

3. ALL SANITARY SEWER WORK SHALL BE IN CONFORMANCE WITH GREEN SANITARY DISTRICT STANDARDS, SPECIFICATIONS AND ORDINANCES. COMPLETE CONSTRUCTION PLANS (ALL UTILITIES) TO BE PROVIDED TO DISTRICT FOR PRE-CONSTRUCTION REVIEW.
2. SANITARY BUILDING SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH OREGON STATE DEPARTMENT OF COMMERCE, BUILDING CODE (LATEST REVISION) AND ITS AMENDMENTS. 8" AND LARGER PUBLIC SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEQ STANDARDS FOR PUBLIC SEWERS AND TO THE LINES, GRADES AND DETAILS SHOWN ON THE PLANS. 4" AND 6" SANITARY BUILDING SEWERS SHALL BE PVC ASTM 3034. ALL LINES SHALL HAVE 12 GAGE INSULATED GREEN TONING WIRE INSTALLED IN THE TRENCH FOR FUTURE LOCATING. CONTRACTOR SHALL INSTALL SEWER LATERALS TO A POINT 5 FEET BEHIND THE PROPERTY LINE OR ANY PUBLIC UTILITY EASEMENTS AND LATERALS MUST BE AT LEAST 4 FEET DEEP ON PROPERTY.
3. ALL SANITARY BUILDING SEWERS SHALL BE AIR TESTED IN ACCORDANCE WITH APPLICABLE CODE.
4. SANITARY SEWER PIPE SHALL BE PVC ASTM 3034 SDR 35. FOR GRADES OVER 15%, USE CEMENT LINED DUCTILE IRON PIPE.
5. SANITARY SEWERS SHALL BE AIR TESTED IN ACCORDANCE WITH STANDARD SPECIFICATION, UNIBELL B=0.6-85, AFTER COMPACTION OF BACKFILL.
6. SANITARY SEWERS SHALL PASS THE 5% MANDREL DEFLECTION TEST IN ACCORDANCE WITH APPLICABLE APWA SPECIFICATIONS.
7. SANITARY SEWERS SHALL BE INSPECTED AFTER CONSTRUCTION WITH A TV CAMERA PER D.E.Q. REQUIREMENTS.
8. CONCRETE SHALL BE CLASS 5 (1 1/2" MAXIMUM AGGREGATE SIZE) WITH 6 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE, WITH A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN 3,000 P.S.I. AT 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM C-39.86.
9. WHEREVER SANITARY SEWERS CROSS WATER LINES WITH LESS THAN 18" VERTICAL CLEARANCE, THE SANITARY SEWER SHALL BE C900 PVC OR DUCTILE IRON PIPE 10" MINIMUM EACH SIDE OF WATER LINE.
10. MANHOLES SHALL BE TESTED ACCORDING TO 1990 APWA STANDARD SPECIFICATION 306.6.03. WATER TO BE FILLED TO THE RIM OR VACUUM TESTED IN ACCORDANCE WITH ASTM C-924.86.
11. NEW SANITARY SEWER LINES SHALL BE CLEANED WITH A JETTER TRUCK CAPABLE OF PRODUCING 65 GPM AT A PRESSURE OF 1200 PSI. MINIMUM. CLEANING SHALL BEGIN AT THE UPSTREAM END OF THE LINE AND PROCEED DOWNSTREAM TO THE BEGINNING OF THE PROJECT. ANY SOIL, ROCKS OR RUBBISH WILL BE REMOVED FROM THE PROJECT SITE.
12. ALL MANHOLE CONNECTIONS SHALL BE INSERTA TEE CONNECTORS, OR DISTRICT APPROVED CONNECTION DEVICE.
13. CONTRACTOR SHALL PROVIDE PRE-FORMED U SHAPED GASKETS, CONFORMING TO ASTM F-477.
14. CONTRACTOR SHALL REPLACE ANY AND ALL SURVEY MONUMENTS WHICH ARE AFFECTED BY THE CONSTRUCTION. ALL MONUMENTS WILL BE RESET BY A LICENSED LAND SURVEYOR. +WHEN GREEN SANITARY DISTRICT FURNISHES THE LICENSED SURVEYOR, CONTRACTOR WILL BE BILLED FOR THE ACTUAL COST OF RESETING THE MONUMENT OR MONUMENTS.
15. CONTRACTOR SHALL PROVIDE GREEN SANITARY DISTRICT WITH A BOND FOR ONE YEAR EQUIVALENT TO THE COST OF THE SEWER PORTION OF THE CONSTRUCTION BID. ++GREEN SANITARY DISTRICT IS TO BE LISTED AS CO-INSURED ON CONTRACTOR'S INSURANCE POLICY.
16. ALL TONING WIRE SHALL BE TESTED FOR CONTINUITY BEFORE FINAL SURFACING BY A LICENSED ELECTRICAL CONTRACTOR.
17. CONTRACTOR SHALL CONTACT ONE-CALL AT 1-800-332-2344 AT LEAST 48 HOURS PRIOR TO COMMENCING ANY EXCAVATION.
18. CONSTRUCTION DOCUMENTS MUST BE APPROVED BY BOTH DEQ AND THE DISTRICT BEFORE THE DISTRICT WILL ISSUE A PERMIT TO CONSTRUCT THE SEWER EXTENSION.
19. A PRE-CONSTRUCTION MEETING WILL OCCUR 7 DAYS BEFORE CONSTRUCTION OF SANITARY SEWER.

TONING WIRE (BRING TO SURFACE INSIDE MANHOLE)
DRILL HOLE AND SEAL (INSIDE AND OUT)
WITH SIKAFLEX 1A OR GSD
APPROVED SEALANT.

REMOVABLE
MECHANICAL
PLUG

INSERTA GASKET WITH
SECTION OF PVC PIPE
INSTALLED

PROPOSED SANITARY
SEWER LINE

DROP PIPE SHALL BE PVC
MOUNTED TO PROVIDE SPACE
TO PLACE SHORT SECTIONS
OF PIPE TO INSIDE OF BARREL

SAND SLURRY ENCASEMENT
FOR FULL HEIGHT OF
DROP INLET SEWER PIPE

INSTALL 90° BEND

INSERTA GASKET WITH
SECTION OF PVC PIPE
INSTALLED

PLACE "6" MIN. MIX AC MINIMUM THICKNESS OF 4" OR THE THICKNESS OF THE REMOVED PAVEMENT, WHICHEVER IS GREATER, COMPACT AS SPECIFIED

MINIMUM TRENCH PATCH WIDTH
 ROLLER WIDTH PLUS 2"

SEAL SURFACE OVER JOINT WITH TACK MATERIAL AND SAND (AC PATCH ONLY)

EXIST. PAVEMENT

6" MIN.

TACK COAT CUT EDGES

6" MIN.

EXIST. PAVEMENT

UNDISTURBED BASE (EXIST.)

6" MIN.

SAME FACE

CLASS A EXCAVATED NATIVE MATERIAL

CLASS B 3/4"-0" CRUSHED ROCK

CLASS C CLEAN SAND (1/4" MAX.)

CLASS D PIT OR BAR-RUN MATERIAL (3" MAX.)

CLASS E 1 SACK CEMENT PER CUBIC YD SAND

8" MINIMUM COMPACTED AGGREGATE BASE OR FULL DEPTH ASPHALT

COMPACTED BACKFILL (COMPL. AS SPECIFIED ON PLANS & SPECS)

PIPE ZONE

3/4" MINUS CRUSHED AGGREGATE

24" MIN.

8" MIN. ABOVE OUTSIDE OF PIPE BELL

6" MIN.

OUTSIDE DIAMETER

6" MIN.

TONING WIRE 12 GAUGE GREEN

6" MIN. BEDDING BELOW OUTSIDE OF PIPE BELL

TRENCH FOUNDATION STABILIZATION, AS REQUIRED

Traffic Rated Cast Iron Lid

Frame Gasket

Cast Iron Ring

Asphalt Pavement

Concrete Poured or Pre-Cast Slab, Minimum 6 ft Square, 8 inches thick

Back fill as shown on typical trench back fill details above. Typical ALL Manhole Installations

CENTER CONE 48" diameter
24" or 28" neck diameters

36-inch height
48-inch height

GASKET between sections

RISER SECTION 48" diameter
24-inch height

GASKET between sections

2 Sack Cement Per Cubic Yard Sand-Cement Slurry Back fill, Typical ALL Manhole Installations

ROUND BASE 48" diameter

36-inch height
48-inch height

Round base will accept pipe up to 36" in diameter

12" of 3/4" Minus crushed rock compacted to 95% of maximum density

Min 12"

NOTES:

1. ALL EXISTING AC OR PCC PAVEMENT SHALL BE SAW CUT PRIOR TO REPAVING.
2. CONCRETE PAVEMENT SHALL BE REPLACED WITH CONCRETE TO A MINIMUM THICKNESS OF 6" OR TO THE THICKNESS OF REMOVED PAVEMENT, WHICHEVER IS GREATER.

CLEAN-OUT DETAIL

LOOKS 8'-3/4" TRAFFIC BOX
1'-RT.-BODY AND C.T. COVER
MARKED "SEWER"

EXPANSION PLUG

OR CONCRETE PAVING
OTHER SURFACING

12" MIN.

18" MIN.

6" MIN. 3/4"-0"
CRUSHED ROCK

1'-6" MINIMUM
STRAIGHT SECTION

TONING WIRE

MIN. 1 FT ABOVE GROUND

BRING TONING WIRE
TO SURFACE

8 FT STEEL FENCE POST,
GREEN WITH WHITE TOP,
SET @ INVERT ELEVATION

UNDISTURBED EARTH

2X4 BLOCKING TO
UNDISTURBED EARTH

4" PVC PLUG

4" 3034 PVC SEWER PIPE @ 2% SLOPE

4" PVC BEND AS REQUIRED

4" X MAIN DIA GASKETED
PVC REDUCING TEE

GRAVITY SEWER MAIN

FINISH GRADE

TONING WIRE CONNECTION
TO BE SOLDERED AND
WRAPPED W/HEAT SHRINK
TAPE

20' MIN.
45' MAX

BUILDING LATERAL LINE

Property Line

5 ft inside Prop Line

Minimum 4' below
ground line at
property line crossing

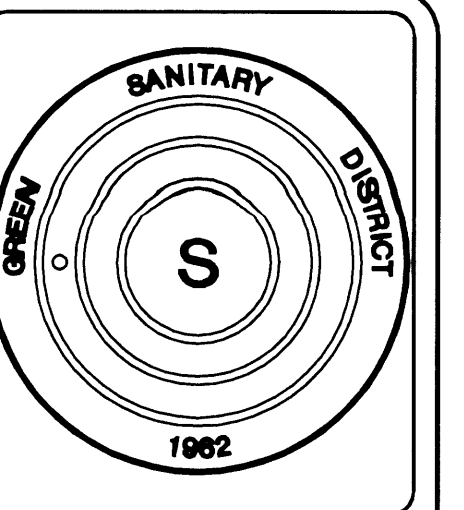
Sanitary Sewer
Main Line

4" Bagg. Lateral

BITS	INSERTA TEE SIZE	BITS (HOLE) DIAMETER
4" (100 MM)		4 1/2" (112.5 MM)
6" (150 MM)		6 1/2" (162.5 MM)
8" (200 MM)		8 3/4" (218.8 MM)
10" (250 MM)		10 7/8" (271.9 MM)
12" (300 MM)		12 7/8" (321.9 MM)
15" (375 MM)		15 13/16" (395.3 MM)

1. CORE THE PROPER SIZE HOLE AS SHOWN ABOVE.
2. INSERT THE RUBBER SLEEVE INTO THE CORED HOLE WITH THE GOLD VERTICAL LINE ON THE RUBBER SLEEVE FACING TO THE SIDE OF THE MAINLINE. THE UPPER SEGMENT SHOULD BE ON THE TOP OF THE WALL OR RIB AND THE LOWER SEGMENT (PVC, RIBBED & POLYETHYLENE PIPE ONLY) SHOULD BE ON THE INSIDE OF THE PIPE.
3. APPLY THE INSERTA TEE SOLUTION SUPPLIED TO THE INSIDE OF THE RUBBER SLEEVE AND TO THE OUTSIDE OF THE PVC HUB ADAPTER. CAUTION! USING PIPE LUBE MAY RESULT IN HUB ADAPTER POPPING OUT.
4. PLACE THE PVC HUB ADAPTER INTO THE RUBBER SLEEVE. MAKE SURE THAT THE RED VERTICAL LINE ON THE PVC HUB ADAPTER IS IN LINE WITH THE GOLD VERTICAL LINE ON THE RUBBER SLEEVE.
5. PLACE THE 2X4 BOARD ON TOP OF THE PVC HUB ADAPTER.
6. THE RED HORIZONTAL LINE AT THE TOP OF THE HUB ADAPTER IS A DEPTH MARK. THIS TELLS THE INSTALLER JUST HOW FAR TO DRIVE THE ADAPTER INTO THE RUBBER SLEEVE. USING THE BOARD AND HAMMER, DRIVE THE PVC HUB ADAPTER INTO THE RUBBER SLEEVE TO WHERE THE HORIZONTAL RED LINE ON THE PVC HUB ADAPTER MEETS THE TOP OF THE RUBBER SLEEVE.
7. PLACE THE STAINLESS BAND AROUND THE TOP OF THE RUBBER SLEEVE AND TIGHTEN DOWN.
8. INSTALL SIDE SERVICE PIPE IN NORMAL MANNER.

1. THIS SPECIFICATION COVERS MATERIALS, MANUFACTURE, DIMENSIONS, AND REQUIREMENTS FOR POLYETHYLENE MANHOLES USED WITH SEWERAGE OR DRAINAGE PIPE AND OR UNDERGROUND CONDUITS WITH OUTSIDE DIAMETERS OF LESS THAN 46 INCHES. MANHOLES SHALL BE MANUFACTURED OF HDPE OR APPROVED EQUAL MEETING THE FOLLOWING SPECIFICATIONS:
ASTM D-883; ASTM D-3350; ASTM D-2122; ASTM F-412; ASTM F-2412; ASTM F-477
2. MANHOLES SHALL BE PRODUCED BY THE ROTATIONAL MOLDING PROCESS AND CONSIST OF THE REQUIRED COMBINATIONS OF BASE, RISER, STIFFENING/ANCHOR RING, AND CONE SECTION AS REQUIRED BY ASTM F-477.
3. INTERIOR ACCESS SHALL BE PROVIDED WITH NONMETALLIC FACTORY-MOLDED STEPS.
4. SEGMENTED JOINTS SHALL BE BELL AND SPIGOT WITH A U SHAPED GASKET, CONFORMING TO ASTM F-477.
5. ANCHOR RINGS SHALL BE AT EACH JOINT AND EXTEND 2.5 INCHES FROM MANHOLE O.D.
6. STIFFENER RINGS SHALL BE EQUAL TO OR LESS THAN 24 INCHES APART LONGITUDINALLY AND CIRCUMFERENTIALLY AROUND THE BARREL.
7. CONCRETE MANHOLES MAY BE SUBSTITUTED IN EXTRAORDINARY CIRCUMSTANCES AT THE DISTRICTS DISCRETION.



FILED
Date: 3-7-2006 By: JP
This survey consists of:
Map: _____
Narrative: _____
Corner Rpt: _____
**DOUGLAS COUNTY
SURVEYOR**

GREEN SANITARY DISTRICT
CONSTRUCTION SPECIFICATIONS

GREEN SANITARY DISTRICT
3879 OLD HIGHWAY 99 S
ROSEBURG, OR 97470
PH (541) 679-7191

SANITARY SEWER LINE CONSTRUCTION DETAILS AND SPECIFICATIONS

CALL BEFORE YOU DIG !
ONE CALL, (800) 332-2344
 OAR 952-001-0010 THROUGH
 OAR 952-001-0090

SHEET

13 OF 13

Co. Rd. # 375 H, 375 J, 375 K

MSSC/2H