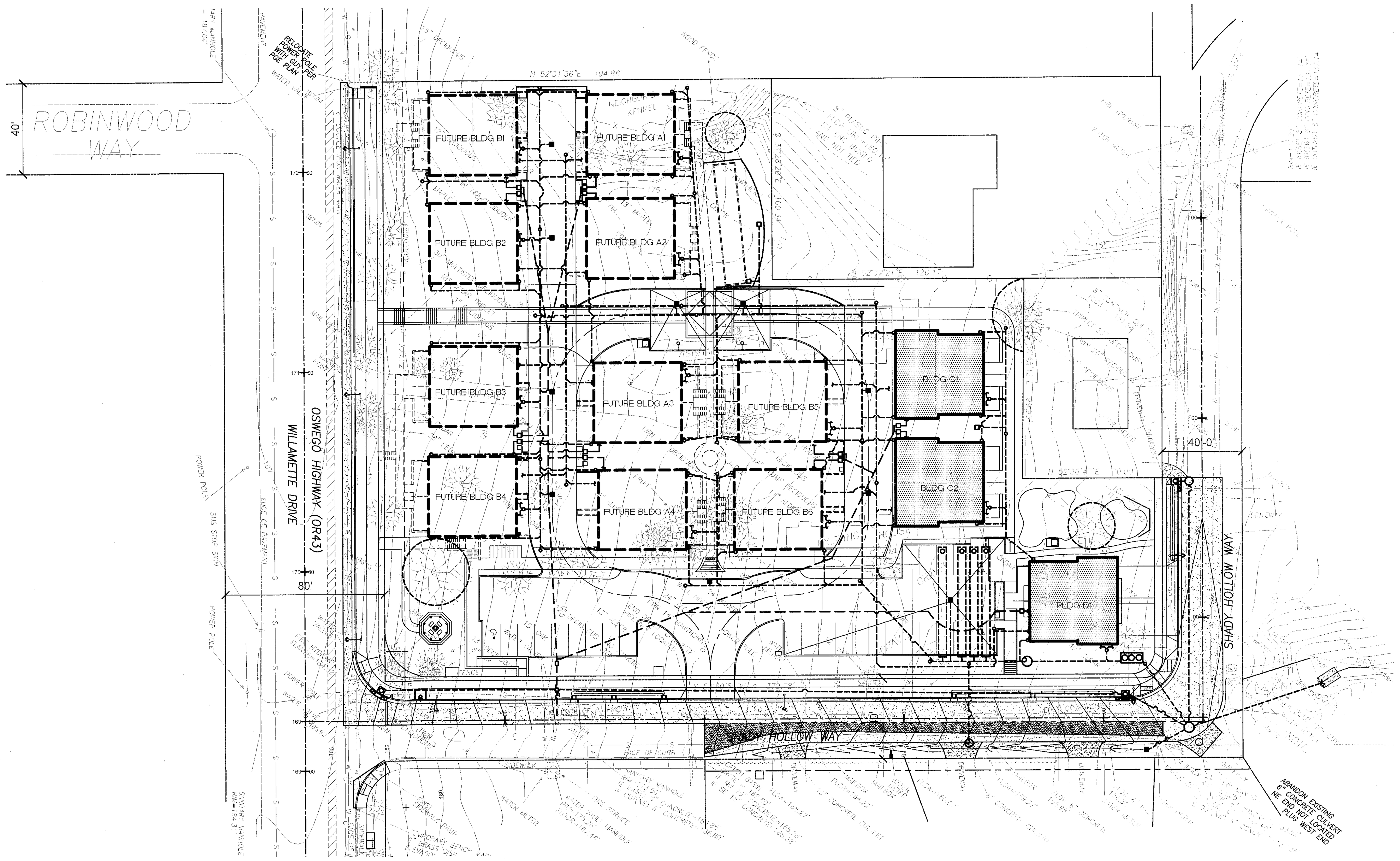
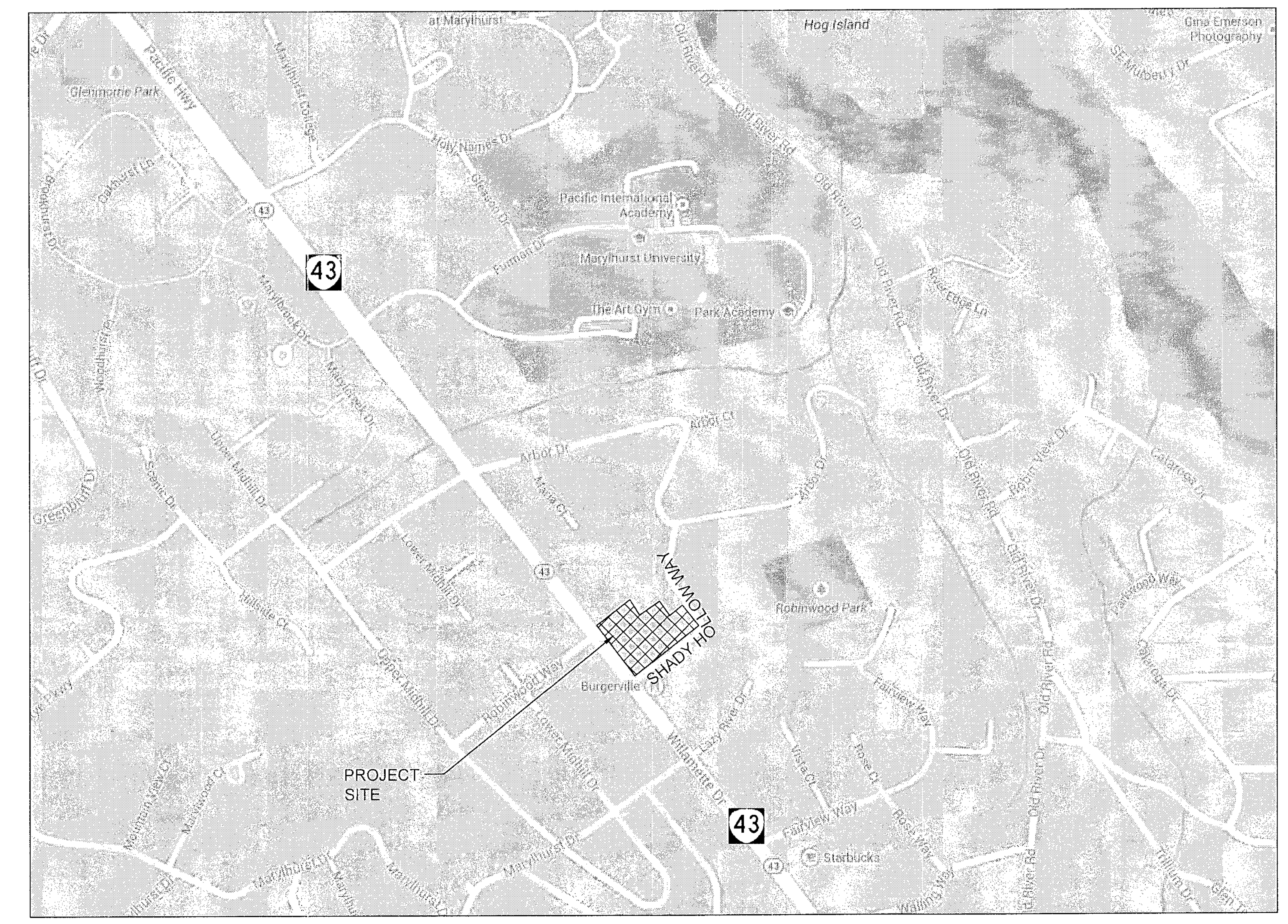
SHADY HOLLOW VILLAGE

WILLAMETTE DRIVE (OR43) AND SHADY HOLLOW WAY PUBLIC IMPROVEMENTS

TAX LOT 45, 46 & 47, LOCATED IN THE SE 1/4 OF
SECTION 14, T.2S, R.1E., WILLAMETTE MERIDIAN,
CITY OF WEST LINN, CLACKAMAS COUNTY, STATE OF OREGON



OVERALL SITE PLAN
SCALE: 1" = 40'



VICINITY MAP - CITY OF WEST LINN
SCALE: N.T.S.

N

LEGEND:

●	FOUND MONUMENT AS NOTED	— W —	WATER LINE
WM	WATER METER	— G —	NATURAL GAS LINE
WV	WATER VALVE	— SS —	SANITARY SEWER LINE
	FIRE HYDRANT	— SD —	STORM DRAINAGE LINE
IC	IRRIGATION CONTROL BOX	— OH —	OVERHEAD UTILITY LINES
S	SANITARY SEWER MANHOLE	— T —	UNDERGROUND TELECOM. LINE
D	STORM MANHOLE	X0.0GRND	SPOT ELEVATION GROUND
CB	CATCH BASIN	X0.00EC	SPOT ELEVATION EDGE OF CONCRETE
A	AREA DRAIN	X0.00EP	SPOT ELEVATION EDGE OF PAVEMENT
	CLEANOUT	X0.00AC	SPOT ELEVATION TOP OF ASPHALT
GV	GAS VALVE	X0.00FFE	SPOT ELEVATION FINISHED FLOOR
GM	GAS METER	X0.00TC	SPOT ELEVATION TOP OF CURB
	UTILITY POLE		
EM	ELECTRIC METER		
	GUY ANCHOR		
	LIGHT POLE		
TP	TELEPHONE PEDISTAL		
	TRAFFIC SIGN		
MB	MAIL BOX		

STATIONING ALONG OR43 IS BASED OFF OF RIGHT OF WAY MAP NO. 4B-5-1
△3

Sheet No.	INDEX OF CS SHEETS
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CS1.1	PUBLIC IMPROVEMENTS STANDARD NOTES
CS2.0A	OSWEGO HIGHWAY (OR43) (WILLAMETTE DRIVE) IMPROVEMENTS
CS2.0B	OSWEGO HIGHWAY (OR43) (WILLAMETTE DRIVE) STRIPING PLAN
CS2.0C	ODOT STADARD DRAWINGS
CS2.0D	ODOT STADARD DRAWINGS
CS2.0E	ODOT STADARD DRAWINGS
CS2.0F	ODOT STADARD DRAWINGS
CS2.0G	ODOT STADARD DRAWINGS
CS2.1	SHADY HOLLOW WAY PLAN & PROFILE
CS2.2	SHADY HOLLOW WAY PLAN & PROFILE
CS3.0	WDY SECTION DETAILS
CS3.1	PUBLIC IMPROVEMENT DETAILS
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CS3.3	PUBLIC IMPROVEMENT DETAILS

AS-BUILT DEC 16, 2015

SHADY HOLLOW 2015

P:\2014\14029_5 Shady Hollow Apts\Cad\Plot\As-Built\Offsi[illegible]et Improvements\CS1.0 Coversheet\CS1.0-14029.dw[illegible] 16/2015 11:15:11 AM, Kuboyama

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SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
△2	21 OCT 2014	CGP
△3	06 JAN 2015	CGP
△4	23 JAN 2015	CGP
△5	25 FEB 2015	CGP
△6	16 MAR 2015	CGP

SHEET TITLE
COVER SHEET

SHEET #
CS1.0

GENERAL NOTES

GENERAL

1. ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND PROVISIONS OF THE CITY OF WEST LINN MINIMUM DESIGN STANDARDS FOR EXTENSIONS AND IMPROVEMENTS TO THE PUBLIC WATER AND SANITARY SEWER SYSTEM. IMPROVEMENTS DEPICTED ON THESE PLANS FORM THE INTENT OF COMPLYING WITH PUBLIC STREET AND PUBLIC STORM IMPROVEMENTS AS REQUIRED BY CITY OF WEST LINN. SEE SHEET SD4.0 FOR ADDITIONAL APPLICABLE CONSTRUCTION NOTES.
2. THE CONTRACT DOCUMENTS, WHICH INCLUDE THE CITY OF WEST LINN STANDARDS, DRAWINGS, AND ANY OTHER PERTINENT SPECIFICATIONS, PERMITS, REGULATIONS AND REQUIREMENTS UNIQUE TO THE PROJECT, WILL GOVERN THE WORK TO BE DONE. WHEN A PARTICULAR SPECIFICATION, REGULATION, OR REQUIREMENT IS REFERRED TO IN THE CONTRACT DOCUMENTS, SUCH REFERENCE SHALL BE TO CURRENT REVISIONS OR AMENDMENTS. ITEMS MENTIONED IN THE CONTRACT DOCUMENTS AND NOT SHOWN ON THE DRAWINGS OR STANDARD DETAILS SHALL BE OF LIKE EFFECT AS THOUGH SHOWN OR MENTIONED IN BOTH. SPECIFICATIONS AND DRAWINGS REFERRED TO IN ANY OF THE CONTRACT DOCUMENTS SHALL BE CONSIDERED AS BEING INCLUDED IN THE DOCUMENT IN WHICH SUCH REFERENCE IS MADE.
3. IN ORDER TO PROTECT UNDERGROUND FACILITIES, EXCAVATORS PERFORMING THE WORK SET FORTH ON THESE PLANS MUST COMPLY WITH THE PROVISIONS OF OREGON STATE LAW (REQUIRES CONTRACTOR TO NOTIFY UTILITIES AT LEAST 48 HOURS, BUT NO MORE THAN 10 BUSINESS DAYS, PRIOR TO ANY EXCAVATIONS.)
4. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS IS APPROXIMATE AND SHOWN FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
5. VERTICAL DATUM: REFER TO TOPOGRAPHIC SURVEY.
6. TOPOGRAPHIC SURVEY BY: TOWNSHIP SURVEYING, INC., OREGON CITY, OR.
7. THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "OREGON SUPPLEMENTS". THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN LOCAL ACCESS FOR HOMEOWNERS AND BUSINESSES ALONG THE PROJECT SITE. ROAD CLOSURES ARE NOT ALLOWED.
8. PRIOR TO ANY STREET WORK, THE CONTRACTOR MUST SUBMIT A TRAFFIC PLAN TO THE CITY TO REVIEW AND APPROVE. NO STREET WORK AFFECTING LANES OF TRAFFIC SHALL BEGIN PRIOR TO SUCH APPROVAL.
9. THE CONTRACTOR AND/OR SUB-CONTRACTOR SHALL HAVE A MINIMUM OF TWO (2) SETS OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES. ONE SET SHALL BE DEDICATED TO RECORDING "AS-BUILT" CONDITIONS. THE AS-BUILT MARKED SET SHALL BE RETURNED TO THE ENGINEER.
10. CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL EARTHWORK, TRENCH BACKFILL AND ROAD CONSTRUCTION COMPACTION TESTS AND GEOTECHNICAL REVIEWS WITH THE PROJECT GEOTECHNICAL ENGINEERING OFFICE AS REQUIRED FOR ACCEPTANCE OF PROJECT WORK BY CITY OF WEST LINN AND AS REQUIRED BY THESE PLANS.
11. CONTRACTOR SHALL CAREFULLY MAINTAIN BENCHMARKS, PROPERTY CORNERS, MONUMENTS, AND OTHER REFERENCE POINTS. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL PAY FOR THEIR REPLACEMENT BY EMPLOYING THE PROJECT'S PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS AND OTHER SUCH MONUMENTS.
12. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL PRESENT A LIST AT THE PRECONSTRUCTION MEETING OF SUBCONTRACTORS, A PROJECT SCHEDULE, A TRAFFIC CONTROL PLAN AND A 24 HOUR PHONE NUMBER FOR CONTRACTOR CONTACT FOR EMERGENCIES.
13. FINAL CLEANUP – PRIOR TO FINAL ACCEPTANCE AND PAYMENT, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED ASPHALTIC CONCRETE MATERIAL OR OTHER ITEMS DEPOSITED BY THE CONTRACTOR'S PERSONNEL DURING THE PERFORMANCE OF THIS WORK.
14. THE CONTRACTOR SHALL, AS A MINIMUM, COORDINATE THE PROPOSED CONSTRUCTION ACTIVITIES WITH THE OWNER, NEIGHBORS AND THE LOCAL PUBLIC AGENCIES, UTLITIIES AND COMPANIES DURING CONSTRUCTION TO AVOID DAMAGE AND TO PREVENT THE INTERRUPTION OF SERVICES AND UTILITIES TO RESIDENTS AND BUSINESSES.
15. THE CONTRACTOR SHALL PROVIDE SUBMITTALS OF ALL MATERIALS AND ACCESSORIES TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO SITE DELIVERY.
16. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON DRAWINGS AND IN FIELD. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH WORK.
17. EXISTING UTILITIES AND SITE INFORMATION SHOWN HEREON ARE BASED ON RECORD DRAWINGS PROVIDED BY OR MADE AVAILABLE BY THE OWNER. THE CONTRACTOR IS REQUIRED TO FIELD VERIFY THE LOCATION OF EXISTING FEATURES AND UTILITIES PRIOR TO CONSTRUCTION, AND SHALL ARRANGE FOR THE RELOCATION OF ANY IN CONFLICT WITH THE PROPOSED WORK. MINOR ADJUSTMENTS BASED ON FIELD CONDITIONS SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
17. ALL CONSTRUCTION ACTIVITY SHALL BE DONE IN A SAFE AND NEAT MANNER AND UNDER OBSERVATION BY CITY FORCES.
18. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL CONSTRUCTION SAFETY, HEALTH AND OTHER RULES AND REGULATIONS OF 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.
19. ALL TRENCH EXCAVATIONS SHALL BE PROPERLY SHORED AND BRACED TO PREVENT CAVING. UNUSUALLY DEEP EXCAVATIONS MAY REQUIRE EXTRA SHORING AND BRACING. ALL SHEETING, SHORING, AND BRACING OF TRENCHES SHALL CONFORM TO OREGON STATE REGULATIONS AND CITY OF THE DALLES CONSTRUCTION STANDARDS.
20. ALL UNDERGROUND UTILITIES SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF CURBS, RETAINING WALLS, OR PAVEMENT.
21. CONTRACTOR TO REMOVE FROM SITE EXCESS SOIL OR OTHER MATERIALS NOT REUSABLE FOR THIS PROJECT, AND COMPLY WITH ALL RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL REPORT.
22. APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER 5 FEET IN HEIGHT ON SLOPES IN EXCESS OF 5 HORIZONTAL TO 1 VERTICAL. THE CONTRACTOR SHALL ARRANGE FOR THE GEOTECHNICAL ENGINEER TO INSPECT EXCAVATED BENCHES PRIOR TO FILL PLACEMENT.
23. CUT AND FILL SLOPES SHALL BE PROTECTED FROM EROSION. SUCH CONTROL MAY CONSIST OF APPROPRIATE REVEGETATION OR OTHER ACCEPTABLE MEANS AND METHODS. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTHWORK OR SITE STRIPPING.
24. CRUSHED ROCK BASE MATERIAL AND PIPE ZONE MATERIAL SHALL BE CRUSHED ROCK CONFORMING TO OREGON DEPARTMENT OF TRANSPORTATION AND BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D1557.
25. 3/4 " - 0" CRUSHED ROCK PIPE ZONE AND BACKFILL MATERIAL IS REQUIRED FOR ALL UTILITY LINES, CONDUITS AND LEVELING COURSES BELOW PAVEMENTS AND IN RIGHT-OF-WAYS. REFER TO THE TYPICAL TRENCH AND PAVEMENT DETAILS.
26. ASPHALTIC CONCRETE (A.C.) PAVEMENT SHALL BE A 12.5MM DENSE GRADED HOT MIX WITH A 5.8% MINIMUM ASPHALT CONTENT PER OREGON DOT CLASSIFICATION FOR ALL LIFTS. PAVEMENT SHALL BE PLACED ONLY ON DRY, CLEAN AND PROPERLY PREPARED SURFACES, AND WHEN CONDITIONS MEET THE SPECIFICATIONS AS SET FORTH IN THE MOST RECENT EDITION OF THE OREGON DOT SPECIFICATIONS. ALL NEW PAVEMENT AREAS SHALL CONFORM TO THE TYPICAL PAVEMENT SECTION DETAIL. ALL A.C. PAVEMENT TO BE COMPACTED TO 92% OF MAXIMUM DENSITY PER ASTM D2041 FOR SINGLE AND FIRST LIFTS AND 92% COMPACTION SHALL BE REQUIRED FOR SUBSEQUENT LIFTS.
27. ALL JOINTS BETWEEN A.C AND CONCRETE STRUCTURES MUST BE TACKED WITH BITUMASTIC. NO EXCEPTIONS ALLOWED.
28. ALL PORTLAND CEMENT CONCRETE PAVEMENT SHALL HAVE A 28 DAY MINIMUM ULTIMATE STRENGTH OF 4000 PSI. PROVIDE A MINIMUM OF (4) TEST CYLINDERS IN ACCORDANCE WITH CURRENT IBC AT EACH POUR.
   A. MINIMUM MIX REQUIREMENTS:
      I. CEMENT CONTENT PER YARD: 5 SACKS.
      II. MAXIMUM WATER/CEMENT RATIO: 0.45. FLY ASH MEETING ASTM C618 AND WITH LOSS ON IGNITION LESS THAN 3% MAY BE ADDED TO THE CEMENT, BUT NOT MORE THAN 15% BY WEIGHT.
      III. SLUMP: 3 INCH TO 4 INCH. DEVIATING FROM DESIGN SLUMP +1/2 INCH TO -1 INCH. WHEN CONCRETE IS TO BE PUMPED, ADD PLASTICIZERS MEETING ASTM C494 AND PROVIDE A NEW MIX DESIGN. DO NOT ADD WATER.
      IV. ADMIX: PROVIDE WATER REDUCING ADMIX (MASTER BUILDERS) AND REDUCE WATER USED BY 10% MINIMUM FOR ALL SLABS.
      V. AIR ENTRAINMENT: PER ACI 301 AND 306 AT ALL EXTERIOR SLABS AND FLAT WORK.
      VI. ALL ADMIXTURES TO BE COMPATIBLE FROM SAME MANUFACTURER.
   B. PLACE AND CURE ALL CONCRETE PER ACI CODES AND STANDARDS

02.0 CLEARING AND GRUBBING

1. ALL CONSTRUCTION AND MATERIALS WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THESE PLANS AND THE APPLICABLE REQUIREMENTS OF CITY OF WEST LINN, STATE OF OREGON.
2. NOTIFY ARCHITECT 2 BUSINESS DAYS BEFORE COMMENCING WORK.
3. CONTRACTOR SHALL REMOVE ALL TREES, SHRUBS, RUBBISH, AND MAN-MADE STRUCTURES INCLUDING BUT NOT LIMITED TO CONCRETE SLABS, WALLS, VAULTS, FOOTINGS, ASPHALTIC PAVED SURFACES, GRAVELED AREAS, SHED OR OTHER FREE-STANDING BUILDINGS (CONSTRUCTED OF WOOD, CONCRETE, METAL, ETC.) FOUNDATIONS, FENCES, RAILINGS, MACHINERY, ETC. WITHIN THE CLEARING LIMITS. THE ITEMS LISTED ABOVE SHALL BE DISPOSED OF OFF-SITE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONFIRM THE NUMBER AND TYPE OF STRUCTURES TO BE REMOVED. CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION AND WORK PERMITS.
4. ALL BURIED STRUCTURES (I.E. TANKS, LEACH LINES, DRAIN TILE, AND PIPES) NOT DESIGNATED TO REMAIN ON THE SITE, SHALL BE REMOVED AND THE RESULTING EXCAVATIONS SHALL BE PROPERLY INSPECTED, BACKFILLED AND COMPACTED PRIOR TO ANY GRADING OR FILLING OPERATIONS. THIS IS TO INCLUDE STUMPS AND ROOTBALLS OF TREES TO BE REMOVED FROM THE SITE. NOTIFY CITY FOR INSPECTIONS AS REQUIRED.
5. THE AREA OF THE SITE DESIGNATED ON THE PLAN TO BE REGRADED OR PAVED SHALL BE STRIPPED TO REMOVE ALL ORGANIC MATERIAL DOWN TO FIRM SUBGRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING SUBGRADE SOILS FROM OVERWORKING AND PROVIDE REPAIR TO DAMAGED SUBGRADE AT NO ADDITIONAL COST TO THE OWNER.
6. ALL UNSUITABLE MATERIAL (SOIL AND VEGETATION) REMOVED DURING THE CLEARING AND GRUBBING OPERATIONS SHALL BE REMOVED BY THE CONTRACTOR AND LEGALLY DISPOSED OF IN A SUITABLE LOCATION OFFSITE.
7. EXCAVATORS MUST COMPLY WITH ALL PROVISIONS OF ORS 757.541 TO 757.571 INCLUDING NOTIFICATION OF ALL OWNERS OF UNDERGROUND FACILITIES AT USA LOCATES (681-7044), AT LEAST 48 BUSINESS HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS BEFORE COMMENCING AN EXCAVATION.
8. ALL EMBANKMENTS REQUIRED SHALL BE STRUCTURAL FILL MEETING THE REQUIREMENTS AND SPECIFICATIONS OF IBC CHAPTER 18.
9. ALL EXCESS MATERIAL NOT UTILIZED ON-SITE SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR.
10. TREES NOT DESIGNATED TO BE REMOVED BY THE ARCHITECT SHALL BE PROTECTED AT ALL TIMES.
11. SAWCUT STRAIGHT LINES TO MATCH EXISTING PAVEMENT WITH THE NEW PAVEMENT.
12. CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE TRAFFIC CONTROL ALONG THE EXISTING ROADS AS REQUIRED BY THE CITY OF WEST LINN.

PUBLIC STREET

1. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE CURRENT REQUIREMENTS OF CITY OF WEST LINN "CONSTRUCTION STANDARDS FOR PUBLIC WORKS FACILITIES", AND THE MOST CURRENT EDITION OF THE OREGON CHAPTER APWA SPECIFICATIONS.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CITY OF WEST LINN 24 HOURS BEFORE STARTING CONSTRUCTION OR RESUMING WORK AFTER SHUTDOWNS, EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SATURDAYS, SUNDAYS, OR HOLIDAYS. CONTRACTOR SHALL ASSIST THE ENGINEER IN PREPARING AS-BUILT DRAWINGS.
3. MARK ALL UTILITIES ON CURB WITH AN "S", "SD", AND "W" FOR SANITARY SEWER, STORM DRAIN AND WATER LATERALS.
4. CONTROL STAKES ARE REQUIRED FOR ALL CURB LINES AND STREET CENTERLINES FOR CONSTRUCTION, AND MUST BE PROVIDED BY A SURVEYOR LICENSED IN THE STATE OF OREGON.
5. SUB-BASE SHALL BE APPROVED BY THE CITY BEFORE PLACING THE BASE ROCK, BY CONDUCTING ON-SITE COMPACTION TESTS AS DEEMED NECESSARY BY THE CITY AND AS REQUIRED BY THE SPECIFICATIONS.
6. THE SUBGRADE SHALL BE APPROVED BEFORE PLACING THE ASPHALT BY CONDUCTING ON-SITE COMPACTION TESTS AS DEEMED NECESSARY BY THE CITY AND AS REQUIRED BY THE SPECIFICATIONS. ALSO, A DEFLECTION TEST(S) PERFORMED WITH A 10 YARD LOADED DUMP TRUCK WILL BE REQUIRED. THIS TEST MUST BE WITNESSED BY THE CITY AND SOILS ENGINEER. NO DEFLECTION IS ALLOWED AND ALL STREETS MUST BE TESTED.
7. COMPACTION TESTS OF AGGREGATE BASE MUST BE IN ACCORDANCE WITH ASSHTO, METHOD T-180 AND ACHIEVE A RELATIVE DENSITY OF 95%. OVER-EXCAVATION AND GEOTEXTILE FABRIC (MIRAFI 500X OR PRE-APPROVED EQUAL) WILL BE REQUIRED IF THE SUBGRADE IS SOFT OR UNSUITABLE OR NOTED ON THE PLANS.
8. ASPHALTIC CONCRETE (A.C.) PAVEMENT SHALL BE A 12.5MM DENSE GRADED MIX PER OREGON DOT CLASSIFICATION (FORMERLY CLASS C) FOR ALL LIFTS. PAVEMENT WILL BE PLACED ONLY ON DRY, CLEAN AND PROPERLY PREPARED SURFACES, AND WHEN THE CONDITIONS MEET THE SPECIFICATIONS AS SET FORTH IN THE MOST RECENT EDITION OF THE OREGON DOT SPECIFICATIONS. ALL A.C. PAVEMENT TO BE COMPACTED TO 92% OF MAXIMUM DENSITY PER ASTM D2041 FOR SINGLE AND FIRST LIFTS AND 92% FOR SUBSEQUENT LIFTS.
9. ALL JOINTS BETWEEN A.C AND CONCRETE STRUCTURES MUST BE TACKED WITH BITUMASTIC. NO EXCEPTIONS ALLOWED.
10. ALL REQUIRED UTILITIES (SANITARY SEWER, STORM SEWER, WATER LINES, POWER, TELEPHONE, GAS, STREET LIGHTS, ETC.) SHALL BE IN-PLACE AND THEIR LOCATIONS ACCURATELY LOCATED BY THE GENERAL CONTRACTOR ON "AS-BUILT" DRAWINGS. A FINAL INSPECTION BY CITY STAFF WILL BE REQUIRED TO VERIFY UTILITY CONDITION; AND IF DEFICIENCIES ON ANY OF THEM ARE NOTED, THEY MUST BE CORRECTED PRIOR TO PAVING.
11. AT ALL SAWCUT JOINTS OF AC PAVEMENT PROVIDE A CONTINUOUS HOT ASPHALT SEAL COAT WITH FULLY SANDED FINISH.

PUBLIC STORM DRAIN

1. ALL STORM SEWER SYSTEM FITTINGS, EQUIPMENT AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF WEST LINN ENGINEERING DEPARTMENT.
2. PVC STORM DRAIN PIPE SHALL BE ASTM D3034, SDR-35. COMPATIBLE ASTM D3034 FITTINGS MUST BE USED WITH ASTM D3034 PIPE. ALL ASTM D3034 PIPE USED MUST BE OF WATER-TIGHT JOINTS TESTED FOR ROUNDNESS AFTER BACKFILL. PROVIDE PRESSURE TEST, MANDREL TEST AND TV VIDEO TAPE.
3. DUCTILE IRON STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH AWWA C151, CLASS 52, ASTM 536, AND AWWA C104. JOINTS SHALL BE BELL AND SPIGOT WITH RUBBER GASKETS PER AWWA C111.
4. STORM DRAIN LINES SHALL BE LAID IN A STRAIGHT ALIGNMENT AND UNIFORM GRADE BETWEEN MANHOLES OR OTHER JUNCTION STRUCTURES. CONTROL STAKES ARE REQUIRED FOR LOCATING NEW STORM DRAIN PIPE AND MUST BE PROVIDED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN OREGON.
5. ALL NEW STORM SEWER PIPES AND MANHOLES MUST BE THOROUGHLY CLEANED AND PRESSURE TESTED AS REQUIRED BY THE CITY. ALL TESTS MUST BE WITNESSED AND PASSED BY THE CITY PRIOR TO PLACING INTO OPERATION.
6. ALL CONNECTIONS TO EXISTING STORM SEWER MAINS REQUIRE ISSUANCE OF A PUBLIC WORKS PERMIT AND INSPECTION BY THE CITY PRIOR TO BACKFILLING.
7. ALL OTHER CONSTRUCTION PRACTICES (RELATING TO STORM SEWER) WITHIN THE CITY'S PUBLIC RIGHT-OF-WAY, NOT COVERED IN THESE "GENERAL REQUIREMENTS' AND/OR "CONSTRUCTION DETAILS" SECTIONS, MUST COMPLY WITH THE RULES AND REGULATIONS FOUND IN THE MOST RECENT EDITION(S) OF THE CITY OF WEST LINN CONSTRUCTION STANDARDS.

EARTHWORK SPILLAGE AND DUST CONTROL

1. AVOID SOILS SPILLAGE AND CREATION OF DUST NUISANCE BY COVERING AND SECURING LOADS WHEN HAULING ON OR ADJACENT TO PUBLIC STREETS OR HIGHWAYS.
2. TAKE PRECAUTIONS NECESSARY TO PREVENT EROSION AND TRANSPORTATION OF SOILS DOWNSTREAM.
3. REMOVE SPILLAGE OR DUST AND SWEEP, WASH, OR OTHERWISE CLEAN PROJECT, ADJACENT PROPERTIES, STREETS, HIGHWAYS, AND DOWNSTREAM DRAINAGE SYSTEMS.

CONSTRUCTION INSPECTIONS AND MEETINGS

1. THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH CITY PERSONEL, ALL SUBCONTRACTORS, PROJECT ARCHITECT, OWNER'S REPRESENTATIVE, PROJECT GEOTECHNICAL ENGINEER AND PROJECT CIVIL ENGINEER PRIOR TO BEGINNING PUBLIC IMPROVEMENT WORK.
2. THE CITY SHALL BE NOTIFIED TO INSPECT ALL PUBLIC IMPROVEMENTS.
3. THE CITY'S REPRESENTATIVES SHALL BE ALLOWED ACCESS TO ALL PARTS OF THE WORK, INCLUDING THE PLANS OF PRODUCERS AND FABRICATORS AT ALL TIMES; AND SHALL BE FURNISHED WITH EVERY REASONABLE FACILITY FOR ASCERTAINING WHETHER OR NOT THE WORK, AS PERFORMED, IS IN ACCORDANCE WITH THE REQUIREMENTS AND INTENT OF THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL FURNISH, AT THE CONTRACTOR'S OWN EXPENSE, SUCH SAMPLES AS ARE CUSTOMARILY REQUIRED FOR TESTING PURPOSES. THE CITY DOES NOT FURNISH FULL-TIME INSPECTION OF NEW PUBLIC IMPROVEMENTS. FOR THIS REASON, IT IS IMPERATIVE THAT THE OWNER AND/OR THE OWNER'S CONTRACTORS PROVIDE PROMPT AND COMPLETE NOTIFICATION TO THE CITY AS TO THE PROGRESS OF THE CONSTRUCTION OF UTILITY IMPROVEMENTS. NOTIFICATION MUST BE GIVEN TO THE CITY WHEN THE FOLLOWING WORK IS TO BE SCHEDULED AND AT OTHER TIMES AS INSTRUCTED BY CITY PERSONEL:

   A. PLACEMENT OF EROSION/SEDIMENTATION CONTROLS.
   B. UNDERGROUND UTILITY TRENCHING AND CONDUIT PLACEMENT.
   C. COMPACTION TESTING/PROOF ROLL OF TRENCH BACKFILL AND FILL AREAS.
   D. ALL TESTING OF UTILITY CONDUITS AND APPURTENANCES.
   E. CONSTRUCTION OF CONCRETE STRUCTURES (CURBS, INLETS, MANHOLES, SIDEWALKS, DRIVEWAYS, ETC.).
   F. PLACEMENT AND COMPACTION OF ASPHALTIC PAVEMENT.

   FAILURE TO GIVE PROPER NOTIFICATION (24 HOURS) OF WORK SCHEDULE MAY INVALIDATE THE WORK PERFORMED AND MAKE NECESSARY REMOVAL OF WORK, AND/OR TESTS AND INSPECTION REPORTS BY AN INDEPENDENT TESTING LABORATORY TO CONFIRM COMPLIANCE WITH THE CONSTRUCTION PLANS AND SPECIFICATIONS. SUCH REMOVAL OF WORK AND TESTS SHALL BE FURNISHED AT THE EXPENSE OF THE CONTRACTOR.

CIVIL ABBREVIATIONS

A.B.	ANCHOR BOLTS
ABBR	ABBREVIATION
A.C.	ASPHALT CONCRETE
ACCDG	ACCORDING
A.D.	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
A.F.F.	ABOVE FINISH FLOOR
AHD	AHEAD
ALT	ALTERNATE
APPX	APPROXIMATELY
ARCH	ARCHITECTURAL
A.R.V.	AIR RELIEF VALVE
B.C.R.	BEGIN CURB RETURN
BF	BACKFLOW
BLDG	BUILDING
B.O.	BLOW-OFF
BOT	BOTTOM
B.R.	BEGIN RETURN
B.S.	BACK OF SIDEWALK
BTWN	BETWEEN
BW	BACKWATER
C.B.	CATCH BASIN
C.I.	CAST IRON OR CURB INLET
C.J.	COLD JOINT
C.L.	CENTER LINE
CLR	CLEAR
CNTR	CENTER
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
COP	COPPER
C.O.T.G.	CLEAN OUT TO GRADE
CPLG	COUPLING
CULV	CULVERT
DBL	DOUBLE
D.C.	DOUBLE CHECK
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY
DET	DETAIL
D.F.	DOUGLAS FIR
D.I.	DUCTILE IRON OR DITCH INLET
DIA OR	DIAMETER
DIM	DIMENSION
DIR	DIRECTION
DO	DITTO
DOM	DOMESTIC
DP	DEEP
DRWG OR DWG	DRAWING
DS	DOWN SPOUT
D.W.	DRY WELL
D/W	DRIVEWAY
EA	EACH
E.C.R.	END CURB RETURN
E.G.	EXISTING GRADE
E.J.	EXPANSION JOINT
EL OR ELEV	ELEVATION
ELEC	ELECTRIC
EMBED	EMBEDMENT
E.O.P.	EDGE OF PAVEMENT
E.O.R.	ENGINEER OF RECORD
EQ	EQUAL
E.R.	END RETURN
E.W.	EACH WAY
EX OR EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F.C.A.	FLANGED COUPLING ADAPTER
FD	FOUND
F.D.C.	FIRE DEPARTMENT CONNECTION
FNDN	FOUNDATION
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
F.H.	FIRE HYDRANT
FIN	FINISH
F.L.	FLOW LINE
FLG	FLANGE
FLR	FLOOR
F.P.	FINISH PAVEMENT
F.O.C.	FACE OF CURB
FTG	FOOTING
GA	GAGE OR GAUGE
GALV	GALVANIZED
G.B.	GRADE BREAK
GEN	GENERAL
GR	GROUND
G.S.	GROUND SHOT
G.S.P.	GALVANIZED STEEL PIPE
GUT	GUTTER
G.V.	GATE VALVE

HDPE	HIGH-DENSITY-POLYETHYLENE
HORIZ	HORIZONTAL
H.P.	HIGH POINT
HT	HEIGHT
I.E.	INVERT ELEVATION
INFO	INFORMATION
INT	INTERIOR
I.R.	IRON ROD
JT	JOINT
L	LENGTH
LBS OR #	POUNDS
L.F.	LINEAR FEET
LIN	LINEAR
LT	LEFT
M.B.	MACHINE BOLT
MANUF	MANUFACTURER
MBR	MEMBER
MAT'L	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
M.J.	MECHANICAL JOINT
MH	MANHOLE
MIN	MINIMUM
(N)	NEW
N.S.	NON SHRINK
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.H. OR O.P.P.	OPPOSITE HAND
O.W.S.	OIL WATER SEPARATOR
PL	PLATE
P.L.	PROPERTY LINE
P.C.	POINT OF CURVATURE
P.C.C.	POINT OF COUNTER CURVATURE
PERF	PERFORATED
PLYWD	PLYWOOD
P.P.	PRIMARY POWER/POWER POLE
PROP	PROPOSED
PSF	POUNDS-PER-SQUARE-FOOT
P.T.	POINT OF TANGENCY
PVC	POLYVINYL-CHLORIDE
P.U.E.	PUBLIC UTILITY EASEMENT
P.W.	PUBLIC WORKS
R OR RAD	RADIUS
R.D.	ROOF DRAIN
REINF	REINFORCEMENT/REINFORCING
REQ'D	REQUIRED
REHAB	REHABILITATION
RDCR	REDUCER
R.P.	RADIUS POINT
RT	RIGHT
R/W or R.O.W.	RIGHT-OF-WAY
SCHED	SCHEDULE
SED	SEDIMENTATION
SERV	SERVICE
SHT	SHEET
SIM	SIMILAR
SPECS	SPECIFICATIONS
SQ	SQUARE
STD	STANDARD
S.S.	SANITARY SEWER
STA	STATION
ST.D.	STORM DRAIN
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTURAL
SDWLK	SIDEWALK
T.C.	TOP OF CURB
TELEP	TELEPHONE
T.O.F.	TOP OF FOOTING
T.O.S.	TOP OF SLAB
T.O.W.	TOP OF WALL
TYP	TYPICAL
U.E.	UNDERGROUND ELECTRICAL
U.O.N.	UNLESS OTHERWISE NOTED
U.P.	UNDERGROUND POWER
U.R.M.	UNREINFORCED MASONRY
U.T.	UNDERGROUND TELEPHONE
V.B.	VALVE BOX
VERT	VERTICAL
VLT	VAULT
W	WATER
W.J.	WET JOINT
W.M.	WATER METER
W.Q.	WATER QUALITY
W.W.F.	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT

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SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

AS-BUILT DEC 16, 2015

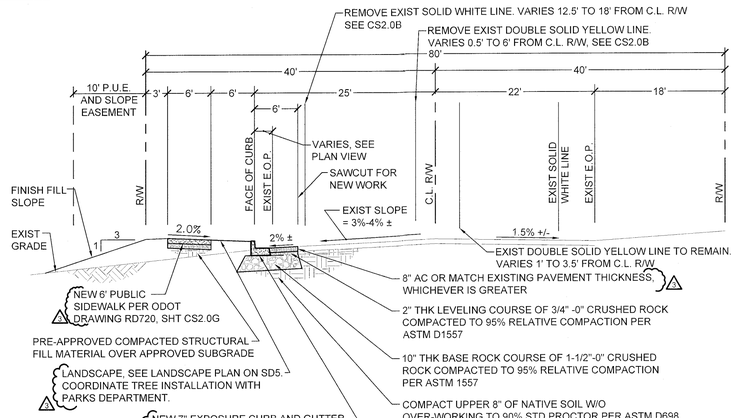
PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
△2	21 OCT 2014	CGP
△3	06 JAN 2015	CGP
△4	23 JAN 2015	CGP
△5	25 FEB 2015	CGP
△6	16 MAR 2015	CGP

SHEET TITLE
NOTES AND ABBREVIATIONS

SHEET #
CS1.1

P:\2014\14029_5 Shady Hollow Apts\Cad\Plot\As-Built\Offsi(et Improvements\CS1.1 Civil Notes\CS1.1-14029.dwg('/2015 11:58:57 AM, Kuboyama

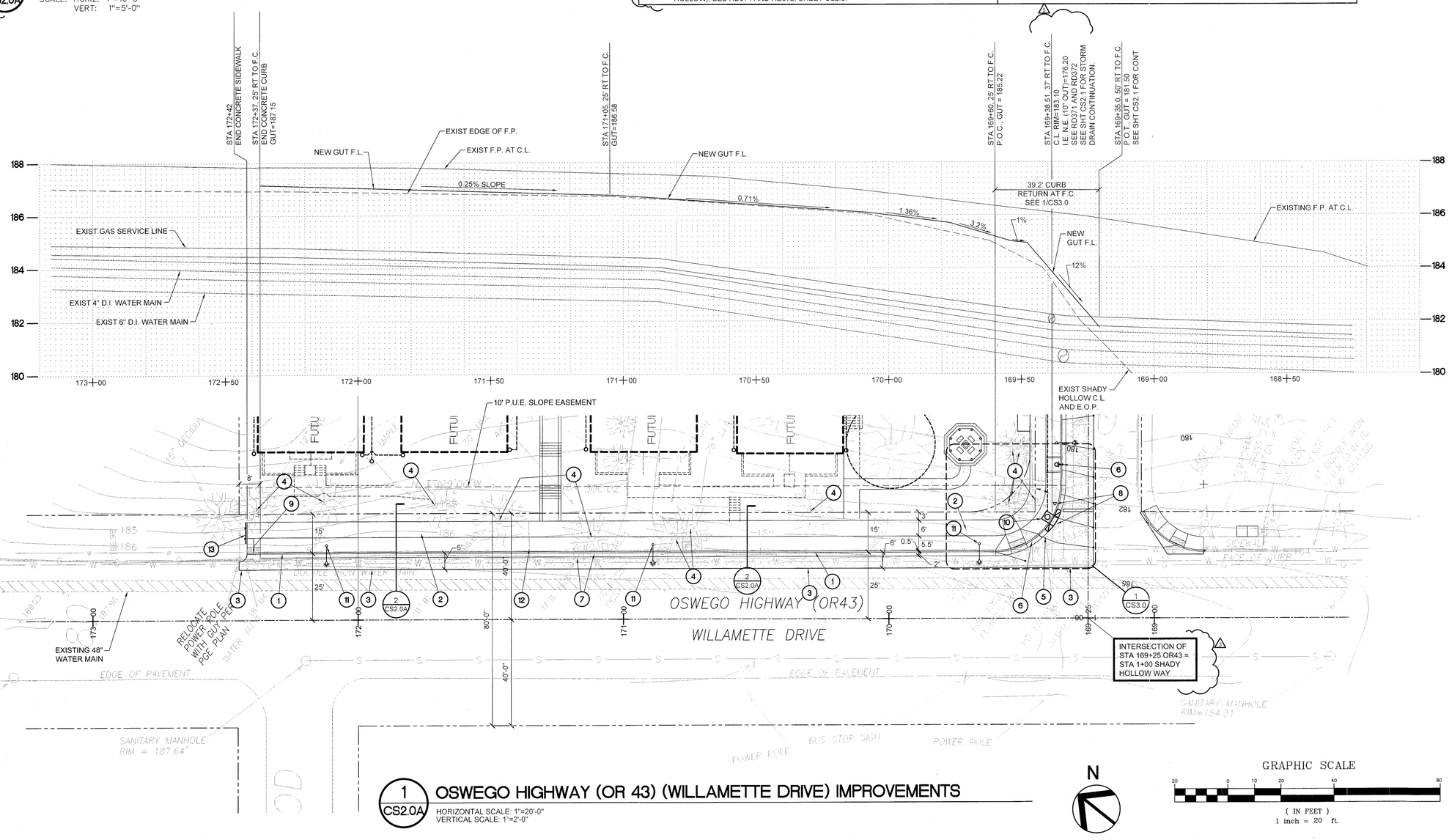


2 / CS2.0A — OR43 STREET CROSS SECTION

SCALE: HORIZ: 1"=10'-0"
VERT: 1"=5'-0"

KEYNOTES FOR THIS SHEET

MARK	DESCRIPTION
1	INSTALL NEW CURB PER OREGON STANDARD DRAWING RD700 ON SHT CS2.0F, 7" CURB HEIGHT, 30" CURB & GUTTER WIDTH.
2	INSTALL NEW 6' PC CONCRETE SIDEWALK PER OREGON STANDARD DRAWING RD720, SHEET CS2.0G.
3	SAWCUT, REMOVE AND REPLACE A.C. PAVEMENT AND PROVIDE NEW PAVEMENT SECTION. STRAIGHT GRADE NEW PAVEMENT FROM EXIST F.P. AT SAWCUT TO NEW GUTTER ELEVATION (TYP). PROVIDE TACK COAT AT ALL SAWCUT EDGES.
4	REMOVE EXISTING TREE FOR NEW WORK.
5	REMOVE EXISTING POWER POLE. MOVE ALL EXIST OVERHEAD LINES UNDERGROUND PER PGE PLAN, GENERAL CONTRACTOR COORDINATE.
6	REMOVE EXISTING F.H. COORDINATE VALVE DECOMMISSION WITH CITY PUBLIC WORKS DEPARTMENT. INSTALL NEW F.H. ASSEMBLY WITH VALVE AT SHADY HOLLOW STA 1+57.75, 13' LT, PER WL-401. CONNECT NEW FIRE SERVICE PIPE TO EXIST WATER LINE. PROVIDE MECH RESTRAINED FITTINGS AT ALL JOINTS. CONTRACTOR CONFIRM PIPE DEPTHS AND ALL MATERIAL REQUIREMENTS PRIOR TO ORDERING.
7	REMOVE EXISTING MAILBOX AND ADDRESS POST
8	REMOVE EXISTING "STOP" SIGN, PROVIDE NEW 36" x 36" STOP SIGN PER MUTCD SIGN R1-1 ON SQUARE STEEL TUBE SUPPORT. EXTEND TUBE SUPPORT ABOVE STOP SIGN AND MOUNT NEW STREET NAME SIGNS ABOVE PER DETAIL 1/CS2.0C. SEE STREET NAME SIGN DETAILS ON CS2.0B AND STOP SIGN DETAIL ON CS2.0C. SEE ALSO SIGN INSTALLATION, ATTACHMENT, FOUNDATION AND SUPPORT DETAIL ON SHTS CS2.0C, CS2.0E AND CS2.0F (TM200, TM206, TM676, TM681 AND TM687).
9	CONC. PAVEMENT CONNECTION RAMP WITH TRUNCATED DOME WARNING SURFACE SIM TO RD757 OPTION J - SIDEWALK RAMP. SEE SHT CS2.0G. PROVIDE HOT ASPHALT SEAL AND SANDED FINISH OVER JOINT TO EXIST A.C. EDGE.
10	NEW CG-3 CURB INLET AT STA 169+38.51, 37' RT (STA 1+36.96, 13.61' LT SHADY HOLLOW), SEE RD371 AND RD372, SHEET CS2.0F
11	NEW STREET LIGHTS (STA 169+66, 28' RT; STA 170+88, 28' RT; STA 172+12, 28' RT) TO BE PROVIDED BY OTHERS, SEPARATE PERMIT IS REQUIRED.
12	DECOMMISSION EXIST WATER METER
13	STA 172+42.50, 33' RT, CENTER OF 8' LONG TEMPORARY TYPE III BARRICADE PER ODOT DWG 820. PROVIDE (2) SUPPORT POSTS PER ODOT DWG TM681, SHT CS2.0E.



1 / CS2.0A — OSWEGO HIGHWAY (OR 43) (WILLAMETTE DRIVE) IMPROVEMENTS

HORIZONTAL SCALE: 1"=20'-0"
VERTICAL SCALE: 1"=2'-0"

N

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE IMPROVEMENTS
WEST LINN, OREGON

AS-BUILT DEC 16, 2015

PROJECT NUMBER: 1335

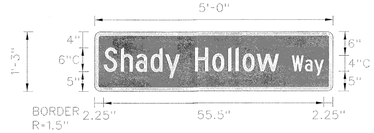
DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
1	21 OCT 2014	CGP
2	06 JAN 2015	CGP
3	23 JAN 2015	CGP
4	25 FEB 2015	CGP
5	16 MAR 2015	CGP

SHEET TITLE
OR43 IMPROVEMENTS

SHEET #
CS2.0A

SIGN DETAIL SHADY HOLLOW WAY SIGN DETAIL

SIGN NUMBER	name
WIDTH x HGHT.	5'-0" x 1'-3"
BORDER WIDTH	1"
CORNER RADIUS	1.5"
MOUNTING	ground
BACKGROUND	TYPE: ASTM TYPE III or IV
	COLOR: Green
LEGEND/BORDER	TYPE: ASTM TYPE III or IV
	COLOR: White



SYMBOL	X	Y	WID	HT

Panel Style: _2009_street_name_6C-tails.ssi
M.U.T.C.D.: 2009 Edition
2 Required Sign Type: 'G' Substrate: HDO PLYWOOD
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

																						LENGTH	SIZE/SERIES
S	h	a	d	y		H	o	l	l	o	w												6/4.5 C 2000
2.3	6.5	10.3	14	17.8	21.5	25.2	29.6	33.6	35.5	37.2	40.8											44.1	
W	a	y																					4/3 C 2000
49.6	52.9	55.2																				8.1	

SIGN DETAIL WILLAMETTE DRIVE SIGN DETAIL

SIGN NUMBER	name
WIDTH x HGHT.	4'-0" x 1'-0"
BORDER WIDTH	1"
CORNER RADIUS	1.5"
MOUNTING	ground
BACKGROUND	TYPE: ASTM TYPE III or IV
	COLOR: Green
LEGEND/BORDER	TYPE: ASTM TYPE III or IV
	COLOR: White

SYMBOL	X	Y	WID	HT

Panel Style: _2009_street_name_6C.ssi
M.U.T.C.D.: 2009 Edition
2 Required Sign Type: 'G' Substrate: HDO PLYWOOD
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

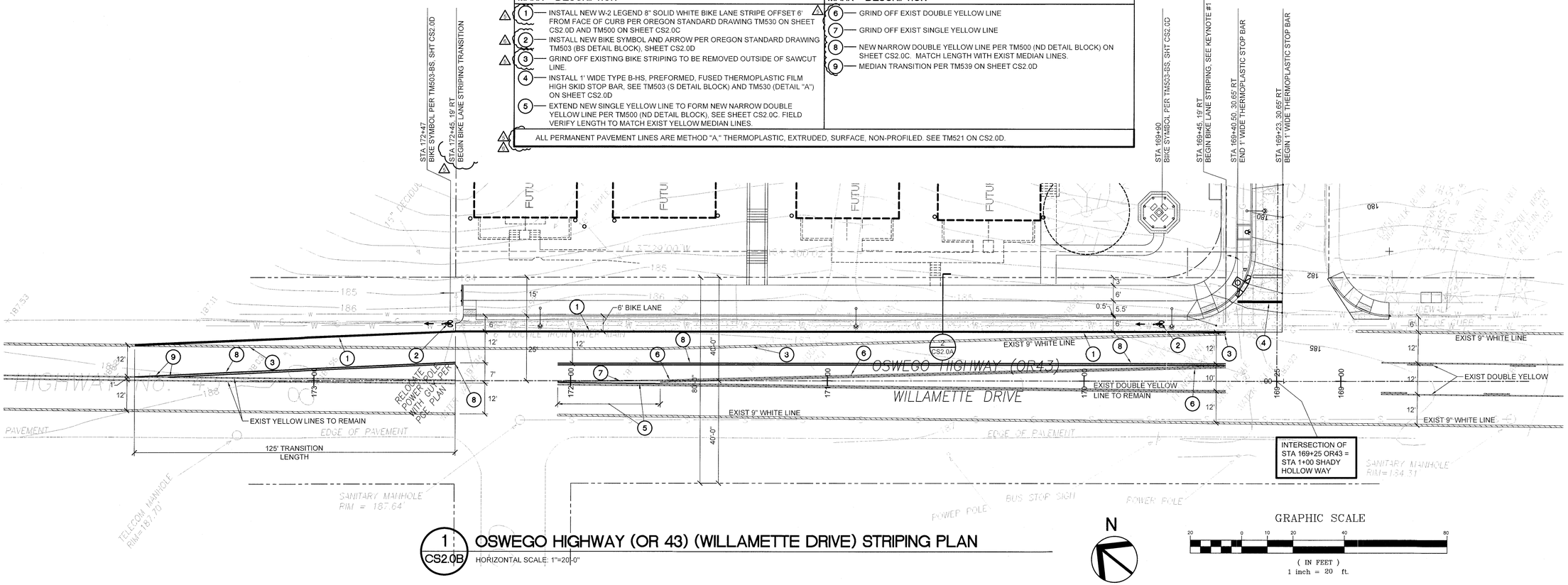
LETTER POSITIONS (X)

																						LENGTH	SIZE/SERIES
W	i	l	l	a	m	e	t	t	e														6/4.5 C 2000
4.4	9.6	11.6	13.5	15.1	19	24.9	28.2	30.5	33.1													31.3	
D	r																						4/3 C 2000
39.4	42.3																					4.3	

KEYNOTES FOR THIS SHEET

MARK	DESCRIPTION
1	INSTALL NEW W-2 LEGEND 8" SOLID WHITE BIKE LANE STRIPE OFFSET 6' FROM FACE OF CURB PER OREGON STANDARD DRAWING TM530 ON SHEET CS2.0D AND TM500 ON SHEET CS2.0C
2	INSTALL NEW BIKE SYMBOL AND ARROW PER OREGON STANDARD DRAWING TM503 (BS DETAIL BLOCK), SHEET CS2.0D
3	GRIND OFF EXISTING BIKE STRIPING TO BE REMOVED OUTSIDE OF SAWCUT LINE.
4	INSTALL 1' WIDE TYPE B-HS, PREFORMED, FUSED THERMOPLASTIC FILM HIGH SKID STOP BAR, SEE TM503 (S DETAIL BLOCK) AND TM530 (DETAIL "A") ON SHEET CS2.0D
5	EXTEND NEW SINGLE YELLOW LINE TO FORM NEW NARROW DOUBLE YELLOW LINE PER TM500 (ND DETAIL BLOCK), SEE SHEET CS2.0C. FIELD VERIFY LENGTH TO MATCH EXIST YELLOW MEDIAN LINES.
6	GRIND OFF EXIST DOUBLE YELLOW LINE
7	GRIND OFF EXIST SINGLE YELLOW LINE
8	NEW NARROW DOUBLE YELLOW LINE PER TM500 (ND DETAIL BLOCK) ON SHEET CS2.0C. MATCH LENGTH WITH EXIST MEDIAN LINES.
9	MEDIAN TRANSITION PER TM539 ON SHEET CS2.0D

ALL PERMANENT PAVEMENT LINES ARE METHOD "A," THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED. SEE TM521 ON CS2.0D.



1 CS2.0B **OSWEGO HIGHWAY (OR 43) (WILLAMETTE DRIVE) STRIPING PLAN**
HORIZONTAL SCALE: 1"=20'-0"

N

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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SHADY HOLLOW VILLAGE

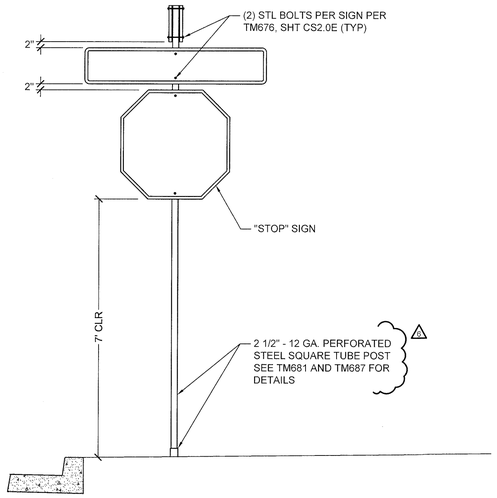
SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

AS-BUILT DEC 16, 2015

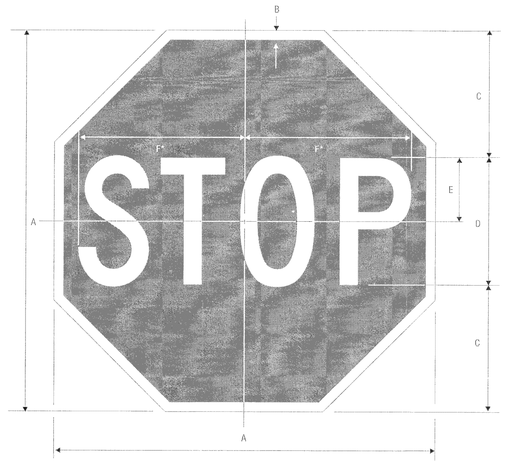
PROJECT NUMBER: 1335		
DRAWING	DATE	BY
DESIGN	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV	12 MAR 2014	SGS
PERMIT	22 AUG 2014	SGS
PLAN CHECKS	21 OCT 2014	CGP
	06 JAN 2015	CGP
	23 JAN 2015	CGP
	25 FEB 2015	CGP
	16 MAR 2015	CGP

SHEET TITLE
OR43
STRIPING PLAN

SHEET #
CS2.0B



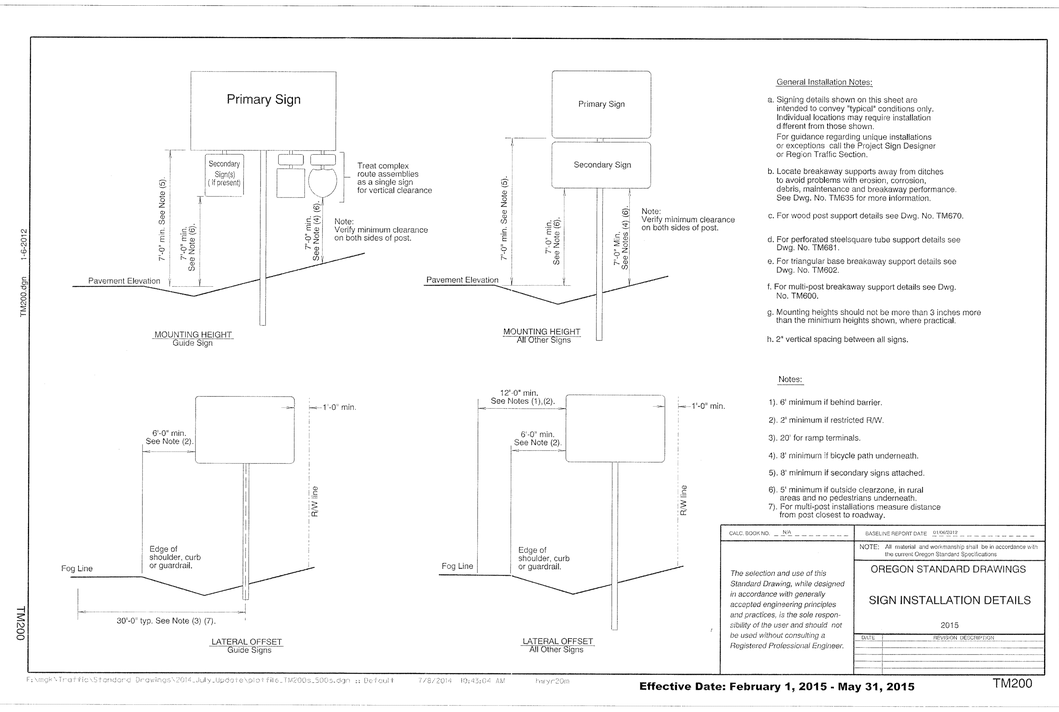
1 CS2.0C **SIGN AT OR43 AND SHADY HOLLOW WAY**
1/2" = 1'-0"



R1-1
STOP
*Reduce spacing 40%

A	B	C	D	E	F
18	.375	6	6 C	3	7.75
24	.625	8	8 C	4	10
30	.75	10	10 C	5	12.5
36	.875	12	12 C	6	15
48	1.25	16	16 C	8	20

COLORS: LEGEND – WHITE (RETROREFLECTIVE)
BACKGROUND – RED (RETROREFLECTIVE)



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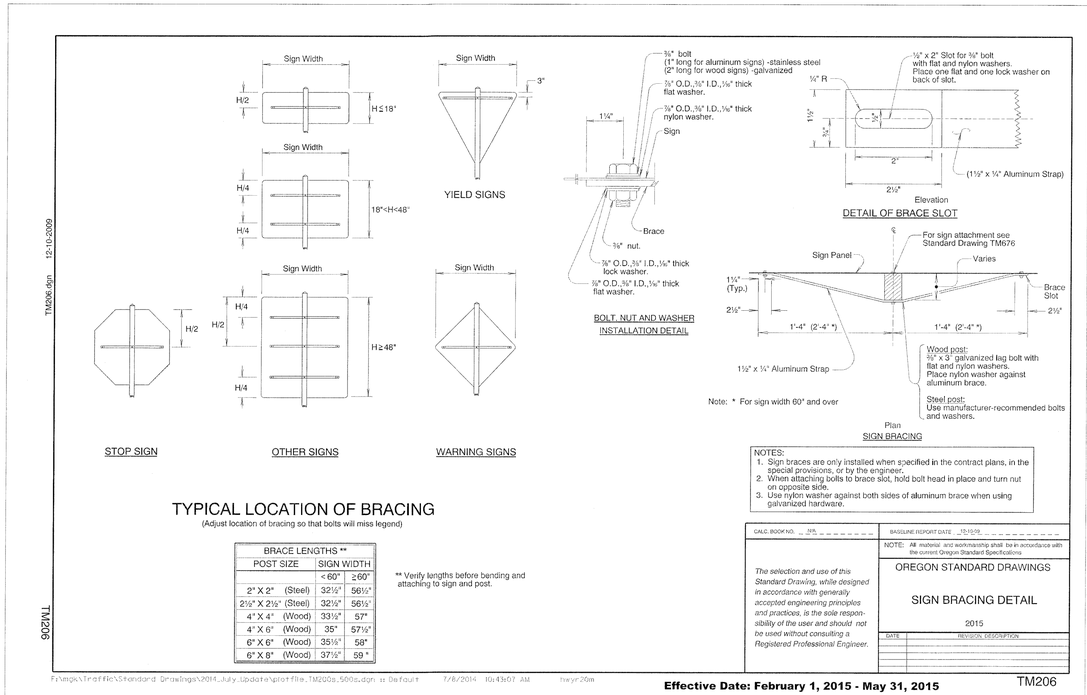
SHADY HOLLOW VILLAGE
SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON



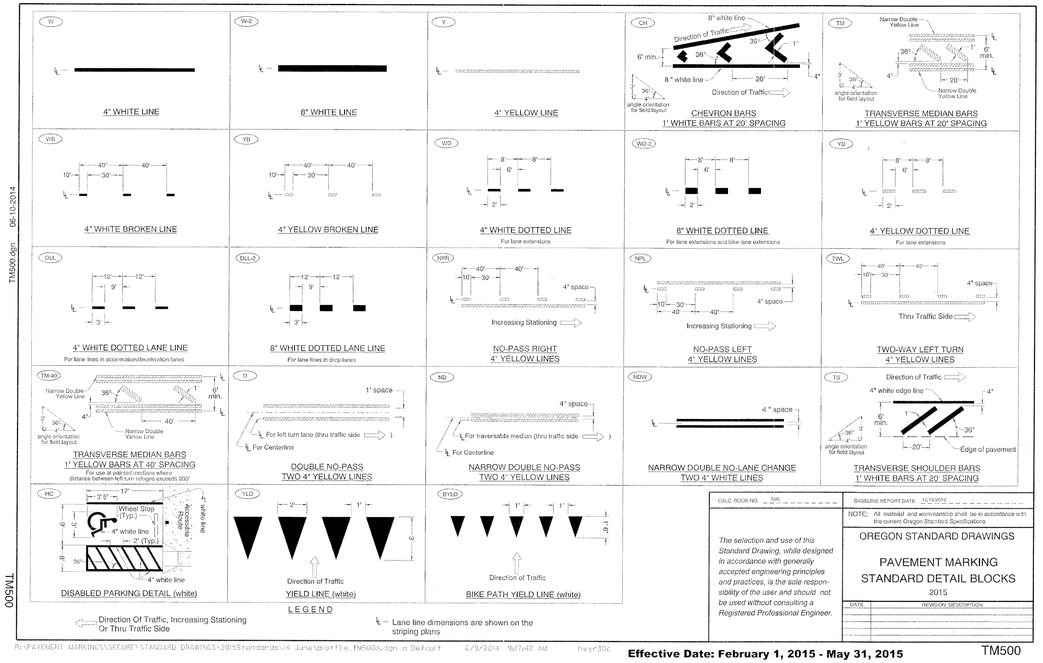
NOTES:
1. Sign braces are only installed when specified in the contract plans, in the special provisions, or by the engineer.
2. When attaching bolts to brace slot, hold bolt head in place and turn nut on opposite side.
3. Use nylon washer against both sides of aluminum brace when using galvanized hardware.

TYPICAL LOCATION OF BRACING
(Adjust location of bracing so that bolts will miss legend)

BRACE LENGTHS **		
POST SIZE	SIGN WIDTH	
	< 60"	≥ 60"
2" X 2" (Steel)	32 1/2"	56 1/2"
2 1/2" X 2 1/2" (Steel)	32 1/2"	56 1/2"
4" X 4" (Wood)	33 1/2"	57"
4" X 6" (Wood)	35"	57 1/2"
6" X 6" (Wood)	35 1/2"	58"
6" X 8" (Wood)	37 1/2"	59 "

** Verify lengths before bending and attaching to sign and post.

CALC. BOOK NO. N/A
BASELINE REPORT DATE 10/10/09
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.
OREGON STANDARD DRAWINGS
SIGN BRACING DETAIL
2015
DATE REVISION DESCRIPTION
TM206
F:\mgk\Traffic\Standard Drawings\2014_July_Updates\plotfile_TM200s_500s.dgn :: Default 7/8/2014 10:43:07 AM hwyr20m
Effective Date: February 1, 2015 - May 31, 2015



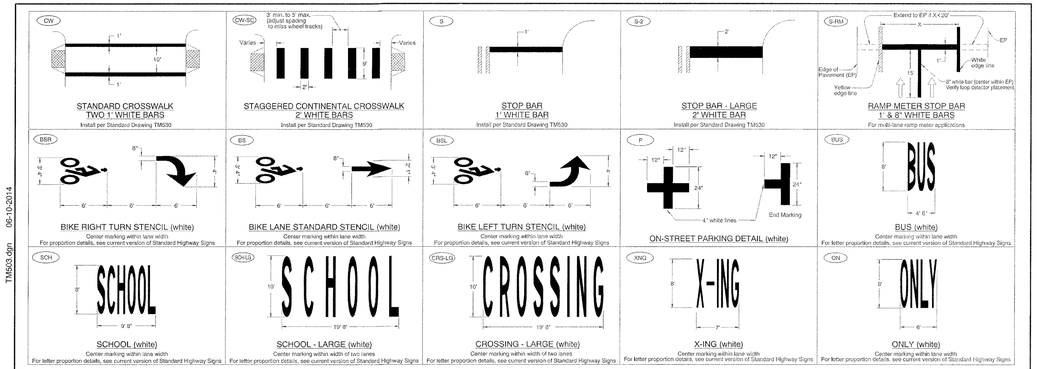
CALC. BOOK NO. N/A
BASELINE REPORT DATE 01/06/2012
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.
OREGON STANDARD DRAWINGS
PAVEMENT MARKING STANDARD DETAIL BLOCKS
2015
DATE REVISION DESCRIPTION
TM500
Effective Date: February 1, 2015 - May 31, 2015

PROJECT NUMBER: 1335		
DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
1	21 OCT 2014	CGP
2	06 JAN 2015	CGP
3	23 JAN 2015	CGP
4	25 FEB 2015	CGP
5	16 MAR 2015	CGP

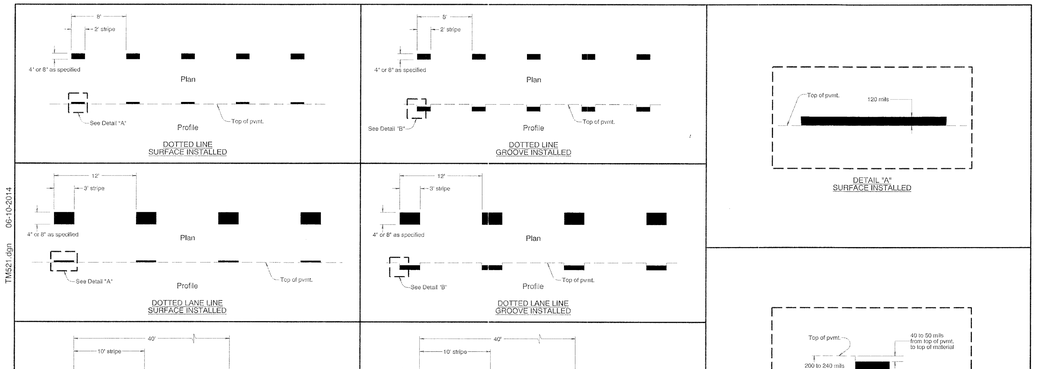
AS-BUILT NOV 18, 2015

SHEET TITLE
ODOT DETAILS

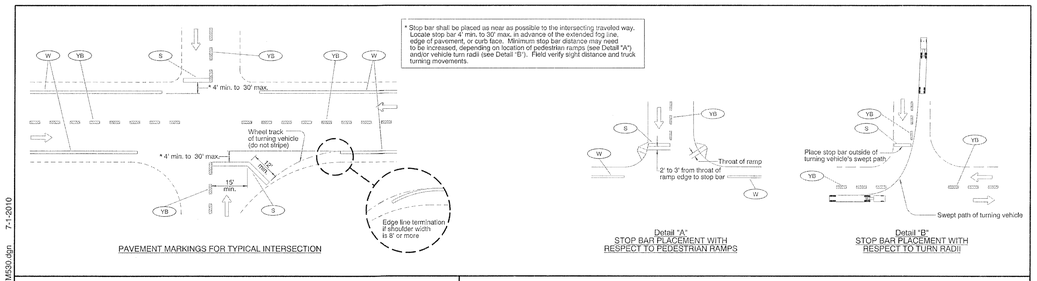
SHEET # CS2.0C



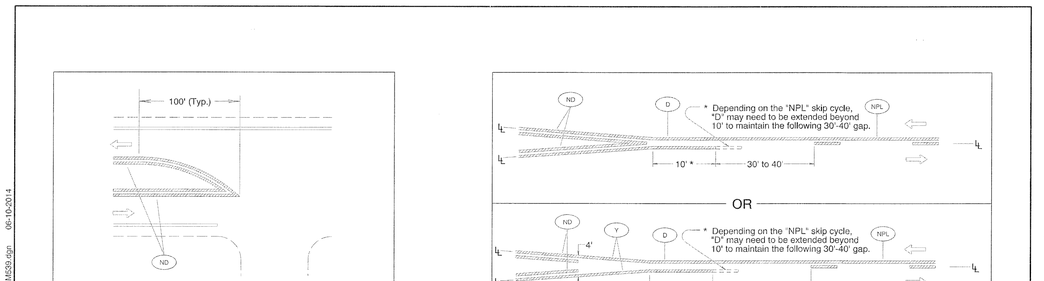
Effective Date: February 1, 2015 - May 31, 2015 TM503



Effective Date: February 1, 2015 - May 31, 2015 TM521



Effective Date: February 1, 2015 - May 31, 2015 TM530



Effective Date: February 1, 2015 - May 31, 2015 TM539

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SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
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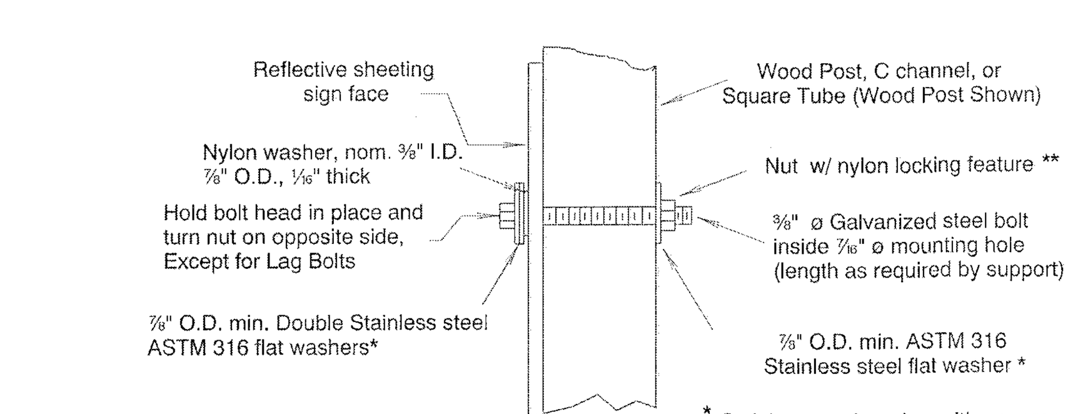
AS-BUILT NOV 18, 2015

SHEET TITLE
ODOT DETAILS

SHEET # CS2.0D



* Stainless steel washer with neoprene layer is an acceptable substitue

** Acceptable substitute for nylon locking nuts:
ANCO PIN-LOC®
TRI-LOC® Top Lock Locknut

Note:
1) When signs are placed on opposing sides of post, ⅜" x 3" lag bolts can be used instead of through bolt.
2) Use nylon and stainless steel washers when signs are placed on both sides of post.
3) Burr threads at junction with nut when locknuts are not used.
4) Post bolts to extend beyond the tightened nuts within the limits of ¼" to 1".

SIGN ATTACHMENT DETAIL

tm676.dgn 11-JUL-2014

CALC. BOOK NO.	BASELINE REPORT DATE	ACCOMPANIED BY DWGS.	SHEET 1 OF 1

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

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OREGON STANDARD DRAWINGS

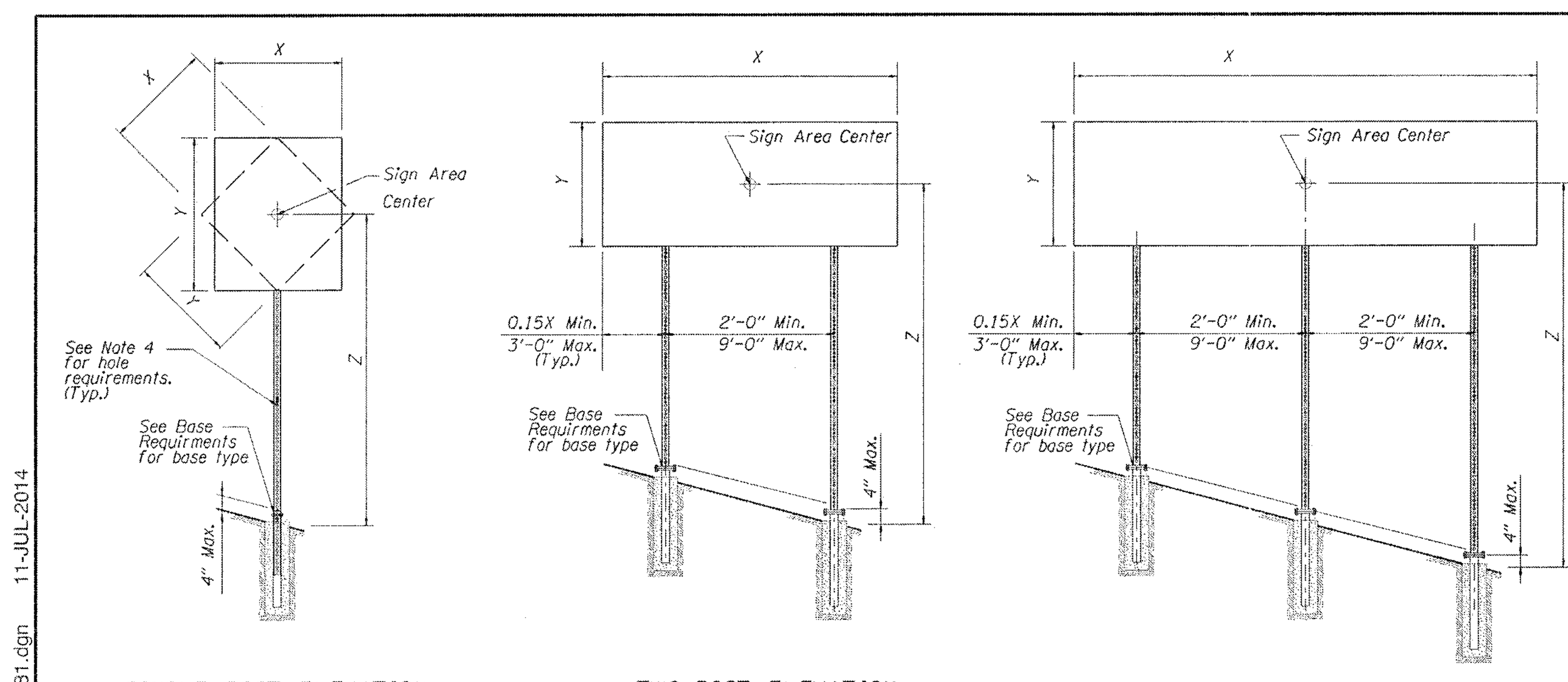
SIGN ATTACHMENTS

2015

DATE	REVISION DESCRIPTION

Effective Date: February 1, 2015 - May 31, 2015 TM676

TM676



SINGLE POST ELEVATION
No scale

TWO POST ELEVATION
No scale

THREE POST ELEVATION
No scale

GENERAL NOTES:

1. Perforated Steel Square Supports are designed in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals 4th Edition, 2001, 2002, 2003, and 2006 interim revisions.
2. The design basic wind speed (3 second gust) shall be according to the wind map shown on TM671.
3. Material grade for base hardware connection shall be according to the manufacturer's recommendation and based on crash testing.
4. Use 7/16" diameter holes at 1" spacing on each of the 4 sides.
5. Steel post shall have a minimum yield stress of 50 ksi.
6. Steel shall be galvanized according to ASTM A653 with coating designation G140.
7. General design parameters are Kz = 0.87, Cd (sign) = 1.20, and G = 1.14.
8. Permanent signing uses an Ir = 0.71 for a recurrence interval of 10 years.
9. Temporary signing uses an Ir = 0.45 for a recurrence interval of 1.5 years.
10. The sign width to sign height or sign height to sign width ratio shall not exceed 5.0.
11. For horizontal and vertical clearances of permanent signs refer to TM200 and of temporary signs refer to TM821.
12. Posts protected by barrier or guardrail do not require slip bases.

	(X * Y * Z) in ft³								
	3 Second Gust Wind Speed (TM671)								
	85 MPH			95 MPH			105 or 110 MPH		
	Number of Posts			Number of Posts			Number of Posts		
Square Tube Size	1	2	3	1	2	3	1	2	3
2"-12 ga.	79	158	237	63	126	189	57	114	171
2½"-12 ga.	136	272	408	109	218	327	98	196	294
2½"-10 ga.	165	330	495	132	264	396	119	238	357
2¼" & 2½"-12 ga.*	231	462	693	185	370	555	167	334	501

PERMANENT PERFORATED STEEL SQUARE TUBE TABLE

	(X * Y * Z) in ft³								
	3 Second Gust Wind Speed (TM671)								
	85 MPH			95 MPH			105 or 110 MPH		
	Number of Posts			Number of Posts			Number of Posts		
Square Tube Size	1	2	3	1	2	3	1	2	3
2"-12 ga.	125	250	375	100	200	300	90	180	270
2½"-12 ga.	215	430	645	172	344	516	155	310	465
2½"-10 ga.	261	522	783	209	418	627	189	378	567
2¼" & 2½"-12 ga.*	364	728	1092	292	584	876	263	526	789

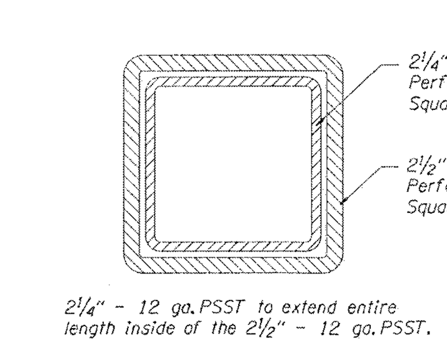
TEMPORARY PERFORATED STEEL SQUARE TUBE TABLE

* - See 2¼" & 2½" - 12 ga. detail.

	Number of Posts		
Square Tube Size	1	2	3
2"-12 ga.	Anchor	Anchor	N/A
2½"-12 ga.	Anchor	Slip	Slip
2½"-10 ga.	Slip	Slip	Slip
2¼" & 2½"-12 ga.*	Slip	Slip	Slip

1. Anchor - See Drawing TM687 for PSST anchor foundation details.
2. Slip - See Drawing TM688 for PSST slip base foundation details.
3. N/A - Do not use this option.

BASE REQUIREMENTS



2¼" - 12 ga. PSST to extend entire length inside of the 2½" - 12 ga. PSST.

2¼" & 2½" - 12 GA. DETAIL
No scale

tm681.dgn 11-JUL-2014

CALC. BOOK NO.	BASELINE REPORT DATE	ACCOMPANIED BY DWGS.	SHEET
5752	06-JAN-2012	TM200, TM671, TM687, TM688, TM775	1 OF 3

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS

PERFORATED STEEL SQUARE TUBE (PSST) SIGN SUPPORT INSTALLATION

2015

DATE	REVISION DESCRIPTION

Effective Date: February 1, 2015 - May 31, 2015 TM681

TM681

AS-BUILT NOV 18, 2015

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WDY
Structural · Civil Engineers
6443 SW Beaverton-Hillsdale Hwy, suite 210
Portland, Oregon 97221
ph:503.203.8111 fx:503.203.8122
www.wdyi.com

SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

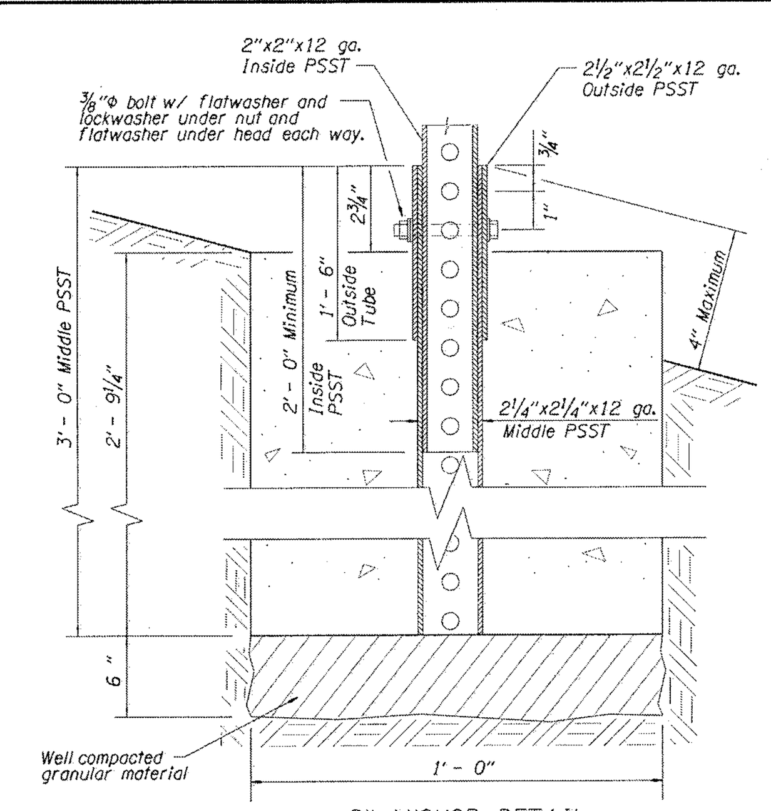
PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
2	21 OCT 2014	CGP
3	06 JAN 2015	CGP
4	23 JAN 2015	CGP
5	25 FEB 2015	CGP
6	16 MAR 2015	CGP

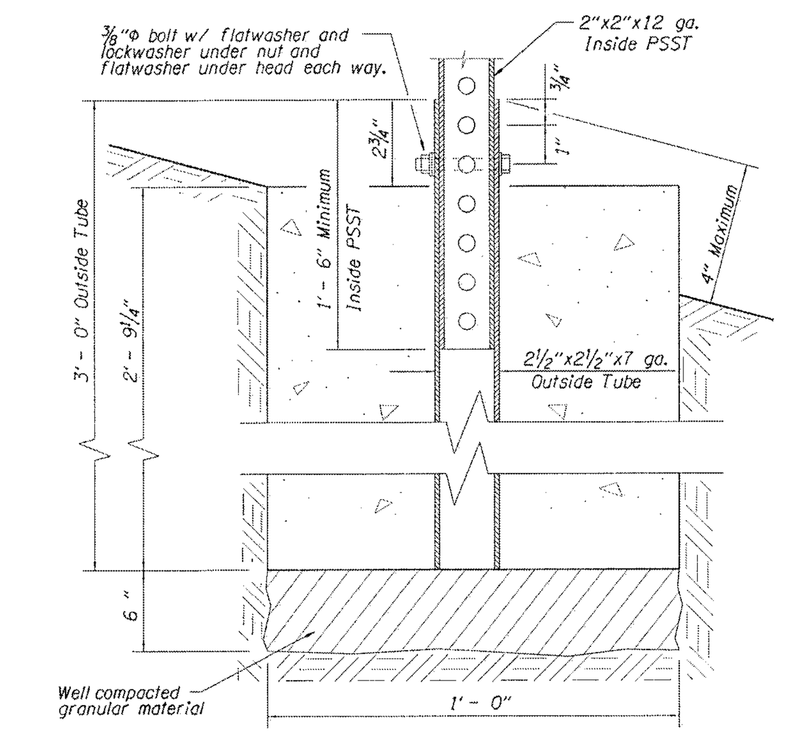
SHEET TITLE
ODOT DETAILS

SHEET #
CS2.0E

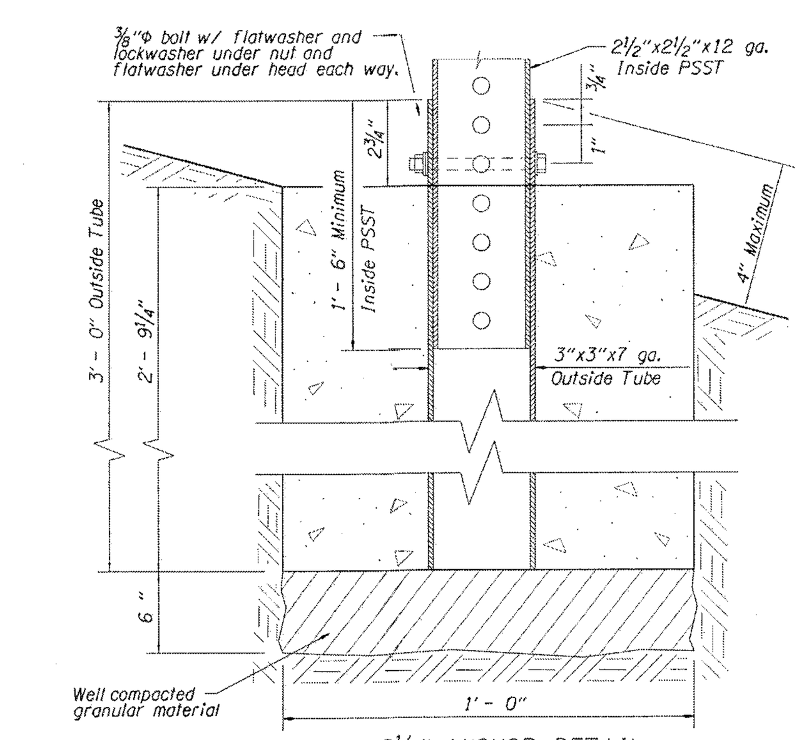
tm687.dgn 11-JUL-2014



2" ANCHOR DETAIL
No scale



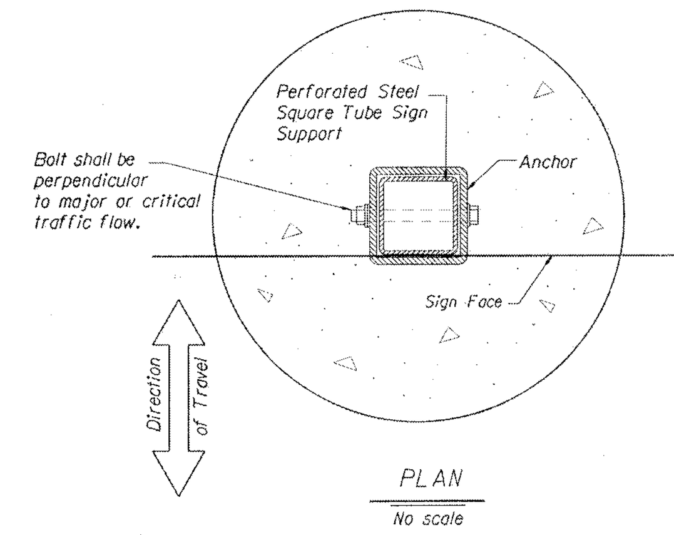
2" OPTIONAL ANCHOR DETAIL
No scale



2½" ANCHOR DETAIL
No scale

General Notes:

1. Material grade for base hardware connection shall be according to the manufacturer's recommendation and based on crash testing.
2. Anchor steel shall be hot dipped galvanized or approved equal.
3. Footing concrete shall be Commercial Grade Concrete (fc = 3000 psi) per Specification 00440. The CGC mixture may be accepted at the site of placement according to 00440.14.
4. The estimated concrete volume is .09 cubic yards.



PLAN
No scale

CALC. BOOK NO.	BASELINE REPORT DATE	ACCOMPANIED BY DWGS.	SHEET
5752	06-JAN-2012	TM681, TM688	2 OF 3

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

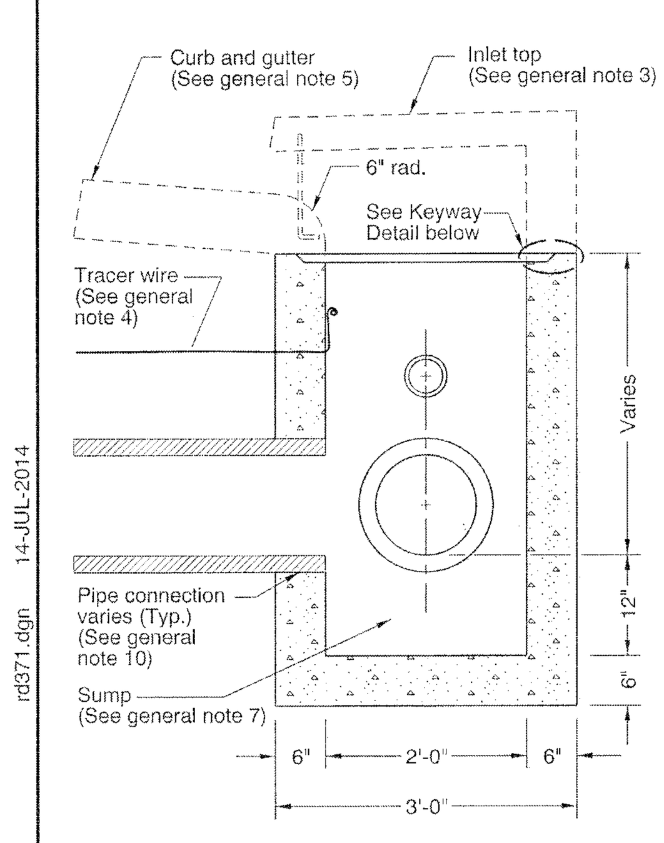
OREGON STANDARD DRAWINGS
PERFORATED STEEL SQUARE TUBE (PSST) ANCHOR FOUNDATION
2015

DATE	REVISION DESCRIPTION

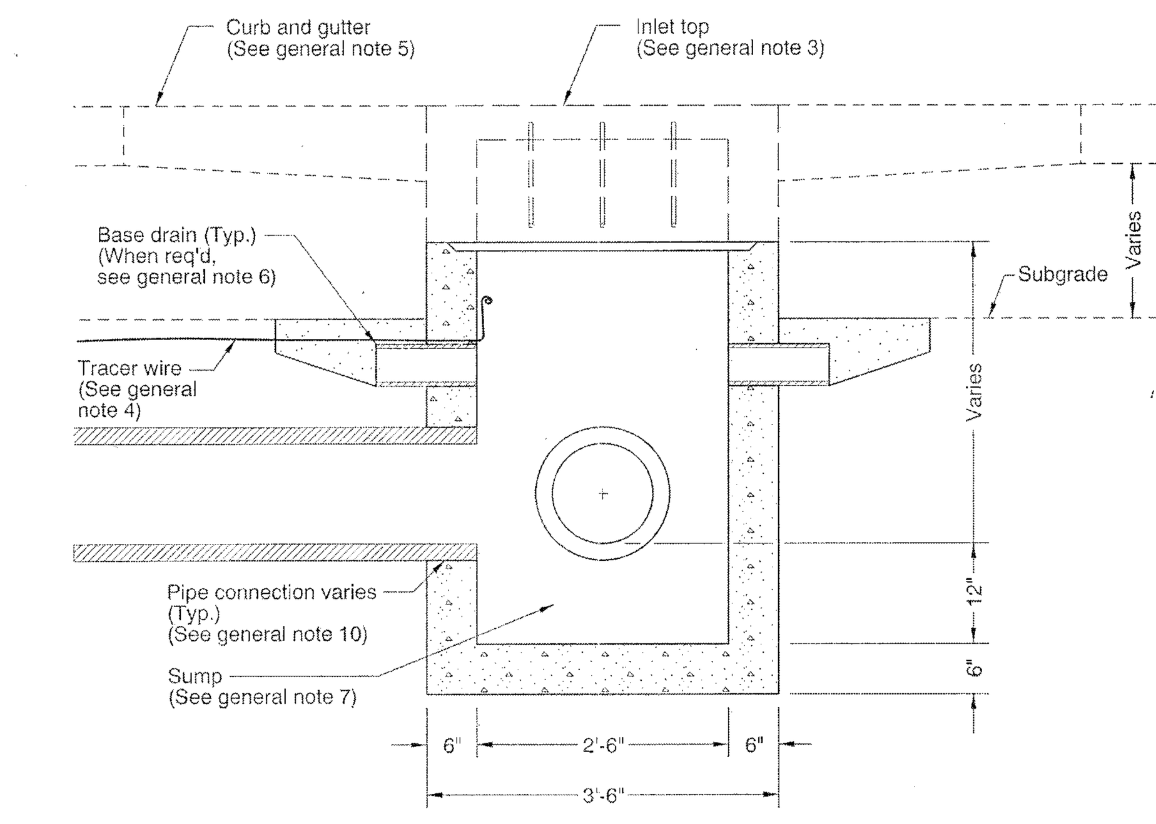
TM687

Effective Date: February 1, 2015 - May 31, 2015 TM687

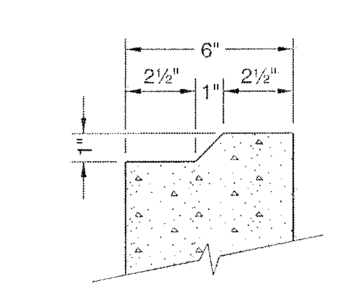
rd371.dgn 14-JUL-2014



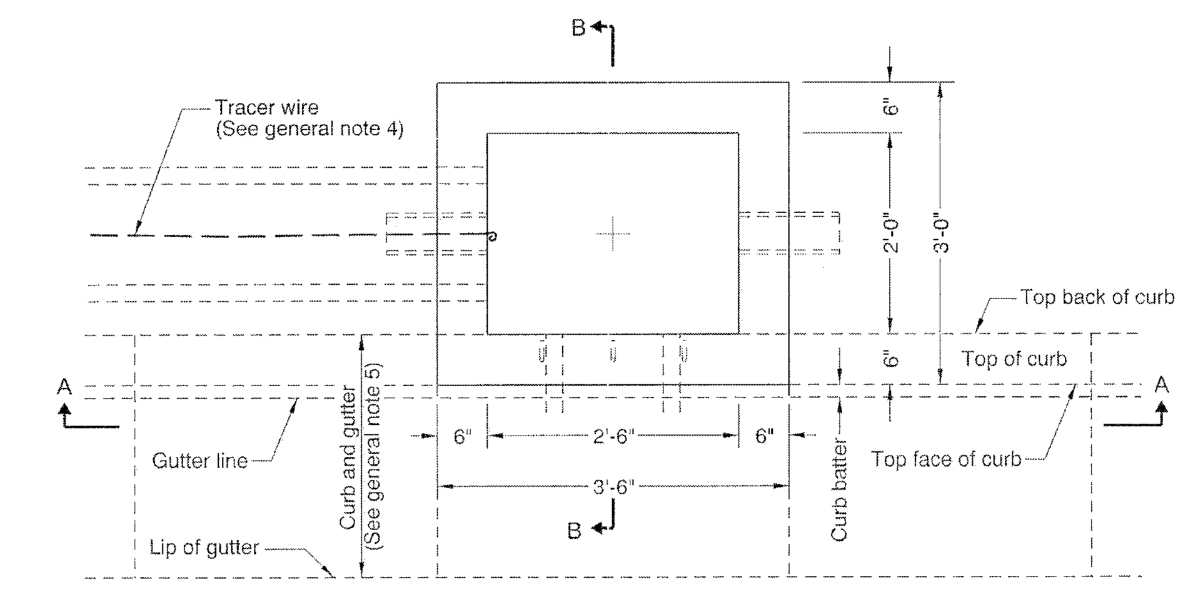
SECTION B - B



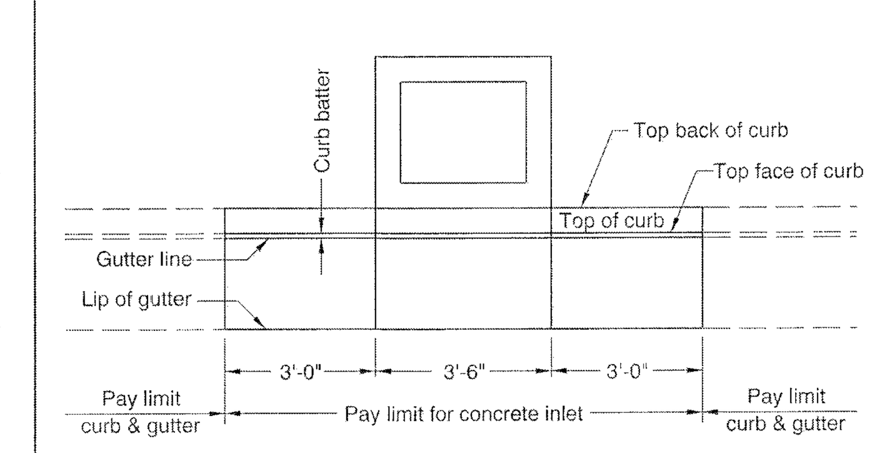
SECTION A - A



KEYWAY DETAIL



PLAN



PLAN

PAY LIMIT

GENERAL NOTES FOR ALL DETAILS:

1. All concrete shall be commercial grade concrete.
2. Inlet base may be cast-in-place or precast. Where precast inlet base is used as an alternate, a 4" compacted leveling bed of sand or ¼"-0 crushed aggregate shall be provided. All precast inlets shall conform to requirements of ASTM C913.
3. See Std. Drgs. RD372 & RD373 for inlet top details.
4. See Std. Drg. RD336 for tracer wire details, or approved alternate.
5. See Std. Drgs. RD700 & RD701 for curb and gutter details.
6. See Std. Drg. RD364 for base drain details.
7. Provide sump only where shown on plans, and allowed by jurisdiction. For sump details, see Std. Drg. RD364.
8. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
9. Max. pipe diameter varies with pipe material.
10. See Std. Drg. RD339 for pipe to structure connections.

CALC. BOOK NO. N/A — BASELINE REPORT DATE 14-JUL-2014

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

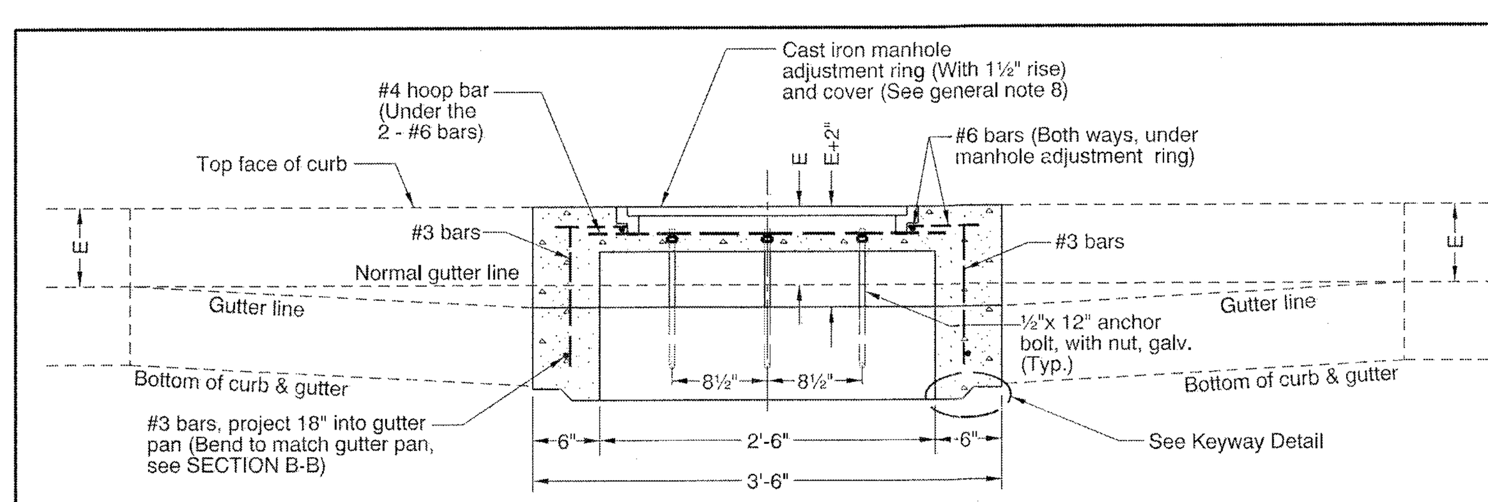
OREGON STANDARD DRAWINGS
CONCRETE INLET BASE TYPE CG-3
2015

DATE	REVISION DESCRIPTION

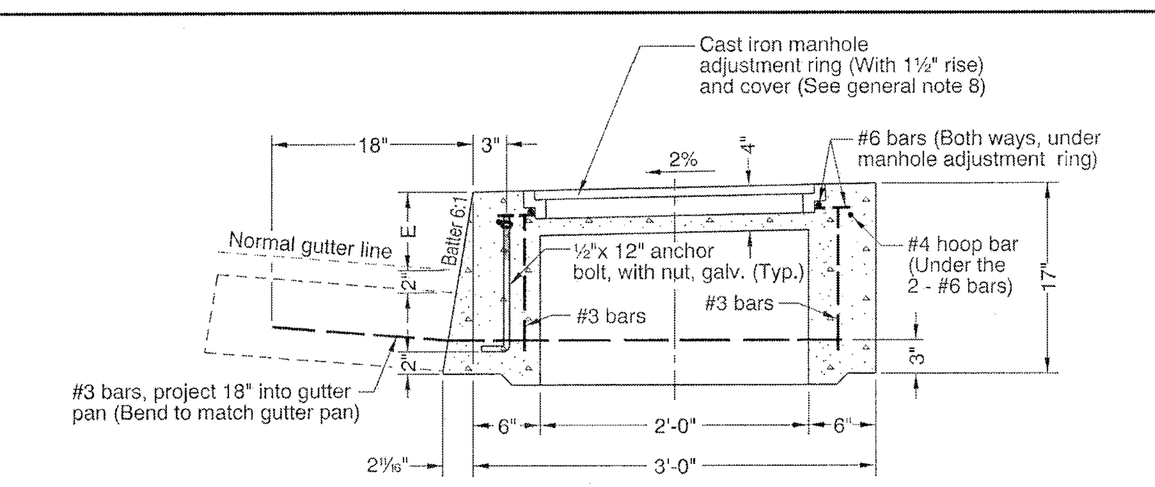
RD371

Effective Date: February 1, 2015 - May 31, 2015 RD371

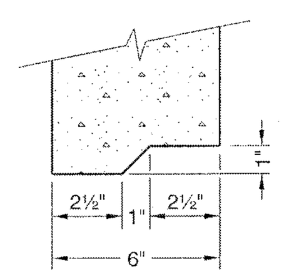
rd372.dgn 14-JUL-2014



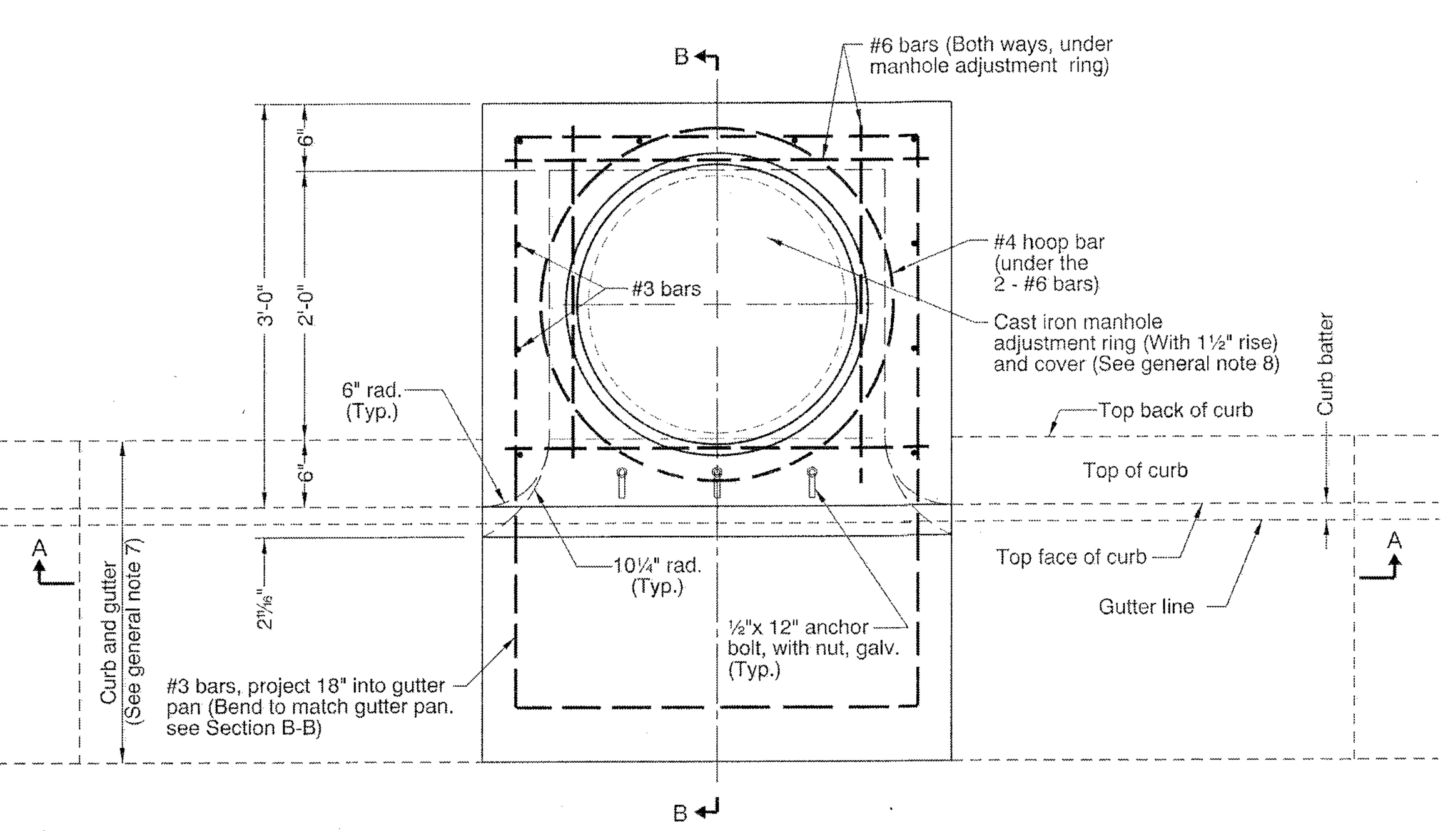
SECTION A - A



SECTION B - B



KEYWAY DETAIL



PLAN

GENERAL NOTES FOR ALL DETAILS:

1. All concrete shall be commercial grade concrete.
2. Inlet top may be cast-in-place or precast.
3. All reinforcement shall be 2" clear of nearest face of conc., unless otherwise shown.
4. Vary anchor bolt length and reinforcing bar placement as required by curb exposure E (see note 7 below).
5. See Std. Drg. RD371 for inlet base details.
6. See Std. Drg. RD371 for inlet pay limit.
7. See Std. Drgs. RD700 & RD701 for curb and gutter details.
8. See Std. Drg. RD356 for cast iron manhole adjustment ring and cover.

CALC. BOOK NO. N/A — BASELINE REPORT DATE 30-JUN-2009

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

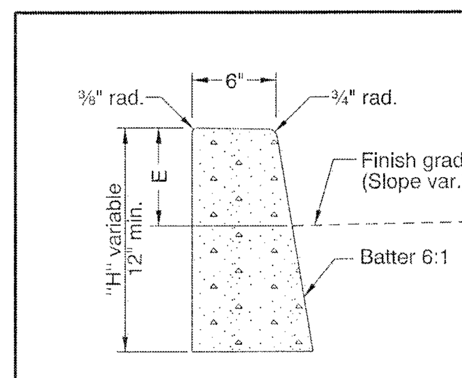
OREGON STANDARD DRAWINGS
CONCRETE INLET TOP, OPTION 1 TYPE CG-3
2015

DATE	REVISION DESCRIPTION

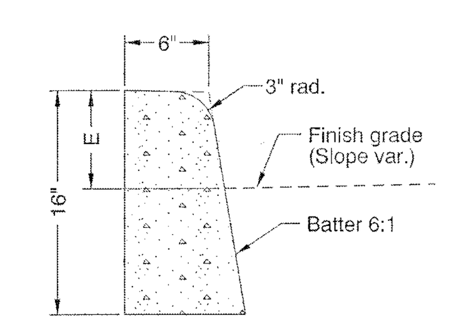
RD372

Effective Date: February 1, 2015 - May 31, 2015 RD372

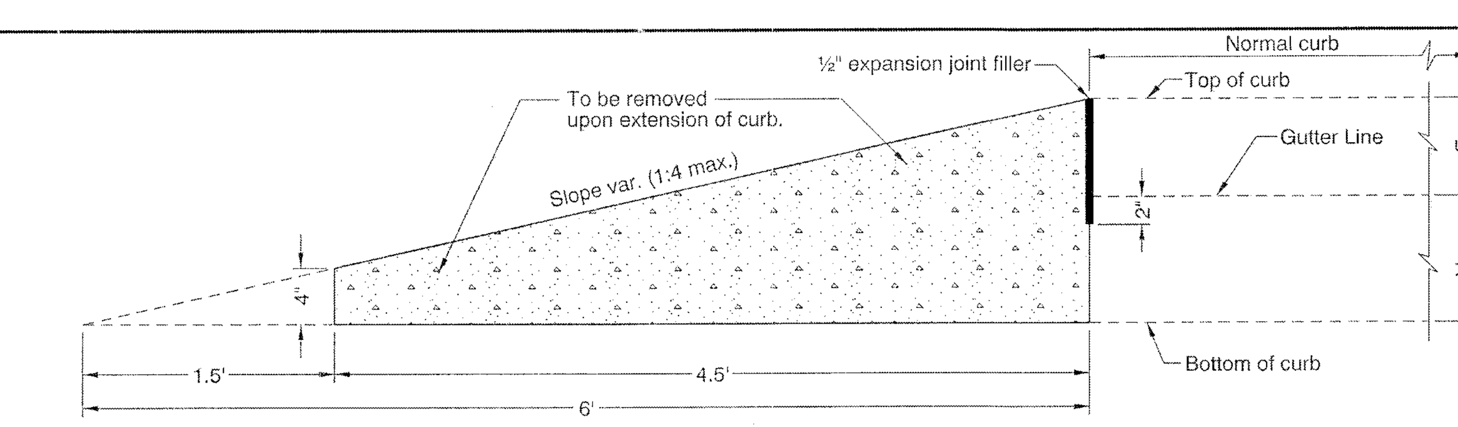
rd700.dgn 14-JUL-2014



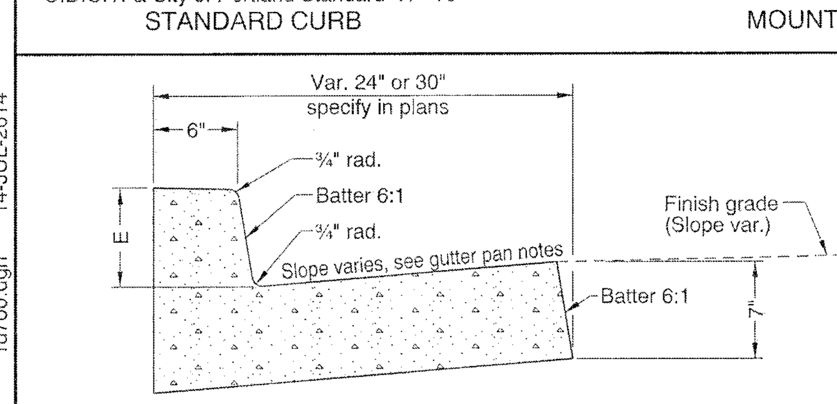
O.D.O.T. & City of Portland Standard "H"=16"
STANDARD CURB



MOUNTABLE CURB

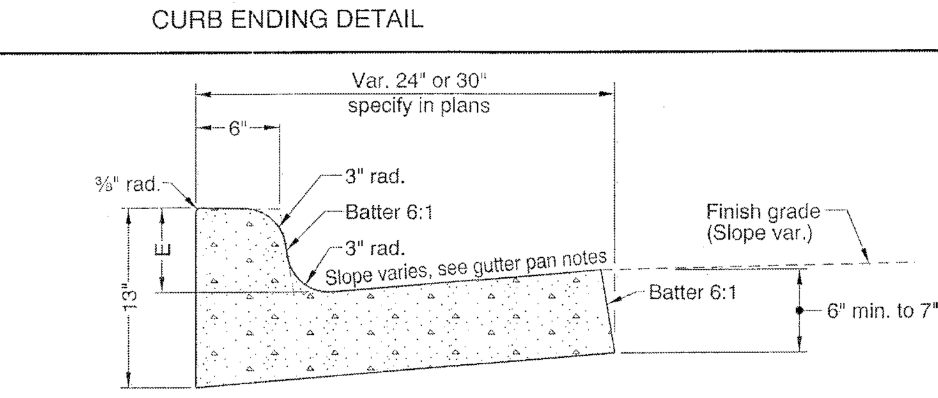


CURB ENDING DETAIL

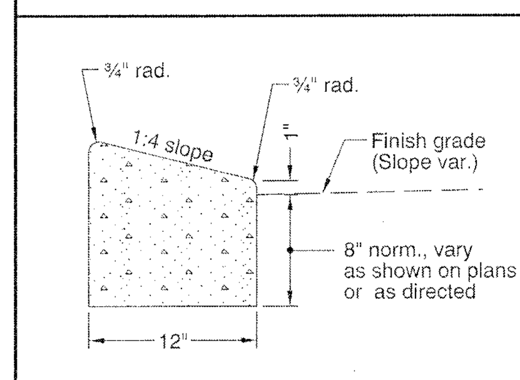


CURB AND GUTTER

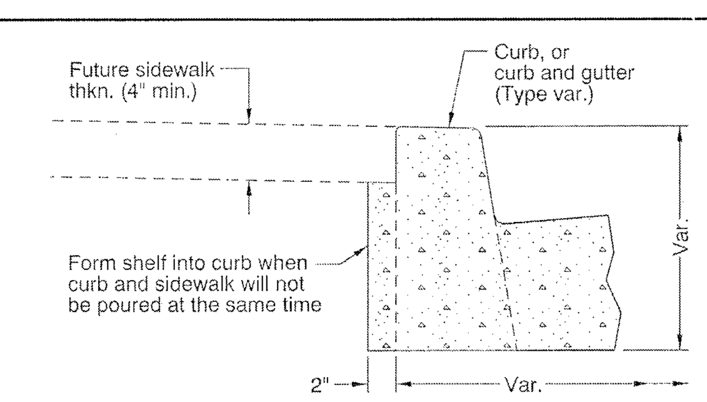
GUTTER PAN NOTES:
Slope 8% normal.
Use 5% slope for gutter width greater than 24".
Slope 4% at ramps. Vary slope as reqd. for drainage.
Vary where shown on plans, and allowed by jurisdiction.



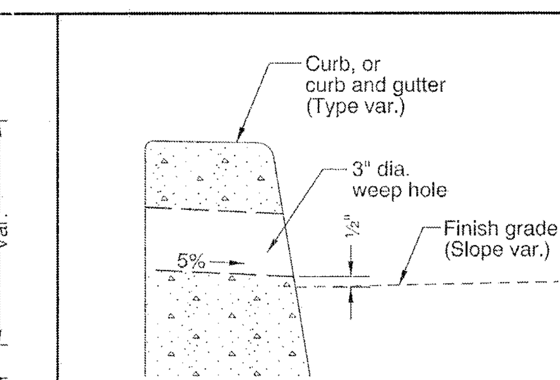
MOUNTABLE CURB AND GUTTER



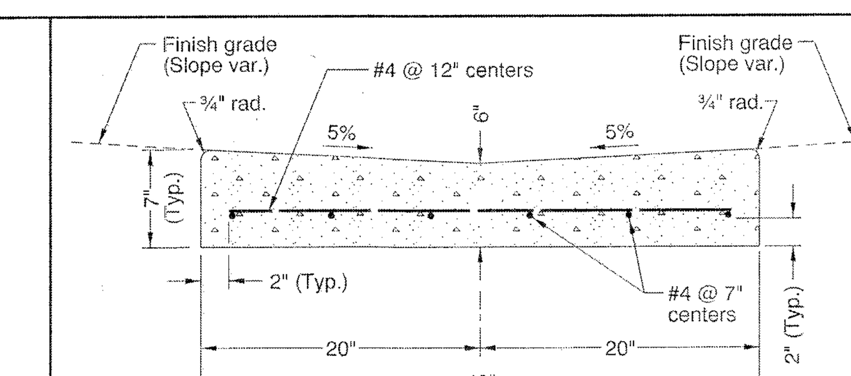
LOW PROFILE
MOUNTABLE CURB



MODIFICATION FOR KEYWAY
(Where shown on plans)



WEEP HOLE DETAIL
(Where shown on plans, and allowed by jurisdiction)



VALLEY GUTTER

GENERAL NOTES FOR ALL DETAILS:

1. Curb exposure "E" = 6" to 9", as measured vertically from flowline to highest point on curb. Vary as shown on plans or as directed. O.D.O.T standard "E"=7".
2. Const. expansion joints at 200' maximum spacing, and at points of tangency, and at ends of each driveways.
3. Const. contraction joints at 15' maximum spacing, and at ends of each inlet and ramp.
4. Transitions shall be used to connect curbs of different exposures "E". ("E" Is the total vertical dimension of those curb surfaces having a slope of 1:1 or steeper). Minimum desirable transition length shall be 20' for each 1" difference in "E".
5. Tops of all curbs shall slope toward the roadway at 2% normal, unless otherwise shown, or as directed.
6. Dimensions are nominal, vary to conform with curb machine approved by the engineer.
7. Dimensions adjacent to radii are measured to the point of intersection of curb surfaces.
8. For sidewalk details, and monolithic curb & sidewalk, see Std. Drg. RD720.
9. For drainage curbs, see Std. Drg. RD701.

CALC. BOOK NO. N/A — BASELINE REPORT DATE 07-JAN-2013

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS
CURBS
2015

DATE	REVISION DESCRIPTION

RD700

Effective Date: February 1, 2015 - May 31, 2015 RD700

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SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

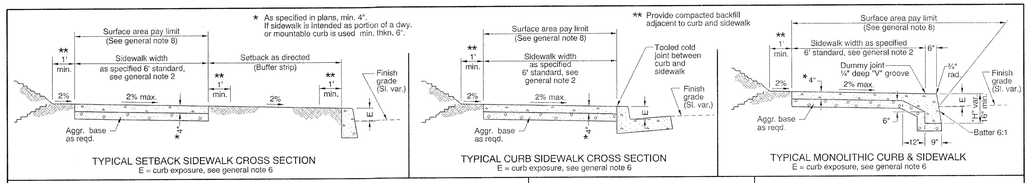
AS-BUILT NOV 18, 2015

PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
2	21 OCT 2014	CGP
3	06 JAN 2015	CGP
4	23 JAN 2015	CGP
5	25 FEB 2015	CGP
6	16 MAR 2015	CGP

SHEET TITLE
ODOT DETAILS

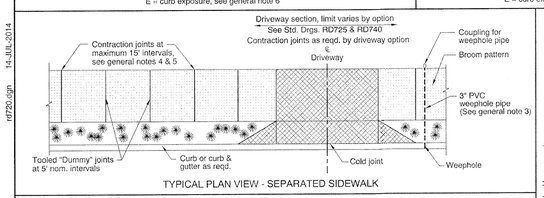
SHEET #
CS2.0F



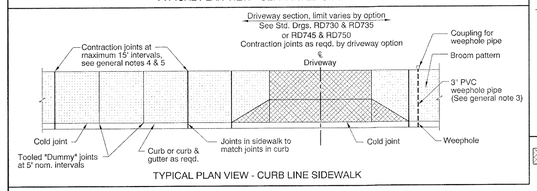
TYPICAL SETBACK SIDEWALK CROSS SECTION
E = curb exposure, see general note 6

TYPICAL CURB SIDEWALK CROSS SECTION
E = curb exposure, see general note 6

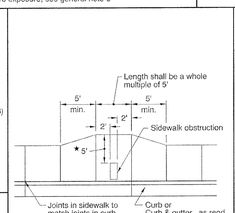
TYPICAL MONOLITHIC CURB & SIDEWALK
E = curb exposure, see general note 6



TYPICAL PLAN VIEW - SEPARATED SIDEWALK

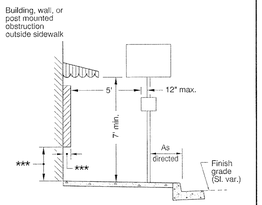


TYPICAL PLAN VIEW - CURB LINE SIDEWALK



★ When site constraints prohibit a 5' passage, the Engineer may direct this to be reduced, but no less than 4'.

REQUIRED SIDEWALK WIDENING AROUND OBSTRUCTIONS



*** Objects with base below 2'-4" may protrude any distance as long as the 5' circulation path is maintained. When an object with a base higher than 2'-4" protrudes further than 4" provide a curb below protrusion to delineate edge.

CLEAR CIRCULATION PATH

General configuration of driveway pay limit (See general note 8), varies by option.

GENERAL NOTES FOR ALL DETAILS:

1. Include additional paved or unpaved 2' clearance to vertical faces higher than 5' such as retaining walls, sound walls, fences and buildings.
2. Curb type and sidewalk width as shown on plans or as directed. On sidewalks 8' and wider, provide a longitudinal joint at the midpoint.
3. Install 3" pvc weephole pipes in sidewalks where shown on plans, and allowed by jurisdiction. Place contraction joint over top of pipe.
4. Const. expansion joints at 200' maximum spacing, and at points of tangency. and at ends of each driveway. For monolithic curb & sidewalk, const. expansion joints at 45' maximum spacing.
5. Const. contraction joints at 15' maximum spacing, and at ends of each driveway and ramp.
6. For curb details, see Std. Drgs. RD700 & RD701.
7. Sidewalk details are based on United States Access Board Standards.
8. For driveway details not shown, see Std. Drgs. RD725, RD730, RD735, RD740, RD745 & RD750.

CALC. BOOK NO. N/A

BASELINE REPORT DATE 23-JUL-2012

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS

SIDEWALKS

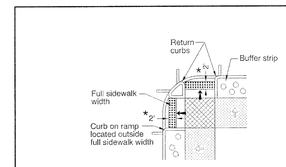
2015

DATE	REVISION DESCRIPTION

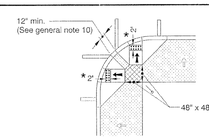
rd720.dgn 14-JUL-2014

RD720

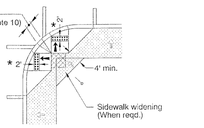
Effective Date: February 1, 2015 - May 31, 2015 RD720



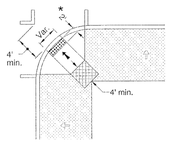
OPTION A
PERPENDICULAR RAMP WITH LANDSCAPED BUFFER STRIP



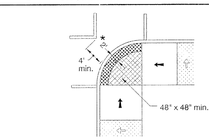
OPTION B
PERPENDICULAR RAMP (FOR WIDE SIDEWALKS)



OPTION C
PERPENDICULAR RAMP (FOR NARROW SIDEWALKS)



OPTION D
DIAGONAL RAMP (FOR WIDE SIDEWALKS)
Use in alterations only and when site constraints prohibit installing two ramps



OPTION E
DIAGONAL-PARALLEL RAMP (FOR SIDEWALK WIDTHS ≥ RADIUS)
Use in alterations only and when site constraints prohibit installing two ramps

Marked or intended crossing location

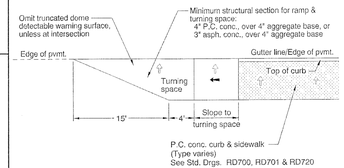
Slope 2% max.

Slope 8.33% (1":12") max. (Ramp length 15' max.)

Truncated dome detectable warning surface

Turning space (Minimum level area 48" x 48") For the purposes of this application, a 2% maximum slope (For drainage) is considered level

★ 2' See general note 5



OPTION F
SIDEWALK RAMP AND TURNING SPACE (FOR ENDS OF SIDEWALKS)

GENERAL NOTES FOR ALL DETAILS:

1. Sidewalk ramp details are based on United States Access Board Standards.
2. See Std. Drgs. RD700 & RD701 for curbs. See Std. Drg. RD720 for sidewalks. See Std. Drgs. TM503 & TM530 for crosswalk markings, widths, etc. See Std. Drg. RD755 for sidewalk ramp details.
3. Tooled joints are required at all sidewalk ramp slope break lines.
4. Sidewalk curb ramp slopes shown are relative to the true level horizon (Zero bubble).
5. Place truncated dome detectable warning surface in the lower 2' adjacent to traffic of throat of ramp only. For details not shown, see Std. Drg. RD759.
6. Side flares that are not part of the path of travel may be any slope. Check the gutter flow depth to assure that the design flood does not overtop the back of sidewalk. If overtopping occurs place an inlet at upstream side or perform other approved design mitigation.
7. Sidewalk flare is not necessary where the ramp is protected from pedestrian cross-travel.
8. For the purpose of this drawing, a curb ramp is considered "perpendicular" if the angle between the longitudinal axis of the ramp and a line tangent to the curb at the ramp center is 75° or greater.
9. Ramps for paths intersecting a roadway should be full width of path, excluding flares. When a ramp is used to provide bicycle access from a roadway to a sidewalk, the ramp should be 8' wide.
10. When 2 curb ramps are immediately adjacent as in Options B & C, the curb exposure (e) between the adjacent side flares may range between 3" and full design exposure.
11. Only use options allowed by jurisdiction.

CALC. BOOK NO. N/A

BASELINE REPORT DATE 08-JUL-2013

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS

SIDEWALK RAMP PLACEMENT OPTIONS CURB RADII ≤ 15'

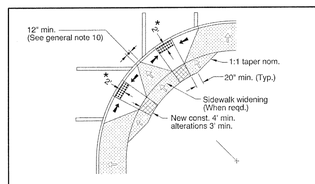
2015

DATE	REVISION DESCRIPTION

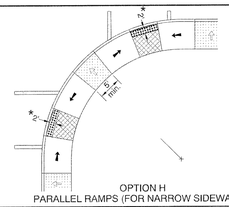
rd756.dgn 14-JUL-2014

RD756

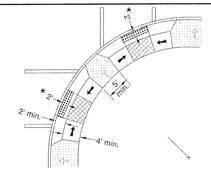
Effective Date: February 1, 2015 - May 31, 2015 RD756



OPTION G
PERPENDICULAR RAMPS (FOR NARROW SIDEWALKS)



OPTION H
PARALLEL RAMPS (FOR NARROW SIDEWALKS)



OPTION I
COMBINATION RAMPS (FOR WIDE SIDEWALKS)

Marked or intended crossing location

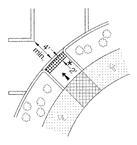
Slope 2% max.

Slope 8.33% (1":12") max. (Ramp length 15' max.)

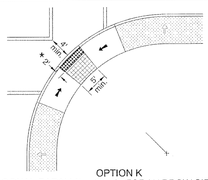
★ 2' See general note 5

Truncated dome detectable warning surface

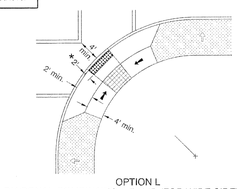
Turning space (Min. level area 48" x 48") For the purposes of this application, a 2% maximum slope (For drainage) is considered level



OPTION J
DIAGONAL RAMP WITH LANDSCAPED BUFFER STRIP
Use in alterations only and when site constraints prohibit installing two ramps



OPTION K
DIAGONAL-PARALLEL RAMP (FOR NARROW SIDEWALKS)
Use in alterations only and when site constraints prohibit installing two ramps



OPTION L
DIAGONAL-COMBINATION RAMP (FOR WIDE SIDEWALKS)
Use in alterations only and when site constraints prohibit installing two ramps

GENERAL NOTES FOR ALL DETAILS:

1. Sidewalk ramp details are based on United States Access Board Standards.
2. See Std. Drgs. RD700 & RD701 for curbs. See Std. Drg. RD720 for sidewalks. See Std. Drgs. TM503 & TM530 for crosswalk markings, widths, etc. See Std. Drg. RD755 for sidewalk ramp details.
3. Tooled joints are required at all sidewalk ramp slope break lines.
4. Sidewalk curb ramp slopes shown are relative to the true level horizon (Zero bubble).
5. Place truncated dome detectable warning surface in the lower 2' adjacent to traffic of throat of ramp only. For details not shown, see Std. Drg. RD759.
6. Side flares that are not part of the path of travel may be any slope. Check the gutter flow depth to assure that the design flood does not overtop the back of sidewalk. If overtopping occurs place an inlet at upstream side or perform other approved design mitigation.
7. Sidewalk flare is not necessary where the ramp is protected from pedestrian cross-travel.
8. For the purpose of this drawing, a curb ramp is considered "perpendicular" if the angle between the longitudinal axis of the ramp and a line tangent to the curb at the ramp center is 75° or greater.
9. Ramps for paths intersecting a roadway should be full width of path, excluding flares. When a ramp is used to provide bicycle access from a roadway to a sidewalk, the ramp should be 8' wide.
10. When 2 curb ramps are immediately adjacent as in Option G, the curb exposure (e) between the adjacent side flares may range between 3" and full design exposure.
11. Only use options allowed by jurisdiction.

CALC. BOOK NO. N/A

BASELINE REPORT DATE 08-JUL-2013

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS

SIDEWALK RAMP PLACEMENT OPTIONS CURB RADII > 15'

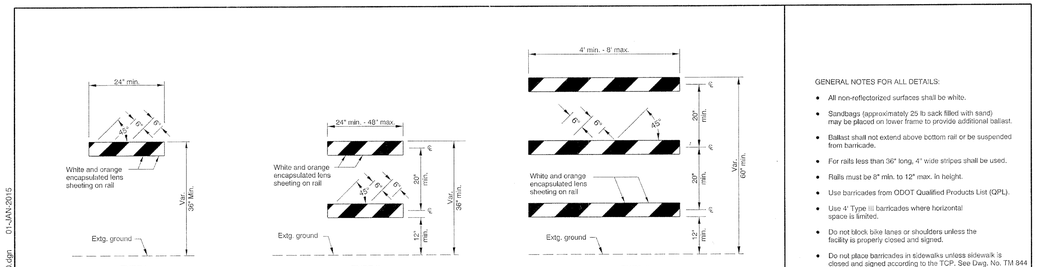
2015

DATE	REVISION DESCRIPTION

rd757.dgn 14-JUL-2014

RD757

Effective Date: February 1, 2015 - May 31, 2015 RD757



BARRICADE RAIL LAYOUT

GENERAL NOTES FOR ALL DETAILS:

- All non-reflectorized surfaces shall be white.
- Sandbags (approximately 25 lb sack filled with sand) may be placed on lower frame to provide additional ballast.
- Ballast shall not extend above bottom rail or be suspended from barricade.
- For rails less than 36" long, 4" wide stripes shall be used.
- Rails must be 8" min. to 12" max. in height.
- Use barricades from ODOT Qualified Products List (QPL).
- Use 4' Type III barricades where horizontal space is limited.
- Do not block bike lanes or shoulders unless the facility is properly closed and signed.
- Do not place barricades in sidewalks unless sidewalk is closed and signed according to the TCP. See Dwg. No. TM 844

NOTES:

- Markings for barricade rails shall slope downward at an angle of 45° in the direction traffic is to pass.
- Where a barricade extends entirely across a roadway, it is desirable that the stripes slope downward in the direction toward which traffic must turn in detouring.
- Where both right and left turns are provided for, slope the chevron striping downward in both directions from the center of the barricade.
- For full roadway closures, the C or LR barricade may be used. Extend barricades completely across roadway unless access is required for local road users.

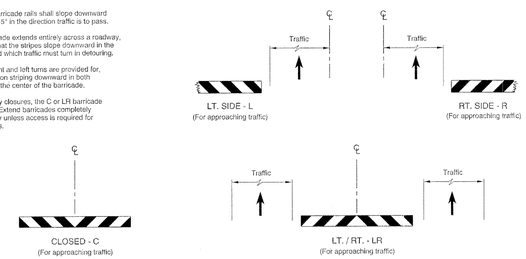


DIAGRAM FOR BARRICADE PLACEMENT AND SLOPE MARKING

BARRICADE NOTATION

CALC. BOOK NO. N/A

BASELINE REPORT DATE 01-JAN-2015

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS

TEMPORARY BARRICADES

2015

DATE	REVISION DESCRIPTION
01-01-2015	REVISED DRAWING AND NOTES

tm820.dgn 01-JAN-2015

TM820

Effective Date: June 1, 2015 - November 30, 2015 TM820

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SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

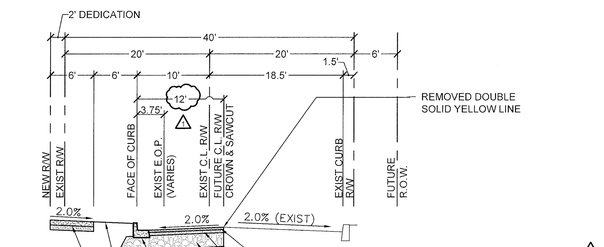
PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
1	21 OCT 2014	CGP
2	06 JAN 2015	CGP
3	23 JAN 2015	CGP
4	25 FEB 2015	CGP
5	16 MAR 2015	CGP

AS-BUILT NOV 18, 2015

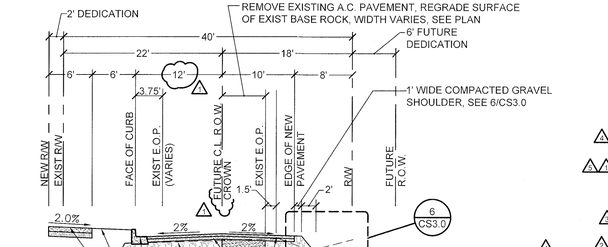
SHEET TITLE
ODOT DETAILS

SHEET # CS2.0G



2 CS2.1 TYP SHADY HOLLOW WAY STREET SECTION, STA 1+59.88 TO STA 3+00

SCALE: HORIZ: 1"=10'-0"
VERT: 1"=5'-0"

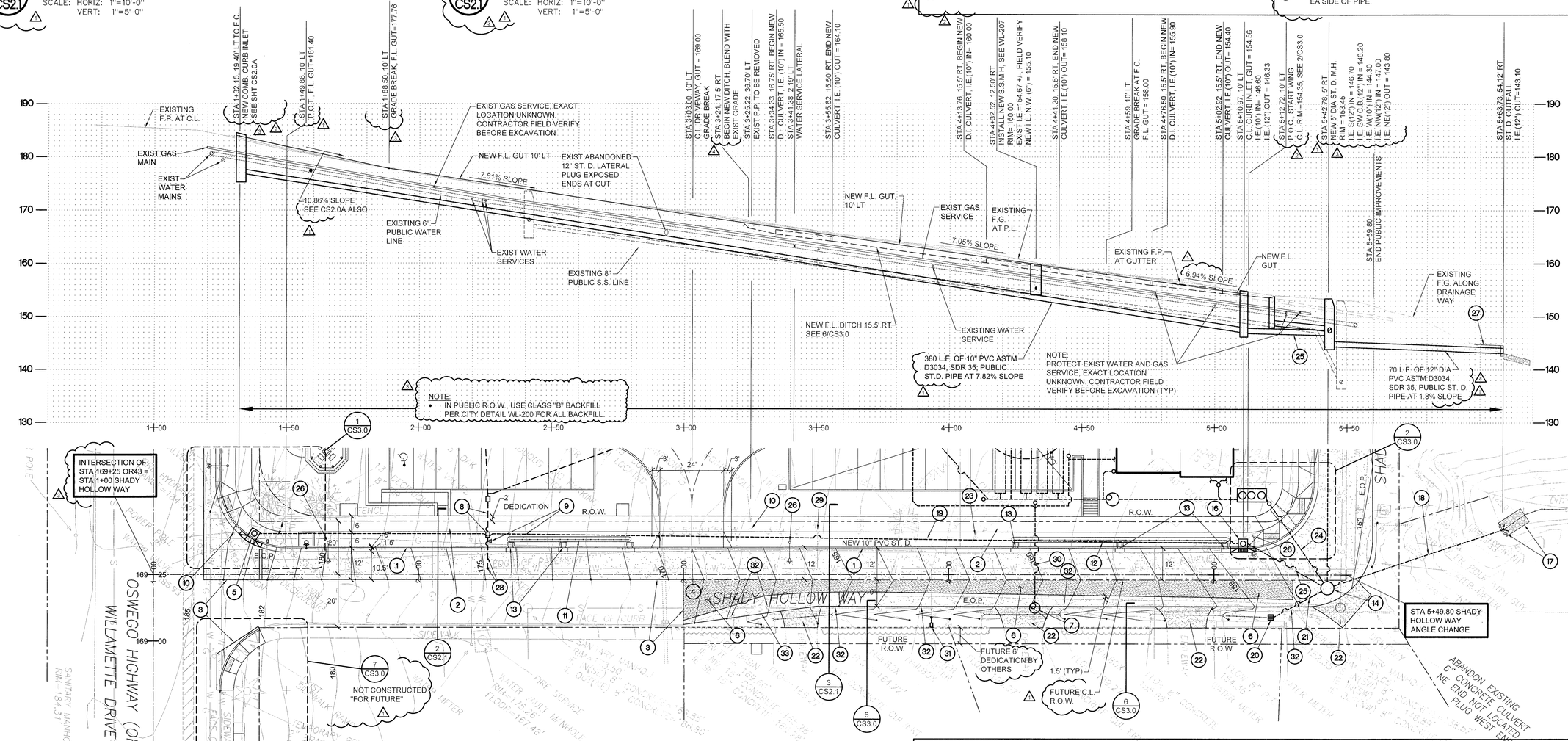


3 CS2.1 TYP SHADY HOLLOW WAY STREET SECTION, STA 3+00 TO STA 5+10.97

SCALE: HORIZ: 1"=10'-0"
VERT: 1"=5'-0"

KEYNOTES FOR THIS SHEET

MARK	DESCRIPTION
1	NEW CURB AND GUTTER, SEE CITY DETAIL WL-501
2	NEW 6' CONCRETE SIDEWALK, SEE CITY DETAIL WL-508 AND WL-511
3	PROVIDE SAWCUT FOR NEW PAVEMENT. REMOVE EXIST PAVEMENT, PROVIDE NEW A.C. PAVEMENT SECTION, SEE CITY DETAIL WL-203 AND 2/CS2.1
4	NEW 24' WIDE COMMERCIAL DRIVEWAY AT STA 2+03.00, SEE CITY STANDARD DETAIL WL-504A
5	NEW CURB INLET AT STA 1+36.96, 13.61' LT, SEE CS2.0A
6	REMOVE EXISTING A.C. PAVEMENT, REGRADE SURFACE OF EXIST BASE ROCK, WIDTH VARIES, SEE PLAN. SEE ALSO 3/CS2.1
7	NEW S.S.M.H. PER CITY DETAIL WL-207, WL-210A AND WL-210B
8	INSTALL 2" WATER METER PER DETAIL WL-403 WITH 2 1/2" COPPER SERVICE PIPE TO PRIVATE DOUBLE CHECK ASSEMBLY. COORDINATE INSTALLATION WITH CITY WATER DEPARTMENT. SEE SD4.3 FOR CONTINUATION ONSITE.
9	RELOCATE EXISTING "NO PARKING" SIGN TO STA 2+27, 12.5' LT, REINSTALL WITH V-LOK BREAK-AWAY SYSTEM AND NEW POST, SEE WL-519
10	REMOVE EXISTING POWER POLE. MOVE ALL EXIST OVERHEAD LINES UNDERGROUND PER PGE PLAN, GENERAL CONTRACTOR COORDINATE AND OBTAIN PERMISSION FROM AFFECTED PROPERTY OWNER.
11	NEW 50 FT LONG (BOTTOM) STORMWATER SWALE, SEE 3/CS3.0 FOR TYPICAL SECTION AND 4/CS3.0 FOR CHECK DAMS.
12	NEW 85 FT LONG (BOTTOM) STORMWATER SWALE, SEE 3/CS3.0 FOR TYPICAL SECTION AND 4/CS3.0 FOR CHECK DAMS.
13	NEW CURB INLET FOR SWALE, SEE DETAIL 5/CS3.0, TYP AT STA 2+34, 2+56, 2+79, 4+25, 4+64 AND 5+03
14	NEW 60" DIA ST. D. M.H., SEE WL-207 AND WL-605
15	NOT USED
16	NEW CURB INLET, RE-ROUTE EXIST GAS MAIN TO PROVIDE 8" CLR. SEE DETAIL WL-601
17	INSTALL NEW HEAD WALL PER WL-613 AND 15" THK x 6' x 10' ROCK PAD OF 18" - 9" ANGULAR ROCK RIP-RAP OVER GEOTEXTILE FABRIC PER WL-614. TOP OF FINISH ROCK PAD TO MATCH EXIST FINISH GROUND OF DRAINAGE WAY. REMOVE TOPSOIL SPOILS. I.E.(12") OUTFALL = 143.00 (MATCH EXIST FINISH GROUND AT OUTFALL)
18	70 L.F. OF 12" DIA PVC ST. D. PIPE AT 1.9%, OUTFALL INTO EXIST NATURAL DRAINAGE WAY
19	REMOVE EXIST CONCRETE CULVERT
20	NEW PRECAST CONC DITCH INLET STRUCTURE, SEE DETAIL WL-603, STA 5+21, 16' RT LOW RIM = 153.90 (SW) I.E. (12") OUT = 148.30 (N)
21	21 L.F. OF 12" DIA PVC ST. D. PIPE AT 4.5% SLOPE, STA 5+21, 16' RT
22	REMOVE EXIST ASPHALT APPROACH APRON TO R.O.W. AND PROVIDE NEW 3" THK A.C. PAVEMENT APPROACH FROM EDGE OF NEW PAVING TO FLUSH WITH EXIST FINISH DRIVEWAY TO REMAIN. PROVIDE 8" MIN THK OF COMPACTED CRUSHED ROCK BASE BELOW NEW DRIVEWAY APPROACH PAVEMENT.
23	REMOVE EXIST ADDRESS POST
24	40 L.F. OF 10" DIA PVC ASTM D3034, SDR 35, ST. D. PIPE AT 14.4% SLOPE
25	33 L.F. OF 12" DIA PVC ASTM D3034, SDR 35 ST. D. PIPE AT 1.2% SLOPE
26	INSTALL STREET LIGHT POLE AND LUMINAIRE ALONG SHADY HOLLOW WAY, SEE PGE ILLUMINATION PLAN. INSTALL PER PGE REQUIREMENTS (STA 1+66, 12' LT; STA 3+40, 12' LT; STA 5+15, 14.63' LT)
27	PLACE AND COMPACT 9" MIN THK OF TOPSOIL OVER PIPE. PROVIDE 4:1 SIDE SLOPE EA SIDE OF PIPE.



KEYNOTES FOR THIS SHEET (CONT)

MARK	DESCRIPTION
28	INSTALL 2 1/2" COPPER WATER SERVICE PIPE WITH 2 1/2" GATE VALVE AND PIPE SIM TO CITY DETAIL WL-403 AT STA 2+26.15, 2' LT. INSTALL 2 1/2" COPPER PIPE TO METER.COORDINATE INSTALLATION WITH CITY WATER DEPT.
29	EXISTING WATER SERVICE AND METER TO REMAIN FOR PRIVATE IRRIGATION. RELOCATE METER TO PLANTER STRIP, COORDINATE WITH WATER DEPARTMENT.
30	NEW 6" DIA PVC SANITARY SEWER LATERAL AT 2.0% SLOPE, CONNECT TO NEW S.S.M.H., SEE WL-207 FOR S.S.M.H. AND ONSITE DWGS FOR CONT. APPROX EXIST S.S. I.E. = 153.40
31	RELOCATE EXIST. RESIDENTIAL WATER METER 2.5' SOUTH, SIM WL-402, COORDINATE WITH WATER DEPARTMENT.
32	RELOCATE EXIST MAILBOXES AND REFLECTOR POSTS TO 1' BEYOND NEW E.O.P. (TYPICAL)
33	50' LONG WIDTH TRANSITION AT EDGE OF NEW PAVEMENT

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

N

1 CS2.1 SHADY HOLLOW WAY STREET - PLAN + PROFILE

HORIZONTAL SCALE: 1"=20'-0"
VERTICAL SCALE: 1"=10'-0"

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SHADY HOLLOW VILLAGE

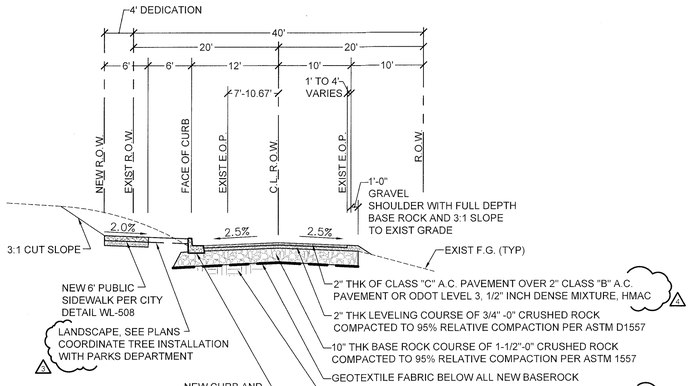
SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

PROJECT NUMBER:	1335	
DRAWING	DATE	BY
DESIGN	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV	12 MAR 2014	SGS
PERMIT	22 AUG 2014	SGS
PLAN CHECKS	21 OCT 2014	CGP
	06 JAN 2015	CGP
	23 JAN 2015	CGP
	25 FEB 2015	CGP
	16 MAR 2015	CGP

AS-BUILT DEC. 16, 2015

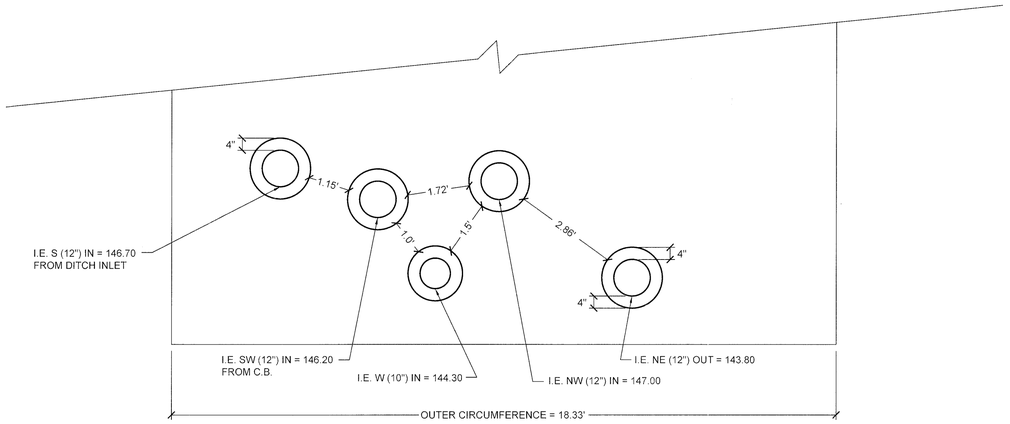
SHEET TITLE
SHADY HOLLOW IMPROVEMENTS

SHEET #
CS2.1



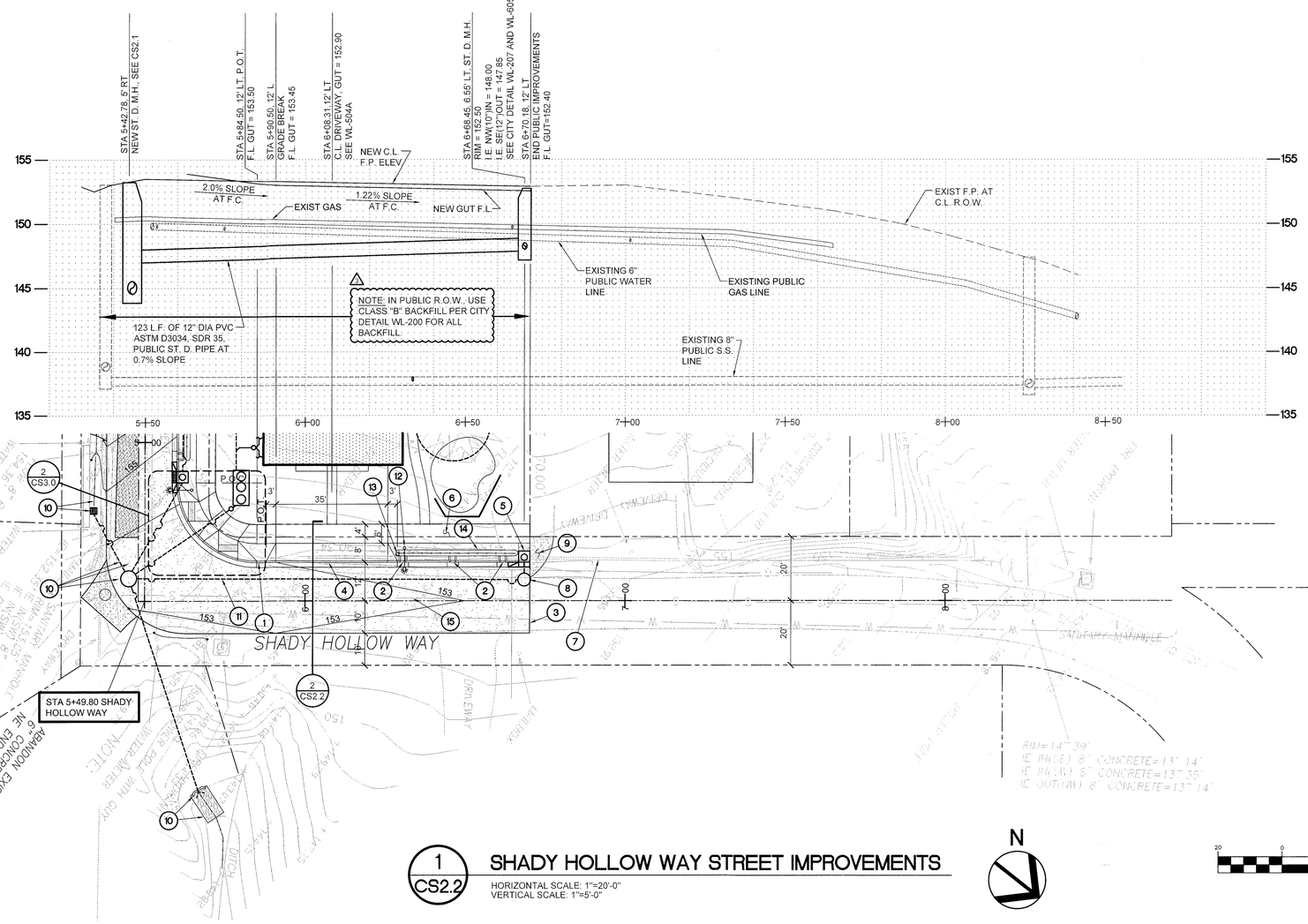
2 CS2.2 TYP SHADY HOLLOW WAY STREET SECTION, STA 5+49.80 TO STA 6+70.18

SCALE: HORIZ: 1"=10'-0"
VERT: 1"=5'-0"



3 CS2.2 SHADY HOLLOW 60" ST. D. M.H. AT STA 5+42.78, 5' RT

SCALE: 1/2"=1'-0"



1 CS2.2 SHADY HOLLOW WAY STREET IMPROVEMENTS

HORIZONTAL SCALE: 1"=20'-0"
VERTICAL SCALE: 1"=5'-0"

N

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

KEYNOTES FOR THIS SHEET

MARK	DESCRIPTION
1	NEW CURB AND GUTTER, SEE DETAIL WL-501 AND 2/CS2.2
2	CURB INLET AT SWALES, SEE 5/CS3.0 (TYP), AT STA 6+32.00, STA 6+47.00 AND STA 6+61.00
3	PROVIDE SAWCUT FOR NEW PAVEMENT AND REMOVE EXISTING PAVEMENT. PROVIDE NEW A.C. PAVEMENT SECTION PER 2/CS2.2, SEE ALSO CITY DETAIL WL-203.
4	NEW 35' WIDE COMMERCIAL DRIVEWAY AT STA 6+08.31, SEE CITY STANDARD DETAIL WL-504A
5	NEW CURB INLET AT STA 6+68.45, SEE DETAIL WL-600, C.L. RIM = 152.40 I.E.(10") OUT = 148.60
6	NEW 6' CONCRETE SIDEWALK, SEE CITY DETAIL WL-508 AND WL-511
7	ABANDON IN PLACE EXIST 8" CONCRETE CULVERT
8	NEW ST. D. M.H., SEE WL-207 AND WL-605 FOR DETAIL
9	INSTALL 2 1/2" THICK A.C. PAVEMENT CONNECTION PATH OVER 8" MIN. THICK OF 3/4" - 0" COMPACTED BASE ROCK OVER GEOTEXTILE FABRIC AT SUBGRADE. PROVIDE HOT ASPHALT SEAL AND SANDED FINISH OVER JOINT TO NEW AND EXIST A.C. EDGES.
10	SEE SHT CS2.1 FOR NEW ST. D. IMPROVEMENTS AT INTERSECTION.
11	123 L.F. OF 12" DIA PVC ASTM 3034, SDR 35, ST. D. PIPE AT 0.7% SLOPE
12	INSTALL STREET LIGHT POLE AND LUMINAIRE ALONG SHADY HOLLOW DRIVE PER PGE REQUIREMENTS, SEE ILLUMINATION PLAN. (STA 6+31, 16.5' LT)
13	INSTALL 30" x 30" YELLOW RIGHT TURN ARROW SIGN WITH V-LOK BREAK-AWAY SYSTEM SIM TO MUTCD SIGN W1-1R AND W13-1 AT STA 6+28.80, 14.5' LT. SEE WL-519 FOR V-LOK DETAIL.
14	NEW 37 FT LONG (BOTTOM) STORMWATER SWALE, SEE 3/CS3.0 FOR TYPICAL SECTION AND 4/CS3.0 FOR CHECK DAMS.
15	NEW 6" DIA PVC SCHEDULE 40 S.S. LATERAL, CONNECT TO EXISTING 8" CONCRETE SANITARY LINE, SEE DETAIL WL-218, SCHEME 1 AND ONSITE DRAWINGS FOR CONTINUATION. APPROX I.E. (6") IN = 137.62

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SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE IMPROVEMENT
WEST LINN, OREGON

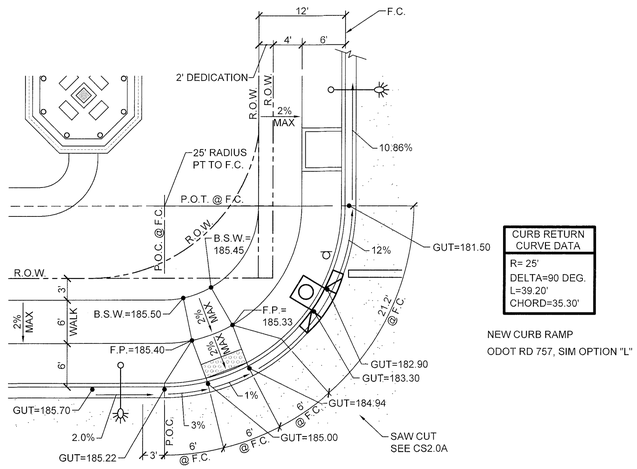
AS-BUILT DEC 16, 2015

PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
1	21 OCT 2014	CGP
2	06 JAN 2015	CGP
3	23 JAN 2015	CGP
4	25 FEB 2015	CGP
5	16 MAR 2015	CGP

SHEET TITLE
SHADY HOLLOW IMPROVEMENTS

SHEET #
CS2.2



CURB RETURN CURVE DATA

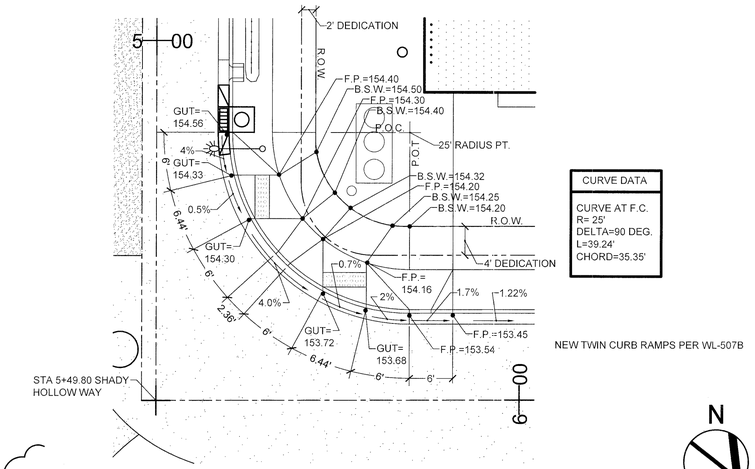
R= 25'
DELTA=90 DEG.
L=39.20'
CHORD=35.30'

NEW CURB RAMP
ODOT RD 757, SIM OPTION "L"

N

1 CS3.0 OR43 AND SHADY HOLLOW WAY CURB RETURN AND RAMP (N.E. CORNER)

1" = 10'-0"



CURVE DATA

CURVE AT F.C.
R= 25'
DELTA=90 DEG.
L=39.24'
CHORD=35.35'

NEW TWIN CURB RAMPS PER WL-507B

N

2 CS3.0 SHADY HOLLOW WAY CURB RAMP

1" = 10'-0"

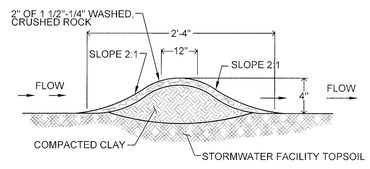
NOTE:
THE SOIL MIX SHALL CONSIST OF 67% SANDY LOAM TOPSOIL AND 33% COMPOST MATERIAL BY VOLUME. TOPSOIL MIX SHALL BE A SANDY LOAM AS DEFINED BY THE ASTM SOIL TEXTURE CLASSIFICATION. SOIL CLASSIFICATION AND OTHER SPECIFICATIONS MUST BE EVALUATED AND REPORTED BY AN ACCREDITED SOILS TESTING LABORATORY AND APPROVED BY THE ENGINEER PRIOR TO DELIVERY OF TOPSOIL TO PROJECT SITE. CONTRACTOR SUBMIT TOPSOIL EVALUATION REPORTS FOR REVIEW.

3 CS3.0 TYPICAL STREET SWALE SECTION

1/2" = 1'-0"

SWALE GRASS SEED PLANTING	
HORDEUM BRACHYANTHERUM (MEADOW BARLEY)	25%
ELYMUS GLAUCUS (BLUE WILD RYE)	25%
BROMUS CARINATUS (CALIFORNIA BROME)	10%
FESTUCA ROMERII (ROEMER'S FESCUE)	10%
DESCHAMPSIA CESPITOSA (TUFTED HAIRGRASS)	10%
AGROSTIS EXARATA (SPIKE BENTGRASS)	10%
ALOPECURUS GENICULATUA (WATER FOXTAIL)	5%
DESCHAMPSIA ELONGATA (SLENDER HAIRGRASS)	5%

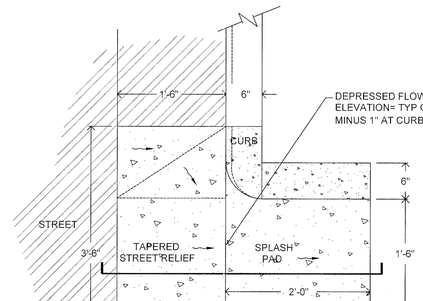
PLANT AT 10 LBS/1,000 S.F.



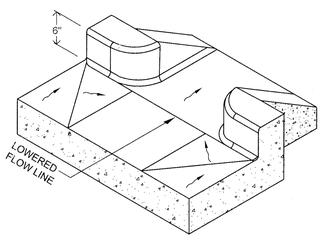
NOTE: CHECK DAMS ARE REQUIRED IN SWALES TO ALLOW WATER TO POOL AND INFILTRATE INTO THE GROUND. THEY SHALL BE CONSTRUCTED OF DURABLE, NON-TOXIC MATERIALS SUCH AS ROCK AND SOIL BY INTEGRATING THESE MATERIALS INTO THE GRADING OF THE SWALE. CHECK DAMS ARE AS LONG AS THE WIDTH OF THE SWALE, PERPENDICULAR TO FLOW LINE. THEY GENERALLY FORM A 12 INCH WIDE BENCH ON TOP AND MEASURE 4 TO 10 INCHES HIGH, DEPENDING ON THE DEPTH OF THE FACILITY. SPACING OF CHECK DAMS IS 12 FT O.C.

4 CS3.0 SWALE CHECK DAM DETAIL

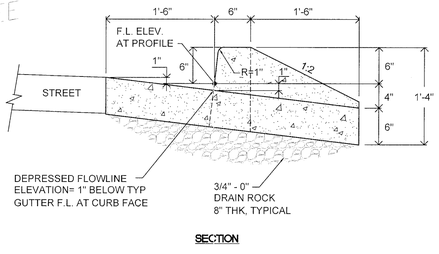
N.T.S.



FLAN



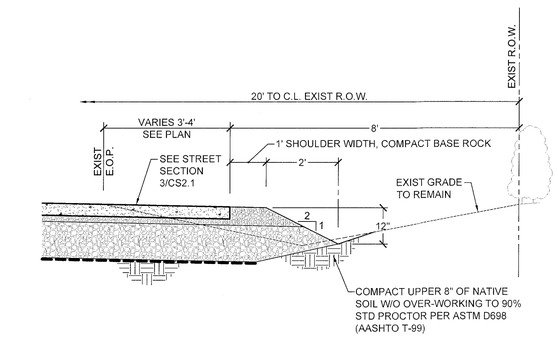
ISOMETRIC



SECTION

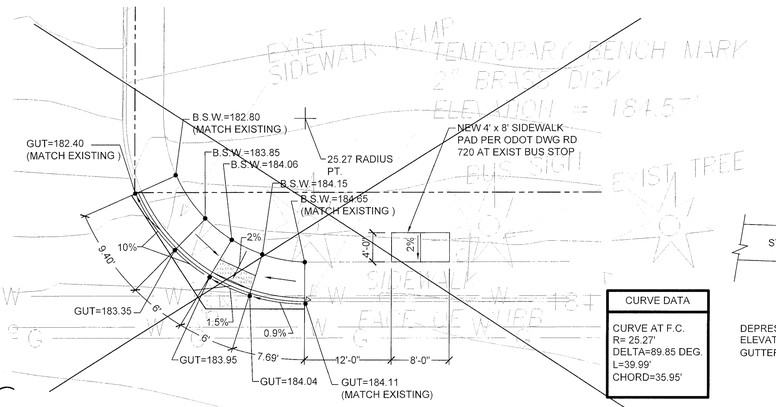
5 CS3.0 CURB INLET AT SWALES

1" = 1'-0"



6 CS3.0 TYPICAL STREET DITCH SECTION

1/2" = 1'-0"



CURVE DATA

CURVE AT F.C.
R= 25.27'
DELTA=89.85 DEG.
L=39.99'
CHORD=35.95'

7 CS3.0 BURGERVILLE CURB RAMP - ODOT STD DWG RD 757, OPTION K (SE CORNER OF OR43 AND SHADY HOLLOW WAY)

1" = 10'-0"

NOT CONSTRUCTED
"FOR FUTURE"

N

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SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

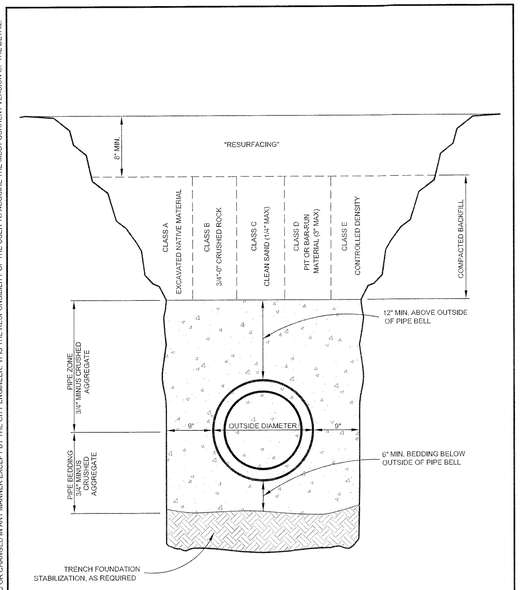
PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
1	21 OCT 2014	CGP
2	06 JAN 2015	CGP
3	23 JAN 2015	CGP
4	25 FEB 2015	CGP
5	16 MAR 2015	CGP

AS-BUILT DEC 16, 2015

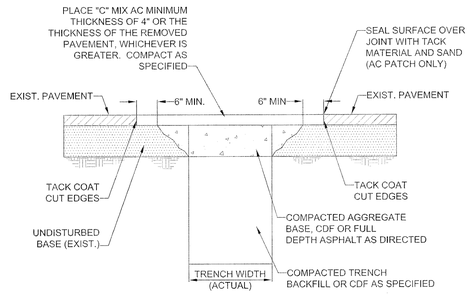
SHEET TITLE
WDY SECTION DETAILS

SHEET # CS3.0



TRENCH BACKFILL BEDDING AND PIPE ZONE

DATE:	2010
DRAWING NO.	WL-200
FILE NO.	

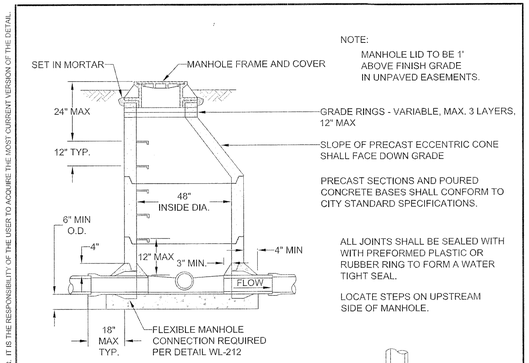


NOTE:

1. ALL EXISTING AC OR PCC PAVEMENT SHALL BE SAWCUT TO NEAT, STRAIGHT LINES PRIOR TO REPAVING.
2. CONCRETE PAVEMENT SHALL BE REPLACED WITH CONCRETE TO A MINIMUM THICKNESS OF REMOVED PAVEMENT, WHICHEVER IS GREATER.
3. IF EXISTING BASE MATERIAL IS CTB OR ATB, THEN REPLACEMENT BASE MATERIAL SHALL MATCH EXISTING.
4. ALL UTILITIES SHALL HAVE A MINIMUM COVER OF 36".
5. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY PER AASHTO T-180 OR AS SPECIFIED IN THE CONTRACT DOCUMENTS.
6. ALL TRENCH BACKFILL AND PATCHING SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF WEST LINN.
7. APPROVED CDF SHALL BE USED OR 3/4 - 0" GRAVEL BACKFILL SHALL BE PLACED AND COMPACTED IN 12" MAXIMUM LIFTS. IF 3/4-0" GRAVEL BACKFILL IS USED, COMPACTION TESTING BY A CERTIFIED TESTING COMPANY IS REQUIRED AT DEPTH INTERVALS AS SPECIFIED BY THE CITY ENGINEER.
8. T-CUT MAY BE ENLARGED AT THE DISCRETION OF THE CITY ENGINEER OR CITY INSPECTOR DUE TO SITE CONDITIONS OR PROJECT REQUIREMENTS.
9. ALL CUT EDGES SHALL BE SAND SEALED.
10. COMPACTED BACKFILL OR CDF MUST EXTEND 2 FEET OUTSIDE OF PAVEMENT SURFACE.

STREET T-CUT

DATE:	2010
DRAWING NO.	WL-203
FILE NO.	



NOTE:
MANHOLE LID TO BE 1" ABOVE FINISH GRADE IN UNPAVED EASEMENTS.

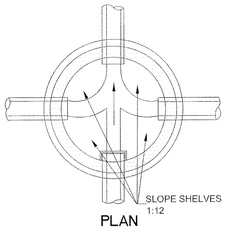
PRECAST SECTIONS AND POURED CONCRETE BASES SHALL CONFORM TO CITY STANDARD SPECIFICATIONS.

ALL JOINTS SHALL BE SEALED WITH WITH PREFORMED PLASTIC OR RUBBER RING TO FORM A WATER TIGHT SEAL.

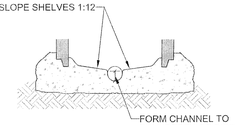
LOCATE STEPS ON UPSTREAM SIDE OF MANHOLE.

NOTE:
POLYETHYLENE STEPS/IRON REINFORCEMENT 6" x 12" WIDE, 2" DROP, EMBEDDED 3", ON 12" CENTERS (TYPICAL)

MANHOLES SHALL HAVE A 12" MIN. 24" MAX. BOTTOM RISER, TO BE BEDDED IN THE CONCRETE AS THE BASE TAKES ITS INITIAL SET.



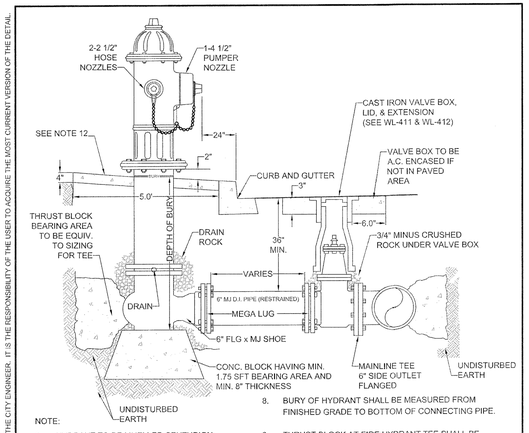
PLAN



NOTE:
CHANNELS MUST BE ABLE TO PASS A 7"X30" CYLINDER INTO PIPES. SHELF SHALL NOT BE BELOW THE TOP OF THE PIPE.

STANDARD MANHOLE FOR LESS THAN 36" PIPE

DATE:	2010
DRAWING NO.	WL-207
FILE NO.	

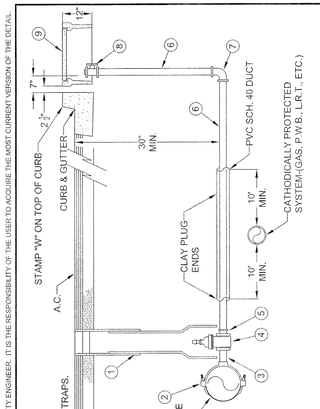


NOTE:

1. HYDRANT TO BE MUELLER CENTURION MDL A-423 ONLY WITH 1 1/2" OPER. NUTS OR CLOW MEDALLION F-2545.
2. HYDRANT COLOR TO BE MILLER EQUIP. ENAMEL 0 E 40 (SAFETY YELLOW).
3. JOINTS TO BE RESTRAINED BY 3/4" DIA. GALVANIZED STEEL RODS AND THRUST BLOCKS OR MEGALUGS AND THRUST BLOCKS.
4. ALL FITTINGS IN CONTACT W/CONCRETE SHALL BE WRAPPED IN PLASTIC, HYDRANT DRAIN HOLES TO REMAIN OPEN TO DRAIN ROCK AND OPERATIONAL.
5. MIN. 4 CFT OF 1 1/2" - 3/4" CLEAN DRAIN ROCK SHALL BE PLACED AROUND SHOE UP TO A MIN. OF 6" ABOVE DRAIN OUTLETS.
6. WHERE PLANTER STRIP EXISTS, HYDRANT SHALL BE PLACED SO THE FRONT PORT IS A MINIMUM OF 24" BEHIND THE FACE OF THE CURB.
7. WHERE INTEGRAL S/W & CURB EXISTS, HYDRANT SHALL BE PLACED AT BACK OF THE SIDEWALK, OR AS DIRECTED BY ENGINEER.
8. BURY OF HYDRANT SHALL BE MEASURED FROM FINISHED GRADE TO BOTTOM OF CONNECTING PIPE.
9. THRUST BLOCK AT FIRE HYDRANT TEE SHALL BE EQUIVALENT TO TEE PIPE SIZING (SEE WL-406).
10. HYDRANT VALVE SHALL BE MUELLER RESILIENT WEDGE GATE VALVE #A-2360-16 ONLY.
11. NO EXTENSIONS ALLOWED
12. HYDRANT SHALL HAVE A 5' x5' x 4" THICK CONCRETE APRON. THERE SHALL BE 2" OF CLEARANCE BETWEEN THE TOP OF THE APRON AND THE BOTTOM OF THE FLANGED BOLT PATTERN OF THE HYDRANT.
13. CONCRETE SHALL BE COMMERCIALLY MIXED WITH A BREAKING STRENGTH OF NOT LESS THAN 3000 PSI.

STANDARD FIRE HYDRANT ASSEMBLY

DATE:	2010
DRAWING NO.	WL-401
FILE NO.	



MATERIAL:

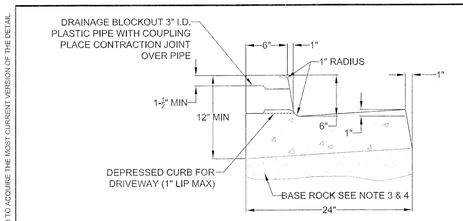
1. CAST IRON VALVE BOX AND LID (SEE STANDARD DETAIL WL-411).
2. PIPE O.D. x 2" TEE OR ROCKWELL NO. 317 SERVICE SADDLE WITH STRAPS.
3. 2" x 6" BRASS I.P. T. NIPPLE. 6" LENGTH MAY BE REDUCED IF NEEDED TO ACCOMMODATE CERTAIN TAPPING MACHINES.
4. 2" I.P. T. x I.P.T. GATE VALVE WITH RESILIENT WEDGE.
5. 2" x 3" I.P.T. x MUELLER 110 COMP. COUPLING.
6. 2" ASTM B-88 TYPE "K" COPPER TUBING. SOFT TEMPER WITH FLARE FITTING WILL NOT BE APPROVED.
7. 2" 90° ELL. MUELLER 110 CTS COMPRESSION.
8. 1 1/2" - 2" ANGLE METER STOP, MUELLER NO. 14276 OR 14277, FORD NO. FV23-777W.
9. BROOKS METER BOX, BODY NO. 65 (2"), LID & COVER NO. 65-S (2").

NOTE:

1. MACHINE DRILLED AND TAPPED ONLY. NO HAND DRILLING IS ALLOWED.
2. SUBSTITUTES FOR ANY MATERIALS SHOWN SHALL BE APPROVED BY THE CITY ENGINEER.
3. ALL PIPE AND STRUCTURE ZONE SHALL BE BACKFILLED USING 3/4" MINUS CRUSHED AGG. AND COMPACTED TO 95% MAX DENSITY AS DETERMINED BY AASHTO T-180.
4. WHEN AN ACTIVE CATHODIC PROTECTED SYSTEM IS ENCOUNTERED, SCH. 40 PVC SHALL BE INSTALLED AS SHOWN ABOVE WITH CLAY PLUG.
5. METER BOX SHALL BE CENTERED OVER THE COMPLETED METER AND FITTING ASSEMBLY.
6. CUSTOMER SHALL INSTALL AN APPROVED BACKFLOW PREVENTION DEVICE.
7. METER BOXES IN CURB TIGHT SIDEWALK AND THOSE SUBJECT TO INCIDENTAL AUTO TRAFFIC MUST HAVE METAL LIDS AND BE TRAFFIC RATED.

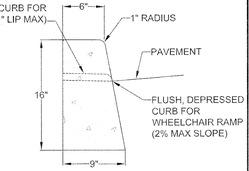
STANDARD 1 1/2" - 2" WATER SERVICE

DATE:	2010
DRAWING NO.	WL-403
FILE NO.	



FLUSH, DEPRESSED CURB FOR WHEELCHAIR RAMP 2% MAX SLOPE

TYPICAL CURB AND GUTTER



TYPICAL STRAIGHT CURB

NOTE:

1. CONCRETE SHALL HAVE A BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS
2. CONTRACTION JOINTS:
   A) TO BE PROVIDED:
      -AT EACH POINT OF TANGENCY
      -AT EACH COLD JOINT
      -AT EACH SIDE OF INLET STRUCTURES
      -AT BOTH SIDES OF AN APPROACH
   B) SPACING TO BE NOT MORE THAN 15 FEET
   C) THE DEPTH OF THE JOINT SHALL BE AT LEAST 1/3 OF THE THICKNESS OF CONCRETE
   D) EXPANSION JOINTS SHALL NOT BE USED
3. BASE ROCK - 1-1/2"-0", 95% COMPACTION PER AASHTO T-180 ROCK SHALL BE TO SUBGRADE OF THE STREET SECTION OR 4" IN DEPTH, WHICHEVER IS GREATER
4. FULL DEPTH PREPARED ROCK SECTION SHALL EXTEND 1' HORIZONTALLY BEYOND BOTH SIDES OF CURB AND GUTTER
5. DRAINAGE BLOCK - 3" DIA. PLASTIC PIPE
   A) DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE DONE BY:
      -CORE DRILLING
      -VERTICAL SAWCUT OF CURB 24" EACH SIDE OF DRAIN AND RE-POURED TO FULL DEPTH OF CURB
6. STAMP TOP OF CURB WITH "W" AT WATER SERVICE CROSSING AND "S" AT SANITARY LATERAL CROSSING

TYPICAL CURBS

DATE:	2010
DRAWING NO.	WL-501
FILE NO.	

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Structural · Civil Engineers
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THESE RECORD DOCUMENTS HAVE BEEN PREPARED BASED ON INFORMATION COLLECTED IN THE FIELD BY WDY AND ALSO INFORMATION PROVIDED BY THE GENERAL CONTRACTOR. WDY HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF ALL INFORMATION PROVIDED BY THE GENERAL CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HEREIN AS A RESULT.

SHADY HOLLOW VILLAGE

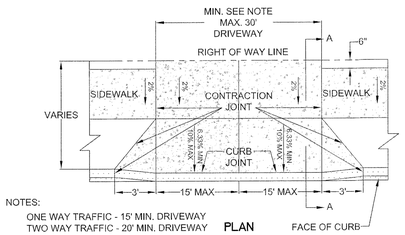
SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

AS-BUILT DEC 16, 2015

PROJECT NUMBER: 1335		
DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
1	21 OCT 2014	CGP
2	06 JAN 2015	CGP
3	23 JAN 2015	CGP
4	25 FEB 2015	CGP
5	16 MAR 2015	CGP

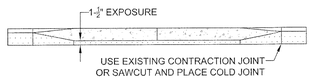
SHEET TITLE
CIVIL DETAILS

SHEET #
CS3.1

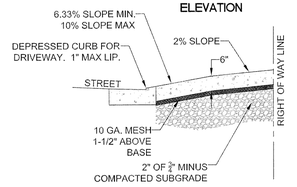


NOTES:
ONE WAY TRAFFIC - 15' MIN. DRIVEWAY
TWO WAY TRAFFIC - 20' MIN. DRIVEWAY

PLAN



ELEVATION



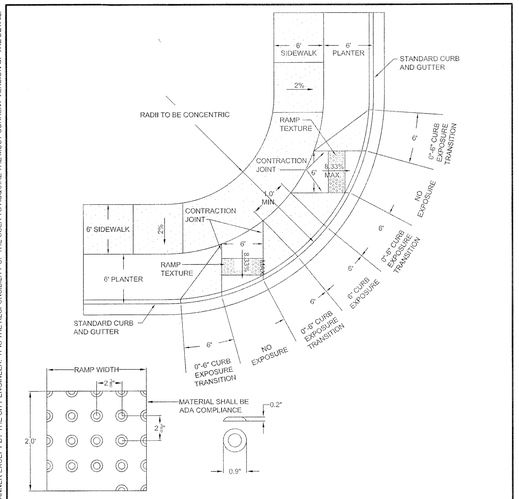
SECTION A-A

NOTE:
1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 4000 PSI AFTER 28 DAYS, 6 SACK MIX
2. CURB JOINT SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS ALONG BACK OF CURB
3. DRIVEWAY SHALL BE A MINIMUM 6" THICK
4. DRIVEWAY CURB CUT SHALL COMPLY WITH THE CONDITIONS OF 5.0070, "WIDTH AND LOCATION OF CURB CUTS"

COMMERCIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB

City of West Linn

DATE:	2010
DRAWING NO.	WL-504A
FILE NO.	



RAMP TEXTURE PATTERN DETAIL

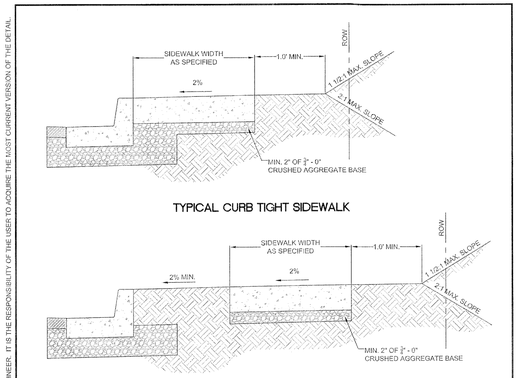
TRUNCATED DOME DETAIL

NOTE:
1. LANDING AT TOP OF RAMP SHALL NOT EXCEED 2% IN ANY DIRECTION AND SHALL BE A MINIMUM OF 60" x 60".
2. RAMP CROSS SLOPE SHALL NOT EXCEED 2% (AS MEASURED PERPENDICULAR TO PEDESTRIAN TRAFFIC FLOW).
3. TRUNCATED DOME MUST EXTEND THE FULL WIDTH OF THE RAMP AND COVER THE FIRST 2 FEET OF THE RAMP CLOSEST TO THE STREET.
4. TRANSITIONS FROM THE RAMP TO THE WALKWAY, GUTTER, AND STREET MUST BE FLUSH (LEVEL) AND FREE OF ABRUPT LEVEL CHANGES.
5. THE GUTTER OR ADJACENT ROADWAY MUST HAVE A SLOPE OF NO MORE THAN 5 PERCENT (1:20) TOWARD THE RAMP.
6. FLARED SIDES ("WING") OF THE CURB RAMP SHALL NOT EXCEED 10% IN SLOPE (8.33% IF PEDESTRIAN TRAVEL IS REQUIRED OVER THEM PER ADA STANDARDS - I.E. IF MINIMUM 48" x 48" (FOR EXISTING SITES ONLY) LANDING IS NOT PROVIDED AT TOP OF RAMP).
7. CONCRETE STRENGTH SHALL BE 3300 PSI.
8. PLACE CONTRACTION JOINTS AS SHOWN ABOVE.
9. NO ABOVE GROUND UTILITIES ARE PERMITTED WITHIN RAMP AREA.
10. WHEN EITHER OPPOSING CURB RAMP HAS AN EXISTING TWIN RAMP, USE DETAIL WL-507B.

TWIN CURB RAMP

City of West Linn

DATE:	2010
DRAWING NO.	WL-507B
FILE NO.	



TYPICAL CURB TIGHT SIDEWALK

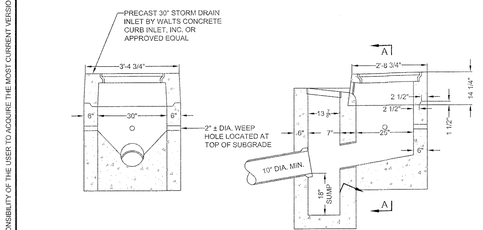
SIDEWALK AWAY FROM CURB

NOTE:
1. CONCRETE SHALL BE 3300 PSI AT 28 DAYS.
2. PANEL LENGTHS SHALL BE EQUAL TO THE SIDEWALK WIDTH, BUT MAY BE ADJUSTED WITH THE CITY ENGINEER'S APPROVAL.
3. CONTRACTION JOINTS (1/3RD OF THE THICKNESS OF CONCRETE) SHALL BE PLACED EVERY THIRD PANEL, WITH A MAX. SPACING OF 15 FEET. JOINTS SHALL ALSO BE PLACED AT THE SIDES OF DRIVEWAY APPROACHES, UTILITY VAULTS, AND WHEELCHAIR RAMPS.
4. A CURING COMPOUND SHALL BE USED. WHITE REFLECTIVE SHEETING SHALL BE USED IN CASE OF RAIN.
5. 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 MIN. 1/2" RADIUS.
6. THE SIDEWALK SHALL HAVE A MIN. THICKNESS OF 6" IF THE SIDEWALK IS INTENDED AS A PORTION OF THE THE DRIVEWAY. OTHERWISE, THE SIDEWALK SHALL HAVE A MIN. THICKNESS OF 4".
7. DRAIN BLOCKOUTS IN THE CURB SHALL BE EXTENDED TO THE BACK OF THE SIDEWALK WITH A 3" DIAMETER PLASTIC PIPE AT A 2% SLOPE. A CONTRACTION JOINT SHALL BE PLACED OVER THE PIPE.

CONCRETE SIDEWALK CROSS SECTION

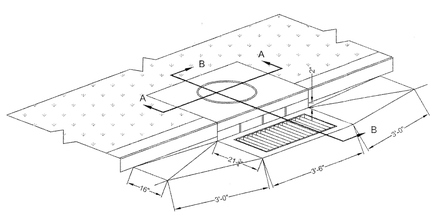
City of West Linn

DATE:	2010
DRAWING NO.	WL-508
FILE NO.	



SECTION A-A

SECTION B-B

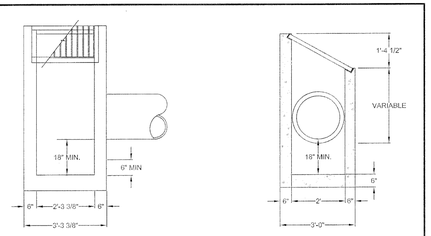


NOTE:
1. CAST IN PLACE CONCRETE TO BE 3300 PSI AND WEEP HOLE WITH GALVINIZED MESH. SCREEN ON MIN. 3 SIDES OF INLET.
2. MANHOLE RIMS AND COVERS AS MANUFACTURED BY HERN IRON WORKS, COEUR D' ALENE, IDAHO. COVER PATTERN NO. 2312, RIM PATTERN NO. 2311 OR APPROVED EQUAL.

COMBINATION CURB INLET

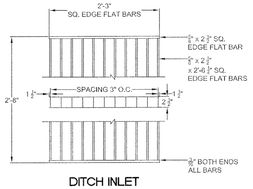
City of West Linn

DATE:	2010
DRAWING NO.	WL-601
FILE NO.	

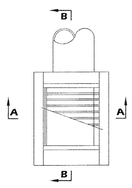


SECTION B-B

SECTION A-A

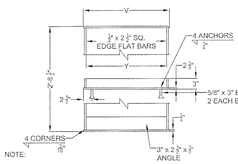


DITCH INLET



PLAN

NOTE:
1. CONCRETE STRENGTH SHALL BE 3300 PSI.
2. CATCH BASIN, FRAME, AND GRATES SHALL MEET H2O LOADING.
3. INSIDE FRAME DIMENSIONS: 2'-3 3/8", 2'-8 1/2".



NOTE:
3/8" CROSS BARS SHALL BE FLUSH WITH THE GRATE SURFACE AND MAY BE FILLET WELDED, RESISTANCE WELDED OR ELECTROFORGED TO BEARING BARS.

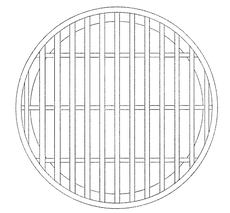
DITCH INLET FRAME

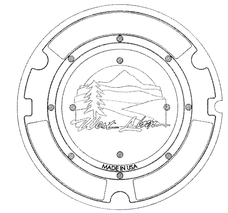
INLET TYPE	V	Y	Y1	NO. OF BARS	TYPE
D	2'-4 3/4"	2'-3 3/8"	2'-3"	9	1

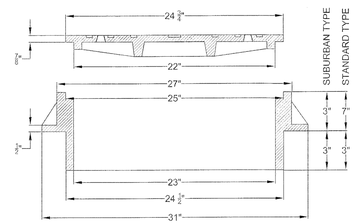
STANDARD DITCH INLET

City of West Linn

DATE:	2010
DRAWING NO.	WL-603
FILE NO.	







NOTE:
1. USE SUBURBAN TYPE ONLY IN NON-TRAFFIC AREAS, AND ONLY WITH APPROVAL BY THE CITY.
2. COVER AND FRAME SHALL BE GRAY CAST IRON ASTM A-48 CLASS 30.
3. COVER AND FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
4. NOTCH LID FOR LIFTING HOOK.
5. OPEN GRATES REQUIRE APPROVAL BY CITY, AND MUST BE BICYCLE SAFE IF USED IN TRAFFIC AREAS.

MANHOLE FRAME AND COVER

City of West Linn

DATE:	2010
DRAWING NO.	WL-605
FILE NO.	

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Structural · Civil Engineers
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Portland, Oregon 97221
ph.503.203.8111 fx.503.203.8122
www.wdyi.com

THESE RECORD DOCUMENTS HAVE BEEN PREPARED BASED ON INFORMATION COLLECTED IN THE FIELD BY WDY AND ALSO INFORMATION PROVIDED BY THE GENERAL CONTRACTOR. WDY HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF ALL INFORMATION PROVIDED BY THE GENERAL CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HEREIN AS A RESULT.

SHADY HOLLOW VILLAGE

SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

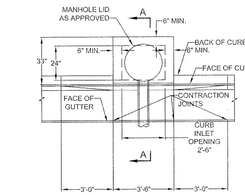
PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
1	21 OCT 2014	CGP
2	06 JAN 2015	CGP
3	23 JAN 2015	CGP
4	25 FEB 2015	CGP
5	16 MAR 2015	CGP

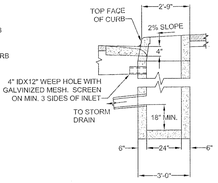
AS-BUILT DEC 16, 2015

SHEET TITLE
CIVIL DETAILS

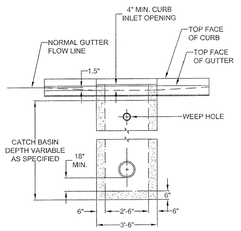
SHEET # CS3.2



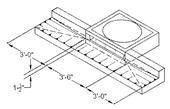
PLAN VIEW



SECTION A-A



FRONT VIEW

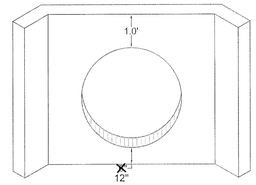


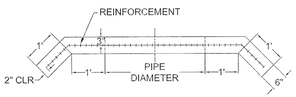
PERSPECTIVE VIEW SHOWING DEPRESSED GUTTER AT CURB INLET

NOTE:

1. ALL FABRICATED METAL PARTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.
2. CONCRETE STRENGTH SHALL BE 3300 PSI AT 28 DAYS.
3. CURB INLET BASE MAY BE PRECAST OR CAST-IN-PLACE.
4. FOR SLOPES OF 5% OR GREATER, USE DWG. WL-601.

GUTTER INLET 2 1/2 A	
City of West Linn	DATE: 2010
	DRAWING NO. WL-600
	FILE NO.

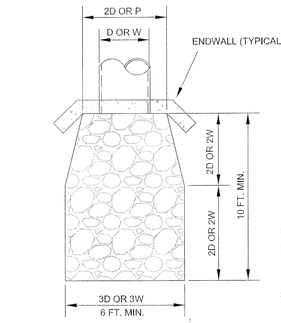




NOTE:

1. USE CONCRETE HAVING A 28 DAY DESIGN STRENGTH OF 3300 PSI.
2. OUTLET WING WALL SHALL BE USED FOR ALL OUTFALL PIPES FROM 10" TO 36".
3. THIS DETAIL REPRESENTS THE MINIMUM REQUIREMENT. THE NEED FOR ADDITIONAL STEEL, A FOOTING AND DRAINAGE BEHIND THE WALL SHALL BE INVESTIGATED BY THE DESIGN ENGINEER.
4. FOR PIPES LARGER THAN 33" OR MULTIPLE PIPE OUTLETS, USE DETAIL WL-612.
5. CONCRETE REINFORCEMENT SHALL CONSIST OF:
   A) ~~ADDING A POLY FIBER MESH TO THE CONCRETE MIX OR~~ HORIZ
   B) USE (2) #4 BARS ABOVE AND BELOW PIPE AND #4 BARS AT 6" O.C. VERTICALLY.

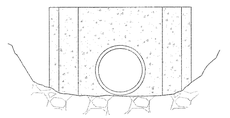
OUTLET HEADWALL (FOR OUTLET PIPES OF 10" TO 33")	
City of West Linn	DATE: 2010
	DRAWING NO. WL-613
	FILE NO.



D = PIPE DIAMETER
W = BOTTOM WIDTH OF CHANNEL
P = WETTED PERIMETER OF CHANNEL

DESIGN VELOCITY FT./SEC	ROCK CLASSIFICATION BY WEIGHT
6 - 10	200 LBS.
10 - 12	1/4 TON
12 - 14	1/2 TON
14 - 16	1 TON
16 - 18	2 TON

SELECTION OF RIP RAP (SEE NOTE 1)

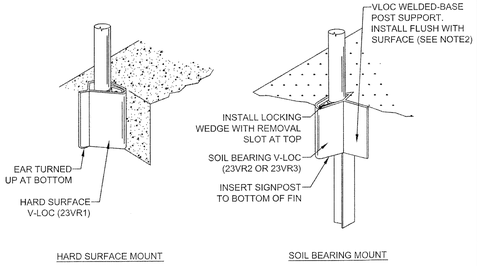


NOTE:

1. DIMENSIONS FOR RIP RAP APPLY TO FLOWS
   < 2 CFS RIP RAP FOR FLOWS
   > 2 CFS MUST BE DESIGNED BY AN ENGINEER
   FLOWS > 20 FPS SHALL USE ENERGY DISSIPATOR
2. TYPE OF RIP RAP
   A. REGULAR QUARRY STONE CLASS 50-200
   B. COBBLESTONE
   C. CONCRETE (ONLY ALLOWED UPON APPROVAL OF THE CITY)
3. PLACEMENT
   A. MINIMUM DEPTH = 1 1/2 TIMES AVERAGE STONE SIZE.
   B. ROCKS SHALL BE PLACED TO PROVIDE A MINIMUM OF VOIDS.
   C. SURFACE ROCKS OR CONCRETE SHALL PROTRUDE AT LEAST 1/2 THEIR VERTICAL DIMENSION.
   D. RIP RAP IS TO BE PLACED OVER A NATURAL BEDDING, OR IT MAY BE GROUTED OR PLACED OVER A GRAVEL BEDDING AS REQUIRED BY THE CITY.

STORM SEWER OUTFALL	
City of West Linn	DATE: 2010
	DRAWING NO. WL-614
	FILE NO.

SIGN POST SUPPORT DETAIL	
STANDARD DETAIL WL-519	City of West Linn
APPROVED: / DATE:	

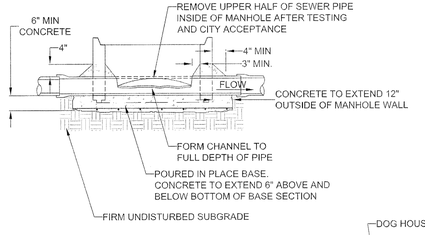


HARD SURFACE MOUNT — SOIL BEARING MOUNT

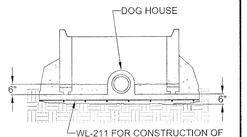
NOTE:

1. V-LOC SIGN POST SUPPORTS (OR APPROVED EQUAL) SHALL BE APPROPRIATE TO THE INSTALLATION SITE:
   TYPE 23VR1 -- HARD SURFACE MOUNT
   TYPE 23VR2 -- NATIVE SOIL BEARING MOUNT
   TYPE 23VR3 -- LOOSE SOIL BEARING MOUNT
2. POSITION V-LOC AS SPECIFIED BY MANUFACTURER AND USE APPROVED DRIVER TO INSTALL LOCKING WEDGE.

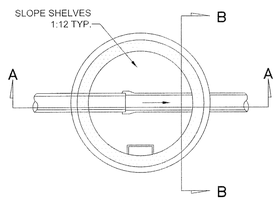
1-2015



SECTION A-A



SECTION B-B

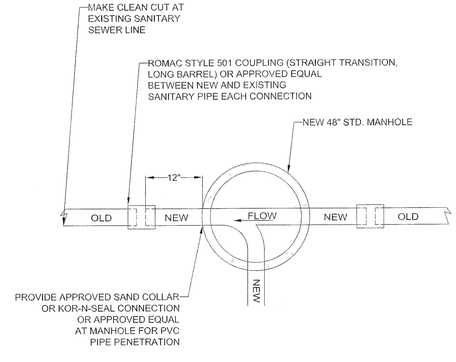


PLAN VIEW

NOTE:

1. BOTTOM RISER TO BE BEDDED IN THE CAST-IN-PLACE AS THE BASE TAKES IT'S INITIAL SET. SET FOR 24 HOUR MIN. OR UNTIL CONCRETE HAS CURED SUFFICIENTLY BEFORE ADDING ADDITIONAL RISERS.
2. 3" TO 6" CLEARANCE BETWEEN BOTTOM RISER SECTION AND TOP OF PIPE. RISER SECTION MUST BE CAST TO ACCOMODATE PIPE (DOG HOUSE) NO SAWING OR OR BREAKING OF RISER WILL BE ALLOWED.
3. REMOVE TOP OF PIPE ONLY AFTER TESTING AND ACCEPTED BY CITY.

NEW MANHOLE TO EXISTING PVC SEWER LINE CONNECTION	
City of West Linn	DATE: 2010
	DRAWING NO. WL-210A
	FILE NO.



NOTE:
NEW PVC (ASTM D3034, SDR 35) PIPE
PIPE MATCHING EXISTING SANITARY SEWER LINE SIZE
(TYPICAL CONNECTION, MULTIPLE CONNECTIONS MAY EXIST)

NEW MANHOLE TO EXISTING NON-PVC SEWER LINE CONNECTION	
City of West Linn	DATE: 2010
	DRAWING NO. WL-210B
	FILE NO.

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ph:503.203.8111 fx:503.203.8122
www.wdyi.com

SHADY HOLLOW VILLAGE

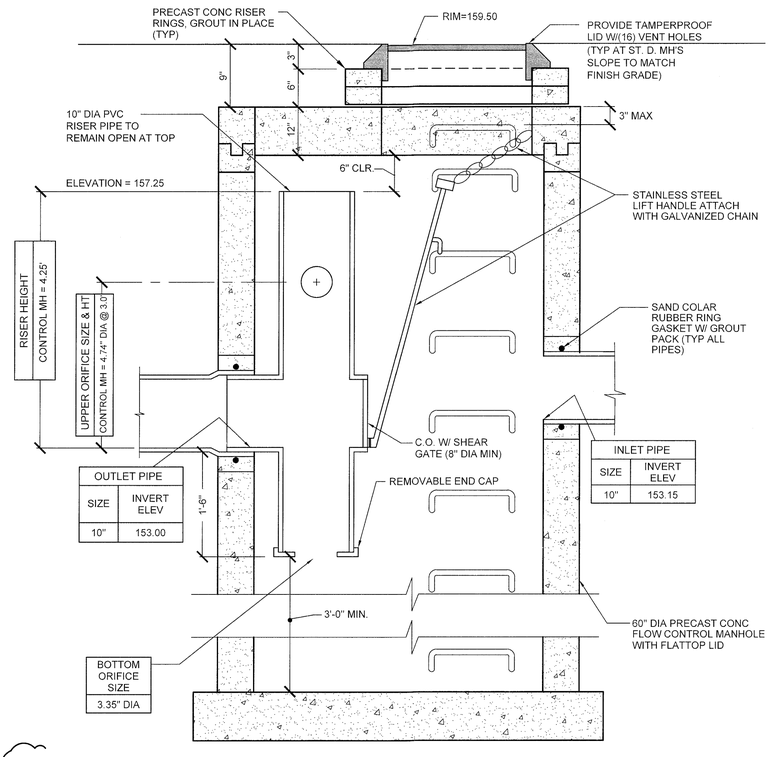
SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

AS-BUILT DEC 16, 2015

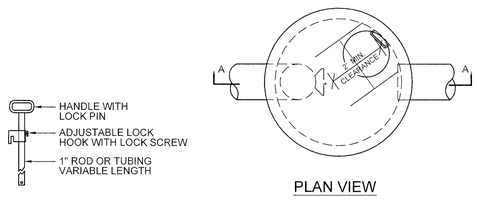
PROJECT NUMBER: 1335		
DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
PERMIT		
	22 AUG 2014	SGS
PLAN CHECKS		
1	21 OCT 2014	CGP
2	06 JAN 2015	CGP
3	23 JAN 2015	CGP
4	25 FEB 2015	CGP
5	16 MAR 2015	CGP

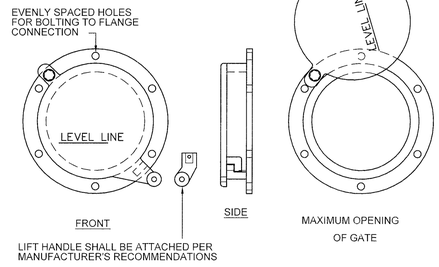
SHEET TITLE
CIVIL DETAILS

SHEET #
CS3.3



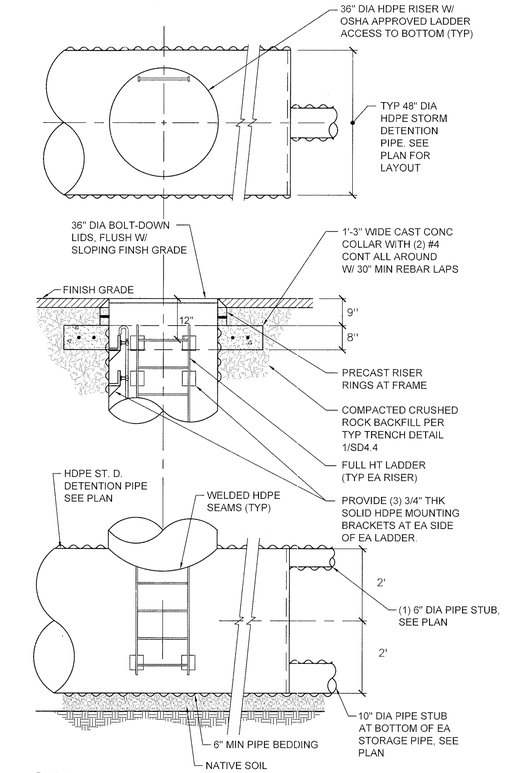
NOTE:
ALTERNATES ARE ACCEPTABLE PROVIDED MATERIAL SPECIFICATIONS ARE MET AND FLANGE BOLT PATTERN MATCHES.





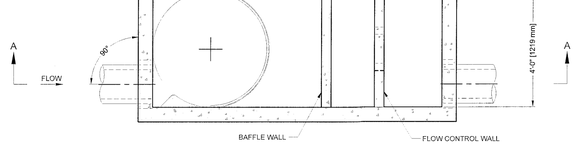
CLEANOUT/SHEAR GATE

1 SD4.5 **60" DIA. STORM DRAIN DETENTION OUTLET CONTROL MANHOLE**
N.T.S.

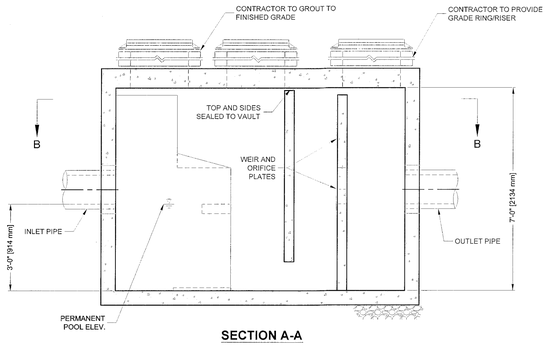


2 SD4.5 **TYPICAL ACCESS RISER AT DETENTION PIPE**
1/2" = 1'-0"

NOTE: ONSITE STORM DETENTION AND TREATMENT SYSTEM TO BE INSPECTED AND APPROVED BY ENGINEERING DEPARTMENT



SECTION B-B



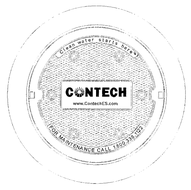
SECTION A-A

Vortechs
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE U.S. PATENTS. OTHER U.S. AND FOREIGN PATENTS PENDING.

VORTECHS 2000 DESIGN NOTES

VORTECHS 2000 RATED TREATMENT CAPACITY IS 2.8 CFS, OR PER LOCAL REGULATIONS. IF THE SITE CONDITIONS EXCEED RATED TREATMENT CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD INLET/OUTLET CONFIGURATION IS SHOWN. FOR OTHER CONFIGURATION OPTIONS , PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com



SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			ID
WATER QUALITY FLOW RATE (CFS)			0.25
PEAK FLOW RATE (CFS)			1.88
RETURN PERIOD OF PEAK FLOW (YRS)			25
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	149.40	PVC	10"
OUTLET PIPE	149.30	PVC	10"
RIM ELEVATION			155.50
ANTI-FLOTATION BALLAST			
NOTES/SPECIAL REQUIREMENTS:			

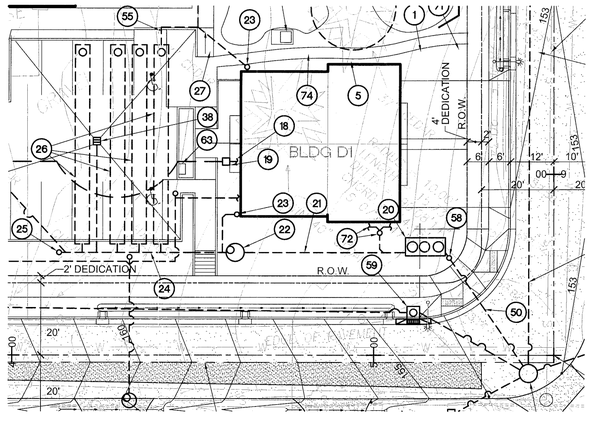
* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com
4. VORTECHS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING. ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. INLET PIPE(S) MUST BE PERPENDICULAR TO THE VAULT AND AT THE CORNER TO INTRODUCE THE FLOW TANGENTIALLY TO THE SWIRL CHAMBER. DUAL INLETS NOT TO HAVE OPPOSING TANGENTIAL FLOW DIRECTIONS.
7. OUTLET PIPE(S) MUST BE DOWN STREAM OF THE FLOW CONTROL BAFFLE AND MAY BE LOCATED ON THE SIDE OR END OF THE VAULT. THE FLOW CONTROL WALL MAY BE TURNED TO ACCOMODATE OUTLET PIPE KNOCKOUTS ON THE SIDE OF THE VAULT.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE VORTECHS STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

VORTECHS 2000 STANDARD DETAIL



KEYNOTES FOR DETAIL 3/SD4.5

MARK	DESCRIPTION	MARK	DESCRIPTION
20	NEW 'CONTECH' VORTECHS STORM TREATMENT VAULT MODEL 2000, SEE DETAIL ON SD4.5 I.E. (10") IN = 150.0, I.E. (10") OUT = 149.9	26	(4) ROWS OF 55 L.F. OF NEW 48" DIA HDPE ST. D. DETENTION PIPE, SEE 2/SD4.5 FOR TYP ACCESS DETAIL, BOTTOM ELEVATION = 153.30
21	46 L.F. OF 10" DIA PVC ST.D. PIPE AT 6.6% SLOPE	50	SEE SHT CS2.1 FOR 10" DIA ST. D. SERVICE
22	5' DIA ST. D. DETENTION MANHOLE, SEE 1/SD4.5 FOR DETAIL I.E.(10") IN = 153.15, I.E.(10") OUT = 153.00, RIM = 159.50	55	122 L.F. OF 6" DIA PVC ST. D. PIPE AT 1.0% SLOPE
24	46 L.F. OF 10" DIA PVC ST. D. PIPE AT 0.25% SLOPE	58	C.O. ASSEMBLY AT 100 O.C. MAX SPACING, SEE 5 OR 6 ON SD4.4
25	ST. D. C.O. ASSEMBLY, SEE 6/SD4.4, I.E. (10") = 153.30		

3 SD4.5 **ONSITE STORM DETENTION AND TREATMENT FACILITIES** (REFERENCE SHEET SD4.3 ONSITE UTILITY PLAN)
1"=20'-0"

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WDY
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SHADY HOLLOW VILLAGE
SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

PROJECT NUMBER: 1335

DRAWING	DATE	BY
PERMIT		
	22 AUG 2014	SGS
PLAN CHECK		
1	08 OCT 2014	CGP
2	21 OCT 2014	CGP
3	06 JAN 2015	CGP
4	23 JAN 2015	CGP
5	28 JAN 2015	CGP
AS-BUILT		
1	20 APR 2015	CGP

SHEET TITLE
ONSITE CIVIL DETAILS

SHEET #
SD4.5

PLANT LIST

TREES (see A1 for existing trees)

TRACHYCARPUS FORTUNEI Windmill Palm		
CUPRESSUS SEMPERVIRANS Italian Cypress		
TAXUS BREVIFOLIA Oregon Yew		
ALRBUTUS UNEDO Strawberry Tree		
QUERCUS PHILLYREOIDES Ubame Oak		
CARPINUS BETULUS "FASTIGIATA" Pyramidal European Hornbeam		10" - 12" DBH @ MATURITY

SHRUBS AND ORNAMENTAL GRASSES

GAULTHERIA SHALON Salal	GS	
MAHONIA AQUAFOLIUM Oregon Grape	MA	
MAHONIA AQUAFOLIUM "COMPACTA" Dwarf Oregon Grape	MAC	
NANDIAN DOMESTICA Heavenly Bamboo	ND	
ANDROPOGON GERARDII Big Bluestem Turkeyfoot Grass	AG	
ARRHENATHERUM CLATIUS BULBOSUM "VARIEGATUM" Bulbous Oat Grass	AC	
CORTADERIA SELLOANA Pampas Grass	CS	
PENNISETUM ALOPECUROIDS Fountain Grass	PA	
RHODODENDRON Varieties to be selected	R	
AZALEA Varieties to be selected	A	

GROUND COVERS

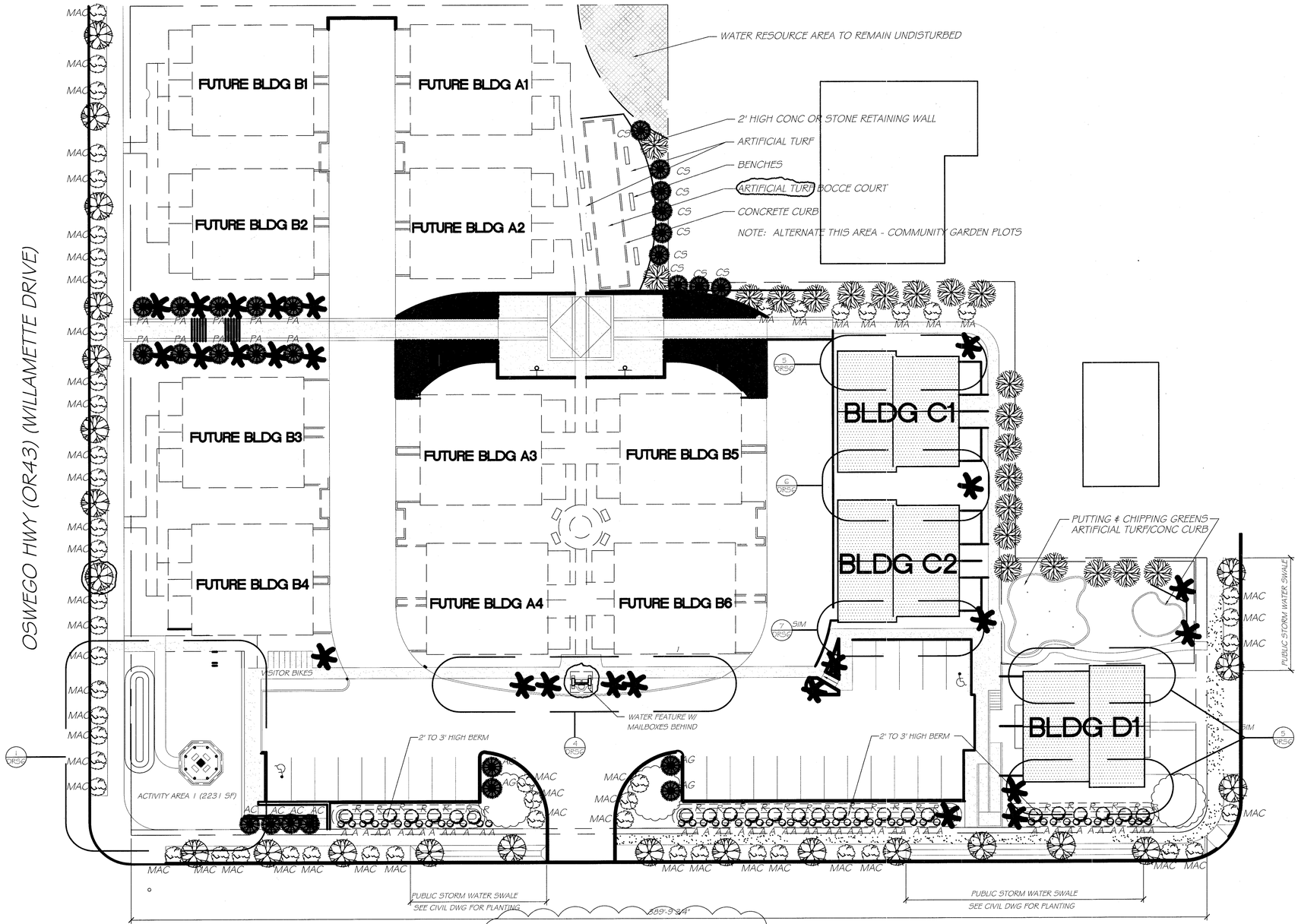
ASARUM CAUDATUM Wild Ginger	
COTONEASTER DAMERII Bearberry Cotoneaster	
ARCTOSTAPHYLOS UVA URSI Kinnickinnick	

NOTES

1. NEW TREES TO BE 2" CAL DBH AND/OR 6'-0" MIN HEIGHT
2. NEW SHRUBS AND GRASSES TO BE 1 GAL CONTAINER MIN
3. NEW GROUND COVERS TO BE 4" POT @ 18" OC TRIANGULAR
4. TYPICAL GROUND COVER TO BE KINNICKINNICK UNLESS NOTED
5. PROVIDE 2" BARK MULCH IN ALL PLANTER BEDS

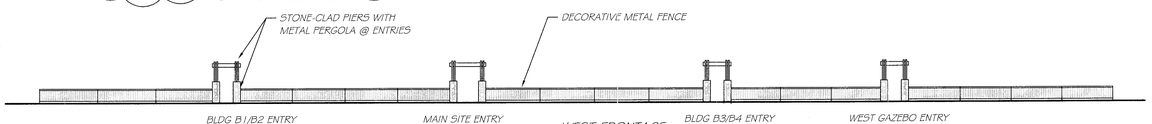
CONCRETE PAVING

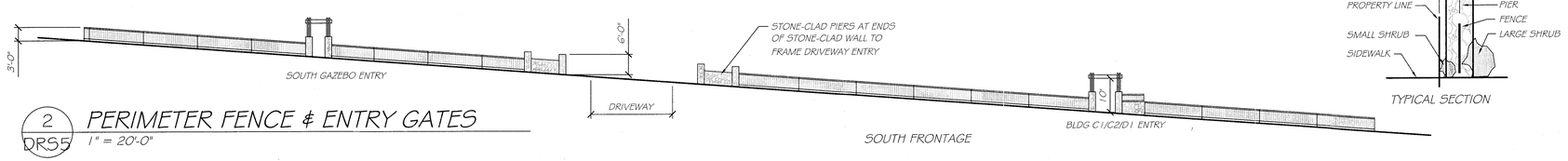
SALT OR BROOM, SCORED	
WITH COBBLES/ROCKS (EMERGENCY ACCESS ONLY)	



1 DRS5 LANDSCAPE PLAN
1" = 20'-0"

TRUE PLAN





2 DRS5 PERIMETER FENCE & ENTRY GATES
1" = 20'-0"

STEWART GORDON STRAUS ARCHITECT
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REGISTERED ARCHITECT
STEWART GORDON STRAUS
PORTLAND, OREGON
1602
STATE OF OREGON

SHADY HOLLOW VILLAGE
PHASE ONE SITE DEVELOPMENT + BUILDINGS
SHADY HOLLOW AND WILLAMETTE DRIVE
WEST LINN, OREGON

PROJECT NUMBER: 1335

DRAWING	DATE	BY
DESIGN		
	20 NOV 2013	SGS
NBRHD MTG		
	11 FEB 2014	SGS
DES REV		
	12 MAR 2014	SGS
	21 APR 2014	SGS
	14 MAY 2014	SGS
PERMIT		
	22 AUG 2014	SGS
	24 FEB 2015	SGS
	16 DEC 2015	SGS

SHEET TITLE
PROPOSED LANDSCAPE

SHEET #
SD5