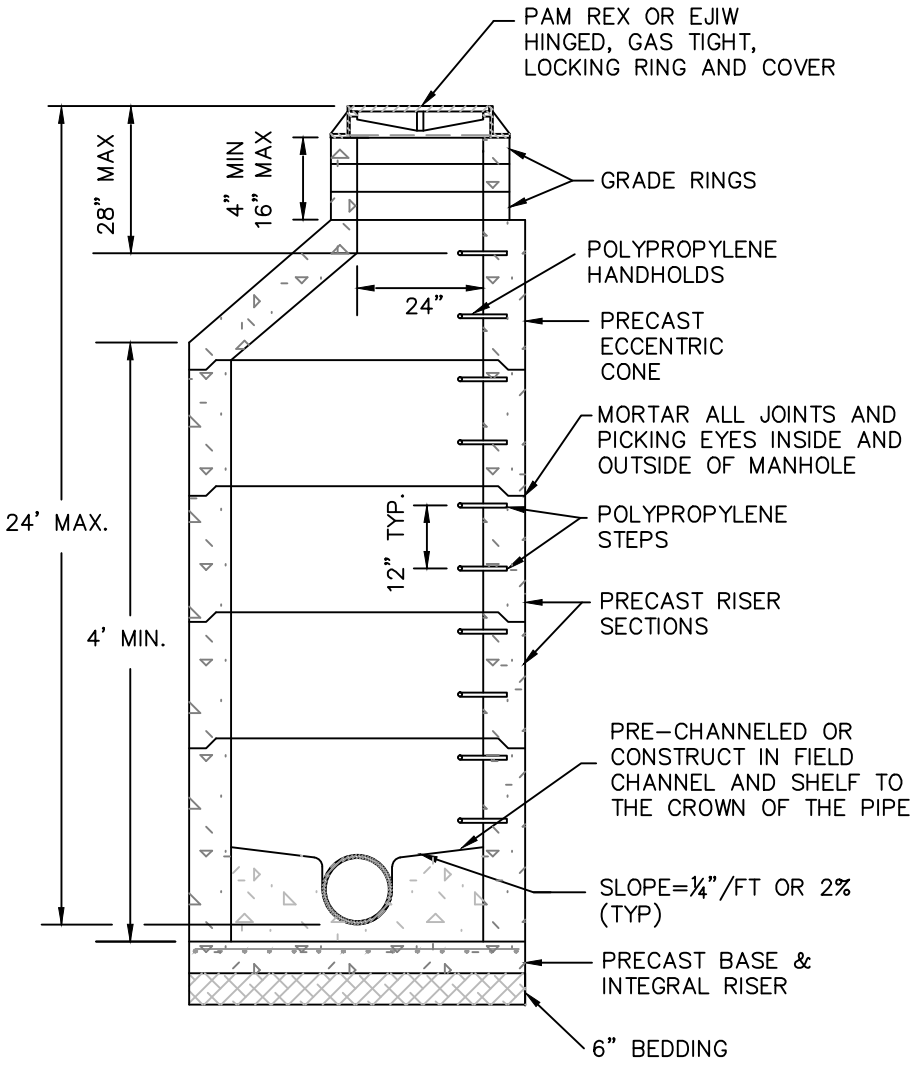

NOTES:

1. PRECAST MANHOLES SHALL MEET THE REQUIREMENTS OF ASTM C478. JOINTS SHALL BE RUBBER GASKETED CONFORMING TO ASTM C443 AND SHALL BE GROUTED FROM THE INSIDE AND OUTSIDE. LIFT HOLES SHALL BE GROUTED FROM THE OUTSIDE AND INSIDE OF THE MANHOLE.
2. STEPS IN MANHOLE SHALL HAVE 6" MINIMUM CLEARANCE.
3. SEWER MANHOLE SHALL HAVE CONSISTANT WALL THICKNESS WITH NO KNOCKOUTS. MANHOLE SHALL BE MANUFACTURE CORED OR CORED ON SIGHT.
4. CONNECTION TO MANHOLE SHALL BE MADE BY KOR-N-SEAL BOOT OR LINK SEAL.
5. SEE DETAIL 5-3 FOR MANHOLE COLLAR INSTALLATION.
6. A SEWER GUARD SHALL BE INSTALLED IN ANY MANHOLE SUBJECT TO FLOODING.
7. WHEN POSSIBLE, RUN PIPE THROUGH MANHOLE, CHANNEL AND THEN REMOVE TOP OF PIPE TO PROVIDE A SMOOTH ABRASION RESISTANT CHANNEL.
8. MANHOLES SUBJECT TO HIGH LEVELS OF H2S OR AS DIRECTED BY CITY SHALL BE COATED ON THE INTERIOR WITH SPECTRA SHIELD OR APPROVED EQUAL. AREAS OF HIGH GROUND WATER SHALL HAVE EPOXY COATING APPLIED TO THE EXTERIOR.
9. SEWER LINES SHALL HAVE A MAXIMUM DEPTH OF 24'. A REQUEST FOR SEWER DEEPER THAT 24' SHALL BE REVIEWED BY THE CITY. CITY'S DETERMINATION SHALL BE FINAL.

CITY OF GIG HARBOR
ENGINEERING DIVISION

TYPE 1 MANHOLE

DETAIL NO. 5-01

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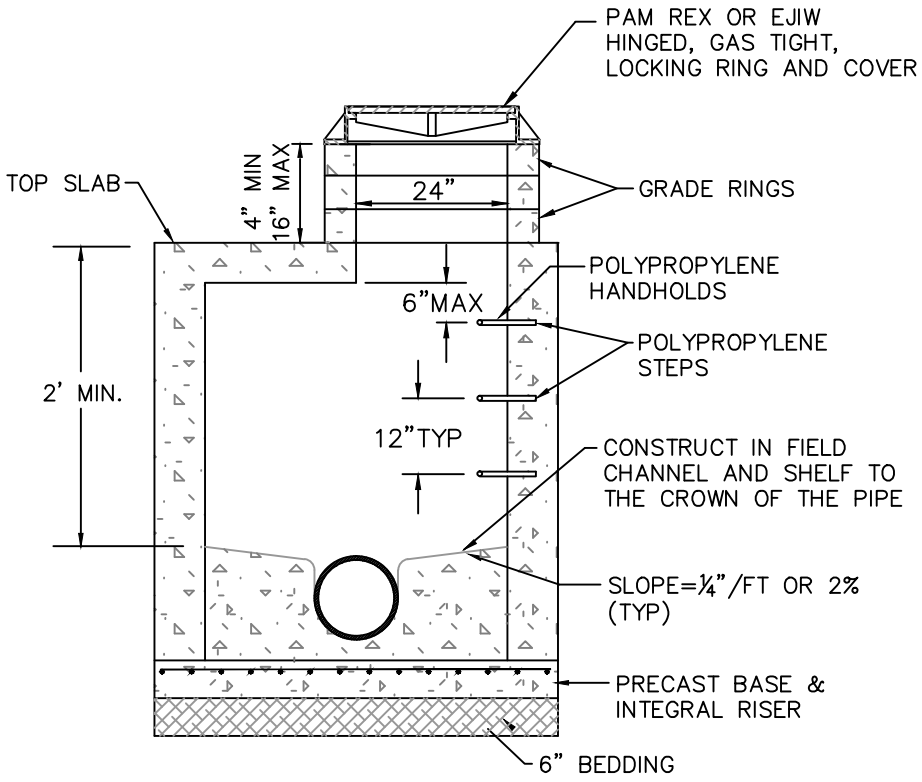
CITY ENGINEER _____ DATE MAY 16, 2016



NOTES:

1. PRECAST MANHOLES SHALL MEET THE REQUIREMENTS OF ASTM C478. JOINTS SHALL BE RUBBER GASKETED CONFORMING TO ASTM C443 AND SHALL BE GROUTED OUTSIDE AND INSIDE. LIFT HOLES SHALL BE GROUTED FROM THE OUTSIDE AND INSIDE OF THE MANHOLE.
2. STEPS IN MANHOLE SHALL HAVE 6" MINIMUM CLEARANCE.
3. THE RING AND COVER FOR MANHOLES LESS THAN 5' SHALL BE INSTALLED OVER THE OUTLET CHANNEL OR AS DIRECTED BY THE CITY.
4. CONNECTION TO MANHOLE SHALL BE MADE BY KOR-N-SEAL BOOT OR LINK SEAL.
5. SEE DETAIL 5-3 FOR MANHOLE COLLAR INSTALLATION.
6. A SEWER GUARD SHALL BE INSTALLED IN ANY MANHOLE SUBJECT TO FLOODING.
7. WHEN POSSIBLE, RUN PIPE THROUGH MANHOLE, CHANNEL AND THEN REMOVE TOP OF PIPE TO PROVIDE A SMOOTH ABRASION RESISTANT CHANNEL.
8. MANHOLES SUBJECT TO HIGH LEVELS OF H2S OR AS DIRECTED BY CITY SHALL BE COATED ON THE INTERIOR WITH SPECTRA SHIELD OR APPROVED EQUAL. AREAS OF HIGH GROUND WATER SHALL HAVE EPOXY COATING APPLIED TO THE EXTERIOR.

CITY OF GIG HARBOR
ENGINEERING DIVISION

SHALLOW MANHOLE

DETAIL NO. 5-02

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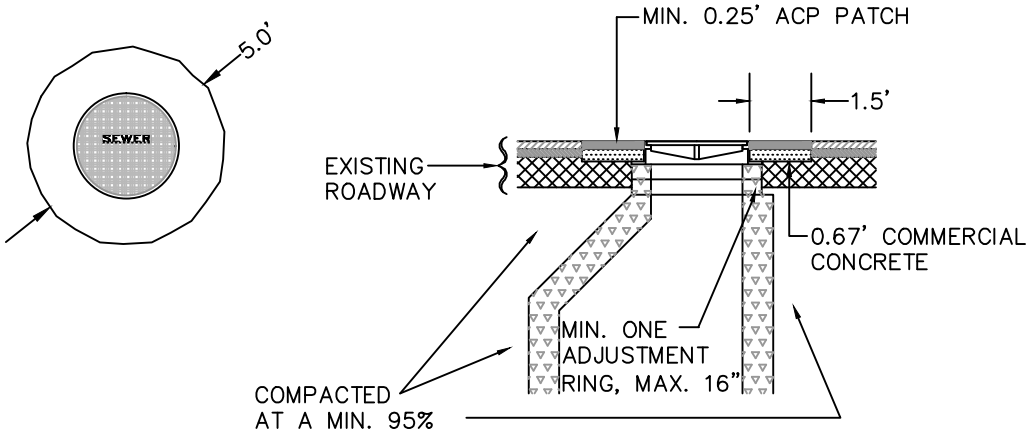
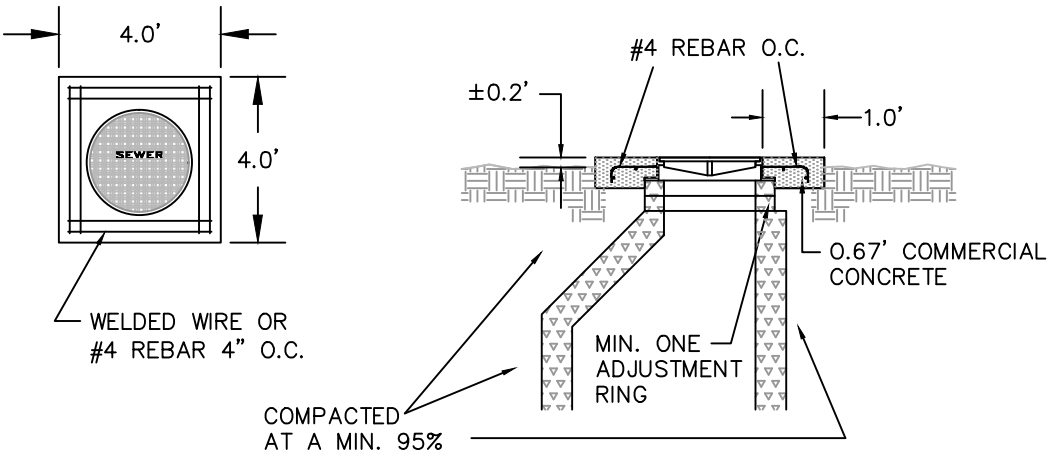
CITY ENGINEER _____ DATE MAY 16, 2016



MANHOLE IN ASPHALT



MANHOLE OUTSIDE ASPHALT

NOTES:

1. ON MANHOLE OUTSIDE ASPHALT ADD REINFORCING STEEL AS SHOWN ABOVE. DEFORMED BAR TO MEET ASTM A615 GRADE 60 FY=60,000 P.S.I.
2. ALL SEWER MANHOLE LIDS SHALL BE ESIW OR PAMREX 24" GASKETED OR APPROVED EQUAL.
3. ALL SEAMS SHALL BE GROUTED INSIDE AND OUTSIDE.
4. IF COATING IS APPLIED, COATING SHALL RUN TO BOTTOM OF COVER GROVE.

CITY OF GIG HARBOR
ENGINEERING DIVISION

MANHOLE COLLAR	DETAIL NO. 5-03

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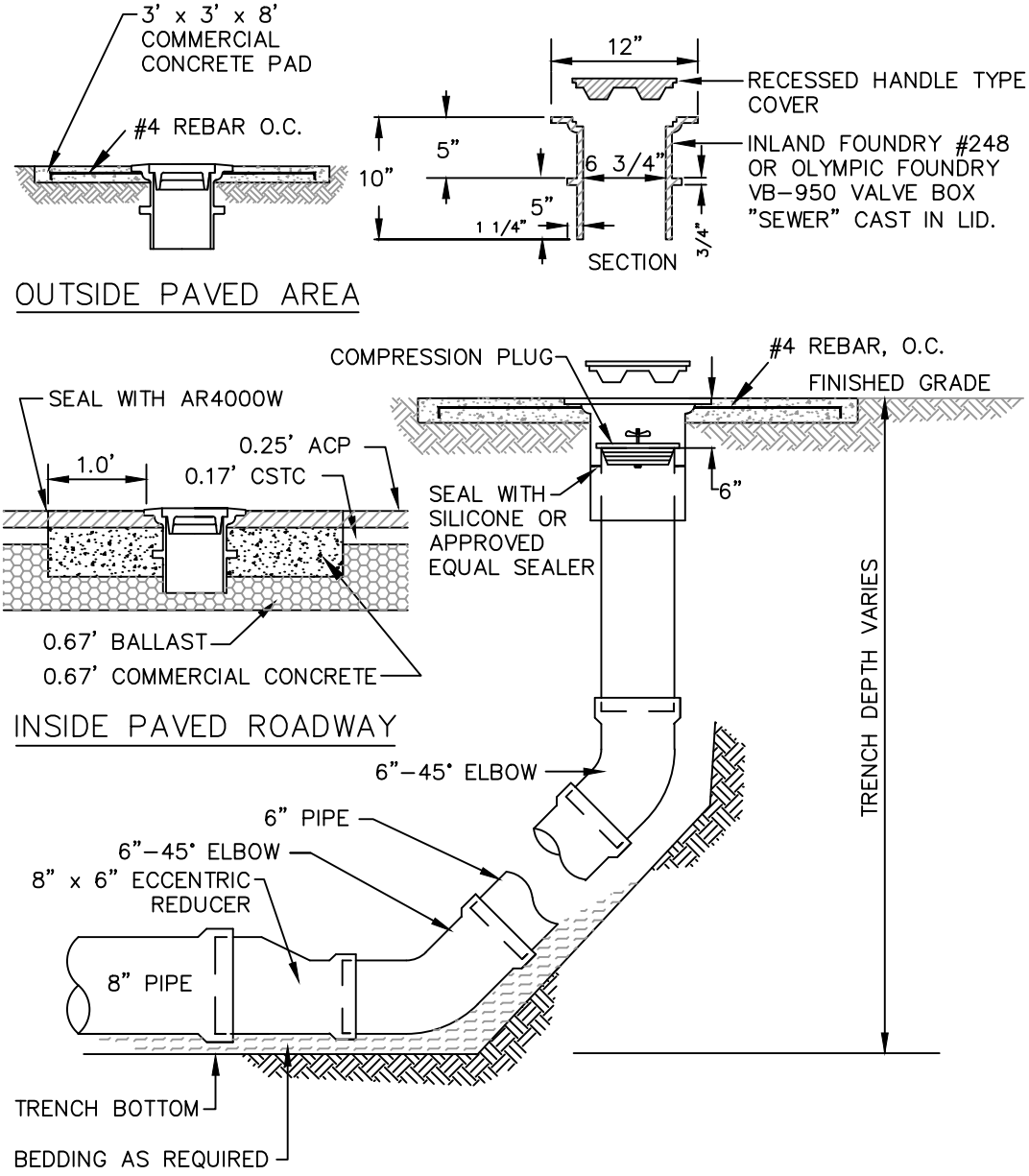
CITY ENGINEER _____ DATE MAY 16, 2016



NOTE:

1. ALL SEWER PIPE SHALL BE ASTM 3034 SDR 35.
2. LOCATED IN CENTER OF CUL-DE-SAC WHEN APPROPRIATE.

CITY OF GIG HARBOR
ENGINEERING DIVISION

END OF LINE CLEANOUT

DETAIL NO. 5-04

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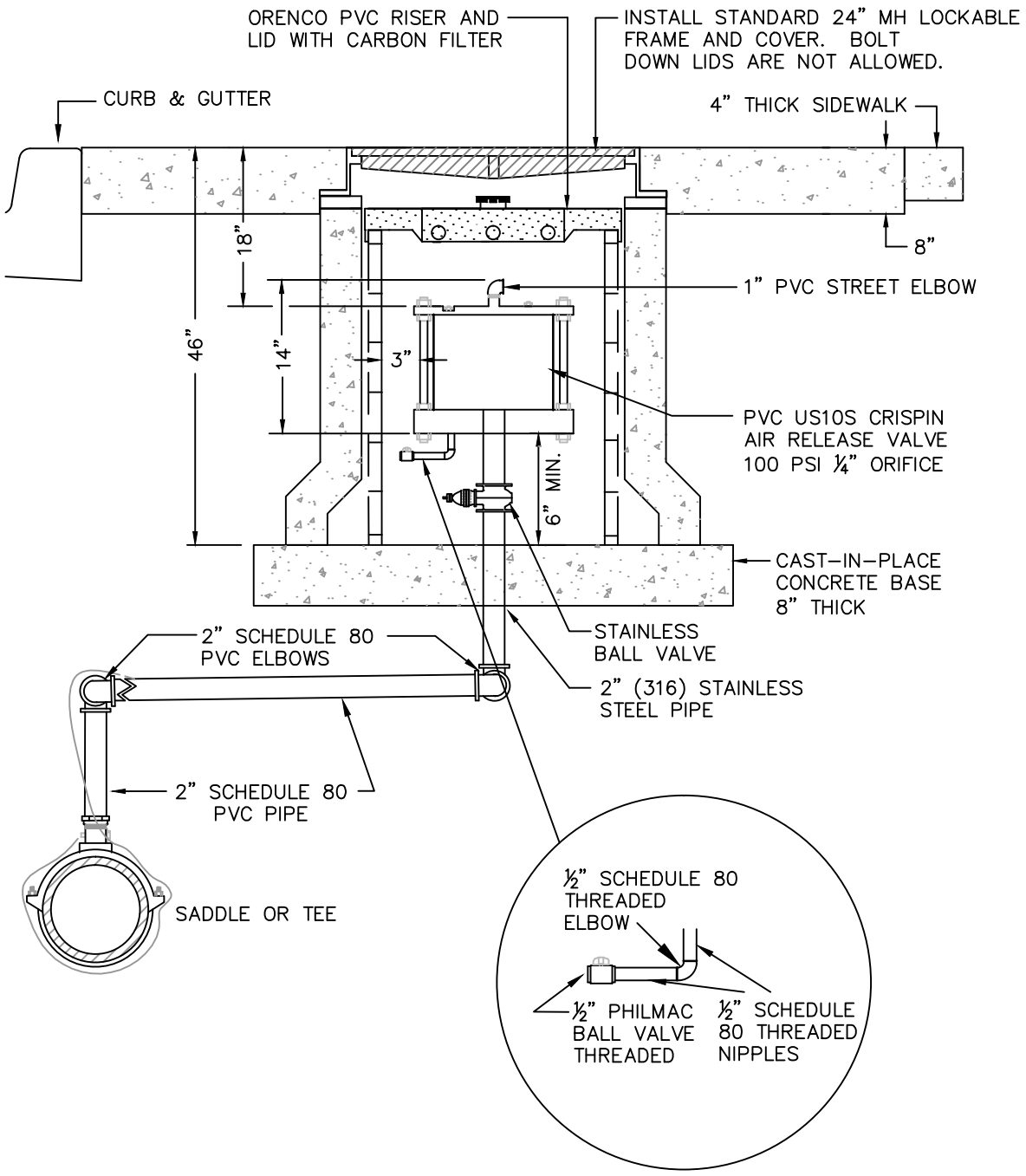
CITY ENGINEER _____ DATE MAY 16, 2016



NOTES:

1. A RAIN GUARD SHALL BE REQUIRED.

CITY OF GIG HARBOR
ENGINEERING DIVISION

AIR VALVE RELEASE ASSEMBLY

DETAIL NO. 5-05

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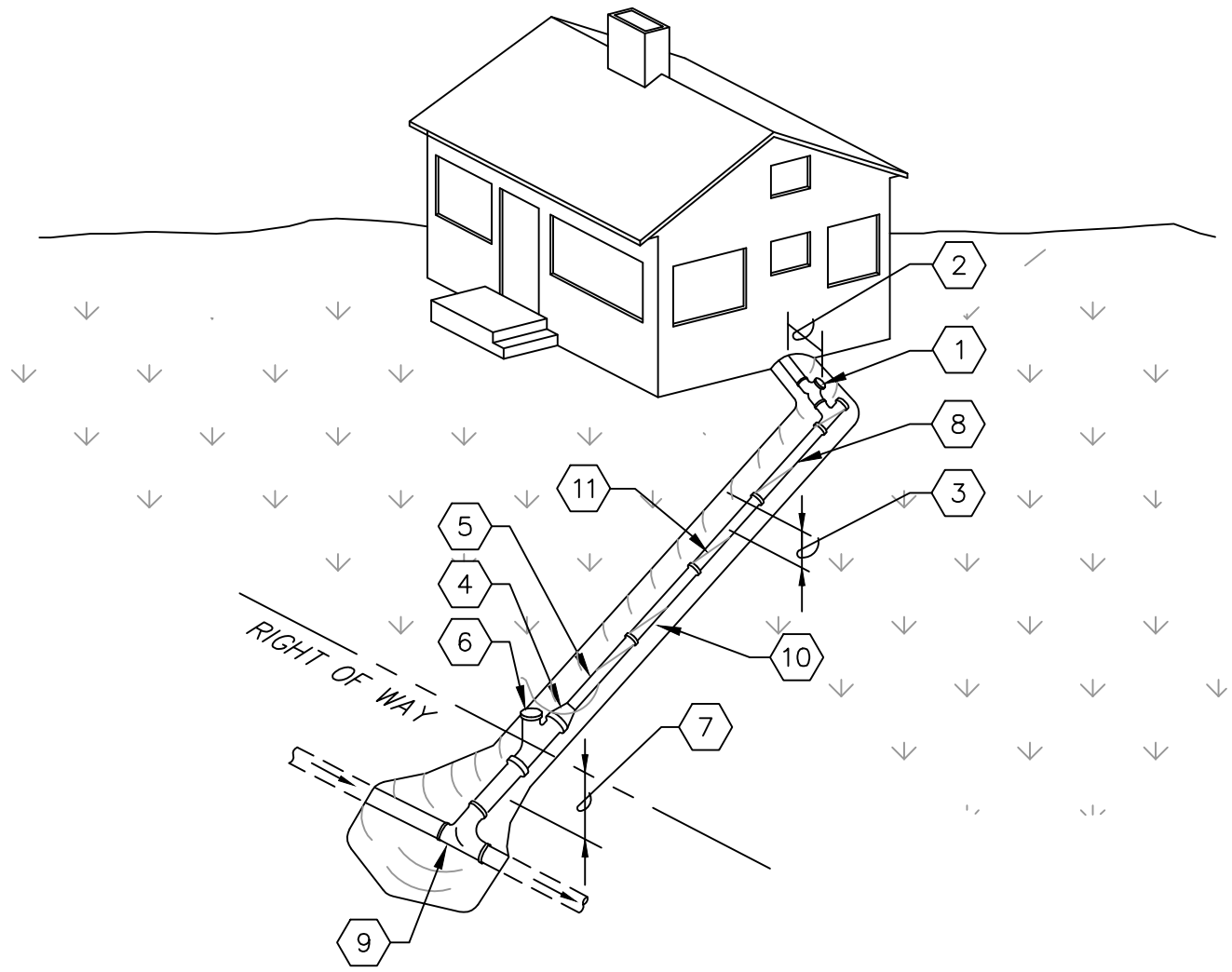

CONSTRUCTION NOTES:

1. 4" DOUBLE SWEEP AT HOUSE.
2. WITHIN 24" OF FOUNDATION WALL.
3. MINIMUM COVER ON PRIVATE PROPERTY IS 24" OVER TOP OF PIPE.
4. 6"x 4" REDUCER WHERE REQUIRED.
5. SIDE SEWER PIPE SHALL BE 4" OR LARGER.
6. 6" SWEEPING CLEANOUT TEE BROUGHT TO THE SURFACE AT THE PROPERTY LINE. CLEANOUT CASTING STAMPED "SEWER"REQUIRED.
7. MINIMUM DEPTH AT PROPERTY LINE IS 48".
8. BUILDING SEWER SHOULD HAVE A MINIMUM 2% UNIFORM GRADE AND BE IN STRAIGHT ALIGNMENT INSOFAR AS POSSIBLE.
9. SWEEPING TEE AT MAIN.
10. 5/8" CSTC BEDDING AROUND PIPE.
11. LOCATE WIRE AND LOCATE TAPE REQUIRED IN TRENCH.

CITY OF GIG HARBOR
ENGINEERING DIVISION

SIDE SEWER CONNECTION

DETAIL NO. 5-06

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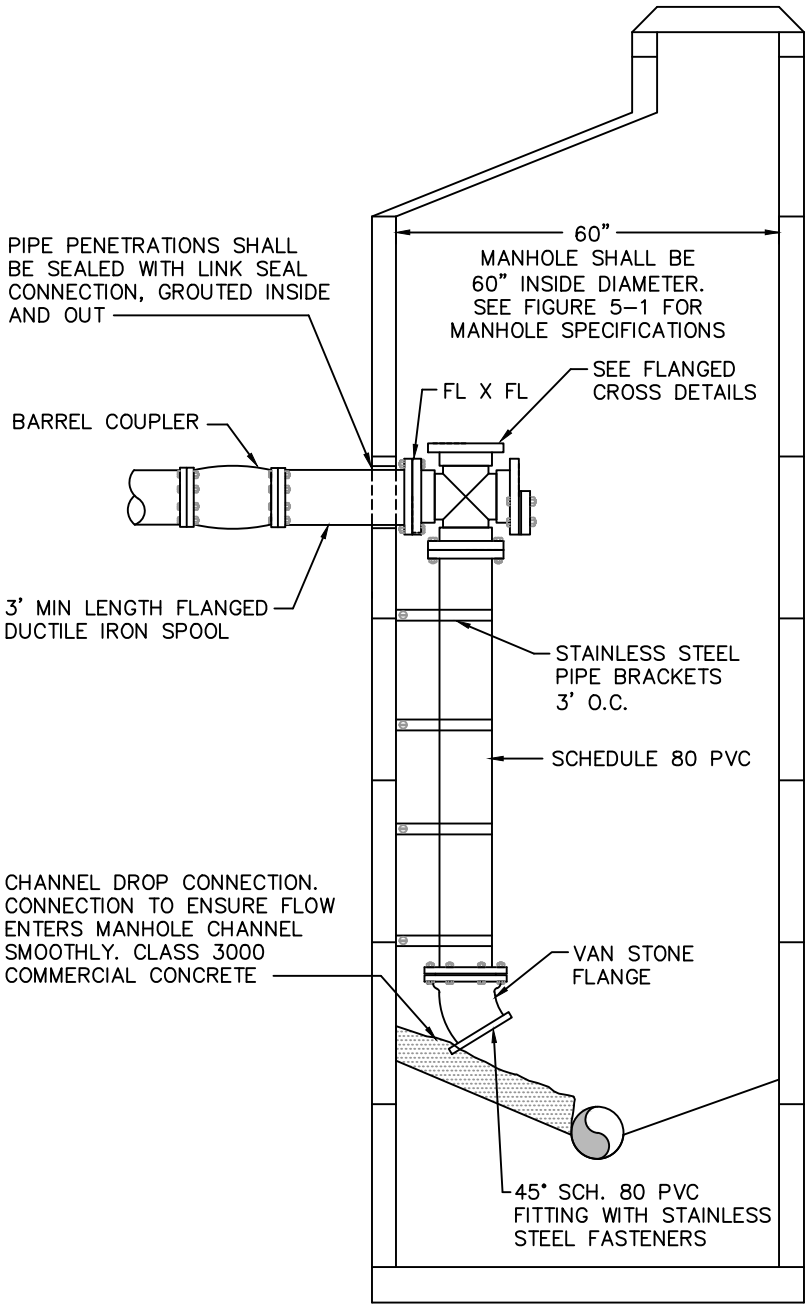
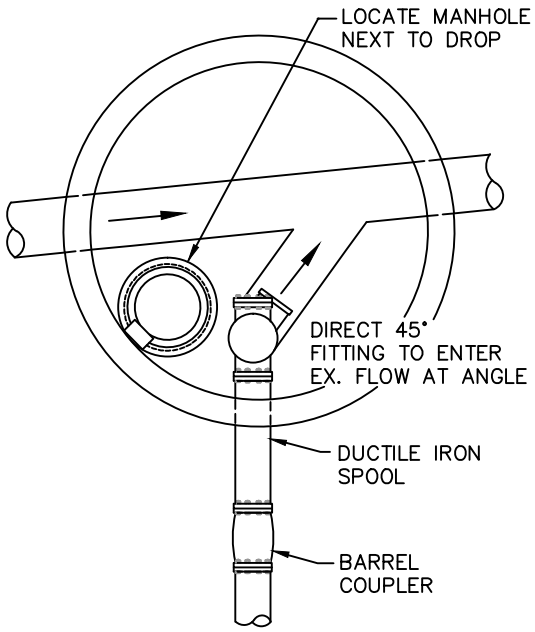
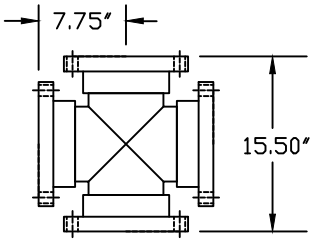
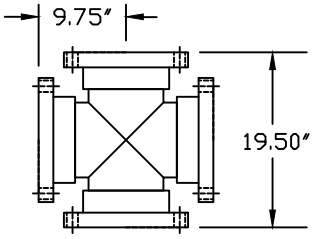






6" FLANGED CROSS SCHEDULE 80 PVC DETAIL



6" FLANGED CROSS SCHEDULE 80 PVC DETAIL

NOTE:

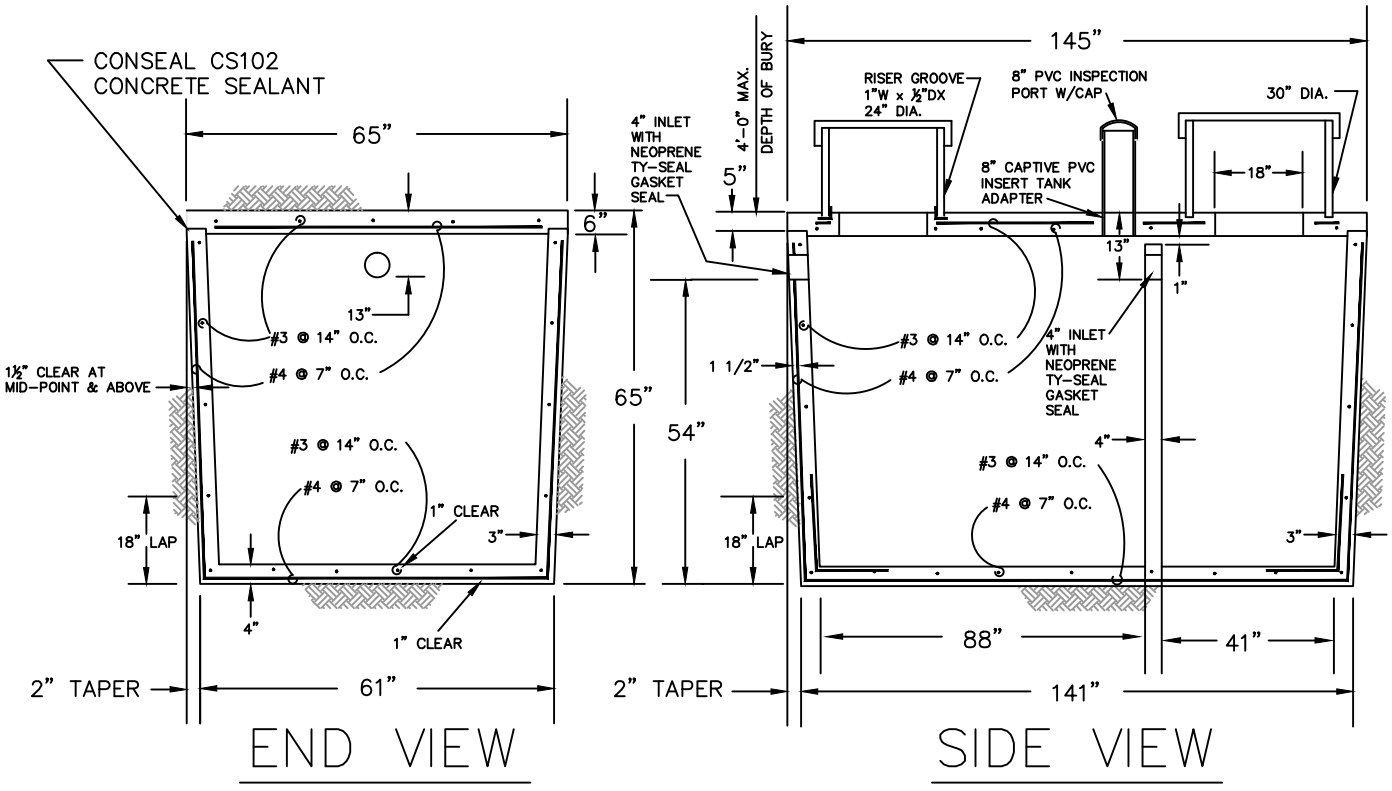
1. INSIDE DROP MANHOLE SHALL BE 60" MIN. DIAMETER FOR 4"–10" DROPS. 72" MANHOLE SHALL BE REQUIRED FOR 12"–16" INSIDE DROPS. ALL SIZES ARE SUBJECT TO CONDITIONS.
2. ALL HARDWARE FOR DUCTILE IRON FITTINGS AND PIPE BRACKETS SHALL BE STAINLESS STEEL.
3. PIPES SHALL BE SCH. 80 PVC, ALONG WITH 45° FITTING AT BOTTOM OF DROP.
4. ALL FITTINGS SHALL BE DUCTILE IRON.
5. MANHOLE ACCESS TO BE LOCATED NEXT TO DROP TO ALLOW ACCESS TO SCHEDULE 80 PVC CROSS.
6. VAN STONE FLANGE SHALL BE USED AT BOTTOM OF DROP PIPE TO ALLOW FLOW TO BE EASILY DIRECTED INTO EXISTING CHANNEL.
7. MANHOLE PENETRATION SHALL BE CORED AND CONNECTED USING LINK SEAL. PENETRATION SHALL BE GROUTED INSIDE AND OUT.

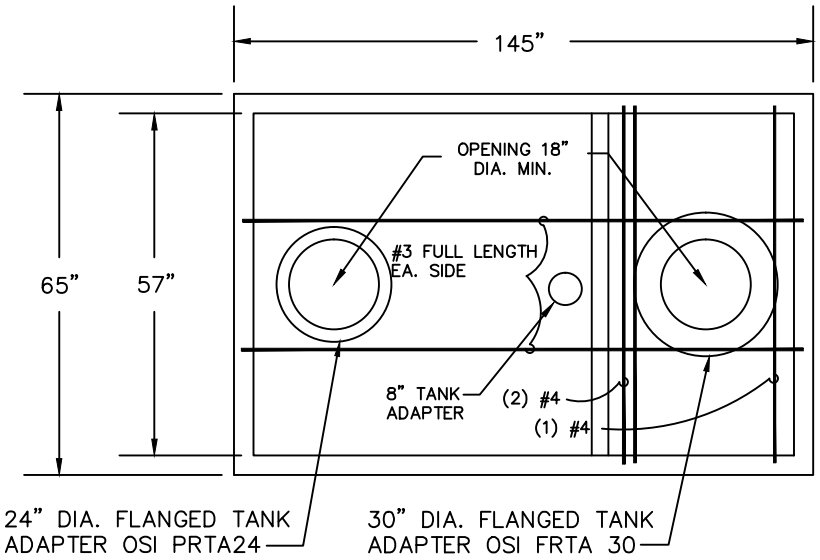
CITY OF GIG HARBOR
ENGINEERING DIVISION

INSIDE DROP CONNECTION

DETAIL NO. 5-07

APPROVED FOR PUBLICATION
CITY ENGINEER _____ DATE MAY 16, 2016





PLAN

NOTES:

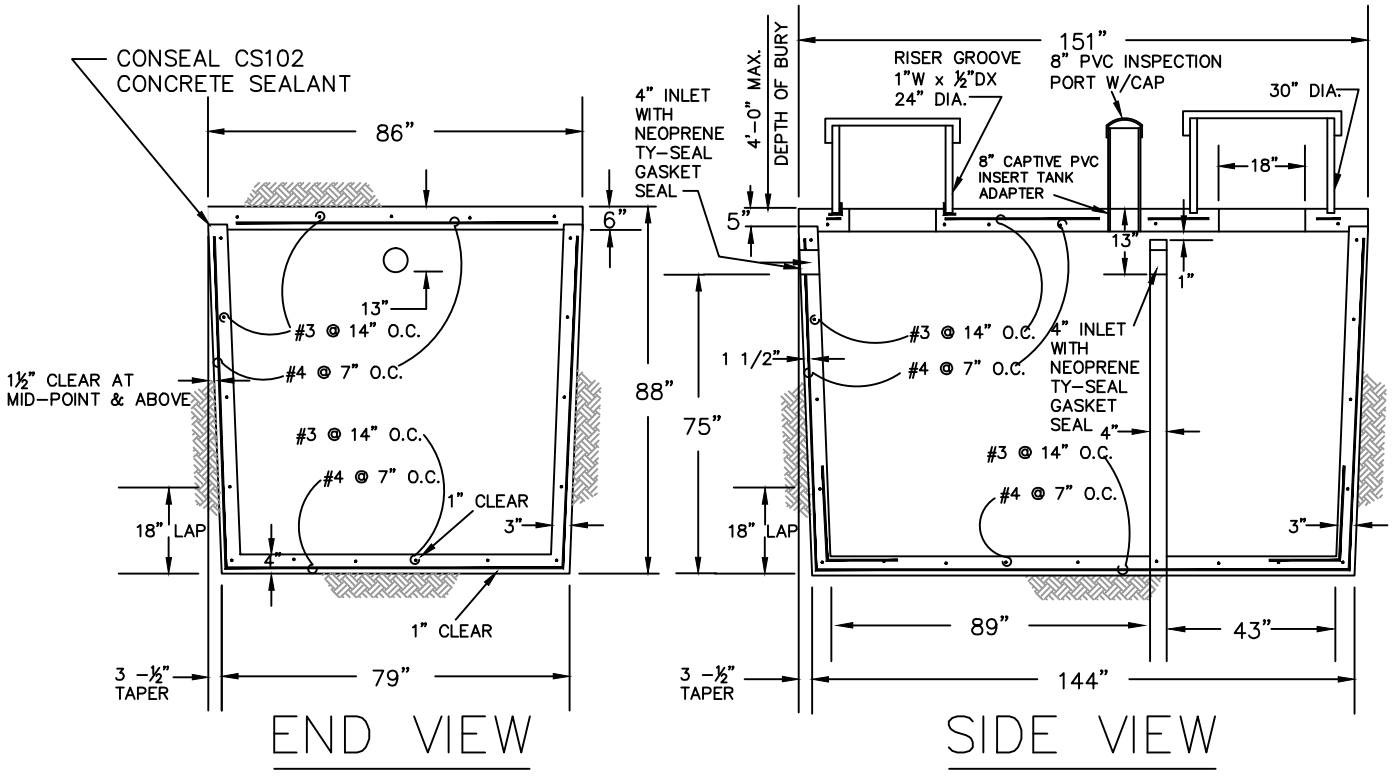
1. SEE SECTION 5E.030 AND 5E.035 FOR APPROVED TANKS.
2. REINFORCING STEEL:
   DEFORMED BAR ASTM A615
   GRADE 60 FY=60,000 P.S.I.
3. CONCRETE: F'C=4000 P.S.I. COMPREHENSIVE STRENGTH @ 28 DAY TEST. MAX. AGGREGATE SIZE ¾"
4. LOADING:
   TOP SLAB:
   2500 LB. WHEEL LOAD OVER 2½ SQ. FT.
   400 P.S.F. SOIL LOAD
   LATERAL LOAD:
   62.4 P.C.F. HYDROSTATIC
   SOIL BEARING:
   1000 P.S.F. ASSUMED
5. THIS TANK IS NOT DESIGNED TO WITHSTAND AN H-20 LIVE LOAD
6. CALL APPROVED TANK MANUFACTURER FOR DIMENSIONS. DIMENSIONS MAY VARY BETWEEN MANUFACTURERS.
7. INTERIOR SHALL BE COATED WITH SPRAY WALL, RAVEN 405 OR APPROVED EQUAL AS DETERMINED BY CITY.

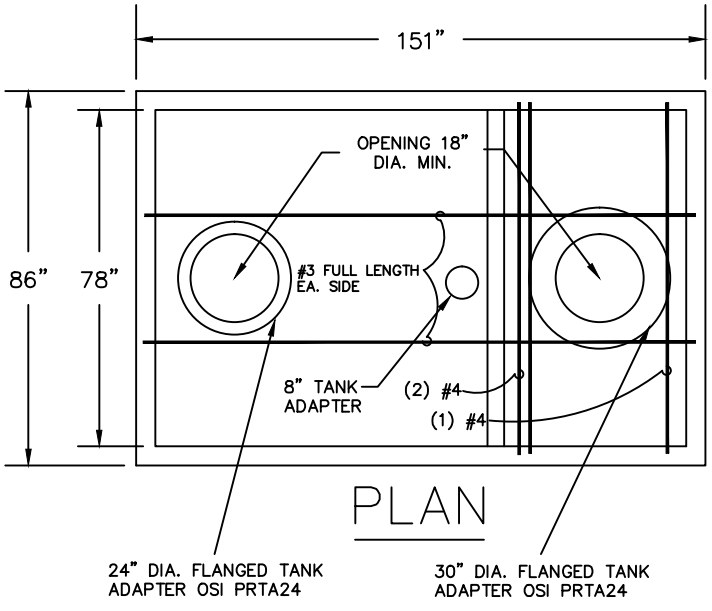
CITY OF GIG HARBOR
ENGINEERING DIVISION

1500 GALLON S.T.E.P SEPTIC TANK

DETAIL NO. 5-08

APPROVED FOR PUBLICATION
CITY ENGINEER _____ DATE MAY 16, 2016





NOTES:

1. SEE SECTION 5E.030 AND 5E.035 FOR APPROVED TANKS.
2. REINFORCING STEEL:
   DEFORMED BAR ASTM 615
   GRADE 60 FY=60,000 P.S.I.
3. CONCRETE: F'C=4000 P.S.I. COMPRESSIVE STRENGTH @ 28 DAY TEST. MAX. AGGREGATE SIZE ¾"
4. LOADING:
   TOP SLAB:
   2500 LB. WHEEL LOAD OVER 2½ SQ. FT.
   400 P.S.F. SOIL LOAD
   LATERAL LOAD:
   62.4 P.C.F. HYDROSTATIC
   SOIL BEARING:
   1000 P.S.F. ASSUMED
5. THIS TANK IS NOT DESIGNED TO WITHSTAND AN H-20 LIVE LOAD
6. INTERIOR SHALL BE COATED WITH SPRAY WALL, RAVEN 405 OR APPROVED EQUAL AS DETERMINED BY CITY.

CITY OF GIG HARBOR
ENGINEERING DIVISION

3000 GALLON S.T.E.P SEPTIC TANK

DETAIL NO. 5-09

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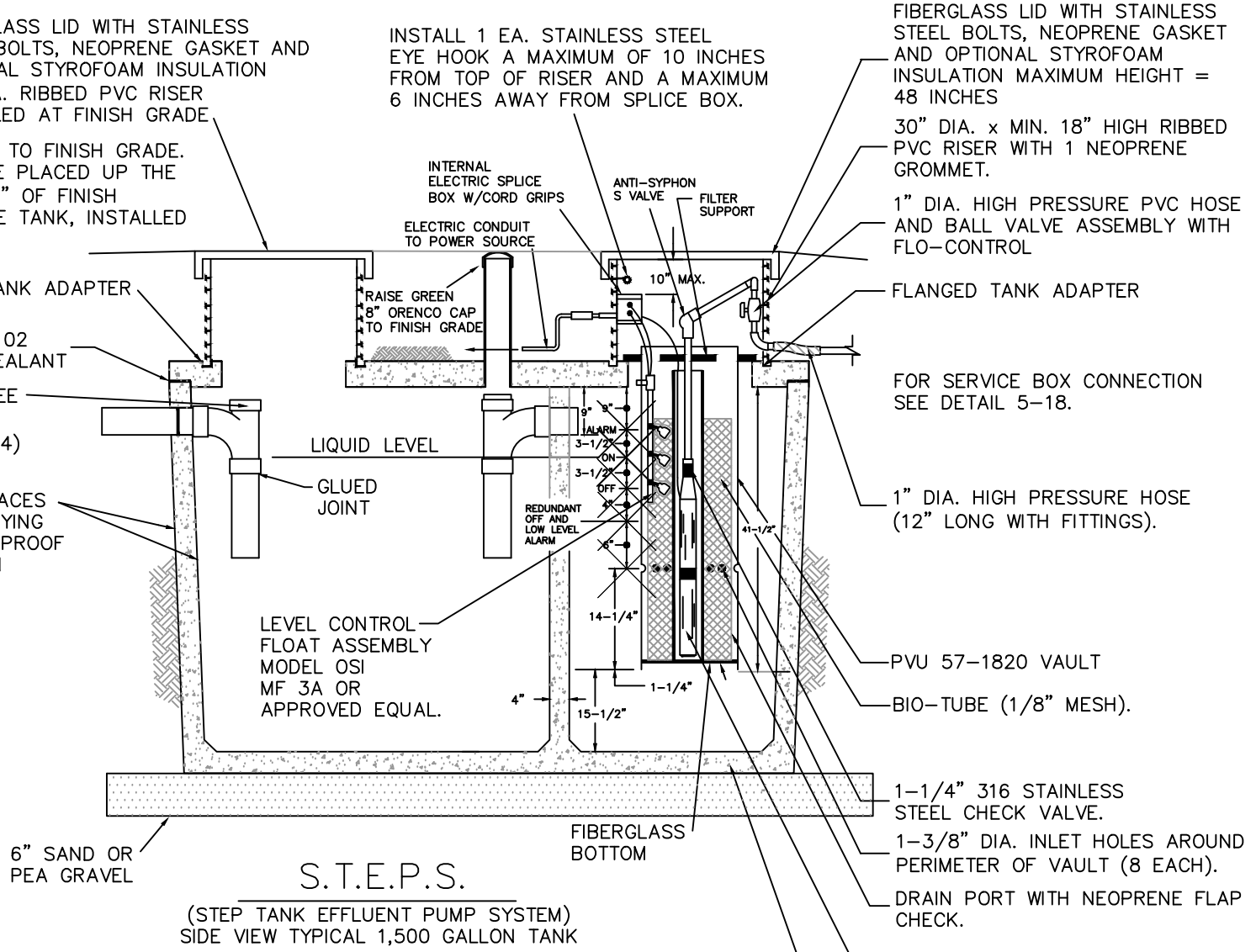
CITY ENGINEER _____ DATE MAY 16, 2016



S.T.E.P.S.

(STEP TANK EFFLUENT PUMP SYSTEM)
SIDE VIEW TYPICAL 1,500 GALLON TANK

NOTES:

1. TANKS SHALL BE BEDDED ON 6 INCHES OF 5/8" CRUSHED ROCK OR PEA GRAVEL. SIDES SHALL BE COMPACTED IN 2 FOOT LIFTS TO THE SAME OR GREATER DENSITY THAN THE SURROUNDING AREA.
2. PIPING FROM PUMP TO THE MAINLINE CONNECTION SHALL BE 11 / 4" SCHEDULE 80 PVC.
3. ALL BACKFILL MATERIAL FOR THE TANK SHALL BE SAND OR GRAVEL BACKFILL FOR PIPE ZONE BEDDING PER WSDOT 9-03.12(3), PAGE 9-27.

CITY OF GIG HARBOR
ENGINEERING DIVISION

1500 GALLON
S.T.E.P. TANK

DETAIL NO. 5-10

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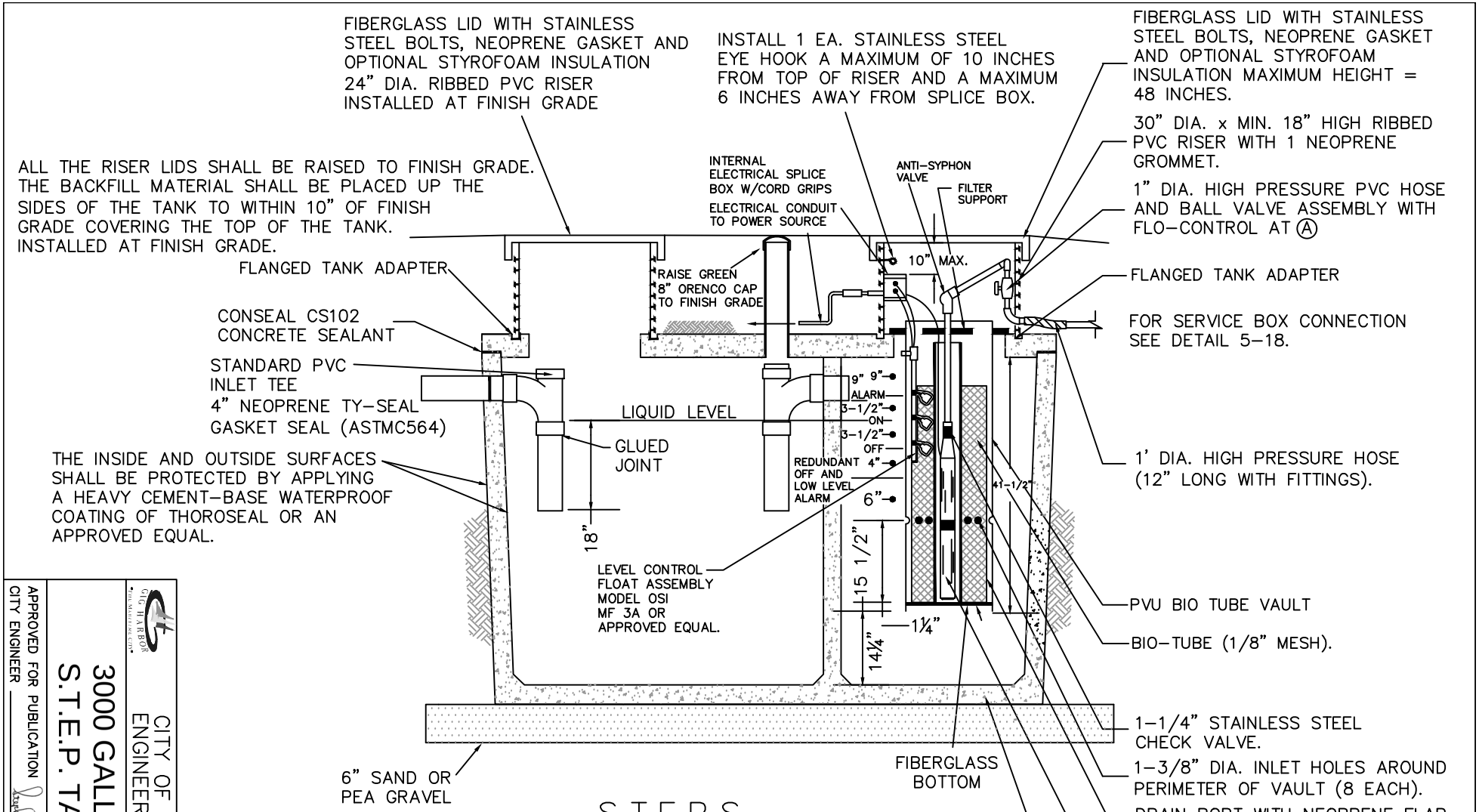
CITY ENGINEER _____
DATE MAY 16, 2016



S.T.E.P.S.

(STEP TANK EFFLUENT PUMP SYSTEM)
SIDE VIEW TYPICAL 3,000 GALLON TANK

NOTE:

1. TANKS SHALL BE BEDDED ON 6 INCHES OF ⅝" CRUSHED ROCK OR PEA GRAVEL. SIDES SHALL BE COMPACTED IN 2 FOOT LIFTS TO THE SAME OR GREATER DENSITY THAN THE SURROUNDING AREA.
2. PIPING FROM THE PUMP TO HE MAINLINE CONNECTION SHALL BE 11 / 4" SCHEDULE 80 PVC.
3. ALL BACKFILL MATERIAL FOR THE TANK SHALL BE SAND OR GRAVEL BACKFILL FOR PIPE ZONE BEDDING PER WSDOT 9-03.12(3), PAGE 9-27.

CITY OF GIG HARBOR
ENGINEERING DIVISION

3000 GALLON
S.T.E.P. TANK

DETAIL NO.
5-11

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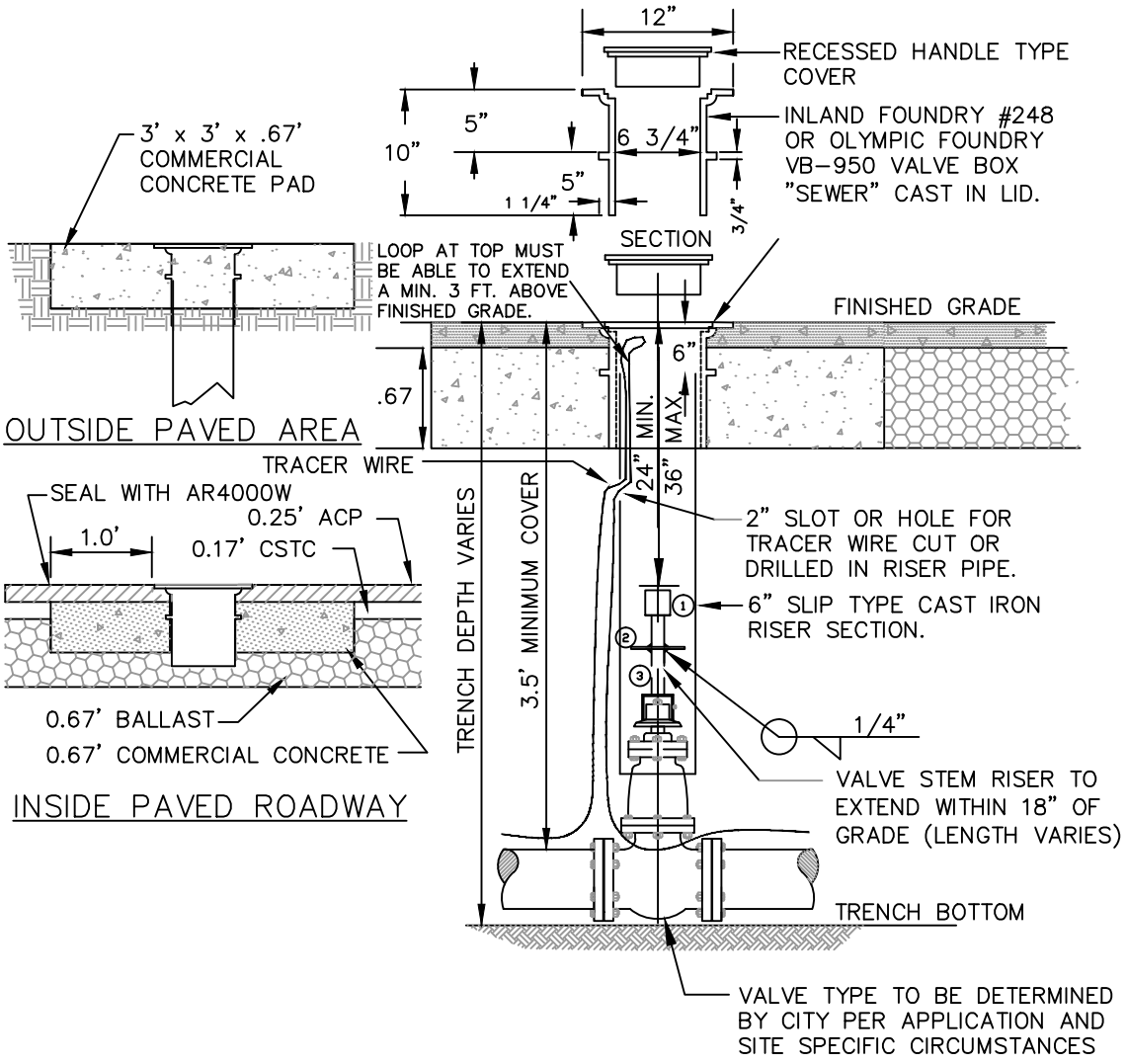
CITY ENGINEER _____
DATE MAY 16, 2016



NOTE:

ALL VALVES MUST HAVE A 14 GAUGE COATED COPPER TRACER WIRE TIED OFF AT VALVE BODY, EXTENDED OUTSIDE PVC RISER PIPE THEN EXTENDED ONE FOOT TOP OF VALVE BOX.

VALVE STEM EXTENSION LEGEND

① VALVE OPERATING NUT OR 1-7/8" x 1-7/8" X 2" HIGH GRADE STEEL WELDED TO GUIDE PLATE.
② 3/16" THICK x 5-1/2" DIA. STEEL GUIDE PLATE WELDED TO RISER SHAFT.
③ 2" x 2" X 3/16" STRUCTURAL STEEL TUBING TO FIT OPERATING NUT. LENGTH AS REQUIRED.

NOTE:
ALL WELDS TO SHAFT SHALL BE FILLET WELD ALL AROUND, AS SPECIFIED ABOVE.

CITY OF GIG HARBOR
ENGINEERING DIVISION

STANDARD VALVE BOX

DETAIL NO. 5-12

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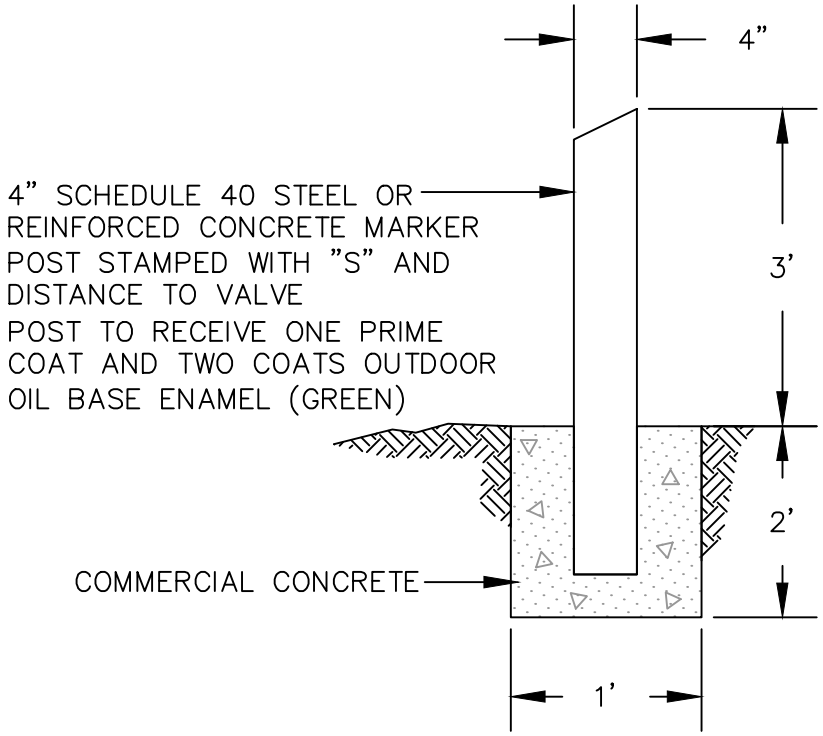
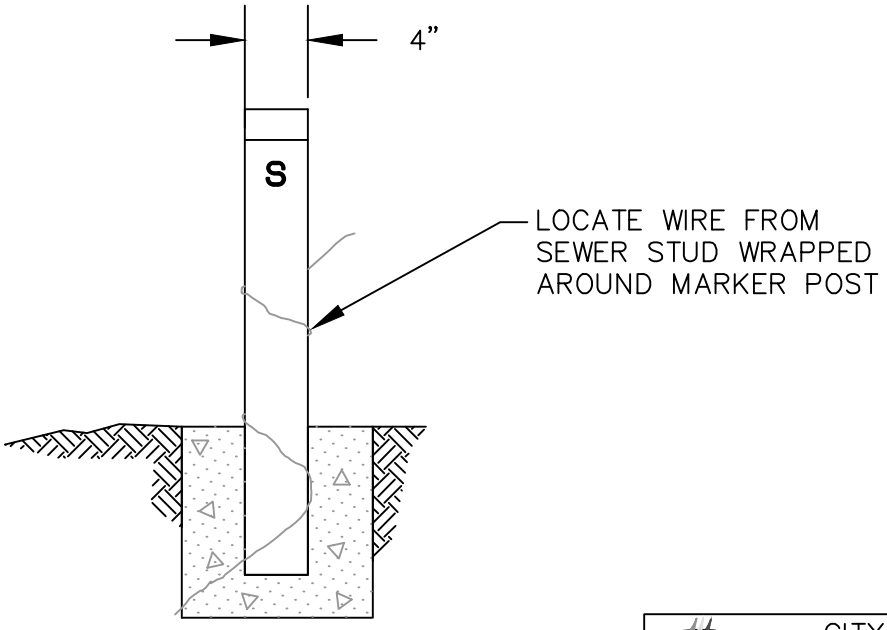


SIDE



FRONT

CITY OF GIG HARBOR
ENGINEERING DIVISION

VALVE MARKER POST

DETAIL NO. 5-13

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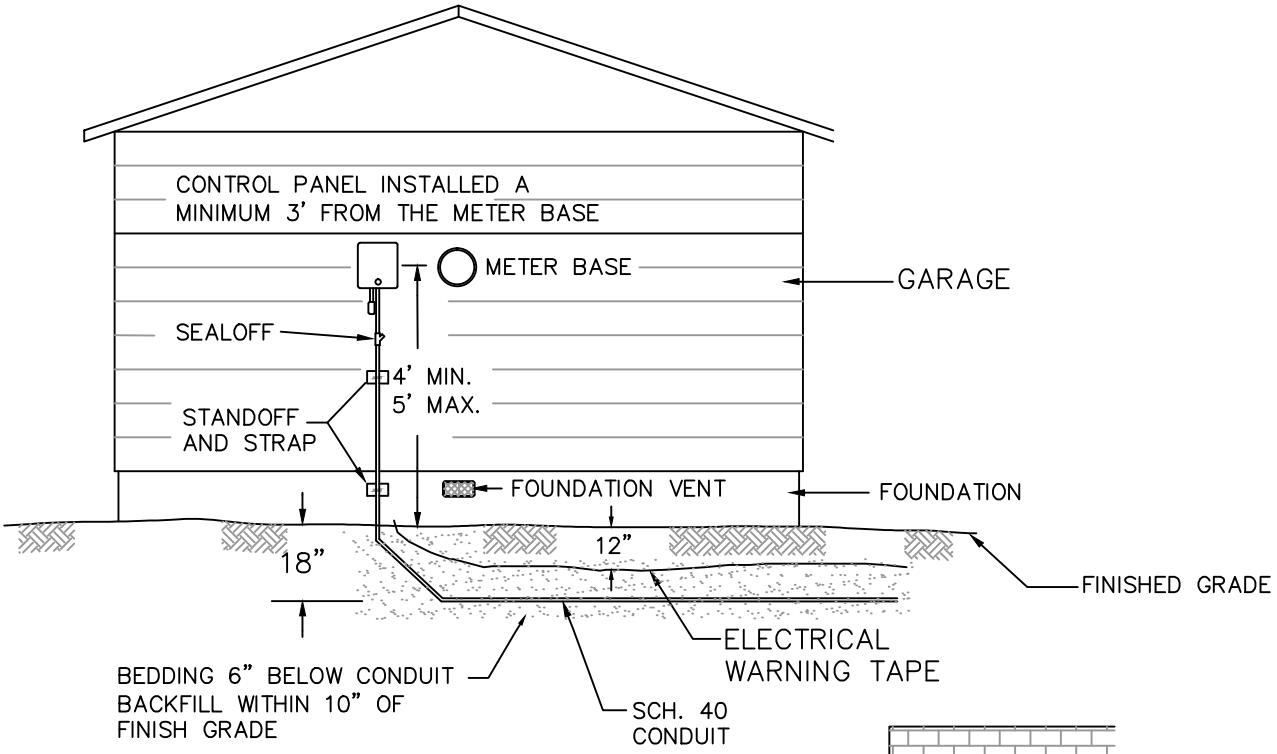

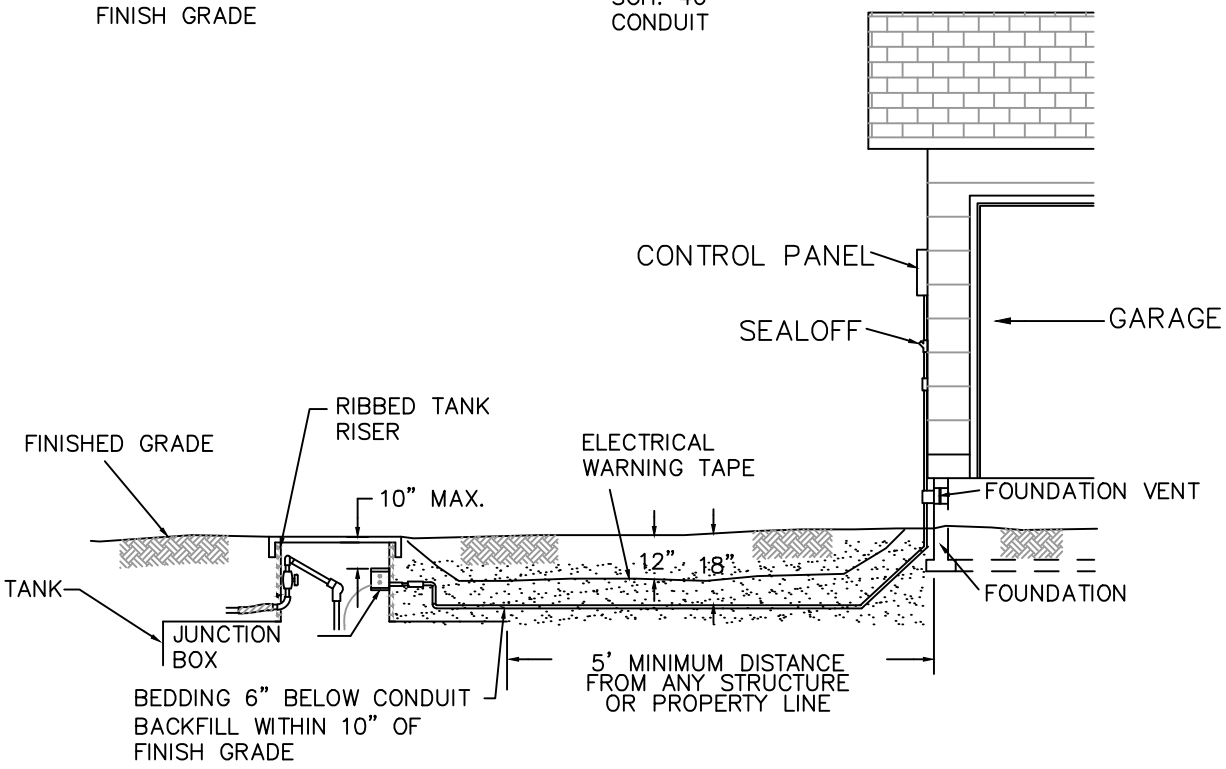

NOTE:

1. CONTROL PANEL REQUIREMENT ARE IN 5E.095.
2. ELECTRICAL CONDUIT MUST BE BEDDED IN SAND OR PEA GRAVEL.
3. STEP LINES UNDER DRIVEWAYS SHALL BE CASED IN 2" CLASS 200 PVC EXTENDED 2 FEET BEYOND THE DRIVEWAY EDGES.
   A SQUARE D 30A 240 VAC 3R SAFETY SWITCH NON-FUSED IS REQUIRED.

CITY OF GIG HARBOR
ENGINEERING DIVISION

S.T.E.P.
CONTROL PANEL

DETAIL NO. 5-14

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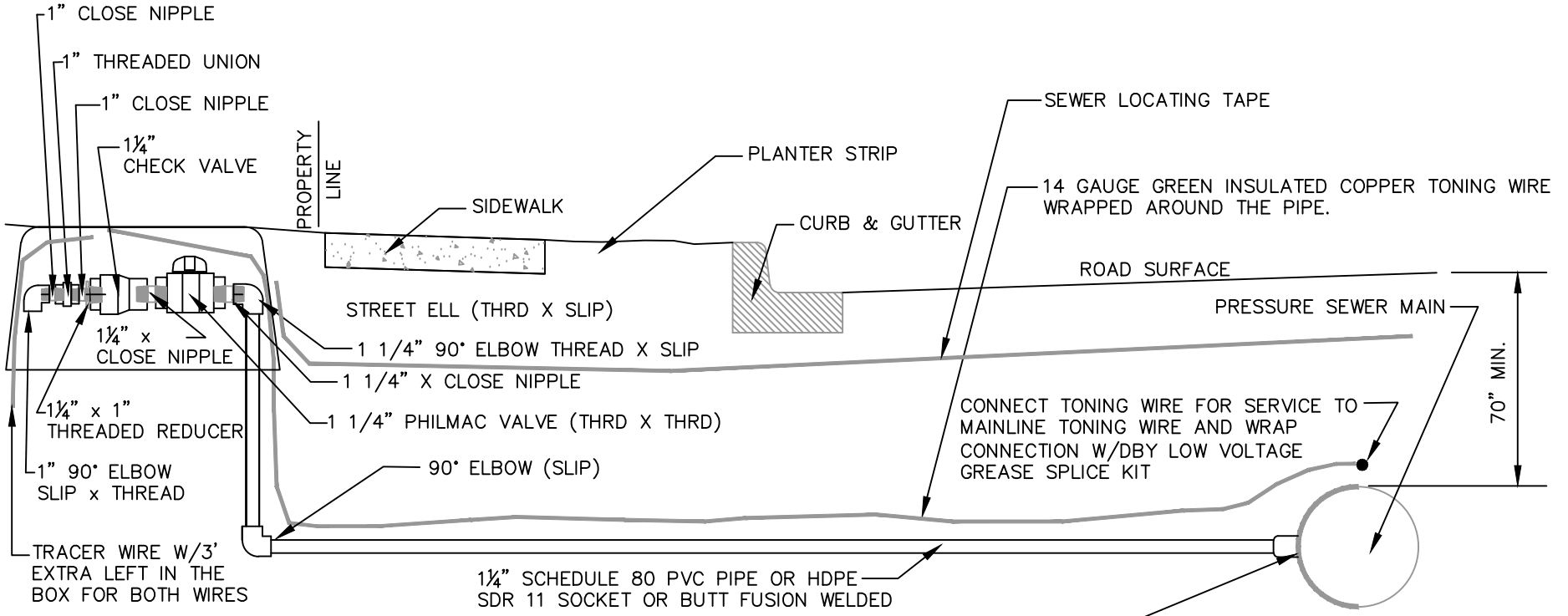

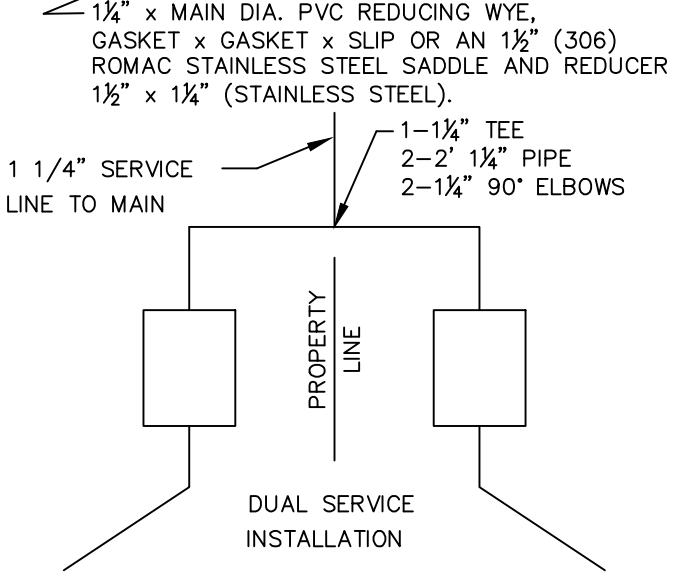

NOTES:

1. FILL SERVICE BOX WITH FIBERGLASS INSULATION AT TIME OF ON-SITE CONNECTION TO THE STUB.
2. AFTER THE HYDRO-STATIC TESTS HAVE BEEN APPROVED BY THE CITY INSPECTOR THE CHECK VALVE SHOULD BE INSTALLED.
3. FOR HDPE REQUIREMENTS SEE CHAPTER 5D.
4. FUTURE LOT CONNECTION SHALL BE MADE AT THE 90° ELBOW WITH THE TRACER INCLUDED IN THE INSTALLATION.
5. ALL PIPING AND FITTINGS SHALL BE SCHEDULE 80.
6. THE 1¼" VALVE SHALL BE A PHILMAC THREADED.
7. THE CHECK VALVE SHALL BE KING BRO.S # KSC 1250 T THREADED.
8. SERVICE BOX-CARSON INDUSTRIES MODEL NO. 1419 WITH BOLTED, FLAT COVER AND NO. 1419 EXTENSION WHEN IN NON-TRAFFIC AREAS, "VALVE BOX LID SHALL BE MARKED SEWER".

CITY OF GIG HARBOR
ENGINEERING DIVISION

SINGLE FAMILY S.T.E.P. SERVICE CONNECTION

DETAIL NO. 5-15

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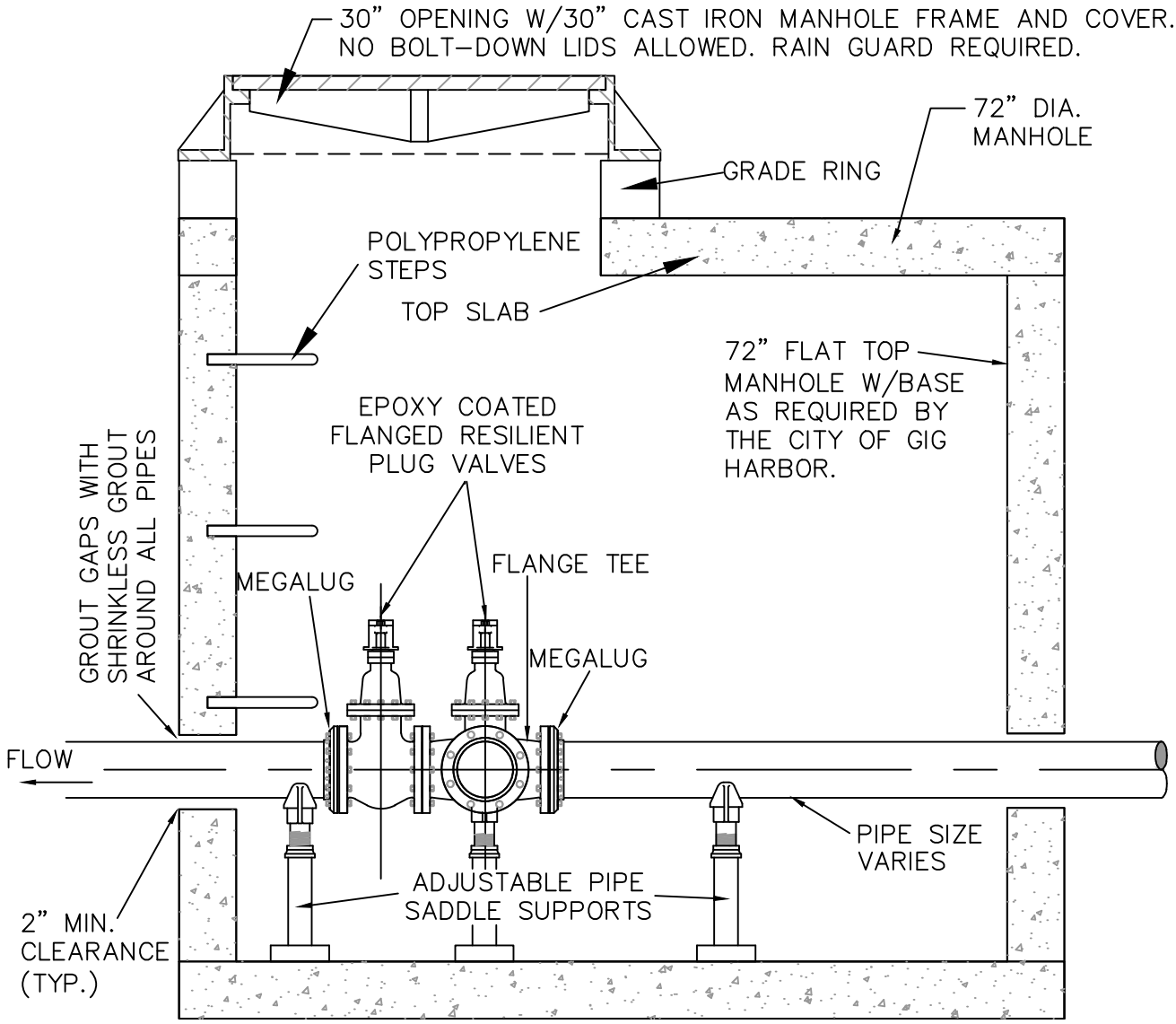
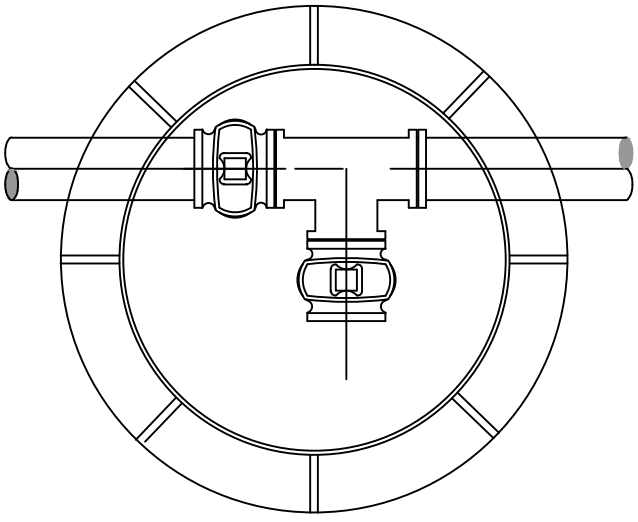
CITY ENGINEER _____
DATE MAY 16, 2016



TOP VIEW THROUGH MANHOLE OPENING



NOTES:

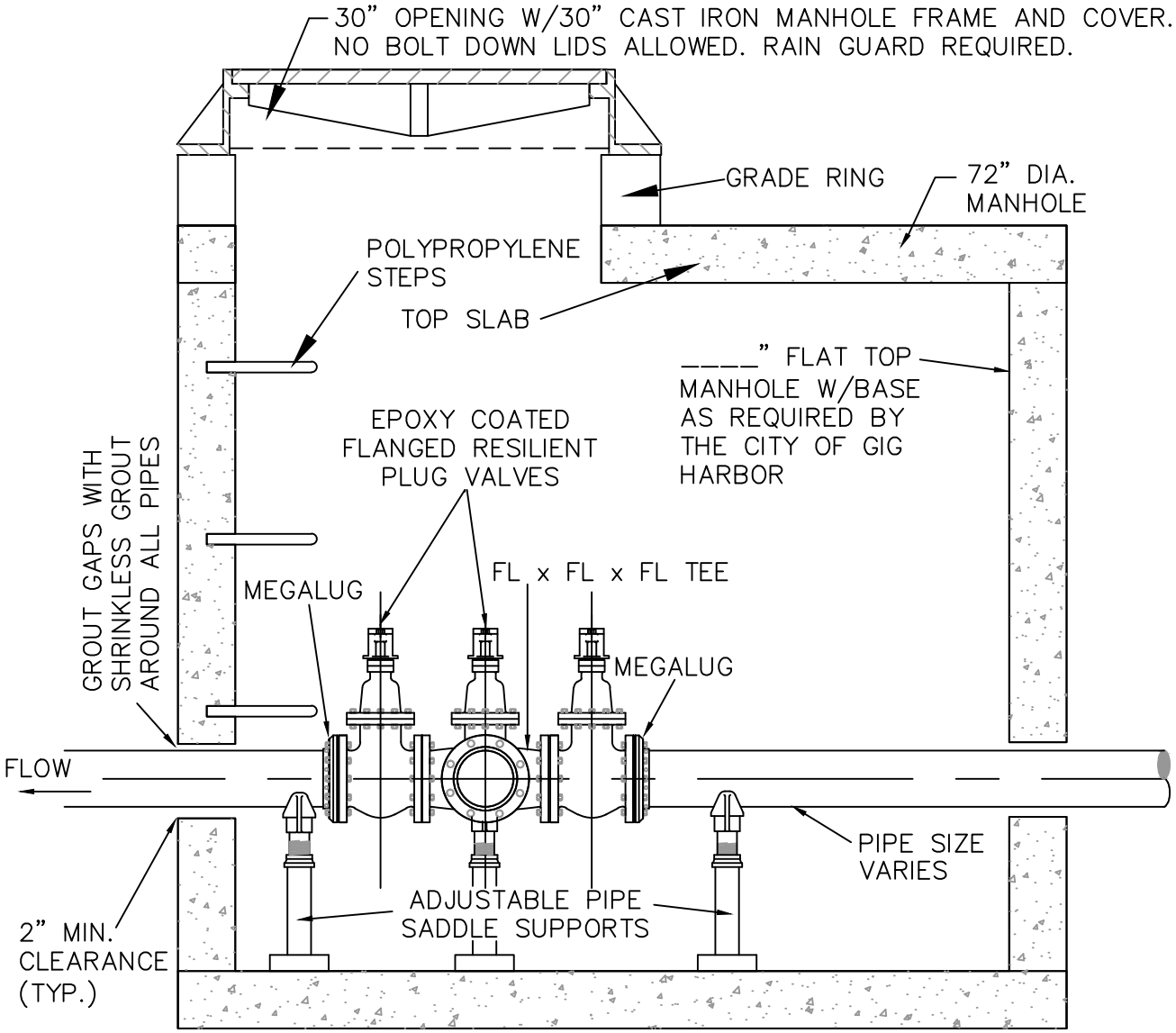
1. ALL APPURTENANCES INSTALLED SHALL BE THE SAME SIZE AS THE PIPE
2. THE SIZE OF THE MANHOLE SHALL BE DETERMINED BY THE SIZE OF THE PIPE.

CITY OF GIG HARBOR
ENGINEERING DIVISION

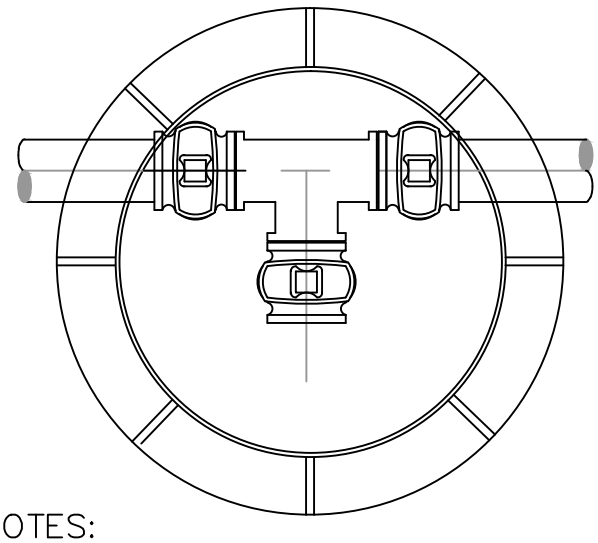
PIG CATCHER PORT 4" AND LARGER

DETAIL NO. 5-16

APPROVED FOR PUBLICATION
CITY ENGINEER _____ DATE MAY 16, 2016



TOP VIEW THROUGH MANHOLE OPENING



NOTES:

1. ALL APPURTENANCES INSTALLED SHALL BE THE SAME SIZE AS THE PIPE.
2. THE SIZE OF THE MANHOLE SHALL BE DETERMINED BY THE SIZE OF THE PIPE.

CITY OF GIG HARBOR
ENGINEERING DIVISION

INLINE PIG CATCHER PORT 4" AND LARGER	DETAIL NO. 5-17

APPROVED FOR PUBLICATION
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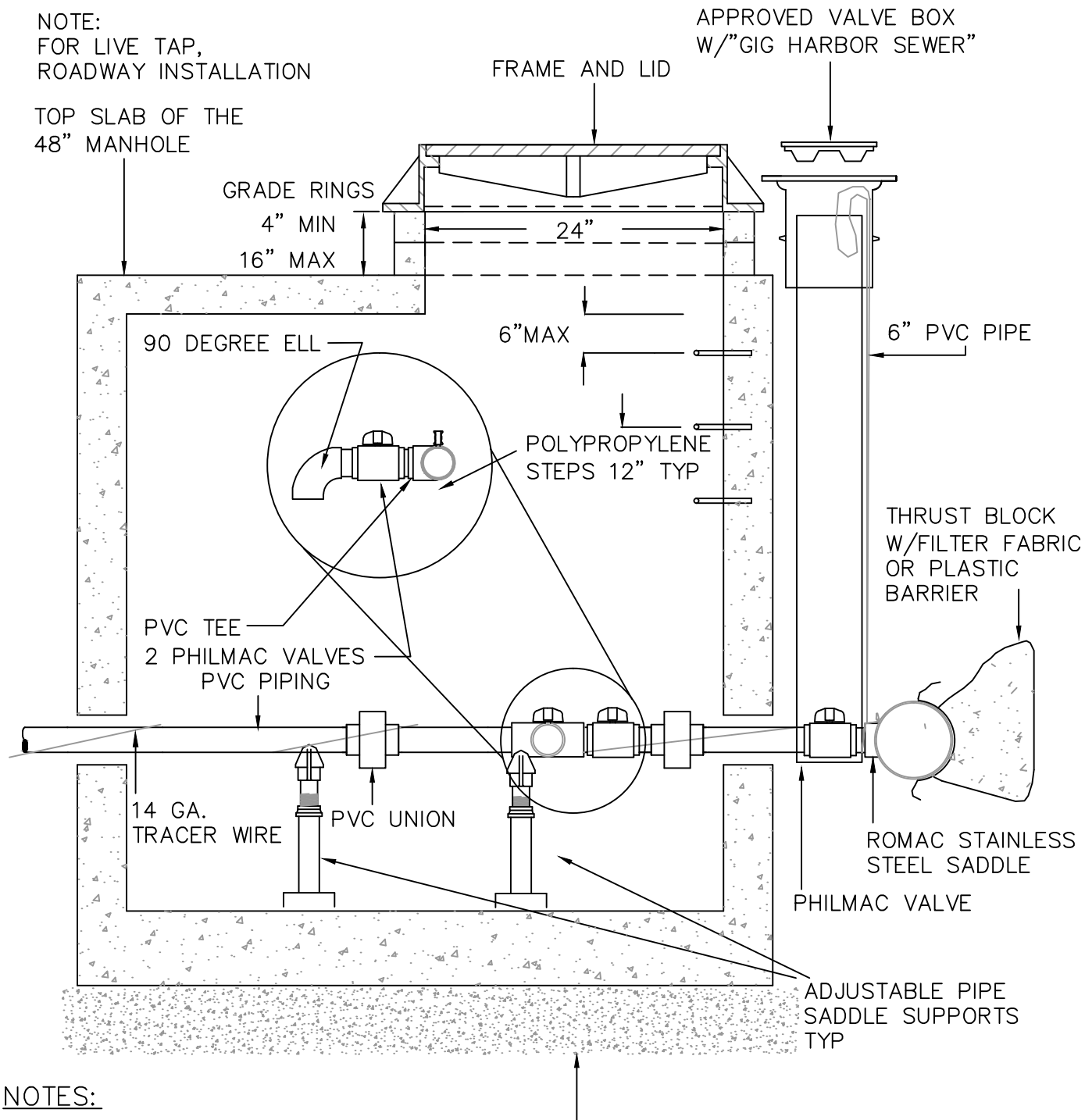


NOTES:

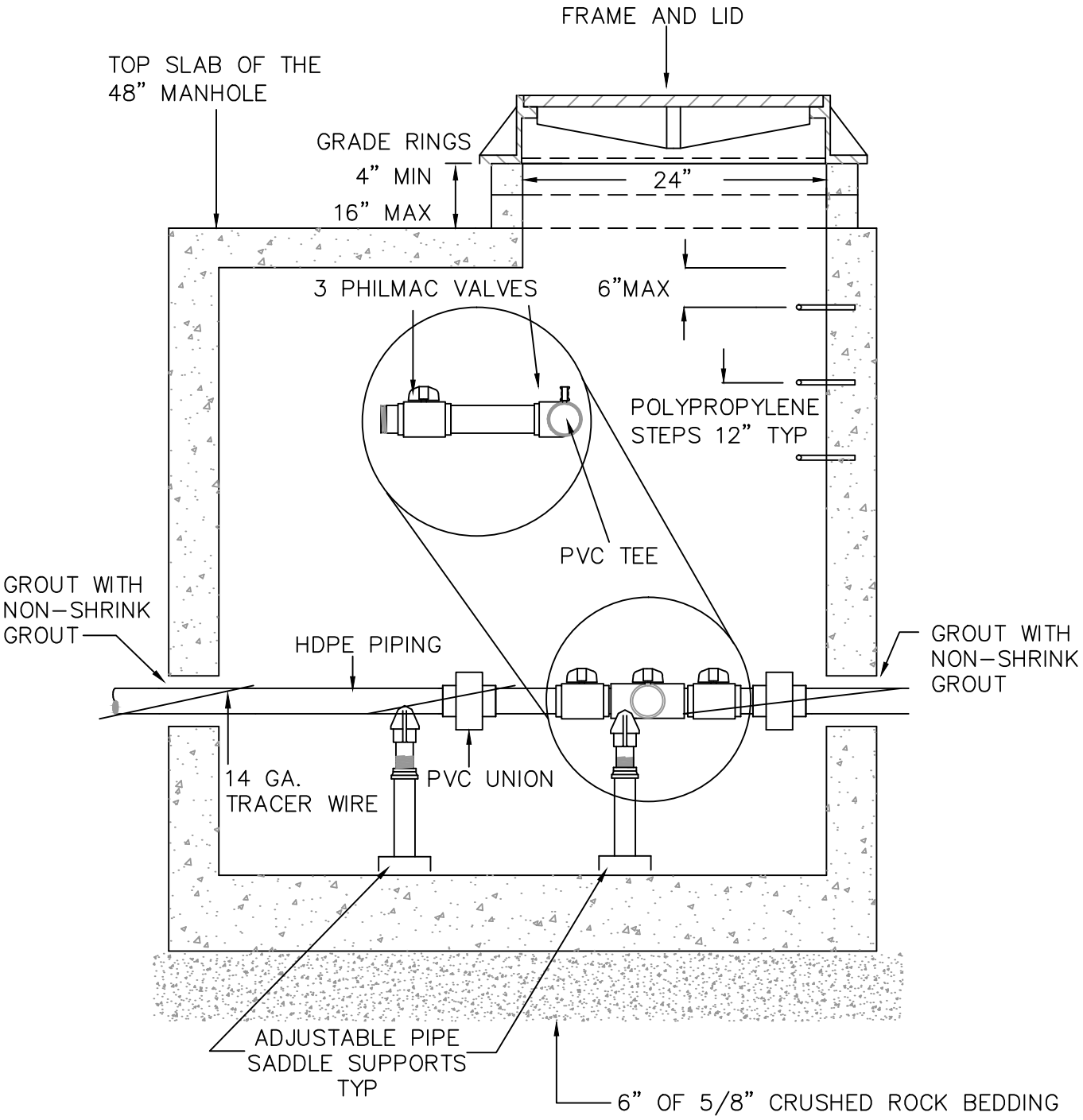
1. CONNECTION TO MANHOLE SHALL BE MADE BY KOR-N-SEAL BOOT.
2. SEE DETAIL 5-3 FOR MANHOLE COLLAR INSTALLATION.
3. A SEWER GUARD SHALL BE INSTALLED IN ANY MANHOLE SUBJECT TO FLOODING.
4. GROUT ALL JOINTS AND CONNECTION POINTS WITH NON-SHRINK GROUT.
5. THE PLACEMENT OF THE VALVE ASSEMBLY SHALL BE DIRECTLY BELOW THE MANHOLE FRAME AND LID.

CITY OF GIG HARBOR
ENGINEERING DIVISION

2" PIG CATCHER PORT

DETAIL NO. 5-18

APPROVED FOR PUBLICATION
CITY ENGINEER _____ DATE MAY 16, 2016



NOTES:

1. CONNECTION TO MANHOLE SHALL BE MADE BY KOR-N-SEAL BOOT.
2. SEE DETAIL 5-3 FOR MANHOLE COLLAR INSTALLATION.
3. A SEWER GUARD SHALL BE INSTALLED IN ANY MANHOLE SUBJECT TO FLOODING.
4. GROUT ALL JOINTS AND CONNECTION POINTS WITH NON-SHRINK GROUT.
5. THE PLACEMENT OF THE VALVE ASSEMBLY SHALL BE DIRECTLY BELOW THE MANHOLE FRAME AND LID.

CITY OF GIG HARBOR
ENGINEERING DIVISION

2" LINE PIG CATCHER PORT

DETAIL NO. 5-19

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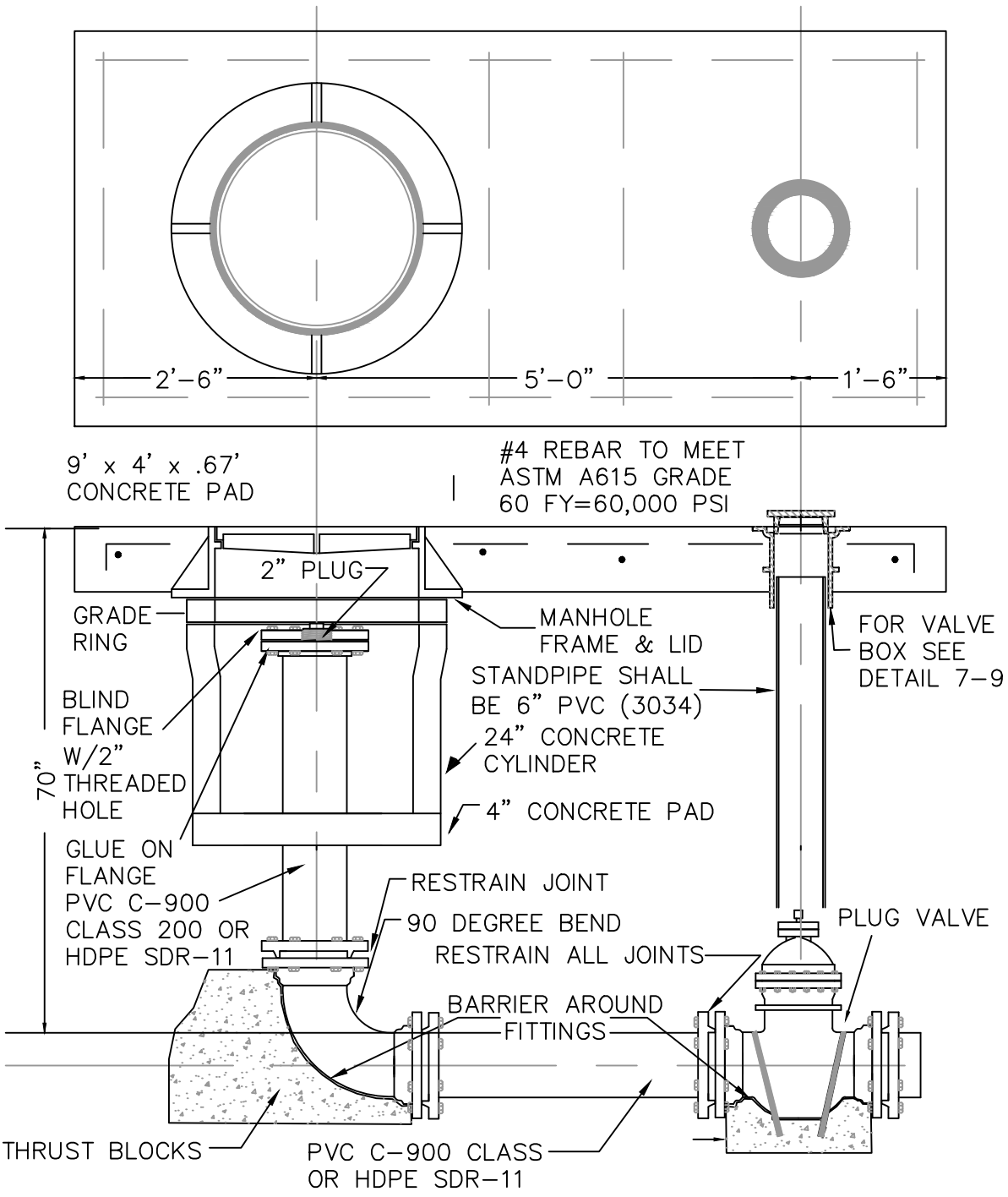

NOTE:

1. FOR VALVE STEM RISER REQUIREMENTS SEE DETAIL 5-15.
2. THE PIG LAUNCH SIZES SHALL BE THE SAME SIZE AS THE MAIN.
3. VALVE BOXES SHALL BE INLAND FOUNDRY #248 OR OLYMPIC FOUNDRY VB-950 VALVE BOX W/"CITY OF GIG HARBOR" CAST IN LID.

CITY OF GIG HARBOR
ENGINEERING DIVISION

LAUNCH PORT
4" AND LARGER

DETAIL NO.
5-20

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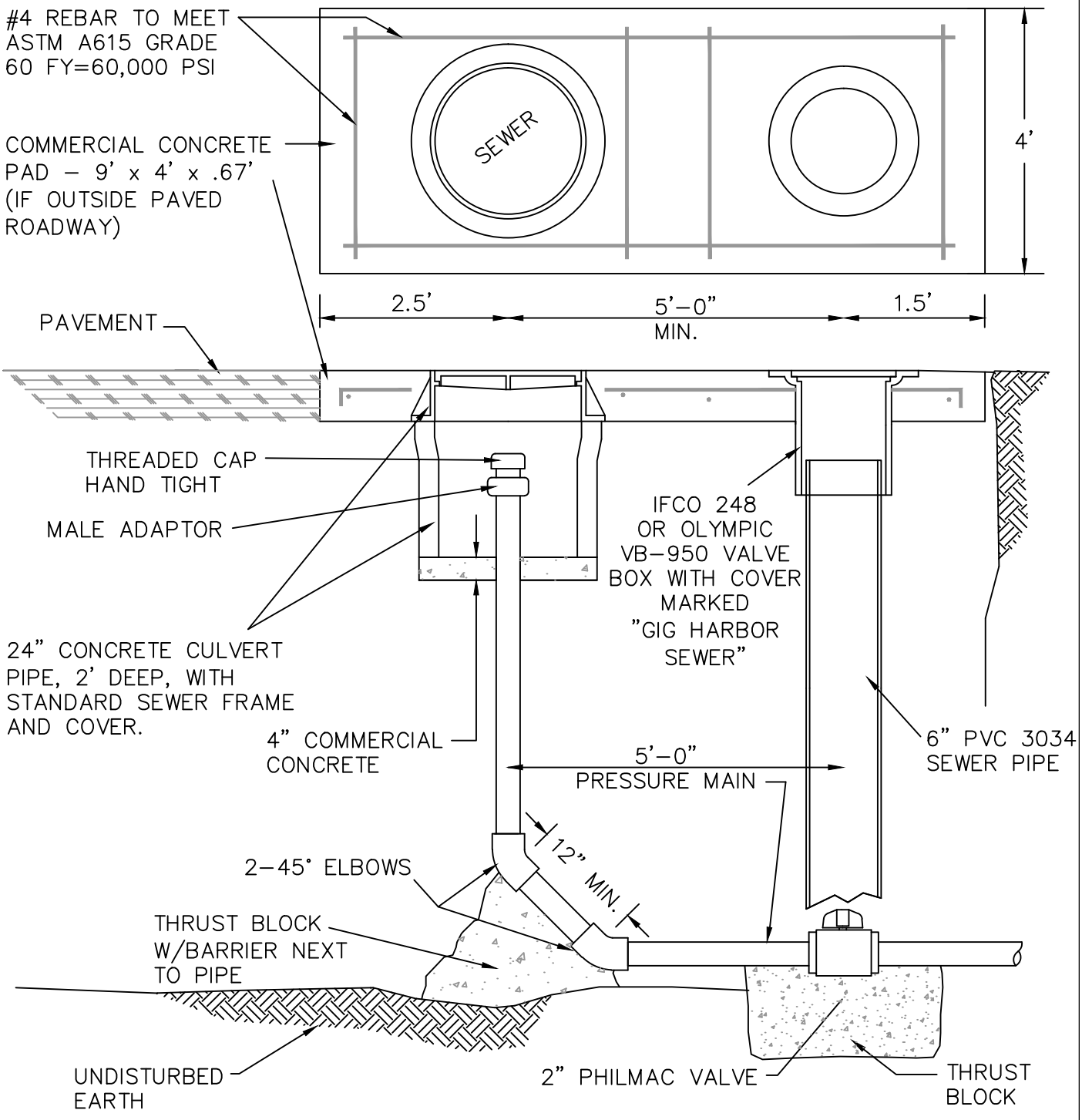

NOTE:

1. FOR VALVE STEM RISER REQUIREMENTS SEE DETAIL 5–15. PHILMAC VALVES DO NOT REQUIRE EXTENSIONS.

CITY OF GIG HARBOR
ENGINEERING DIVISION

2" LAUNCH PORT

DETAIL NO. 5-21

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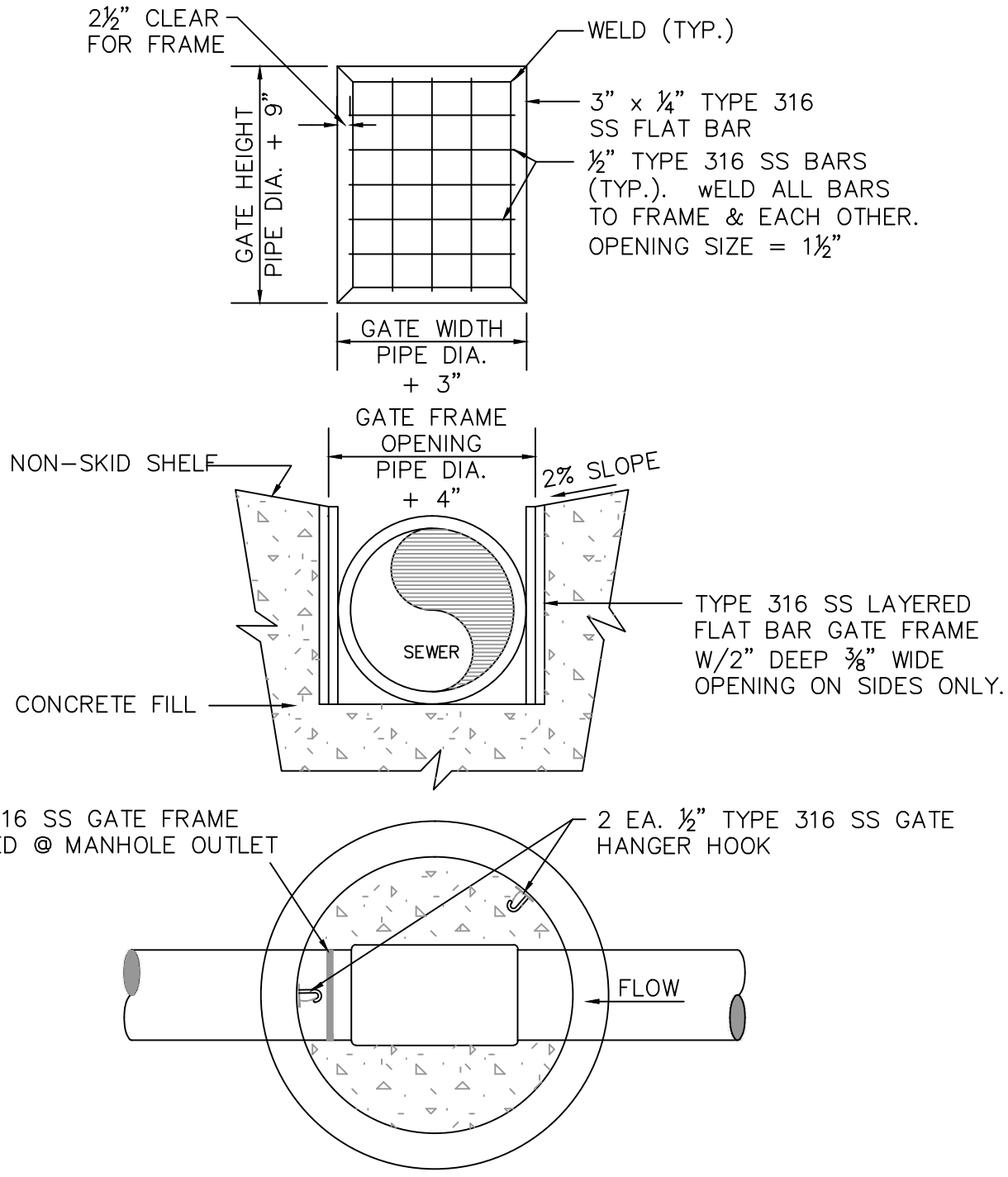

NOTES:

1. THE DOWNSTREAM AREA BEHIND GATE MUST NOT ALLOW PIG TO CONTINUE TRAVEL DOWN PIPE.

CITY OF GIG HARBOR
ENGINEERING DIVISION

OUTFALL MANHOLE PIG CATCHER

DETAIL NO. 5-22

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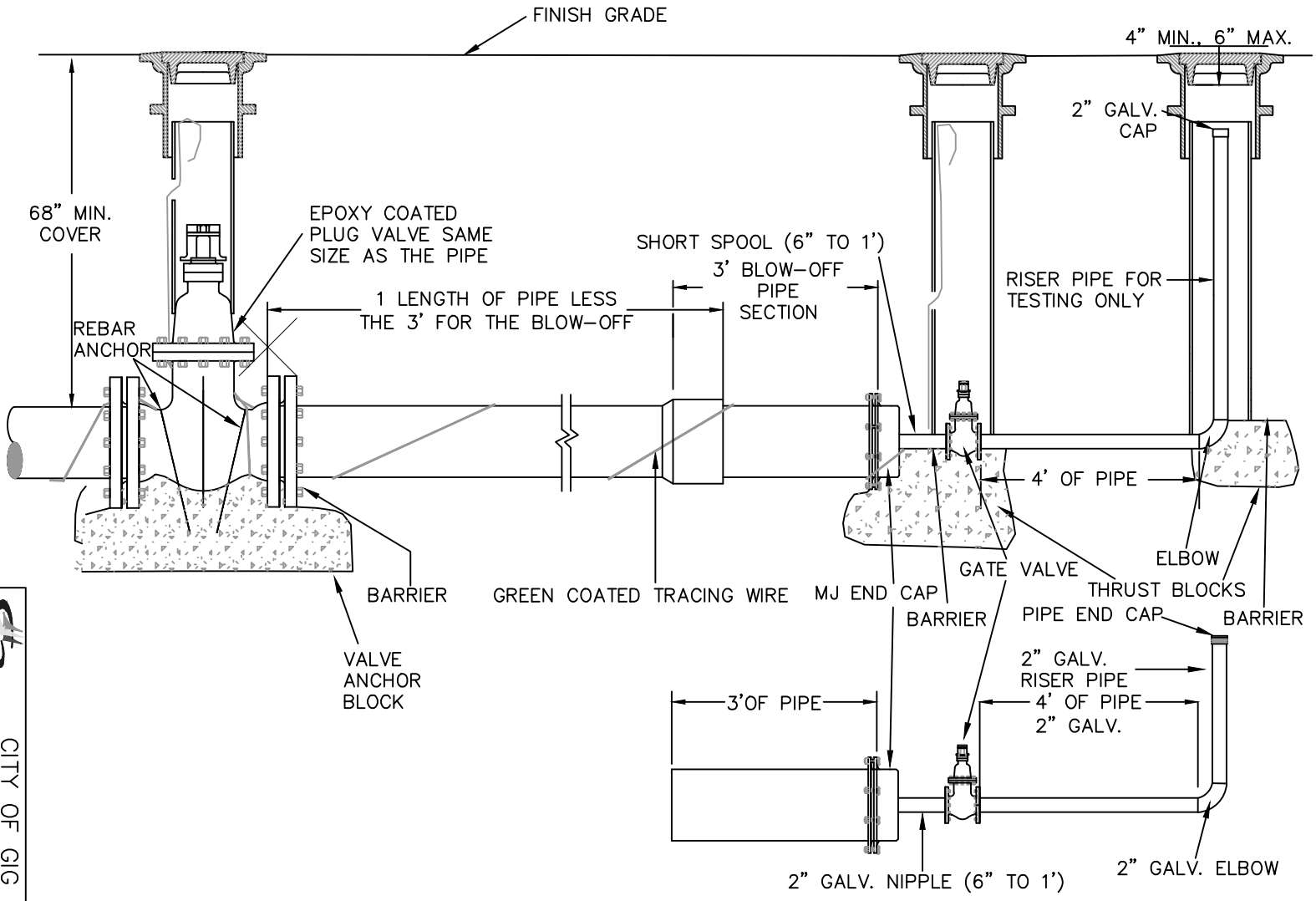

NOTES:

1. FOR VALVE BOX REQUIREMENTS SEE DETAIL 5-15.
2. THIS IA A FUTURE EXTENSION DETAIL. THE TEST REQUIREMENTS SHALL BE PER SECTION 5A.070 TESTING UNDER FORCE MAINS.
3. FOR PIPING REQUIREMENTS SEE SECTION 5D.030 PRESSURE MAIN.

CITY OF GIG HARBOR
ENGINEERING DIVISION

FUTURE EXTENSION PRESSURE MAINS

DETAIL NO. 5-23

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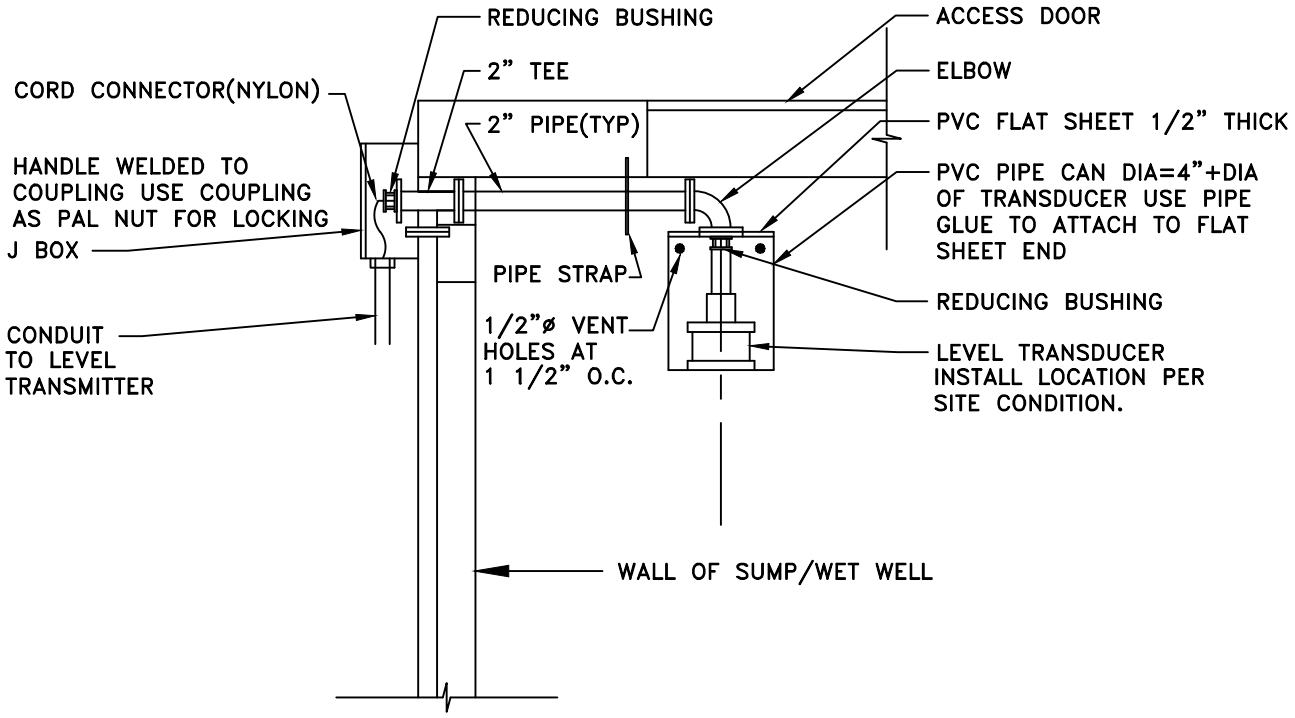

CITY OF GIG HARBOR
ENGINEERING DIVISION

ULTRASONIC LEVEL SENSOR MOUNTING

DETAIL NO. 5-24

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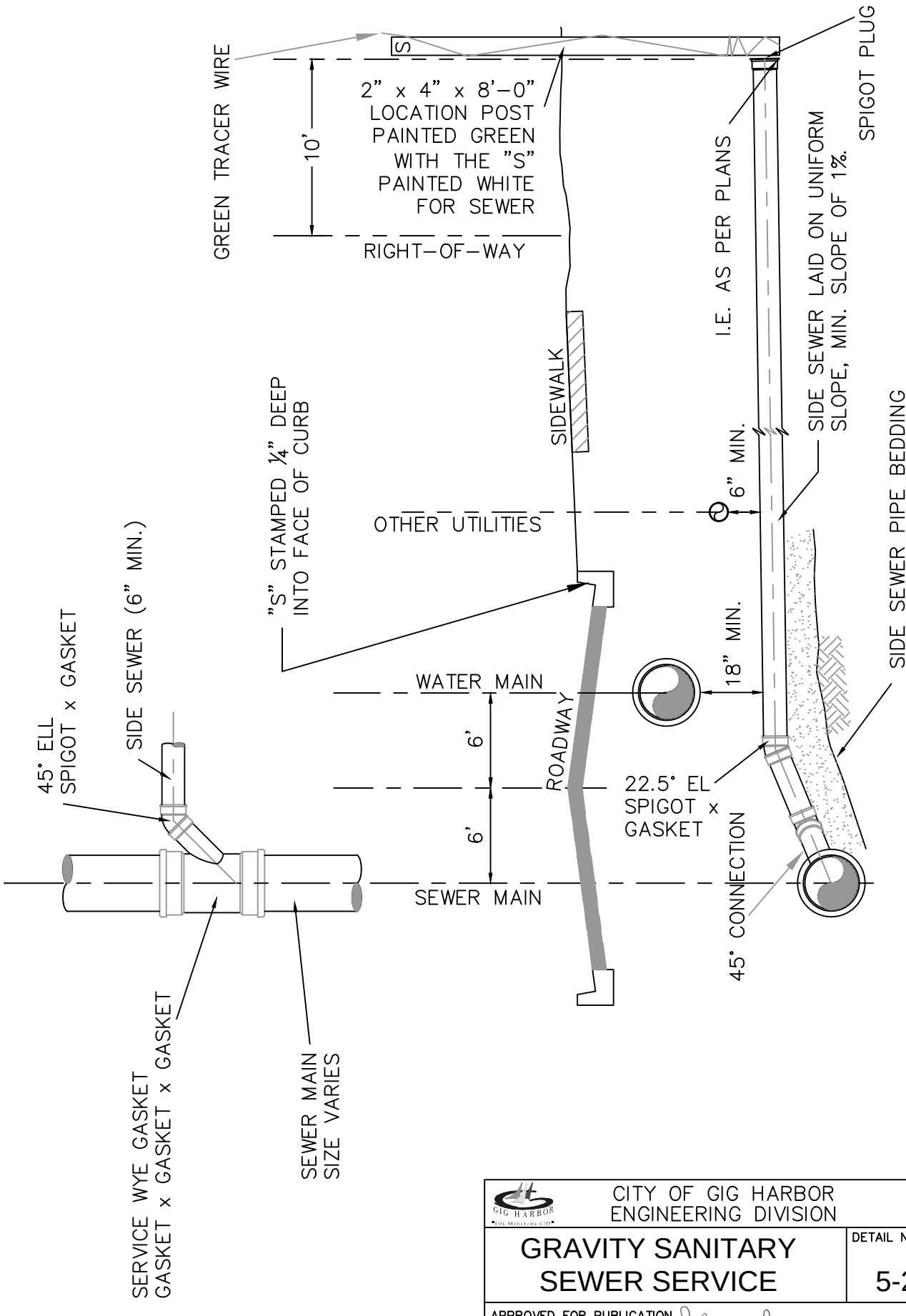

CITY OF GIG HARBOR
ENGINEERING DIVISION

GRAVITY SANITARY SEWER SERVICE

DETAIL NO. 5-25

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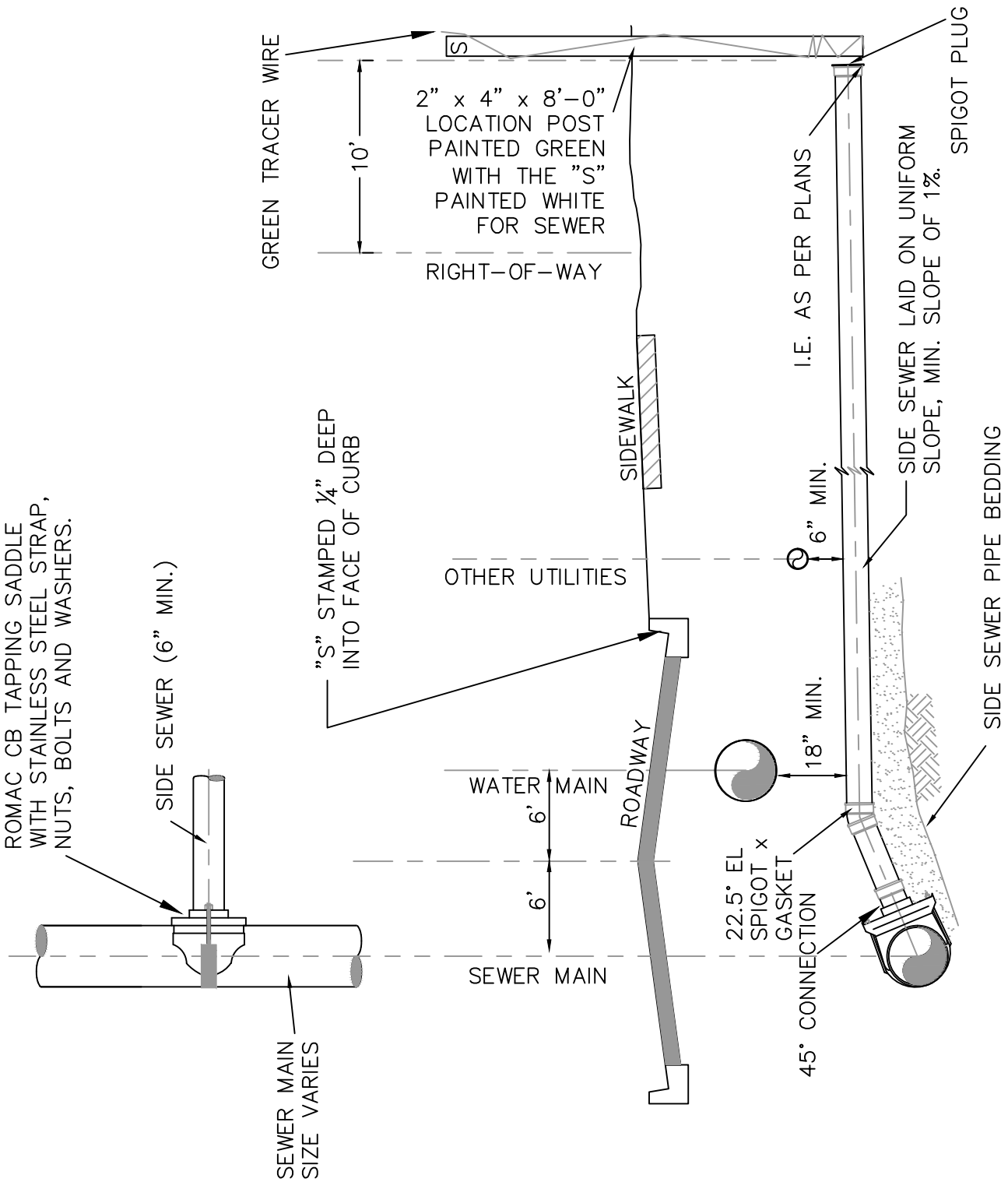

NOTE:

1. INSERT-A-TEE SHALL NOT BE ALLOWED.

CITY OF GIG HARBOR
ENGINEERING DIVISION

GRAVITY SEWER TAP CONNECTION

DETAIL NO. 5-26

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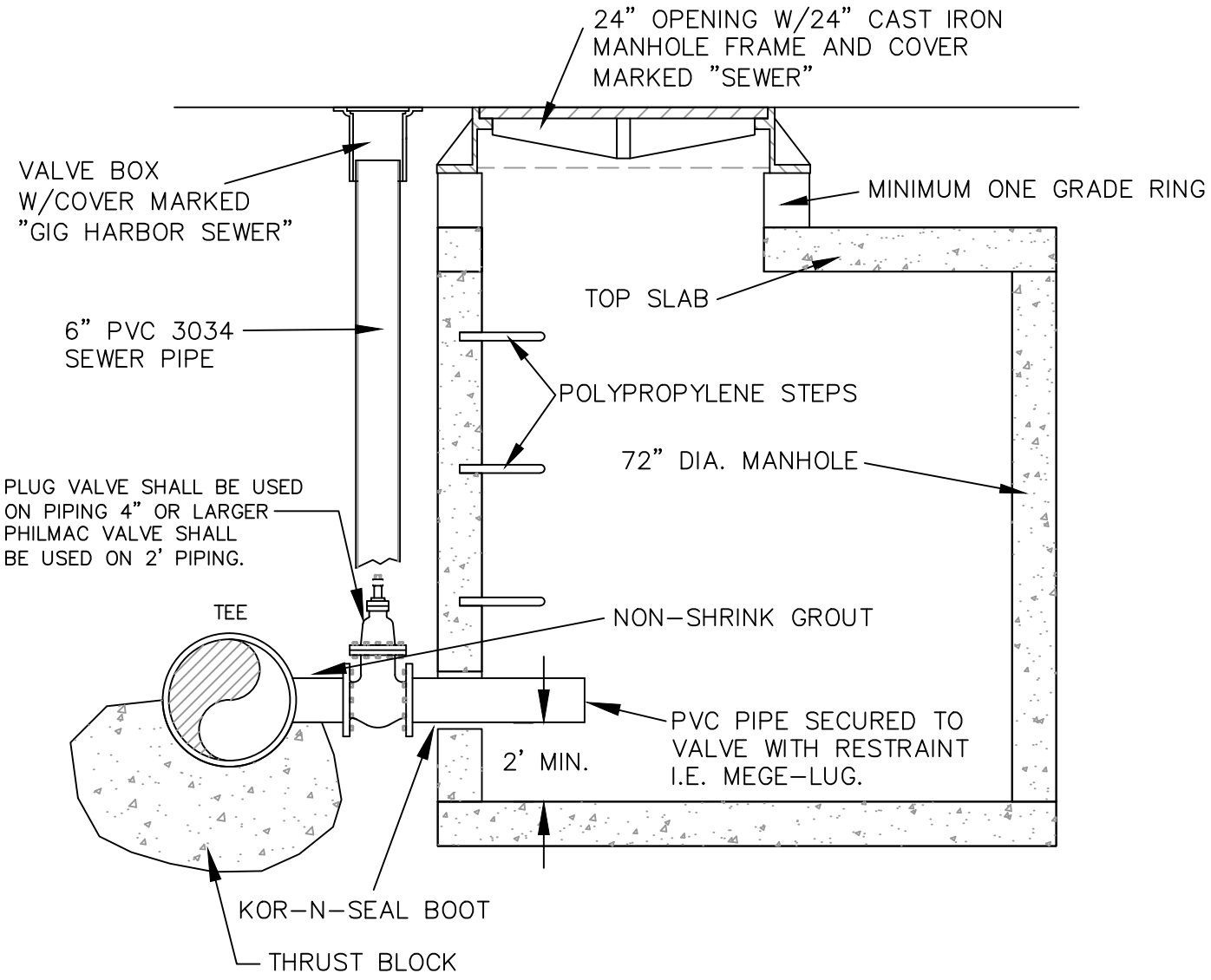

NOTE:

1. MANHOLE SHALL BE COATED ON THE INSIDE WITH TNEMIC 120 VINYL ESTER OR QUANTUM POLYMORPHIC RESIN.

2. INSTALL A CONCRETE PAD WHEN LOW POINT DRAIN MANHOLE IS INSTALLED OUTSIDE OF PAVED AREA. SEE DETAIL 5-3.

CITY OF GIG HARBOR
ENGINEERING DIVISION

LOW POINT DRAIN

DETAIL NO. 5-27

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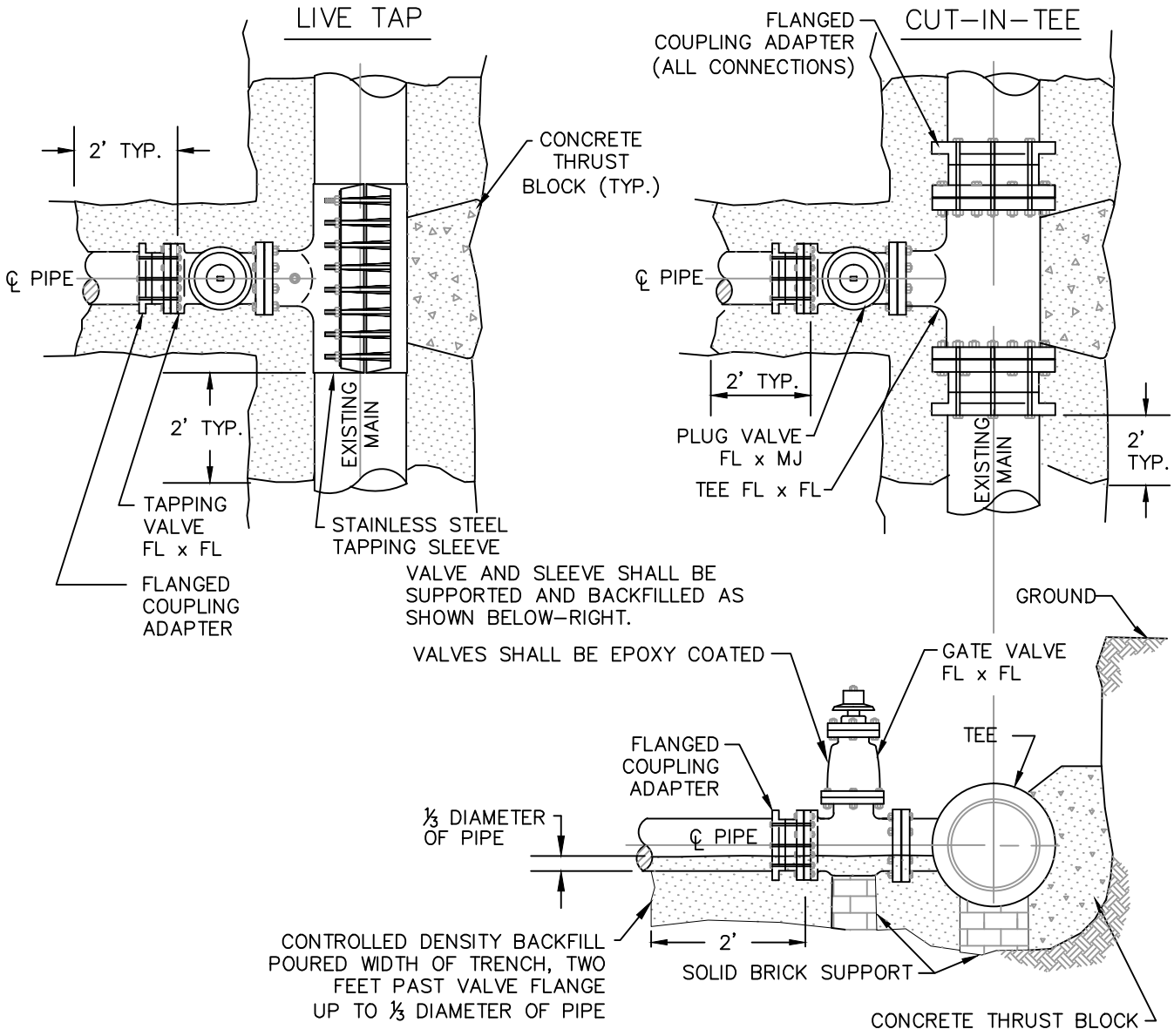

NOTES:

1. 11 MIL PLASTIC OR CONSTRUCTION FABRIC SHALL BE WRAPPED AROUND PIPE AND FITTINGS BEFORE THRUST BLOCK AND BACKFILL ARE POURED.
2. CONTROLLED DENSITY BACKFILL IS A PLANT MIX CONSISTING OF: 3100# SAND, 450# WATER, AND ONE SACK (94#) OF CEMENT.
3. MJ CUT IN TEES SHALL NOT BE PERMITTED.
4. SUPPORT VALVE AND SLEEVE CONTINUOUSLY THROUGH INSTALLATION.

CITY OF GIG HARBOR
ENGINEERING DIVISION

CONNECTION TO EXISTING PRESSURE MAIN

DETAIL NO. 5-28

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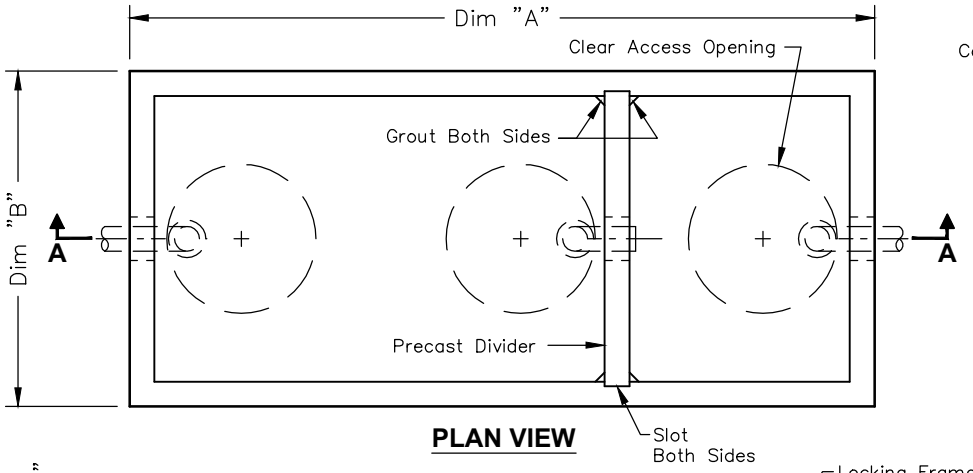
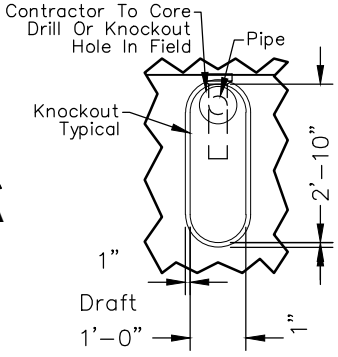
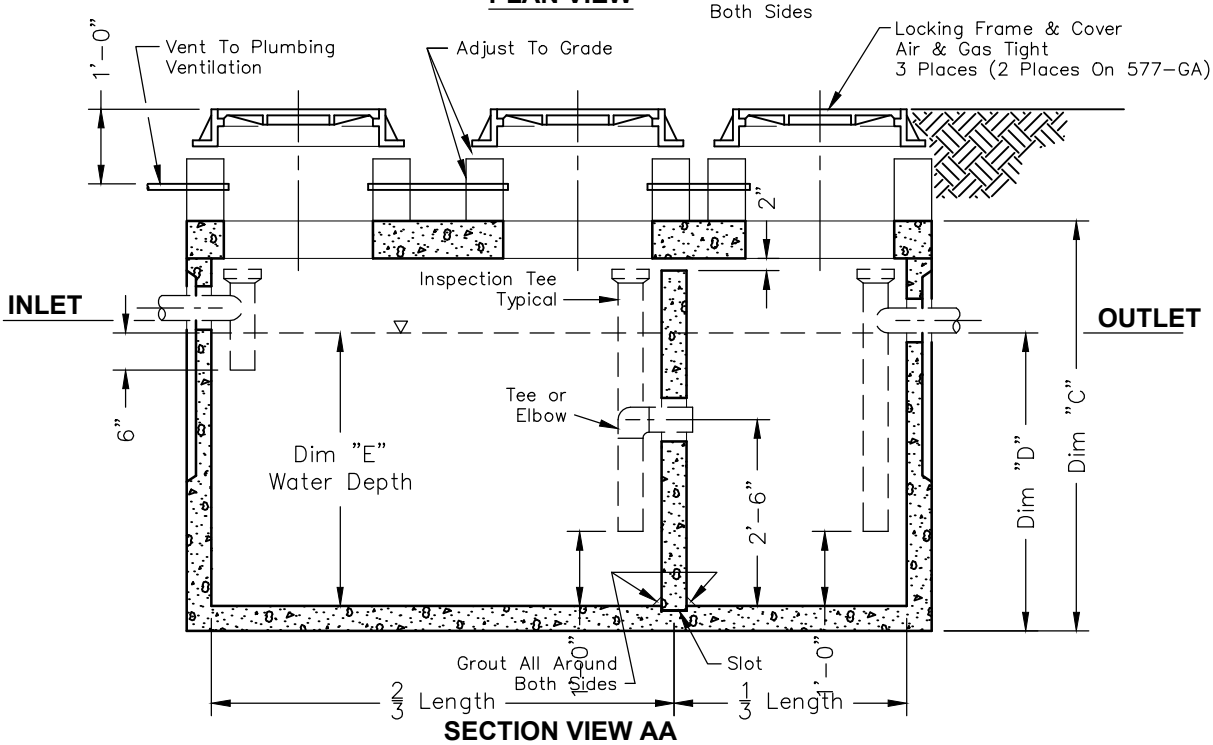


PLAN VIEW



DETAIL 1



SECTION VIEW AA

Gallon Capacity	600	800	1000	1500	2000	2500	3000	4000	5000	6000	7000
UV Co. Model No.	577-GA	577-GA	4484-GA	5106-GA	612-GA	612-GA	712-GA	712-GA	814-GA	818-GA	818-GA
Dim "A"	7'-0"	7'-0"	9'-0"	11'-2"	12'-8"	12'-8"	13'-1"	13'-1"	15'-7"	19'-11"	19'-11"
Dim "B"	4'-8"	4'-8"	5'-0"	5'-8"	6'-8"	6'-8"	8'-0"	8'-0"	9'-7"	9'-11"	9'-11"
Dim "C"	7'-0"	7'-0"	7'-2"	7'-2"	8'-0"	8'-0"	8'-7"	8'-7"	10'-0 1/2"	10'-5"	10'-5"
Dim "D"	3'-7"	4'-8"	4'-2"	4'-3"	4'-7"	5'-6 1/2"	5'-1"	6'-8"	7'-4"	7'-1"	8'-0"
Water Depth Dim "E"	3'-3"	4'-4"	3'-10"	3'-11"	3'-9 1/2"	4'-9"	4'-8"	6'-3"	6'-1"	5'-8"	6'-7"

Design Criteria:

Uniform Plumbing Code – Appendix H

Number Of Meals Per Peak Hours x Waste Flow Rate x Retention Time x Storage Factor = Capacity In Gallons

Notes:

1. Concrete: 28 Day Compressive Strength f'c = 7000 psi
2. Rebar: ASTM A-615 Grade 60
3. Mesh: ASTM A-185 Grade 65
4. Design: ACI-318-02 Building Code
   ASTM C-857 "Minimum Structural Design Loading For Underground Precast Concrete Utility Structures"
5. Loads: H-20 Truck Wheel w/ 30% Impact Per AASHTO
6. Fill w/ Clean Water Prior To Start-Up Of System
7. Contractor To Supply & Install All Piping & Sampling Tees
8. Gray Water Only, Black Water Shall Be Carried By Separate Side Sewer

CITY OF GIG HARBOR
ENGINEERING DIVISION

GREASE INTERCEPTOR 600 - 7000 GALLONS WITH OIL AND WATER SEPARATOR

DETAIL NO. 5-29

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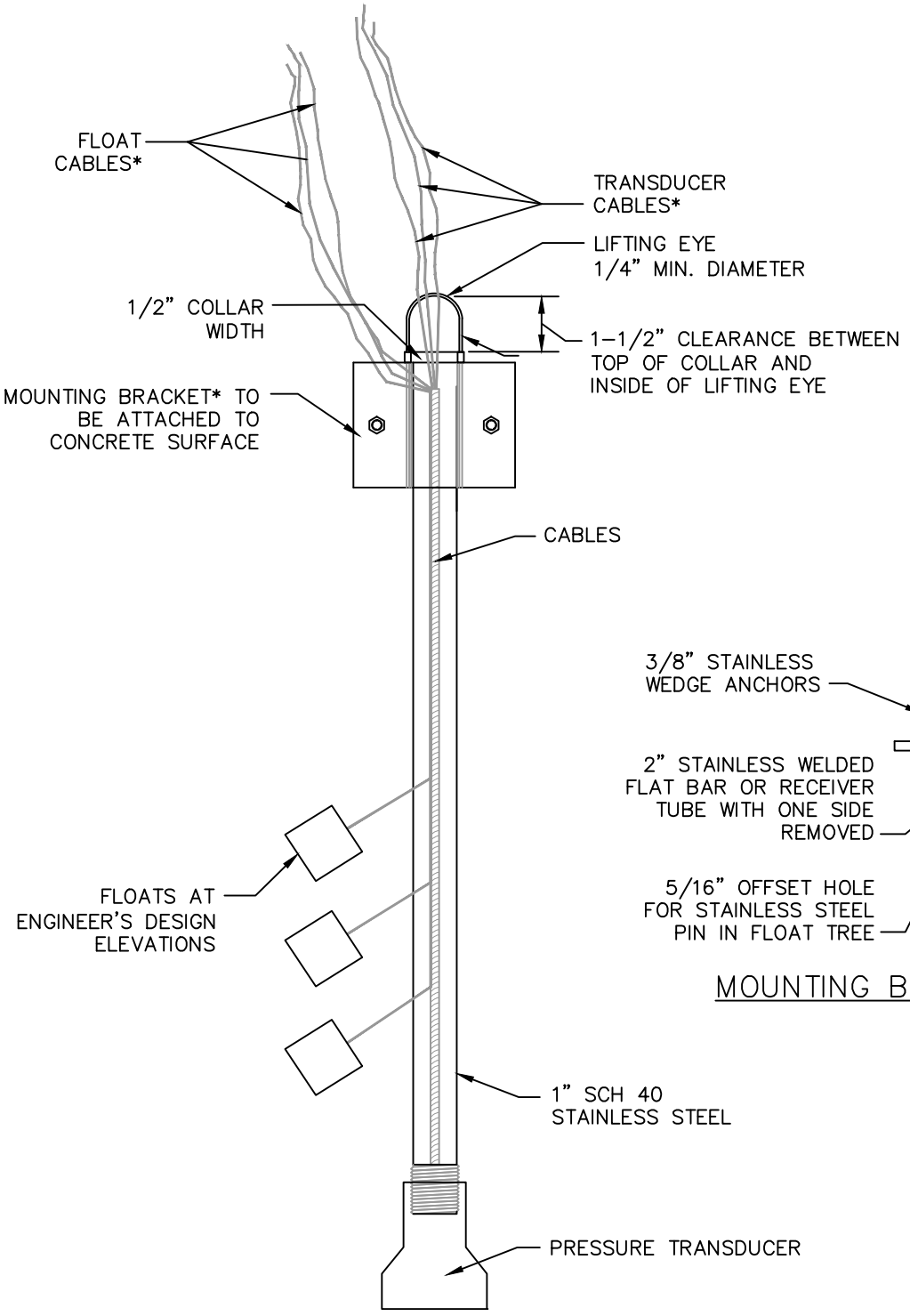

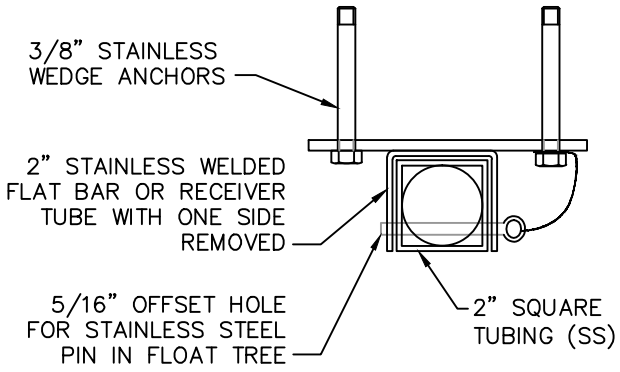

MOUNTING BRACKET DETAIL

* NOTES

1. CABLES MUST BE LONG ENOUGH TO PULL FLOAT TREE VERTICALLY OUT OF WET WELL W/O DISCONNECTING
2. 3/8" x 4" x 6" STAINLESS STEEL MOUNTING BRACKET

CITY OF GIG HARBOR
ENGINEERING DIVISION

TRANSDUCER/ FLOAT TREE

DETAIL NO. 5-30

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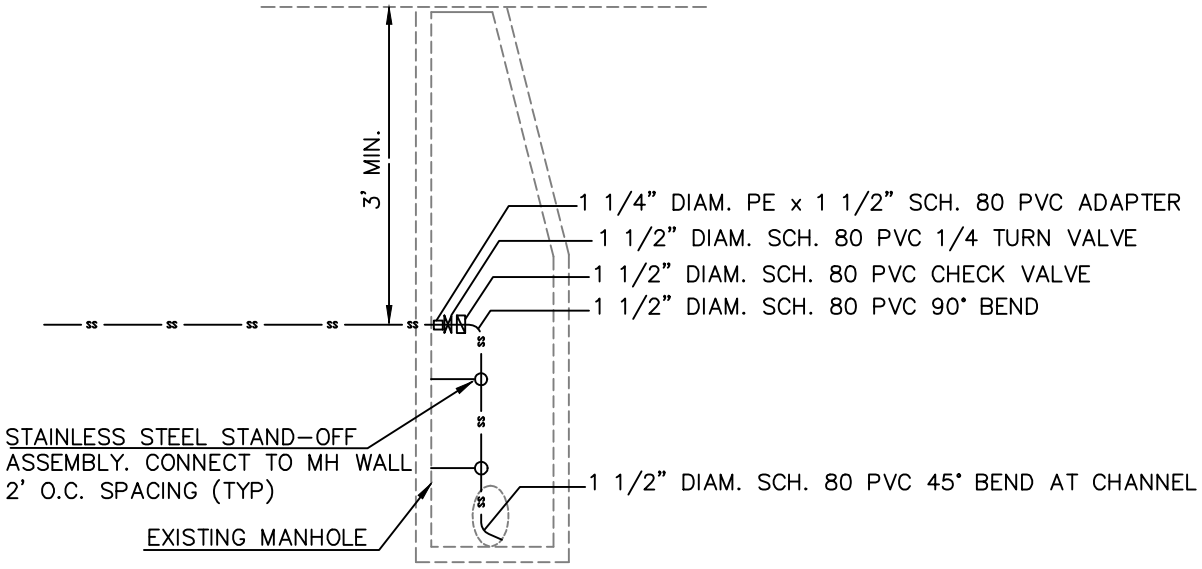

GRINDER PUMP LINE
INSIDE DROP CONNECTION

CITY OF GIG HARBOR
ENGINEERING DIVISION

GRINDER PUMP LINE INSIDE DROP CONN.	DETAIL NO. 5-31

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