

CITY OF SHERWOOD

PINE ST SANITARY SEWER EXTENSION

2018

(CONSTRUCTION DRAWINGS)

SHEET INDEX:

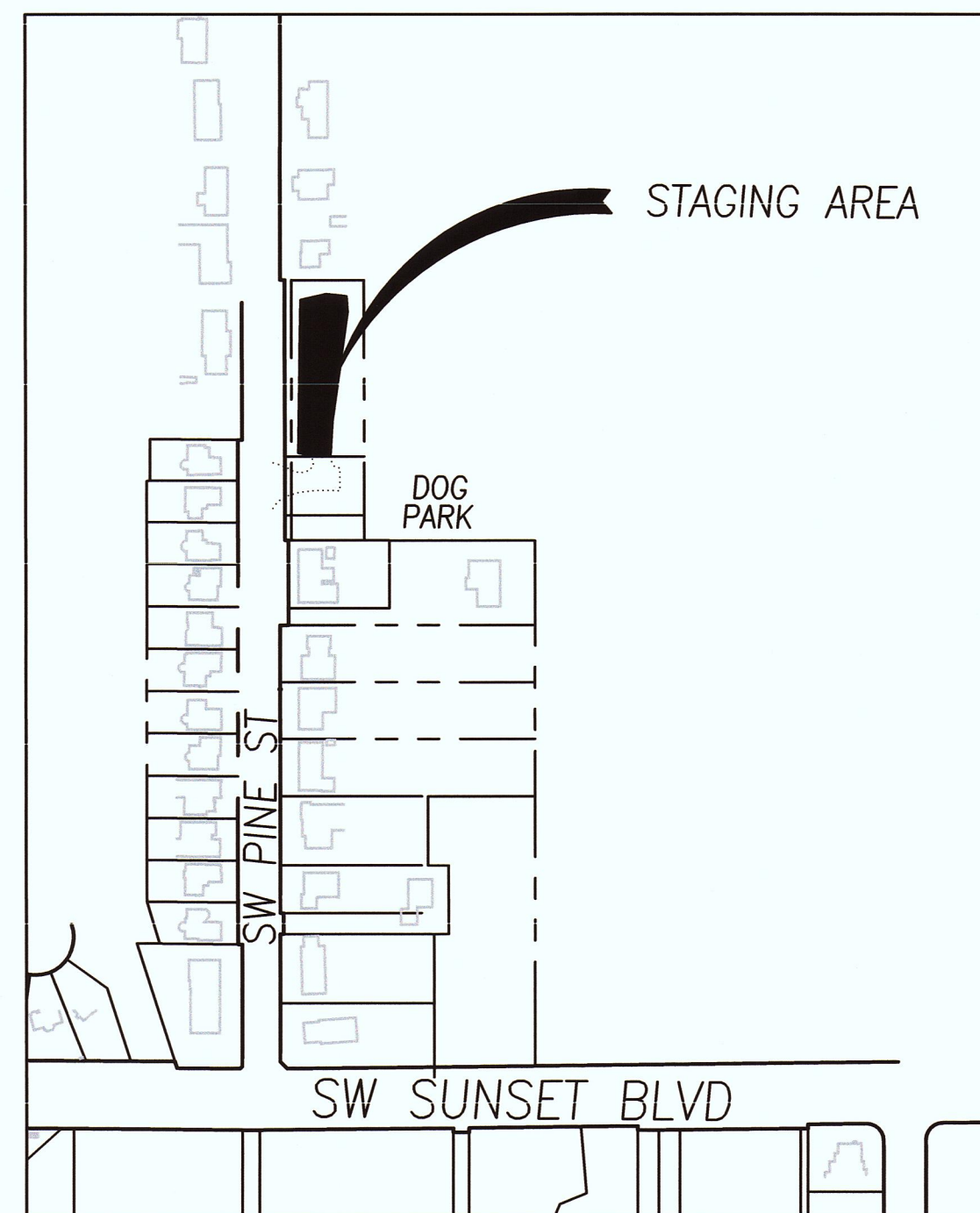
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- C5. DETAILS
- C6. DETAILS

PROJECT LOCATION:

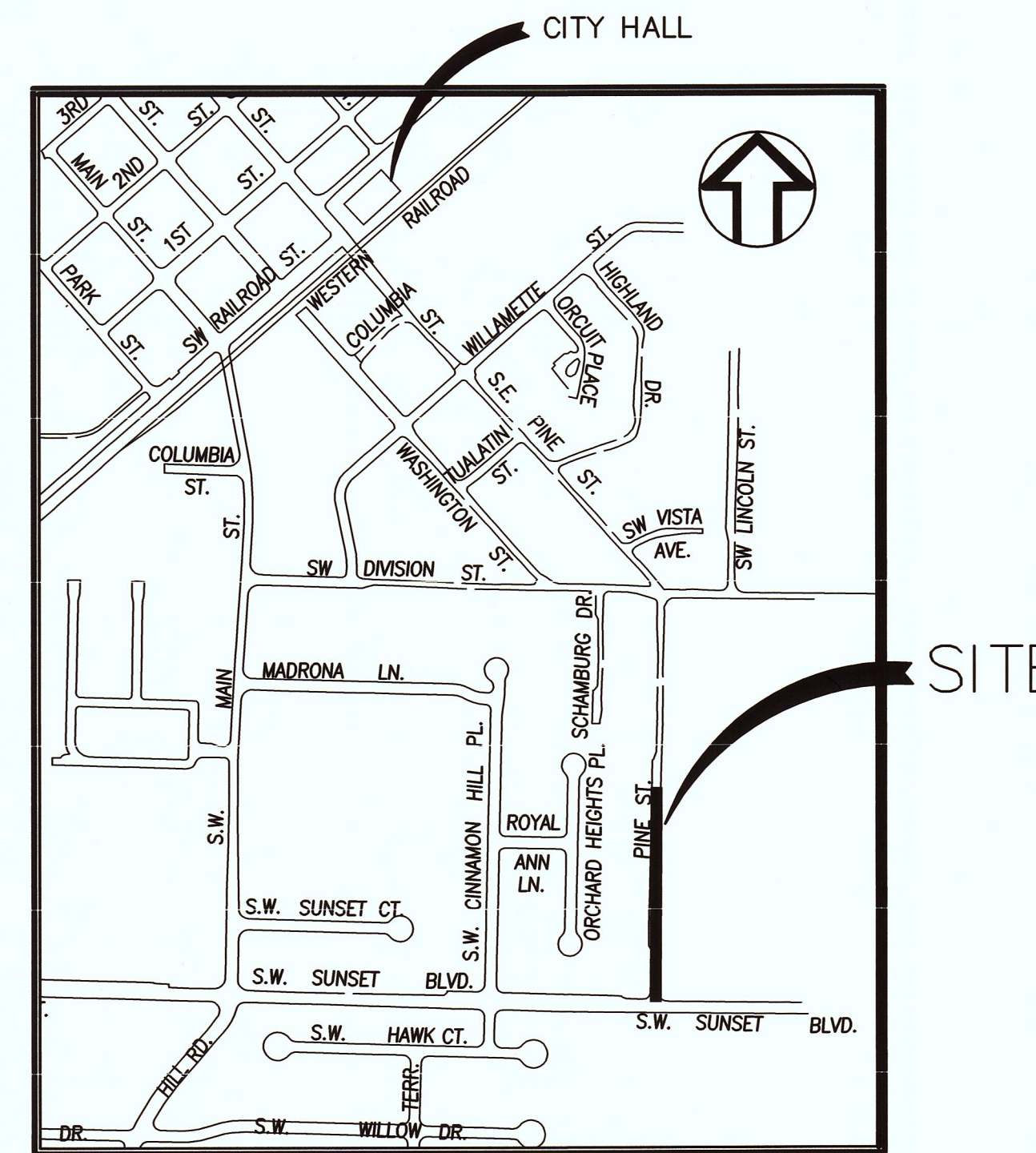
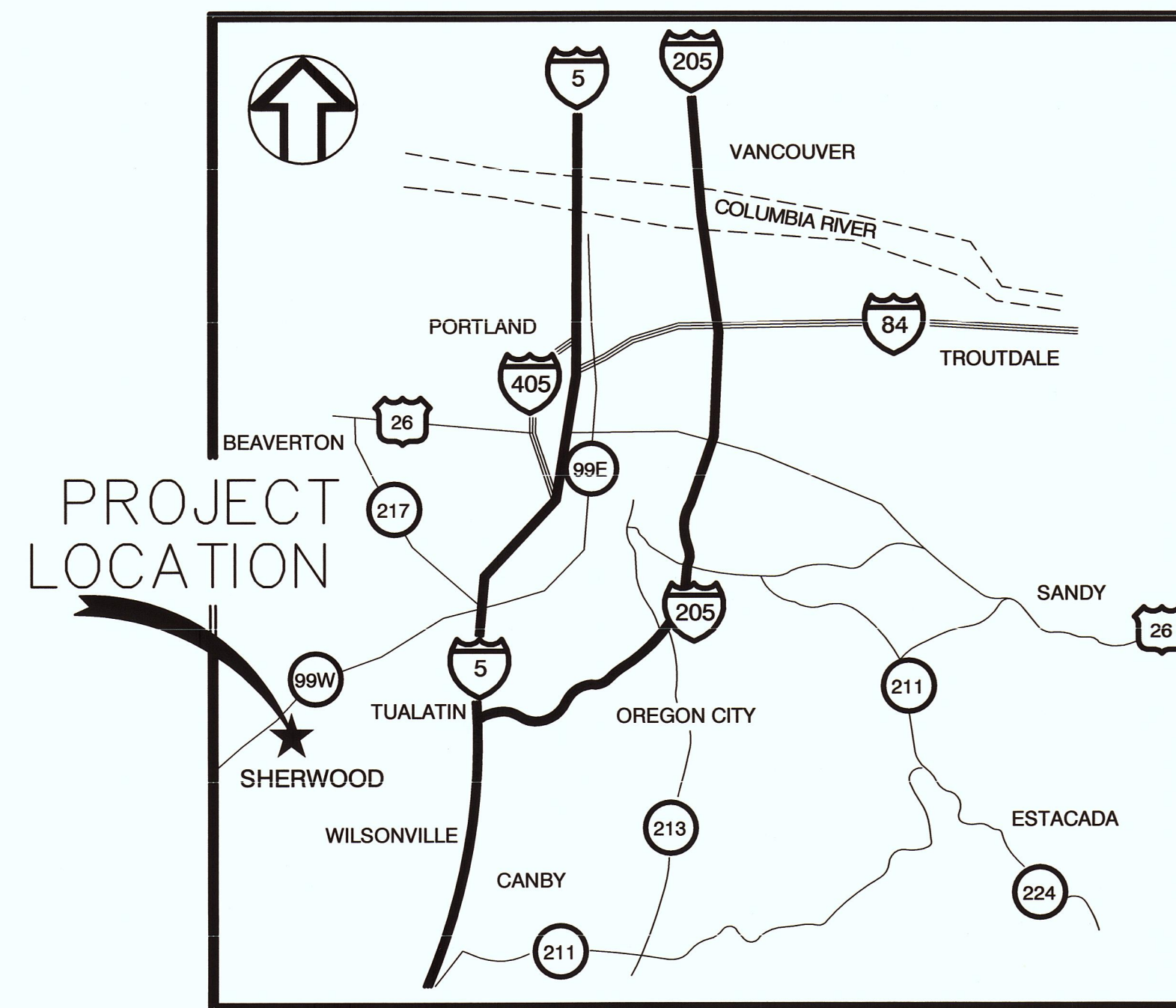
SW PINE ST NORTH OF SW SUNSET BLVD IN SHERWOOD, OREGON

DEVELOPER/OWNER:

CITY OF SHERWOOD – ENGINEERING
 22560 SW PINE ST SHERWOOD, OREGON 97140
 CONTACT: CRAIG CHRISTENSEN, P.E.
 PH. 503-925-2301
 CHRISTENSENC@SHERWOODOREGON.GOV



STAGING AREA
NOT TO SCALE



Other Agencies:

City of Sherwood Public Works Department
 (503) 925-2319
 Contact (Water, Storm & Sanitary Sewer):
 Rich Sattler, Utilities Supervisor

Frontier Communications
 (503) 641-4463
 Contact: Tam Nguyen

Sherwood Broadband
 (503) 625-4203
 Contact: Brad Crawford

Tualatin Valley Fire & Rescue
 (503) 259-1504
 Contact: John Wolff

US Postal Service
 (503) 692-9414
 Contact: Pam Kennedy

Northwest Natural Gas
 (503) 226-4211 Ext. 4376
 Contact: Andrea Kuehnel

Qwest
 (916) 765-2074
 Contact: William Bodin

Comcast
 (503) 596-3813
 Contact: Ken Parris

Portland General Electric
 (503) 570-4413
 Contact: Ray Lambert

Pride Disposal
 (503) 625-6177 x124
 Contact: Kristin Lechner

CITY CONTACT INFORMATION:

CITY OF SHERWOOD INSPECTOR: ANDY STIRLING (503) 925-2307
 CITY PROJECT ENGINEER: BOB GALATI, P.E. (503) 925-2303
 CONTACT INSPECTOR 48 HOURS PRIOR TO CONSTRUCTION.

SURVEY INFORMATION:

SHEETS C3 AND C4:
 ELEVATIONS ARE BASED ON: WASHINGTON COUNTY BENCHMARK NO_111
 DATUM NAVD29 ELEVATION-213.55
 LOCATION: NW ¼ & SW ¼ OF SECTION 32, TOWNSHIP 2 SOUTH,
 RANGE 1 WEST, WASHINGTON COUNTY, OR

SHEET C5:
 ELEVATIONS ARE BASED ON AN ASSUMED LOCAL DATUM.
 THE BASE OF THIS ASSUMED DATUM IS 100.00', WHICH IS BASED ON
 THE "O" IN "OPEN", CAST IN THE FIRE HYDRANT AT APPROXIMATELY
 STATION 2+83, 38' R, PUBLIC SANITARY SEWER ALIGNMENT "S", ON
 SHEET C5.

THIS DESIGN COMPLIES WITH ORS 92.044 (7) IN THAT NO UTILITY INFRASTRUCTURE IS DESIGNED TO BE WITHIN ONE (1) FOOT OF A SURVEY MONUMENT LOCATION SHOWN ON A SUBDIVISION OR PARTITION PLAT. NO DESIGN EXCEPTIONS NOR FINAL FIELD LOCATION CHANGES SHALL BE PERMITTED IF THAT CHANGE WOULD CAUSE ANY UTILITY INFRASTRUCTURE TO BE PLACED WITHIN THE PROHIBITED AREA.

ATTENTION EXCAVATORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-011-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING (503) 232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST 2 BUSINESS DAYS, BEFORE COMMENCING ANY EXCAVATION. CALL (503) 246-6699.

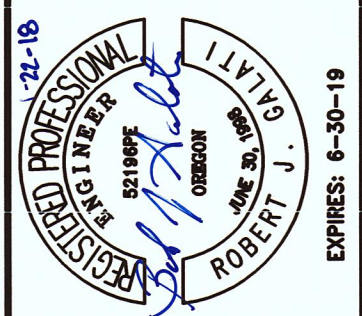
COVER

PINE ST SANITARY SEWER EXTENSION

LOCATED IN SECTION 32CA AND 32DB, T2S, R1W, W.M. IN THE CITY OF SHERWOOD, WASHINGTON COUNTY, STATE OF OREGON

CITY OF SHERWOOD
 ENGINEERING DEPARTMENT
 22560 SW PINE STREET
 SHERWOOD, OREGON 97140

PHONE: (503) 925-2309
 FAX: (503) 625-0629
 E-MAIL: engineering@sherwoodoregon.gov



DESIGNED BY:	R/G
DRAWN BY:	AGS
CHECKED BY:	R/G
FULL SIZE SCALE:	N/A
DATE:	JAN 8, 2017

REVISIONS	

JOB NO.	8095
SHEET NO.	C1

GENERAL NOTES

- ALL CONSTRUCTION WORK, MATERIALS AND TESTING SHALL CONFORM TO ODOT/APWA OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2015, CLEAN WATERS SERVICES, AND THE CITY OF SHERWOOD ENGINEERING DESIGN AND STANDARD DETAILS MANUAL.
- CONTRACTOR AND SUBCONTRACTOR(S) SHALL HAVE A MINIMUM OF ONE SET OF APPROVED PLANS AND CITY OF SHERWOOD CONSTRUCTION SPECIFICATIONS ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
- A CITY OF SHERWOOD OR A METRO BUSINESS LICENSE IS REQUIRED FOR THE CONTRACTOR AND ALL SUBCONTRACTORS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION AND ARRANGE FOR PROTECTION OF UTILITIES IN CONFLICT WITH PROPOSED WORK. THE LOCATIONS, DEPTH AND DESCRIPTION OF EXISTING UTILITIES SHOWN WERE COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEYS. THE ENGINEER OR UTILITY COMPANIES DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. ADDITIONAL UTILITIES MAY EXIST WITHIN THE WORK AREA. POTHOLING PRIOR TO CONSTRUCTION MAY BE NECESSARY. ALL WORK TO VERIFY UTILITY LOCATIONS AND DEPTHS IS INCIDENTAL.
- OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING (503) 232-1987 OR BY ACCESSING THE INTERNET AT WWW.STATE.OR.US/GOVERNMENT.HTM. THE CONTRACTOR MUST NOTIFY THE CENTER AT LEAST 2 BUSINESS DAYS, BUT NOT MORE THAN 10 BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL (503) 246-6699.
- THE CONTRACTOR SHALL MAKE PROVISIONS TO KEEP ALL EXISTING UTILITIES IN SERVICE AND PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY DAMAGED UTILITIES USING MATERIAL AND METHODS APPROVED BY THE UTILITY OWNER. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN AGREEMENT WITH THE UTILITY PROVIDER AND NOTIFICATION TO SERVICE CUSTOMER.
- THE CONTRACTOR SHALL PRUNE ALL VEGETATION, AS NECESSARY FOR EQUIPMENT CLEARANCES AS WELL AS ANY ROOT PRUNING AS DETERMINED BY THE ENGINEER. THE CONTRACTOR SHALL PROTECT ALL EXISTING LANDSCAPING THAT IS TO REMAIN. DAMAGE TO TREES AND SHRUBS IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR (INCIDENTAL).
- CONTRACTOR SHALL NOTIFY THE CITY OF SHERWOOD 48 HOURS IN ADVANCE OF STARTING CONSTRUCTION AND 24 HOURS BEFORE RESUMING WORK AFTER SHUTDOWNS, EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SATURDAYS, SUNDAYS, OR HOLIDAYS.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, BRUSH, ROOTS, EXCESS TOPSOIL, AND OTHER EXCESS MATERIAL OFF SITE. MATERIALS SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET ALL APPLICABLE REGULATIONS. DISPOSAL LOCATION INFORMATION TO BE PROVIDED TO CITY PRIOR TO BEGINNING ANY WORK.
- CONSTRUCTION VEHICLES SHALL PARK AT A LOCATION APPROVED BY THE INSPECTOR. HOURS OF CONSTRUCTION SHALL BE 8:30 AM TO 6:00 PM FOR SW SUNSET BLVD. AND 7:30 AM TO 6:00 PM FOR SW PINE ST., MONDAY THROUGH FRIDAY. CONSTRUCTION IS PROHIBITED ON SATURDAY AND SUNDAY UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE CITY ENGINEER AND CITY MANAGER 48 HOURS AHEAD OF TIME. CONSTRUCTION ACTIVITIES INCLUDE ALL FIELD MAINTENANCE OF EQUIPMENT, REFUELING, AND PICK UP AND DELIVERY OF EQUIPMENT AS WELL AS THE ACTUAL CONSTRUCTION ACTIVITY.
- AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL CLEAN UP THE PROJECT AREA AND LEAVE IT IN A NEAT AND SECURED MANNER. UPON COMPLETION, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL.
- THE CONTRACTOR SHALL KEEP AN APPROVED SET OF PLANS ON THE PROJECT SITE AT ALL TIMES WITH ALL KNOWN CHANGES REDLINED ON THE WORKING PLAN SET FOR THE SOLE PURPOSE OF RECORDING AS BUILT INFORMATION OF IMPROVEMENTS AND LOCATION AND DEPTH OF ANY EXISTING UTILITIES ENCOUNTERED.
- ANY ALTERATIONS OR VARIATIONS FROM THESE PLANS EXCEPT MINOR FIELD ADJUSTMENTS NEEDED TO MEET EXISTING FIELD CONDITIONS, SHALL BE APPROVED BY THE ENGINEER AND APPLICABLE REGULATORY AGENCY REPRESENTATIVE. CONTRACTOR SHALL KEEP RECORD OF ALL CHANGES AND NOTE ON AS BUILT PLANS. CONTRACTOR SHALL SUBMIT ACCURATE AND COMPLETE "AS-BUILT" INFORMATION TO THE ENGINEER UPON COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE PLANS INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO PROVIDE A COMPLETE PROJECT.
- CONTRACTOR SHALL PROVIDE EFFECTIVE EROSION PROTECTION TO INCLUDE, BUT NOT BE LIMITED TO, GRADING, DITCHING, GRAVEL CONSTRUCTION ENTRANCE, STRAW WATTLES, TRIANGULAR SILT DAMS, SILT FENCING, AND SEDIMENT BARRIERS TO MINIMIZE EROSION AND IMPACT TO ADJACENT PROPERTY. SEE EROSION AND SEDIMENT CONTROL NOTES AND PLANS.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AT ALL TIMES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE THE START OF WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY FIELD MEASUREMENTS AND OTHERWISE VERIFY ALL DIMENSIONS AND EXISTING CONSTRUCTION CONDITIONS INDICATED AND/OR SHOWN ON THE PLANS. SHOULD ANY ERROR OR INCONSISTENCY EXIST, THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK AFFECTED UNTIL REPORTED TO THE PROJECT ENGINEER FOR CLARIFICATION OR CORRECTION.
- ANY INSPECTION BY THE CITY, COUNTY, STATE, FEDERAL AGENCY OR PROJECT ENGINEER SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH THE APPLICABLE CODES, REGULATIONS, CITY STANDARDS AND PROJECT PLANS.
- THE CONTRACTOR SHALL PROVIDE TO THE CITY PROJECT MANAGER AND INSPECTOR A 24 HOUR CONTACT PERSON AND CELL PHONE NUMBER.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL CONSTRUCTION SAFETY, HEALTH AND OTHER RULES AND REGULATIONS FROM OSHA, DEQ, STATE, AND LOCAL REGULATING AGENCIES FOR SAFETY AND INSTALLATION OF THE WORK INCLUDING BUT NOT LIMITED TO SHORING, BRACING, ERECTION/INSTALLATION, FALL PROTECTION, GUARDRAILS, ETC.
- TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL PLAN SHALL BE SUBJECT TO THE APPROVAL OF THE CITY.
- CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING STRUCTURES AND UTILITIES NOT SHOWN TO BE REMOVED. CONTRACTOR SHALL REPLACE OR REPAIR ANY EXISTING STRUCTURES (SIDEWALKS, CURB, FENCE, STREET TREES, ETC.) DAMAGED DURING CONSTRUCTION, IN ACCORDANCE WITH CITY STANDARDS.
- ALL EXCESS MATERIALS SHALL BE REMOVED AND DISPOSED OF OFF SITE IN COMPLIANCE WITH ALL REGULATIONS (INCIDENTAL).

EROSION CONTROL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
- THE IMPLEMENTATION OF THESE ESC PLANS AND CONSTRUCTION MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE LOCAL JURISDICTION, AND VEGETATION/LANDSCAPING IS ESTABLISHED.
- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE MORE THAN 1/3 THE HEIGHT OF THE BARRIER. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED AFTER PAVING. THE CLEANING OPERATIONS SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- STORM DRAIN INLETS, BASINS, AND AREA DRAINS SHALL BE PROTECTED AS NOTED ON THE PLANS UNTIL THE PROJECT HAS BEEN COMPLETED.
- IF THERE ARE EXPOSED SOILS OR SOILS NOT FULLY ESTABLISHED FROM OCTOBER 1ST THROUGH MAY 31ST, THE WET WEATHER EROSION PREVENTION MEASURES WILL BE IN EFFECT. SEE THE EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (CHAPTER 4) OF CLEAN WATER SERVICES FOR REQUIREMENTS.
- THE CONTRACTOR SHALL REMOVE ESC MEASURES WHEN VEGETATION IS FULLY ESTABLISHED.
- ALL PUMPING OF SEDIMENT-LADEN WATER SHALL BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP (FILTER BAG, DIRT BAG, ETC.)
- SITE EROSION CONTROL PLAN AND BMP'S MEETING CWS STANDARDS TO BE IN PLACE AND APPROVED PRIOR TO CONSTRUCTION.
- TRACKING OF MATERIALS OUTSIDE OF THE WORK ZONE, ONTO ADJACENT STREETS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND CLEAN TO THE SATISFACTION OF THE INSPECTOR. THIS INCLUDES BUT IS NOT LIMITED TO SOIL, AGGREGATE, ASPHALT DEBRIS, ETC.

TRAFFIC CONTROL NOTES

- ALL ROADS AND SIDEWALKS SHALL REMAIN OPENED AT ALL TIMES UNLESS A WRITTEN PLAN HAS BEEN SUBMITTED AND APPROVED BY THE CITY PRIOR TO ANY CLOSURES.
- FLAGGERS (IF NECESSARY) ARE TO BE INCLUDED IN PRICE OF "TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE WITH FLAGGERS".
- SW PINE ST AND SW SUNSET BLVD SHALL HAVE ONE LANE OPEN AT ALL TIMES. ALL LANES SHALL BE OPEN AT THE END OF EACH WORK DAY.
- ALL TRAFFIC CONTROL SHALL MEET MUTCD STANDARDS.

SANITARY NOTES

- ALL MAINLINE SEWER PIPING SHALL BE ASTM D 3034, SDR 35, PVC, COMPATIBLE ASTM D 3034 FITTINGS MUST BE USED. ALL MATERIALS INSTALLED SHALL MEET CITY OF SHERWOOD AND CWS STANDARDS.
- TRENCH BACKFILL SHALL BE "CLASS B" IN ALL PUBLIC RIGHT-OF-WAYS AND PAVED AREAS IN THE PROJECT. TRENCH BACKFILL MAY BE "CLASS A" FOR AREAS OUTSIDE PUBLIC RIGHT-OF-WAYS AND OUTSIDE OF PAVED AND GRAVEL SURFACED AREAS, PER CITY OF SHERWOOD STANDARD DETAIL RD-47.
- STEEL PLATING MUST MEET CITY OF SHERWOOD STANDARDS. STEEL PLATES SHALL BE A-36 STEEL MEETING AASHTO H-20 LOADING SPECIFICATIONS. PLATES SHALL BE CENTERED OVER THE TRENCH. NO MORE THAN 1/2 OF THE PLATE SHALL SPAN A TRENCH THAT HAS BEEN COMPLETELY BACKFILLED, OR NO MORE THAN 1/3 OF THE PLATE SHALL SPAN A TRENCH THAT HAS NOT BEEN COMPLETELY BACKFILLED. STEEL PLATES SHALL BE PINNED AND HOT PATCHED AROUND THE EDGES (COLD PATCH ACCEPTABLE FOR SW PINE ST ONLY). HOT PATCH RAMP SHALL BE AT LEAST 2' WIDE, TAPERED UNIFORMLY FROM THE TOP OF PLATE TO THE EXISTING ASPHALT. "STEEL PLATE ON ROADWAY" SIGNS, MEETING MUTCD REQUIREMENTS, SHALL BE INSTALLED IN EACH LANE OF TRAFFIC AFFECTED.
- MANHOLE WALLS SHALL BE PRECAST REINFORCED CONCRETE MANHOLES OF THE SIZE REQUIRED PER MANUFACTURER'S RECOMMENDATIONS FOR THE PIPE SIZES AND NUMBER OF OPENINGS.
- SEWER LINES SHALL BE LAID IN A STRAIGHT ALIGNMENT AND IN A UNIFORM GRADE BETWEEN THE MANHOLES AND CLEANOUTS. THE LINE AND GRADE VARIANCE TOLERANCE SPECIFICATIONS, NOT TO EXCEED 1/32" PER INCH OF PIPE DIAMETER, WILL BE STRICTLY ENFORCED. ANY BELLIES EXCEEDING THESE TOLERANCES SHALL BE REPAIRED TO WITHIN TOLERANCES AT NO COST TO THE CITY.
- ALL SANITARY LINES SHALL BE MANDREL, VIDEO AND AIR TESTED. SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED. TESTING AND INSPECTION SHALL BE IN ACCORDANCE WITH CITY OF SHERWOOD AND CWS STANDARDS.
- ALL MATERIALS INSPECTIONS AND TESTS ARE TO BE IN ACCORDANCE WITH CITY OF SHERWOOD AND/OR CWS SPECIFICATIONS. ALL SECTIONS FAILING TO PASS THE REQUIRED TESTS AND INSPECTIONS SHALL BE LOCATED AND REPAIRED. AFTER REPAIR, THESE SECTIONS SHALL BE RETESTED AND INSPECTED UNTIL FOUND ACCEPTABLE.
- CITY WITNESSED VIDEO INSPECTION TO OCCUR AFTER PIPE TRENCHES HAVE BEEN FULLY BACKFILLED AND HAVE PASSED COMPACTION TESTING REQUIREMENTS. TESTS TO BE WITNESSED BY THE CITY; A MINIMUM OF 48-HOURS NOTICE IS REQUIRED.
- ALL NEW SANITARY SEWER PIPES AND MANHOLES MUST BE THOROUGHLY CLEANED BY JETTING PRIOR TO FINAL ACCEPTANCE.
- ALL OTHER CONSTRUCTION PRACTICES RELATING TO SANITARY SEWER INSTALLATION WITHIN THE CITY'S PUBLIC RIGHT-OF-WAY, NOT COVERED IN THESE "GENERAL NOTES" AND/OR "CONSTRUCTION DETAILS" SECTIONS, SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE MOST RECENT EDITION OF THE CITY OF SHERWOOD DESIGN AND CONSTRUCTION MANUAL AND THE MOST RECENT CWS DESIGN AND CONSTRUCTION STANDARDS MANUAL.
- NO TRENCHES SHALL BE LEFT OPEN OVERNIGHT. ANY TRENCHES OR HOLES SHALL BE BACKFILLED BY THE END OF THE WORKDAY OR COVERED AND FENCED OFF FROM ACCESS BY PASSING PUBLIC. THE CONTRACTOR SHALL LEAVE ANY WORK AREAS IN A SAFE CONDITION AT THE END OF EACH WORKDAY.
- SAWCUTTING NECESSARY FOR THE CONSTRUCTION OF THE SANITARY SEWER PIPE AND MANHOLES, INCLUDING ASSOCIATED T-CUT REQUIRED FOR TRENCH RESTORATION, SHALL BE INCIDENTAL TO THE APPLICABLE BID ITEM. NO SEPARATE PAYMENT SHALL BE MADE FOR SAWCUTTING.

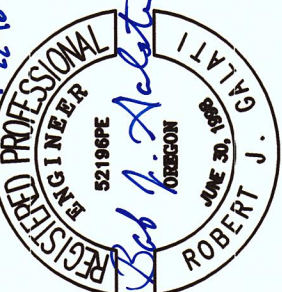
GENERAL NOTES

PINE ST SANITARY SEWER
EXTENSION

LOCATED IN SECTION 32CA AND 32DB, T2S, R1W, W.M. IN THE CITY OF SHERWOOD, WASHINGTON COUNTY, STATE OF OREGON

CITY OF SHERWOOD
ENGINEERING DEPARTMENT
22550 SW PINE STREET
SHERWOOD, OREGON 97140

PHONE: (503) 925-2399
FAX: (503) 925-0929
E-MAIL: engineering@ci.sherwood.oregon.gov



EXPIRES: 6-30-19

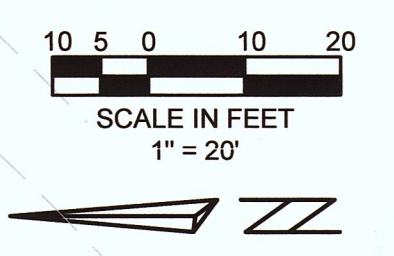
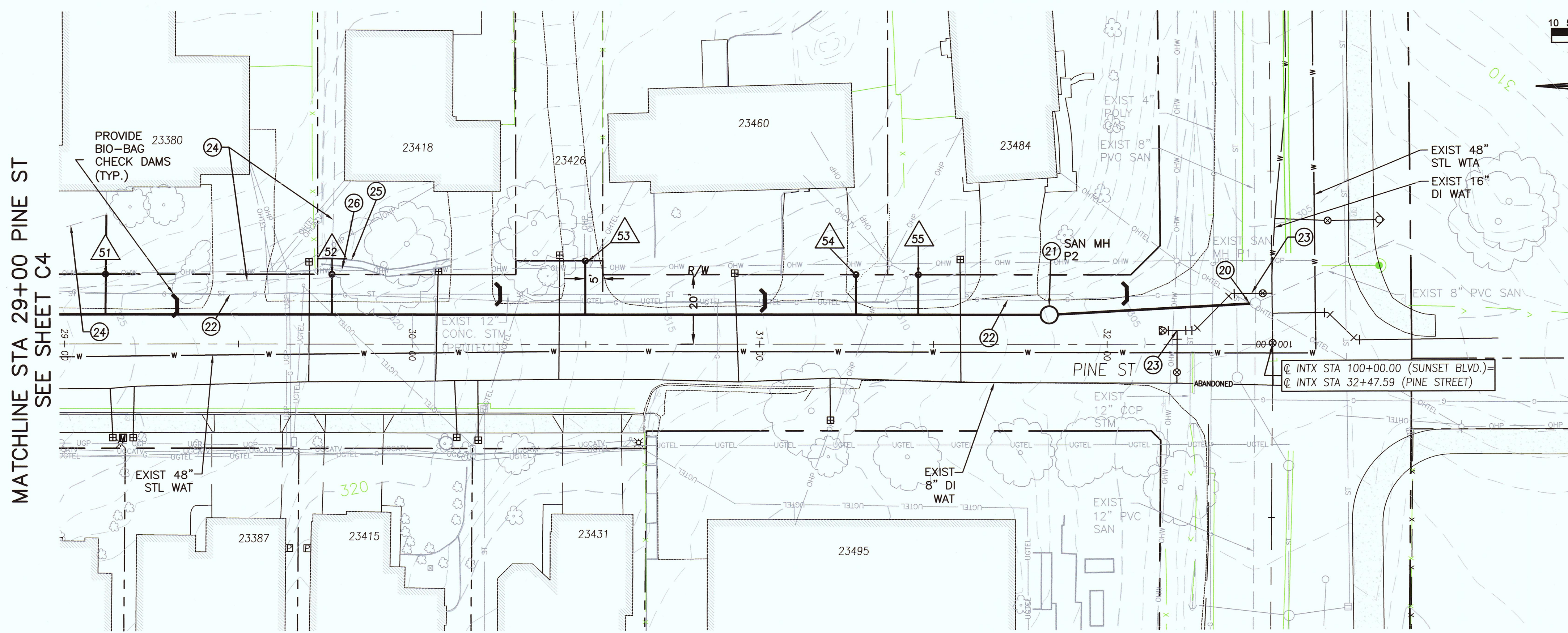
DESIGNED BY:	RIG
DRAWN BY:	AS
CHECKED BY:	RIG
FULL SIZE SCALE:	N/A
DATE:	JAN 8, 2017
Pine St_Sanitary_Sheets.dwg	

NO.	DESCRIPTION

REVISIONS

JOB NO. 8095

SHEET NO. C2



SANITARY KEY NOTES

- 20 CONNECT TO EXISTING SANITARY MANHOLE. CORE, GROUT AND REFORM CHANNEL AS REQUIRED.
- 21 INSTALL NEW 48" SANITARY MANHOLE, WITH STANDARD FRAME AND COVER, PER "STANDARD MANHOLE" DETAIL, SHEET C5.
- 22 PROTECT EXISTING UTILITY DURING CONSTRUCTION (INCIDENTAL).
- 23 CONTRACTOR TO SECURE AND PROTECT WATERLINE DURING CONSTRUCTION (INCIDENTAL).
- 24 LOCATE LATERAL ROUTE FROM THE CONNECTION AT THE MAIN TO THE HOUSE. PROVIDE INFORMATION TO THE CITY ENGINEER FOR UPDATING LATERAL TABLE.
- 25 PROTECT OR REMOVE AND REBUILD RETAINING WALL OR FENCE AS NECESSARY TO INSTALL SEWER SERVICE LATERAL (INCIDENTAL).
- 26 COORDINATE WORK WITH PGE. PROVIDE TEMPORARY GUY WIRE SUPPORT IF REQUIRED.

SANITARY SEWER CONSTRUCTION NOTES

1. INSTALL 4" SANITARY SEWER LATERALS AT MINIMUM SLOPE OF 2%. INSTALL LATERAL PER SIDE SEWER/SIDE STORM PIPELINE DETAIL, SS-62, SHEET C5. INSTALL 4" CLEANOUT AT RIGHT OF WAY LINE FOR SANITARY LATERALS 51-55 PER DETAILS SS-60, SS-61.
2. THE CONTRACTOR SHALL MAINTAIN UNINTERRUPTED SEWER SERVICE DURING CONSTRUCTION (INCIDENTAL).
3. ALL LATERALS TO HAVE AN 8"x4" MANUFACTURED TEE TIPPED UP AT THE SLOPE INDICATED IN THE LATERAL TABLE.

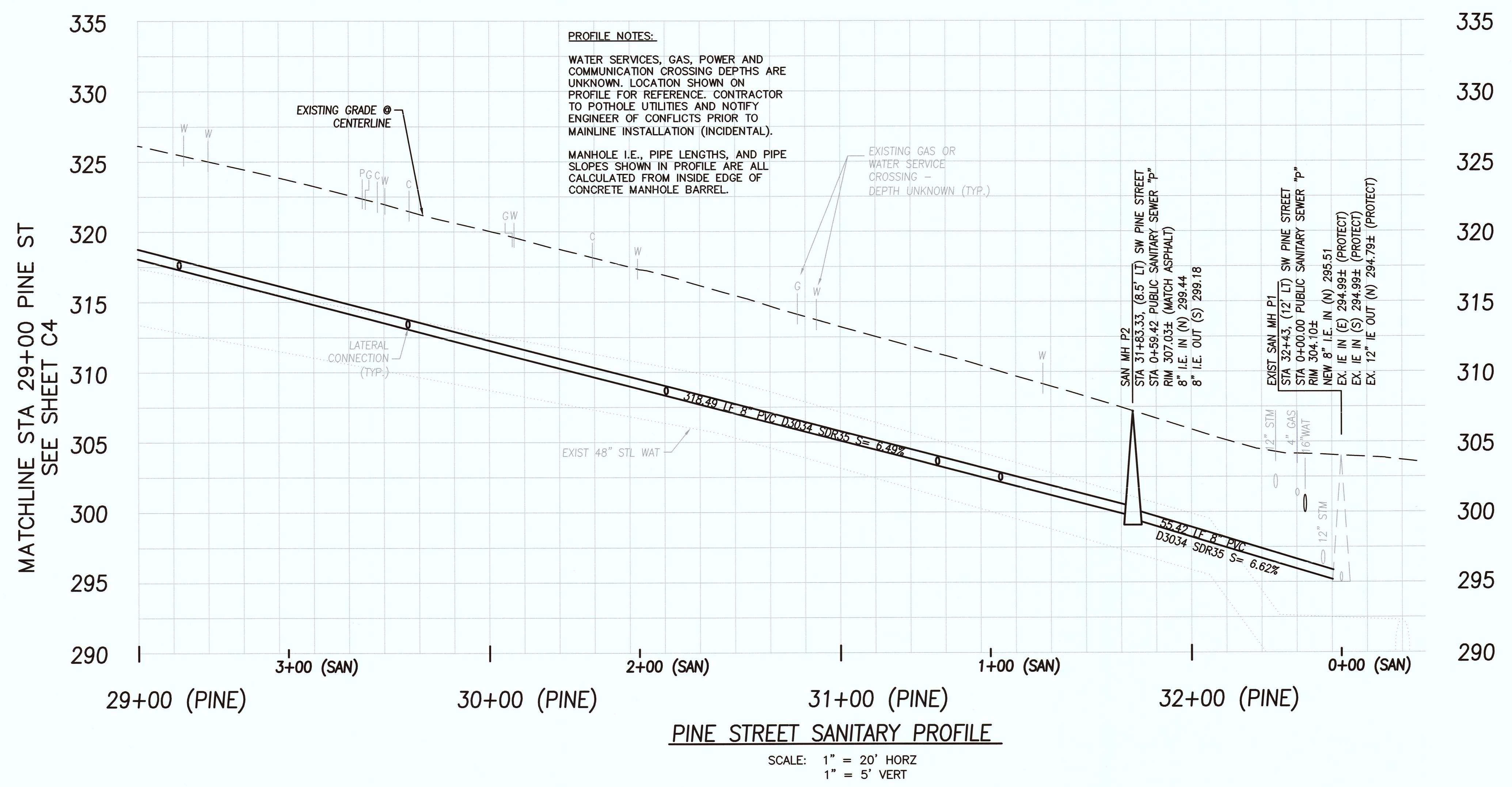
SANITARY SEWER LATERAL TABLE

LATERAL	STREET STATION	RT/LT	LENGTH (FT)	IE @ END	SLOPE	DISTANCE TO DOWNSTREAM MH
51	*29+12	LT	29	-*	-*	271.59' (MH P2)
52	*29+77	LT	12	-*	-*	206.44' (MH P2)
53	*30+50	LT	16	-*	-*	133.52' (MH P2)
54	31+28	LT	12	307.30	35.08%	55.63' (MH P2)
55	31+46	LT	12	306.40	37.25%	37.69' (MH P2)

LATERAL LOCATION NOTE:

* LATERAL LOCATIONS SHOWN MAY VARY FROM ACTUAL LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE EACH LATERAL ROUTE IN ACCORDANCE WITH SECTION 00415.41 OF THE CONTRACT SPECIAL PROVISIONS. THE CONTRACTOR SHALL PROVIDE TO THE CITY ENGINEER VERTICAL AND HORIZONTAL LOCATIONS OF EACH SERVICE LATERAL WHERE THE SERVICE LATERAL CROSSES THE RIGHT OF WAY/PROPERTY LINE. THE INTENT IS TO INSTALL EVERYTHING WITHIN THE RIGHT OF WAY PERPENDICULAR TO THE SANITARY MAINLINE. NO SERVICE LATERALS OR MANUFACTURED TEE FITTINGS ARE TO BE INSTALLED UNTIL THE INFORMATION HAS BEEN PROVIDED TO THE CITY ENGINEER AND AN UPDATED LATERAL TABLE HAS BEEN ISSUED TO THE CONTRACTOR.

ADDITIONAL HORIZONTAL AND VERTICAL LATERAL ROUTE FROM THE RIGHT OF WAY EXTENDING TO THE HOUSE CLEANOUT IS REQUIRED FOR 23380, 23358, 23418 AND 23426 SW PINE ST. THE INTENT IS TO RECONNECT THE HOME SO THE LATERAL IS PERPENDICULAR FROM THE HOME TO THE SANITARY MAIN.



PROFILE NOTES:

WATER SERVICES, GAS, POWER AND COMMUNICATION CROSSING DEPTHS ARE UNKNOWN. LOCATION SHOWN ON PROFILE FOR REFERENCE. CONTRACTOR TO POT-HOLE UTILITIES AND NOTIFY ENGINEER OF CONFLICTS PRIOR TO MAINLINE INSTALLATION (INCIDENTAL).
 MANHOLE I.E., PIPE LENGTHS, AND PIPE SLOPES SHOWN IN PROFILE ARE ALL CALCULATED FROM INSIDE EDGE OF CONCRETE MANHOLE BARREL.
 EXISTING GAS OR WATER SERVICE CROSSING - DEPTH UNKNOWN (TYP.)

PINE STREET SANITARY PROFILE

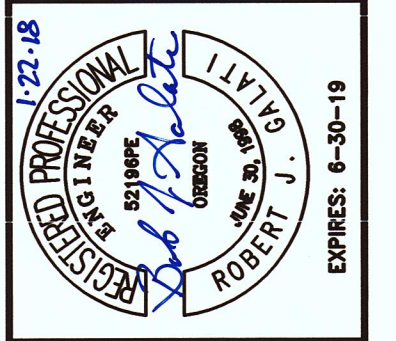
SCALE: 1" = 20' HORZ
 1" = 5' VERT

PINE STREET
 SANITARY
 29+00 TO 32+50

PINE ST SANITARY SEWER
 EXTENSION

LOCATED IN SECTION 32CA AND 32DB, T2S, R1W, W4M,
 IN THE CITY OF SHERWOOD, WASHINGTON COUNTY,
 STATE OF OREGON

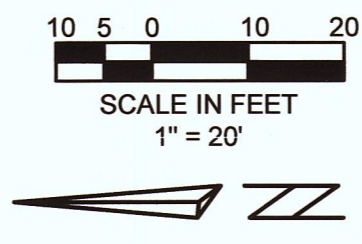
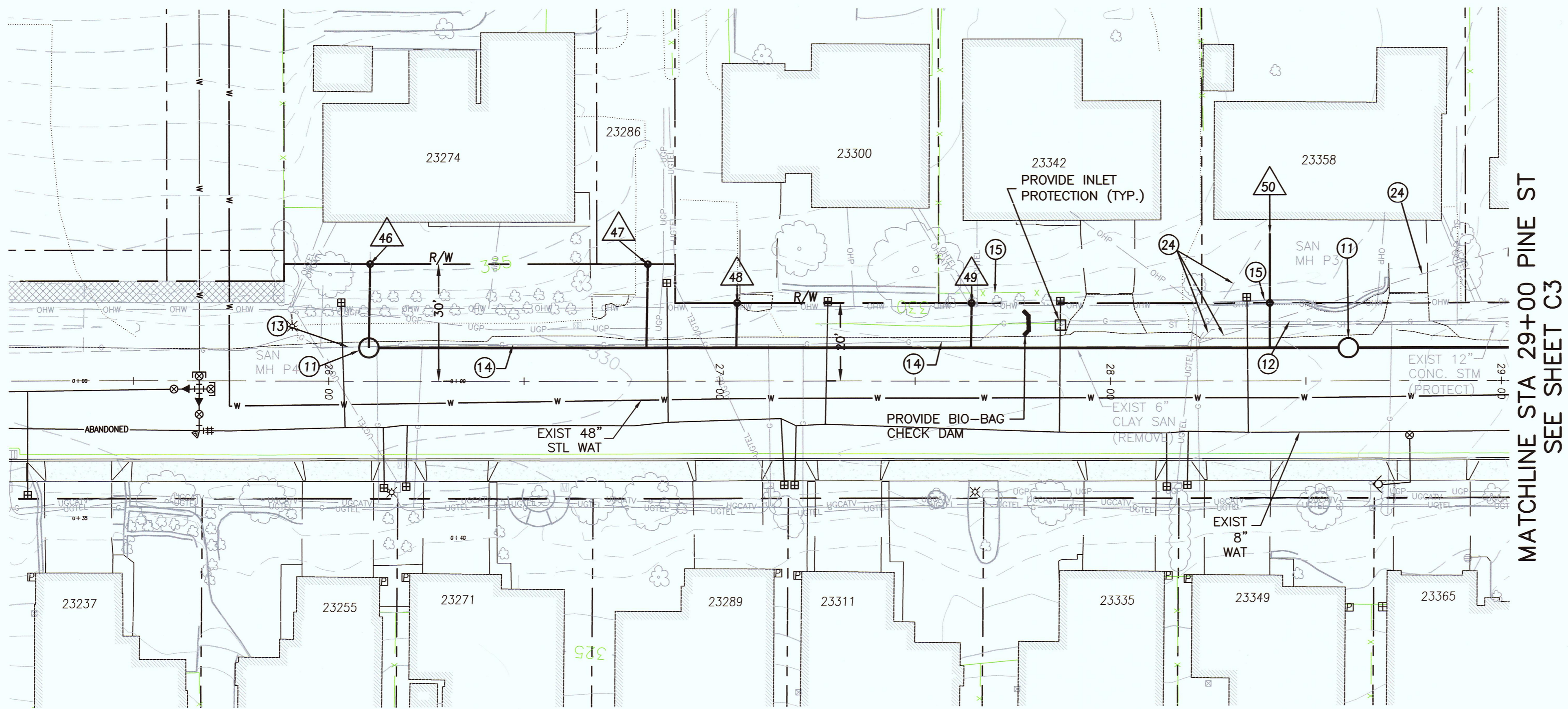
CITY OF SHERWOOD
 ENGINEERING DEPARTMENT
 22560 SW PINE STREET
 SHERWOOD, OREGON 97140
 PHONE: (503) 925-2309
 FAX: (503) 635-0629
 E-MAIL: engineering@sherwoodoregon.gov



DESIGNED BY:	RUG
DRAWN BY:	AGS
CHECKED BY:	RUG
FULL SIZE SCALE:	1"=20'
DATE:	JAN 8, 2017
PROJECT:	Pine St. Sanitary_Sheets.dwg

NO.	REVISIONS

JOB NO. **8095**
 SHEET NO. **C3**



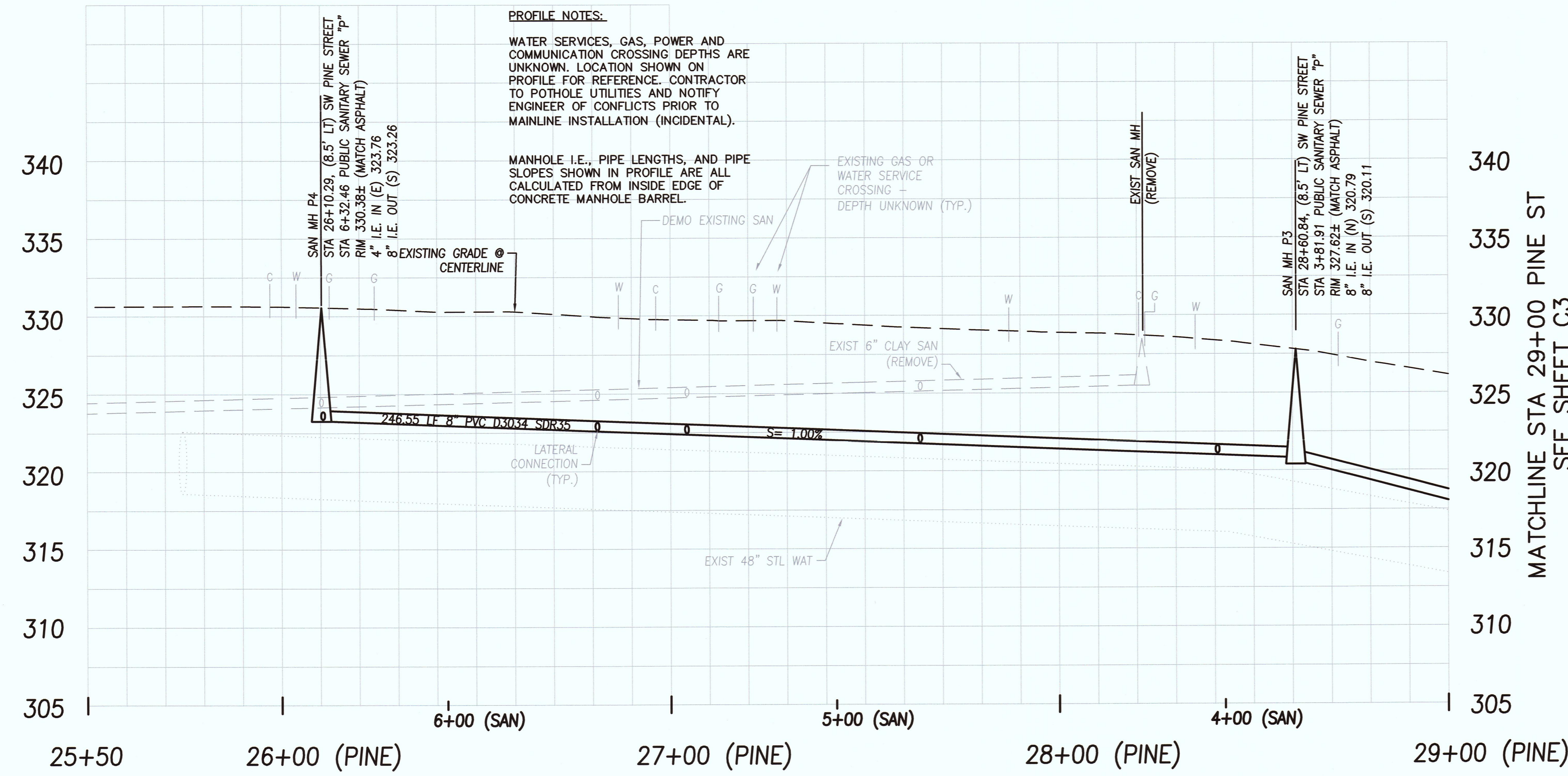
SANITARY KEY NOTES

- ①1 INSTALL NEW 48" SANITARY MANHOLE PER "STANDARD MANHOLE" DETAIL, SHEET C5.
- ①2 PROTECT EXISTING UTILITY DURING CONSTRUCTION (INCIDENTAL).
- ①3 EXISTING 6" CLAY PIPE TO BE GROUTED WATERTIGHT AND ABANDONED IN PLACE WITH CDF.
- ①4 EXISTING 1" STEEL GAS LINE TO BE ABANDONED/RELOCATED EAST BY OTHERS FROM APPROX. STA 26+00 TO 27+70 PINE ST. PRIOR TO SEWER WORK IN THIS AREA. SEE SUPPLEMENTAL INFORMATION IN BID DOCUMENTS FOR NORTHWEST NATURAL DESIGN DRAWINGS.
- ①5 PROTECT OR REMOVE AND REBUILD RETAINING WALL OR FENCE AS NECESSARY TO INSTALL SEWER SERVICE LATERAL (INCIDENTAL).
- ②4 LOCATE LATERAL ROUTE FROM CONNECTION AT THE MAIN TO THE HOUSE. PROVIDE INFORMATION TO THE CITY ENGINEER FOR UPDATING LATERAL TABLE.

SANITARY SEWER CONSTRUCTION NOTES

- 1. INSTALL 4" SANITARY SEWER LATERALS AT MINIMUM SLOPE OF 2%. INSTALL LATERAL PER SIDE SEWER/SIDE STORM PIPELINE DETAIL, SS-62, SHEET C5. INSTALL 4" CLEANOUT AT RIGHT OF WAY LINE FOR SANITARY LATERALS 46-50 PER DETAILS SS-60, SS-61.
- 2. THE CONTRACTOR SHALL MAINTAIN UNINTERRUPTED SEWER SERVICE DURING CONSTRUCTION (INCIDENTAL).
- 3. ALL LATERALS TO HAVE AN 8"x4" MANUFACTURED TEE FITTING TIPPED UP AT SLOPE INDICATED IN LATERAL TABLE.

MATCHLINE STA 29+00 PINE ST
SEE SHEET C3



PROFILE NOTES:

WATER SERVICES, GAS, POWER AND COMMUNICATION CROSSING DEPTHS ARE UNKNOWN. LOCATION SHOWN ON PROFILE FOR REFERENCE. CONTRACTOR TO POTHOLE UTILITIES AND NOTIFY ENGINEER OF CONFLICTS PRIOR TO MAINLINE INSTALLATION (INCIDENTAL).

MANHOLE I.E., PIPE LENGTHS, AND PIPE SLOPES SHOWN IN PROFILE ARE ALL CALCULATED FROM INSIDE EDGE OF CONCRETE MANHOLE BARREL.

EXISTING GAS OR WATER SERVICE CROSSING DEPTH UNKNOWN (TYP.)

EXIST 6" CLAY SAN (REMOVE)

EXIST 48" STL WAT

SW PINE STREET SANITARY PROFILE

SCALE: 1" = 20' HORIZ
1" = 5' VERT

MATCHLINE STA 29+00 PINE ST
SEE SHEET C3

SANITARY SEWER LATERAL TABLE

LATERAL	STREET STATION	RT/LT	LENGTH (FT)	IE @ END	SLOPE	DISTANCE TO DOWNSTREAM MH
46	*26+10	LT	22	-*	-*	0' (MH P4)
47	*26+81	LT	22	-*	-*	179.58' (MH P3)
48	*27+04	J	12	-*	-*	156.58' (MH P3)
49	*27+64	LT	12	-*	-*	96.57' (MH P3)
50	*28+41	LT	29	-*	-*	20.10' (MH P3)

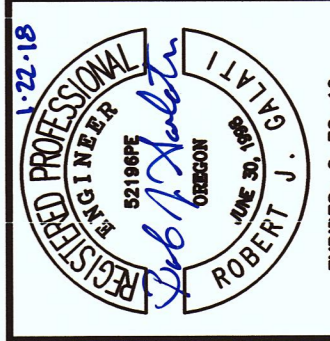
NOTE:
* LATERAL LOCATIONS SHOWN MAY VARY FROM ACTUAL LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE EACH LATERAL ROUTE IN ACCORDANCE WITH SECTION 00415.41 OF THE CONTRACT SPECIAL PROVISIONS. THE CONTRACTOR SHALL PROVIDE TO THE CITY ENGINEER EACH SERVICE LATERAL WHERE THE SERVICE LATERAL CROSSES THE RIGHT OF WAY/PROPERTY LINE. THE INTENT IS TO INSTALL EVERYTHING WITHIN THE RIGHT OF WAY PERPENDICULAR TO THE SANITARY MAINLINE. NO SERVICE LATERALS OR MANUFACTURED TEE FITTINGS ARE TO BE INSTALLED UNTIL THE INFORMATION HAS BEEN PROVIDED TO THE CITY ENGINEER AND AN UPDATED LATERAL TABLE HAS BEEN ISSUED TO THE CONTRACTOR.

ADDITIONAL HORIZONTAL AND VERTICAL LATERAL ROUTE FROM THE RIGHT OF WAY EXTENDING TO THE HOUSE CLEANOUT IS REQUIRED FOR 23380, 23358, 23418 AND 23426 SW PINE ST. THE INTENT IS TO RECONNECT THE HOME SO THE LATERAL IS PERPENDICULAR FROM THE HOME TO THE SANITARY MAIN.

PINE STREET
SANITARY
25+50 TO 29+00

PINE ST SANITARY SEWER
EXTENSION

CITY OF SHERWOOD
ENGINEERING DEPARTMENT
22560 SW PINE STREET
SHERWOOD, OREGON 97140
PHONE: (503) 925-2309
FAX: (503) 625-0629
E-MAIL: engineering@sherwoodoregon.gov



DESIGNED BY:	R/G
DRAWN BY:	AGS
CHECKED BY:	R/G
FULL SIZE SCALE:	1"=20'
DATE:	JAN 8, 2017

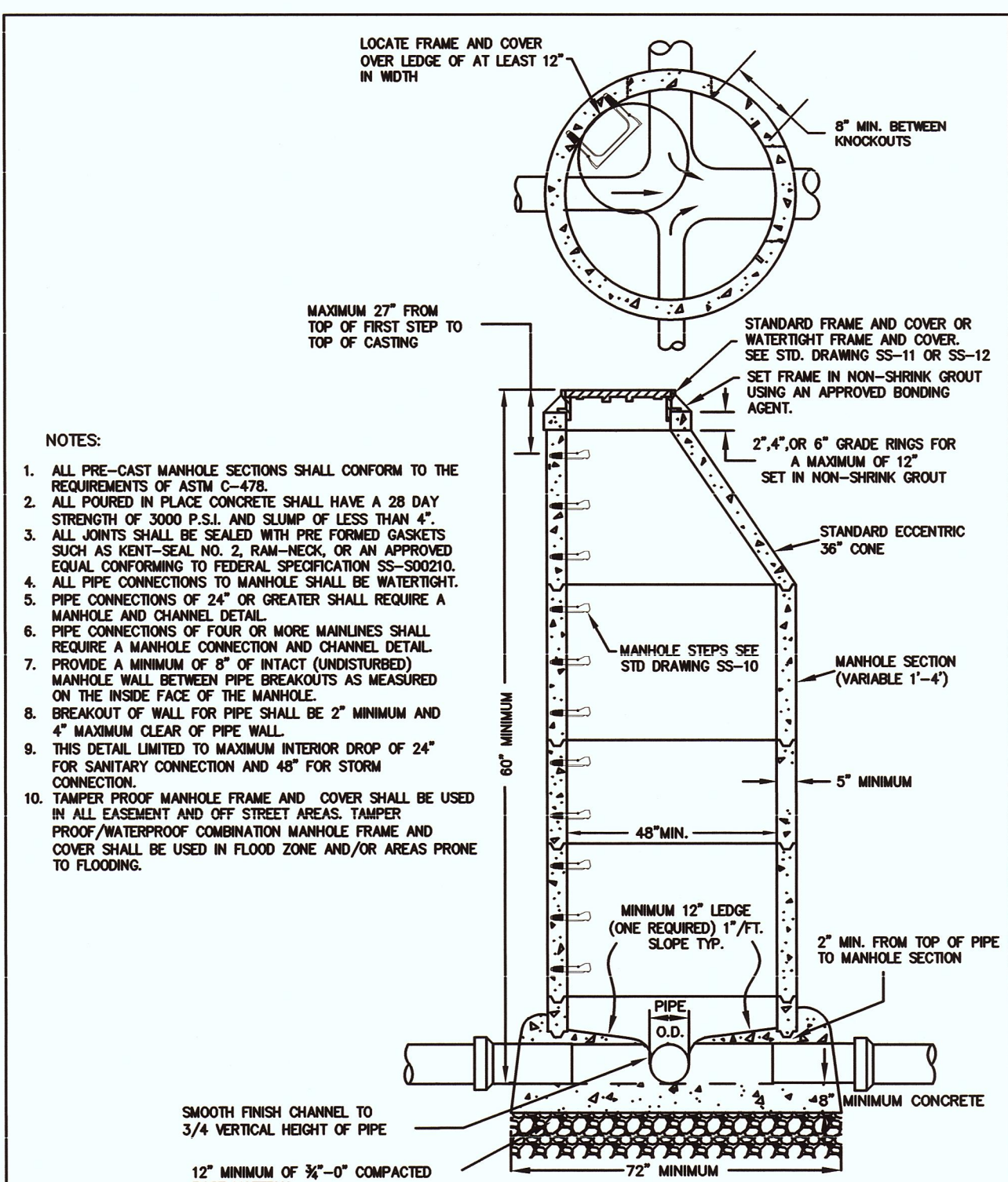
NO.	DESCRIPTION

JOB NO. **8095**

SHEET **C4**

REVISIONS

Pine St Sanitary_Sheets.dwg

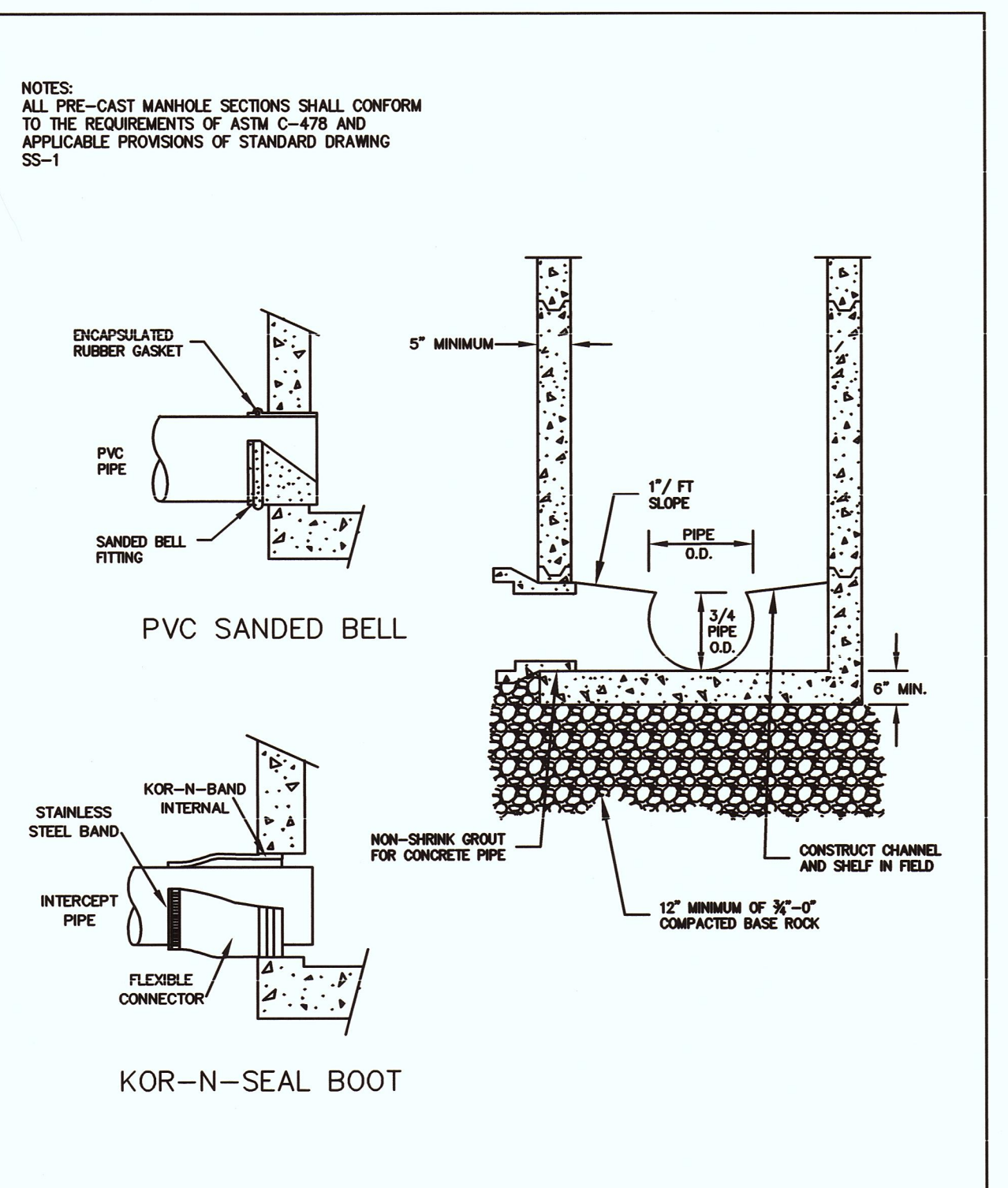


NOTES:

1. ALL PRE-CAST MANHOLE SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478.
2. ALL POURED IN PLACE CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3000 P.S.I. AND SLUMP OF LESS THAN 4".
3. ALL JOINTS SHALL BE SEALED WITH PRE-FORMED CASSETS SUCH AS KENT-SEAL AND 12 MAN-SEAL OR AN APPROVED EQUAL CONFORMING TO FEDERAL SPECIFICATION SS-50210.
4. ALL PIPE CONNECTIONS TO MANHOLE SHALL BE WATER-TIGHT.
5. PIPE CONNECTIONS OF 24" OR GREATER SHALL REQUIRE A MANHOLE AND CHANNEL DETAIL.
6. PIPE CONNECTIONS OF FOUR OR MORE MAINLINES SHALL REQUIRE A MANHOLE CONNECTION AND CHANNEL DETAIL.
7. PROVIDE A MINIMUM OF 6" OF INTACT (UNDISTURBED) MANHOLE WALL BETWEEN PIPE BREAKOUTS AS MEASURED ON THE INSIDE FACE OF THE MANHOLE.
8. BREAKOUT OF WALL FOR PIPE SHALL BE 2" MINIMUM AND 4" MAXIMUM CLEAR OF PIPE WALL.
9. THIS DETAIL LIMITED TO MAXIMUM INTERIOR DROP OF 24" FOR SANITARY CONNECTION AND 48" FOR STORM CONNECTION.
10. TAMPER PROOF MANHOLE FRAME AND COVER SHALL BE USED IN ALL EASEMENT AND OFF STREET AREAS. TAMPER PROOF/WATERPROOF COMBINATION MANHOLE FRAME AND COVER SHALL BE USED IN FLOOD ZONE AND/OR AREAS PRONE TO FLOODING.

STANDARD DRAWING TITLE	DRAWING NUMBER
STANDARD MANHOLE	SS-1
SCALE	DATE
N.T.S.	MAR '16

Any alteration of this drawing may not be authorized in any way with the City of Sherwood Standard Drawings.

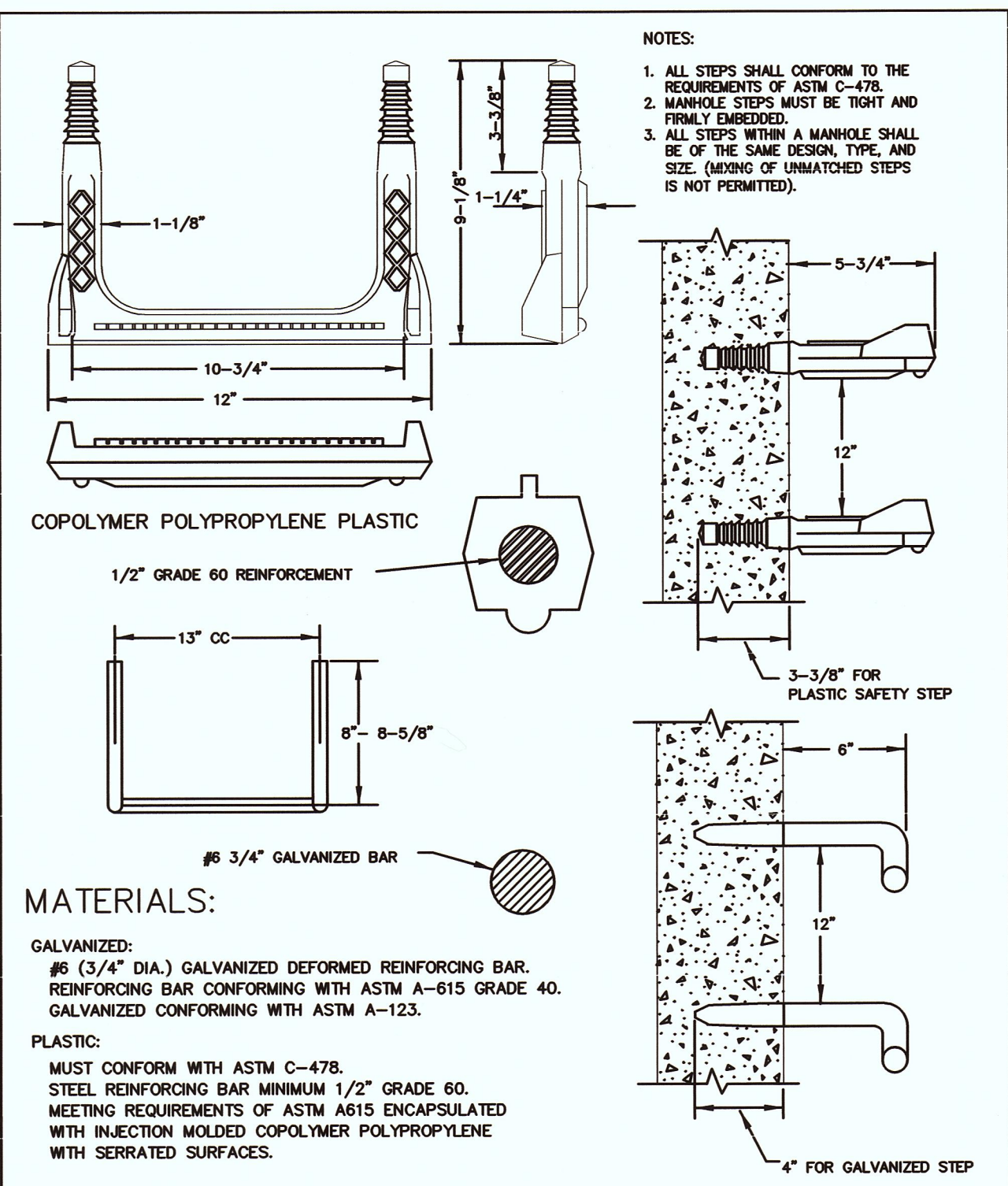


NOTES:

ALL PRE-CAST MANHOLE SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478 AND APPLICABLE PROVISIONS OF STANDARD DRAWING SS-1

STANDARD DRAWING TITLE	DRAWING NUMBER
PRECAST CONCRETE MANHOLE BASE	SS-2
SCALE	DATE
N.T.S.	MAR '16

Any alteration of this drawing may not be authorized in any way with the City of Sherwood Standard Drawings.



NOTES:

1. ALL STEPS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478.
2. MANHOLE STEPS MUST BE TIGHTLY AND FIRMLY EMBEDDED.
3. ALL STEPS WITHIN A MANHOLE SHALL BE OF THE SAME DESIGN, TYPE, AND SIZE. (MIXING OF UNMATCHED STEPS IS NOT PERMITTED.)

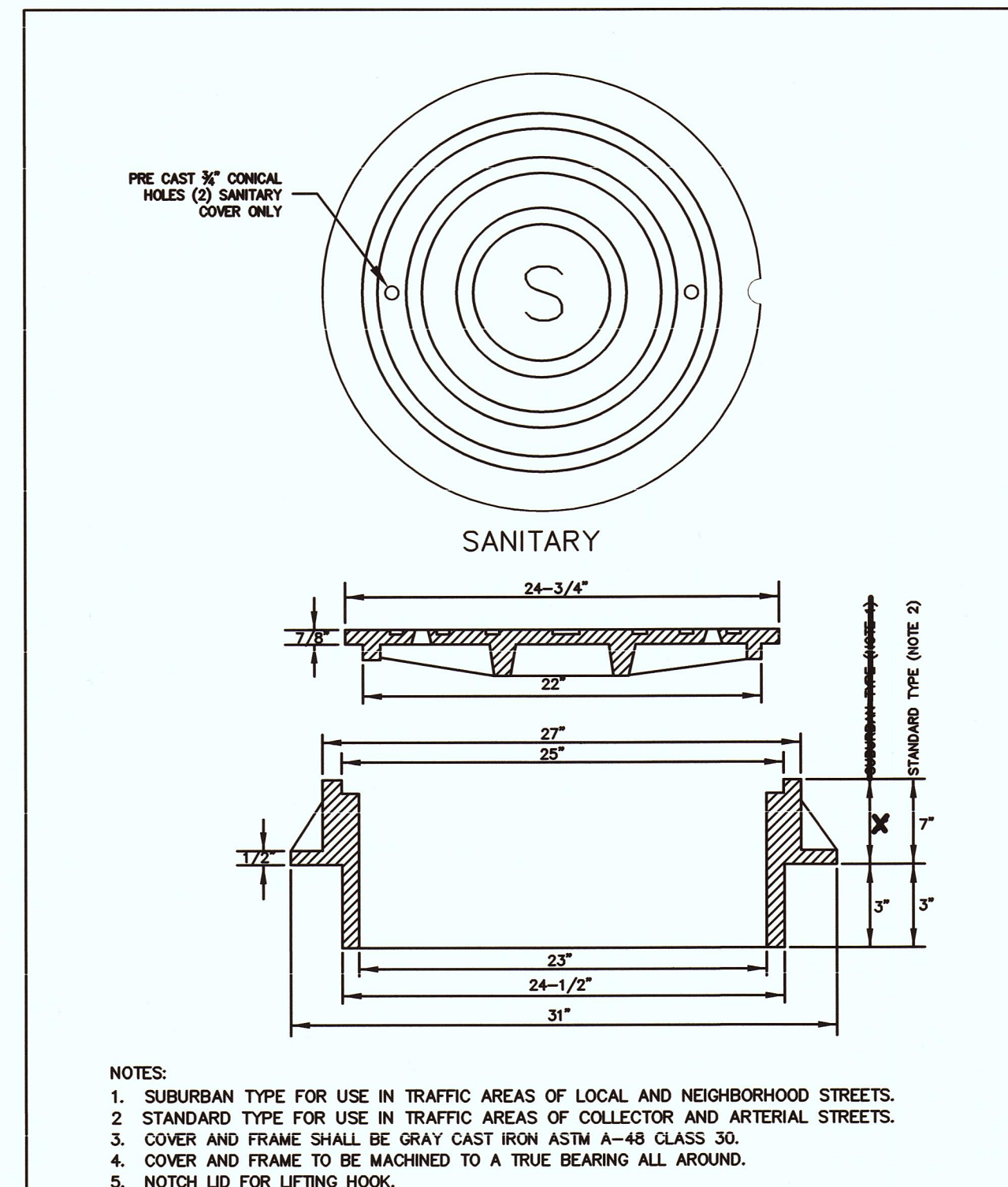
MATERIALS:

GALVANIZED:
#3 (3/4" DIA.) GALVANIZED DEFORMED REINFORCING BAR.
REINFORCING BAR CONFORMING WITH ASTM A-615 GRADE 40.
GALVANIZED CONFORMING WITH ASTM A-123.

PLASTIC:
MUST CONFORM WITH ASTM C-478.
STEEL REINFORCING BAR MINIMUM 1/2" GRADE 60.
MEETING REQUIREMENTS OF ASTM A515 ENCAPSULATED WITH INJECTION MOLDED COPOLYMER POLYPROPYLENE WITH SERRATED SURFACES.

STANDARD DRAWING TITLE	DRAWING NUMBER
MANHOLE STEP	SS-10
SCALE	DATE
N.T.S.	MAR '16

Any alteration of this drawing may not be authorized in any way with the City of Sherwood Standard Drawings.

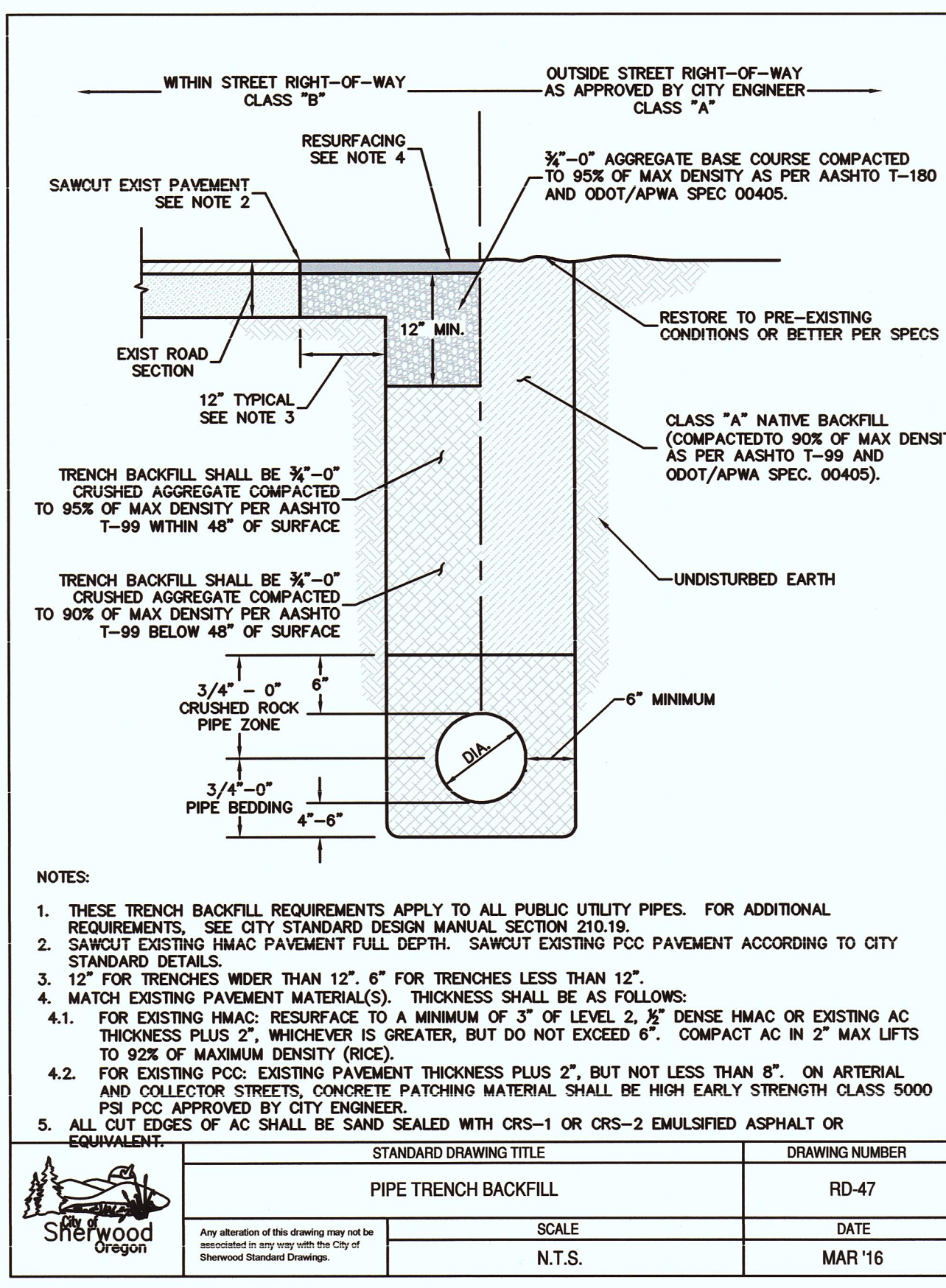


NOTES:

1. SUBURBAN TYPE FOR USE IN TRAFFIC AREAS OF LOCAL AND NEIGHBORHOOD STREETS.
2. STANDARD TYPE FOR USE IN TRAFFIC AREAS OF COLLECTOR AND ARTERIAL STREETS.
3. COVER AND FRAME SHALL BE GRAY CAST IRON ASTM A-48 CLASS 30.
4. COVER AND FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
5. NOTCH LID FOR LIFTING HOOK.

STANDARD DRAWING TITLE	DRAWING NUMBER
SUBURBAN AND STANDARD MANHOLE FRAME AND COVER SANITARY	SS-11
SCALE	DATE
N.T.S.	MAR '16

Any alteration of this drawing may not be authorized in any way with the City of Sherwood Standard Drawings.

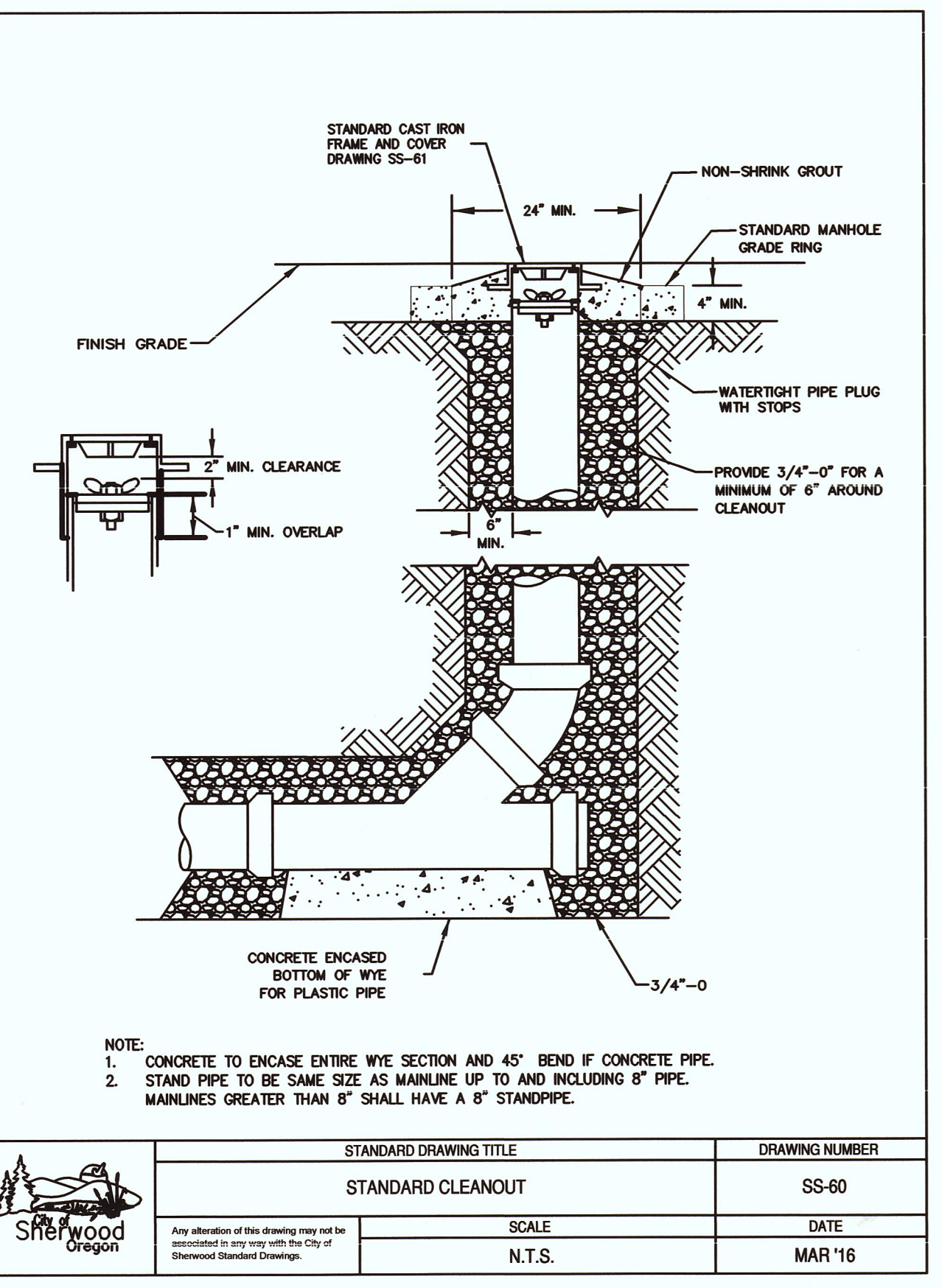


NOTES:

1. THESE TRENCH BACKFILL REQUIREMENTS APPLY TO ALL PUBLIC UTILITY PIPES. FOR ADDITIONAL REQUIREMENTS, SEE CITY STANDARD DESIGN MANUAL SECTION 210.19.
2. SAWCUT EXISTING HMAC PAVEMENT FULL DEPTH. SAWCUT EXISTING PCC PAVEMENT ACCORDING TO CITY STANDARD DETAILS.
3. 12" FOR TRENCHES WIDER THAN 12". 6" FOR TRENCHES LESS THAN 12".
4. MATCH EXISTING PAVEMENT MATERIAL(S). THICKNESS SHALL BE AS FOLLOWS:
 - 4.1. FOR EXISTING HMAC: RESURFACE TO A MINIMUM OF 3" OF LEVEL 2. 2" DENSE HMAC OR EXISTING AC THICKNESS PLUS 2", WHICHEVER IS GREATER, BUT DO NOT EXCEED 6". COMPACT AC IN 2" MAX LIFTS TO 92% OF MAXIMUM DENSITY (RICE).
 - 4.2. FOR EXISTING PCC: EXISTING PAVEMENT THICKNESS PLUS 2", BUT NOT LESS THAN 8". ON ARTERIAL AND COLLECTOR STREETS, CONCRETE PATCHING MATERIAL SHALL BE HIGH EARLY STRENGTH CLASS 5000 PSI PCC APPROVED BY CITY ENGINEER.
5. ALL CUT EDGES OF AC SHALL BE SAND SEALED WITH CRS-1 OR CRS-2 EMULSIFIED ASPHALT OR EQUIVALENT.

STANDARD DRAWING TITLE	DRAWING NUMBER
PIPE TRENCH BACKFILL	RD-47
SCALE	DATE
N.T.S.	MAR '16

Any alteration of this drawing may not be authorized in any way with the City of Sherwood Standard Drawings.

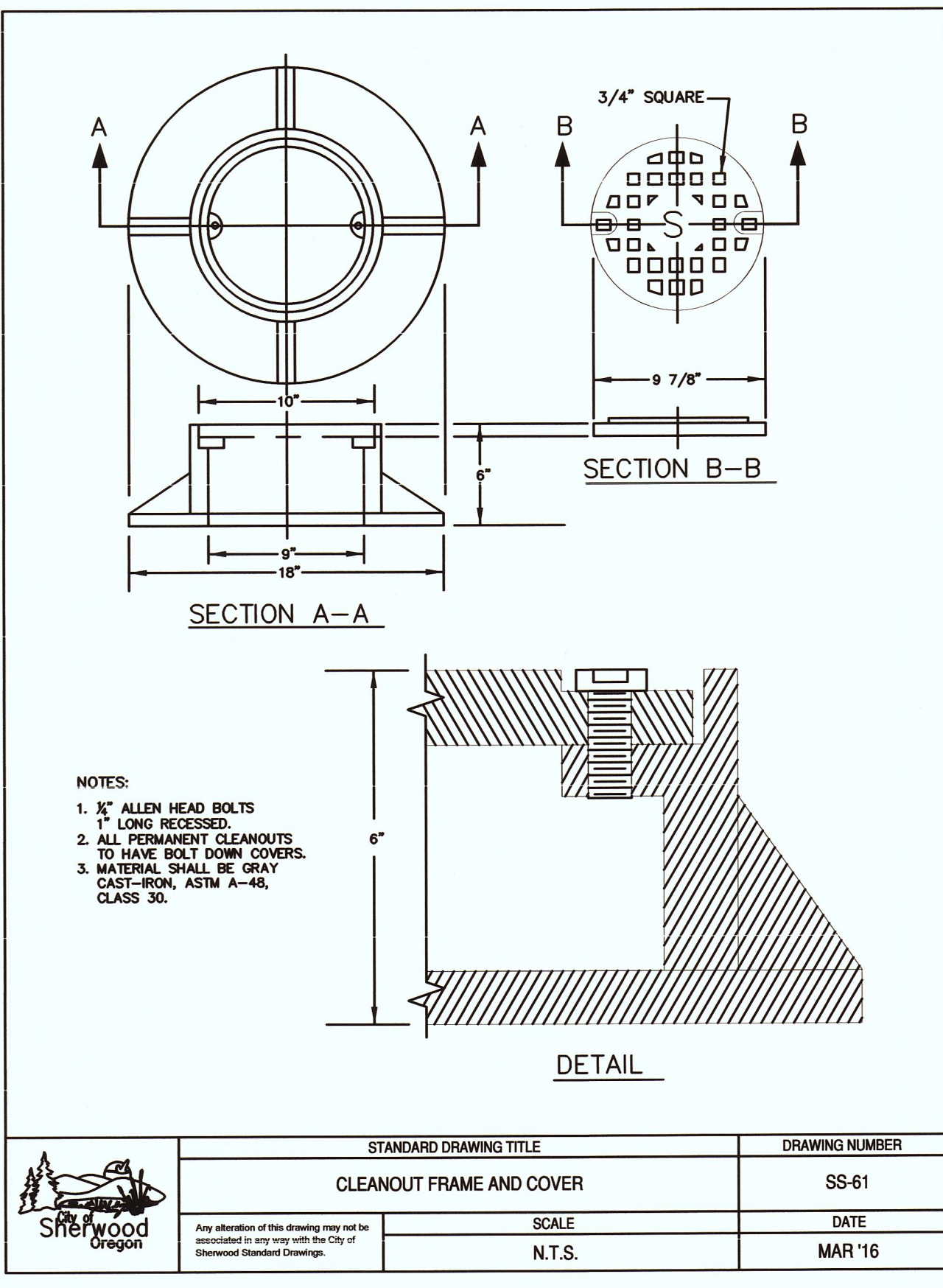


NOTE:

1. CONCRETE TO ENCASE ENTIRE WYE SECTION AND 45° BEND IF CONCRETE PIPE.
2. STAND PIPE TO BE SAME SIZE AS MAINLINE UP TO AND INCLUDING 6" PIPE. MAINLINES GREATER THAN 6" SHALL HAVE A 6" STANDPIPE.

STANDARD DRAWING TITLE	DRAWING NUMBER
STANDARD CLEANOUT	SS-60
SCALE	DATE
N.T.S.	MAR '16

Any alteration of this drawing may not be authorized in any way with the City of Sherwood Standard Drawings.

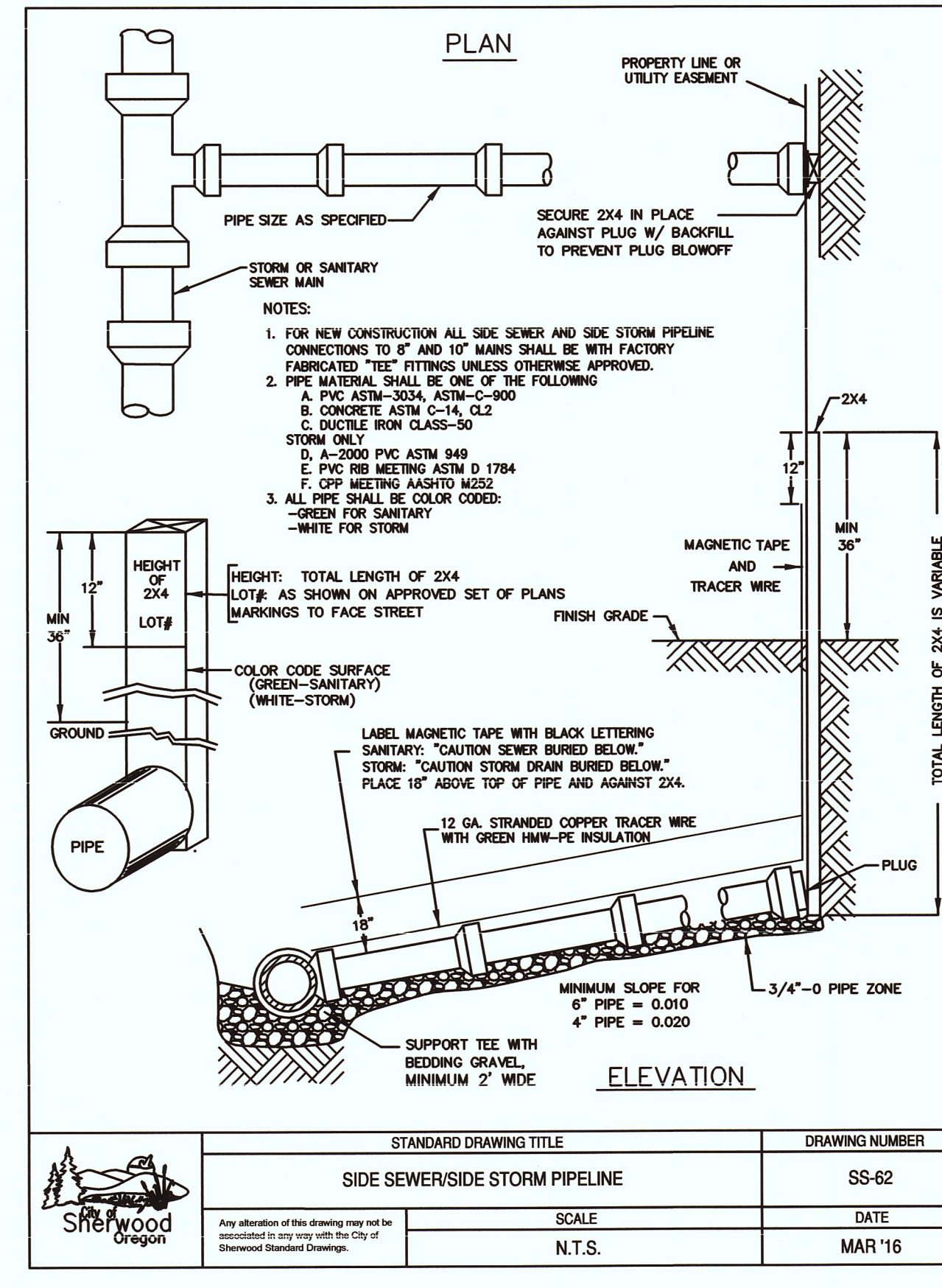


NOTES:

1. 1/2" ALLEN HEAD BOLTS 1" LONG RECESSED.
2. ALL PERMANENT CLEANOUTS TO HAVE BOLT DOWN CONE.
3. MATERIAL SHALL BE GRAY CAST-IRON, ASTM A-48, CLASS 30.

STANDARD DRAWING TITLE	DRAWING NUMBER
CLEANOUT FRAME AND COVER	SS-61
SCALE	DATE
N.T.S.	MAR '16

Any alteration of this drawing may not be authorized in any way with the City of Sherwood Standard Drawings.



NOTES:

1. FOR NEW CONSTRUCTION ALL SIDE SEWER AND SIDE STORM PIPELINE CONNECTIONS TO 6" AND 10" MAINS SHALL BE WITH FACTORY FABRICATED 'TEE' FITTINGS UNLESS OTHERWISE APPROVED.
2. PIPE MATERIAL SHALL BE ONE OF THE FOLLOWING:
 - A. PVC ASTM-3034, ASTM-C-900
 - B. CONCRETE ASTM C-14, C-12
 - C. DUCTILE IRON CLASS-50
 - D. A-2000 PVC ASTM 949
 - E. PVC RIB MEETING ASTM D 1784
 - F. CPVC MEETING AASHTO M252
3. ALL PIPE SHALL BE COLOR CODED:
 - GREEN FOR SANITARY
 - WHITE FOR STORM

STANDARD DRAWING TITLE	DRAWING NUMBER
SIDE SEWER/SIDE STORM PIPELINE	SS-62
SCALE	DATE
N.T.S.	MAR '16

Any alteration of this drawing may not be authorized in any way with the City of Sherwood Standard Drawings.

PINE ST SANITARY SEWER EXTENSION
 LOCATED IN SECTION 32CA AND 32DB, T2S, R1W, W.M. IN THE CITY OF SHERWOOD, WASHINGTON COUNTY, STATE OF OREGON

CITY OF SHERWOOD
 ENGINEERING DEPARTMENT
 22580 SW PINE STREET
 SHERWOOD, OREGON 97140
 PHONE: (503) 925-2309
 FAX: (503) 925-0628
 E-MAIL: engineering@cityofsherwood.org

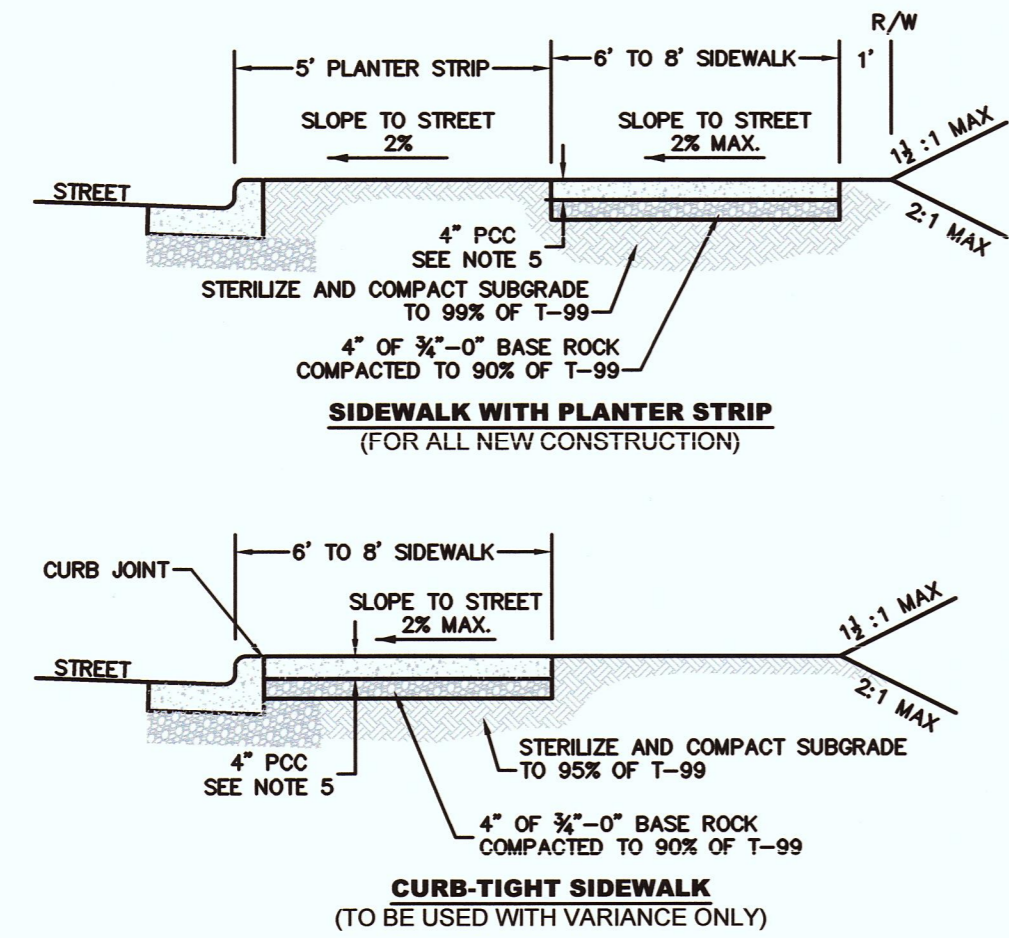
PROFESSIONAL SEAL
 J. J. J. J.
 EXP. 8-30-19

DESIGNED BY:	SCALE:	DATE:
RAG	N.T.S.	JUN 8, 2017

DRAWN BY:	CHECKED BY:	FULL SIZE SCALE:
ACS	RAG	N/A

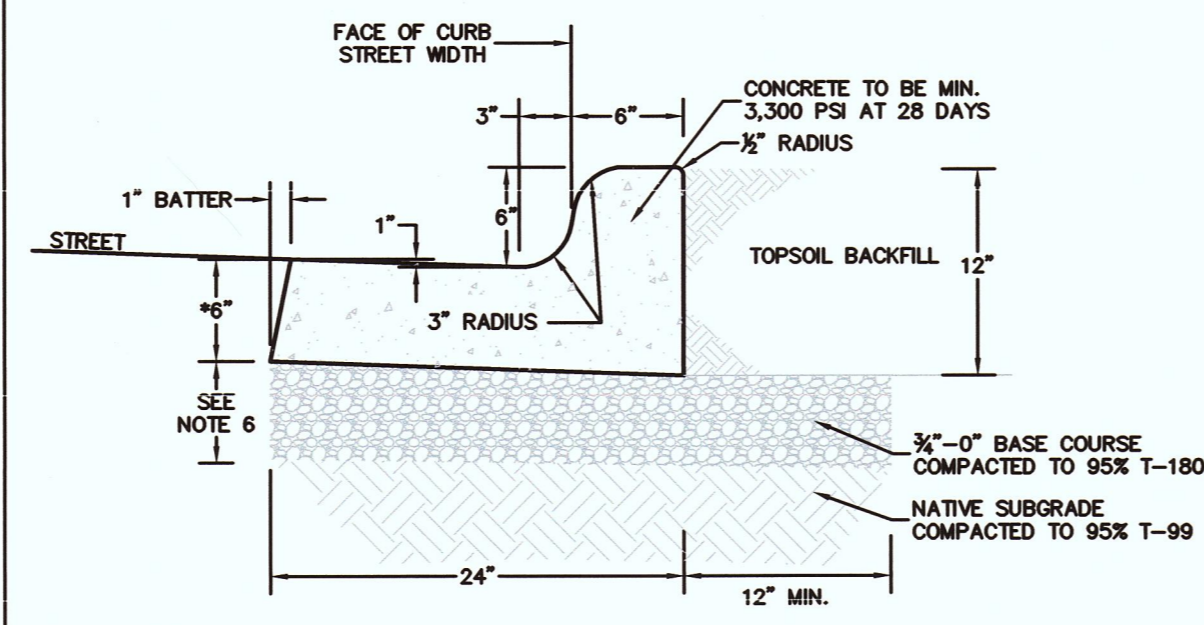
JOB NO. 8095
 SHEET NO. C5
 REVISIONS

PINEST.Sanitary_Sheets.dwg
 PINE ST SANITARY SEWER EXTENSION



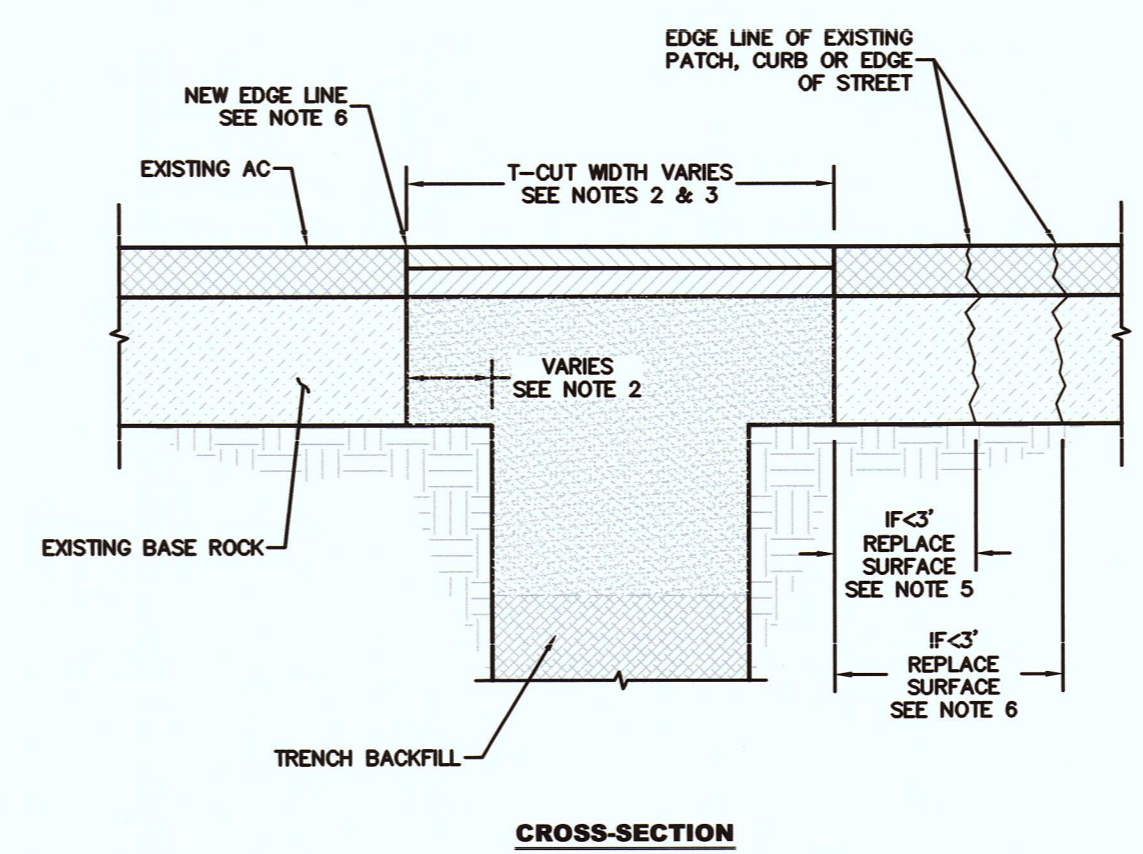
- NOTES:
1. CONCRETE SHALL BE COMMERCIAL MIX, MIN. COMPRESSIVE STRENGTH OF 3,300 PSI @ 28 DAYS, WITH A 4" MAX SLUMP.
 2. SIDEWALK PANELS TO BE SQUARE (6' LONG x 6' WIDE TYP.).
 3. EXPANSION JOINTS TO BE PLACED AT SIDES OF DRIVEWAY APPROACHES, UTILITY VAULTS, CURB RAMP, AND/OR POINTS OF TANGENCY IN CURB AS SHOWN ON THE STANDARD DRAWINGS FOR SIDEWALK RAMP, AND AT SPACING NOT TO EXCEED 45'.
 4. FOR SIDEWALKS ADJACENT TO THE CURB AND POURED AT THE SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROWELED JOINT WITH A MINIMUM 1/2" RADIUS.
 5. SIDEWALKS SHALL HAVE A MINIMUM THICKNESS OF 4". IF MOUNTABLE CURB IS USED, OR IF SIDEWALK IS INTENDED AS PORTION OF A RESIDENTIAL DRIVEWAY IT SHALL HAVE A 6" MINIMUM THICKNESS, COMMERCIAL 8".
 6. CONCRETE SHALL HAVE A BROOM FINISH, ALL JOINTS SHALL BE EDGED WITH 3" SHINE.
 7. WIDTH OF PLANTER STRIP AND SIDEWALK IS MEASURED FROM FACE OF CURB.
 8. IF DRAIN BLOCKOUTS IN CURBS ARE APPROVED, THEY SHALL BE EXTENDED PERPENDICULAR TO CURB TO 1' PAST BACK OF SIDEWALK WITH A 3" DIAMETER ADS PIPE. CONTRACTION JOINT SHALL BE PLACE OVER PIPE.

STANDARD DRAWING TITLE	DRAWING NUMBER
SIDEWALK DETAIL	RD-26
SCALE	DATE
N.T.S.	MAR '16



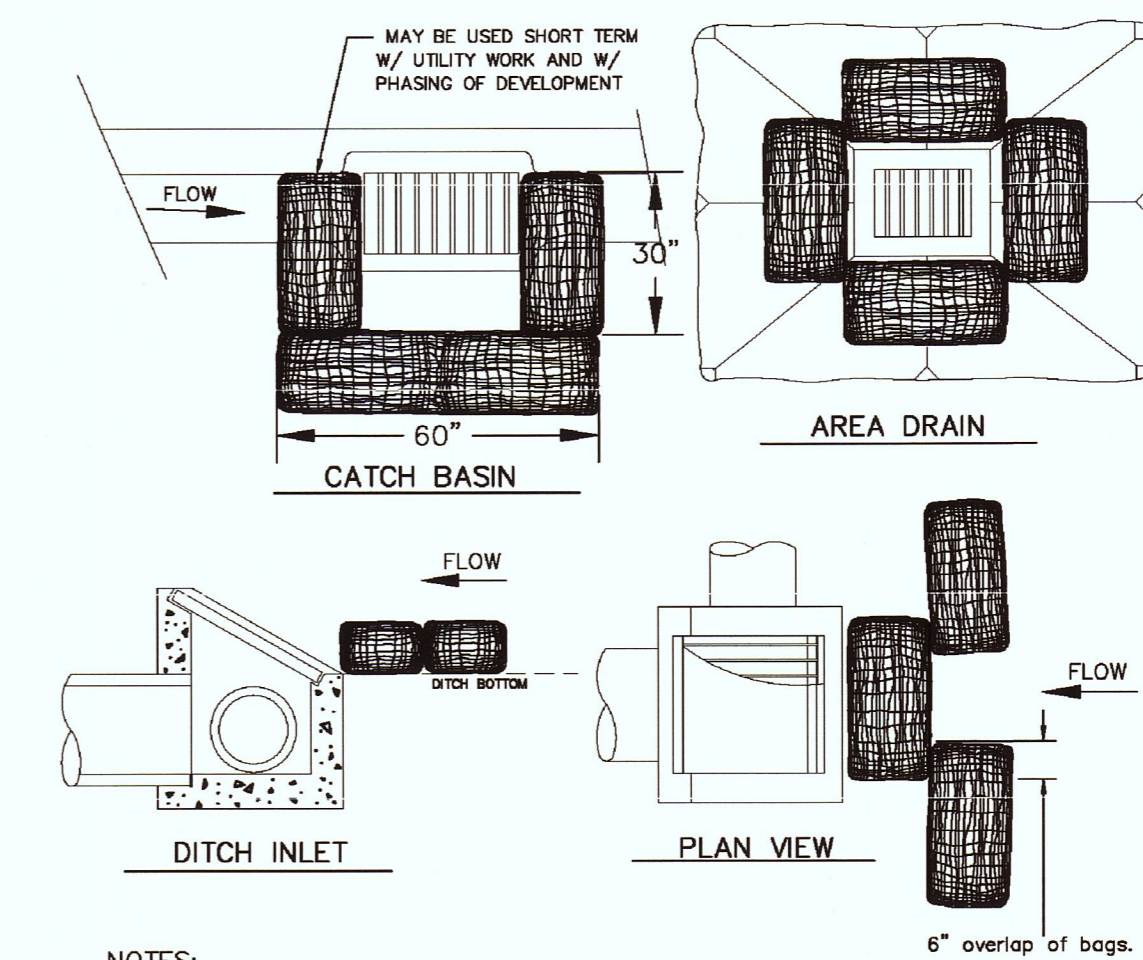
- NOTES:
1. MONOLITHIC CURB AND GUTTER SHALL BE USED ON ALL NEW ROADWAY SECTIONS, EXCEPT AT ROADWAY MEDIANS AND AT MOUNTABLE CURB SECTIONS (SEE STD DET RD-21 & RD-24 FOR THESE CONDITIONS).
 2. CONCRETE SHALL BE COMMERCIAL MIX, WITH A 28-DAY COMPRESSIVE STRENGTH OF 3,300 PSI, WITH A 4" MAX SLUMP.
 3. EXPANSION JOINTS TO BE PROVIDED AT EACH:
 - A. POINT OF TANGENCY.
 - B. COLD JOINT.
 - C. SIDE OF INLET STRUCTURES.
 - D. SIDE OF DRIVEWAYS.
 4. EXPANSION JOINT MATERIAL SHALL BE PRE-MOLDED, ASPHALT IMPREGNATED, NON-EXTRUDING, WITH A THICKNESS OF 3/8".
 5. CONTRACTION JOINTS SHALL HAVE:
 - A. SPACING OF NOT MORE THAN 15 FEET.
 - B. DEPTH OF JOINT OF AT LEAST 1 1/2".
 6. BASE ROCK SHALL BE 3/4"-0", COMPACTED TO 95% OF MAXIMUM DENSITY PER AASHTO T-190. BASE ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURES OR 6", WHICHEVER IS GREATER, AND SHALL EXTEND 12" BEHIND CURB.
 7. FOR CURB AND GUTTER REQUIREMENTS ON SHED AND SUPERELEVATED ROAD SECTIONS, SEE STD DET RD-23
 8. COMMERCIAL DRIVEWAY DROPS SHALL BE 8" THICK, RE-BAR REINFORCED, AND 4,000 PSI AT 28 DAYS.

STANDARD DRAWING TITLE	DRAWING NUMBER
MONOLITHIC CURB AND GUTTER	RD-22
SCALE	DATE
N.T.S.	MAR '16

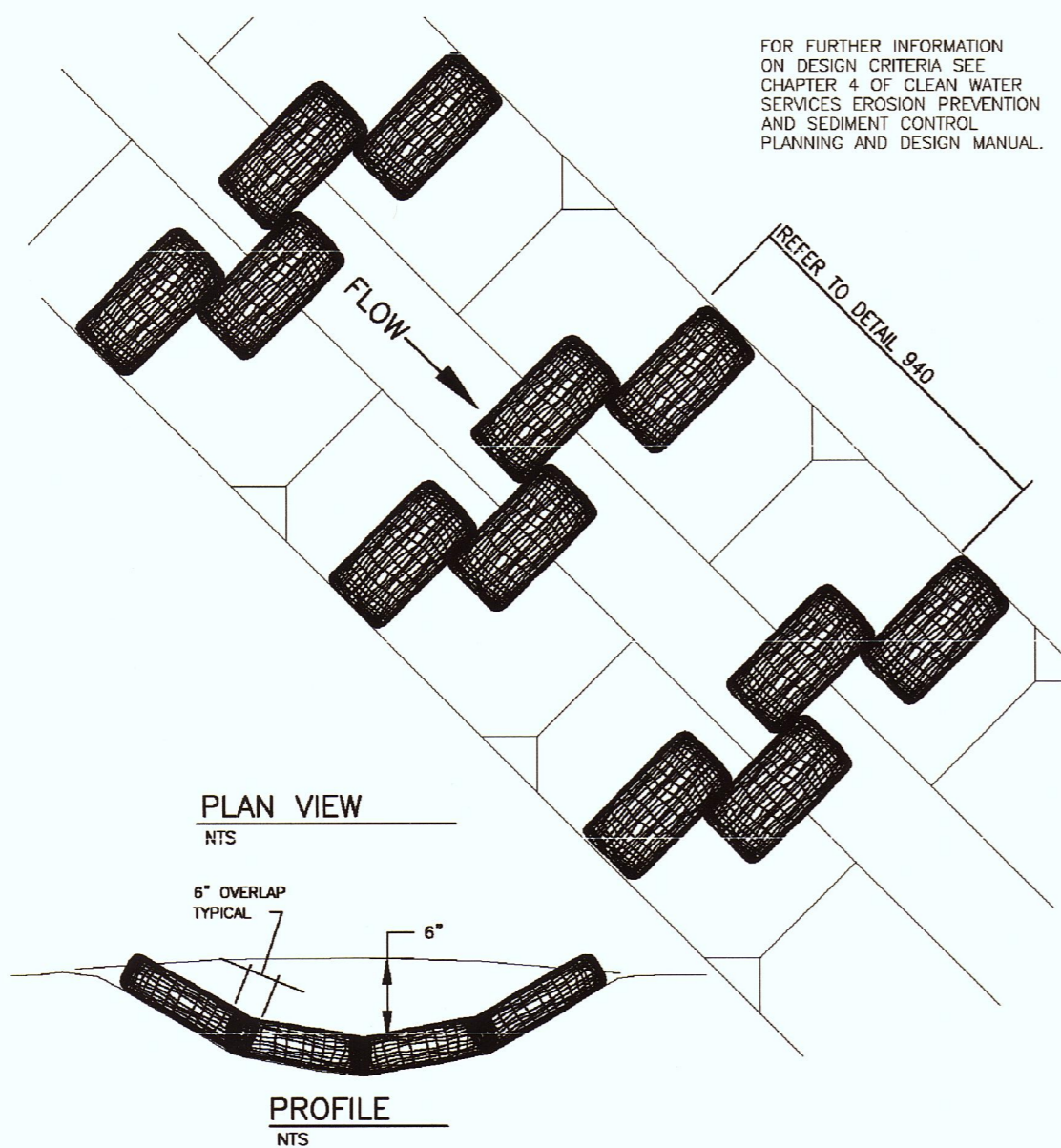


- NOTES:
1. THIS DRAWING APPLIES TO TRENCH CUTS AND OTHER KINDS OF STREET CUTS.
 2. SEE STD DET RD-8 FOR TYPICAL STREET PAVEMENT SECTION.
 3. T-CUT ASPHALT 6" FOR TRENCHES 12" WIDE OR LESS, ELSE T-CUT IS 12" MINIMUM FOR TRENCHES WIDER THAN 12".
 4. ON ALL NON-LOCAL STREETS, WIDTH OF T-CUT SHALL BE A MINIMUM OF 3'. ON ALL LOCAL STREETS, WIDTH OF T-CUT SHALL BE A MINIMUM OF 12" PLUS THE TRENCH WIDTH.
 5. IF NEW EDGE OF PAVEMENT IS LESS THAN 3" FROM ANOTHER PATCH, CURB OR EDGE OF STREET, REPLACE THE PAVEMENT IN BETWEEN.
 6. IF MORE THAN ONE EXISTING PATCH EDGE IS WITHIN THE 3' ZONE, REMOVE PAVEMENT TO THE FAR EDGE OF THE PRE-EXISTING PATCH.
 7. NEW EDGE OF PAVEMENT (EDGE LINE) SHALL NOT LIE IN A WHEEL PATH. WIDTH OF T-CUT SHALL BE WIDENED WHERE NECESSARY TO MOVE THE EDGE LINE OUT OF THE WHEEL PATH AND EITHER: (A) TO LOCATION THAT IS 6" FROM THE NEAREST LINE OR (B) TO THE LOCATION REQUIRED BY NOTE 3 OR 4 ABOVE AS APPLICABLE, WHICHEVER IS NEAREST OF (A) OR (B).

STANDARD DRAWING TITLE	DRAWING NUMBER
PIPE TRENCH RESTORATION	RD-45
SCALE	DATE
N.T.S.	MAR '16



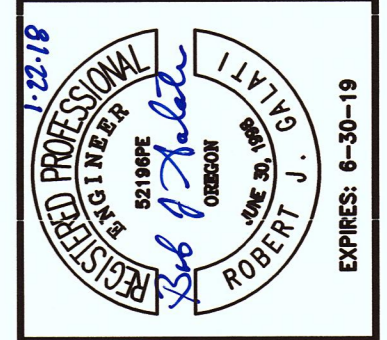
- NOTES:
1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPES.
 2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
 3. WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN YOU MUST HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".
- FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



- NOTES:
1. STAKING OF BAGS REQUIRED USING (2) 1"x2" WOOD STAKES OR APPROVED EQUAL PER BAG.
 2. SURFACE MUST BE SMOOTH BEFORE APPLICATION.
 3. CHECK DAMS CAN BE CONSTRUCTED USING STRAW WATTLES OR OTHER MATERIALS AS APPROVED BY THE DISTRICT OR CITY.

DETAILS
 PINE ST SANITARY SEWER EXTENSION
 LOCATED IN SECTION 320A AND 320B, T2S, R1W, W.M. IN THE CITY OF SHERWOOD, WASHINGTON COUNTY, STATE OF OREGON

CITY OF SHERWOOD
 ENGINEERING DEPARTMENT
 22560 SW PINE STREET
 SHERWOOD, OREGON 97140
 PHONE: (503) 925-2309
 FAX: (503) 625-0629
 E-MAIL: engineering@sherwoodoregon.gov



DESIGNED BY:	RJC
DRAWN BY:	AS
CHECKED BY:	RJC
FULL SIZE SCALE:	N/A
DATE:	JAN 8, 2017

NO.	DATE	DESCRIPTION
1	08/31/16	RAISED SUNSET SS (WCD#1)

JOB NO. 8095
 SHEET NO. C6