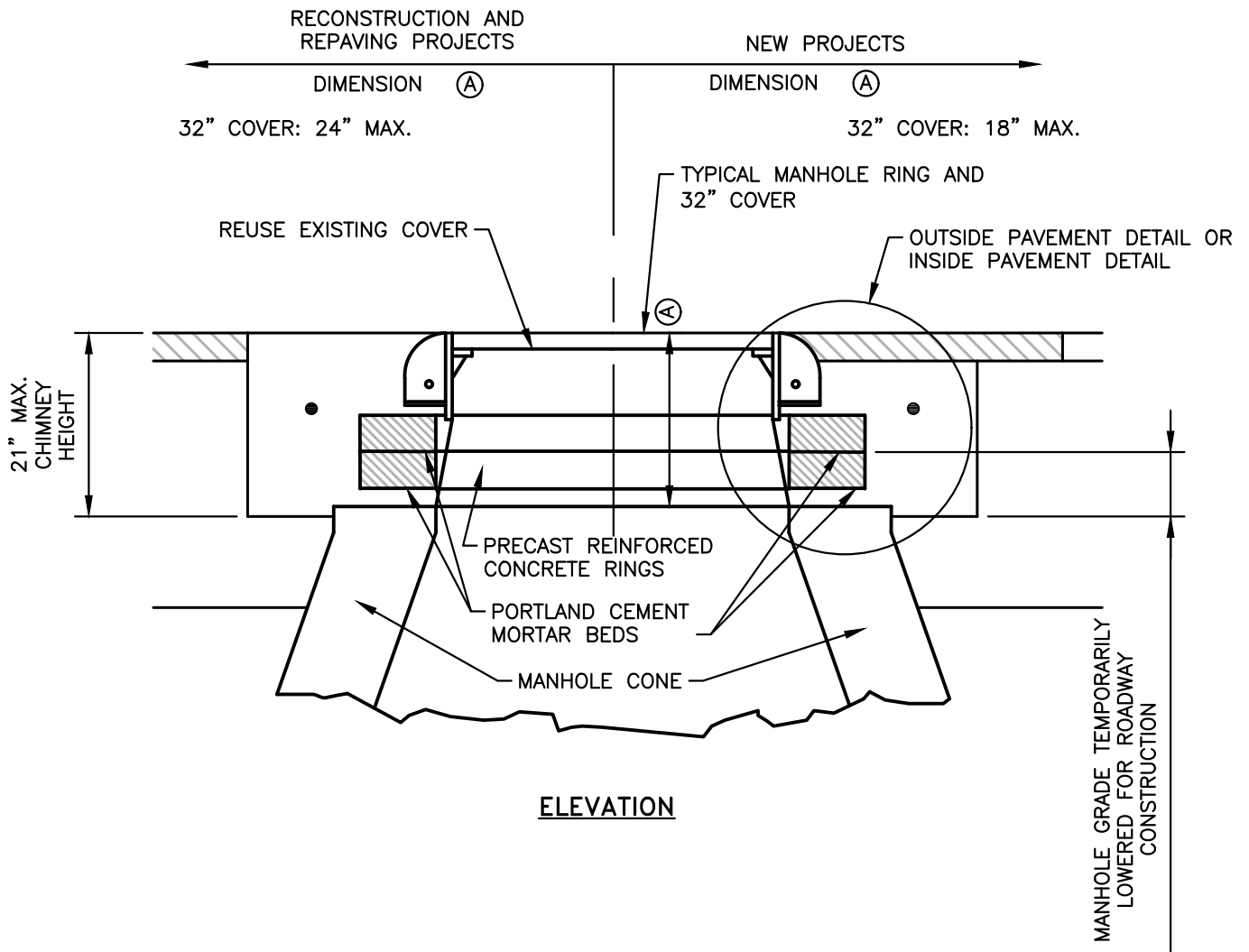
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|---|--|---|------------------------|
|  | TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS | BOX MANHOLE 30" AND LARGER PIPE | |
| | ADOPTED: 07/01/2025 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. | DETAIL NO. WW06 |



NOTES:

1. MANHOLE SECTIONS TEMPORARILY REMOVED FOR ROADWAY CONSTRUCTION MAY BE REUSED ONLY WITH THE WRITTEN APPROVAL OF THE INSPECTOR. O-RINGS SHALL NOT BE REUSED.
2. ANY COMBINATION OF REMOVING THE CONCRETE RINGS, AND/OR THE MANHOLE CONE, AND/OR THE STRAIGHT RISER SECTION OF THE MANHOLE SHALL BE ACCEPTABLE TO TEMPORARILY LOWER THE MANHOLE GRADE FOR ROADWAY RECONSTRUCTION.
3. WHILE THE MANHOLE IS TEMPORARILY LOWERED, A SHEET OF STEEL SUITABLE TO SUPPORT ALL IMPOSED LOADS SHALL BE USED TO COVER THE OPENING. THE STEEL PLATE SHALL BE SET IN MORTAR TO PREVENT LEAKAGE.
4. SUBGRADE AND BASE MATERIALS SHALL BE COMPACTED TO 95% AND 100% DENSITIES, RESPECTIVELY, COMPACTION SHALL BE BY MECHANICAL TAMPING TO THE DENSITIES SPECIFIED.
5. SEE DETAIL WW10 FOR BACKFILL REQUIREMENTS.

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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>MAJOR MANHOLE ADJUSTMENT</p> | |
| | <p>ADOPTED:</p> <p>07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO.</p> <p>WW07</p> |



NOTES:

1. SEE DETAIL WW10 FOR BACKFILL REQUIREMENTS.



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

ADOPTED:

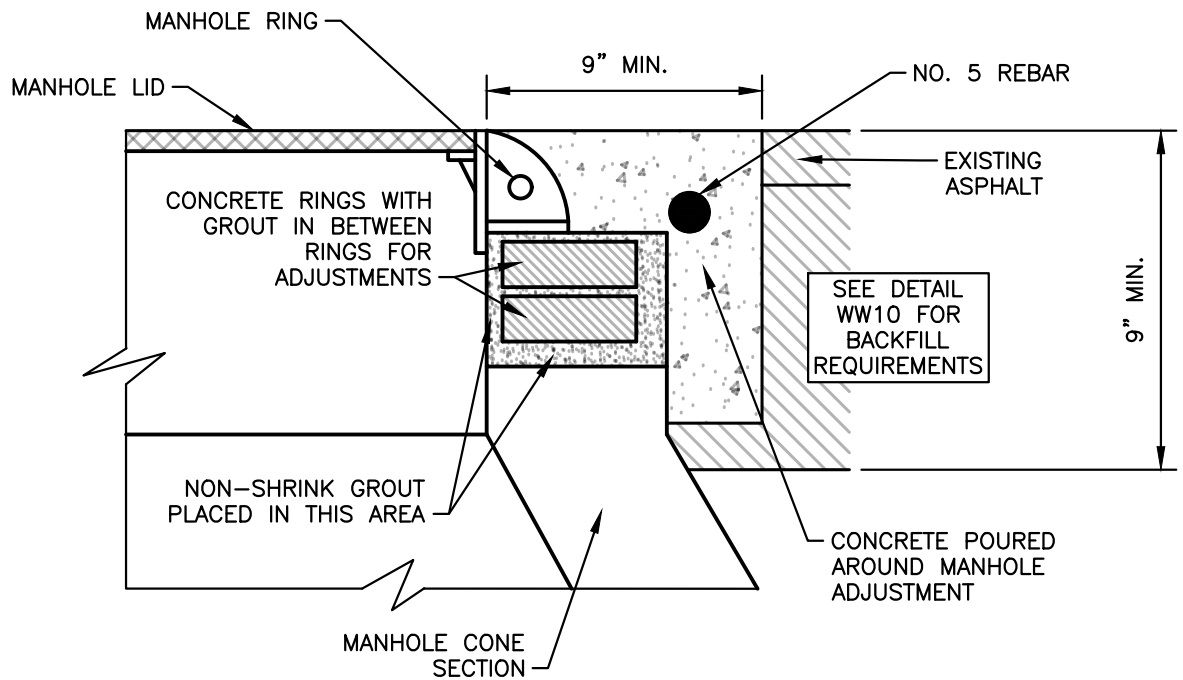
07/01/2025

NEW MANHOLE CONSTRUCTION AND
MINOR MANHOLE ADJUSTMENT
(1 OF 2)

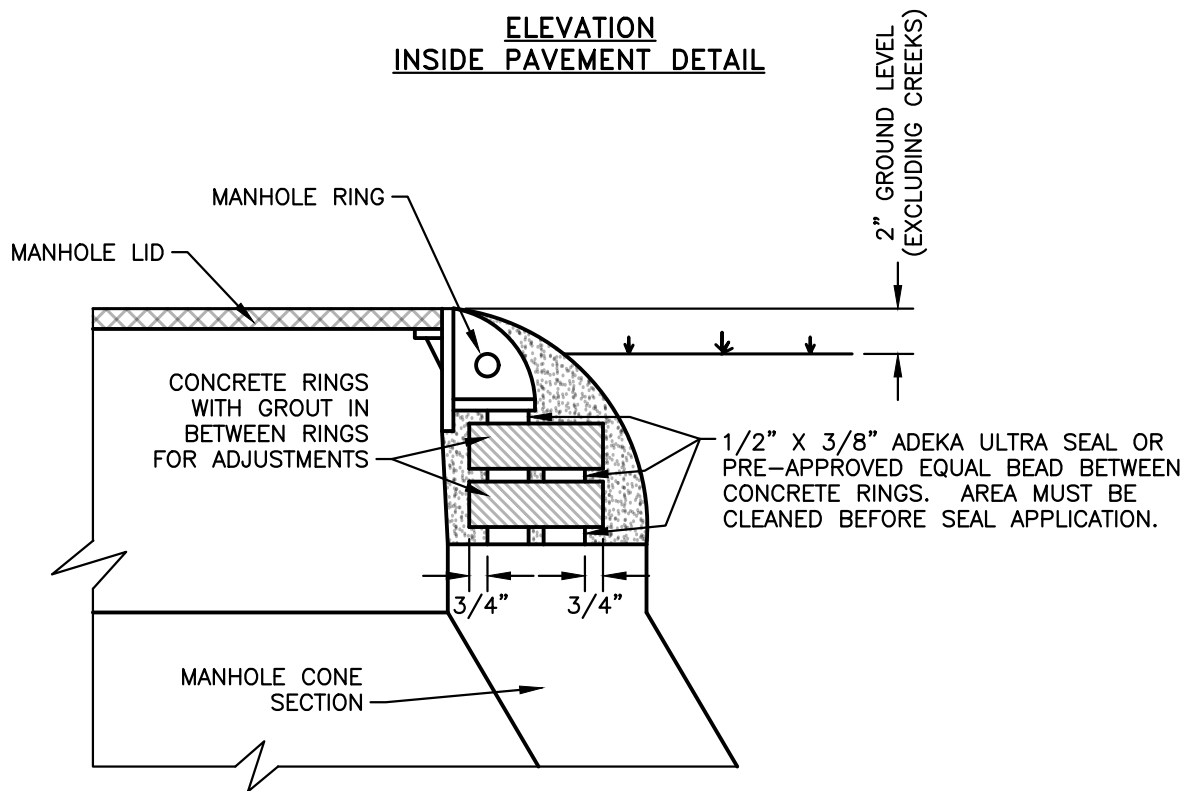
THE ARCHITECT/ENGINEER ASSUMES
RESPONSIBILITY FOR APPROPRIATE
USE OF THIS STANDARD.

DETAIL NO.

WW08



**ELEVATION
INSIDE PAVEMENT DETAIL**



**ELEVATION
OUTSIDE PAVEMENT DETAIL**

NOTES:

1. MORTAR BEDS SHALL NOT EXCEED 1".
2. SEE DETAIL WW10 FOR BACKFILL REQUIREMENT.



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

ADOPTED:

07/01/2025

NEW MANHOLE CONSTRUCTION AND
MINOR MANHOLE ADJUSTMENT
(2 OF 2)

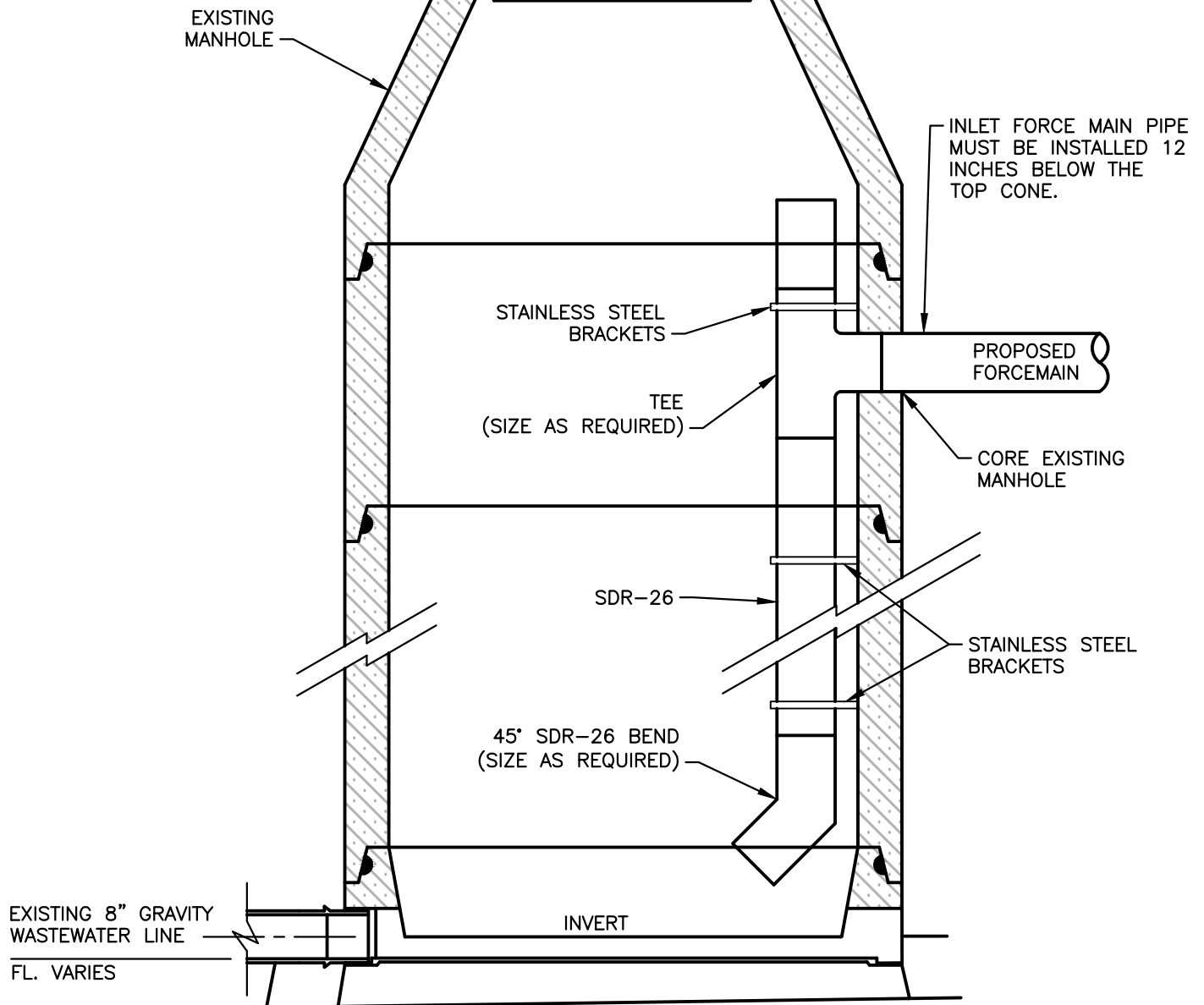
THE ARCHITECT/ENGINEER ASSUMES
RESPONSIBILITY FOR APPROPRIATE
USE OF THIS STANDARD.

DETAIL NO.

WW08


*ALL PIPES INSIDE MANHOLE MUST
BE GLUED

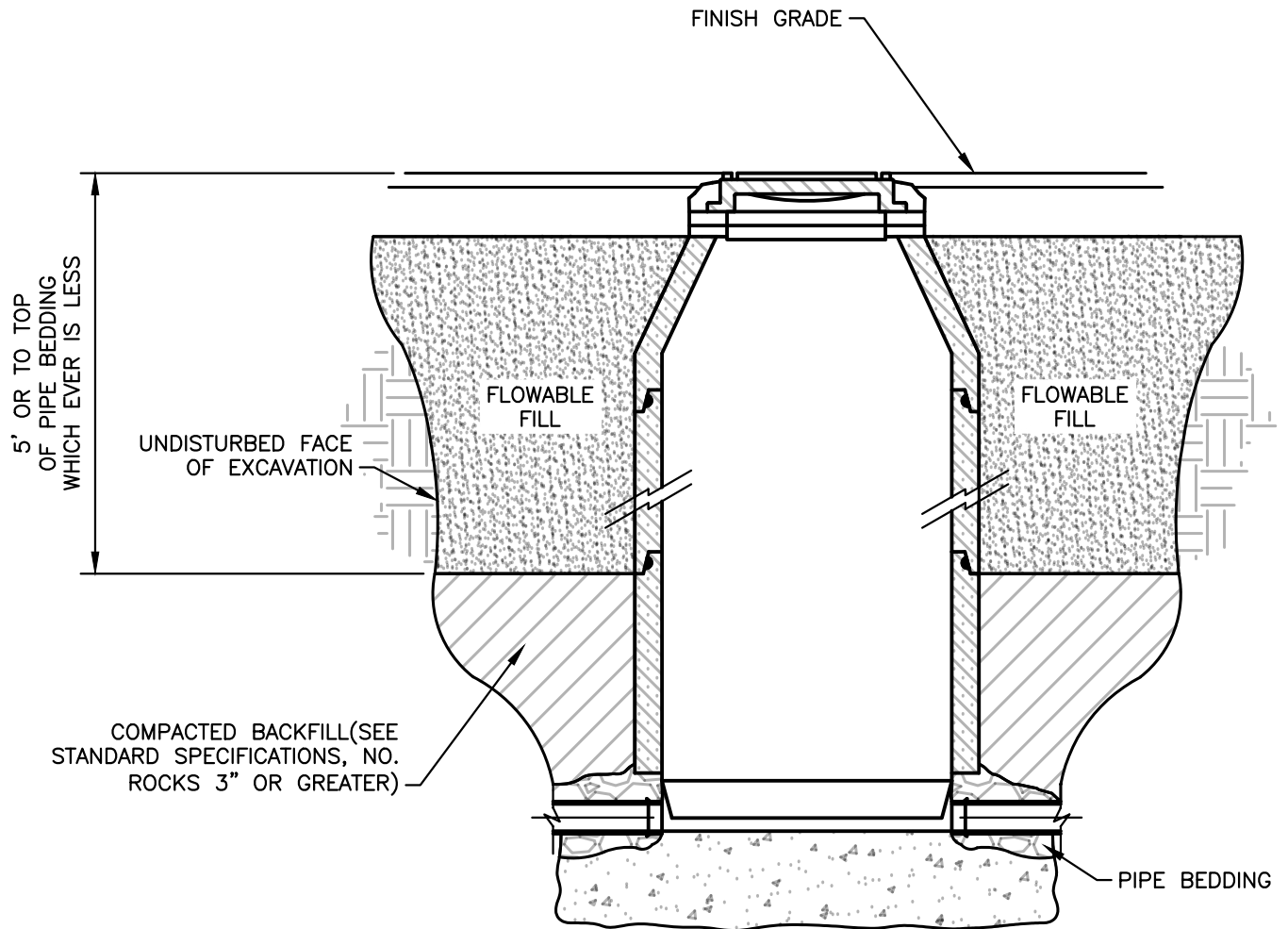
TOP OF MANHOLE
ELEV. VARIES



NOTES:


1. INTERIOR OF MANHOLE TO BE COATED WITH 1/2" THICK LAFARGE SEWER COAT.
2. SEE DETAIL WW10 FOR BACKFILL REQUIREMENTS.
3. DROP SHOULD NOT EXCEED MORE THAN 8 FEET.
4. BOTTOM DISCHARGE BEND SHOULD BE INSTALLED IN THE DIRECTION OF FLOW.

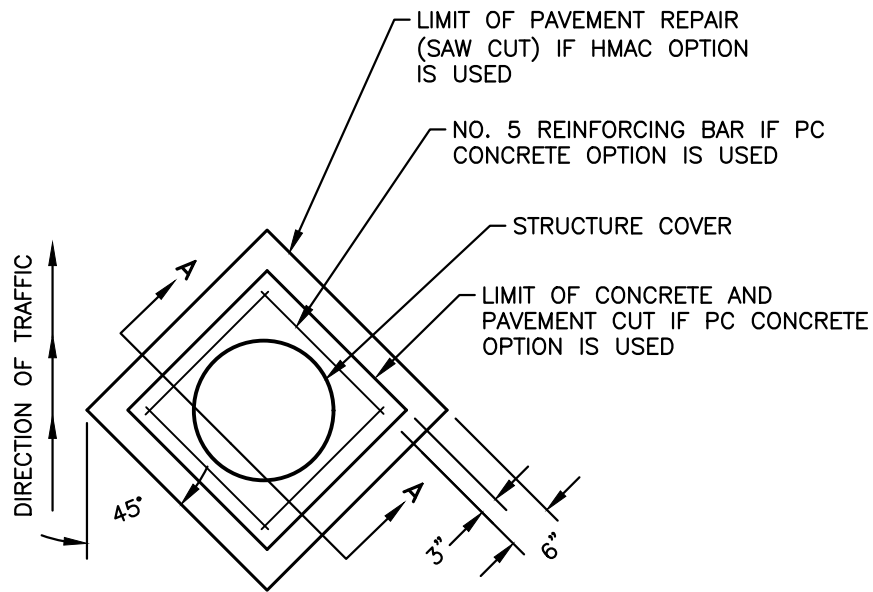
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|---|---|--|---------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>CONNECTION TO EXISTING MANHOLE WITH INLET DROP</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW09</p> |



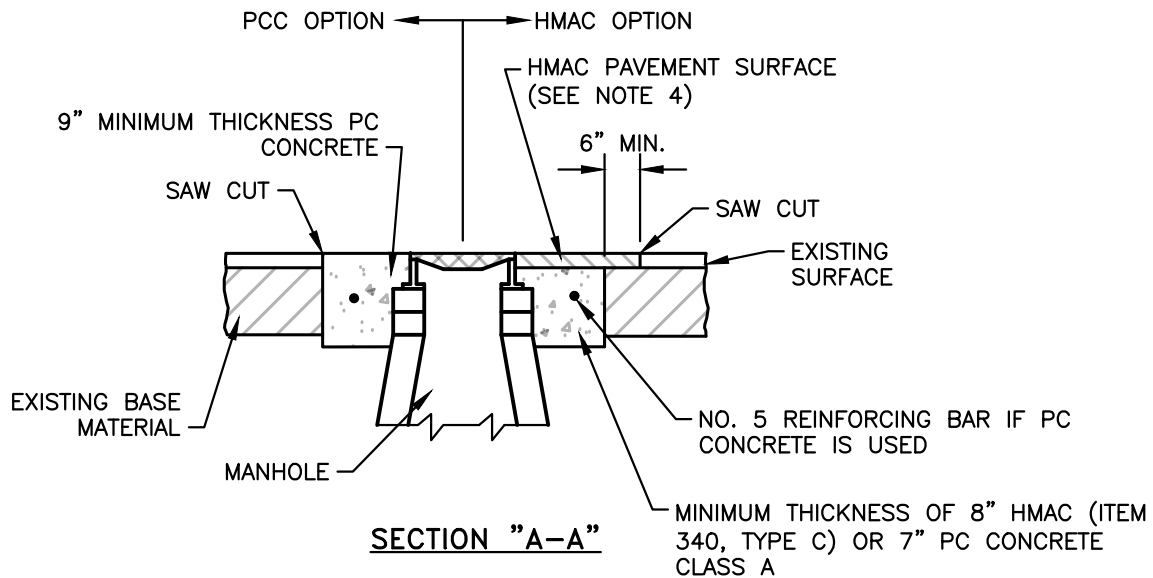
NOTES:

1. ALL MANHOLES LOCATED IN THE ROADWAY SHALL BE INSTALLED FLUSH TO MATCH ROAD SURFACE. MANHOLES LOCATED OUTSIDE OF PAVEMENT SHALL BE 12 INCHES ABOVE GRADE.
2. SUBGRADE AND BASE MATERIALS SHALL BE COMPACTED TO 95% AND 100% DENSITIES, RESPECTIVELY, COMPACTION SHALL BE BY MECHANICAL TAMPING TO THE DENSITIES SPECIFIED.

| | | | |
|---|---|--|---------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>MANHOLE BACKFILL REQUIREMENTS</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW10</p> |



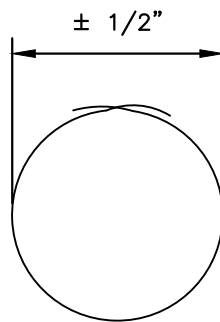
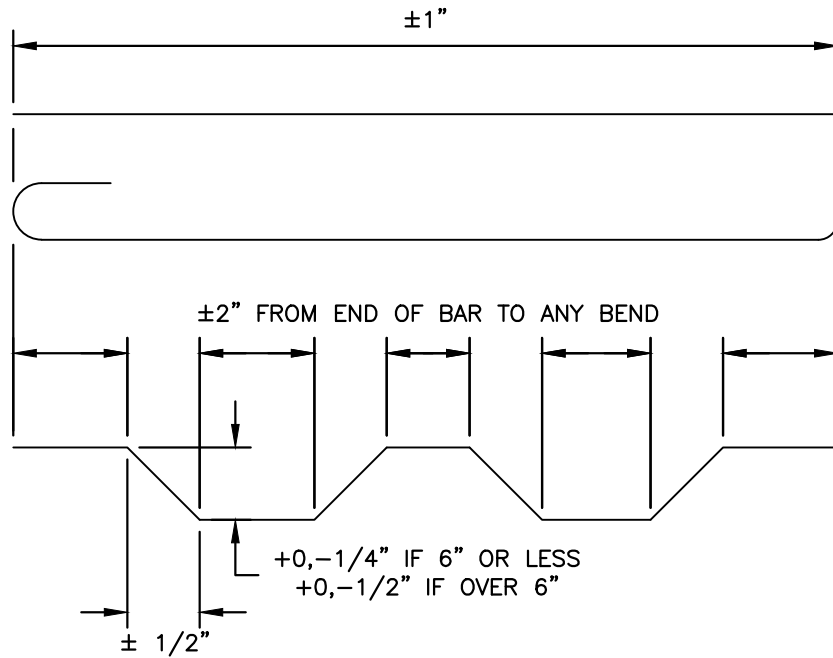
PLAN



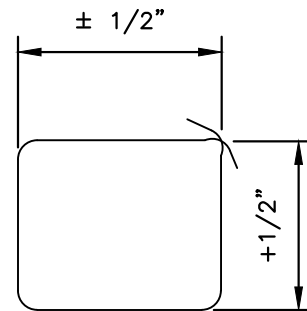
NOTES:

1. IF PC CONCRETE IS USED AROUND THE MANHOLE, THE CONCRETE SHALL BE REINFORCED WITH NO. 5 BARS AS SHOWN. THE CONCRETE SHALL EXTEND TO EDGE OF SAW CUT PAVEMENT EDGE.
2. REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION;
 - A. MIN. 2" HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
 - B. MIN. 3" HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS.

| | | | |
|---|--|---|------------------------|
|  | TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS | CASTING ADJUSTMENT | |
| | ADOPTED: 07/01/2025 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. | DETAIL NO. WW11 |



SPIRAL OR
CIRCULAR TIE



STIRRUP OR TIE

NOTE:

FABRICATING TOLERANCES FOR BARS, FROM PLAN CENTERLINE DIMENSIONS SHALL NOT BE GREATER THEN SHOWN.



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

ADOPTED:

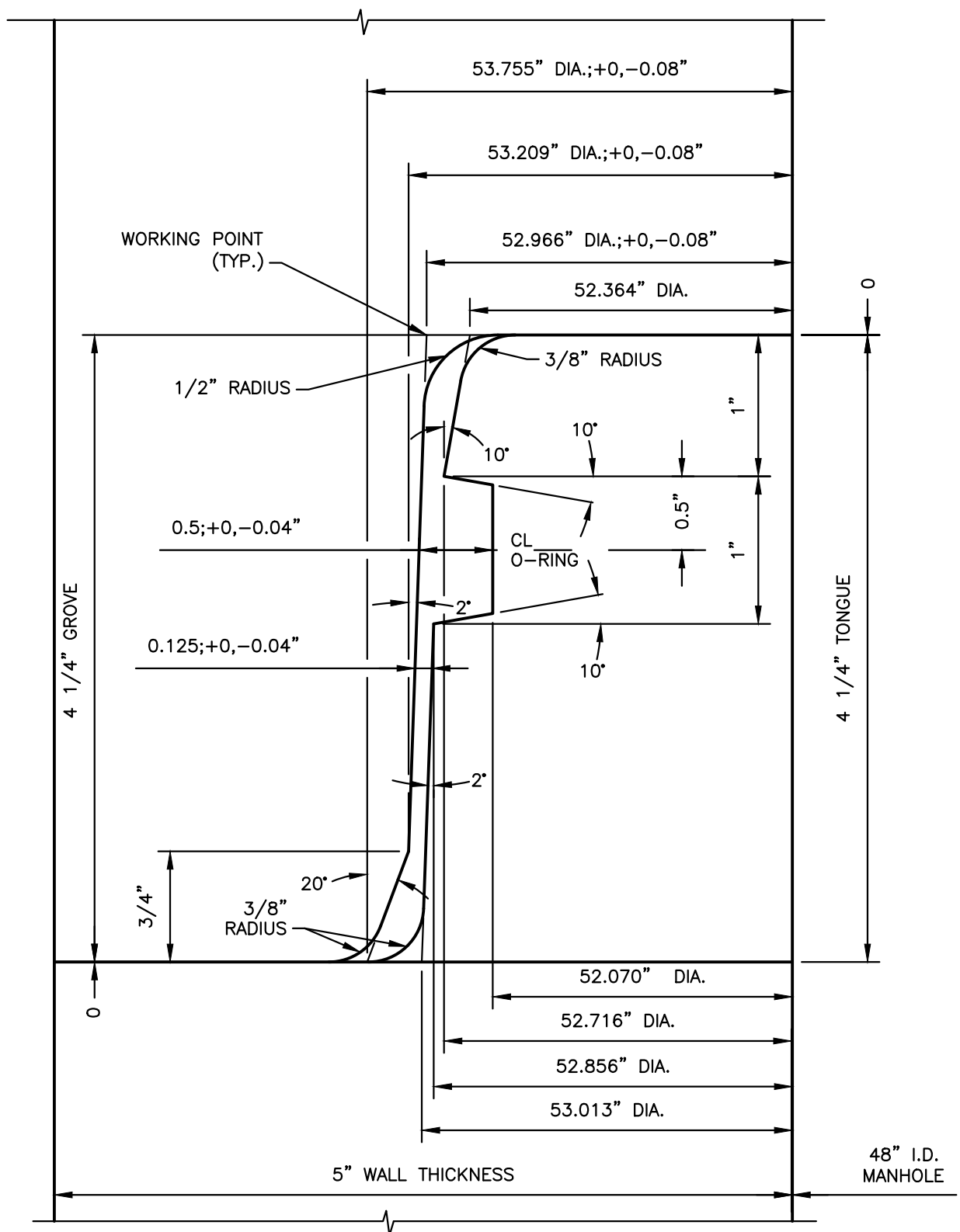
07/01/2025

REINFORCING STEEL
TOLERANCES

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

DETAIL NO.

WW12



NOTES:

1. O-RING DIMENSION 25/32" DIA., 1013 cc VOLUME.



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

ADOPTED:

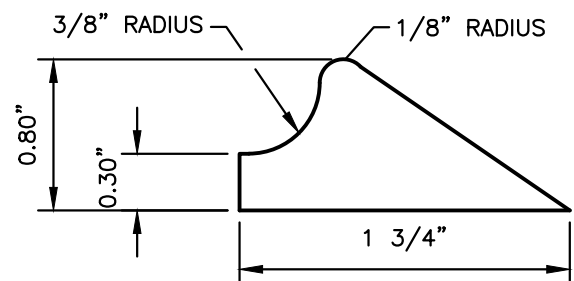
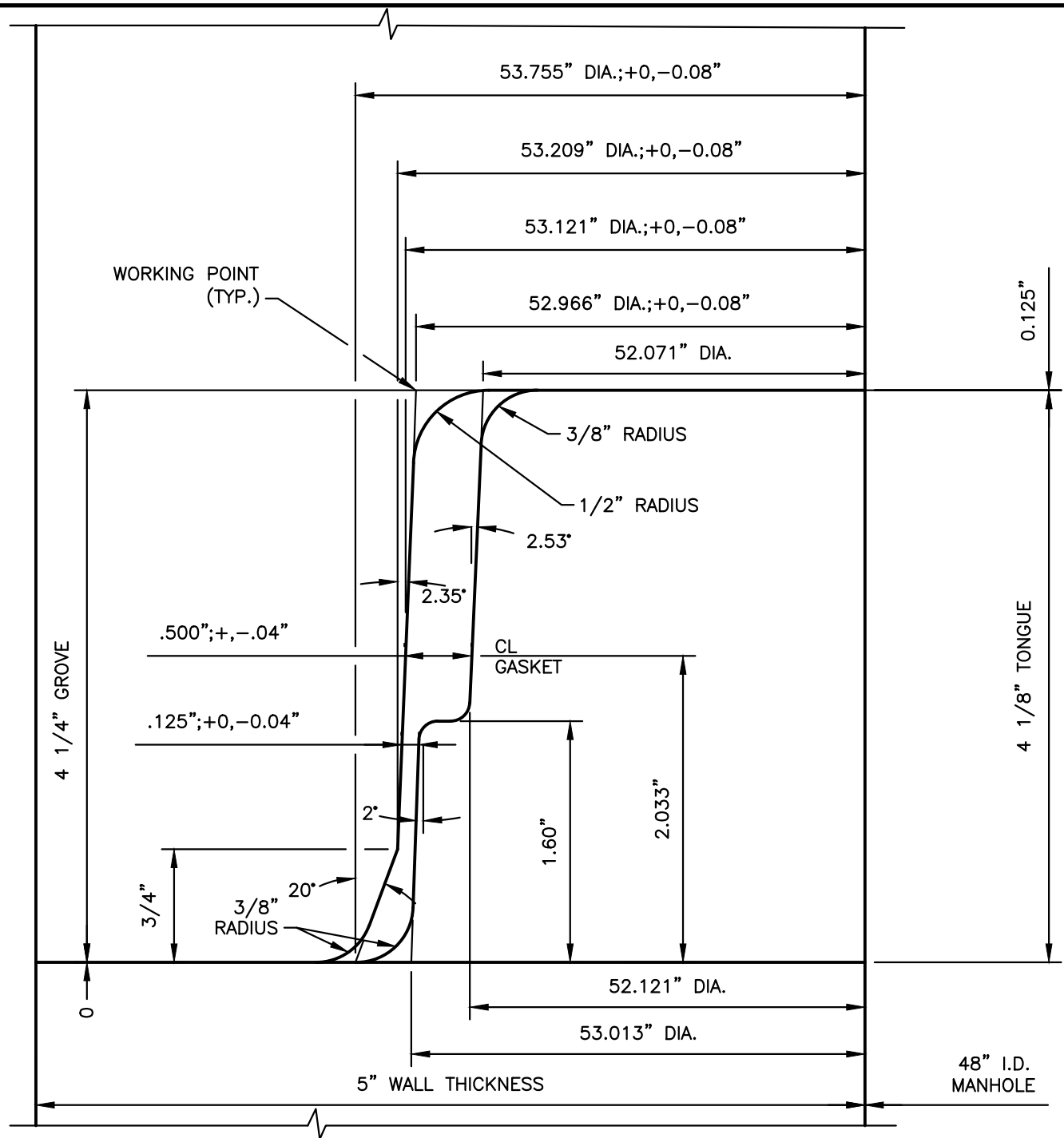
07/01/2025

O-RING JOINT DETAIL PRECAST
MANHOLE SECTION

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

DETAIL NO.


WW13

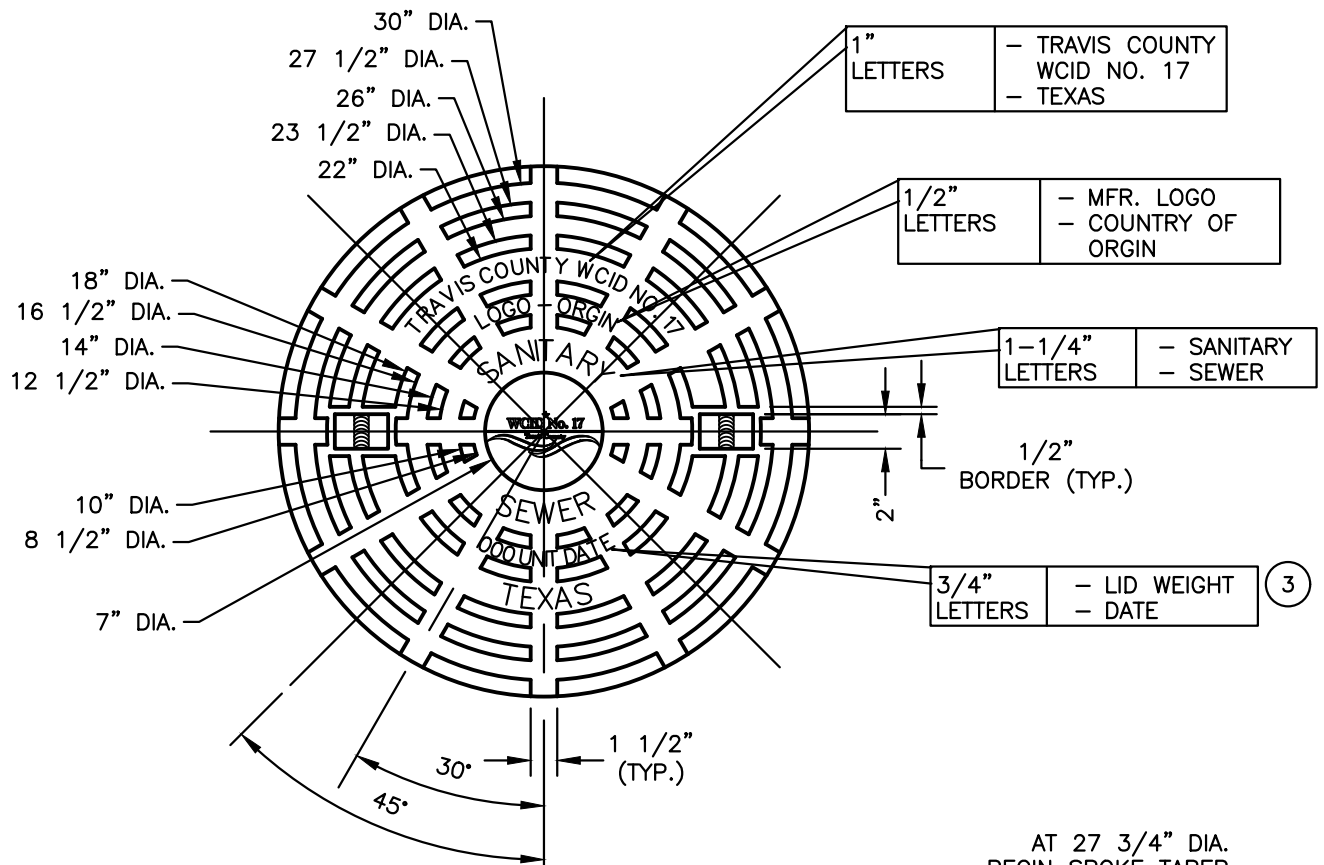


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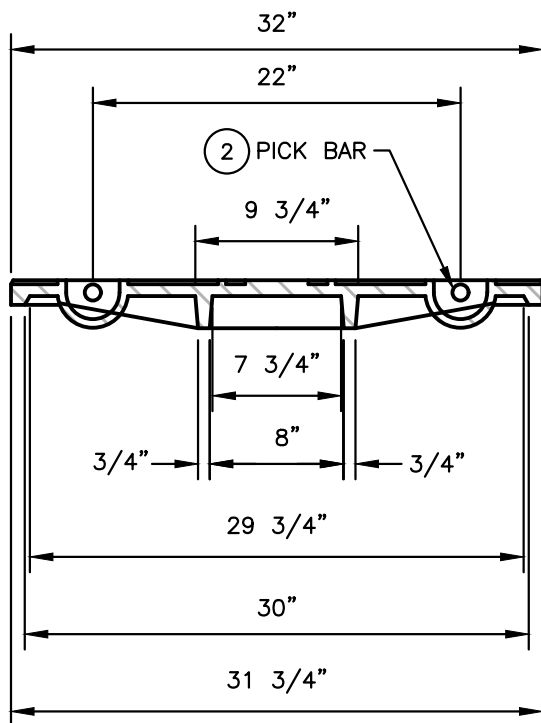
GASKET STRETCH; MIN. 10, MAX. 15%.

WEDGE TYPE GASKET TYPICAL DIMENSIONS

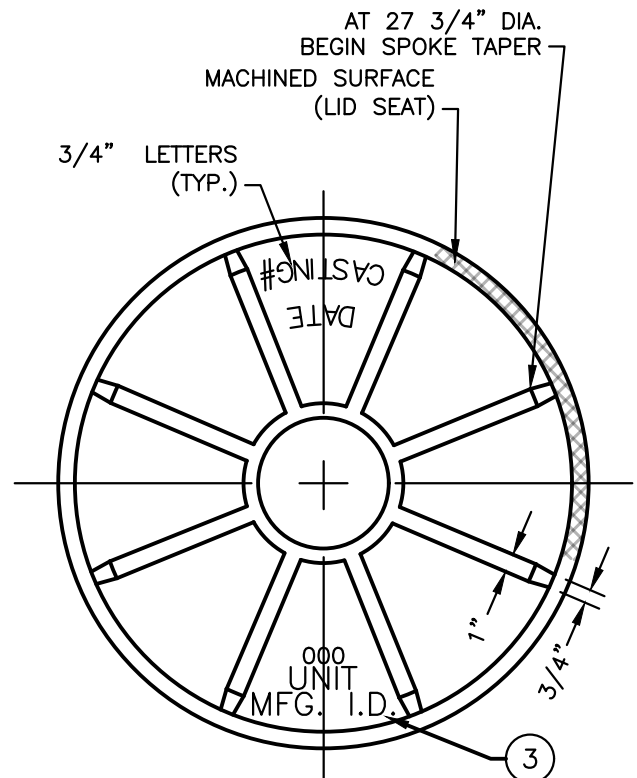
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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>WEDGE - SEAL JOINT DETAIL PRECAST MANHOLE SECTION</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW14</p> |



LID PLAN VIEW




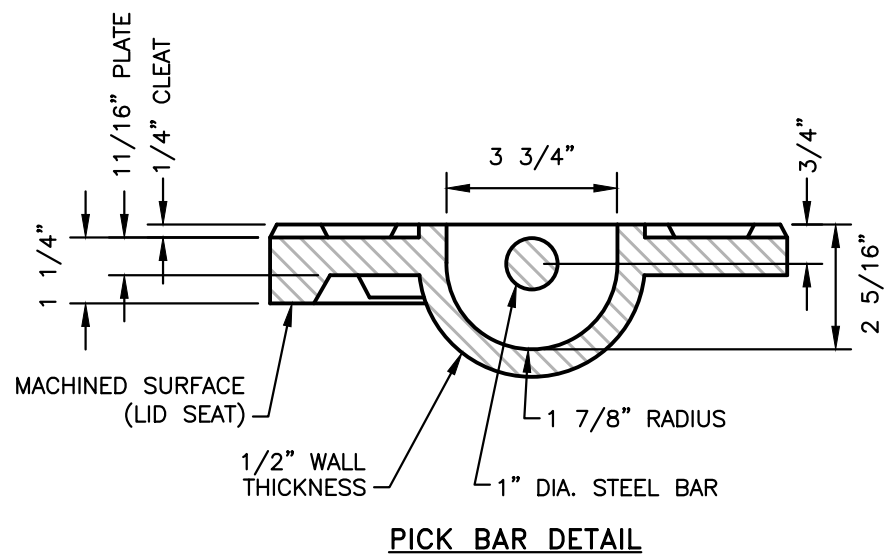
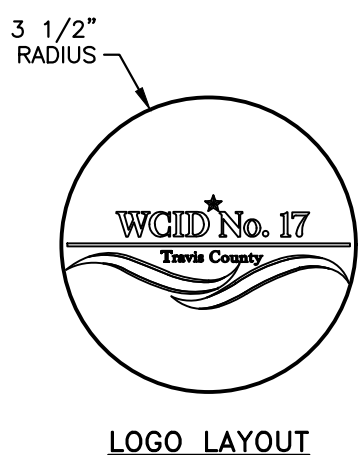
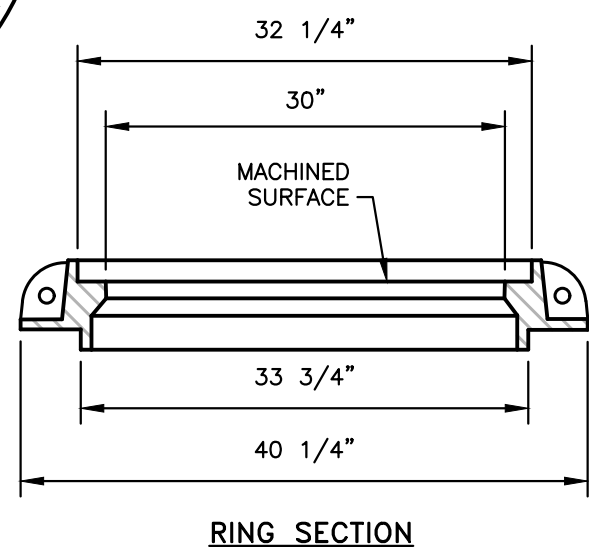
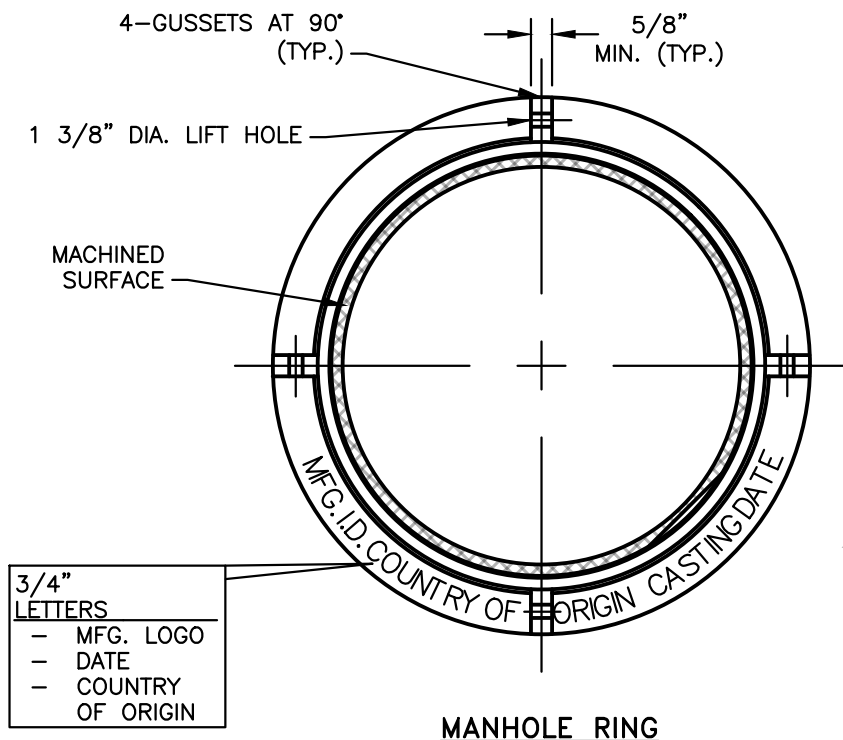
LID SECTION VIEW




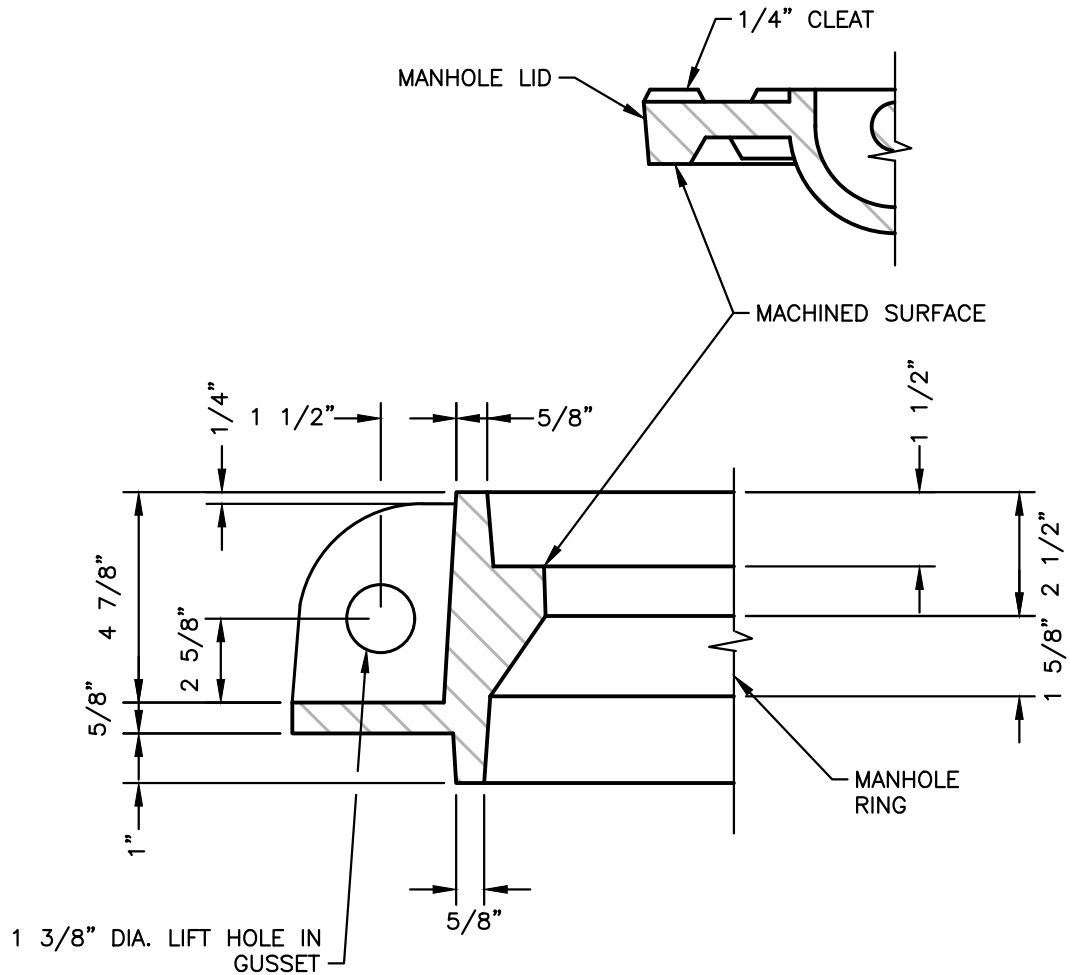
(RELIEVE SPOKE ENDS 1/8" BEYOND
LID FOR SEAT MACHINING PURPOSES)

LID BOTTOM VIEW

| | | | |
|---|---|--|----------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>SANITARY SEWER MANHOLE RING AND 32" COVER (1 OF 3)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW15</p> |




| | | | |
|---|--|--|-------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17</p> <p>STANDARD DETAILS</p> | <p>SANITARY SEWER MANHOLE RING AND 32" COVER</p> <p>(2 OF 3)</p> | |
| | <p>ADOPTED:</p> <p>07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO.</p> <p>WW15</p> |

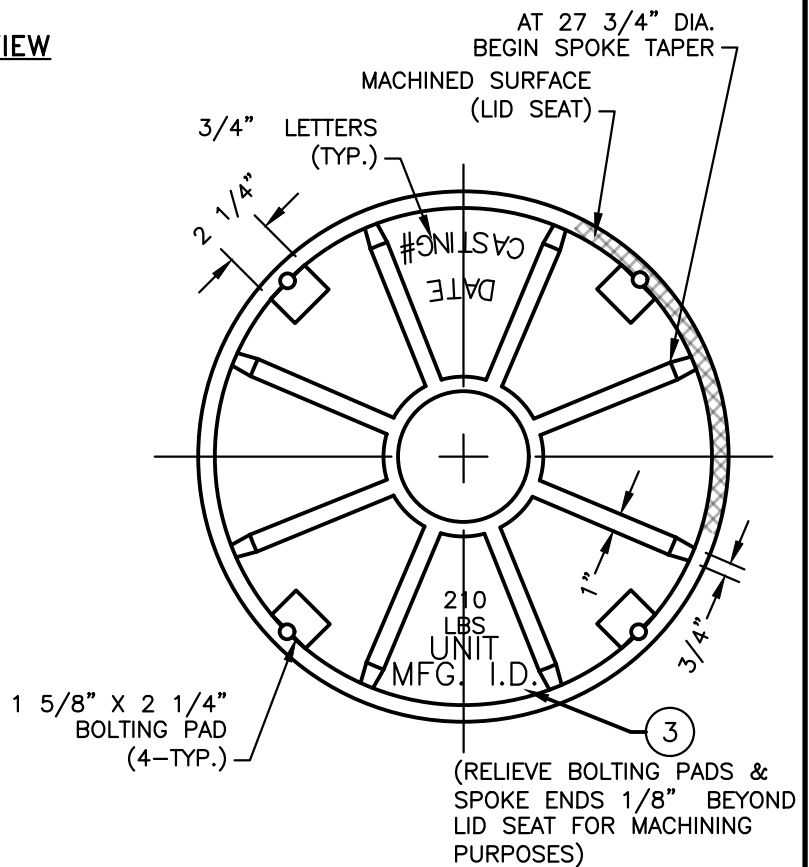
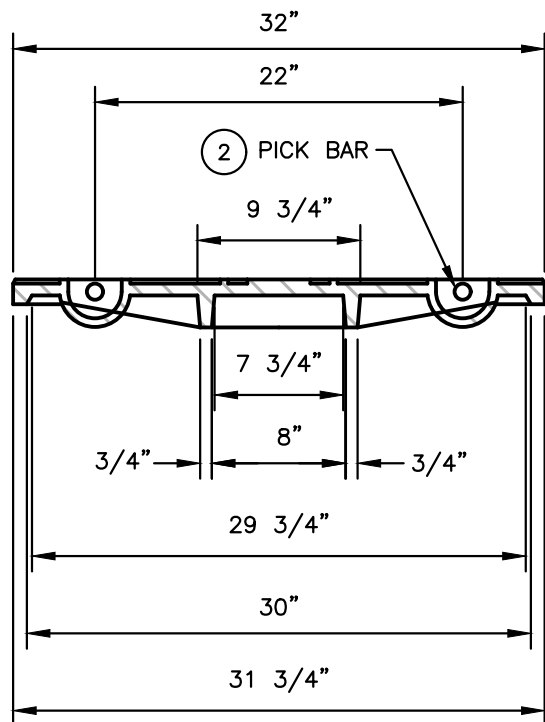
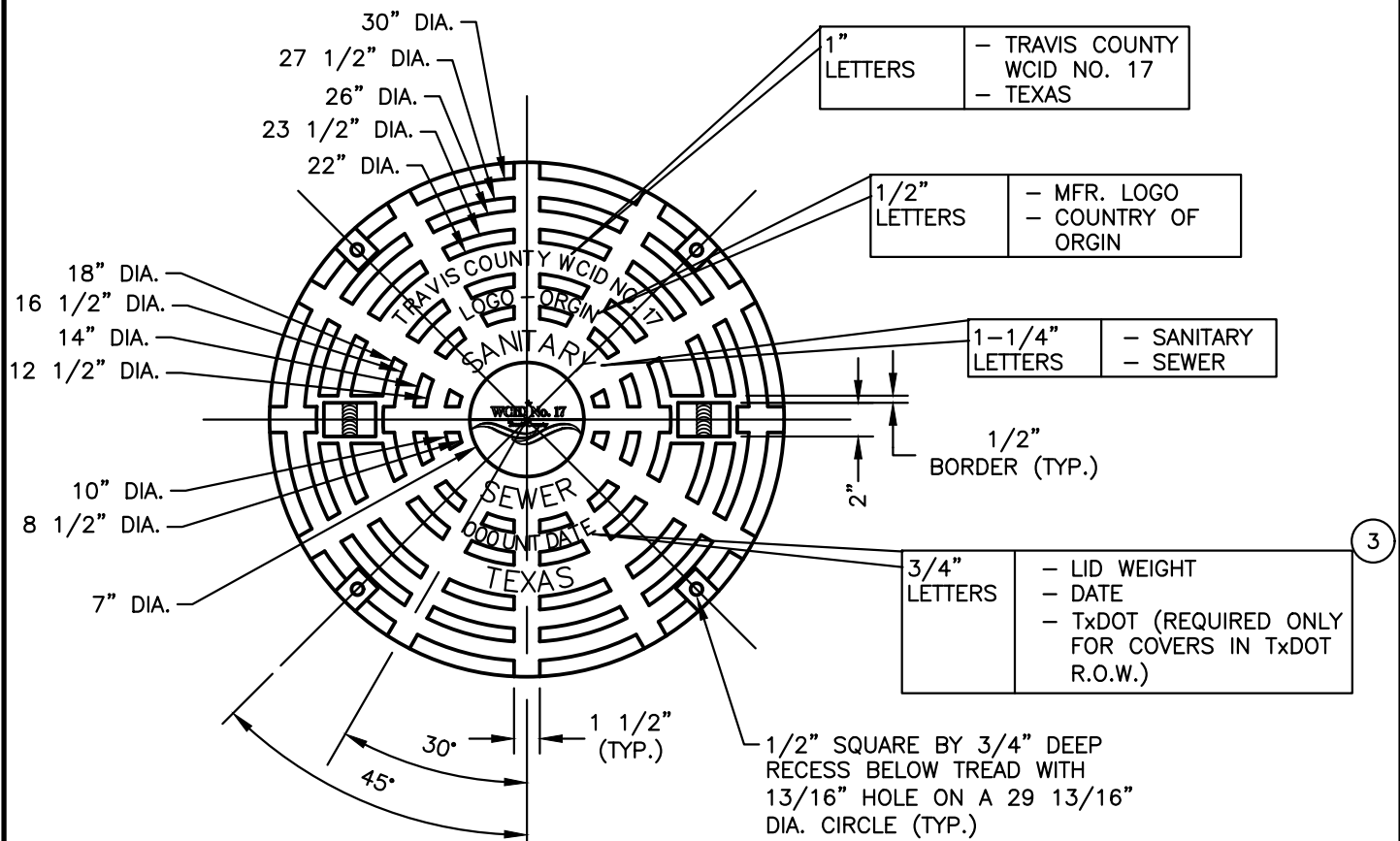



LIFT HOLE DETAIL

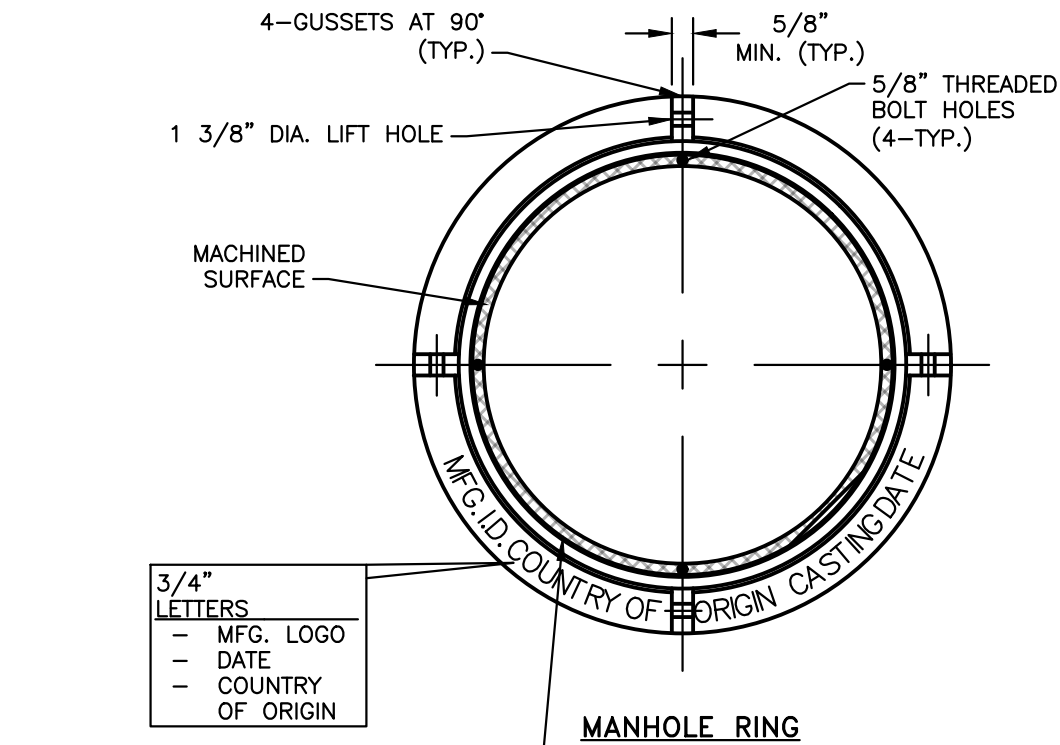
NOTES:

1. ALL CORNERS AND EDGES SHALL HAVE A 1/16" MINIMUM RADIUS.
2. LIDS SHALL BE CAST WITH TWO 1" DIA. STEEL PICK BARS.
3. LID WEIGHTS SHALL BE 210 LBS. FOR CAST IRON OR 175 LBS. FOR DUCTILE IRON. WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF LID.
4. MANUFACTURER SHALL PROVIDE INDEPENDENT TESTING LABORATORY REPORT ON 25,000 POUND PROOF LOAD TEST CONDUCTED ACCORDING TO AASHTO M-306.
5. FILLETS SHALL BE 1/4" RADIUS UNLESS OTHERWISE SPECIFIED.
6. MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.

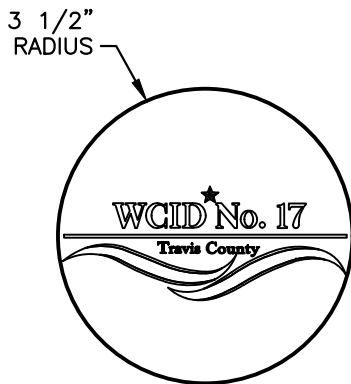
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|---|--|---|------------------------|
|  | TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS | SANITARY SEWER MANHOLE RING AND 32" COVER (3 OF 3) | |
| | ADOPTED: 07/01/2025 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. | DETAIL NO. WW15 |



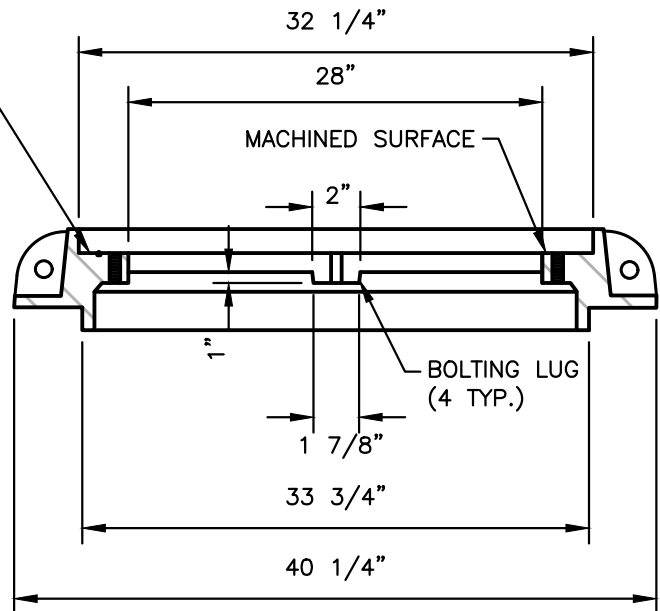
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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>WATERTIGHT MANHOLE RING AND 32" COVER (1 OF 3)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW16</p> |




5/16" O-RING IN A 1/4" GROOVE ON A 31 3/8" CIRCLE



LOGO LAYOUT




RING SECTION

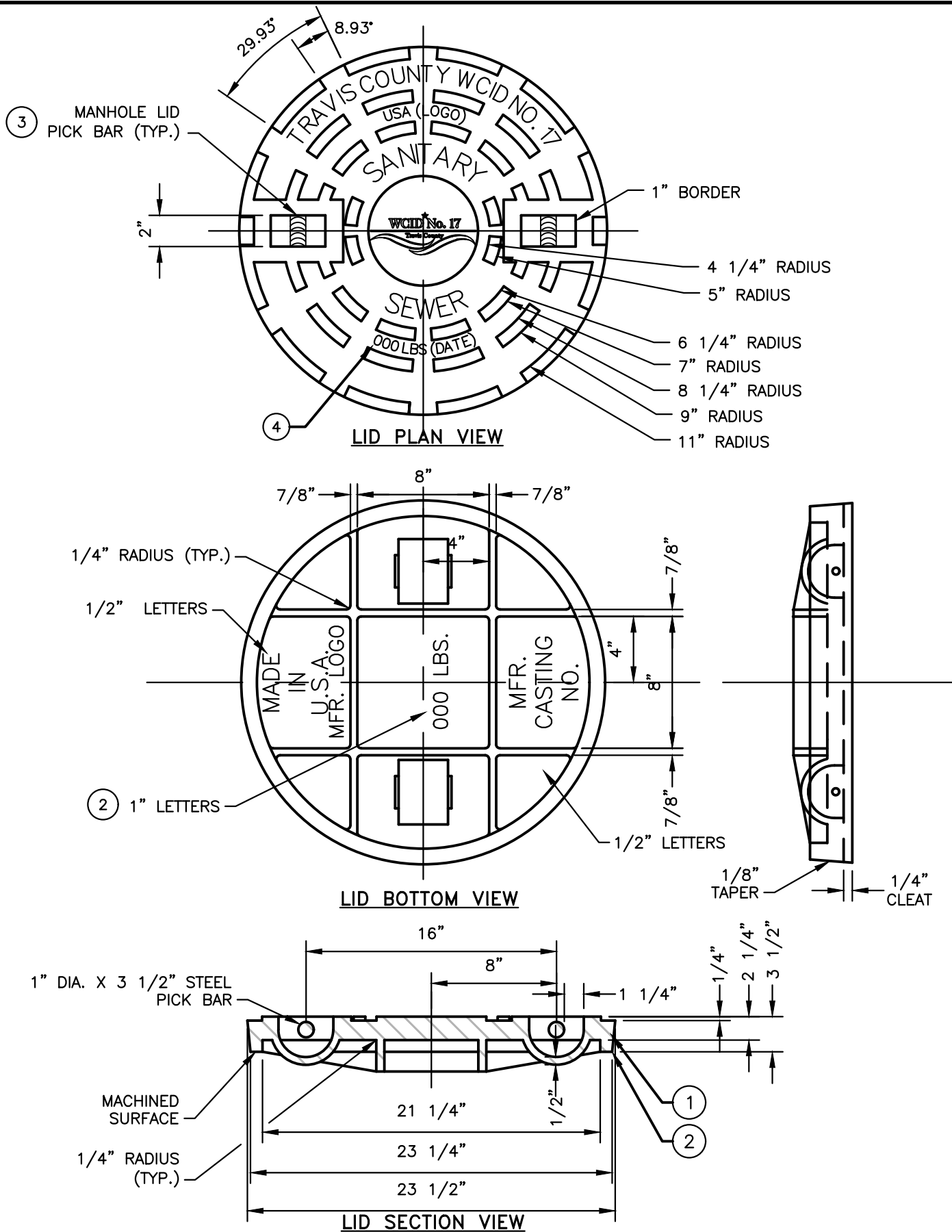
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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>WATERTIGHT MANHOLE RING AND 32" COVER (2 OF 3)</p> | |
| | <p>ADOPTED:</p> <p>07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO.</p> <p>WW16</p> |




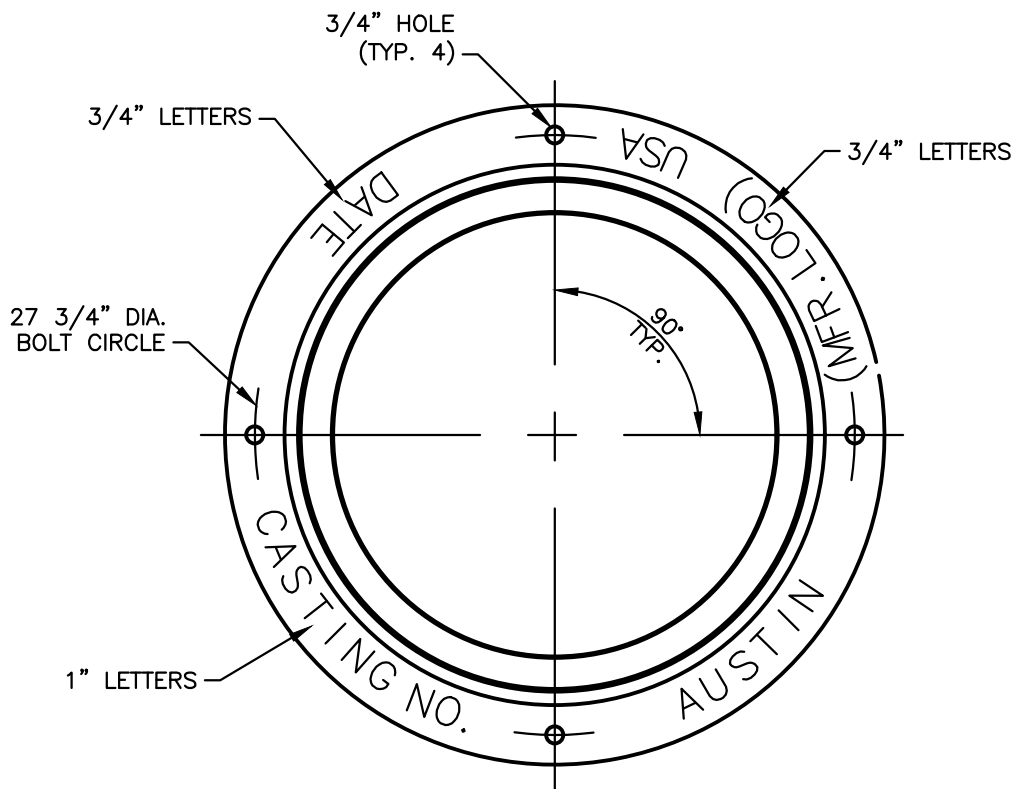
1. ALL CORNERS AND EDGES SHALL HAVE A 1/16" MINIMUM RADIUS.
2. LIDS SHALL BE CAST WITH TWO 1" DIA. STEEL PICK BARS.
3. LID WEIGHTS SHALL BE 210 LBS. FOR CAST IRON OR 175 LBS. FOR DUCTILE IRON. WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF LID.
4. MANUFACTURER SHALL PROVIDE INDEPENDENT TESTING LABORATORY REPORT ON 25,000 POUND PROOF LOAD TEST CONDUCTED ACCORDING TO AASHTO M-306. (40,000 POUND FOR TxDOT RIGHT-OF-WAY).
5. FILLETS SHALL BE 1/4" RADIUS UNLESS OTHERWISE SPECIFIED.
6. MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
7. BOLTS SHALL BE 5/8" X 1 3/7" X 11 N.C. STAINLESS STEEL HEX HEAD (TYPE 316).



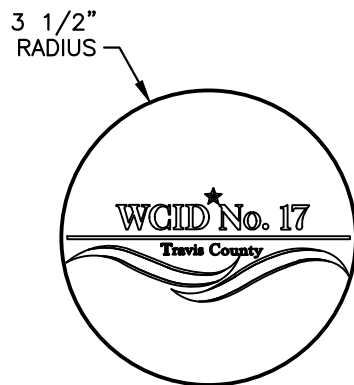
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|---|--|---|------------------------|
|  | TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS | WATERTIGHT MANHOLE RING AND 32" COVER (3 OF 3) | |
| | ADOPTED: 07/01/2025 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. | DETAIL NO. WW16 |



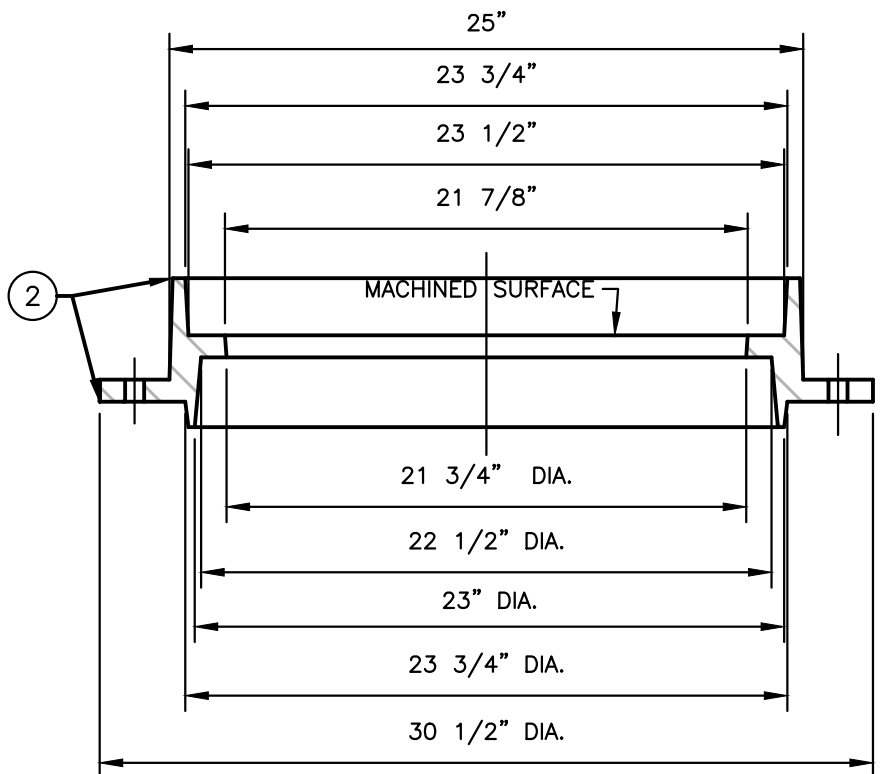
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|---|--|---|------------------------|
|  | TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS | SANITARY SEWER MANHOLE RING AND 24" COVER (1 OF 3) | |
| | ADOPTED: 07/01/2025 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. | DETAIL NO. WW17 |




MANHOLE RING

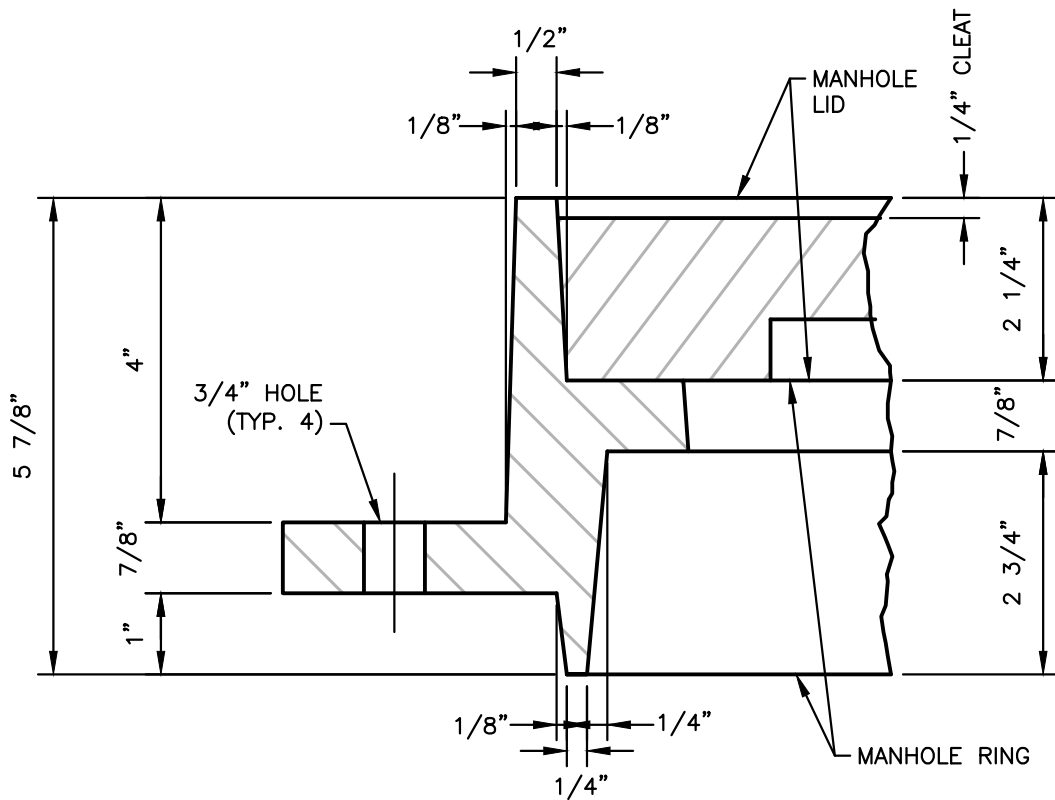


LOGO LAYOUT

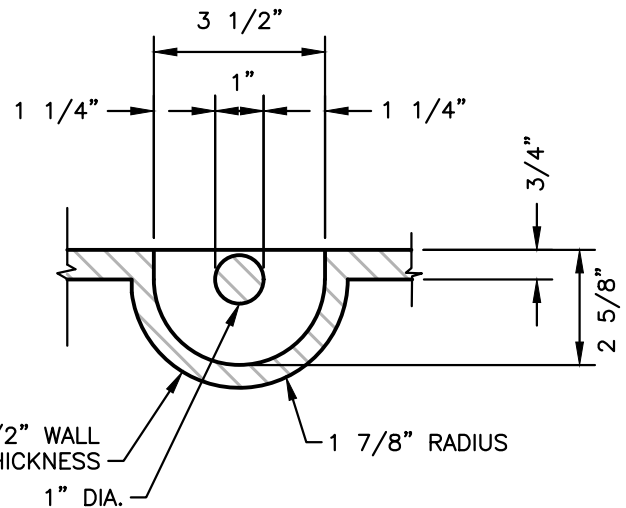


RING SECTION

| | | | |
|---|---|--|-------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>SANITARY SEWER MANHOLE RING AND 24" COVER (2 OF 3)</p> | |
| | <p>ADOPTED:</p> <p>07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO.</p> <p>WW17</p> |



BOLT HOLE DETAIL



PICK BAR DETAIL

NOTES:

- ① 3/4" x 1/4" CLEAT PER CITY SPECIFICATION, OR 1" x 1/4" CLEAT IN STATE MAINTAINED R.O.W.
- ② BREAK ALL SHARP CORNERS 0.06" X 45° MIN.
- ③ LID IS CAST WITH TWO 1" X 3 1/2" STEEL PICK BARS.
- ④ LID WEIGHT 150 OR 170 LBS. CAST TOP & BOTTOM.

| TYP. WEIGHT | LID | RING | SET |
|-------------|-------------|---------|-------------|
| CITY/STATE | 150/175 LBS | 150 LBS | 300/325 LBS |



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

SANITARY SEWER MANHOLE
RING AND 24" COVER
(3 OF 3)

ADOPTED:

07/01/2025

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

DETAIL NO.

WW17

1 1/2" SQ. BOLT RECESS 1/2"
DEEP WITH 3/4" HOLE, 4 TYP.

③

MANHOLE LID PICK
BAR (TYP.)

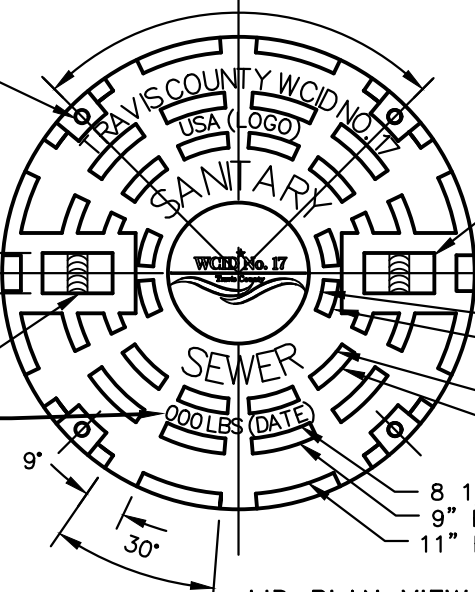
④

2"

9"

30°

90°



1" BORDER

4 1/4" RADIUS

5" RADIUS

6 1/4" RADIUS

7" RADIUS

8 1/4" RADIUS

9" RADIUS

11" RADIUS

LID PLAN VIEW

3/4" DIA. HOLE, TYP.

1/4" RADIUS (TYP.)

1/2" LETTERS

④ 1" LETTERS

1 5/8" X 2 1/4"
BOLTING LUG

7/8"

8"

7/8"

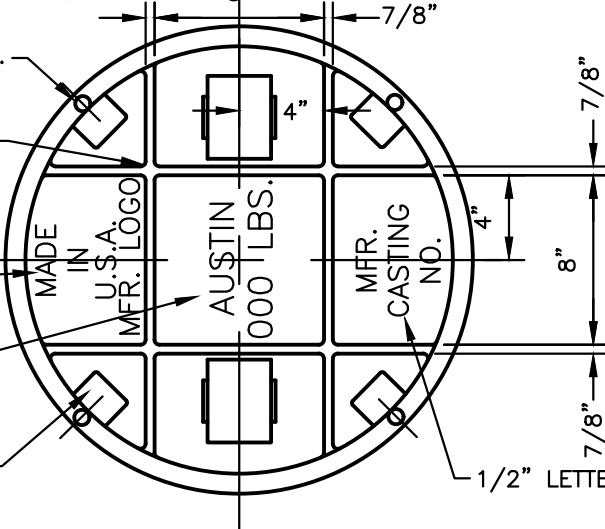
7/8"

4"

8"

7/8"

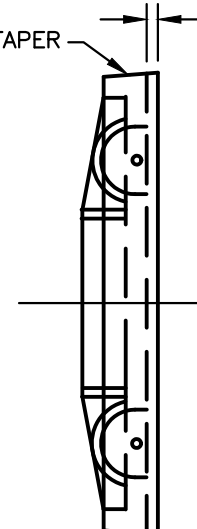
1/2" LETTERS



LID BOTTOM VIEW

1/8" TAPER

1/4" CLEAT



1" DIA. X 3 1/2"
STEEL PICK BAR

MACHINED
SURFACE

1/4" RADIUS (TYP.)

16"

8"

8"

1 1/4"

1 1/4"

2 1/4"

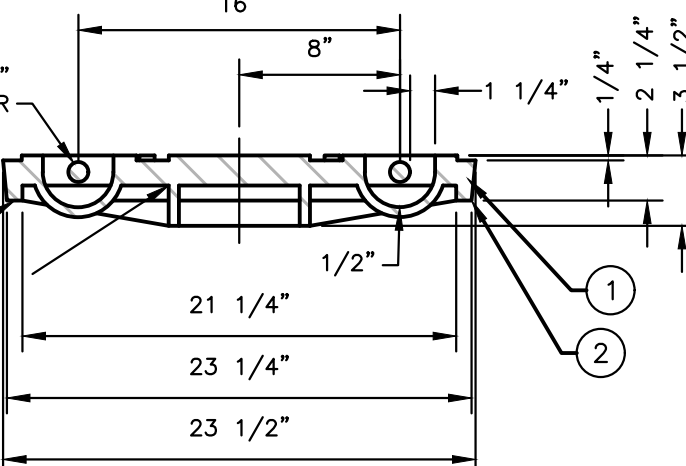
3 1/2"

1 1/2"


21 1/4"

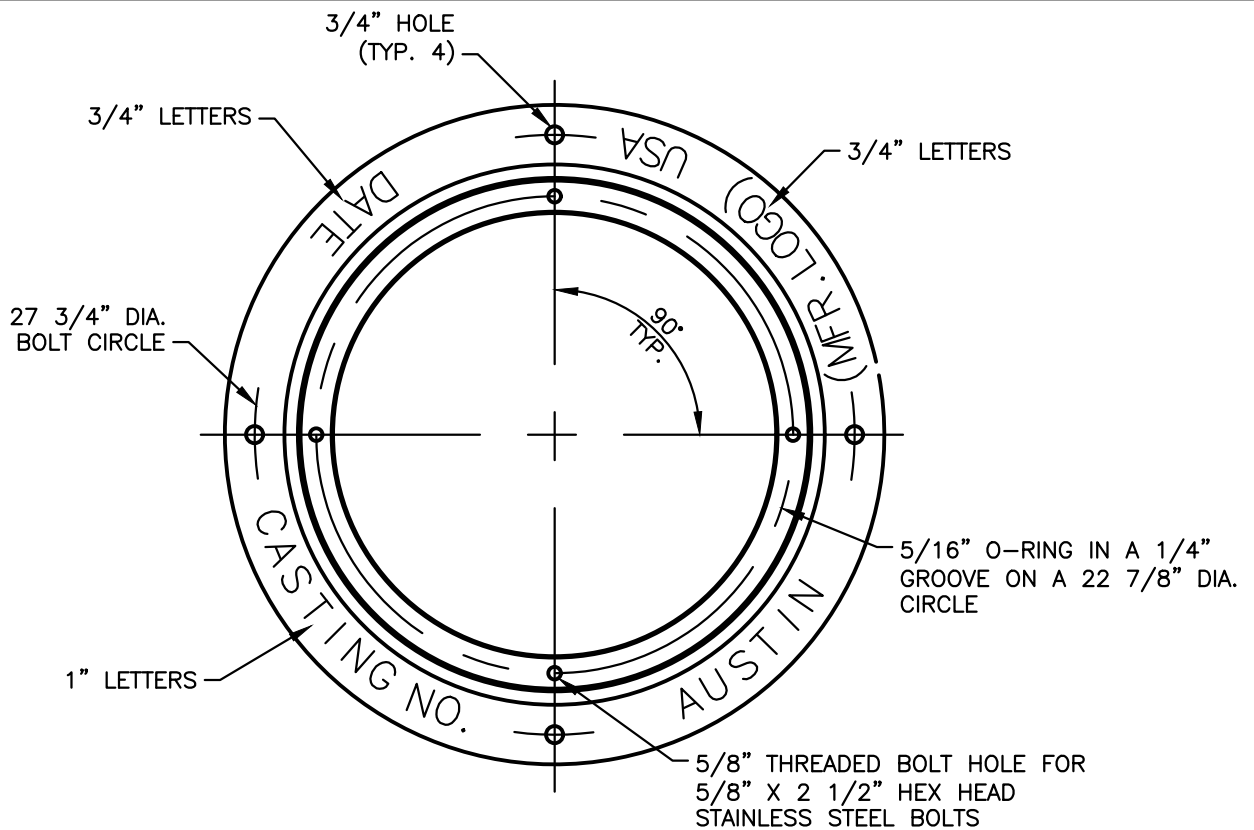
23 1/4"

23 1/2"

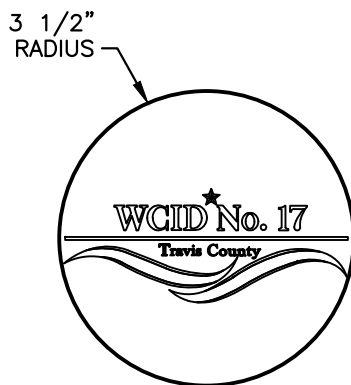


LID SECTION VIEW

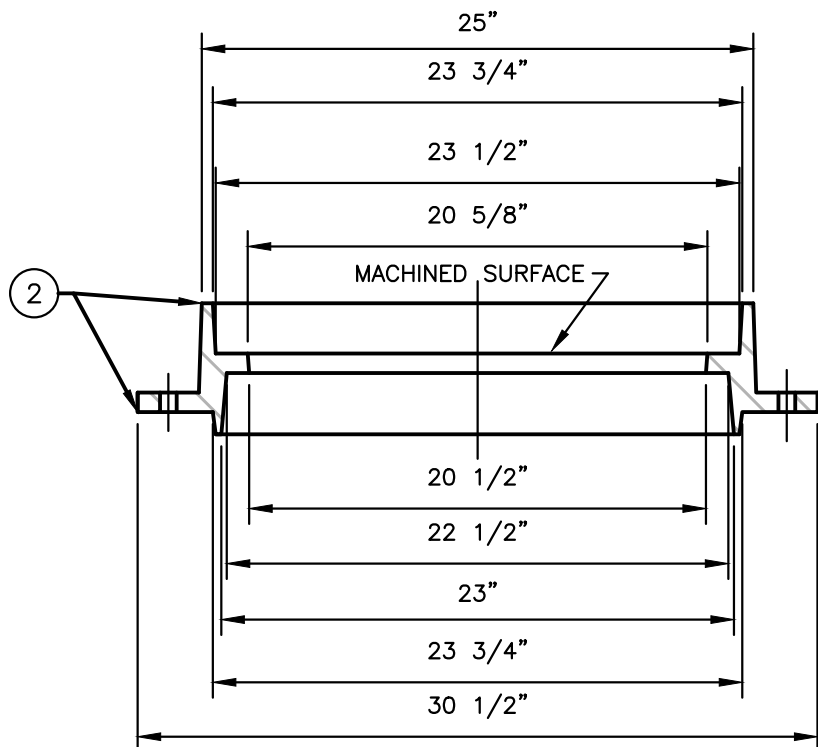
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|---|---|--|----------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>BOLTED SANITARY SEWER MANHOLE RING AND 24" COVER (1 OF 3)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW18</p> |




MANHOLE RING



LOGO LAYOUT



RING SECTION

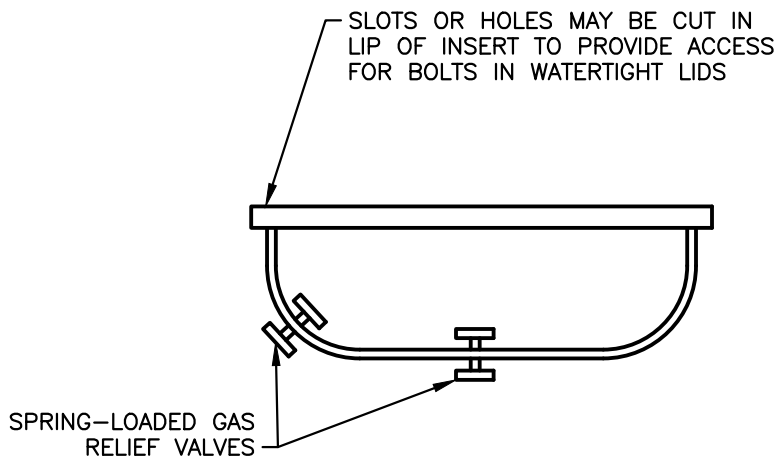
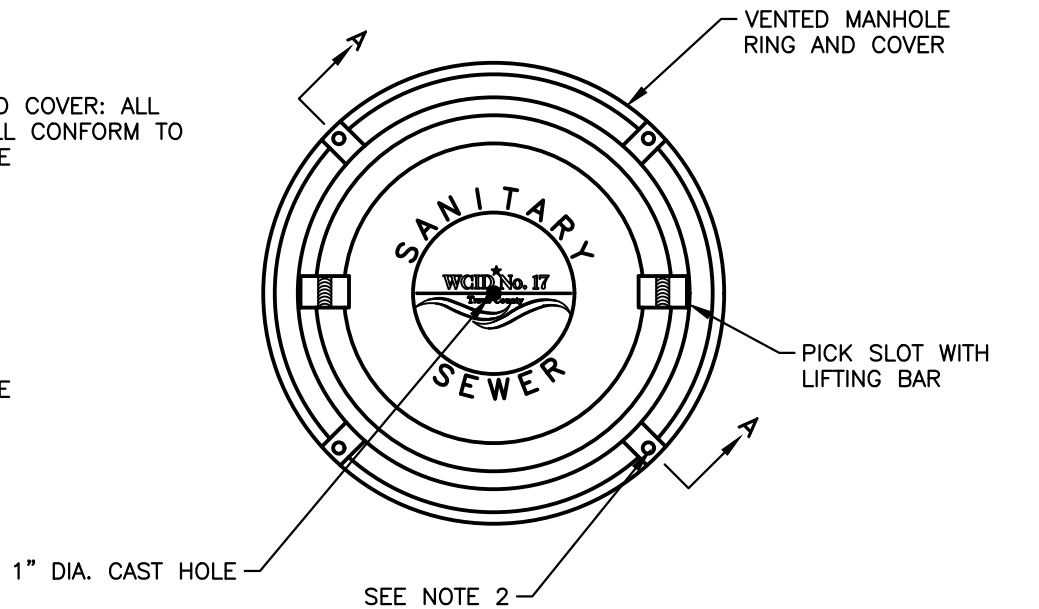
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|---|---|--|----------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>BOLTED SANITARY SEWER MANHOLE RING AND 24" COVER (2 OF 3)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW18</p> |

NOTES:

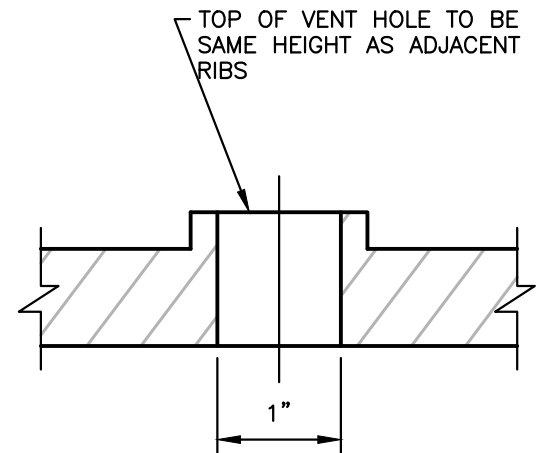
STANDARD MANHOLE RING AND COVER: ALL APPLICABLE DIMENSIONS SHALL CONFORM TO THE DIMENSIONS SHOWN HERE

NOTES:

THE BEARING SURFACES AND O-GROOVE SHALL BE MACHINE GROUND




**WATERTIGHT
MANHOLE INSERT
DETAIL**

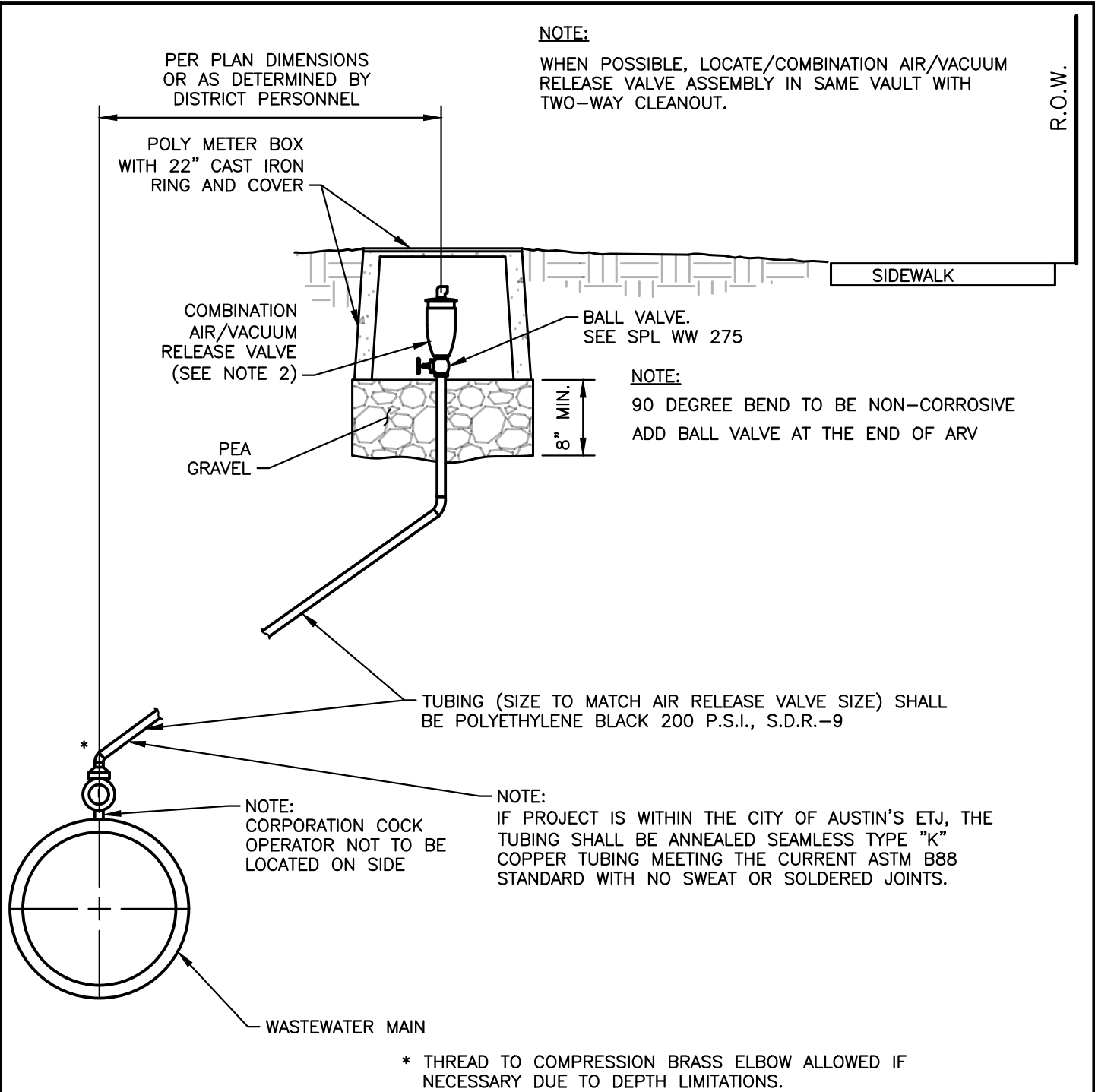


**VENTED HOLE
DETAIL SECTION
A-A**

NOTE:


1. MANHOLE COVER INSERTS SHALL BE FROM AN APPROVED MANUFACTURER NOTED ON WCID NO. 17'S STANDARD PARTS LIST, AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE NECESSARY FIELD MEASUREMENTS FOR THE MANUFACTURER PRIOR TO PRODUCTION.
2. BOLTS SHALL BE 5/8" X 1 3/7" X 11 N.C. STAINLESS STEEL HEX HEAD (TYPE 316).

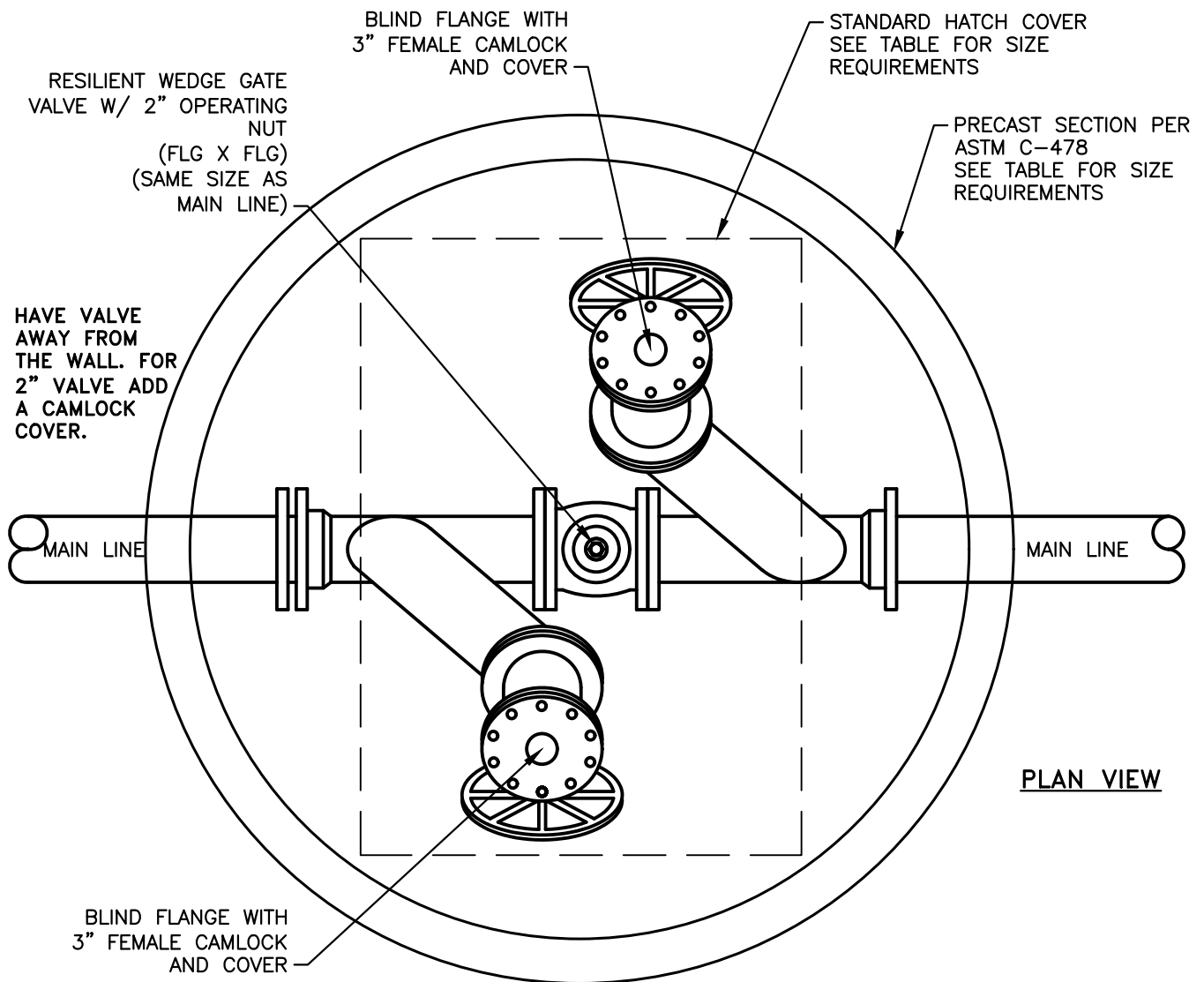
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|---|---|--|----------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>VENTED MANHOLE RING AND COVER DETAIL</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW19</p> |



NOTES:

1. AUTOMATIC COMBINATION AIR/VACUUM VALVE SHALL BE INSTALLED IN A MANNER WHICH WILL ALLOW REMOVAL OF ASSEMBLY WITHOUT REMOVAL OF THE POLY METER BOX.
2. ALL ARVS SHALL BE A MINIMUM SIZE OF 2".
3. ALL ARVS SHALL BE FROM A WCID NO. 17 APPROVED MANUFACTURER AS PROVIDED ON THE STANDARD PARTS LIST.

| | | | |
|---|---|--|-------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>NON-VENTED COMBINATION AUTOMATIC AIR/VACUUM RELEASE VALVE INSTALLATION (FORCE MAIN)</p> | |
| | <p>ADOPTED:</p> <p>07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO.</p> <p>WW20</p> |




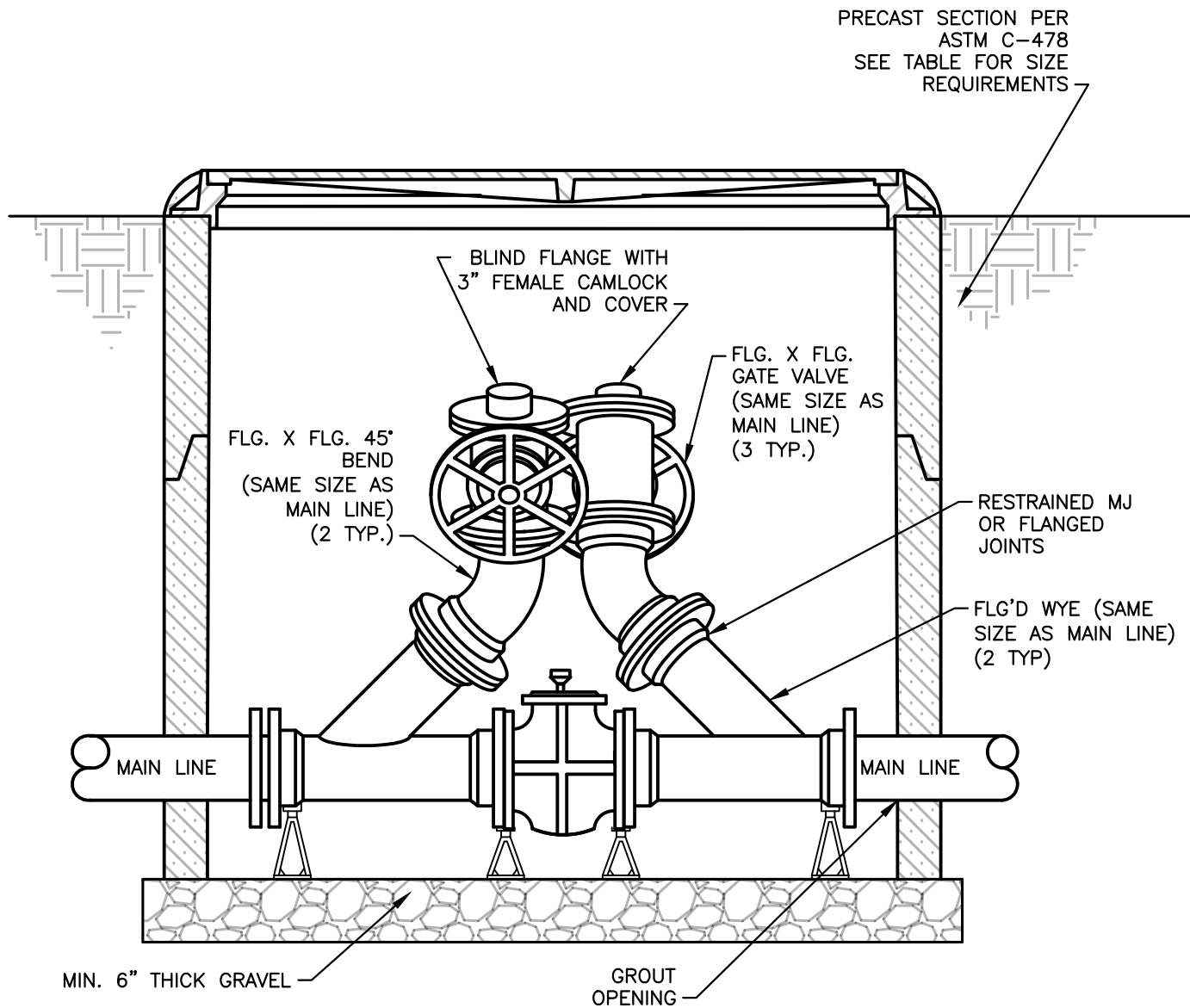
NOTES:

1. ALL CLEAN-OUT VAULTS IN ROADWAY SHALL BE INSTALLED FLUSH TO MATCH ROAD SURFACE. VAULTS LOCATED OUTSIDE OF PAVEMENT SHALL BE 12 INCHES ABOVE GRADE.
2. ALL PIPE SHALL BE DUCTILE IRON A MINIMUM OF 12" PAST MANHOLE OR VAULT.
3. VALVES AND FITTINGS TO BE SAME SIZE AS MAIN LINE.
4. CLEANOUTS SHALL BE SPACED A MAXIMUM 500 FEET APART.

VAULT SIZE REQUIREMENTS

| FORCEMAIN SIZE (IN) | MIN. VAULT I.D. (FT) | MIN. CLEAR HATCH OPENING (FT) |
|---------------------|------------------------|-------------------------------|
| ≤4 | 6 | 3 X 3 |
| 6 | 8 | 4.5 X 4 |
| 8 | 10 | 6 X 5 |
| 12 | 12 | 6 X 5 |
| >12 | VERIFY WITH WCID NO.17 | VERIFY WITH WCID NO.17 |

| | | | |
|---|--|---|---------------------------|
|  | TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS | FORCE MAIN CLEANOUT SECTION (1 OF 2) | |
| | ADOPTED: 07/01/2025 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. | DETAIL NO. WW21 |




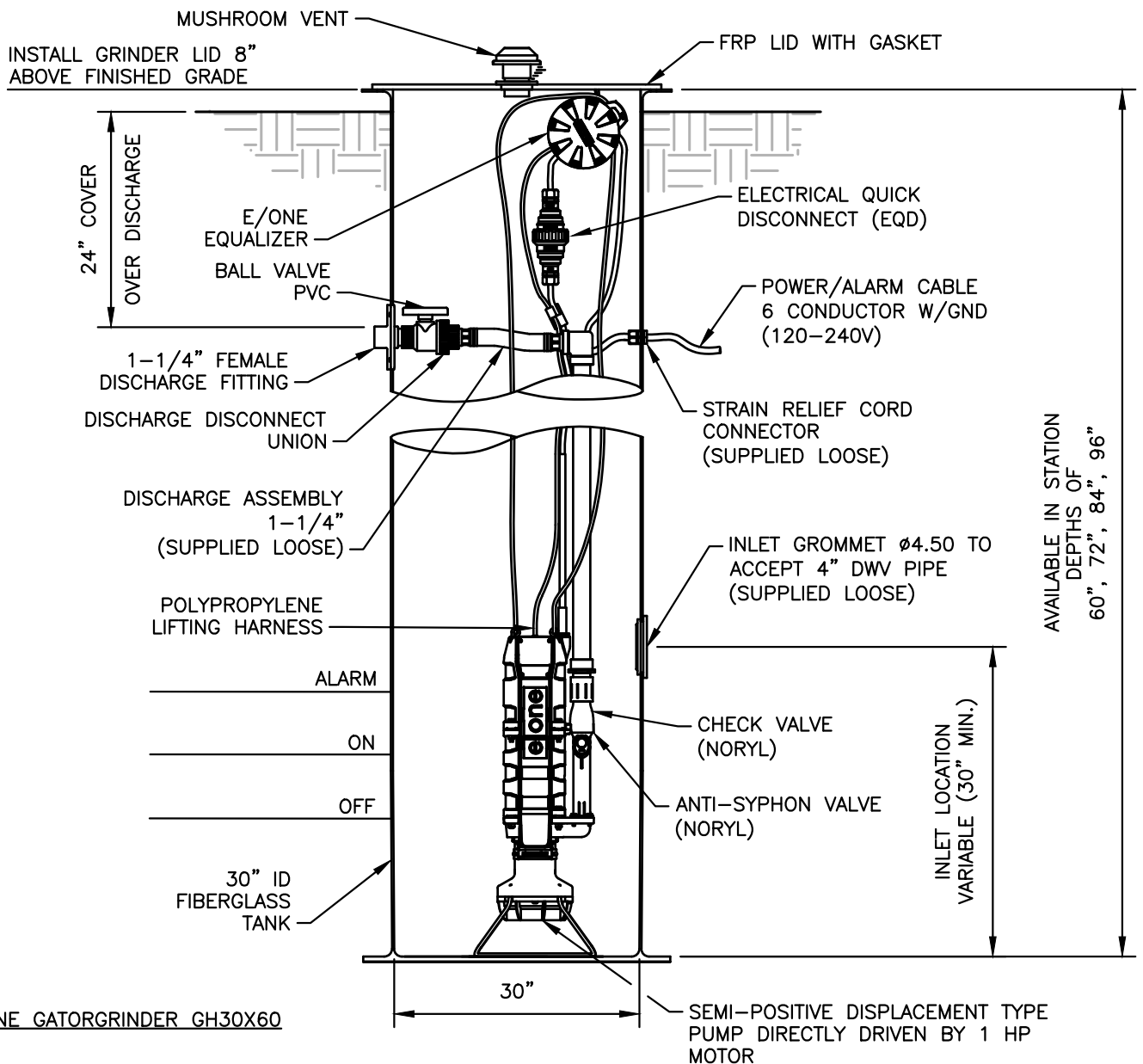
NOTES:

1. ALL CLEAN-OUT VAULTS IN ROADWAY SHALL BE INSTALLED FLUSH TO MATCH ROAD SURFACE. VAULTS LOCATED OUTSIDE OF PAVEMENT SHALL BE 12 INCHES ABOVE GRADE.
2. VALVES AND FITTINGS TO BE SAME SIZE AS MAIN LINE.

VAULT SIZE REQUIREMENTS


| FORCEMAIN SIZE (IN) | MIN. VAULT I.D. (FT) | MIN. CLEAR HATCH OPENING (FT) |
|---------------------|------------------------|-------------------------------|
| ≤4 | 6 | 3 X 3 |
| 6 | 8 | 4.5 X 4 |
| 8 | 10 | 6 X 5 |
| 12 | 12 | 6 X 5 |
| >12 | VERIFY WITH WCID NO.17 | VERIFY WITH WCID NO.17 |

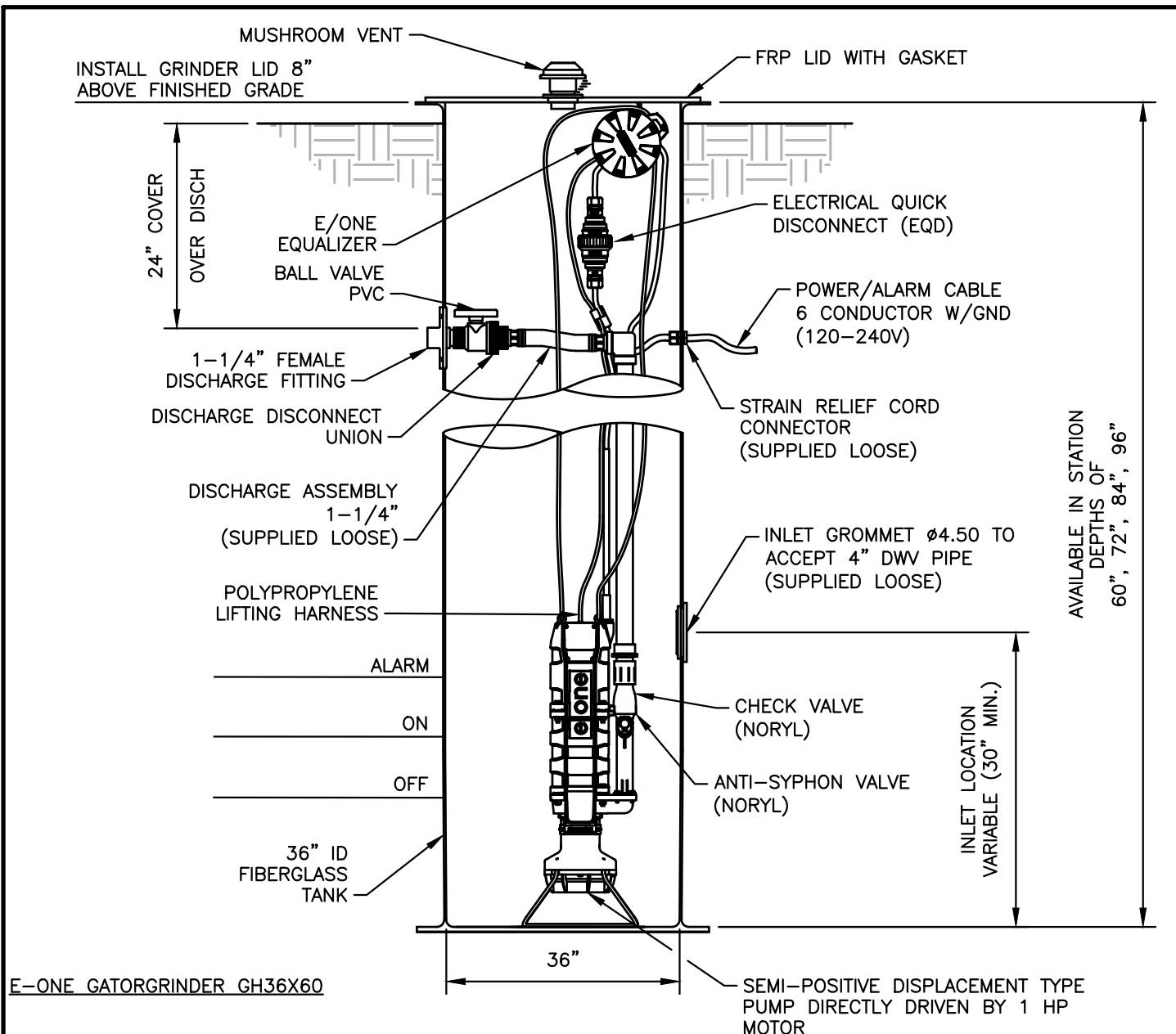
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|---|--|---|------------------------|
|  | TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS | FORCE MAIN CLEANOUT SECTION (2 OF 2) | |
| | ADOPTED: 07/01/2025 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. | DETAIL NO. WW21 |



NOTES:


1. DETAIL IS FOR INFORMATION ONLY. LOT OWNER WILL BE RESPONSIBLE FOR FURNISHING AND INSTALLATION OF RESIDENTIAL GRINDER PUMPS IN UTILITY EASEMENTS.
2. ALL GRINDER PUMP STATIONS SHALL BE SEMI-POSITIVE DISPLACEMENTS TYPE, GATOR GRINDER, AS MANUFACTURED BY E/ONE SEWERS, CONFORMING TO APPROVED WCID NO. 17 DESIGN STANDARD FOR THIS PROJECT.
3. INSTALL RESIDENTIAL GRINDER PUMPS IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
4. LOT OWNER SHALL EXECUTE ALL REQUIRED EASEMENTS AND AGREEMENTS TO ALLOW ACCESS TO PRIVATE CONTRACTORS AS REQUIRED BY WCID NO. 17 FOR EMERGENCY MAINTENANCE OF GRINDER PUMP STATION.
5. GRINDER TO BE LOCATED IN FRONT OF HOUSE, CLEARLY ANNOTATED WITH LIGHT VISIBLE FROM STREET.

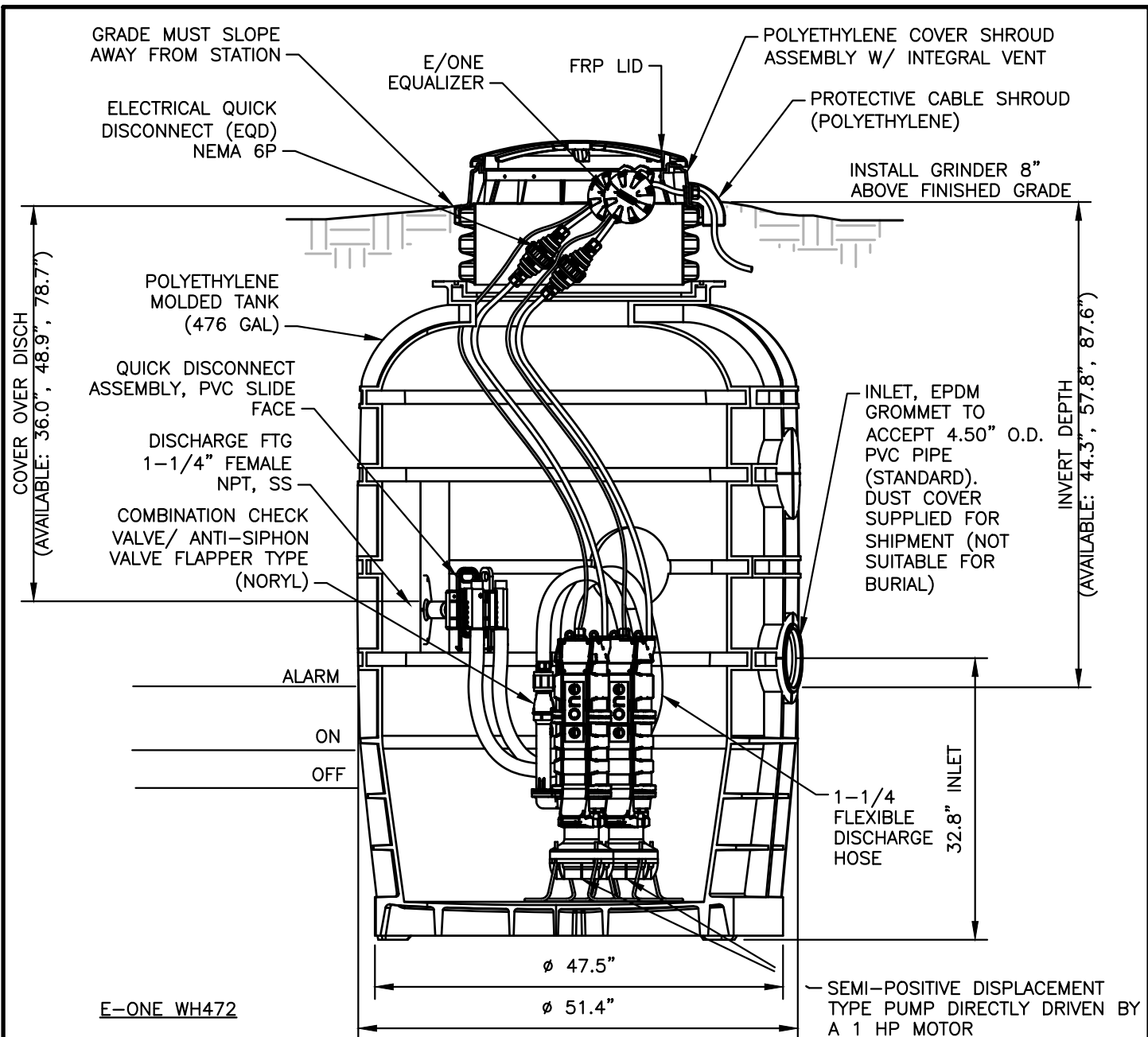
| | | | |
|---|---|--|---------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>SIMPLEX GRINDER PUMP STATION - TYPE I</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW22</p> |



NOTES:


1. DETAIL IS FOR INFORMATION ONLY. LOT OWNER WILL BE RESPONSIBLE FOR FURNISHING AND INSTALLATION OF RESIDENTIAL GRINDER PUMPS IN UTILITY EASEMENTS.
2. ALL GRINDER PUMP STATIONS SHALL BE SEMI-POSITIVE DISPLACEMENTS TYPE, GATOR GRINDER, AS MANUFACTURED BY E/ONE SEWERS, CONFORMING TO APPROVED WCID NO. 17 DESIGN STANDARD FOR THIS PROJECT.
3. INSTALL RESIDENTIAL GRINDER PUMPS IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
4. LOT OWNER SHALL EXECUTE ALL REQUIRED EASEMENTS AND AGREEMENTS TO ALLOW ACCESS TO PRIVATE CONTRACTORS AS REQUIRED BY WCID NO. 17 FOR EMERGENCY MAINTENANCE OF GRINDER PUMP STATION.
5. GRINDER TO BE LOCATED IN FRONT OF HOUSE, CLEARLY ANNOTATED WITH LIGHT VISIBLE FROM STREET.

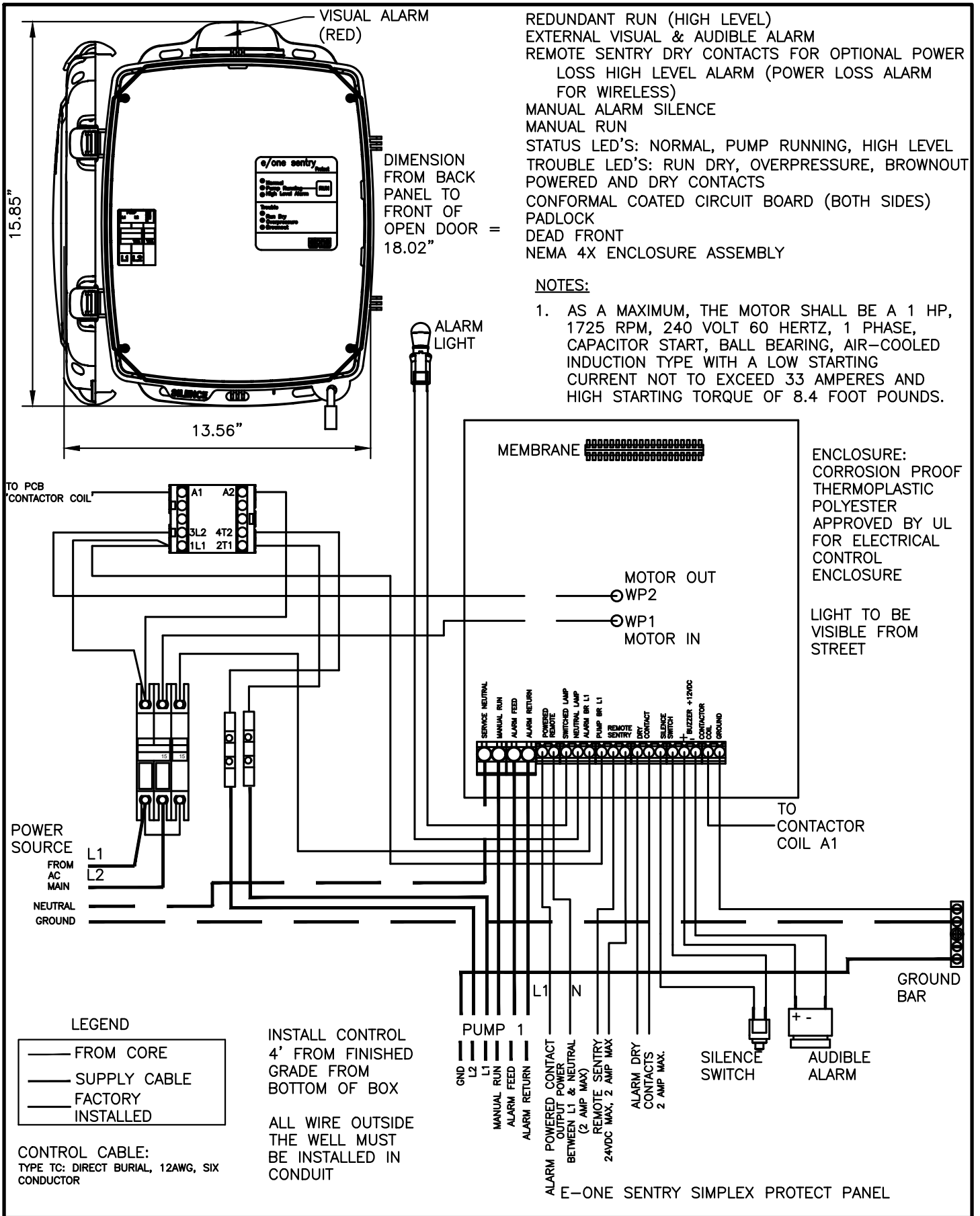
| | | | |
|---|---|--|---------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>SIMPLEX GRINDER PUMP STATION - TYPE II</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW23</p> |




NOTES:

1. DETAIL IS FOR INFORMATION ONLY. LOT OWNER WILL BE RESPONSIBLE FOR FURNISHING AND INSTALLATION OF RESIDENTIAL GRINDER PUMPS IN UTILITY EASEMENTS.
2. ALL GRINDER PUMP STATIONS SHALL BE SEMI-POSITIVE DISPLACEMENTS TYPE, AS MANUFACTURED BY E/ONE SEWERS, DESIGN STANDARD FOR THIS PROJECT.
3. INSTALL RESIDENTIAL GRINDER PUMPS IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
4. LOT OWNER SHALL EXECUTE ALL REQUIRED EASEMENTS AND AGREEMENTS TO ALLOW ACCESS TO PRIVATE CONTRACTORS AS REQUIRED BY WCID NO. 17 FOR EMERGENCY MAINTENANCE OF GRINDER PUMP STATION.
5. GRINDER TO BE LOCATED IN FRONT OF HOUSE, CLEARLY ANNOTATED WITH LIGHT VISIBLE FROM STREET.

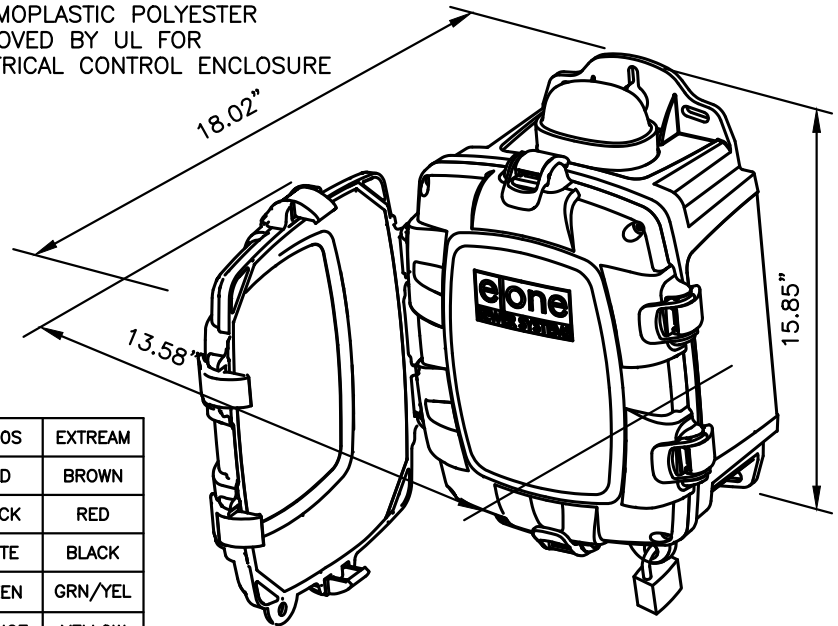
| | | | |
|---|---|--|---------------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>DUPLEX GRINDER PUMP STATION</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW24</p> |



| | | | |
|---|--|--|----------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> <p>ADOPTED: 07/01/2025</p> | <p>GRINDER PUMP STATION SIMPLEX CONTROL PANEL</p> <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW25</p> |
|---|--|--|----------------------------|

EXTERNAL VISUAL & AUDIBLE ALARM
EXTERNAL LATCHING MANUAL SILENCE
MANUAL RUN
PUMP RUN INDICATORS
CONFORMAL COATED CIRCUIT BOARD
PADLOCK
ALARM DRY CONTACT
NEMA 4X ENCLOSURE ASSEMBLY

CORROSION PROOF
THERMOPLASTIC POLYESTER
APPROVED BY UL FOR
ELECTRICAL CONTROL ENCLOSURE



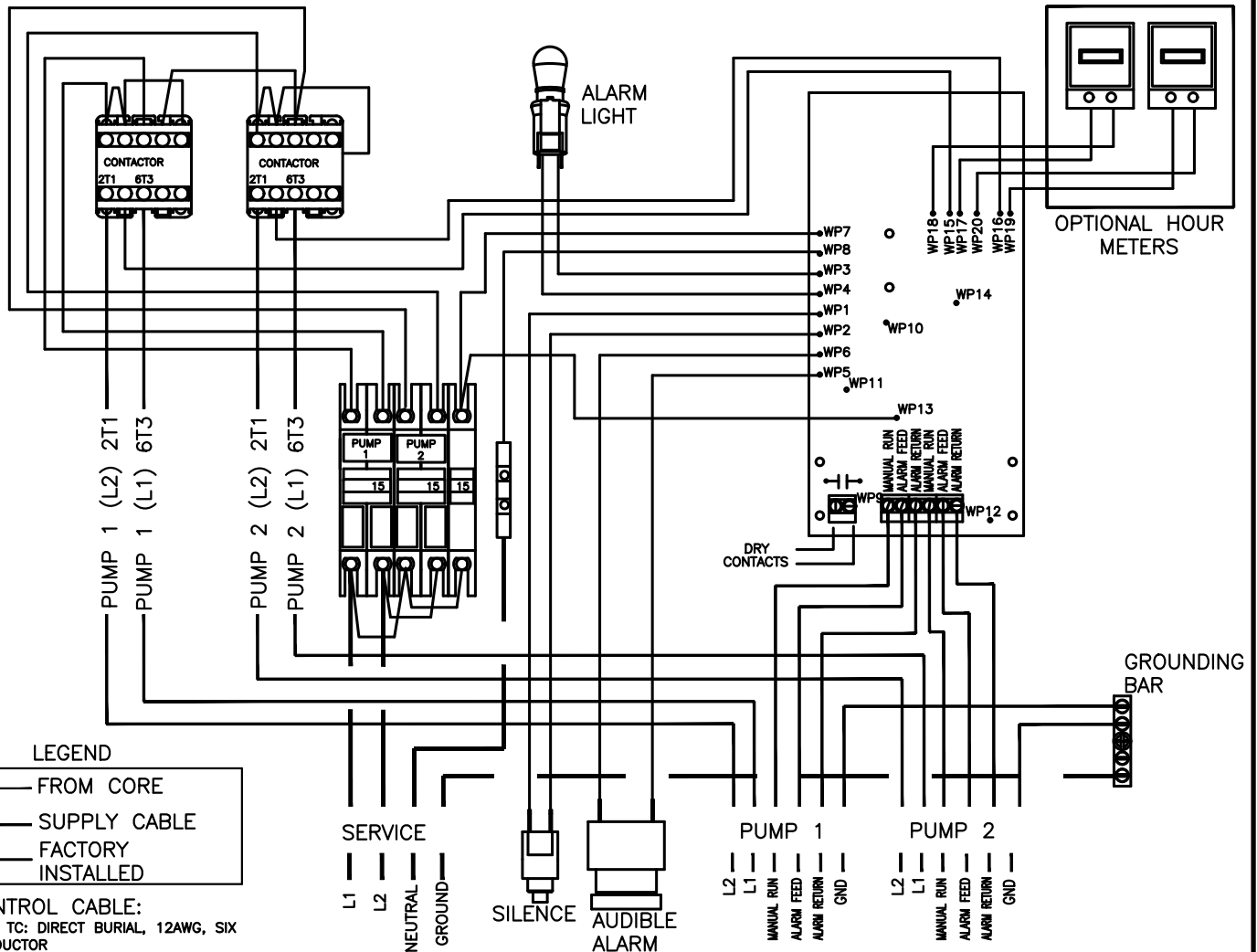
NOTES:

1. AS A MAXIMUM, EACH MOTOR SHALL BE A 1 HP, 1725 RPM, 240 VOLT 60 HERTZ, 1 PHASE, CAPACITOR START, BALL BEARING, AIR-COOLED INDUCTION TYPE WITH A LOW STARTING CURRENT NOT TO EXCEED 33 AMPERES AND HIGH STARTING TORQUE OF 8.4 FOOT POUNDS.

| PIN | FUNCTION | 2000S | EXTREAM |
|-----|--------------|--------|---------|
| 1 | MANUAL RUN | RED | BROWN |
| 2 | L1 | BLACK | RED |
| 3 | L2 | WHITE | BLACK |
| 4 | GND | GREEN | GRN/YEL |
| 5 | ALARM FEED | ORANGE | YELLOW |
| 6 | ALARM RETURN | BLUE | BLUE |


OPTIONS:

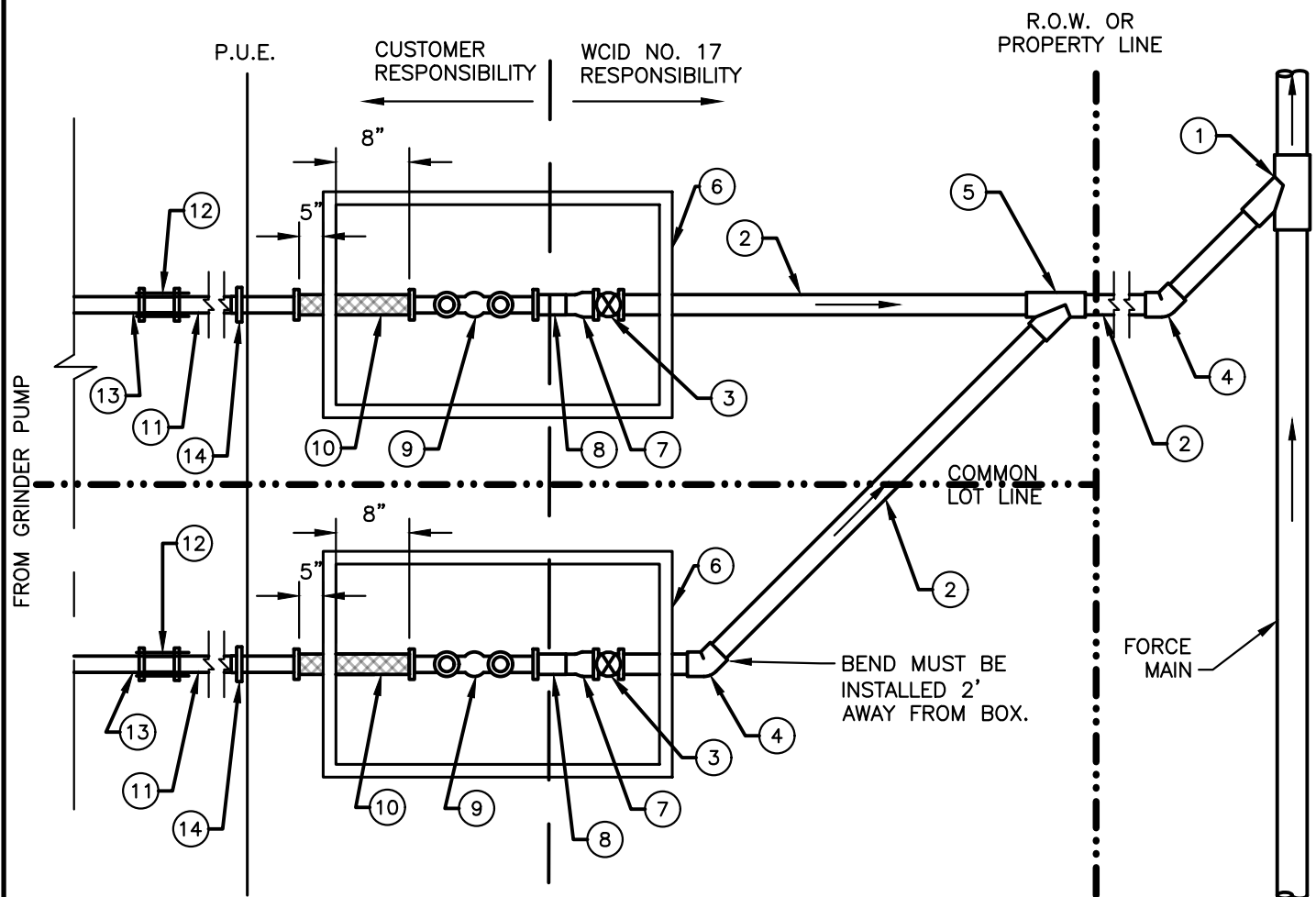
☐ HOUR METER



CONTROL CABLE:
TYPE TC: DIRECT BURIAL, 12AWG, SIX
CONDUCTOR

E-ONE DUPLEX T-260 ALTERNATING PANEL

| | | | |
|---|--|---|----------------------------|
|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> <p>ADOPTED: 07/01/2025</p> | <p>GRINDER PUMP STATION DUPLEX CONTROL PANEL</p> <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW26</p> |
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PLAN

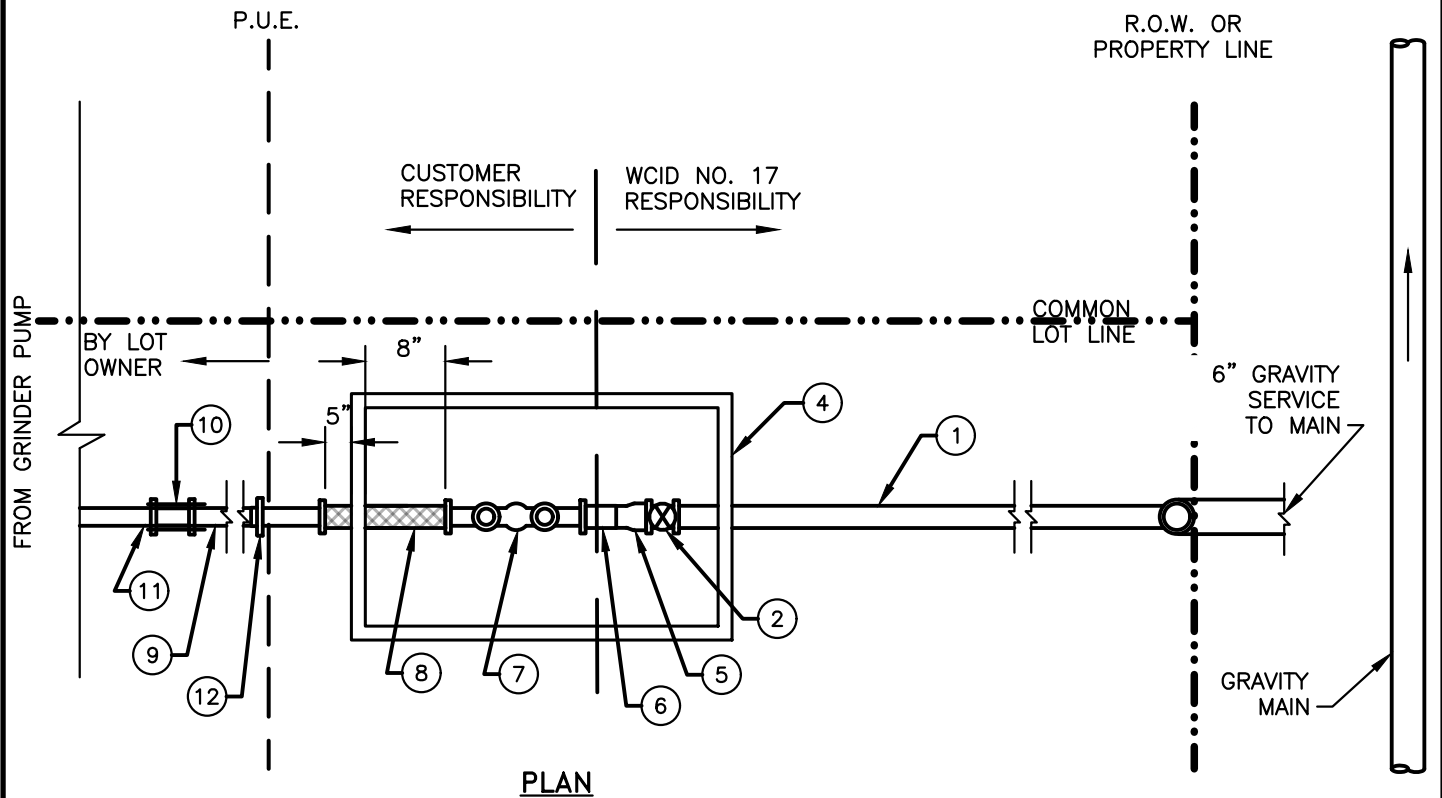
MATERIALS LIST:

- ① WYE — SIZE AS REQUIRED
- ② 2" PVC SCH 80 PIPE
- ③ 2" UNION GATE VALVE
- ④ 2" PVC SCH 80 45° BEND
- ⑤ 2" PVC SCH 80 WYE (OMIT FOR SINGLE SERVICE)
- ⑥ PLASTIC METER BOX WITH CAST IRON LID
- ⑦ 2"x1 1/4" PVC SCH 80 REDUCER
- ⑧ 1 1/4" PVC SCH 80 THREADED
- ⑨ 1 1/4" STAINLESS STEEL CHECK VALVE ASSEMBLY (UNI-LATERAL AS MANUFACTURED BY E-ONE)

- * ⑩ 1 1/4"x13" THREADED STAINLESS STEEL HOSE (TT5-6201 SERIES AS MANUFACTURED BY PROCO)
- * ⑪ 1 1/4" PVC SCH 80 PIPE
- * ⑫ 1 1/4" DRESSER COUPLING
- * ⑬ 1 1/4" X 1 1/4" PLAIN END, 6" LONG, THREAD
- * ⑭ 1 1/4" PVC SCH 80 PLUG (TO BE REMOVED BY OWNER UPON SERVICE LINE EXTENSION AND INSTALLATION OF GRINDER PUMP STATION)
- ⑮ PIPE SUPPORT


* MATERIALS TO BE INSTALLED BY OWNER AND THEIR LICENSED PLUMBER.

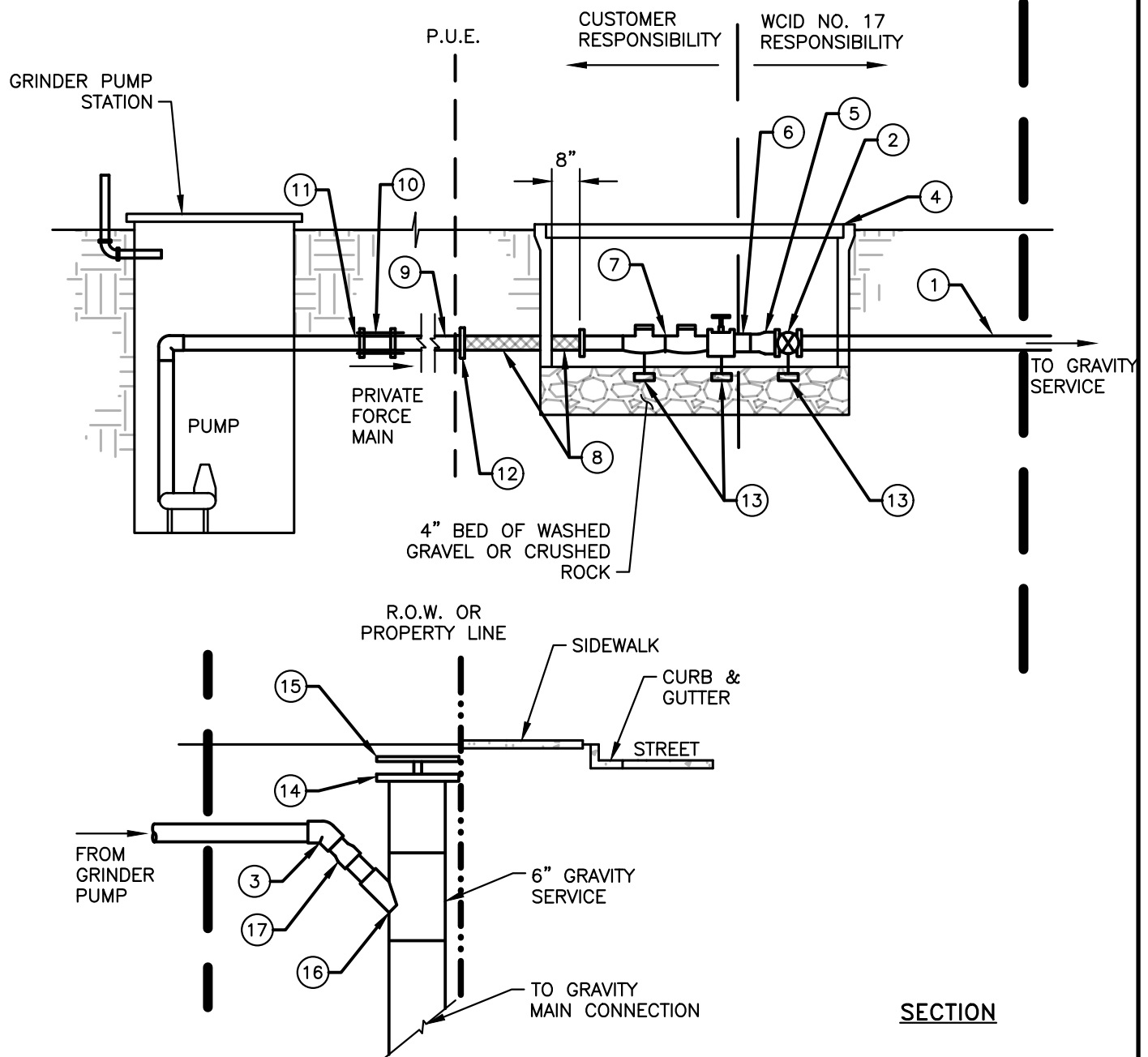
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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>TYPICAL RESIDENTIAL WASTEWATER PRESSURE SEWER SERVICE DETAIL (1 OF 2)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW27</p> |



MATERIALS LIST:


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| <p>① 2" PVC SCH 80 PIPE</p> <p>② 2" UNION GATE VALVE</p> <p>③ 2" PVC SCH 80 45° BEND</p> <p>④ PLASTIC METER BOX WITH CAST IRON LID</p> <p>⑤ 2"x1 1/4" PVC SCH 80 REDUCER</p> <p>⑥ 1 1/4" PVC SCH 80 THREADED</p> <p>* ⑦ 1 1/4" STAINLESS STEEL CHECK VALVE ASSEMBLY (UNI-LATERAL AS MANUFACTURED BY E-ONE)</p> <p>* ⑧ 1 1/4" STAINLESS STEEL CHECK VALVE ASSEMBLY (UNI-LATERAL AS MANUFACTURED BY E-ONE)</p> <p>* ⑨ 1 1/4" PVC SCH 80 PIPE</p> <p>* ⑩ 1 1/4" DRESSER COUPLING</p> | <p>* ⑪ 1 1/4" X 1 1/4" PLAIN END, 6" LONG, THREAD</p> <p>* ⑫ 1 1/4" PVC SCH 80 PLUG (TO BE REMOVED BY OWNER UPON SERVICE LINE EXTENSION AND INSTALLATION OF GRINDER PUMP STATION)</p> <p>* ⑬ PIPE SUPPORT</p> <p>⑭ 6" SCREW CAP</p> <p>⑮ METAL PLATE OVER SCREW CAP 18" BELOW FINISHED GRADE</p> <p>⑯ 6"x4" WYE</p> <p>⑰ 4"x2" REDUCER</p> <p>* MATERIALS TO BE INSTALLED BY OWNER AND THEIR LICENSED PLUMBER.</p> |
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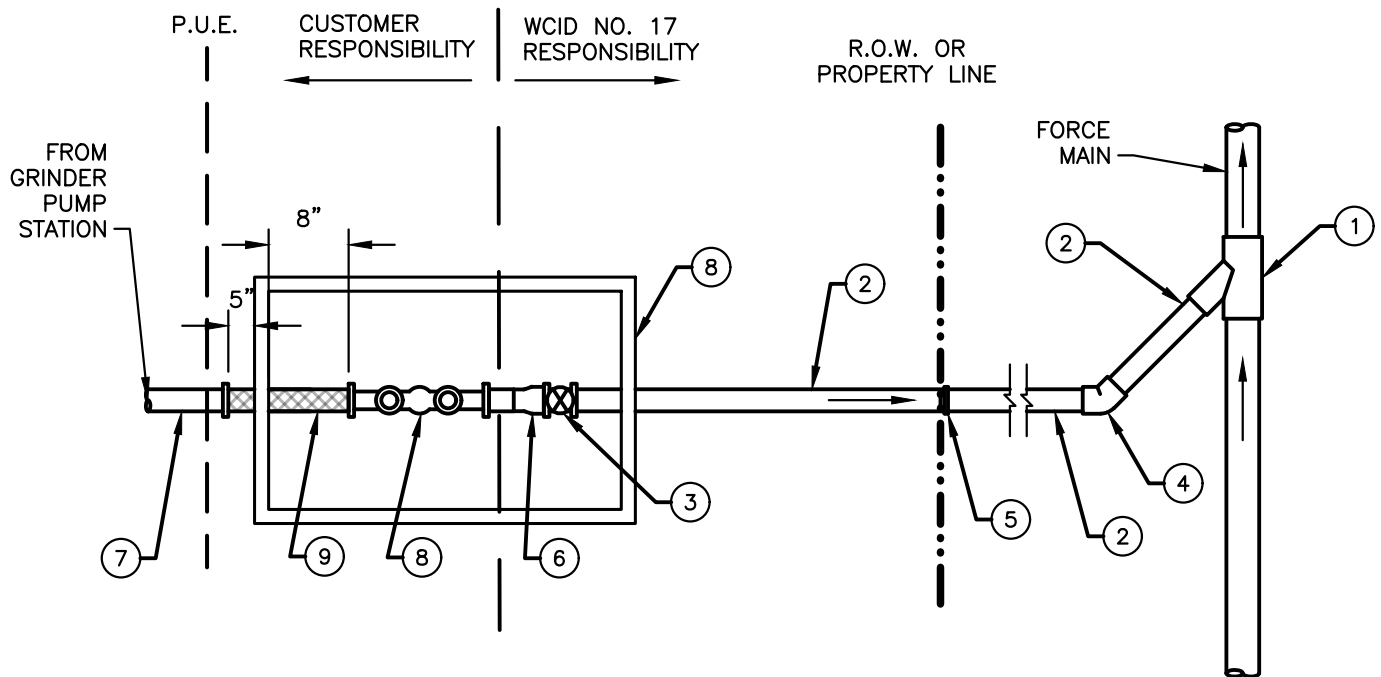
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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>TYPICAL RESIDENTIAL WASTEWATER PRESSURE SEWER TO GRAVITY MAIN CONNECTION (1 OF 2)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW28</p> |



NOTES:

1. LOCATE VALVE BOXES WITHIN 10' P.U.E. AND WITHIN 5' OF LOT CORNER PIN, WHERE FEASIBLE.
2. INSTALL PLASTIC VALVE VAULTS ON 3/8" CRUSHED ROCK OR PEA GRAVEL PAD—MINIMUM 4" DEPTH BELOW VAULT, EXTENDING UPWARD TO PIPE SPRING LINE, AND COMPACTED TO 95% STD PROCTOR.
3. MINIMUM DEPTH OF COVER FOR SERVICES = 24". (TYPICAL DEPTH AT VALVES)
4. EXTENSION OF 1 1/4" SERVICE LINE AND INSTALLATION OF GRINDER PUMP SHALL BE FURNISHED BY LOT OWNERS.
5. LOT OWNERS SHALL GRANT ACCESS TO PRIVATE CONTRACTORS AS REQUIRED BY WCID NO. 17 FOR EMERGENCY MAINTENANCE OF GRINDER PUMP STATION.

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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>TYPICAL RESIDENTIAL WASTEWATER PRESSURE SEWER TO GRAVITY MAIN CONNECTION (2 OF 2)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW28</p> |



MATERIALS LIST:

- ① WYE – SIZE AS REQUIRED
- ② SERVICE LATERAL, SEE NOTE 2
- ③ RESILIENT WEDGE GATE VALVE
- ④ 45° BEND
- ⑤ PLUG (TO BE REMOVED BY PROPERTY OWNER UPON SERVICE LINE EXTENSION AND INSTALLATION OF CLEAN OUT AND GRINDER PUMP STATION)
- ⑥ REDUCER
- * ⑦ SCH 80 PVC


FOR 1 1/4" SERVICE LINES (FITTINGS FOR OTHER SIZES DETERMINED ON INDIVIDUAL BASIS)

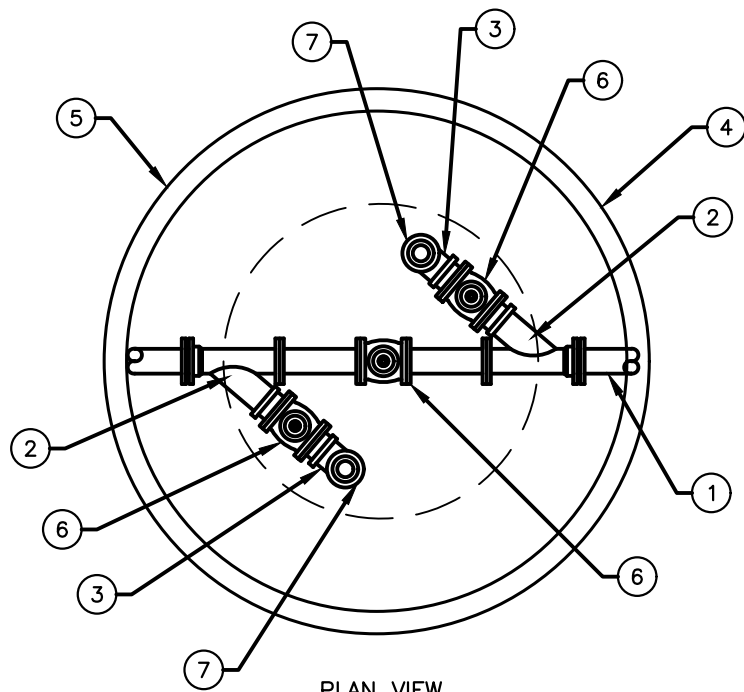
- * ⑧ 1 1/4" STAINLESS STEEL CHECK VALVE ASSEMBLY (UNI-LATERAL AS MANUFACTURED BY E-ONE)
- * ⑨ 1 1/4"x13" THREADED STAINLESS STEEL HOSE (TT5-6201 SERIES AS MANUFACTURED BY PROCO)

* MATERIALS TO BE INSTALLED BY OWNER AND THEIR LICENSED PLUMBER.

NOTES:

1. SIZE OF SERVICE PIPE, VALVES AND FITTINGS SHALL BE DETERMINED ON AN INDIVIDUAL BASIS BY A REGISTERED PROFESSIONAL ENGINEER OR LICENSED PLUMBER TO MEET THE DEMANDS OF THE PARTICULAR PROJECT/PROPERTY AND TO SUIT THE PARTICULAR GRINDER PUMP STATION NEEDED.
2. ALL PIPING SMALLER THAN 4" SHALL BE PVC SCHEDULE 80 WITH PVC SCHEDULE 80 FITTINGS. ALL PIPING 4" AND LARGER SHALL BE C900 PVC WITH DUCTILE IRON FITTINGS. PIPING SHALL BE GREEN, WHITE, OR SHALL BE ENCASED WITH BROWN POLYWRAP.
3. LOCATE VALVE BOXES WITHIN 10' P.U.E. AND WITHIN 5' OF LOT CORNER PIN, WHERE FEASIBLE.
4. INSTALL VALVE VAULTS ON 3/8" CRUSHED ROCK OR PEA GRAVEL PAD—MINIMUM 4" DEPTH BELOW VAULT, EXTENDING UPWARD TO PIPE SPRING LINE, AND COMPACTED TO 95% STD PROCTOR.
5. MINIMUM DEPTH OF COVER FOR SERVICES = 24". (TYPICAL DEPTH AT VALVES)
6. EXTENSION OF SERVICE LINE AND INSTALLATION OF CLEAN OUT AND GRINDER PUMP SHALL BE FURNISHED BY PROPERTY OWNERS.
7. LOT OWNERS SHALL GRANT ACCESS TO PRIVATE CONTRACTORS AS REQUIRED BY WCID NO. 17 FOR EMERGENCY MAINTENANCE OF GRINDER PUMP STATION.

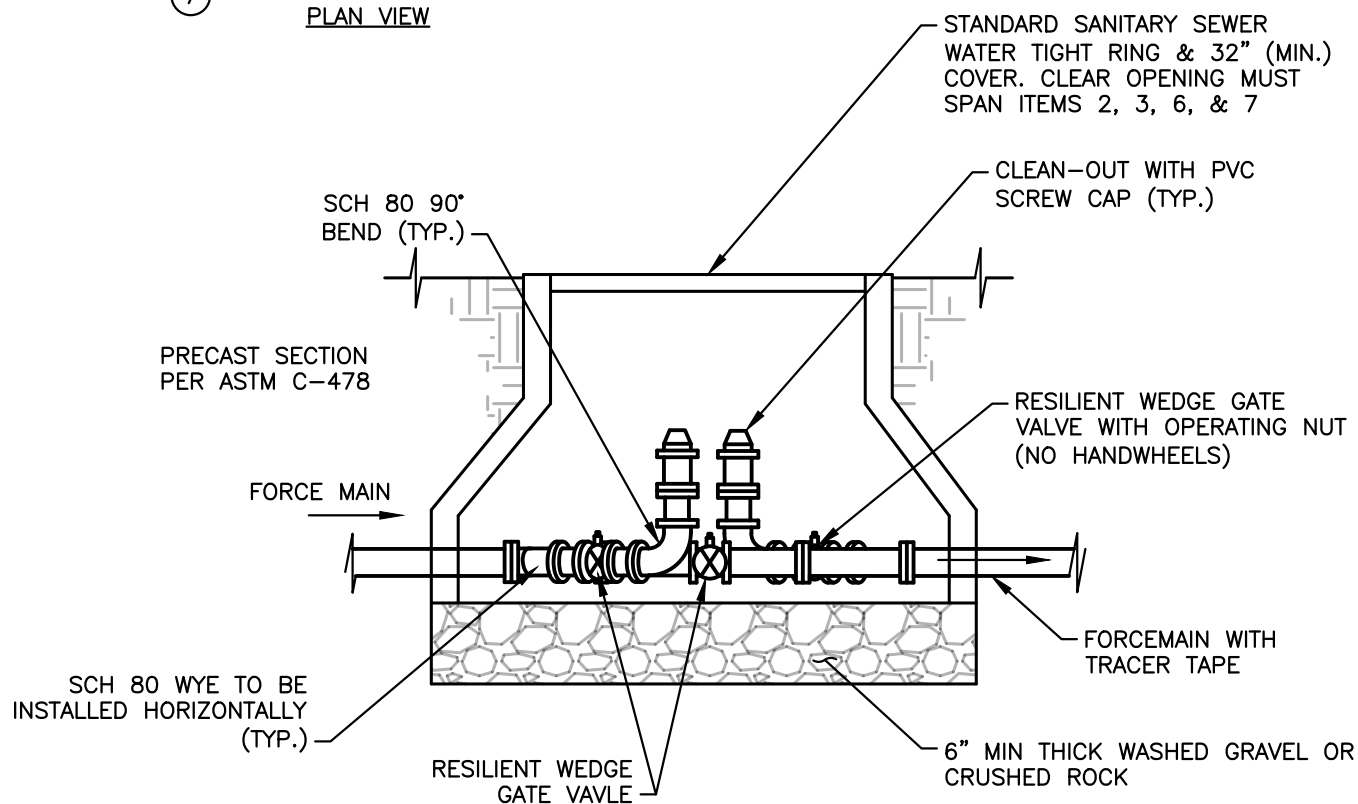
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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>TYPICAL COMMERCIAL WASTEWATER PRESSURE SEWER OR LARGE RESIDENTIAL SERVICE DETAIL</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW29</p> |



PLAN VIEW


MATERIALS LIST:

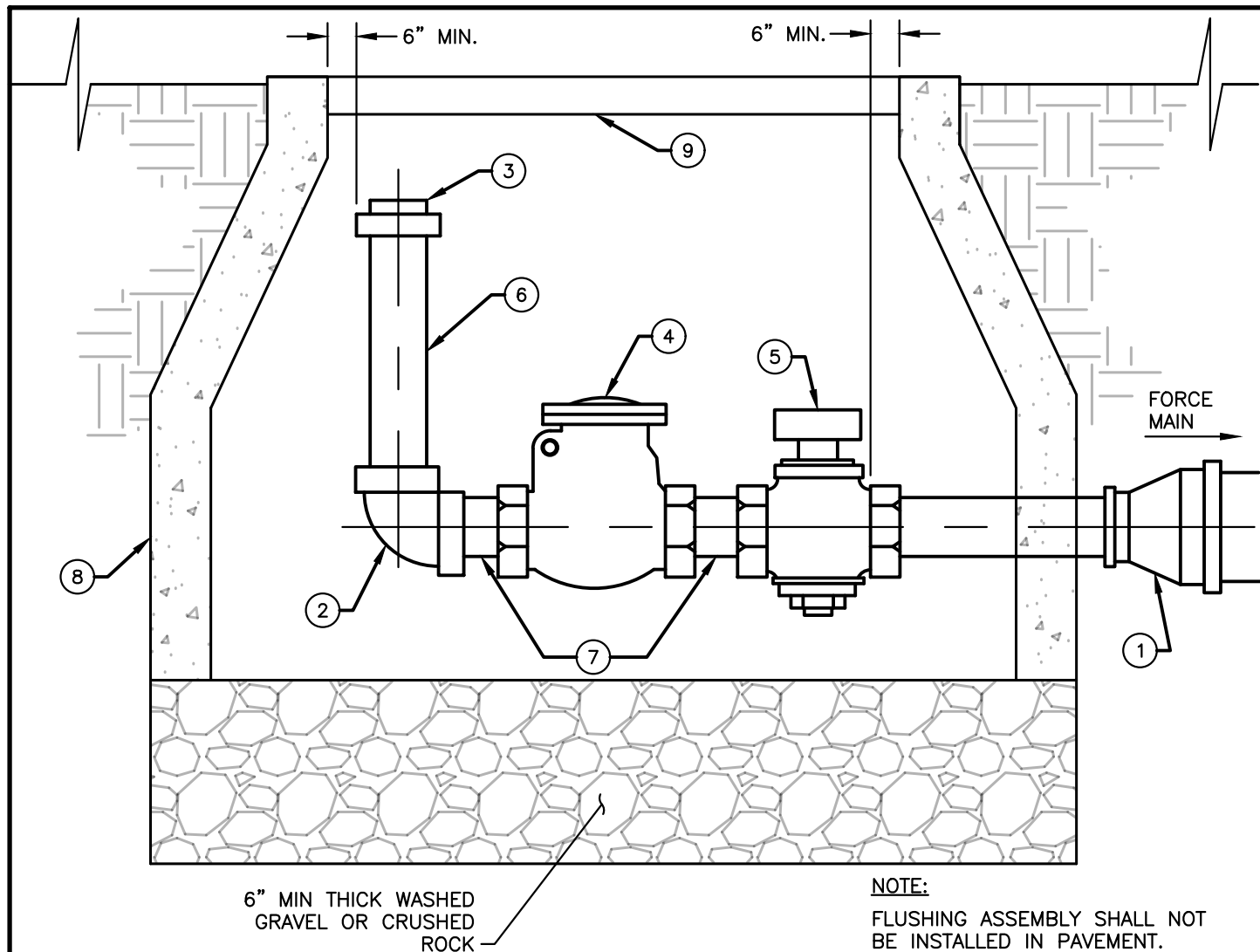
- ① SCH 80 PVC PRESSURE LINE
- ② WYE
- ③ PVC SCH 80 90° BEND
- ④ STANDARD SANITARY SEWER WATER TIGHT RING & 32" (MIN.) COVER. CLEAR OPENING MUST SPAN ITEMS 2, 3, 6, & 7
- ⑤ PRECAST SECTION PER ASTM C-478
- ⑥ RESILIENT WEDGE GATE VALVE
- ⑦ PVC SCREW CAP



NOTE:

1. ALL CLEAN-OUT VAULTS IN ROADWAY SHALL BE INSTALLED FLUSH TO MATCH ROAD SURFACE. VAULTS LOCATED OUTSIDE OF PAVEMENT SHALL BE 12 INCHES ABOVE GRADE.

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|  | <p>TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS</p> | <p>PRESSURE MAIN FLUSHING ASSEMBLY (MAIN LINE)</p> | |
| | <p>ADOPTED: 07/01/2025</p> | <p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> | <p>DETAIL NO. WW30</p> |



| ITEM NO | NO. REQ'D | SIZE AND DESCRIPTION | MATERIAL SPEC'S |
|---------|-----------|---|----------------------------------|
| ① | 1 | MAIN SIZE X 2" REDUCER (WHEN REQ'D) | PVC SLIP JOINT |
| ② | 2 | 2" - 90° SCRD. ELL | SCH. 80 PVC |
| ③ | 1 | 2" SCRD. CAP | SCH. 80 PVC |
| ④ | 1 | 2" SCRD. SWING CHECK VALVE | M & H NO. 59 |
| ⑤ | 1 | 2" RES. WEDGE GATE VLV. | REFER TO WCID NO. 17 SPL |
| ⑥ | 1 | 2" X 10" NIPPLE | SCH. 80 PVC |
| ⑦ | 3 | 2" SHORT NIPPLES | SCH. 80 PVC |
| ⑧ | 1 | PRECAST SECTION | ASTM C-478 OR PRE-APPROVED EQUAL |
| ⑨ | 1 | WATER TIGHT RING & 32" (MIN.) COVER. CLEAR OPENING MUST SPAN APPURTENANCES AND AND CLEARANCE NOTED ABOVE. | PER WCID NO. 17 STANDARDS |

| | | | |
|--|---|---|--------------------|
| | TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT No. 17 STANDARD DETAILS | PIG PORT/END OF LINE FLUSHING (END OF LINE) | |
| | ADOPTED: 07/01/2025 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. | DETAIL NO. WW31 |