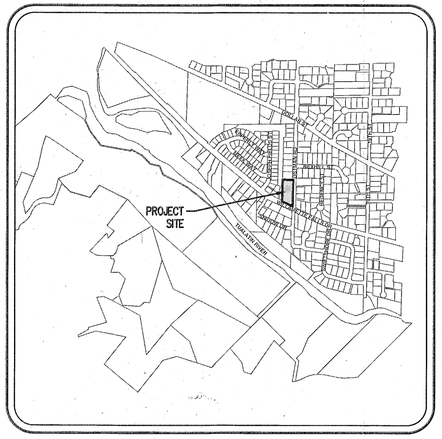
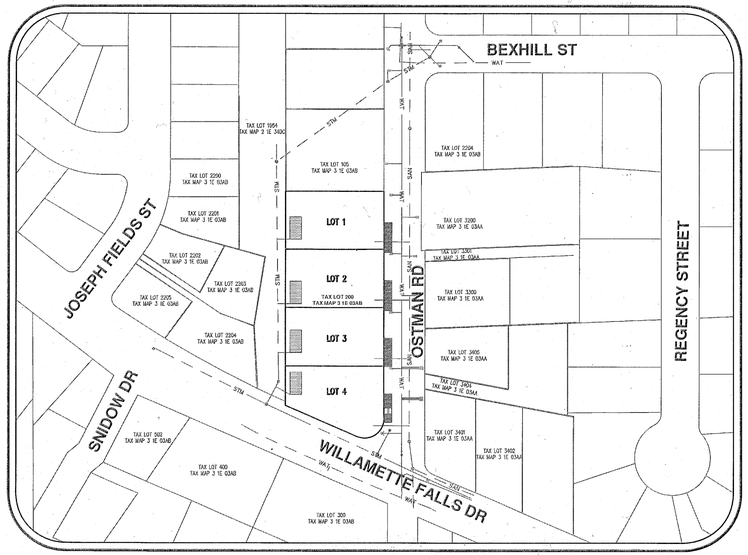
RENAISSANCE AT WILLAMETTE

AS-BUILT CONSTRUCTION PLANS



VICINITY MAP

SCALE: 1" = 1000'



SITE MAP

SCALE: 1" = 100'

AS-BUILT DISCLAIMER:
AS-BUILT INFORMATION IS BASED ON A COMBINATION OF FIELD SURVEY INFORMATION, INSPECTION INFORMATION, AND CONTRACTOR-PROVIDED INFORMATION. THE ENGINEER ONLY CERTIFIES INFORMATION WHICH COULD BE FIELD-VERIFIED AFTER CONSTRUCTION WAS COMPLETED. AS-BUILTS ARE ONLY FOR PUBLIC IMPROVEMENTS WITHIN PUBLIC RIGHT-OF-WAYS OR EASEMENTS.

OWNER/APPLICANT:

RENAISSANCE HOMES
16771 BOONES FERRY ROAD
LAKE OSWEGO, OR 97035

PLANNING/CIVIL ENGINEERING/SURVEYING LANDSCAPE ARCHITECTURE FIRM (APPLICANT'S REPRESENTATIVE):

AKS ENGINEERING & FORESTRY, LLC
CONTACT: MONTY HURLEY
12965 SW HERMAN DR, SUITE 100
TUALATIN, OR 97062
PH: 503-563-6151
FAX: 503-563-6152

SITE LOCATION:

1770 OSTMAN ROAD
WEST LINN, OR 97068

SITE DESCRIPTION:

TAX LOT 200, CLACKAMAS COUNTY ASSESSOR'S MAP 3 1E 03AB, LOCATED IN THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 3, TOWNSHIP 3 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

PROJECT PURPOSE:

FOUR LOT RESIDENTIAL SUBDIVISION FOR FUTURE SINGLE-FAMILY DETACHED HOMES IN THE R-10 ZONE, AS APPROVED IN THE CITY OF WEST LINN FINAL DECISION NOTICE DATED 4-10-2014 FOR SUB-14-01/VAR-14-01/VAR-14-02/VAR-14-03/VAR-14-04/VAR-14-05.

BENCHMARK:

VERTICAL DATUM: ELEVATIONS ARE BASED ON NGS BENCHMARK 89 B (PID: RD0258) ON THE WEST SIDE OF HIGHWAY 99E, 2.4 MILES SOUTH OF THE PROJECT SITE WITH A NAVD 88 ELEVATION OF 93.78 FEET.

TOTAL SITE AREA:

44,463 SF± (1.02 ACRES±)

UTILITY CONTACTS:

POWER

PORTLAND GENERAL ELECTRIC
121 SW SALMON ST
PORTLAND, OREGON. 97024
PH: (503) 736-5450

FIRE

TUALATIN VALLEY FIRE AND RESCUE
11945 SW 70TH AVENUE
TIGARD, OREGON. 97223
PH: (503) 649-8577

CABLE / INTERNET

COMCAST
9605 SW NIMBUS
BEAVERTON, OREGON. 97008
PH: (503) 912-8307

GARBAGE

WEST LINN REFUSE AND RECYCLING
1600 SE 4TH AVE
CANBY, OREGON. 97013
PH: (503) 557-3900

TELEPHONE

CENTURY LINK
1001 MOLALLA AVE
OREGON CITY, OREGON. 97045
PH: (888) 496-1650

WATER / SANITARY / STORM SEWER

CITY OF WEST LINN PUBLIC WORKS
22500 SALAMO RD
WEST LINN, OREGON. 97034
PH: (503) 656-4261

GAS

NW NATURAL
220 NW 2ND AVE
PORTLAND, OREGON. 97209
PH: (503) 226-4211

LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
DECIDUOUS TREE			STORM SEWER CLEAN OUT		
CONIFEROUS TREE			STORM SEWER CATCH BASIN		
FIRE HYDRANT			STORM SEWER MANHOLE		
WATER BLOWOFF			GAS METER		
WATER METER			GAS VALVE		
WATER VALVE			GUY WIRE ANCHOR		
WATER REDUCER			POWER POLE		
DOUBLE CHECK VALVE			POWER VAULT	P	P
AIR RELEASE VALVE			POWER JUNCTION BOX		
SANITARY SEWER CLEAN OUT			POWER PEDESTAL		
SANITARY SEWER MANHOLE			COMMUNICATIONS VAULT	C	C
SIGN			COMMUNICATIONS JUNCTION BOX		
STREET LIGHT			COMMUNICATIONS RISER		
			MAILBOX	MB	MB

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE		
BOUNDARY LINE		
PROPERTY LINE		
CENTERLINE		
DITCH		
CURB		
EDGE OF PAVEMENT		
EASEMENT		
FENCE LINE		
GRAVEL EDGE		
POWER LINE	PWR	PWR
OVERHEAD WIRE	OHW	OHW
COMMUNICATIONS LINE	COM	COM
FIBER OPTIC LINE	CFO	CFO
GAS LINE	GAS	GAS
STORM SEWER LINE	STM	STM
SANITARY SEWER LINE	SAN	SAN
WATER LINE	WAT	WAT

ATTENTION EXCAVATORS:

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS BUT NOT MORE THAN TEN BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

SHEET INDEX

AKS ENGINEERING AND FORESTRY, LLC
12965 SW HERMAN RD
SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
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www.aks-eng.com

AKS ENGINEERING · PLANNING · SURVEYING
FORESTRY · LANDSCAPE ARCHITECTURE

RENAISSANCE AT WILLAMETTE AS-BUILTS
WEST LINN OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

COVER SHEET WITH VICINITY AND SITE MAPS

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED

DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
MAY 9, 2008
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C000

AKS DRAWING FILE: 3745 C000 COVER.DWG | LAYOUT: C000

GENERAL NOTES

1. ALL WORK AND MATERIAL SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS OF THE CITY OF WEST LINN'S PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, INCLUDING DIVISION 1 THROUGH DIVISION 6. THE CONTRACTOR SHALL CONFORM TO THESE SPECIFICATIONS AT ALL TIMES AND AS DIRECTED BY THE CITY AND PROJECT ENGINEER. THE CONTRACTOR SHALL CONFORM TO THE MOST RECENT EDITION OF THE UNIFORM PLUMBING CODE AND THE MOST RECENT EDITION OF THE INTERNATIONAL BUILDING CODE FOR ALL PRIVATE IMPROVEMENTS.

2. THE LOCATIONS, DEPTHS AND DESCRIPTIONS OF EXISTING UTILITIES SHOWN ARE COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEYS. THE ENGINEER OR UTILITY COMPANIES DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. ADDITIONAL UTILITIES MAY EXIST WITHIN THE WORK AREA.

3. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE SHOWN FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

4. CONTRACTOR MUST VERIFY ALL EXISTING UTILITIES FOR BOTH VERTICAL ELEVATION AND HORIZONTAL LOCATION PRIOR TO START OF WORK (POTHOLE BEFORE DIGGING IF NECESSARY). SHOULD CONFLICTS ARISE AND REDESIGN OR RELOCATION OF FACILITIES IS NECESSARY, IT SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. CHANGES MUST BE APPROVED BY THE PROJECT ENGINEER IN ADVANCE OF WORK. CONTRACTOR SHALL COORDINATE THE WORK WITH APPLICABLE AGENCIES.

5. TRENCHES OUTSIDE OF THE FUTURE PAVED OR CONCRETE AREAS MAY BE BACKFILLED WITH NATIVE MATERIAL IN ACCORDANCE WITH COMPACTION SPECIFICATIONS FOR APWA CLASS A BACKFILL. CONTRACTOR SHALL CHECK WITH PROJECT ENGINEER AND VERIFY.

6. SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACES WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE, AND REPAIRED IN A MANNER ACCEPTABLE TO AND AT NO COST TO THE CITY OR DEVELOPER.

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", AND CITY REQUIREMENTS. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN LOCAL ACCESS FOR OWNERS NEAR THE PROJECT SITE. THE CONTRACTOR SHALL PROVIDE A PROJECT-SPECIFIC TRAFFIC CONTROL PLAN, APPROVED BY THE CITY, AND AVAILABLE ON THE PROJECT SITE.

8. THE CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES.

9. CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL EARTHWORK, TRENCH BACKFILL, ROAD CONSTRUCTION COMPACTION TESTS, AND GEOTECHNICAL REVIEWS WITH THE PROJECT'S GEOTECHNICAL ENGINEER AND THE CITY.

10. CONTRACTOR SHALL MAINTAIN BENCHMARKS, PROPERTY CORNERS, AND MONUMENTS. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, AND IF REQUIRED BY ORS 209, THE CONTRACTOR SHALL PAY FOR THEIR REPLACEMENT BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS AND OTHER SUCH MONUMENTS.

11. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING ITEMS:
   A. LIST OF SUBCONTRACTORS
   B. PROJECT SCHEDULE
   C. TRAFFIC CONTROL PLAN
   D. EMERGENCY CONTACT NAME AND PHONE NUMBER

12. 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 CONTRACT.

13. PUBLIC ROADWAYS SHALL NOT BE CLOSED TO TRAFFIC, AT ANY TIME, WITHOUT HAVING FIRST OBTAINED A STREET CLOSURE PERMIT FROM THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR PROVISION OF TIMELY NOTIFICATION OF TRAFFIC FLOW DISRUPTIONS TO AREA-WIDE EMERGENCY SERVICES, TRI-MET BUS SERVICE, AND THE SCHOOL DISTRICT.

14. TRAFFIC CONTROL DEVICES, FLAG PERSONS, ETC., SHALL BE IN PLACE PRIOR TO INITIATION OF CONSTRUCTION WORK AND SHALL BE EFFECTIVELY MAINTAINED. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO ANY WORK WITHIN EXISTING RIGHT-OF-WAY.

15. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER OR THE CITY FORTY-EIGHT (48) HOURS PRIOR TO ANY STAGED INSPECTION.

16. A COPY OF THE PERMIT WITH ALL ATTACHMENTS, A COPY OF THE APPROVED CONSTRUCTION PLANS, AND ALL AMENDMENTS SHALL BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. ALL WORK SHALL CONFORM TO THE PERMIT TERMS, CONDITIONS/PROVISIONS, CITY-APPROVED CONSTRUCTION PLANS, APPROVED PLAN AMENDMENTS, AND THESE GENERAL CONDITIONS. CHANGES TO ANY OF THE AFORESAID MUST BE APPROVED BY THE PROJECT ENGINEER AND CITY, IN ADVANCE OF WORK PERFORMANCE.

18. MAINTENANCE OF THE WORK AREA AND APPROACH ROADS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE WORK AREA AND APPROACH ROADS SHALL BE MAINTAINED IN A CLEAN AND SANITARY CONDITION, FREE FROM OBSTRUCTIONS, HAZARDS, DEBRIS, AND TRASH AT ALL TIMES. A COPY OF THE CONTRACTOR CERTIFICATE OF INSURANCE SHALL BE AVAILABLE AT THE WORK AREA.

19. THE SPREADING OF MUD OR DEBRIS OR STORAGE OF MATERIAL OR EQUIPMENT OF ANY KIND UPON ANY PUBLIC ROADWAY IS STRICTLY PROHIBITED AND VIOLATION SHALL BE CAUSE FOR IMMEDIATE SUSPENSION OF THE PERMIT. THE PROJECT ENGINEER AND/OR CITY MAY AT ANY TIME ORDER IMMEDIATE CLEAN UP AND STOPPAGE OF WORK TO ACCOMPLISH CLEAN-UP

20. EFFECTIVE EROSION CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED THROUGHOUT CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE APPROVED BY THE CITY.

21. PROPERTY DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED. GRASS, SHRUBS, FLOWERS, BARK DUST, EXISTING SIGNS, PAVEMENT MARKINGS, MAILBOXES, ETC. DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE RE-ESTABLISHED, REINSTALLED OR REPLACED, WITH LIKE KIND AND MATERIAL.

22. EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE SITE AND SHALL BE ROUTED SO THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE PROJECT ENGINEER AND/OR CITY MAY AT ANY TIME ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.

23. A TEMPORARY HARD-SURFACE PATCH (COLD MIX AC OR HOT MIX BASE PAVING) SHALL BE PLACED ON TRENCHES WITHIN EXISTING ROADWAYS AT THE END OF EACH DAY'S WORK. NO TRENCH, ON-SITE OR OFF-SITE, SHALL BE LEFT AT ANY TIME IN AN UNSAFE CONDITION. THE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR HAZARDS OR DAMAGE RESULTING FROM THE PROSECUTION OF THE WORK.

24. WORK PROVIDED FOR UNDER THE PERMIT SHALL INCLUDE REPAIR OF EXISTING FACILITIES (ROADS, DITCHES, ETC.) AS MAY BE NECESSARY, IN THE PROJECT ENGINEER'S OPINION, TO OVERCOME DETERIORATION OR DAMAGE WHICH OCCURRED IN CONJUNCTION WITH THE WORK AUTHORIZED BY THE PERMIT. CORRECTIVE WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

25. THE PROJECT ENGINEER MAY, AT THEIR DISCRETION, REQUIRE THE PROVISION OF TESTS AND/OR REPORTS FROM THE CONTRACTOR TO VALIDATE CLAIMS OF MATERIAL OR CONSTRUCTION ADEQUACY/COMPLIANCE. SUCH TESTS/REPORTS SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE.

26. THE CONTRACTOR IS TO COORDINATE CONSTRUCTION OF DRY UTILITIES WITH THE UTILITY COMPANIES (POWER, TELEPHONE, GAS, AND CABLE TELEVISION).

27. POWER, TELEPHONE, GAS, AND CABLE TELEVISION TRENCHING AND CONDUITS ARE TO BE INSTALLED PER UTILITY COMPANY REQUIREMENTS WITH PULL WIRE. VERIFY WITH UTILITY COMPANY FOR SIZE AND TYPE OF CONDUIT PRIOR TO CONSTRUCTION.

28. THE PROJECT ENGINEER RESERVES THE RIGHT TO ADJUST GRADES OR ALIGNMENT TO ACCOMMODATE OTHER UTILITIES AS REQUIRED; SUCH ADJUSTMENTS OR REVISIONS SHALL BE REVIEWED BY THE CITY AND APPROVED PRIOR TO COMMENCEMENT OF WORK.

29. PROPERTY AND RIGHT-OF-WAY LINES SHOWN ARE APPROXIMATE. THESE PLANS ARE NOT MEANT TO SERVE BOUNDARY SURVEY PURPOSES.

30. ALL LENGTHS ARE HORIZONTAL DISTANCES AND SHALL BE CONSIDERED APPROXIMATE. PIPE LENGTHS ARE FROM CENTER OF STRUCTURE (MANHOLE) TO CENTER OF STRUCTURE (MANHOLE).

31. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.

32. THE CONTRACTOR SHALL MAKE PROVISIONS TO KEEP ALL EXISTING UTILITIES IN SERVICE AND PROTECT THEM DURING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY DAMAGED UTILITIES USING MATERIALS AND METHODS APPROVED BY THE UTILITY OWNER. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN AGREEMENT WITH THE UTILITY PROVIDER.

33. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL, AND OTHER MATERIAL IN THE ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET ALL APPLICABLE REGULATIONS.

34. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT "REDLINE DRAWINGS" TO THE PROJECT ENGINEER. "REDLINE DRAWINGS" DOCUMENT ALL DEVIATIONS AND REVISIONS TO THE APPROVED PLANS; THEY ALSO RECORD A DESCRIPTION OF CONSTRUCTION MATERIALS ACTUALLY USED (PIPE MATERIAL, ETC.).

35. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS INCLUDING SUCH INCIDENTALS, AS MAY BE NECESSARY TO MEET THE INTENT OF THE PROJECT CONTRACT DOCUMENTS, APPLICABLE AGENCY REQUIREMENTS, AND OTHER WORK AS NECESSARY TO PROVIDE A COMPLETE PROJECT.

36. THERE SHALL BE NO ALTERATION OR VARIANCE FROM THE APPROVED PLANS WITHOUT APPROVAL OF THE PROJECT ENGINEER.

37. THE CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES.

38. IF GROUND WATER SPRINGS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE THAT THE WATER IS NOT CONVEYED THROUGH UTILITY TRENCHES, AND THE NATURAL FLOW PATH OF THE SPRING IS ALTERED AS LITTLE AS PRACTICABLE. THE PROJECT ENGINEER SHALL SUBMIT INFORMATION SUMMARIZING THE SITUATION TO THE CITY.

39. ANY INSPECTION BY THE CITY, COUNTY, STATE, FEDERAL AGENCY, OR PROJECT ENGINEER SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH THE APPLICABLE PLANS CODES, REGULATIONS, STANDARDS, AND PROJECT CONTRACT DOCUMENTS.

40. SAWCUT STRAIGHT MATCH LINES WHERE EXISTING PAVEMENT MEETS NEW PAVEMENT. SAND AND SEAL JOINT (TYPICAL).

41. DUST SHALL BE CONTROLLED WITHIN THE DEVELOPMENT DURING CONSTRUCTION AND SHALL NOT BE PERMITTED TO DRIFT ONTO ADJACENT PROPERTIES.

42. CONTRACTOR SHALL WORK TO PRESERVE ALL TEMPORARY SURVEY CONTROL POINTS, TEMPORARY BENCHMARKS, TEMPORARY GRADE STAKES, AND OTHER REFERENCE POINTS FOR AS LONG AS THEY ARE NEEDED FOR CONSTRUCTION ACTIVITIES.

43. CONTRACTOR SHALL FOLLOW OSHA REQUIREMENTS.

44. ALL TRENCHES SHALL BE PROPERLY SHORED AND BRACED TO PREVENT CAVING.

45. NO TRENCHES WILL BE ALLOWED TO REMAIN OPEN OVERNIGHT. ALL TRENCHES SHALL BE COVERED WITH STEEL PLATES OR FILLED IN AT NIGHT.

46. UNIDENTIFIED UTILITIES SHALL NOT BE DISRUPTED OR CUT UNTIL UTILITY COMPANY HAS APPROVED THE CUT OR DISRUPTION.

47. ALL FACILITIES SHALL BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO SUPPORT, MAINTAIN, OR OTHERWISE PROTECT EXISTING UTILITIES AND OTHER FACILITIES AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER-THAN-ORIGINAL CONDITION.

48. NOTIFY THE UTILITY COMPANY IMMEDIATELY OF ALL UTILITIES EXPOSED. UTILITIES OR INTERFERING PORTIONS OF UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK.

49. WHERE TRENCH EXCAVATION REQUIRES REMOVAL OF PCC CURBS AND/OR SIDEWALKS, THE CURBS AND/OR SIDEWALKS SHALL BE SAWCUT AND REMOVED AT A TOOLED JOINT UNLESS OTHERWISE AUTHORIZED BY THE OWNER'S REPRESENTATIVE. THE SAWCUT LINES SHOWN ON THE DRAWINGS ARE SCHEMATIC AND NOT INTENDED TO SHOW THE EXACT ALIGNMENT OF SUCH CUTS.

50. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DOCUMENTS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DOCUMENTS AND IN FULL COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS AND CODES.

51. THE CONTRACTOR SHALL PROVIDE ALL THE 'MEANS AND METHODS' NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE APPROVED DRAWINGS AND DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. ALL REPAIRS SHALL USE NEW MATERIAL. REPAIRS SHALL RESTORE THE DAMAGED ITEM TO THE PRE-EXISTING CONDITION OR BETTER. SUCH REPAIRS SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE EXPENSE.

52. CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH SHALL INCLUDE BUT NOT BE LIMITED TO THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.

53. DEBRIS AND TRASH SHALL NOT BE BURIED OR STOCKPILED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL CITY, STATE, AND FEDERAL LAWS AND REGULATIONS. THE CONTRACTOR SHALL MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES, TO BE PROVIDED TO THE PROJECT ENGINEER UPON REQUEST.

54. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND APPROVALS FOR OFF SITE DISPOSAL FACILITIES AND SUPPLY A COPY OF APPROVALS TO THE PROJECT ENGINEER UPON REQUEST.

55. CONTRACTOR SHALL MONITOR THE HAULING OF DEBRIS TO INSURE THAT ALL SPILLAGE FROM TRUCKS IS PROMPTLY AND COMPLETELY REMOVED AND CLEANED UP.

56. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE THE START OF WORK. THE CONTRACTOR SHALL TAKE NECESSARY FIELD MEASUREMENTS AND OTHERWISE VERIFY ALL DIMENSIONS AND EXISTING CONSTRUCTION CONDITIONS INDICATED AND/OR SHOWN ON THE PLANS. SHOULD ANY ERROR OR INCONSISTENCY EXIST, THE CONTRACTOR SHALL NOT PROCEED WITH THE EFFECTED WORK UNTIL REPORTED TO THE PROJECT ENGINEER FOR CLARIFICATION OR CORRECTION.

57. CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF MAILBOXES WITH LOCAL POSTMASTER.

58. CONTRACTOR MUST DISCONNECT AND ABANDON ALL UTILITIES TO STRUCTURES THAT ARE BEING DEMOLISHED PER THE REQUIREMENTS OF THE PUBLIC UTILITY BEING ABANDONED.

59. CONTRACTOR TO LOCATE UNDERGROUND FUEL TANK AND ABANDON PER DEQ UNDERGROUND STORAGE TANK REQUIREMENTS, INCLUDING REMOVAL OF THE TANK AND REPLACEMENT WITH STRUCTURAL FILL.

NOTIFICATION

GENERAL - THE CONTRACTOR SHALL, AS A MINIMUM, COORDINATE THE PROPOSED CONSTRUCTION ACTIVITIES WITH THE OWNER AND THE LOCAL PUBLIC AGENCIES, UTILITIES AND COMPANIES DURING CONSTRUCTION TO AVOID DAMAGE AND TO PREVENT THE INTERRUPTION OF SERVICES AND UTILITIES TO RESIDENTS AND BUSINESSES:

ONE CALL LOCATE - OREGON
UTILITIES NOTIFICATION CENTER
(503) 246-6699

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RENAISSANCE
AT WILLAMETTE
AS-BUILTS
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WEST LINN
CLACKAMAS COUNTY ASSESSOR'S TAXMAP 2S1E03AB
TAX LOT 0200

CONSTRUCTION NOTES

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED
DATE: 2/9/2015	

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2002
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER
3745

SHEET
C001

AKS DRAWING FILE: 3745 C000 COVER.DWG | LAYOUT: C001

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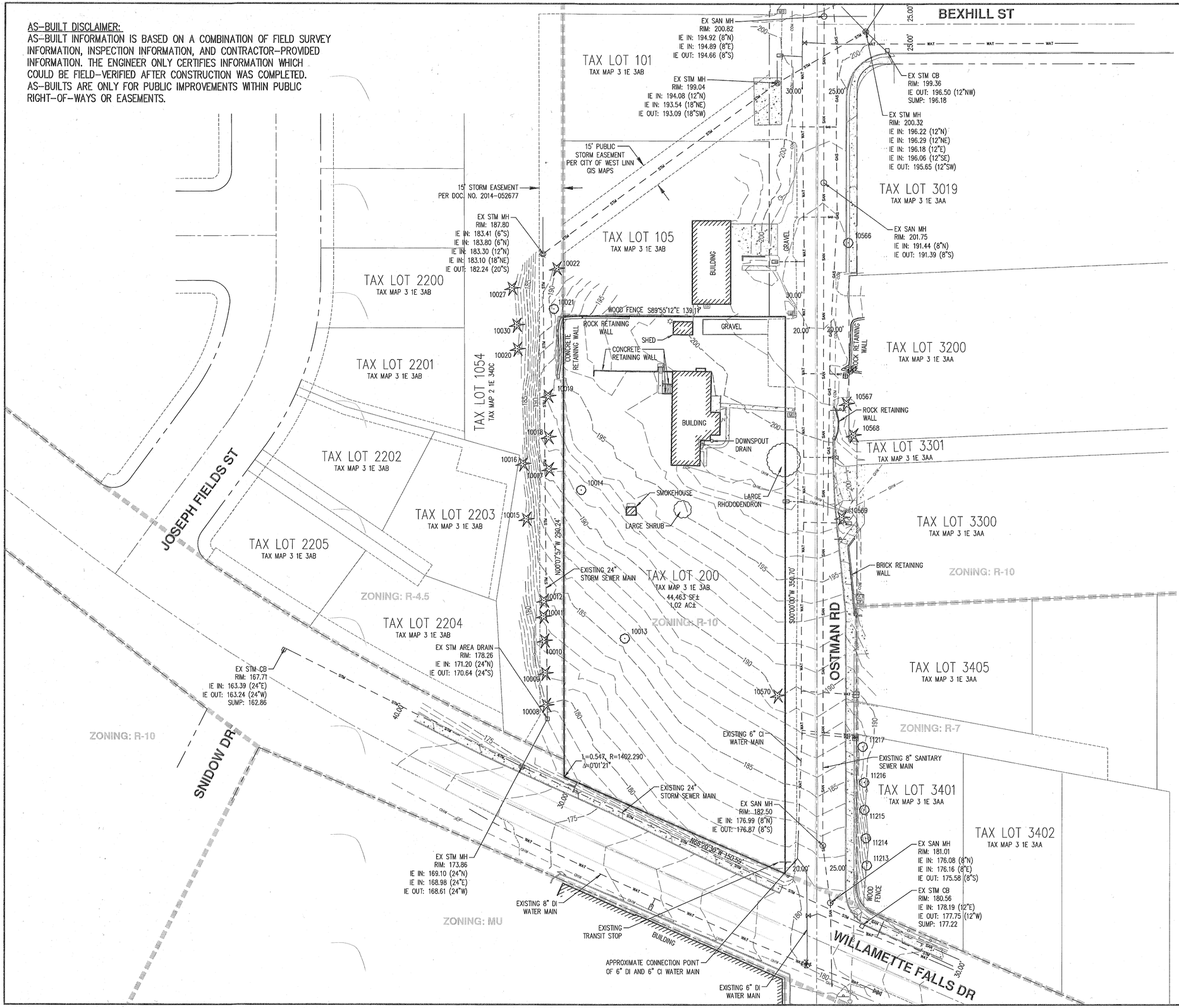

NOTES:

1. UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBER 13235032. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
2. FIELD WORK WAS CONDUCTED OCTOBER 30 – NOVEMBER 6, 2013.
3. VERTICAL DATUM: ELEVATIONS ARE BASED ON NGS BENCHMARK 89 B (PID: RD0258) ON THE WEST SIDE OF HWY 99E, 2.4 MILES SOUTH OF THE PROJECT SITE WITH A NAVD 88 ELEVATION OF 93.78 FEET.
4. THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
5. SURVEY IS ONLY VALID WITH SURVEYOR'S STAMP AND SIGNATURE.
6. BUILDING FOOTPRINTS ARE MEASURED TO SIDING UNLESS NOTED OTHERWISE. CONTACT SURVEYOR WITH QUESTIONS REGARDING BUILDING TIES.
7. CONTOUR INTERVAL IS 1 FOOT.
8. ONLY TREES HAVING A DIAMETER OF 6" AND GREATER, MEASURED AT BREAST HEIGHT, WERE SURVEYED.

TREE TABLE

TREE NO.	SPECIES	DBH(IN.)
10008	PINE	18
10009	PINE	6,15
10010	PINE	20
10011	DOUGLAS FIR	20
10012	DOUGLAS FIR	25
10013	CHERRY	8,7,7
10014	APPLE	26(ROTTEN)
10015	PINE	11,11
10016	PINE	12
10017	PINE	23
10018	PINE	15
10019	PINE	19
10020	PINE	9
10021	COTTONWOOD	65(STUMP)
10022	DOUGLAS FIR	31
10027	PINE	9
10030	PINE	6
10566	CHERRY	11,11,12
10567	DOUGLAS FIR	49
10568	DOUGLAS FIR	56
10569	DOUGLAS FIR	27
10570	DOUGLAS FIR	38(DEAD)
11213	MAPLE	26
11214	MAPLE	11
11215	MAPLE	14
11216	MAPLE	13
11217	BIRCH	18

SCALE 1" = 30 FEET
30 0 12 18 24 30

AKS ENGINEERING AND FORESTRY, LLC
12965 SW HERMAN RD
SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
FAX: 503.563.6152
www.aks-eng.com

AKS ENGINEERING · PLANNING · SURVEYING
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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S FAXMAP 3S1E03AB

EXISTING CONDITIONS PLAN AND TREE TABLE

DESIGNED BY: DCN
DRAWN BY: JDR
CHECKED BY: MBH
SCALE: AS NOTED
DATE: 2/9/2015

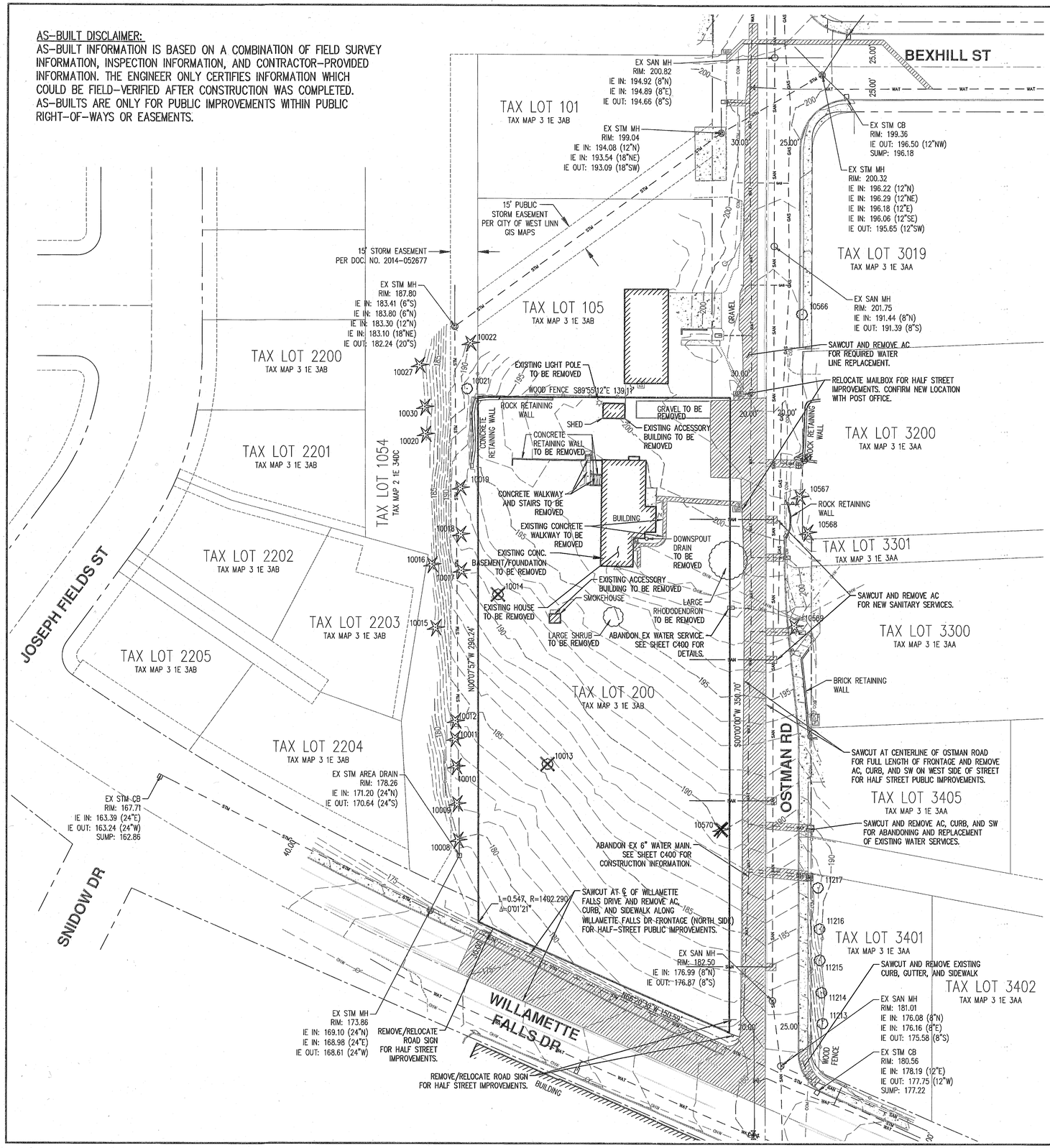
REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JULY 15, 2003
MONTGOMERY B. HURLEY
58542LS
RENEWS: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C002

AS-BUILT DISCLAIMER:
AS-BUILT INFORMATION IS BASED ON A COMBINATION OF FIELD SURVEY INFORMATION, INSPECTION INFORMATION, AND CONTRACTOR-PROVIDED INFORMATION. THE ENGINEER ONLY CERTIFIES INFORMATION WHICH COULD BE FIELD-VERIFIED AFTER CONSTRUCTION WAS COMPLETED. AS-BUILTS ARE ONLY FOR PUBLIC IMPROVEMENTS WITHIN PUBLIC RIGHT-OF-WAYS OR EASEMENTS.



SCALE 1" = 30 FEET
30 0 12 18 24 30

DEMOLITION NOTES:

1. PRIOR TO STARTING DEMOLITION OPERATIONS, THE CONTRACTOR SHALL APPLY FOR AND OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, CITY, AND LOCAL LAWS, CODES, AND REGULATIONS. CITY DEMOLITION PERMIT SHALL BE REQUIRED.
2. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES AND/OR IMPROVEMENTS TO REMAIN ON OR OFF SITE. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING STRUCTURES AND/OR IMPROVEMENTS TO REMAIN AND SHALL RESTORE ANY DAMAGE TO THE PRE-DEMOLITION CONDITION OR BETTER USING NEW MATERIALS. ANY REPAIRS REQUIRED SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE COST AND EXPENSE.
3. CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO OWNER'S REPRESENTATIVE PRIOR TO INITIATING WORK.
4. CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES IN CONFORMANCE WITH THE EROSION CONTROL PLAN, NOTES, AND DETAILS PRIOR TO STARTING DEMOLITION OPERATIONS.
5. THE LOCATION OF ALL UTILITIES SHALL BE MARKED IN THE FIELD PRIOR TO DEMOLITION. CONTRACTOR SHALL PROTECT AND MAINTAIN IN A SAFE AND OPERABLE CONDITION ALL UTILITIES INDICATED TO REMAIN, AND PREVENT INTERRUPTION OF EXISTING UTILITY SERVICES EXCEPT WHEN AUTHORIZED IN WRITING BY THE AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES, ACCEPTABLE TO GOVERNING AUTHORITIES AND OWNER'S REPRESENTATIVE, FOR BUILDING(S) TO REMAIN AS REQUIRED DURING INTERRUPTIONS TO EXISTING UTILITY SERVICES.
6. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE PROJECT LIMITS WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE AND/OR GOVERNMENTAL AGENCIES HAVING JURISDICTION IF APPLICABLE.
7. THE CONTRACTOR SHALL KEEP ALL STREETS AND PUBLIC RIGHT-OF-WAYS CLEAN OF MUD, DIRT, AND DEMOLITION DEBRIS. THE CONTRACTOR SHALL MONITOR THE HAULING OF DEBRIS TO INSURE THAT ANY SPILLAGE FROM TRUCKS IS PROMPTLY AND COMPLETELY REMOVED AND CLEANED UP. IF REQUIRED AND/OR NECESSARY, THE CONTRACTOR SHALL COVER ALL HAUL VEHICLES.
8. CONTRACTOR SHALL CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. IF APPLICABLE STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY STREET OPENING OR DEMOLITION ACTIVITIES IN THE RIGHT-OF-WAY.
9. CONTRACTOR SHALL CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITIONS EXISTING PRIOR TO THE START OF THE WORK.
10. DEBRIS SHALL NOT BE BURIED OR STOCKPILED ON THE PROPERTY. ALL DEMOLITION DEBRIS AND MATERIALS SHALL BE DISPOSED OF AT OFFSITE LOCATIONS IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, CODES, AND REGULATIONS. THE CONTRACTOR SHALL MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES AND SHALL PROVIDE A COPY TO THE OWNER OR OWNER'S REPRESENTATIVE UPON REQUEST. CONTRACTOR SHALL COORDINATE AND PAY ALL COSTS INCLUDING DISPOSAL CHARGES.
11. PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, SHALL EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. THE SAWCUT LINES SHOWN ON THE DRAWINGS ARE SCHEMATIC AND NOT INTENDED TO SHOW THE EXACT ALIGNMENT OF SUCH CUTS.
12. CONTRACTOR SHALL CONFORM TO APPLICABLE REGULATORY PROCEDURES IF HAZARDOUS OR CONTAMINATED MATERIALS ARE DISCOVERED.
13. CONTRACTOR IS RESPONSIBLE FOR JOB SAFETY AND SHALL PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS, WARNING SIGNS, TRAFFIC CONES, AND PROTECTION AS NECESSARY DURING DEMOLITION ACTIVITIES.
14. CONTRACTOR SHALL REMOVE ALL EXISTING STRUCTURES, FACILITIES, IMPROVEMENTS, ETC. AS SHOWN, UNLESS OTHERWISE DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
15. CONTRACTOR SHALL BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL SHALL BE ACCOMPLISHED WITH APPROVED MATERIALS, AND SHALL BE PLACED AS COMPACTED ENGINEERED FILL AS REQUIRED TO SUPPORT NEW IMPROVEMENTS. BACKFILLING SHALL OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES UNLESS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE.
16. DEMOLITION AREAS SHALL BE GRADED TO MATCH ADJACENT TERRAIN TO FORM A SMOOTH, CLEAN (FREE OF DEBRIS), FREE DRAINING SURFACE, UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR APPROVED BY THE OWNER'S REPRESENTATIVE.
17. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR RELOCATION AND TERMINATION OF EXISTING UTILITIES AS NECESSARY. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND PAY ALL COSTS FOR EXCAVATION, BACKFILL, CONDUIT, WIRING, AND APPURTENANCES REQUIRED TO COMPLETE THE WORK. THIS WORK INCLUDES ALL EXISTING DRY UTILITIES TO THE EXISTING HOUSE AND THE EXISTING BUILDINGS ADJACENT TO OSTMAN ROAD.
18. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS CONTAINED IN THE GRADING AND DEMOLITION PERMIT ISSUED BY THE CITY OF WEST LINN BUILDING DEPARTMENT.
19. CONTRACTOR SHALL LOCATE EXISTING SANITARY SEWER SERVICE TO THE HOUSE DURING DEMOLITION AND NOTIFY THE PROJECT ENGINEER AND CITY INSPECTOR. CONTRACTOR SHALL ABANDON THE SEWER SERVICE PIPING PER CITY OF WEST LINN REQUIREMENTS.

TREE TABLE

TREE NO.	SPECIES	DBH(IN.)
10008	PINE	18
10009	PINE	6,15
10010	PINE	20
10011	DOUGLAS FIR	20
10012	DOUGLAS FIR	25
* 10013	CHERRY	8,7,7
* 10014	APPLE	26(ROTTEN)
10015	PINE	11,11
10016	PINE	12
10017	PINE	23
10018	PINE	15
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11213	MAPLE	26
11214	MAPLE	11
11215	MAPLE	14
11216	MAPLE	13
11217	BIRCH	18

* TREE TO BE REMOVED

LEGEND

EXISTING GROUND CONTOUR (1 FT) —— 101 ——
EXISTING GROUND CONTOUR (5 FT) —— 100 ——
EXISTING TREE TO BE REMOVED
EXISTING TREE TO REMAIN
A.C. / CONCRETE TO BE REMOVED

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RENAISSANCE AT WILLAMETTE AS-BUILTS
WEST LINN OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S FARMAP 3S1E03AB

DEMOLITION AND TREE REMOVAL AND PRESERVATION PLAN

DESIGNED BY: DCN
DRAWN BY: JDR
CHECKED BY: MBH
SCALE: AS NOTED
DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2005
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

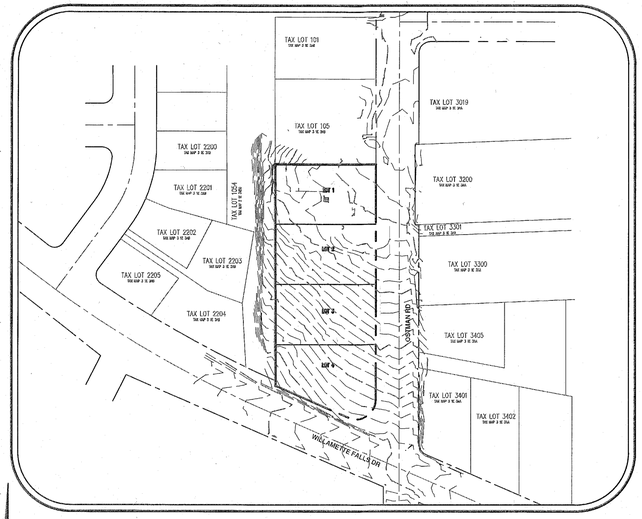
REVISIONS

JOB NUMBER 3745

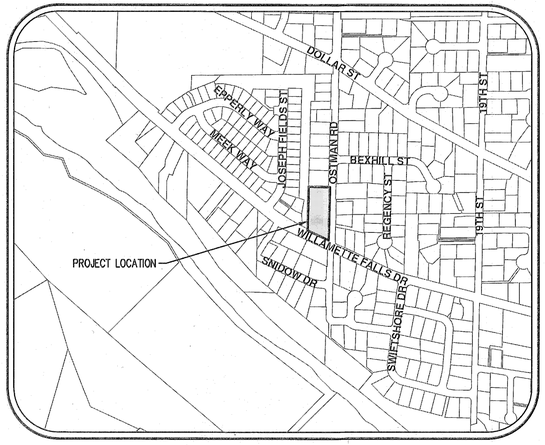
SHEET C030

AKS DRAWING FILE: 3745 C030 TREE PRESSLWG | LAYOUT: C030

ODEQ EROSION AND SEDIMENT CONTROL PLAN (ESCP)



SITE MAP
NOT TO SCALE



VICINITY MAP
SCALE: 1"=500'

ATTENTION EXCAVATORS:

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS BUT NOT MORE THAN TEN BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

OREGON UTILITY NOTIFICATION CENTER — Know what's below. Call before you dig. 811 — DIG SAFELY OREGON 1-800-332-2344

PLANNING / ENGINEERING / SURVEYING FIRM

AKS ENGINEERING & FORESTRY, LLC.
CONTACT: DAVID NICHOLS
12965 SW HERMAN ROAD, SUITE 100
TUALATIN, OR 97062
PH: 503-563-6151
FAX: 503-563-6152

APPLICANT/OWNER

RENAISSANCE HOMES
16771 BOONES FERRY ROAD
LAKE OSWEGO, OR 97035

SHEET INDEX

NARRATIVE DESCRIPTIONS

EXISTING SITE CONDITIONS
ONE SINGLE FAMILY HOUSE WITH DETACHED SHED OUTBUILDING.

DEVELOPED CONDITIONS
* RESIDENTIAL SUBDIVISION BUILDING LOTS.

NATURE OF CONSTRUCTION ACTIVITY AND TIMETABLE FOR MAJOR ACTIVITIES
* CLEARING (SEPT, 2014 – JAN, 2015)
* MASS GRADING [EXCAVATION AND FILL] (SEPT, 2014 – NOV, 2014)
* INSTALLATION OF UTILITIES (SEPT, 2014 – JAN, 2015)
* STREET CONSTRUCTION (SEPT, 2014 – JAN, 2015)
* FINAL STABILIZATION (JAN, 2015)

TOTAL SITE AREA = 1.02 ACRES±

TOTAL DISTURBED AREA = 60,566 SF± = 1.39 ACRES±

SITE SOIL CLASSIFICATION:
53C LATOURELL LOAM, 8% TO 15 % SLOPES
88A WILLAMETTE SILT LOAM, WET, 0% – 3% SLOPES

RECEIVING WATER BODIES:
PUBLIC STORM DRAINAGE SYSTEM.

INSPECTION FREQUENCY:
- ONCE EVERY TWO WEEKS ON INACTIVE SITES.
- DAILY WHEN STORMWATER RUNOFF IS OCCURRING.

PROJECT LOCATION:
1770 OSTMAN ROAD, WEST LINN, OR 97068
LAT: N45.344722° LONG: W122.667222°

PROPERTY DESCRIPTION:
TAX LOT 200, CLACKAMAS COUNTY ASSESSOR'S MAP 3 1E 03AB, LOCATED IN THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 3, TOWNSHIP 3 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

PERMITTEE'S SITE INSPECTOR: NATHAN GARITY
COMPANY/AGENCY: AKS ENGINEERING & FORESTRY, LLC
PHONE: 503-563-6151 (OFFICE) 971-275-3920 (MOBILE)
FAX: 503-563-6151
E-MAIL: NATHANG@AKS-ENG.COM
DESCRIPTION OF EXPERIENCE:
INSPECTING EROSION AND SEDIMENT CONTROLS.

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200CN PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200CN PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200CN PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:

ODEQ STANDARD EROSION AND SEDIMENT CONTROL PLAN NOTES

1. HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.C.I.(3))
2. ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHEDULE A.8.A)
3. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, RETAIN THE ESCP AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION. (SCHEDULE B.2.A)
4. THE ESCP MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE MEASURES AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS. (SCHEDULE A.8.C.II.(1)(C))
5. SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. (SCHEDULE A.12.C.III)
6. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A.8.C.II.(1)(D))
7. IDENTIFY, MARK, AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO E PRESERVED. IDENTIFY BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.C.I.(1)&(2))
8. PRESERVE EXISTING VEGETATION AND RE-VEGETATED OPEN AREAS WHEN PRACTICABLE BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I(6))
9. EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED, REPAIRED, AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORMWATER POLLUTION CONTROLS. (SCHEDULE A.7.D.I AND A.8.C)
10. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
11. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS. (SCHEDULE A.8.C.I.(7))
12. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7))
13. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: GRAVELED (OR PAVED) EXISTS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SCHEDULE A.7.D.II.(0 AND A.8.C.I.(4))
14. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.D.II.(3))
15. USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSED TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING,MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
16. WATER OR USE A SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A.7.B.III)
17. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURE'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.B.III)
18. IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURE'S SPECIFICATIONS. (SCHEDULE A.9.D)
19. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A.7.B)
20. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER. (SCHEDULE A.7.A.I)
21. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.C.I)
22. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT, AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.II)
23. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENT BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III & IV)
24. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STEAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.B.I)
25. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.B.II)
26. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEDDING, OR OTHER METHODS SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I)
27. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)
28. THE DESIGNATED EROSION AND SEDIMENT CONTROL INSPECTOR MUST PERFORM DAILY INSPECTIONS OF THE BMPS AND DISCHARGE OUTFALLS WHEN RAINFALL AND RUNOFF OCCUR. RECORD THE INSPECTIONS AND OBSERVATIONS IN A LOG THAT IS ON SITE. (SCHEDULE B.1.B(1))
29. ALL ESCP CONTROLS AND PRACTICES MUST BE INSPECTED VISUALLY ONCE TO ENSURE THAT BMPS ARE IN WORKING ORDER PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY AND MUST BE INSPECTED VISUALLY ONCE EVERY TWO (2) WEEKS DURING INACTIVE PERIODS GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS. (SCHEDULE B.1.B.(2) & (3))
30. IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION DURING PERIOD IN WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER. (SCHEDULE B.1.B.(4))
31. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. IDENTIFY THE TYPE OF VEGETATION SEED MIX USED. (SCHEDULE A.7.B.III)
32. PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AS EXPOSED AREAS BECOME STABILIZED, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. PROPERLY DISPOSE OF CONSTRUCTION MATERIALS AND WASTE, INCLUDING SEDIMENT RETAINED BE TEMPORARY BMPS. (SCHEDULE A.8.C.III)

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BMP MATRIX FOR CONSTRUCTION PHASES

REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S.

BMPs	YEAR:	14	14	14	14	14	14	14	15	15	15	15	15	15	15	15	15
	MONTH:	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
PIPE SLOPE DRAINS																			
ENERGY DISSIPATERS																			
TEMPORARY DIVERSION DIKES																			
CHECK DAMS																			
TEMPORARY SEEDING AND PLANTING																			
PERMANENT SEEDING AND PLANTING							X	X	X										
MYCORRHIHIZAE/BIOFERTILIZERS																			
MULCHES (SPECIFY TYPE)																			
COMPOST BLANKETS																			
COMPOST SOCKS																			
COMPOST BERM																			
SOIL TACKIFIERS																			
SODDING VEGETATIVE BUFFER STRIPS																			
SEDIMENT FENCING	**				X	X	X	X	X										
EROSION CONTROL BLANKETS AND MATS-AMERICAN GREEN S150																			
EARTH DIKES (STABILIZED)																			
DRAINAGE SWALES					X	X	X	X	X										
ROCK OUTLET PROTECTION																			
SEDIMENT TRAP																			
STORM DRAIN INLET PROTECTION	**				X	X	X	X	X										
TEMPORARY OR PERMANENT SEDIMENTATION BASINS																			
UNPAVED ROADS GRAVELED OR OTHER BMP ON ROAD																			
DEWATERING (TREATMENT LOCATION, SCHEMATIC, AND SAMPLING PLAN REQUIRED)																			
PAVING OPERATION CONTROLS							X	X											
CONCRETE TRUCK WASHOUT					X	X	X	X											
GRAVEL CONSTRUCTION ENTRANCE	**				X	X	X	X											
PLASTIC SHEETING							X	X	X										
RAIN GARDEN					X	X	X	X	X										

** SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY.

INSPECTION FREQUENCY	
SITE CONDITION	MINIMUM FREQUENCY
1. ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING. AT LEAST ONCE EVERY TWO (2) WEEKS REGARDLESS OF WETHER STORMWATER RUNOFF IS OCCURRING.
2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3. INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.	ONCE EVERY TWO (2) WEEKS.
4. PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.

* HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS.
* ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-CN PERMIT REQUIREMENTS.
* INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-CN PERMIT REQUIREMENTS.
* REVISIONS TO APPROVED ESC PLAN OR INSPECTOR MUST BE SUBMITTED TO DEQ OR AGENT IN ACCORDANCE WITH CURRENT 1200-C PERMIT.

RATIONALE STATEMENT

A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEQ's GUIDANCE MANUAL HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMP's WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.

INITIAL MH

AKS ENGINEERING AND FORESTRY, LLC
12965 SW HERMAN RD
SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
FAX: 503.563.6152
www.aks-eng.com
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RENAISSANCE AT WILLAMETTE AS-BUILTS OREGON

CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB
TAX LOT 0200
WEST LINN

EROSION AND SEDIMENT CONTROL COVER SHEET

DESIGNED BY: DCN
DRAWN BY: JDR
CHECKED BY: MBH
SCALE: AS NOTED
DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER 58542PE OREGON JULY 9, 2005 MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C050

AKS DRAWING FILE: 3745 C051 GRADING AND ESC REVI.DWG | LAYOUT: C050

GRADING AND EROSION CONTROL LEGEND

- EXISTING GROUND CONTOUR (1 FT)
- EXISTING GROUND CONTOUR (5 FT) — 105
- FINISHED GRADE CONTOUR (1 FT)
- FINISHED GRADE CONTOUR (5 FT) — 105
- LIMITS OF DISTURBANCE (1.39 ACRES ±)
- SEDIMENT FENCE (TO BE INSTALLED PRIOR TO GRADING) — X
- SEDIMENT FENCE (TO BE INSTALLED AFTER GRADING) — XX
- INLET PROTECTION
- CONCRETE WASHOUT AREA
- DRAINAGE FLOW DIRECTION
- GRAVEL CONSTRUCTION ENTRANCE
- SLOPE MATTING

LEGEND

	EXISTING	PROPOSED
DECIDUOUS TREE	○	○
CONIFEROUS TREE	✶	✶
FIRE HYDRANT	♀	♀
WATER BLOWOFF	⚲	⚲
WATER METER	▭	▭
WATER VALVE	⋈	⋈
DOUBLE CHECK VALVE	⊠	⊠
AIR RELEASE VALVE	⚲	⚲
SANITARY SEWER CLEAN OUT	○	●
SANITARY SEWER MANHOLE	◯	◉
SIGN	⊤	⊤
STREET LIGHT	☼	☼
MAILBOX	MB	MB

	EXISTING	PROPOSED
STORM SEWER CLEAN OUT	○	●
STORM SEWER CATCH BASIN	□	■
STORM SEWER AREA DRAIN	□	■
STORM SEWER MANHOLE	◎	◉
GAS METER	⊠	⊠
GAS VALVE	⊠	⊠
GUY WIRE ANCHOR	←	←
POWER POLE	○	●
POWER VAULT	P	P
POWER JUNCTION BOX	△	△
POWER PEDESTAL	□	■
COMMUNICATIONS VAULT	C	C
COMMUNICATIONS JUNCTION BOX	△	▲
COMMUNICATIONS RISER	○	●

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE		
BOUNDARY LINE		
PROPERTY LINE		
CENTERLINE		
DITCH		
CURB		
EDGE OF PAVEMENT		
EASEMENT		
FENCE LINE		
GRAVEL EDGE		
POWER LINE	PWR	PWR
OVERHEAD WIRE	OHW	OHW
COMMUNICATIONS LINE	COM	COM
FIBER OPTIC LINE	CFO	CFO
GAS LINE	GAS	GAS
STORM SEWER LINE	STM	STM
SANITARY SEWER LINE	SAN	SAN
WATER LINE	WAT	WAT

AS-BUILT DISCLAIMER:
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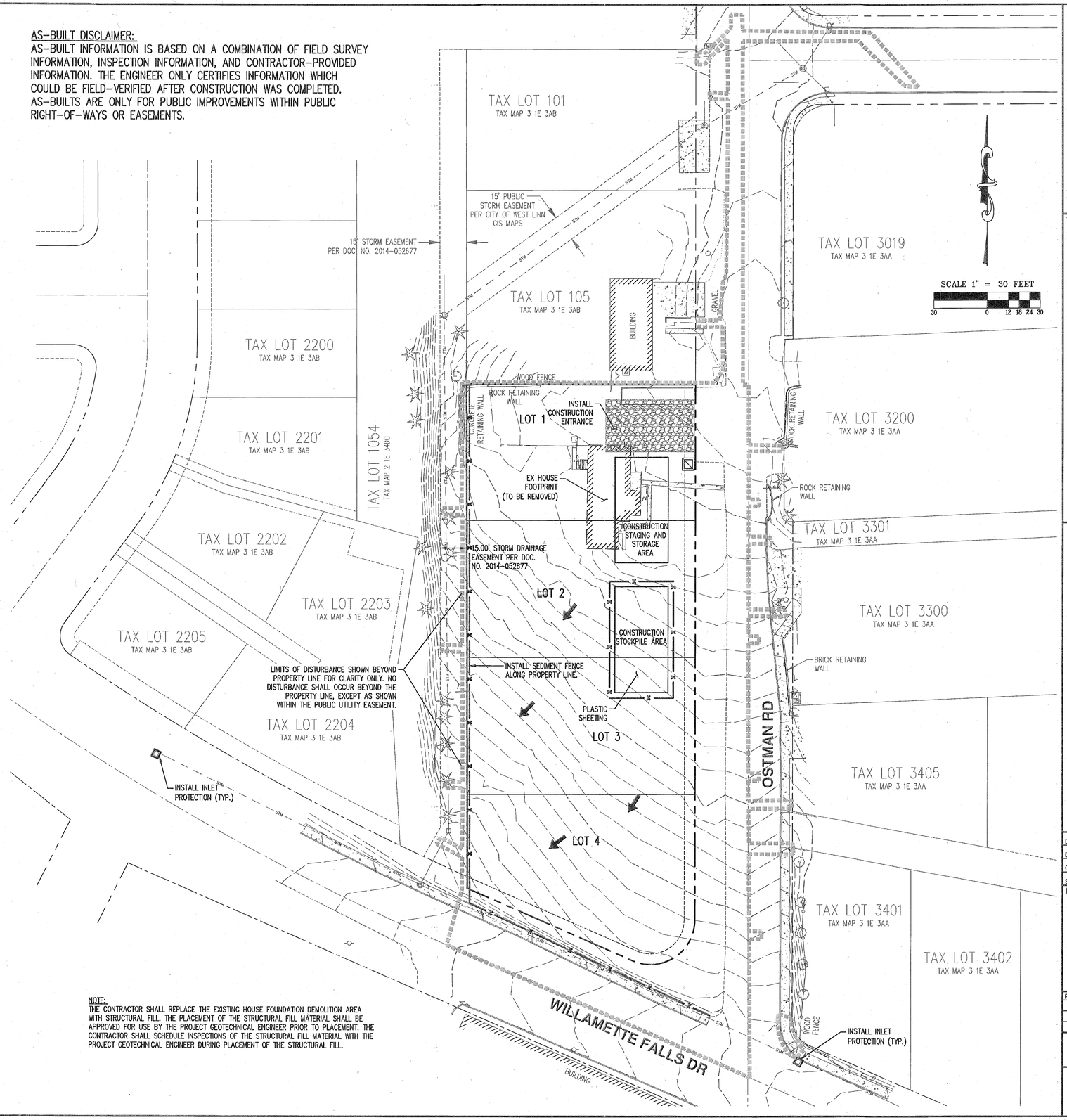

NOTE:
THE CONTRACTOR SHALL REPLACE THE EXISTING HOUSE FOUNDATION DEMOLITION AREA WITH STRUCTURAL FILL. THE PLACEMENT OF THE STRUCTURAL FILL MATERIAL SHALL BE APPROVED FOR USE BY THE PROJECT GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. THE CONTRACTOR SHALL SCHEDULE INSPECTIONS OF THE STRUCTURAL FILL MATERIAL WITH THE PROJECT GEOTECHNICAL ENGINEER DURING PLACEMENT OF THE STRUCTURAL FILL.

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SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
FAX: 503.563.6152
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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

PHASE I EROSION AND SEDIMENT CONTROL PLAN

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED

DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2010
MONTGOMERY B. HURLEY

RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER
3745

SHEET
C051

AKS DRAWING FILE: 3745 C051 GRADING AND ESC REVLDWG | LAYOUT: C051

GRADING AND EROSION CONTROL LEGEND

- EXISTING GROUND CONTOUR (1 FT)
- EXISTING GROUND CONTOUR (5 FT) — 105
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- INLET PROTECTION
- CONCRETE WASHOUT AREA
- DRAINAGE FLOW DIRECTION
- GRAVEL CONSTRUCTION ENTRANCE
- SLOPE MATTING

LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
DECIDUOUS TREE			STORM SEWER CLEAN OUT		
CONIFEROUS TREE			STORM SEWER CATCH BASIN		
			STORM SEWER AREA DRAIN		
FIRE HYDRANT			STORM SEWER MANHOLE		
WATER BLOWOFF			GAS METER		
WATER METER			GAS VALVE		
WATER VALVE			GUY WIRE ANCHOR		
DOUBLE CHECK VALVE			POWER POLE		
AIR RELEASE VALVE			POWER VAULT	P	P
SANITARY SEWER CLEAN OUT			POWER JUNCTION BOX		
SANITARY SEWER MANHOLE			POWER PEDESTAL		
SIGN			COMMUNICATIONS VAULT	C	C
STREET LIGHT			COMMUNICATIONS JUNCTION BOX		
MAILBOX	MB	MB	COMMUNICATIONS RISER		

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE		
BOUNDARY LINE		
PROPERTY LINE		
CENTERLINE		
DITCH		
CURB		
EDGE OF PAVEMENT		
EASEMENT		
FENCE LINE		
GRAVEL EDGE		
POWER LINE	PWR	PWR
OVERHEAD WIRE	OHW	OHW
COMMUNICATIONS LINE	COM	COM
FIBER OPTIC LINE	CFO	CFO
GAS LINE	GAS	GAS
STORM SEWER LINE	STM	STM
SANITARY SEWER LINE	SAN	SAN
WATER LINE	WAT	WAT

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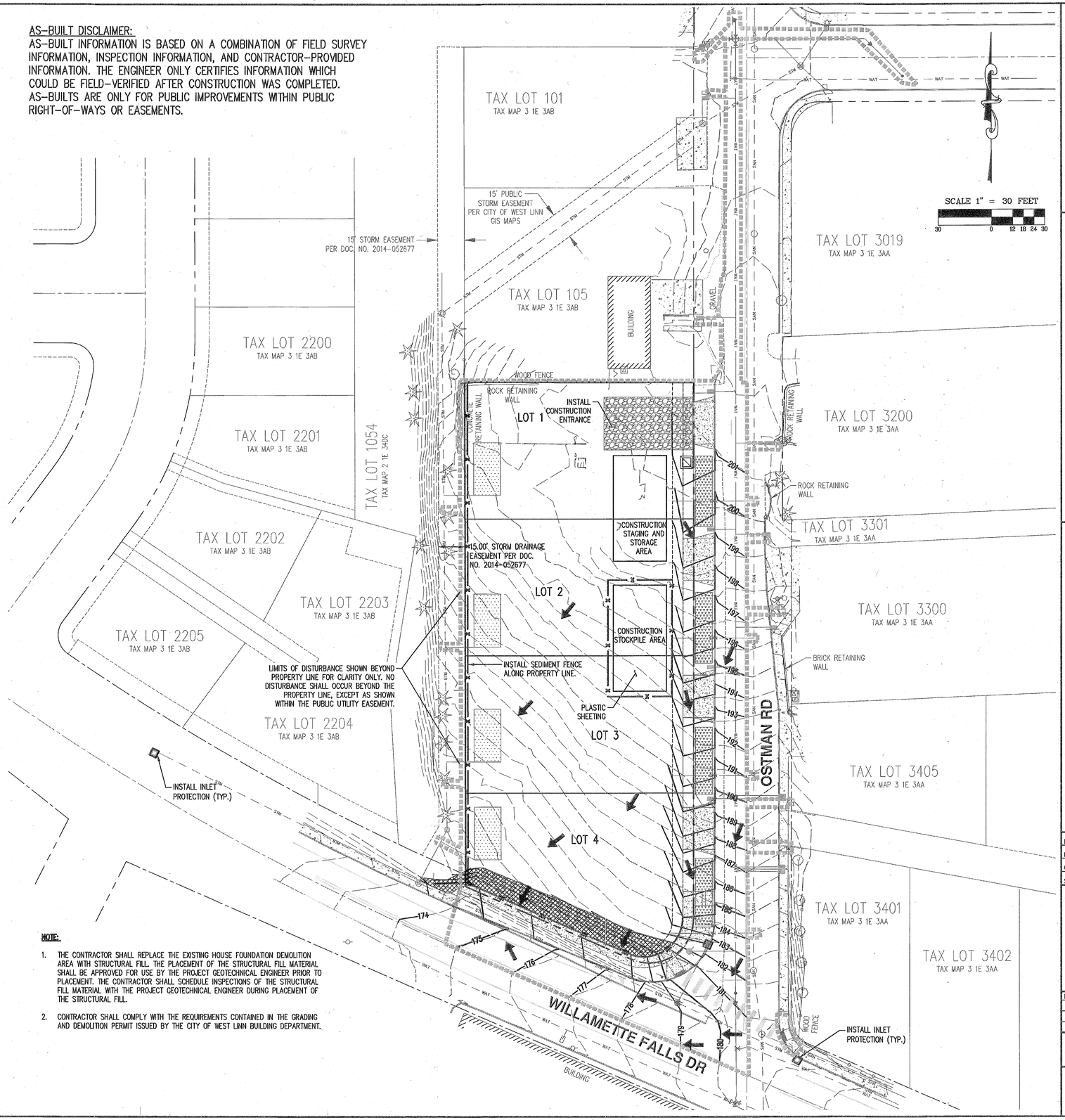

NOTE:

1. THE CONTRACTOR SHALL REPLACE THE EXISTING HOUSE FOUNDATION DEMOLITION AREA WITH STRUCTURAL FILL. THE PLACEMENT OF THE STRUCTURAL FILL MATERIAL SHALL BE APPROVED FOR USE BY THE PROJECT GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. THE CONTRACTOR SHALL SCHEDULE INSPECTIONS OF THE STRUCTURAL FILL MATERIAL WITH THE PROJECT GEOTECHNICAL ENGINEER DURING PLACEMENT OF THE STRUCTURAL FILL.
2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS CONTAINED IN THE GRADING AND DEMOLITION PERMIT ISSUED BY THE CITY OF WEST LINN BUILDING DEPARTMENT.

AKS ENGINEERING AND FORESTRY, LLC
12965 SW HERMAN RD
SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
FAX: 503.563.6152
www.aks-eng.com

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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

PHASE II GRADING AND EROSION PLAN

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED

DATE: 2/9/2015

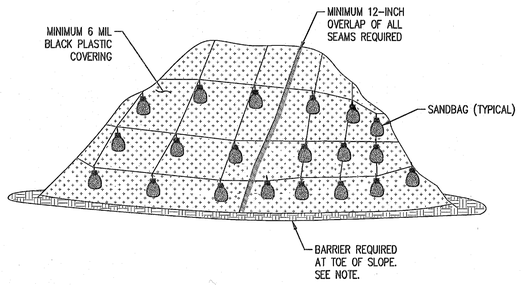
REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2005
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

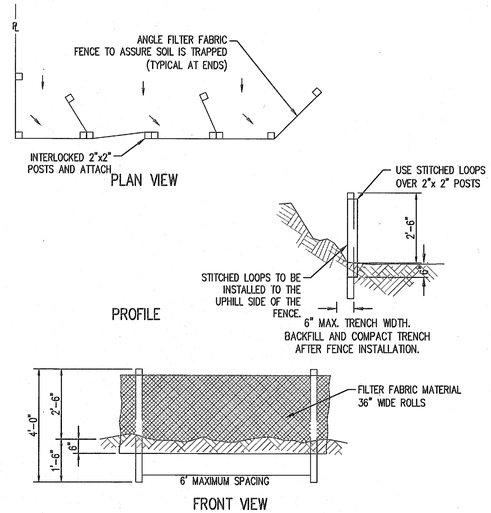
SHEET C052

AKS DRAWING FILE: 3745 C051 GRADING AND ESC REV1.DWG | LAYOUT: C052



NOTES:
1. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.
2. BARRIER SHALL CONSIST OF SOIL BERM, SILT FENCE, STRAW WATTLE, GRASS LINED DITCH, SANDBAGS, OR OTHER APPROVED MATERIAL.
3. STOCKPILE(S) MUST BE LOCATED IN AREAS THAT WILL NOT IMPOUND OR BLOCK STORMWATER RUNOFF.
4. ALL SEAMS SHALL BE TAPED OR WEIGHTED DOWN FOR FULL LENGTH.
5. PLASTIC SHEETING REQUIRED FOR ALL TEMPORARY STOCKPILED MATERIAL.

PLASTIC SHEETING
NTS



NOTES:
1. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
2. 2"X 2" FIR, PINE OR STEEL FENCE POSTS. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.

MAINTENANCE NOTES:
1. SEDIMENT BARRIERS SHALL BE MAINTAINED UNTIL UP-SLOPE AREA IS PERMANENTLY STABILIZED.
2. AT NO TIME SHALL MORE THAN 10 INCHES OF SEDIMENT BE ALLOWED TO ACCUMULATE BEHIND SEDIMENT FENCES.
3. NEW SEDIMENT BARRIERS SHALL BE INSTALLED UPHILL AS REQUIRED TO CONTROL SEDIMENT TRANSPORT.
4. SEDIMENT FENCE MUST BE ADEQUATELY SUPPORTED AS REQUIRED TO CONTROL SEDIMENT TRANSPORT.
5. FENCE SHALL NOT BE STAPLED TO EXISTING TREES.

SEDIMENT FENCE SPECS:
1. SEDIMENT FENCE SHALL BE CONSTRUCTED OF CONTINUOUS FILTER FABRIC TO MINIMIZE USE OF JOINTS.
2. WHEN A JOINT IS REQUIRED, FABRIC SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAP AND BOTH ENDS SECURELY FASTENED TO A POST.

SEDIMENT FENCE
NTS

PRE-CONSTRUCTION, CLEARING, AND DEMOLITION NOTES:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

2. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE OR OTHER APPROVED MATERIALS.

3. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.

4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

5. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES.

AS-BUILT DISCLAIMER:

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EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

2. ALL "SEDIMENT BARRIERS (TO BE INSTALLED AFTER GRADING)" SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.

3. INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.

4. LONG TERM SLOPE STABILIZATION MEASURES SHALL BE IN PLACE OVER AREAS WITH A SLOPE MORE THAN 5:1.

OTHER MISCELLANEOUS BMP NOTES:

TO PREVENT ILLICIT CONNECTION AND ILLEGAL DISCHARGE:

1. INSPECT SITE BEFORE BEGINNING THE JOB FOR EVIDENCE OF ILLICIT CONNECTIONS OR ILLEGAL DUMPING OR DISCHARGES.

2. INSPECT SITE REGULARLY DURING PROJECT EXECUTION FOR EVIDENCE OF ILLICIT CONNECTIONS OR ILLEGAL DUMPING OR DISCHARGES.

3. OBSERVE SITE PERIMETER FOR EVIDENCE OR POTENTIAL OF ILLICITLY DISCHARGED OR ILLEGALLY DUMPED MATERIAL WHICH MAY ENTER THE JOB SITE.

4. IDENTIFICATION OF ILLICIT CONNECTIONS AND ILLEGAL DUMPING OR DISCHARGES:

A. SOLIDS: LOOK FOR DEBRIS, OR RUBBISH PILES. SOLID WASTE DUMPING OFTEN OCCURS ON ROADWAYS WITH LIGHT TRAFFIC LOADS OR IN AREAS NOT EASILY VISIBLE FROM THE TRAVELED WAY.

B. LIQUIDS:
1. VISIBLE SIGNS OF STAINING OR UNUSUAL COLORS TO THE PAVEMENT OR SURROUNDING ADJACENT SOILS.
2. DISCOLORATION OR OILY SUBSTANCES IN THE WATER OR STAINS AND RESIDUES DETAINED WITH DITCHES, CHANNELS OR DRAINAGE BOXES.
3. PUNGENT ODORS COMING FROM THE DRAINAGE SYSTEMS.
4. ABNORMAL WATER FLOW DURING THE DRY WEATHER SEASON.
5. URBAN AREAS – EVIDENCE OF ILLICIT CONNECTIONS OR ILLEGAL DISCHARGES IS TYPICALLY DETECTED AT THE STORM DRAIN OUTFALL LOCATIONS OR AT THE MANHOLES. SIGNS OF AN ILLICIT CONNECTION OR ILLEGAL DISCHARGE CAN INCLUDE:
* – ABNORMAL WATER FLOW DURING THE DRY WEATHER SEASON.
* – UNUSUAL FLOWS IN SUB-DRAIN SYSTEMS USED FOR DEWATERING.
* – PUNGENT ODORS COMING FROM THE DRAINAGE SYSTEMS.
* – DISCOLORATION OR OILY SUBSTANCES IN THE WATER OR STAINS AND RESIDUES DETAINED WITHIN DITCHES.
* – EXCESSIVE SEDIMENT DEPOSITS, PARTICULARLY ADJACENT TO OR NEAR ACTIVE OFF-SITE CONSTRUCTION.

5. NOTIFY THE PROJECT SUPERINTENDENT OF ANY ILLICIT CONNECTIONS, DUMPINGS, OR DISCHARGES AT THE TIME OF DISCOVERY.

6. VEHICLES AND EQUIPMENT SHOULD BE WASHED OFF SITE AT A CONTROLLED WASH FACILITY WHEN AT ALL POSSIBLE.

7. USE "DRY CLEANING METHODS" SUCH AS WIPING DOWN WHENEVER POSSIBLE RATHER THAN WATER WASHING VEHICLES ON SITE.

8. IF CLEANING MUST BE CONDUCTED ON-SITE, IT SHALL BE CONDUCTED IN A DEDICATED AREA WITH THE FOLLOWING CHARACTERISTICS:
* – LOCATED AWAY FROM THE STORM DRAIN INLETS, DRAINAGE FACILITIES, OR WATERCOURSES.
* – PAVED WITH CONCRETE OR ASPHALT, OR STABILIZED WITH AN AGGREGATE BASE.
* – BERMED TO CONTAIN WASH WATERS AND TO PREVENT RUN-ON AND RUNOFF.
* – CONFIGURED WASH AREA WITH A SUMP TO ALLOW COLLECTION AND DISPOSAL OF WASH WATER.
* – DISCHARGE WASH WATER TO A SANITARY OR PROCESS WASTE SEWER (WHERE PERMITTED), OR TO A DEAD END SUMP. WASH WATERS SHALL NOT BE DISCHARGED TO STORM DRAINS OR WATERCOURSES.
* – USED ONLY WHEN NECESSARY.

9. WHEN CLEANING VEHICLES OR EQUIPMENT WITH WATER:
* – USE AS LITTLE WATER AS POSSIBLE. CONSIDER USING A HIGH PRESSURE SPRAYER AND USE THE POSITIVE SHUTOFF VALVE.
* – DO NOT USE SOLVENTS OR DETERGENTS TO CLEAN VEHICLES OR EQUIPMENT ON SITE.
* – DO NOT USE STEAM CLEANING ON SITE.

10. INSPECT AND CLEAN WORK AREAS REGULARLY TO LIMIT WIND BLOWN DEBRIS AND POLLUTANTS TRANSPORTED BY STORMWATER.

TO REUSE AND RECYCLE CONSTRUCTION WASTES:

1. USE TRENCH SPOILS AND CUT AREA SOIL FOR FILL. UNSUITABLE AND EXCESS MATERIAL SHALL BE HAULED OFF SITE TO AN APPROVED LOCATION. IMPORTED FILL MATERIAL SHALL BE APPROVED BY THE PROJECT'S GEOTECHNICAL ENGINEER.

GRADING, STREET, AND UTILITY EROSION AND SEDIMENT CONSTRUCTION NOTES:

1. LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SLOPE MATTING.

2. TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.

3. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.

4. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.

5. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.

6. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

7. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.

8. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.

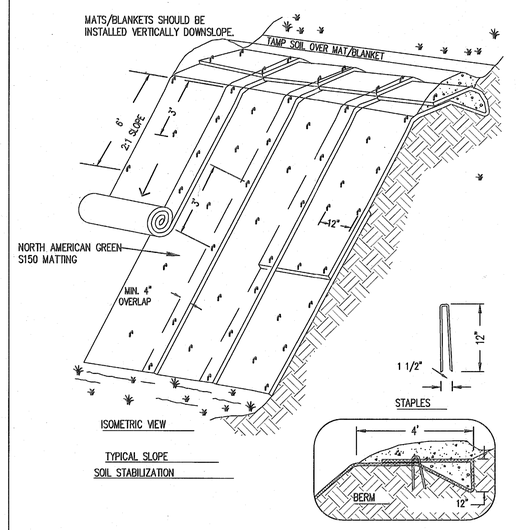
9. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.

10. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORMWATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.

11. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORMWATER SYSTEM.

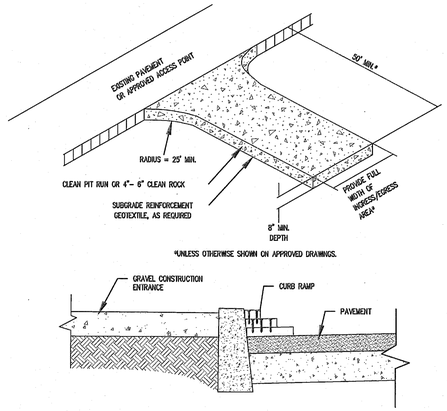
12. USE BMPs SUCH AS INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.

13. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.



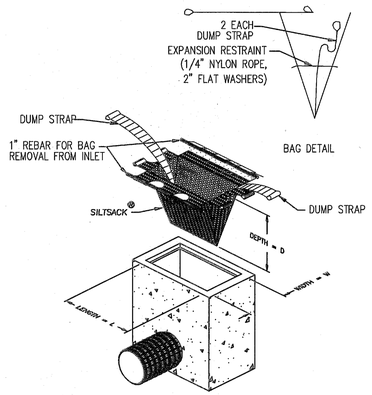
NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. STAKING OR STAPLING LAYOUT PER MANUFACTURERS SPECIFICATIONS.

SLOPE MATTING
NTS



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.

CONSTRUCTION ENTRANCE
NTS



Regular Flow Only
Do not use High Flow Insert Bags.

CATCH BASIN INSERT BAG

NOTES:
1. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS. SIZE OF FILTER FABRIC INLET SACKS TO BE DETERMINED BY MANUFACTURER.

INLET PROTECTION DETAIL
NTS

AKS ENGINEERING AND FORESTRY, LLC
12965 SW HERMAN RD
SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
FAX: 503.563.6152
www.aks-eng.com

AKS ENGINEERING · PLANNING · SURVEYING
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RENAISSANCE AT WILLAMETTE AS-BUILTS
WEST LINN OREGON
TAX LOT 02000 CLACKAMAS COUNTY ASSESSOR'S MAP 3S1E03AB

EROSION CONTROL DETAILS

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED

DATE: 2/9/2015

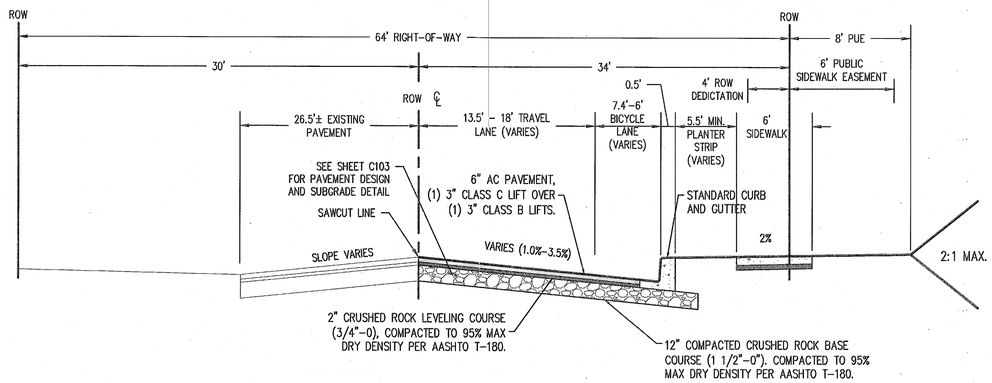
REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2005
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C053

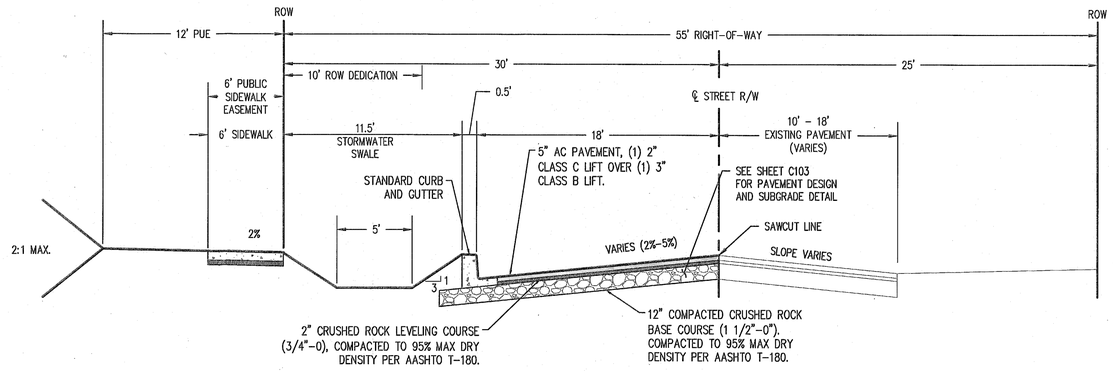
AKS DRAWING FILE: 3745 C053 GRADING AND ESC REV1.DWG | LAYOUT: C053



WILLAMETTE FALLS DRIVE (HALF STREET)
CROSS-SECTION

STA 10+00.00 - STA 11+95.24 (WILLAMETTE FALLS)

NOT TO SCALE



OSTMAN ROAD (HALF STREET)
CROSS-SECTION

STA 10+00.00 - STA 14+07.21 (OSTMAN)

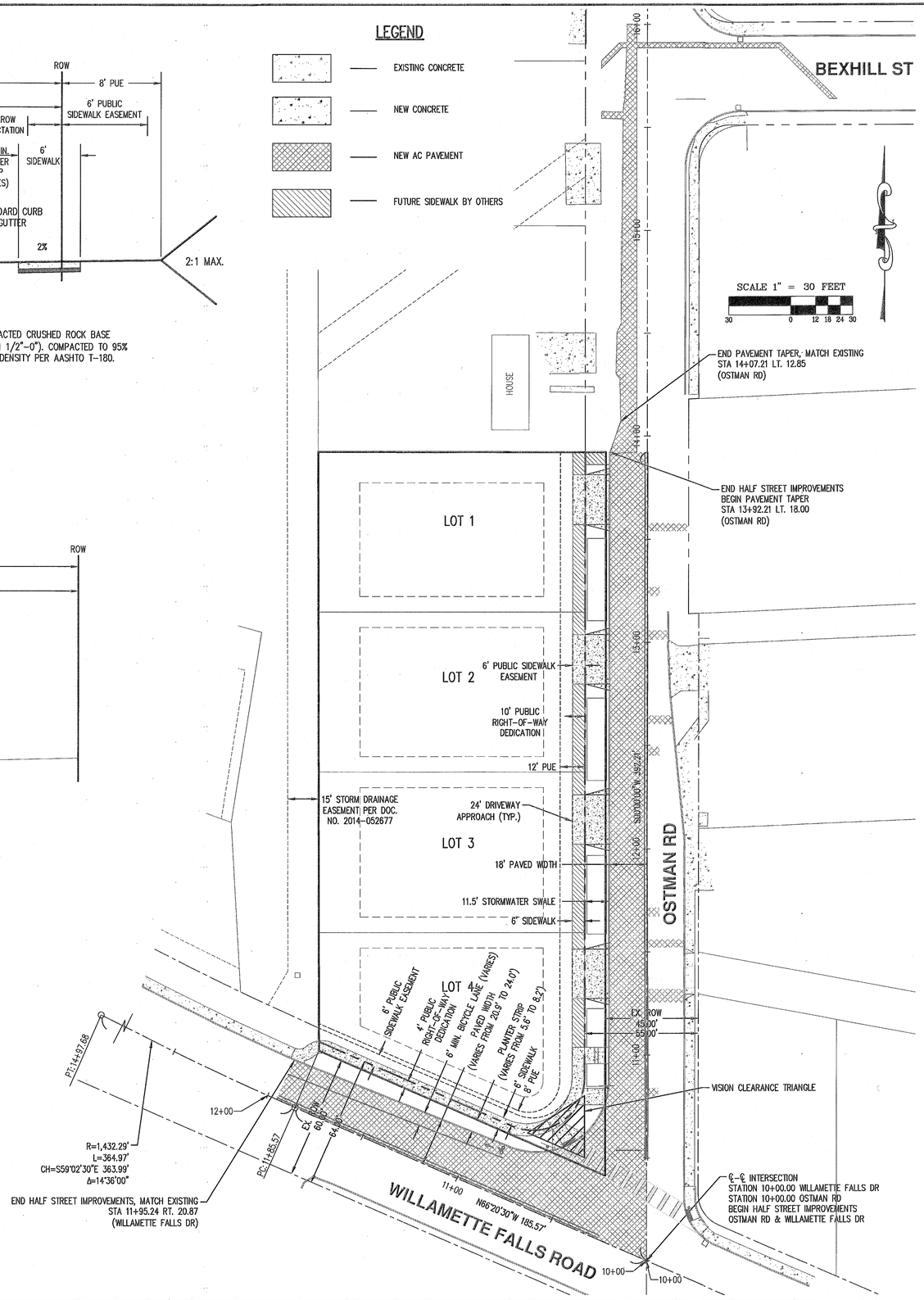
NOT TO SCALE

NOTE:

1. ALL PUBLIC CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, DIVISIONS, AND STREET TECHNICAL REQUIREMENTS.

AS-BUILT DISCLAIMER:

AS-BUILT INFORMATION IS BASED ON A COMBINATION OF FIELD SURVEY INFORMATION, INSPECTION INFORMATION, AND CONTRACTOR-PROVIDED INFORMATION. THE ENGINEER ONLY CERTIFIES INFORMATION WHICH COULD BE FIELD-VERIFIED AFTER CONSTRUCTION WAS COMPLETED. AS-BUILTS ARE ONLY FOR PUBLIC IMPROVEMENTS WITHIN PUBLIC RIGHT-OF-WAYS OR EASEMENTS.



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RENAISSANCE AT WILLAMETTE AS-BUILTS
WEST LINN OREGON
TAX LOT 02200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

STREET PLAN AND CROSS SECTIONS

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED
DATE: 2/9/2015	

REGISTERED PROFESSIONAL ENGINEER 58542PE OREGON JULY 9, 2002 MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

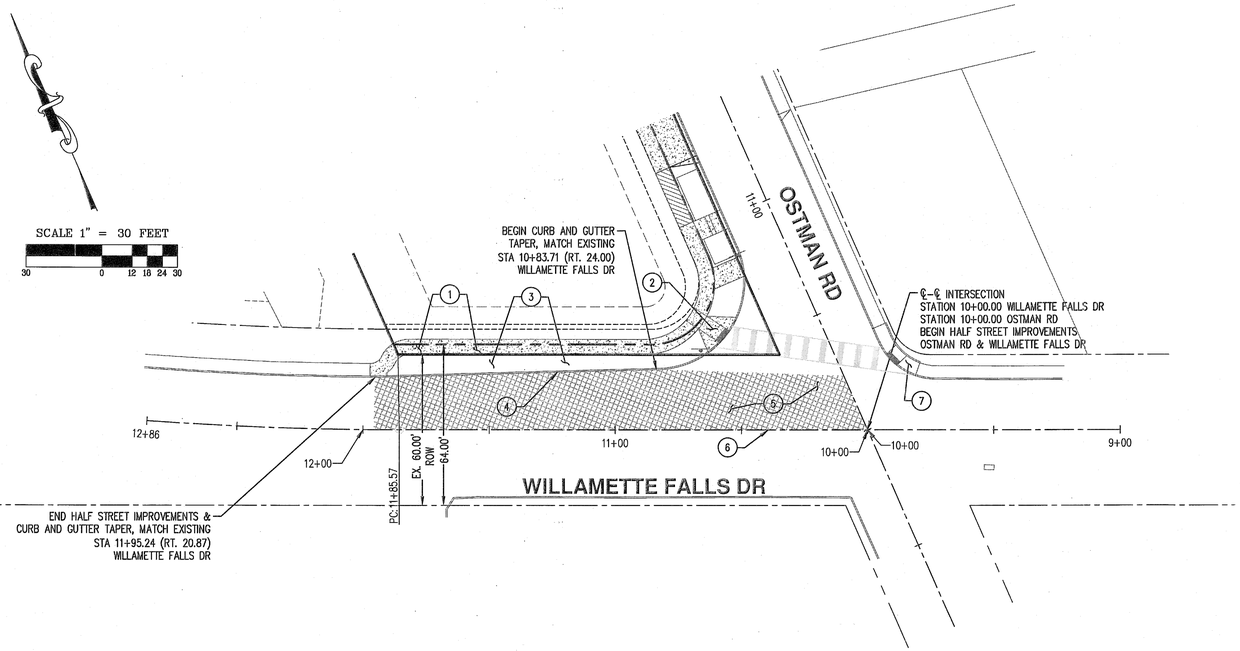
SHEET C100

AKS DRAWING FILE: 3745 C100 SITE PLAN.DWG | LAYOUT: C100

AS-BUILT DISCLAIMER:
AS-BUILT INFORMATION IS BASED ON A COMBINATION OF FIELD SURVEY INFORMATION, INSPECTION INFORMATION, AND CONTRACTOR-PROVIDED INFORMATION. THE ENGINEER ONLY CERTIFIES INFORMATION WHICH COULD BE FIELD-VERIFIED AFTER CONSTRUCTION WAS COMPLETED. AS-BUILTS ARE ONLY FOR PUBLIC IMPROVEMENTS WITHIN PUBLIC RIGHT-OF-WAYS OR EASEMENTS.

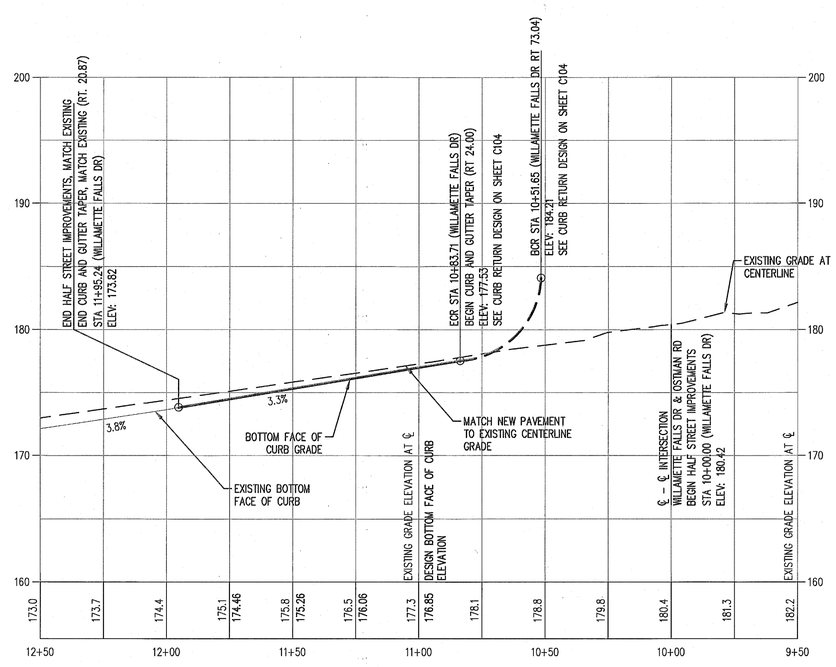
LEGEND

- EXISTING CONCRETE
- NEW CONCRETE
- NEW AC PAVEMENT
- FUTURE SIDEWALK BY OTHERS



PUBLIC STREET KEYED NOTES

1. INSTALL 6' WIDE CONCRETE SIDEWALK, SEE DETAIL ON SHEET C103, SEE SHEET C104 FOR DETAILED GRADING.
2. INSTALL SIDEWALK RAMP, SEE DETAIL ON SHEET C103. SEE SHEET C104 FOR DETAILED GRADING.
3. INSTALL LANDSCAPING AND STREET TREES, SEE SHEET L100 (TO BE APPROVED BY CITY ARBORIST).
4. INSTALL STANDARD CURB AND GUTTER, SEE DETAIL ON SHEET C103.
5. INSTALL AC PAVEMENT AND AGGREGATE BASE, SEE DETAIL ON SHEET C103.
6. SAWCUT EX AC AT CENTERLINE. SAND AND SEAL SAWCUT JOINT PER CITY CONSTRUCTION STANDARDS.
7. INSTALL SIDEWALK RAMP, SEE DETAIL ON SHEET C104.



WILLAMETTE FALLS DRIVE CENTERLINE PROFILE
Hor. Scale: 1"= 30'
Vert. Scale: 1"= 6'

STATIONING BASED ON CENTERLINE OF WILLAMETTE FALLS DRIVE

WILLAMETTE FALLS DRIVE CENTERLINE ALIGNMENT

CENTERLINE STATION	TANGENT / CURVE	BEARING / RADIUS	LENGTH	DELTA
PT STA: 10+00.00				
	TANGENT	N66°20'30"W	185.57'	
PC STA: 11+85.57				
	CURVE RT	1432.29'	9.66'	00°23'00"
PT STA: 11+95.24				

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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON
TAX LOT 02000 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

STREET PLAN AND PROFILE - WILLAMETTE FALLS DRIVE

DESIGNED BY: DCN
DRAWN BY: JDR
CHECKED BY: MBH
SCALE: AS NOTED
DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2005
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

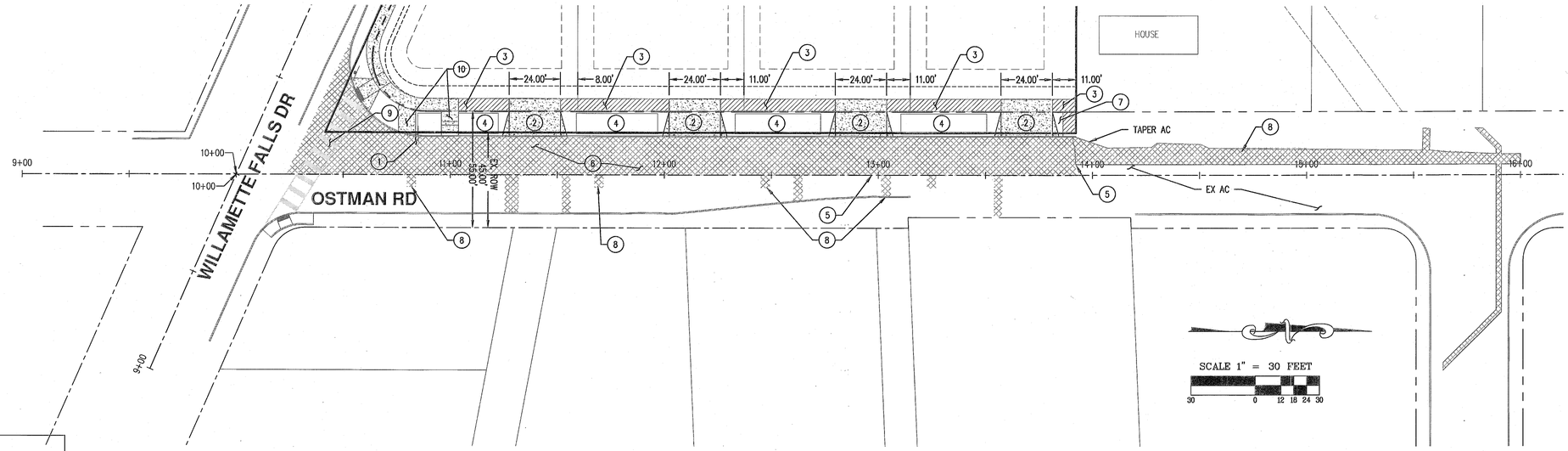
SHEET C101

AKS DRAWING FILE: 3745 C100 SITE PLANDWG | LAYOUT: C101

AS-BUILT DISCLAIMER:
AS-BUILT INFORMATION IS BASED ON A COMBINATION OF FIELD SURVEY INFORMATION, INSPECTION INFORMATION, AND CONTRACTOR-PROVIDED INFORMATION. THE ENGINEER ONLY CERTIFIES INFORMATION WHICH COULD BE FIELD-VERIFIED AFTER CONSTRUCTION WAS COMPLETED. AS-BUILTS ARE ONLY FOR PUBLIC IMPROVEMENTS WITHIN PUBLIC RIGHT-OF-WAYS OR EASEMENTS.

LEGEND

- EXISTING CONCRETE
- NEW CONCRETE
- NEW AC PAVEMENT
- FUTURE SIDEWALK BY OTHERS

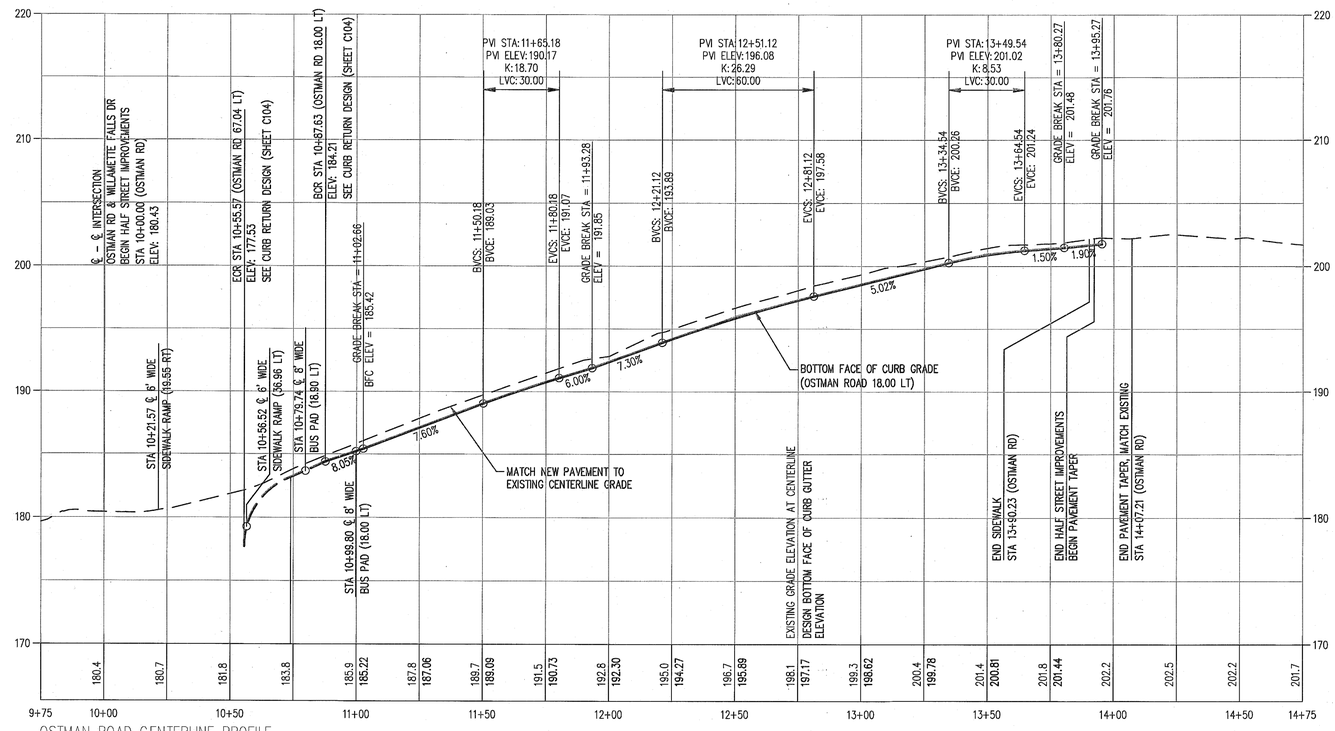


OSTMAN ROAD CENTERLINE ALIGNMENT

CENTERLINE STATION	TANGENT	BEARING	LENGTH	DELTA
PT STA: 10+00.00				
	TANGENT	S00°00'00"W	392.21'	
PT STA: 13+92.21				

PUBLIC STREET KEYED NOTES

1. INSTALL STANDARD CURB AND GUTTER, SEE DETAIL ON SHEET C103.
2. INSTALL CONCRETE DRIVEWAY APRON, SEE DETAIL ON SHEET C103.
3. FUTURE SIDEWALK BY OTHERS, NOT PART OF THIS PERMIT.
4. SEE SHEETS C200 AND C202 FOR PUBLIC STORMWATER FACILITY.
5. SAWCUT EXISTING AC AT CENTERLINE. SAND AND SEAL SAWCUT JOINT PER CITY CONSTRICTION STANDARDS.
6. INSTALL AC PAVING AND AGGREGATE BASE, SEE DETAIL ON SHEET C103.
7. INSTALL LANDSCAPING AND STREET TREES, SEE DETAIL ON SHEET L100.
8. TRENCH RESTORATION AND PAVING, SEE DETAILS ON SHEET C103.
9. NEW ADA CROSSWALK (PROJECT SIDE OF STREET ONLY), SEE DETAILED GRADING ON SHEET C104. SEE SHEET C110 FOR DETAILS OF PAVEMENT MARKING.
10. INSTALL 8' WIDE CONCRETE SIDEWALK, SEE DETAIL ON SHEET C103. SEE SHEET C104 FOR GRADES.



OSTMAN ROAD CENTERLINE PROFILE
Hor. Scale: 1"= 30'
Vert. Scale: 1"= 6'

STATIONING BASED ON OSTMAN ROAD CENTERLINE

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SUITE 100
TUALATIN, OR 97062
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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN, OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

STREET PLAN AND PROFILE - OSTMAN ROAD

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED
DATE:	2/9/2015

REGISTERED PROFESSIONAL ENGINEER 58542PE OREGON JULY 9, 2005 MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C102

AKS DRAWING FILE: 3745 C100 SITE PLAN.DWG | LAYOUT: C102

RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON

TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

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SUITE 100
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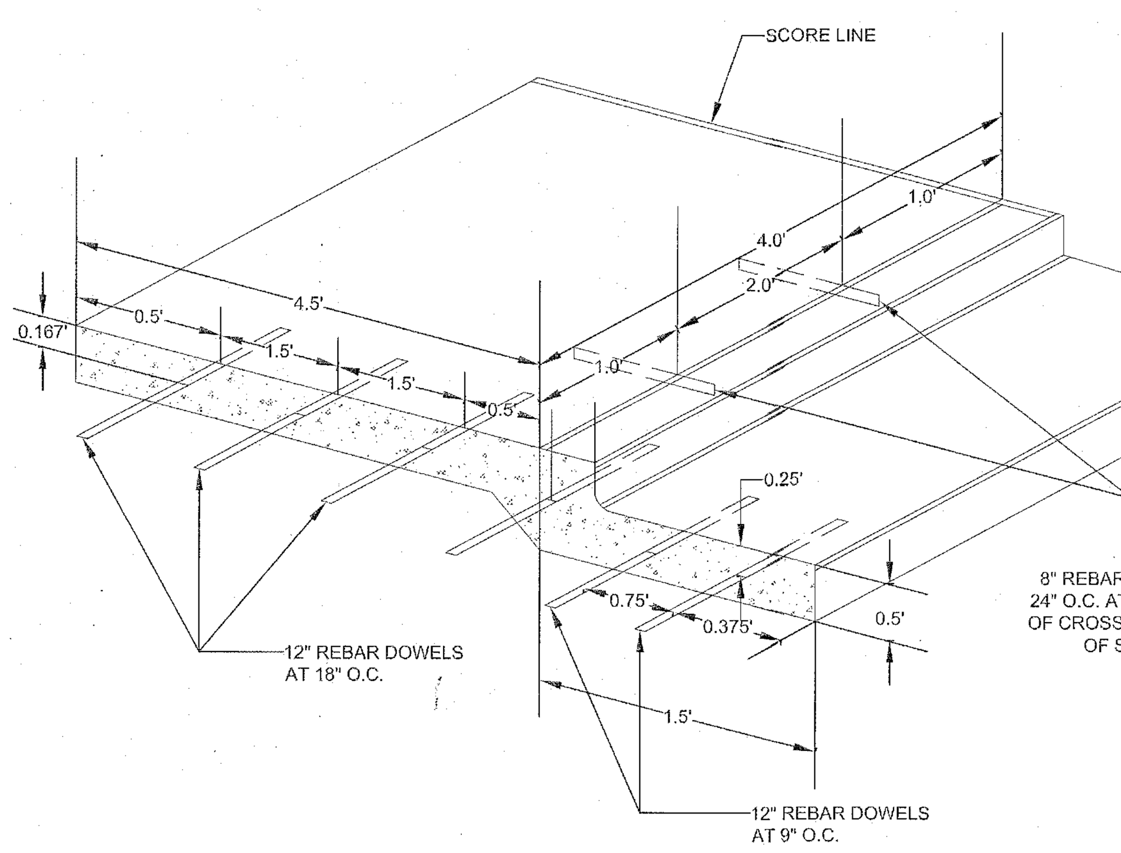
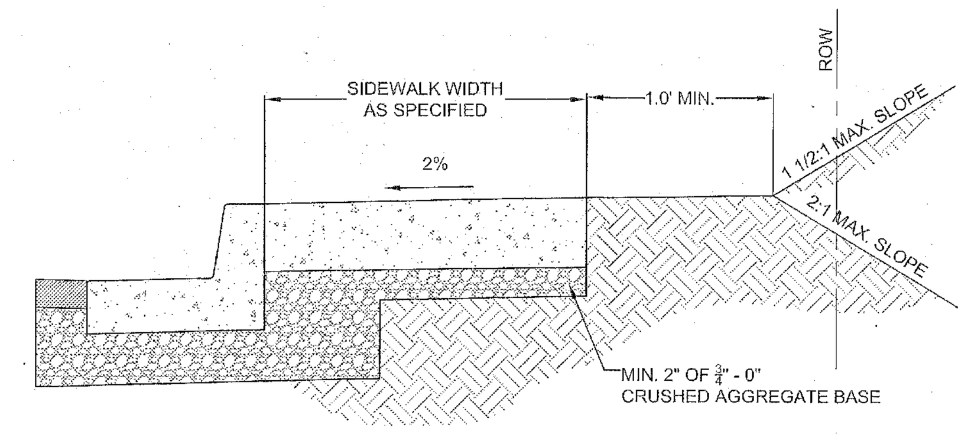
STREET DETAILS

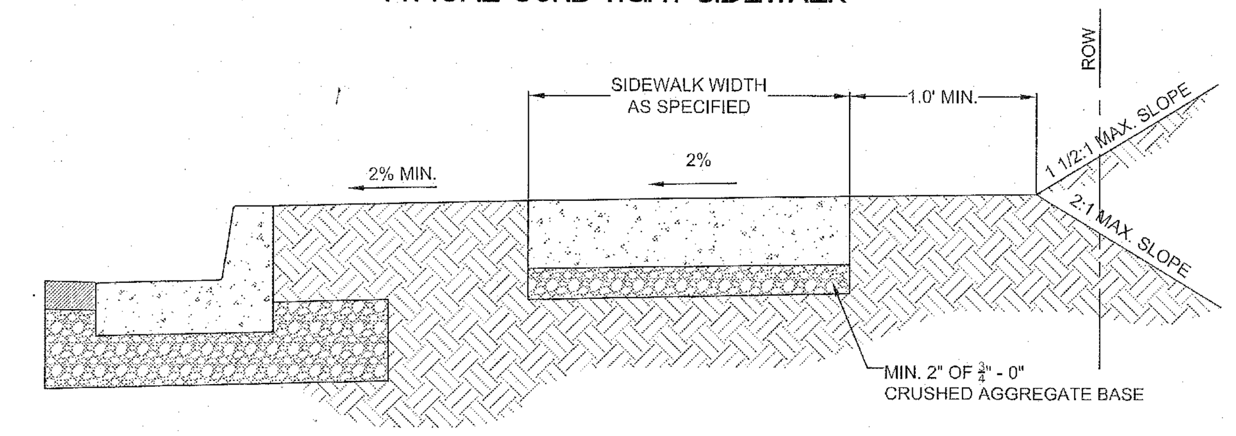


CURB, GUTTER AND SIDEWALK DOWELING DETAIL

CITY OF West Linn	DATE: 2010
	DRAWING NO. WL-511
	FILE NO.



TYPICAL CURB TIGHT SIDEWALK



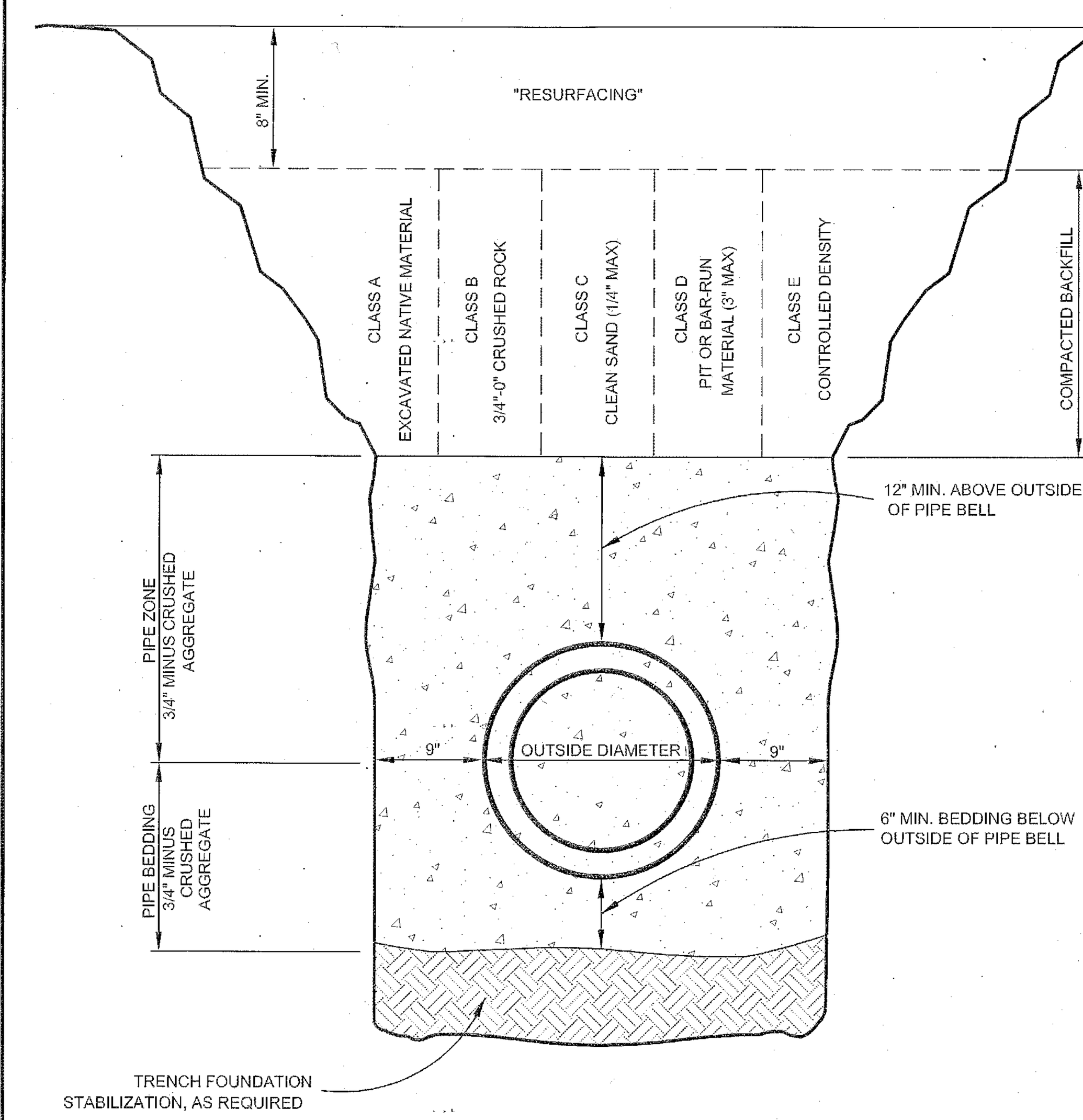
SIDEWALK AWAY FROM CURB

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.

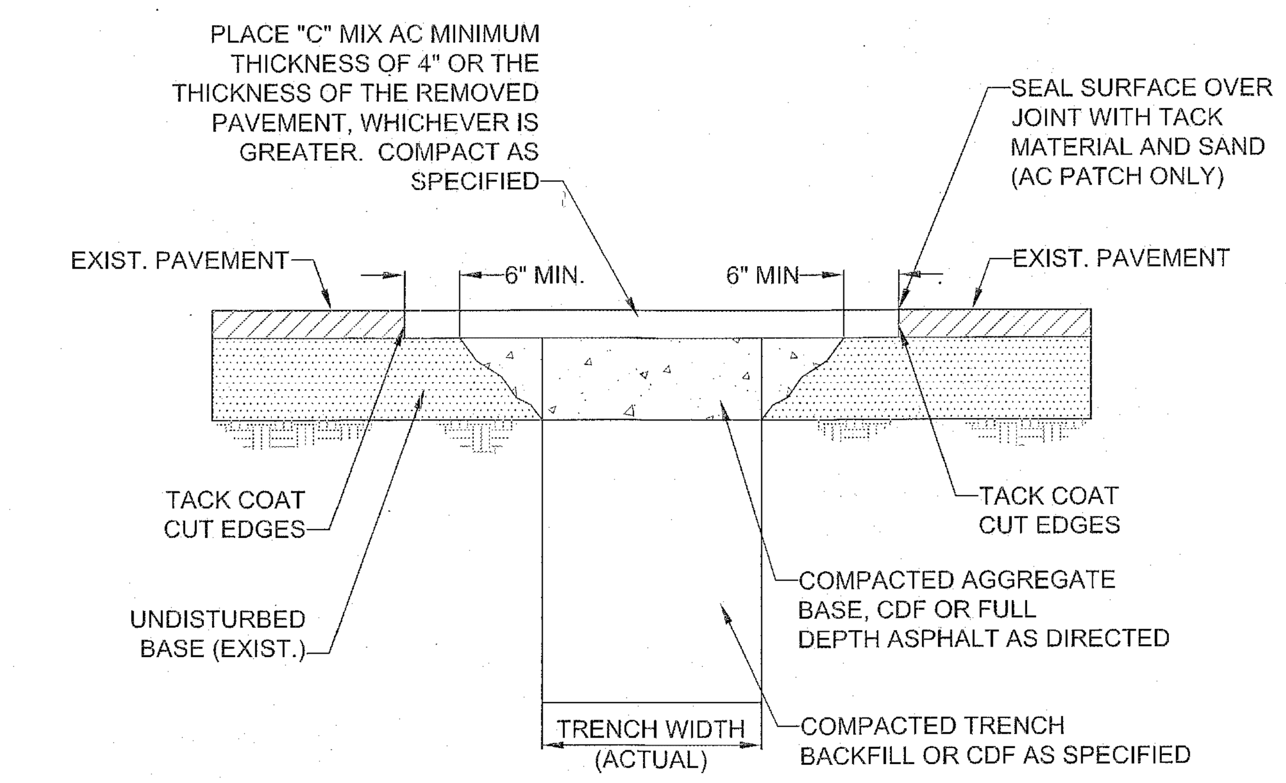
CONCRETE SIDEWALK CROSS SECTION

CITY OF West Linn	DATE: 2010
	DRAWING NO. WL-508
	FILE NO.



TRENCH BACKFILL BEDDING AND PIPE ZONE

CITY OF West Linn	DATE: 2010
	DRAWING NO. WL-200
	FILE NO.

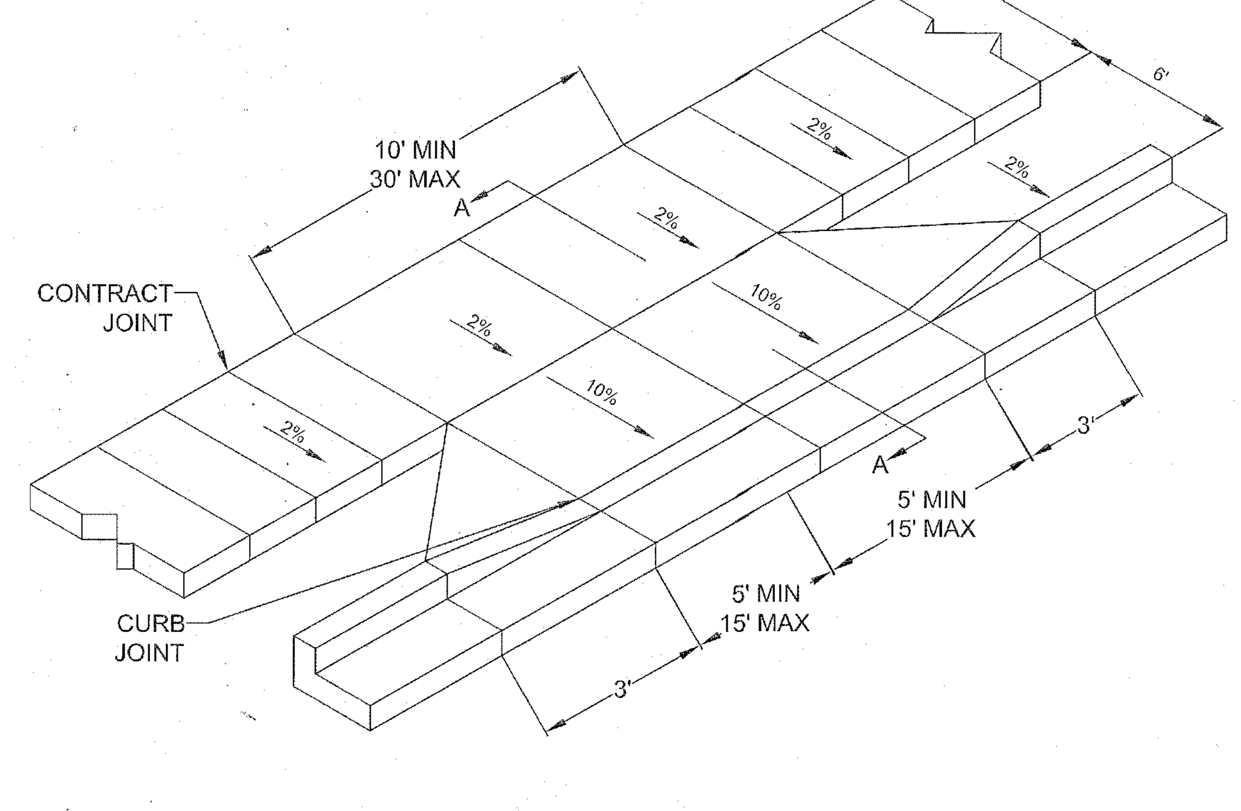


NOTE:

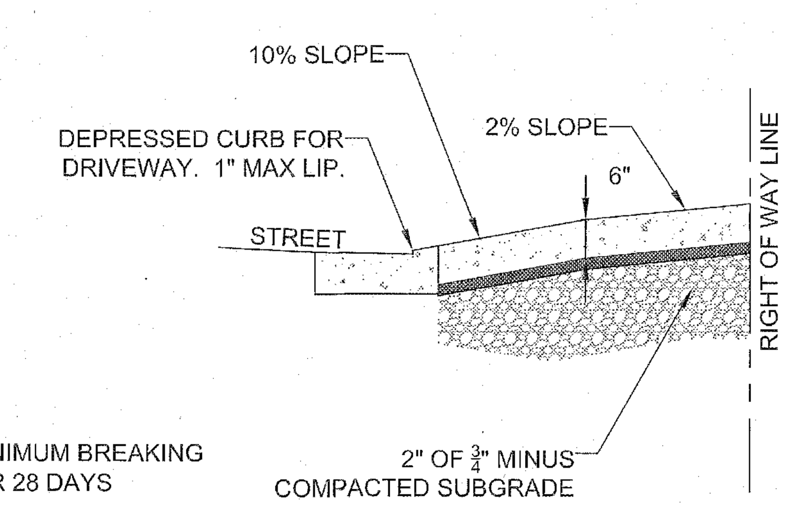
1. ALL EXISTING AC OR PCC PAVEMENT SHALL BE SAWCUT TO NEAT, STRAIGHT LINES PRIOR TO REPAVING.
2. CONCRETE PAVEMENT SHALL BE REPLACED WITH CONCRETE TO A MINIMUM THICKNESS OF REMOVED PAVEMENT, WHICHEVER IS GREATER.
3. IF EXISTING BASE MATERIAL IS CTB OR ATB, THEN REPLACEMENT BASE MATERIAL SHALL MATCH EXISTING.
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

CITY OF West Linn	DATE: 2010
	DRAWING NO. WL-203
	FILE NO.



SIDEWALK AWAY FROM CURB



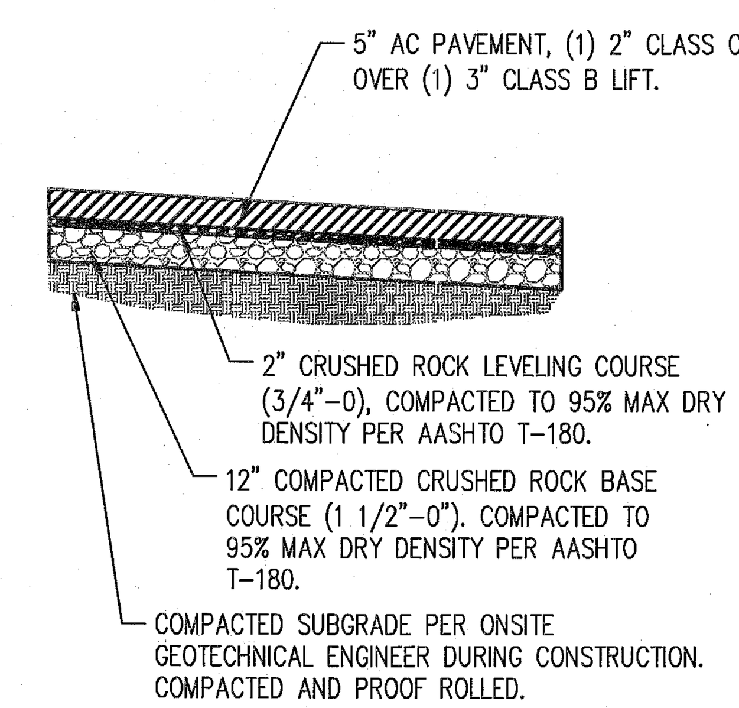
SECTION A-A

NOTE:

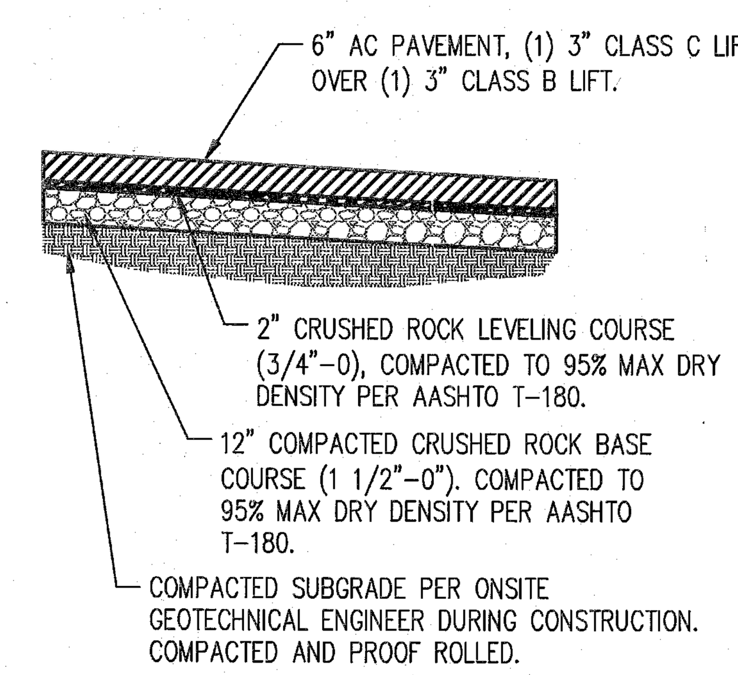
1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS 6 SACK MIX
2. CURB SHALL BE TROWELED JOINT WITH MIN. 1/2" RADIUS ALONG BACK OF CURB
3. DRIVEWAY SHALL BE A MINIMUM 6" THICK
4. DRIVEWAY CURB CUT SHALL COMPLY WITH THE CONDITIONS OF 5.0070, "WIDTH AND LOCATION OF CURB CUTS"
5. FOR REPLACEMENT OF EXISITNG APPROACH:
   A. MUST MEET CURRENT ADA REQUIREMENTS TO GREATEST DEGREE POSSIBLE.
   B. DAMAGED ROADWAY MUST BE SAWCUT AND REPAVED WITH CLASS C HOT MIX ASPHALT

RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB

CITY OF West Linn	DATE: 2010
	DRAWING NO. WL-503A
	FILE NO.



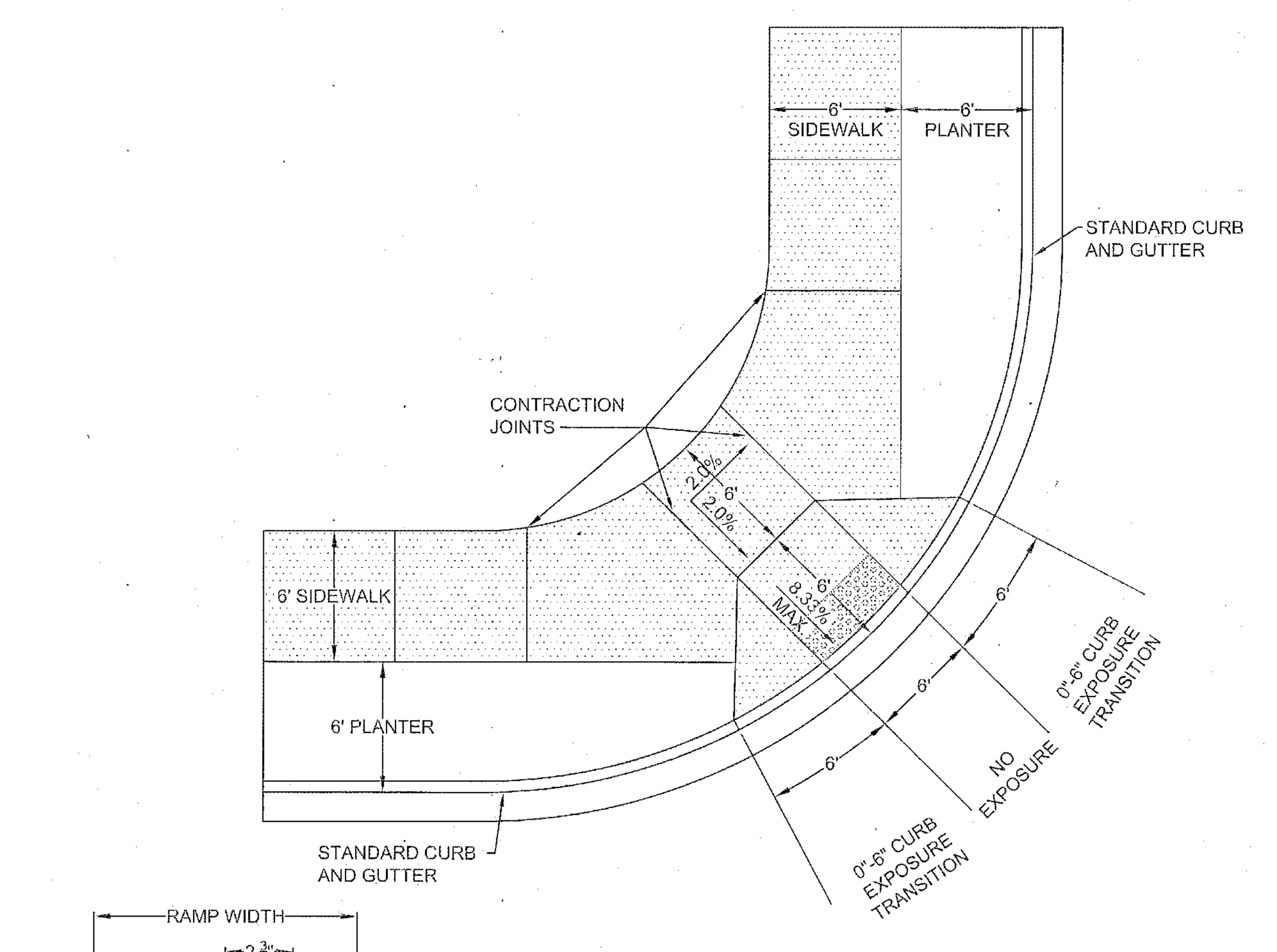
OSTMAN STREET

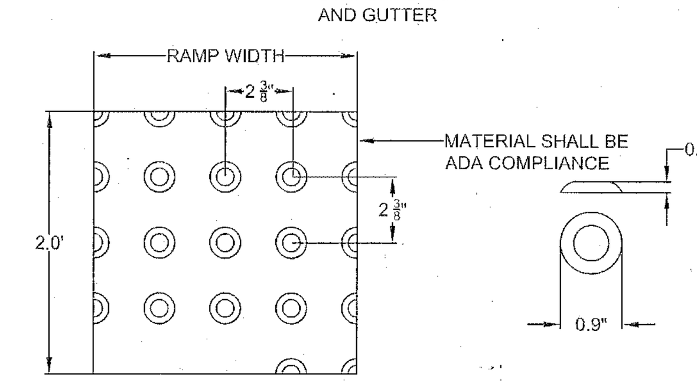


WILLAMETTE FALLS DRIVE

TYPICAL NEW ASPHALT SECTION

NTS





RAMP TEXTURE PATTERN DETAIL

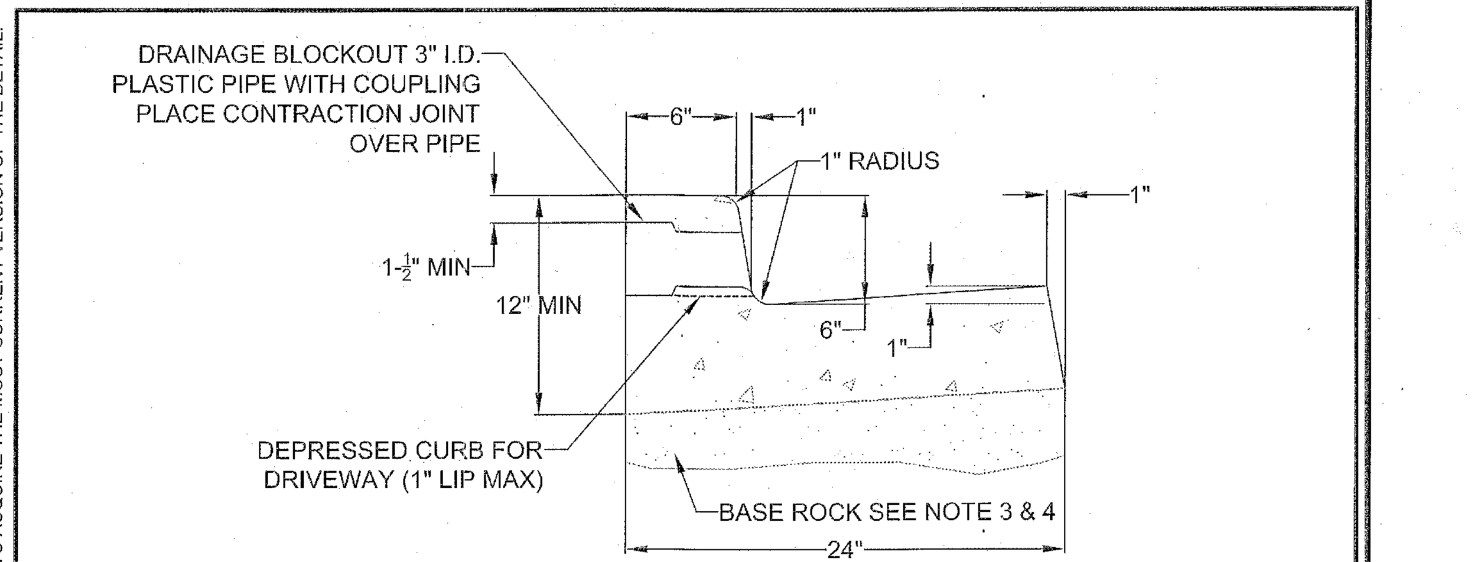
TRUNCATED DOME DETAIL

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.

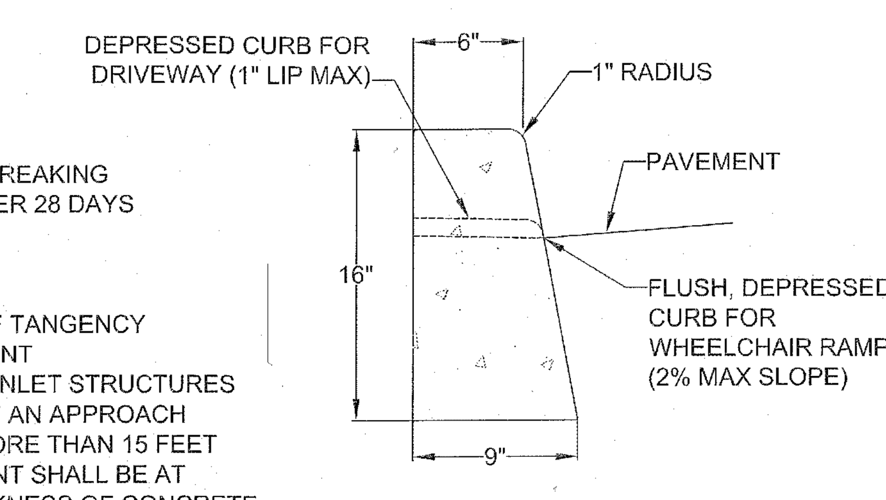
SINGLE CURB RAMP (ALLOWED WITH CITY ENGINEER APPROVAL ONLY)

CITY OF West Linn	DATE: 2010
	DRAWING NO. WL-507A
	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

CITY OF West Linn	DATE: 2010
	DRAWING NO. WL-501
	FILE NO.

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED
DATE: 2/9/2015	

REGISTERED PROFESSIONAL ENGINEER 58542PE OREGON JULY 9, 2002 MONTGOMERY B. HURLEY

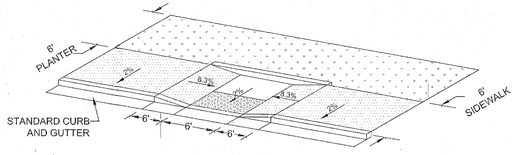
RENEWAL DATE: 6/30/15

REVISIONS

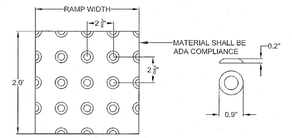
JOB NUMBER 3745

SHEET C103

AKS DRAWING FILE: 3745 C100 SITE PLAN.DWG | LAYOUT: C103



PARALLEL CURB RAMP



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.

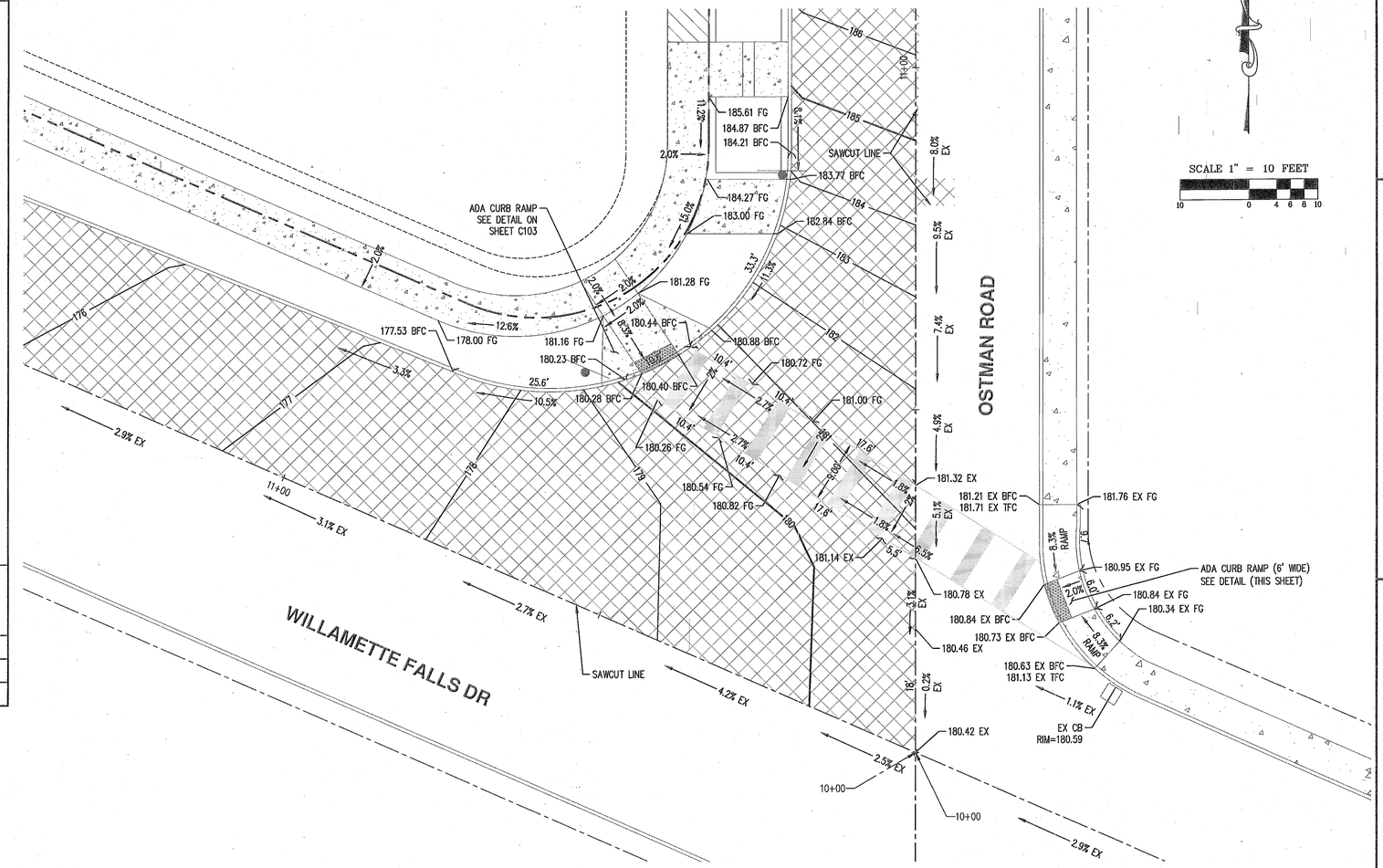
PARALLEL CURB RAMP

CURB TIGHT

City of West Linn

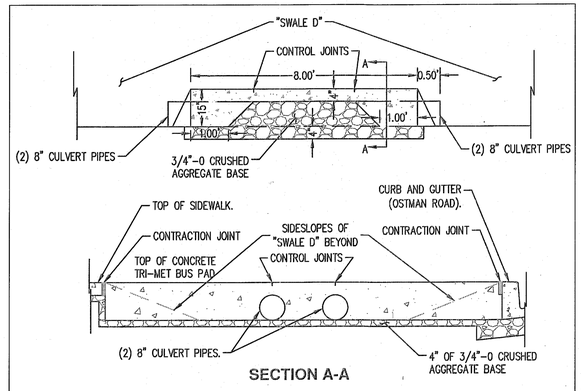
DATE: 2010
DRAWING NO. WL-506C
FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



LEGEND

- EXISTING CONCRETE
- NEW CONCRETE
- NEW AC PAVEMENT
- FUTURE SIDEWALK BY OTHERS



SECTION A-A

THICKENED EDGE BUS PAD

NTS

AS-BUILT DISCLAIMER:

AS-BUILT INFORMATION IS BASED ON A COMBINATION OF FIELD SURVEY INFORMATION, INSPECTION INFORMATION, AND CONTRACTOR-PROVIDED INFORMATION. THE ENGINEER ONLY CERTIFIES INFORMATION WHICH COULD BE FIELD-VERIFIED AFTER CONSTRUCTION WAS COMPLETED. AS-BUILTS ARE ONLY FOR PUBLIC IMPROVEMENTS WITHIN PUBLIC RIGHT-OF-WAYS OR EASEMENTS.

AKS DRAWING FILE: 3745 C100 SITE PLAN.DWG | LAYOUT: C104

AKS ENGINEERING AND FORESTRY, LLC
12965 SW HERMAN RD
SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
FAX: 503.563.6152
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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN / OREGON

TAX LOT 0200 / CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

STREET DETAILS

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED

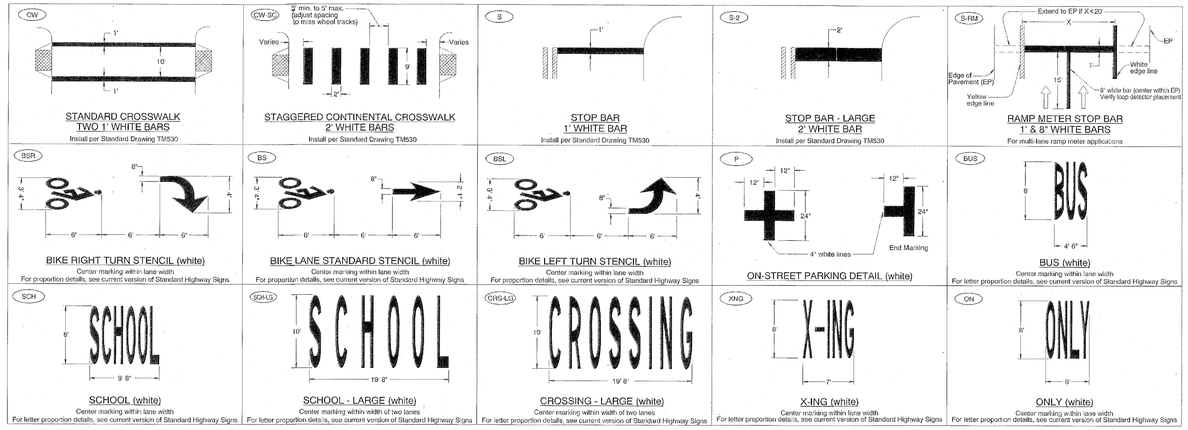
DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2008
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C104



General Note:

1. Arrow, letter, and bike symbol dimensions nominal.

LEGEND

Direction of Travel

CALC. BOOK NO. N/A

BASELINE REPORT DATE 7/9/2009

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

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2015

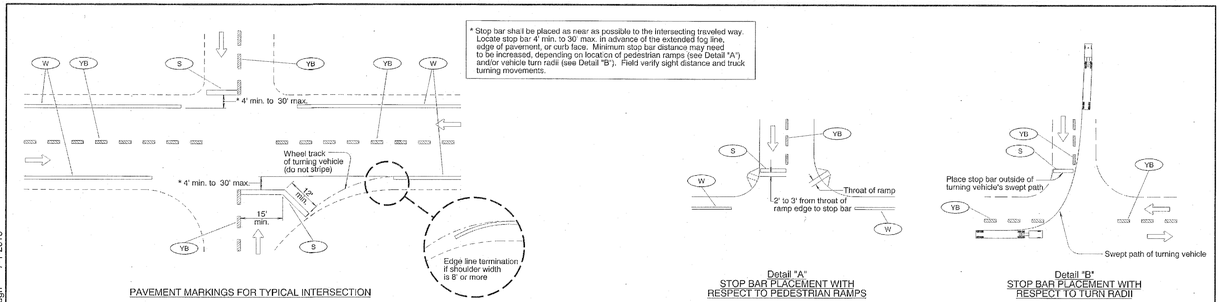
DATE	REVISION DESCRIPTION

TM503

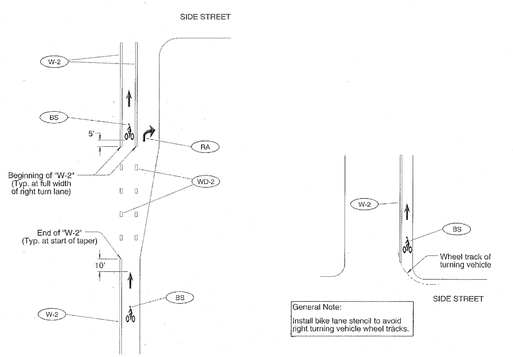
R:\PAVEMENT MARKINGS\SECURE\STANDARD DRAWINGS\2015standards\14 June\plotfile_TM500s.dgn :: Default 6/9/2014 9:17:45 AM hwyr30c

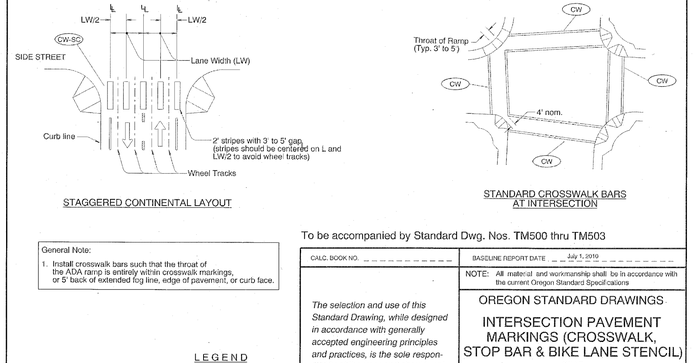
Effective Date: February 1, 2015 - May 31, 2015

TM503.dgn 06-10-2014



TM530.dgn 7-1-2010





General Note:

1. Install crosswalk bars such that the throat of the ADA ramp is entirely within crosswalk markings, or 5' back of extended fog line, edge of pavement, or curb face.

LEGEND

Direction of Travel

ℓ_L Lane line dimensions are shown on the striping plans

To be accompanied by Standard Dwg. Nos. TM500 thru TM503

CALC. BOOK NO.

BASELINE REPORT DATE July 1, 2010

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

INTERSECTION PAVEMENT MARKINGS (CROSSWALK, STOP BAR & BIKE LANE STENCIL)

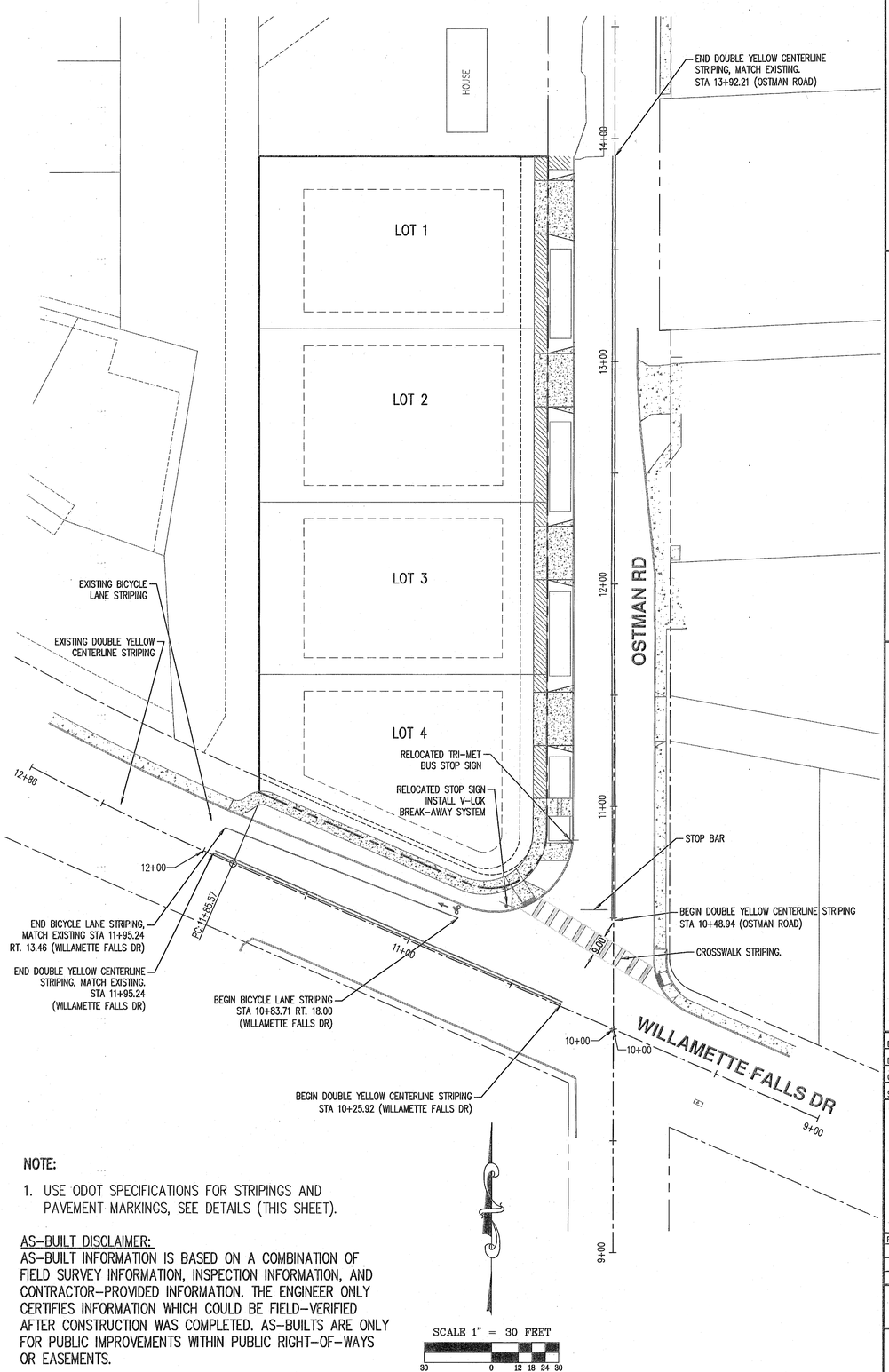
2015

DATE	REVISION DESCRIPTION

TM530

F:\mgk\Traffic\Standard Drawings\2014_July_Update\plotfile_TM200s_500s.dgn :: Default 7/8/2014 10:43:15 AM hwyr20m

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



NOTE:

1. USE ODOT SPECIFICATIONS FOR STRIPINGS AND PAVEMENT MARKINGS, SEE DETAILS (THIS SHEET).

AS-BUILT DISCLAIMER:

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SCALE 1" = 30 FEET

30 0 12 18 24 30

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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON

TAX LOT 02200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 2S1E03AB

STRIPING AND SIGNAGE PLAN

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED

DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER 38542PE OREGON JULY 9, 2005 MONTGOMERY B. HURLEY

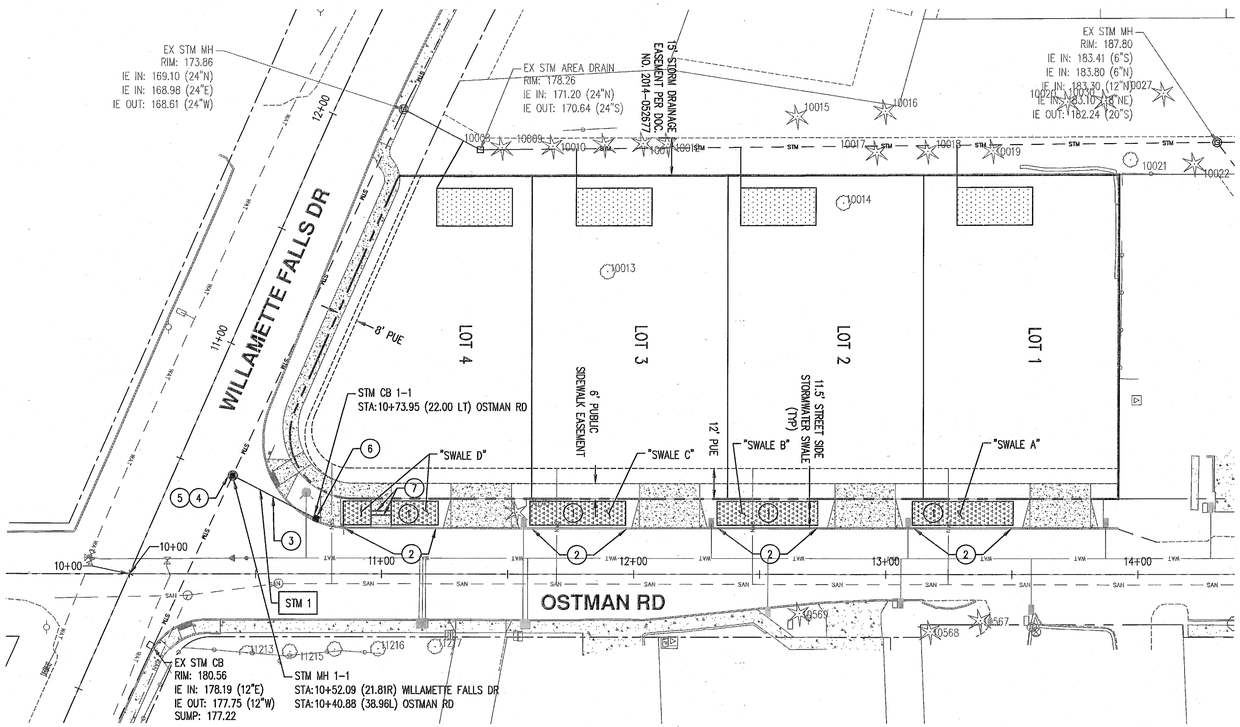
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C110

AKS DRAWING FILE: 3745 C100 SITE PLAN.DWG | LAYOUT: C110



SCALE 1" = 30 FEET

30 0 12 18 24 30

LEGEND

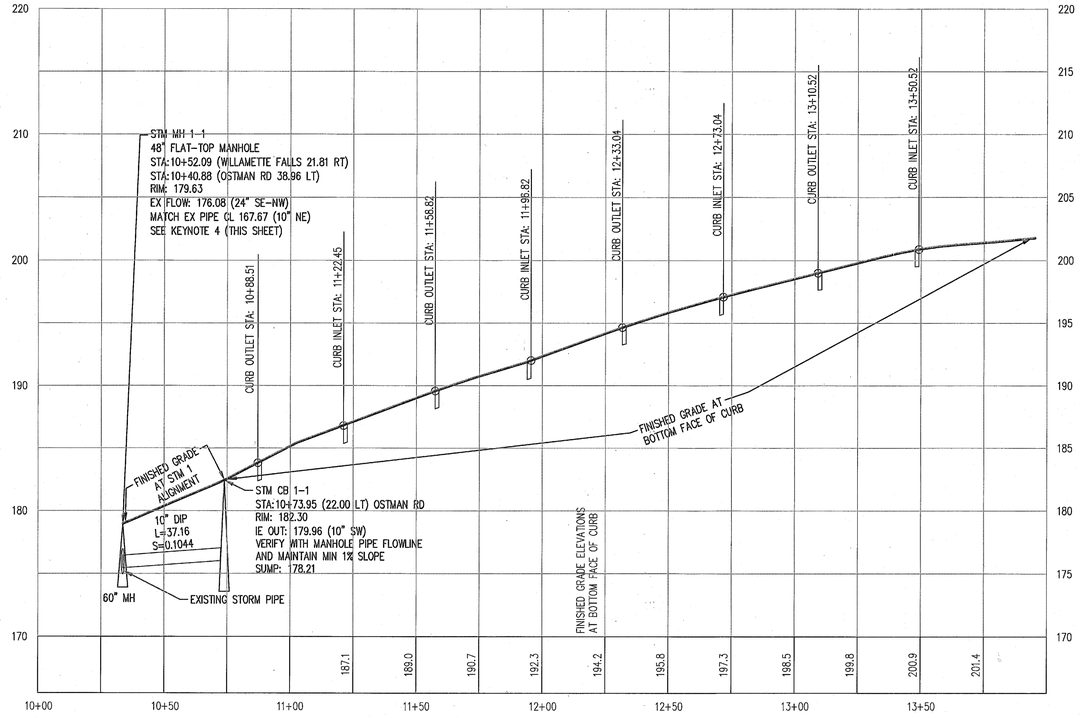
PRIVATE STORMWATER "RAINGARDEN" FACILITY FOR LOTS, BY OTHERS. NOT PART OF THIS PERMIT.

PUBLIC STREETSIDE STORMWATER FACILITY, SEE DETAIL ON SHEET C202.

PUBLIC STORMWATER DRAINAGE KEYED NOTES

1. INSTALL PUBLIC STREETSIDE STORMWATER FACILITY PER DETAILS ON SHEET C201.
   INSTALL INLET AND OUTLET IN CURB PER DETAIL ON SHEET C201.
2. REVERSE SLOPE ON OUTLET WING WALL ONLY, 0.10' TO PREVENT GUTTER DRAINAGE FROM ENTERING SWALE AT SWALE OUTLET LOCATION. **ALL INLETS TO BE 30" WIDE AT THROAT.**
3. INSTALL 37 LF 10" DIP AT S = 0.1044.
4. CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION PRIOR TO ORDERING AND INSTALLING STORM MANHOLE 1-1.
5. INSTALL 60" STORMWATER MANHOLE, SEE DETAIL ON SHEET C201.
6. INSTALL "2 1/2 A" GUTTER INLET, SEE DETAIL ON SHEET C201.
7. INSTALL (2) 8" ASTM D3034 SDR 35 CULVERT PIPES AT BOTTOM OF "SWALE D". MATCH FLOWLINES TO SWALE FLOWLINE.

NOTE:
ALL PUBLIC STORM SEWER CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 6, STORM DRAIN TECHNICAL REQUIREMENTS.



STM 1
HOR: 1"= 30'
VERT: 1"= 6'

STATIONING BASED ON OSTMAN ROAD CENTERLINE

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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON
TAX LOT 02001 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 2S1E03AB

PUBLIC STORM SEWER PLAN AND PROFILE - OSTMAN ROAD

DESIGNED BY: DCN
DRAWN BY: JDR
CHECKED BY: MBH
SCALE: AS NOTED
DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2005
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C200

AKS DRAWING FILE: 3745 C200 STORM SEWER PLAN.DWG | LAYOUT: C200

AS-BUILT DISCLAIMER:
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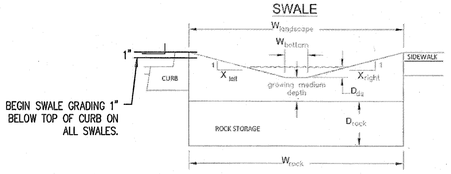
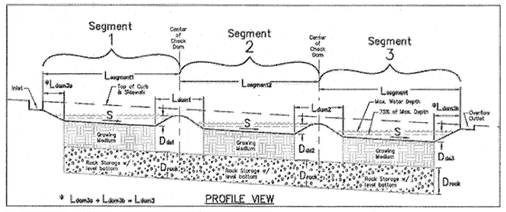
PUBLIC STREET SWALE	LENGTH OF FACILITY SEGMENT (Lsegment) (ft)	CHECK DAM LENGTH (Ldam) (ft)	BOTTOM WIDTH (Wbottom) (ft)	SIDE SLOPE RIGHT (Xright:1)	SIDE SLOPE LEFT (Xleft:1)	DOWNSTREAM DEPTH (Dds) (in)	LANDSCAPE WIDTH (Wlandscape) (ft)	ROCK STORAGE WIDTH (Wrock) (ft)	ROCK STORAGE DEPTH (Drock) (in)
A	8	2	5.0	3	3	8	11.5	9	18
	8	2	5.0	3	3	8	11.5	9	18
	8	2	5.0	3	3	8	11.5	9	18
	8	2	5.0	3	3	8	11.5	9	18
	8	2	5.0	3	3	8	11.5	9	18
B	8	2	5.0	3	3	8	11.5	10	26
	8	2	5.0	3	3	8	11.5	10	26
	8	2	5.0	3	3	8	11.5	10	26
	8	2	5.0	3	3	8	11.5	10	26
	8	2	5.0	3	3	9	11.5	10	26
C	7.6	2	5.0	3	3	8	11.5	8	15
	7.6	2	5.0	3	3	8	11.5	8	15
	7.6	2	5.0	3	3	8	11.5	8	15
	7.6	2	5.0	3	3	8	11.5	8	15
	7.6	2	5.0	3	3	8	11.5	8	15
D	5.9	2	5.5	3	3	9	11.5	10	18
	5.9	2	5.5	3	3	9	11.5	10	18
	5.9	2	5.5	3	3	9	11.5	10	18
	5.9	2	5.5	3	3	9	11.5	10	18
	5.9	2	5.5	3	3	9	11.5	10	18

SWALE

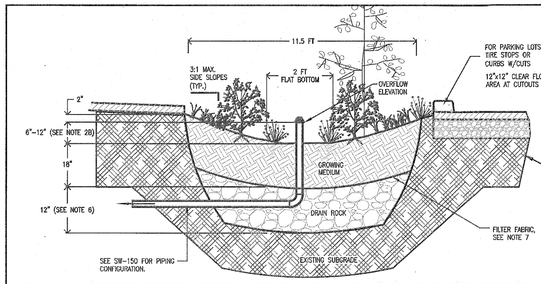


BEGIN SWALE GRADING 1" BELOW TOP OF CURB ON ALL SWALES.



* L dam3a + L dam3b = L dam3

PUBLIC STREET SWALES
NTS



SEE PUBLIC STREET SWALES DETAIL ON THIS SHEET FOR SWALE DIMENSIONS (OVERFLOW PIPING NOT REQUIRED).

1. Provide protection from all vehicle traffic, equipment staging, and foot traffic in proposed infiltration areas prior to, during, and after construction.
2. Dimensions:
   a. Width of swale: 5' - 12'.
   b. Depth of swale ((from top of growing medium to overflow elevation); Simplified: 9", Presumptive: 6"-12".
   c. Longitudinal slope of swale: 6.0% or less.
   d. Flat bottom width: 2'.
   e. Side slopes of swale: 3:1 maximum.
3. Setbacks (from centerline of facility):
   a. Infiltration swales must be 10' from foundations and 5' from property lines.
   b. Flow-through swales must be lined with connection to approved discharge point according to SWMM Section 1.3.
4. Overflow:
   a. Overflow required for Simplified Approach
   b. Inlet elevation must allow for 2" of freeboard, minimum.
   c. Protect from debris and sediment with strainer or grate.
5. Piping: shall be ABS Sch.40, cast iron, or PVS Sch.40, 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping must have 1% grade and follow the Uniform Plumbing Code.
6. Drain rock:
   a. Size for infiltration swale: 1½" - ¾" washed
   b. Size for flow-through swale: ¾" washed
   c. Depth for Simplified: 12"
   d. Depth for Presumptive: 0-48", see calcs.
7. Separation between drain rock and growing medium: Use filter fabric (see SWMM Exhibit 2-4 Geotextile table) or a gravel lens (¾ - ¼ inch washed, crushed rock 2 to 3 inches deep).
8. Growing medium:
   a. 18" minimum
   b. See Appendix F.3 for specification or use sand/loam/compost 3-way mix.
9. Vegetation: Follow landscape plans otherwise refer to plant list in SWMM Appendix F. Minimum container size is 1 gallon. # of plantings per 100sf of facility area:
   a. Zone A (wet): 115 herbaceous plants OR 100 herbaceous plants and 4 small shrubs.
   b. Zone B (moderate to dry): 1 tree AND 3 large shrubs / small trees AND 4 small shrubs AND 140 groundcover plants.

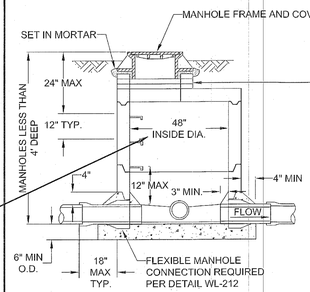
   The delineation between Zone A and B shall be either at the outlet elevation or the check dam elevation, whichever is lowest.
10. Waterproof liner: Shall be 30 mil PVC or equivalent for flow-through facilities.
11. Install washed pea gravel or river rock to transition from inlets and splash pad to growing medium.
12. Check dams: Shall be placed according to facility design. Refer to SW-340 for profile and spacing.
13. Inspections: Call BDS IVR Inspection Line, (503) 823-7000, for appropriate inspections.

CONTRACTOR SHALL CONFORM TO APPENDIX F.3.

CONTACT THE CITY OF WEST LINN FOR INSPECTIONS (503) 722-5500.

- DRAWING NOT TO SCALE -

STORMWATER MANAGEMENT MANUAL TYPICAL DETAILS
- Simplified / Presumptive Design Approach -
Swale
Bureau of Environmental Services
NUMBER SW-120



MANHOLE DIAMETER SHALL BE 60"

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

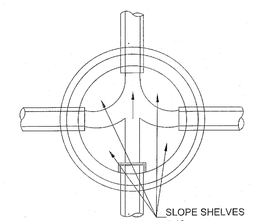
PRECAST SECTIONS AND POURED CONCRETE BASES SHALL CONFORM TO CITY STANDARD SPECIFICATIONS.

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

LOCATE STEPS ON UPSTREAM SIDE OF MANHOLE.

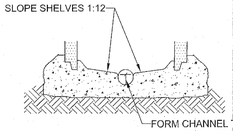
NOTE:
POLYETHYLENE STEPS/IRON REINFORCEMENT 8" x 12" WIDE, 2" DROP, EMBEDDED 3", ON 12" CENTERS (TYPICAL)

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



PLAN

SLOPE SHELVES 1:12



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

SHALLOW MANHOLE FOR LESS THAN 36" PIPE

City of West Linn
DATE: 2010
DRAWING NO. WL-208
FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.

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RENAISSANCE AT WILLAMETTE AS-BUILTS
WEST LINN OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 2S1E03AB

PUBLIC STORM SEWER DETAILS

DESIGNED BY: DCN
DRAWN BY: JDR
CHECKED BY: MBH
SCALE: AS NOTED
DATE: 2/9/2015

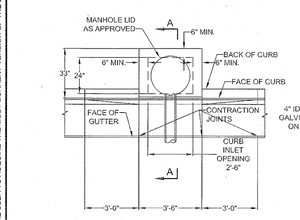
REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2005
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

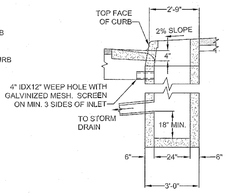
JOB NUMBER 3745

SHEET C201

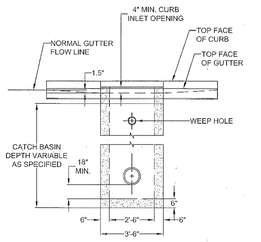
AKS DRAWING FILE: 3745 C20D STORM SEWER PLANDING | LAYOUT: C201



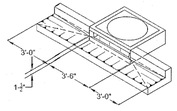
PLAN VIEW



SECTION A-A



FRONT VIEW

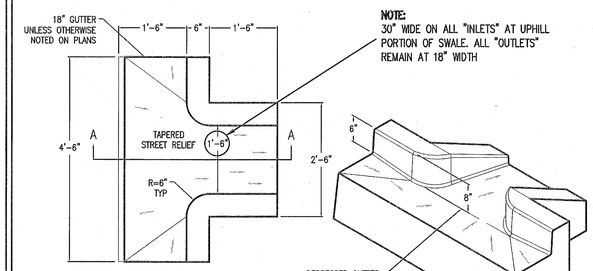


PERSPECTIVE VIEW SHOWING DEPRESSED GUTTER AT CURB INLET

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

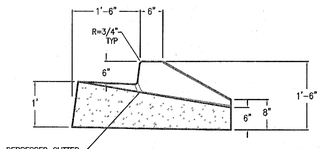
City of West Linn
DATE: 2010
DRAWING NO. WL-600
FILE NO.



PLAN

ISOMETRIC

NOTE:
30" WIDE ON ALL "INLETS" AT UPHILL PORTION OF SWALE. ALL "OUTLETS" REMAIN AT 18" WIDTH

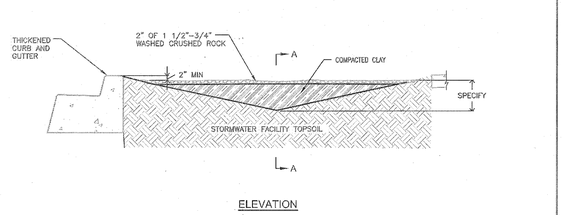


SECTION A-B

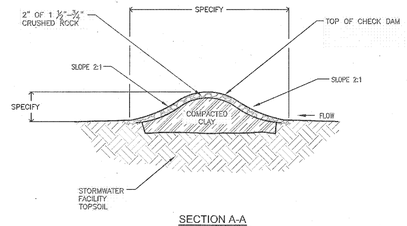
DESIGNER INFORMATION
1. For use with stormwater facilities with side slopes.
2. Refer to Standard Drawing P-540. Match gutter pan of adjacent curb and gutter.
3. Metal inlet assembly, SW-332, required on high traffic streets.

- DRAWING NOT TO SCALE -

STORMWATER MANAGEMENT MANUAL TYPICAL DETAILS
- Green Streets -
Concrete Inlet with Wingwalls
Curb Inlets
Bureau of Environmental Services
NUMBER SW-330



ELEVATION



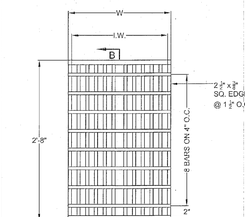
SECTION A-A

DESIGNER INFORMATION
1. Rock check dam for use in swales and curb extensions with side slopes.
2. Specify check dam elevation and width.
3. Provide stationing and/or dimensioning for check dams.

CONSTRUCTION NOTES
1. Hand tamp topsoil directly under check dam.
2. Key clay core into stormwater facility topsoil.

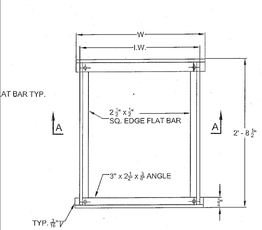
- DRAWING NOT TO SCALE -

STORMWATER MANAGEMENT MANUAL TYPICAL DETAILS
- 2011 GREEN STREETS -
Rock Check Dam for Swales
Check Dams
Bureau of Environmental Services
City of Portland
NUMBER SW-340
SET REVISED: 12-08-2011



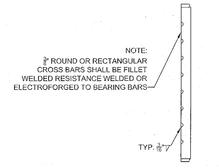
PLAN

TYPE	W	I.W
STANDARD	1'-9"	1'-8 1/4"

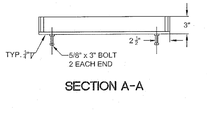


PLAN

TYPE	DIA. PIPE	W	I.W
STANDARD	10"-12"	1'-10 3/4"	1'-9 3/8"



SECTION B-B



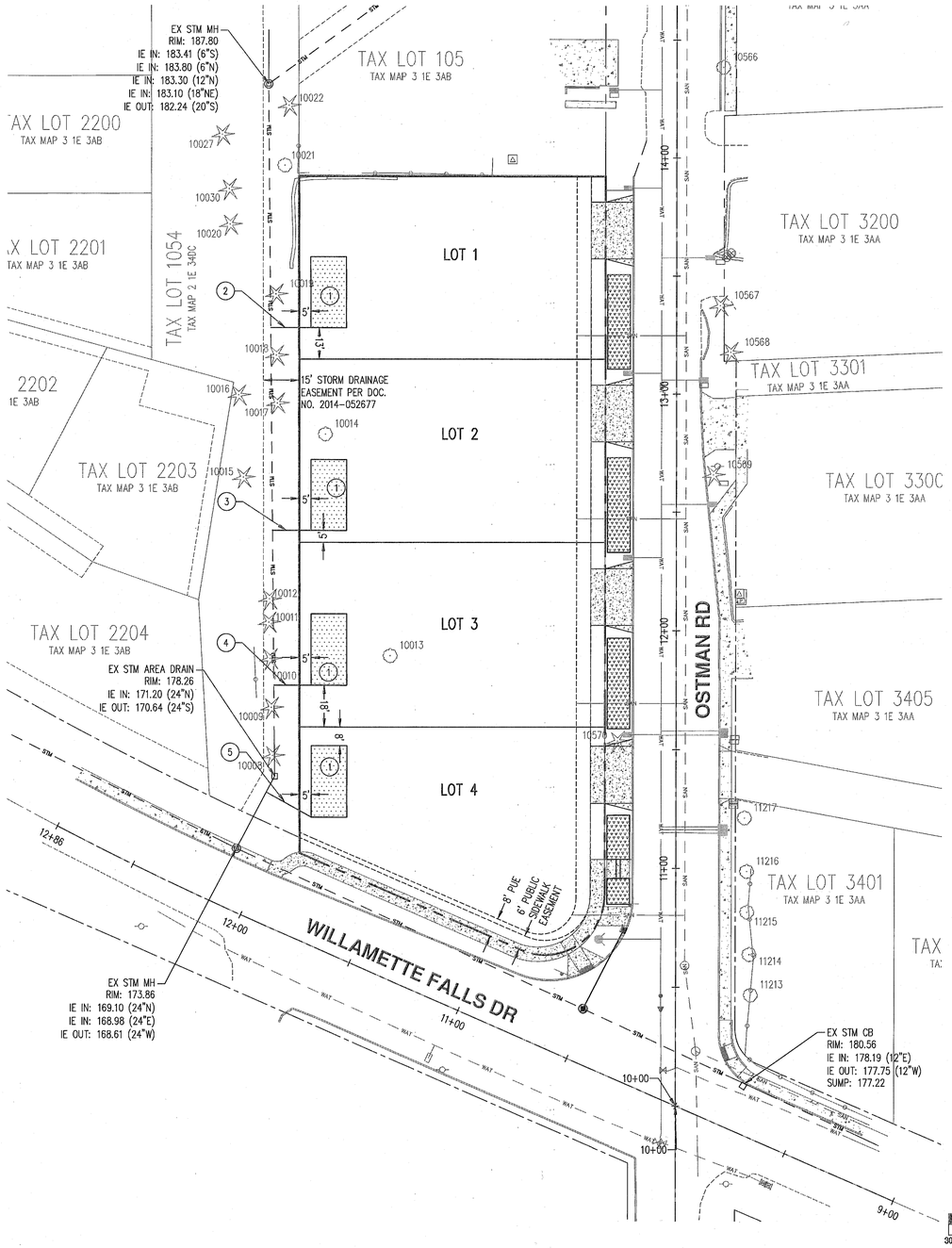
SECTION A-A

NOTE:
USE VERTICAL BEADS IN CORNERS, FILLET WELD JOINT ON BOTTOM OF FRAME. GRATE MUST REST FLAT ON FRAME SURFACE.

FRAME AND GRATE FOR GUTTER AND CURB INLET

City of West Linn
DATE: 2010
DRAWING NO. WL-602B
FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



PRIVATE STORMWATER DRAINAGE KEYED NOTES

1. PRIVATE STORMWATER RAINGARDEN FACILITY BY OTHERS, NOT PART OF THIS PERMIT.
2. INSTALL PRIVATE STORMWATER OVERFLOW PIPE, 8" PCV ASTM D 3034 SDR 35. L=16.85 IE OUT = 188.90. PLACE TRACER WIRE OVER CENTERLINE OF PIPE. MATCH EXISTING PIPE CENTERLINE. CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION.
3. INSTALL PRIVATE STORMWATER OVERFLOW PIPE, 8" PCV ASTM D 3034 SDR 35. L=16.02 IE OUT = 182.69. PLACE TRACER WIRE OVER CENTERLINE OF PIPE. MATCH EXISTING PIPE CENTERLINE. CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION.
4. INSTALL PRIVATE STORMWATER OVERFLOW PIPE, 8" PCV ASTM D 3034 SDR 35. L=15.60 IE OUT = 176.47. PLACE TRACER WIRE OVER CENTERLINE OF PIPE. MATCH EXISTING PIPE CENTERLINE. CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION.
5. INSTALL PRIVATE STORMWATER OVERFLOW PIPE, 8" PCV ASTM D 3034 SDR 35. L=21.66 IE OUT = 172.46. PLACE TRACER WIRE OVER CENTERLINE OF PIPE. MATCH EXISTING PIPE CENTERLINE. CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION.

NOTE:
1. A WATERTIGHT PLUG SHALL BE INSTALLED ON THE END OF SERVICE LATERALS AND A 2" x 4" WOOD MARKER SHALL BE PLACED AT LATERAL END FROM PIPE INVERT TO AT LEAST 36" ABOVE THE FINISHED GROUND. THE 2" x 4" TOP SHALL BE PAINTED WHITE AND MARKED WITH THE DEPTH OF THE LATERAL MEASURED FROM GROUND TO INVERT OF PIPE.

AS-BUILT DISCLAIMER:
AS-BUILT INFORMATION IS BASED ON A COMBINATION OF FIELD SURVEY INFORMATION, INSPECTION INFORMATION, AND CONTRACTOR-PROVIDED INFORMATION. THE ENGINEER ONLY CERTIFIES INFORMATION WHICH COULD BE FIELD-VERIFIED AFTER CONSTRUCTION WAS COMPLETED. AS-BUILTS ARE ONLY FOR PUBLIC IMPROVEMENTS WITHIN PUBLIC RIGHT-OF-WAYS OR EASEMENTS.

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12965 SW HERMAN RD
SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 2S1E03AB

PRIVATE STORM SEWER PLAN

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED

DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
MAY 9, 2006
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER
3745

SHEET
C202

AKS DRAWING FILE: 3745 C200 STORM SEWER PLAN.DWG | LAYOUT: C202

AS-BUILT DISCLAIMER:
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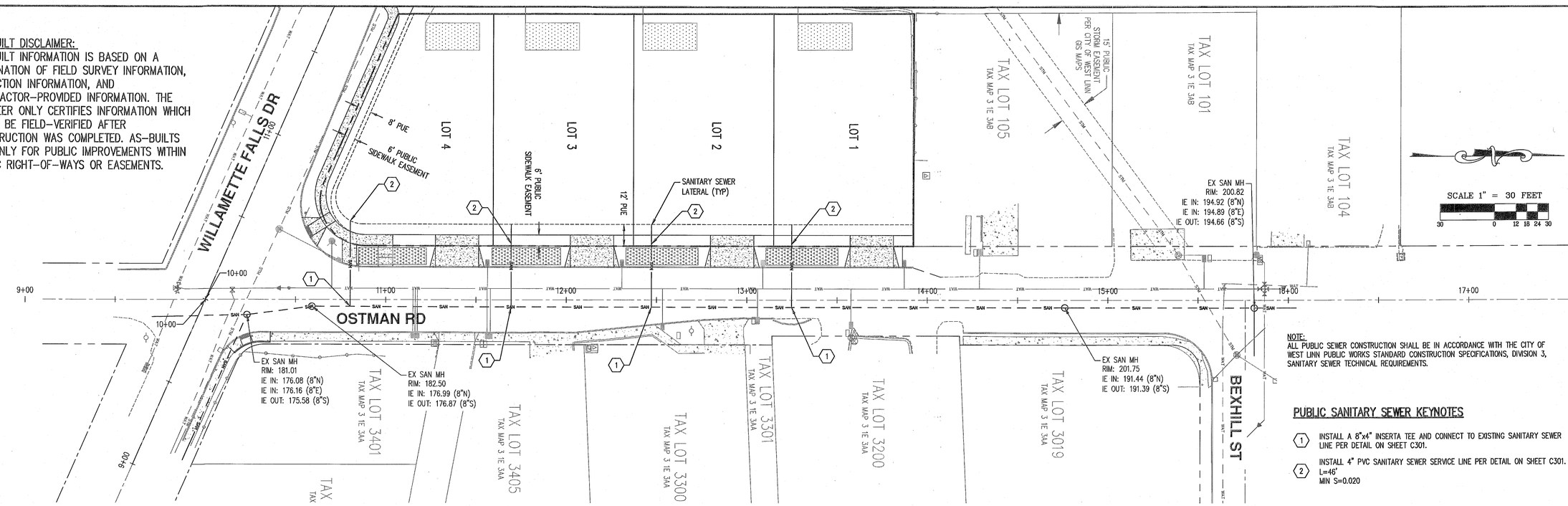
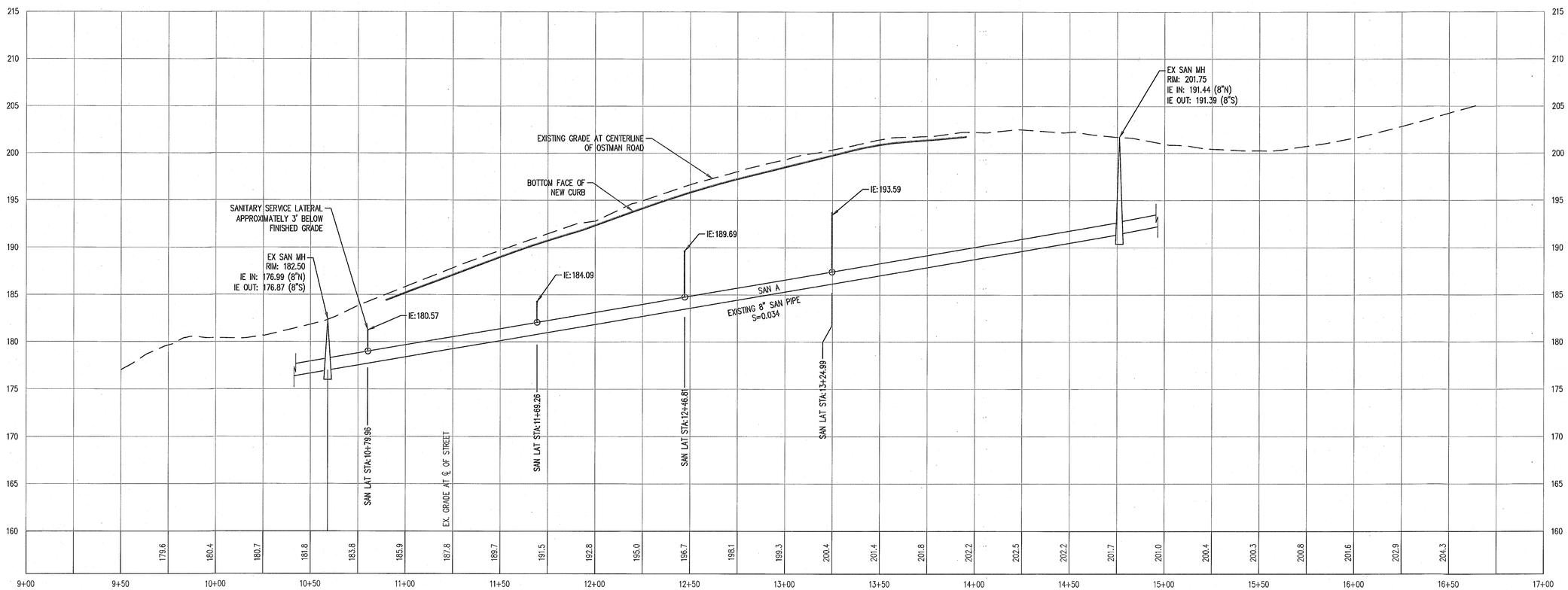


NOTE:
ALL PUBLIC SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 3, SANITARY SEWER TECHNICAL REQUIREMENTS.

PUBLIC SANITARY SEWER KEYNOTES

1. INSTALL A 8"x4" INSERTA TEE AND CONNECT TO EXISTING SANITARY SEWER LINE PER DETAIL ON SHEET C301.
2. INSTALL 4" PVC SANITARY SEWER SERVICE LINE PER DETAIL ON SHEET C301. L=46' MIN S=0.020



SAN A *
HOR: 1"= 30'
VERT: 1"= 6'

* STATIONING BASED ON OSTMAN ROAD CENTERLINE

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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON
TAX LOT 02200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

PUBLIC SANITARY SEWER PLAN AND PROFILE - OSTMAN ROAD

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED
DATE:	2/9/2015

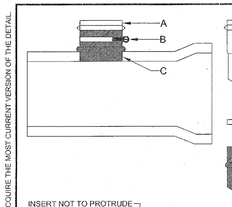
REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2005
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER
3745

SHEET
C300

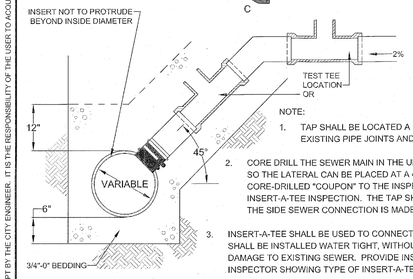
AKS DRAWING FILE: 3745 C300 SANITARY SEWER PLAN.DWG | LAYOUT: C300



A. PVC HUB SHALL CONFORM TO ASTM 3034, SDR 35 DRIVE INTO CENTER OF RUBBER SLEEVE AFTER SLEEVE IS PLACED IN HOLE.

B. STAINLESS STEEL BAND SECURES UPPER HALF OF RUBBER SLEEVE TO THE PVC HUB. STAINLESS STEEL BAND SHALL BE 300 SERIES, 9/16" BAND WIDTH, CADMIUM PLATED CARBON STEEL, AND ATTACHED WITH HEX HEAD SLOTTED SCREW.

C. COMPLETE RUBBER SLEEVE INCLUDES A MOLDED SEGMENT THAT HOLDS IT IN PLACE.



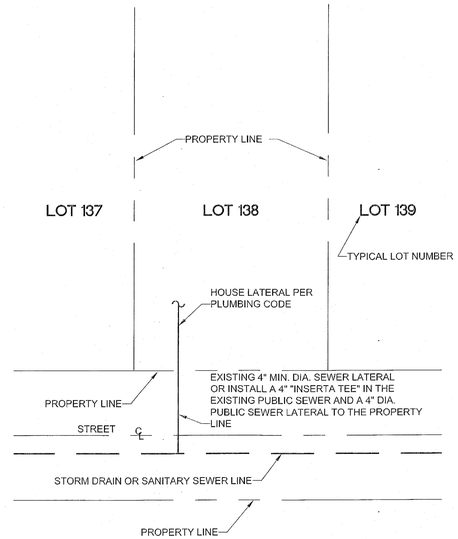
NOTE:

1. TAP SHALL BE LOCATED A MINIMUM OF 12" FROM EXISTING PIPE JOINTS AND 12" FROM OTHER TAPS.
2. CORE DRILL THE SEWER MAIN IN THE UPPER QUARANT OF THE PIPE SO THE LATERAL CAN BE PLACED AT A 45° ANGLE AND PRESENT THE CORE-DRILLED "COUPON" TO THE INSPECTOR AT TIME OF THE INSERT-A-TEE INSPECTION. THE TAP SHALL BE INSPECTED BEFORE THE SIDE SEWER CONNECTION IS MADE.
3. INSERT-A-TEE SHALL BE USED TO CONNECT LATERAL TO MAIN. TAP SHALL BE INSTALLED WATER TIGHT, WITHOUT PROTRUSION INTO OR DAMAGE TO EXISTING SEWER. PROVIDE INSERT-A-TEE PACKAGING TO INSPECTOR SHOWING TYPE OF INSERT-A-TEE INSTALLED.
4. LATERAL SHALL BE 4" (FOR STANDARD SINGLE FAMILY HOMES) GREEN ASTM3034 AND PLACE AT 2% SLOPE TO THE PROPERTY LINE. PLACE A TEST TEE WITHIN 3 FEET OF THE TAP.
5. PLACE GREEN TRACER WIRE OVER CENTERLINE OF SERVICE LATERAL.
6. COMPACT 6" OF 3/4-0" ROCK UNDER THE PIPE. HAUNCH WELL UNDER LATERAL.
7. ONCE APPROVED BY CITY INSPECTOR, PLACE 12" OF 3/4"-ROCK ABOVE THE TOP OF THE PIPE.
8. BACKFILL ABOVE THE PIPE ZONE (ABOVE 12" OF ROCK) SHALL BE CDF (DELIVER CDF RECEIPT TO THE ENGINEERING DEPT). ALTERNATELY, 3/4-0" GRAVEL BACKFILL MAY BE USED. COMPACTION TESTING BY A CERTIFIED TESTING AGENCY MUST OCCUR IN LIFTS AS SPECIFIED BY THE CITY INSPECTOR (DELIVER TEST RESULTS TO THE ENGINEERING DEPT). CITY RESERVES THE RIGHT TO FURTHER SPECIFY BACKFILL BASED ON SITE CONDITIONS.
9. T.V. INSPECTION OF THE LATERAL AND/OR MAIN MAY BE REQUIRED FOLLOWING BACKFILL, PRIOR TO FINAL APPROVAL.
10. 4" MAXIMUM TAP FOR 8" MAIN (CUT IN TEE TO BE USED FOR 6" LATERAL ON 8" MAIN).
11. ALL CONNECTIONS SHALL BE MADE WITH HARD FITTINGS, INCLUDING TRANSITIONS BETWEEN DISSIMILAR MATERIALS.

SEWER SERVICE TAP TO EXISTING SEWER FOR HOUSE LATERALS

City of West Linn

DATE: 2010
DRAWING NO. WL-303
FILE NO.



TYPICAL CONNECTION FOR SINGLE FAMILY RESIDENCE.

SEWER CONNECTION SINGLE FAMILY EXISTING LOT

City of West Linn

DATE: 2010
DRAWING NO. WL-216
FILE NO.

AS-BUILT DISCLAIMER:
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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

SANITARY SEWER DETAILS

DESIGNED BY:	DCN
DRAWN BY:	JDR
CHECKED BY:	MBH
SCALE:	AS NOTED

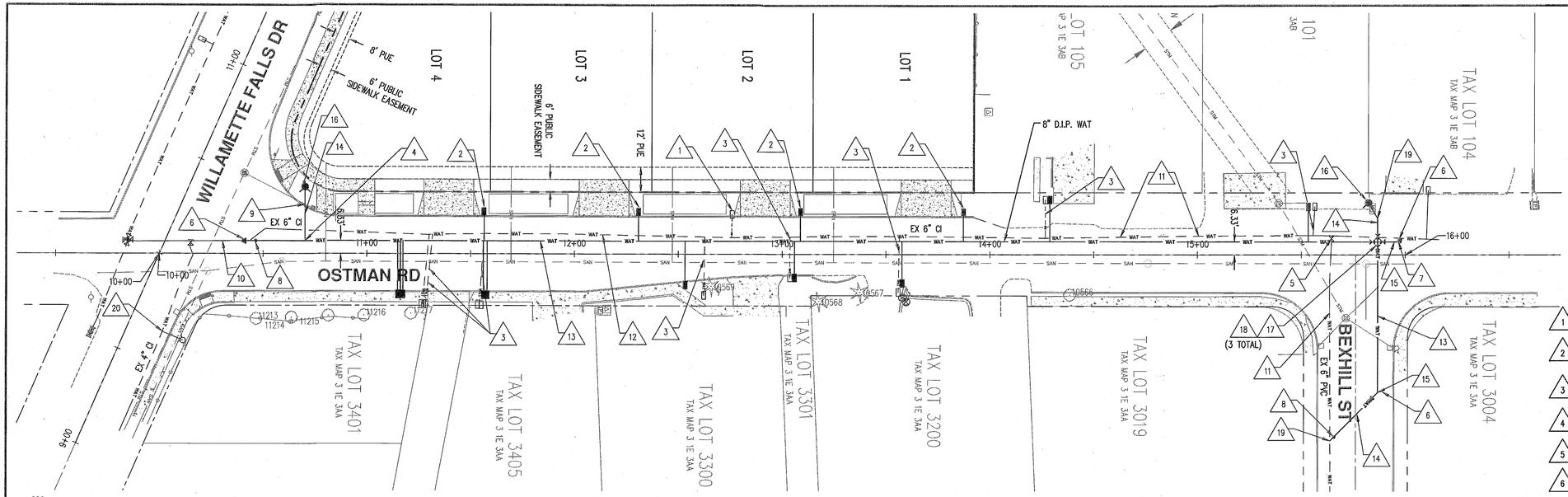
DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
JULY 9, 2002
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C301

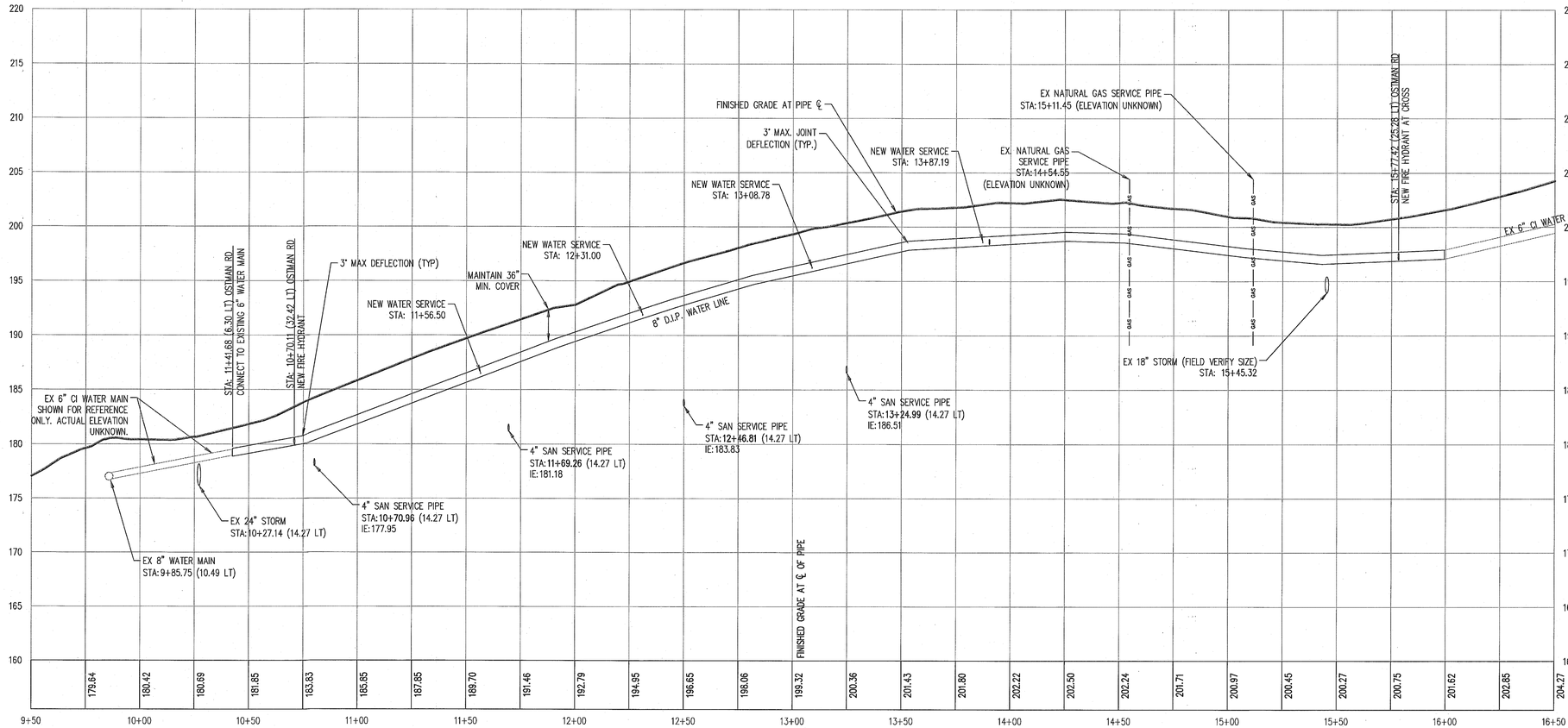


SCALE 1" = 30 FEET

30 0 12 18 24 30

WATER KEYED NOTES

1. ABANDON EXISTING WATER SERVICE. WATER METER TO BE RETURNED TO THE CITY.
2. INSTALL 1" SINGLE WATER SERVICE (TYP). SEE DETAIL ON SHEET C401 FOR CONSTRUCTION INFORMATION.
3. ABANDON EXISTING WATER SERVICE LINES. CONNECT TO NEW D.I.P. WATER MAIN, SEE DETAILS ON SHEET C401. INSTALL NEW 1" SINGLE WATER SERVICE LINES, SEE DETAIL ON SHEET C401 FOR CONSTRUCTION INFORMATION.
4. INSTALL 8"x8"x6" TEE FLG.xFLG.xFLG. WITH THRUST BLOCKING PER DETAIL ON SHEET C401.
5. REMOVE EXISTING 6" VALVE BOX AND REPLACE WITH CDF.
6. INSTALL 8"x6" M.J.xM.J. REDUCER. THRUST BLOCKING PER DETAIL ON SHEET C401.
7. INSTALL 6"x6" M.J. 45° BEND. THRUST BLOCKING, SEE DETAIL ON SHEET C401 VERIFY PIPE JOINT CONNECTION REQUIREMENT WITH THE CITY.
8. INSTALL TEMPORARY BLOWOFF, SEE DETAIL ON SHEET C401.
9. INSTALL 6"x6" M.J. 45° BENDS UNDER EXISTING STORM PIPE (4 EACH). THRUST BLOCKING PER DETAIL ON SHEET C401.
10. EX 6" WATER LINE (TO REMAIN).
11. ABANDON PIPE IN PLACE. FILL WATER LINE ENDS WITH CONCRETE.
12. EXISTING 6" MAIN LINE TO BE ABANDONED IN-PLACE AFTER ALL SERVICE CONNECTIONS HAVE BEEN MADE TO THE NEW WATER MAIN AND TESTING AND DISINFECTION ARE COMPLETED AND APPROVED. PLUG ENDS OF PIPE WITH CONCRETE.
13. INSTALL 8" D.I.P. CL. 52.
14. INSTALL 6" D.I.P. CL. 52.
15. INSTALL 8"x8" M.J. 45° BEND. THRUST BLOCKING SEE DETAIL ON SHEET C401.
16. INSTALL FIRE HYDRANT PER DETAIL ON SHEET C401.
17. INSTALL 8"x8"x8"x6" CROSS FLG.xFLG.xFLG.xFLG. WITH THRUST BLOCKING PER DETAIL ON SHEET C401.
18. INSTALL 8" GATE VALVE M.J. x FLG.
19. INSTALL 6"x6" M.J. 45° BEND. VERIFY PIPE JOINT CONNECTION REQUIREMENT WITH THE CITY. SEE DETAIL ON SHEET C401 FOR THRUST BLOCKING.
20. EXISTING FIRE HYDRANT REMOVED AT MAIN WATER LINE.



OSTMAN ROAD WATER LINE PROFILE

HOR: 1"= 30'

VERT: 1"= 6'

STATIONING IS BASED ON CENTERLINE OF OSTMAN ROAD.

NOTES

1. ALL PUBLIC WATER LINE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATION DIVISION 4, WATER TECHNICAL REQUIREMENTS.
2. ALL WATER PIPE PRODUCTS BEING REMOVED SHALL BE RETURNED TO THE CITY AS DIRECTED BY THE CITY PROJECT ENGINEER / INSPECTOR.
3. PROVIDE RESTRAIN JOINTS WITH FIELD-LOK GASKET. RESTRAIN LENGTH CALCULATIONS PER PUBLIC WORKS STANDARDS, SECTION 4.0014 USE EBBA AS NEEDED.

AS-BUILT DISCLAIMER:

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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON

TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 2S1E03AB

WATER PLAN

DESIGNED BY: DCN
DRAWN BY: JDR
CHECKED BY: MBH
SCALE: AS NOTED
DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER
58542PE
OREGON
MAY 9, 2006
MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

REVISIONS

JOB NUMBER 3745

SHEET C400

AKS DRAWING FILE: 3745 C400 WATER PLAN.DWG | LAYOUT: C400

AS-BUILT DISCLAIMER:
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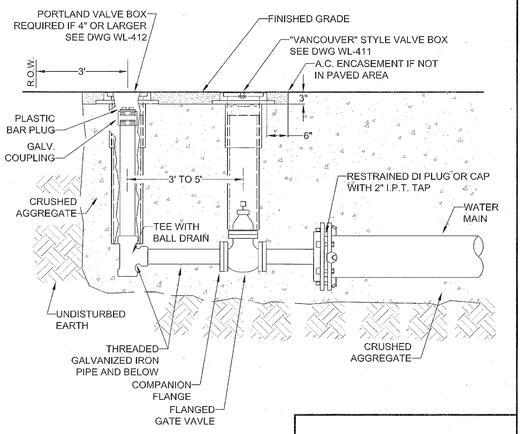
BLOW-OFF SIZES REQUIRED	
MAIN SIZE	BLOW-OFF SIZE
4" TO 6"	2"
8" TO 12"	4"
14" TO 18"	6"
20" & UP	PER ENGR.

NOTE:
1. BACKFILL WITH SELECT CRUSHED AGGREGATE A MINIMUM OF 6" ON ALL SIDES. COMPACTED TO 95% OF MAX DENSITY AS DETERMINED BY AASHTO T180.
2. ON TEMPORARY BLOW-OFFS ONLY, AN MJ CAP TAPPED 4" OR 6" MAY BE SUBSTITUTED FOR REDUCER.
3. TEMPORARY BLOW-OFF IS ONE REMOVED AT THE END OF PROJECT CONSTRUCTION. A PERMANENT BLOW-OFF REMAINS ON THE PROJECT AFTER ACCEPTANCE.
4. PLACE BLOW-OFF STANDPIPE 3 FT. INSIDE R.O.W. LINE AT END OF STREET (2 FT FROM BARRICADE).



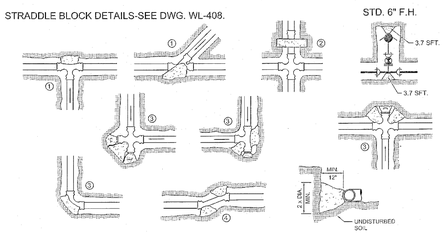
PERMANENT OR TEMPORARY 4" AND 6" BLOW-OFF

City of West Linn | DATE: 2010 | DRAWING NO. WL-404B | FILE NO.

FITTING SIZE (Inches)	TEE, WYE, & ① HYDRANTS	STRADDLE BLOCK ②	90° BEND ③ PLUGGED CROSS TEE PLUGGED-RUNS	45° BEND ④	22 1/2° BEND ④	11 1/2° BEND ④
2	*	*	*	*	*	*
4	1.7	2.1	2.4	1.3	*	*
6	3.7	4.9	5.3	2.9	1.5	*
8	6.7	8.7	9.5	5.1	2.7	1.3
10	10.5	13.6	14.8	8	4.1	2
12	15.1	19.6	21.3	11.6	5.9	2.9
14						
16	26.8	34.8	37.9	20.5	10.4	5.2
18	33.9	44	47.9	25.9	12.8	6.7
LARGER	* *	* *	* *	* *	* *	* *

BEARING AREA OF THRUST BLOCKS (sq. ft.)

1. ALL VALUES ARE BASED ON THE FOLLOWING ASSUMPTIONS: AVG. PRESSURE = 100 PSI X 2 (safety factor); 1500 PSF SOIL BEARING CAPACITY; NORMAL DISTRIBUTION DESIGN VELOCITY NOT TO EXCEED 5 F/S.
2. ALL FITTINGS SHALL BE WRAPPED IN 8 MM PLASTIC PRIOR TO PLACEMENT OF CONCRETE.
3. BEARING SURFACE OF THRUST BLOCKING SHALL BE AGAINST UNDISTURBED SOIL
4. ALL CONCRETE MIX SHALL HAVE A MIN. 28 DAY STRENGTH OF 3000 PSI.
5. ALL PIPE ZONES SHALL BE GRAVEL FILLED AND COMPACTED.
6. THRUST BLOCKS FOR PLUGGED CROSS AND PLUGGED TEE SHALL HAVE #4 REBAR LIFTING LOOPS INSTALLED AS SHOWN.
7. VERTICAL THRUST DETAILS-SEE DWG. WL-407.
8. STRADDLE BLOCK DETAILS-SEE DWG. WL-408.

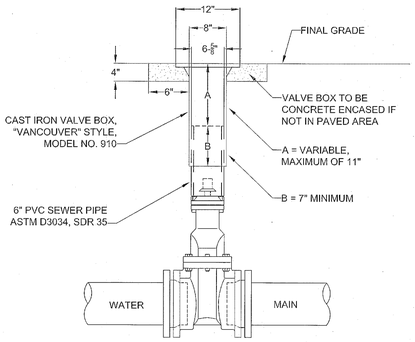


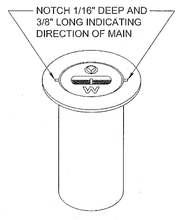
* BLOCK TO UNDISTURBED TRENCH WALLS.

** THRUST BLOCKS FOR PIPES LARGER THAN 18" WILL BE INDIVIDUALLY DESIGNED BY THE ENGINEER.

HORIZONTAL THRUST BLOCKING

City of West Linn | DATE: 2010 | DRAWING NO. WL-406 | FILE NO.

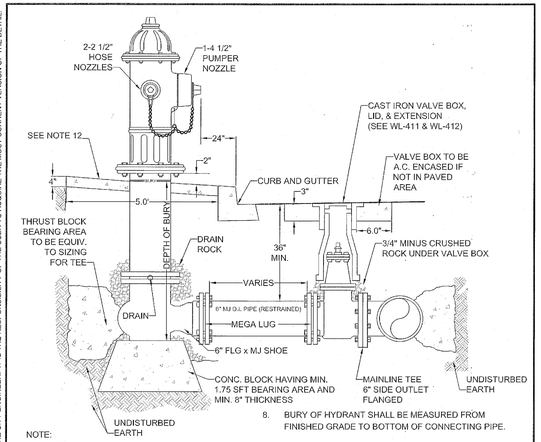




NOTE:
1. VALVE BOXES SHALL BE CENTERED DIRECTLY OVER THE VALVE NUT IN A VERTICAL POSITION.
2. VALVE BOX TOP SHALL BE ADJUSTED TO MEET FINISHED GRADE.
3. PVC SHALL BE ONE CONTINUOUS PIECE-NO BELLS OR COUPLERS.
4. ON VALVES 8" AND LARGER, PVC SHALL BE NOTCHED OVER VALVE PACKING BOLTS SO PVC SITS ON BONNET.

STANDARD VALVE BOX DETAIL

City of West Linn | DATE: 2010 | DRAWING NO. WL-411 | FILE NO.

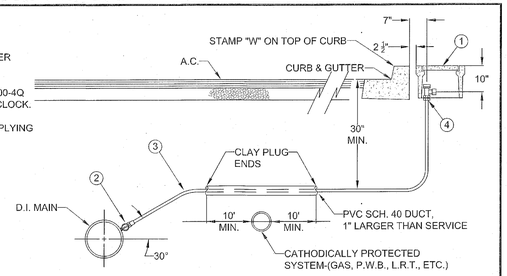


NOTE:
1. HYDRANT TO BE MUELLER CENTURION MDL A-423 ONLY WITH 1 1/2" OPER. NUTS OR CLOW MEDALLION F-2545.
2. HYDRANT COLOR TO BE MILLER EQUIP. ENAMEL 0 E 40 (SAFETY YELLOW).
3. JOINTS TO BE RESTRAINED BY 3/4" DIA. GALVANIZED STEEL RODS AND THRUST BLOCKS OR MEGALUGS AND THRUST BLOCKS.
4. ALL FITTINGS IN CONTACT WICONCRETE 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

City of West Linn | DATE: 2010 | DRAWING NO. WL-401 | FILE NO.

MATERIAL:
1. BROOKS METER BOX, BODY NO. 37, LID AND COVER NO.37-S.
2. MUELLER CORP. STOP NO. H-15008 OR FORD F1000-4Q CORP. STOP WITH OPERATING NUT AT 3 OR 9 O'CLOCK.
3. 1" SOFT TEMPER, TYPE "K" COPPER TUBING COMPLYING WITH ASTM B-88.
4. MUELLER ANGLE METER STOP NO. H-14258 (FORD NO. KV43-444W-Q).



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 ASSEMBLY.
6. TAPS INTO MAIN TO HAVE 18" SEPARATION ON CENTER MINIMUM.
7. ANGLE METER STOPS TO BE 18" FROM PROPERTY LINE AND NOT IN DRIVEWAY APPROACH.
8. METER BOXES IN CURB TIGHT SIDEWALK AND THOSE SUBJECT TO INCIDENTAL AUTO TRAFFIC MUST HAVE METAL LIDS AND BE TRAFFIC RATED.

STANDARD 1" WATER SERVICE

City of West Linn | DATE: 2010 | DRAWING NO. WL-402 | FILE NO.

AKS ENGINEERING AND FORESTRY, LLC
12965 SW HERMAN RD
SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
FAX: 503.563.6152
www.aks-eng.com

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RENAISSANCE AT WILLAMETTE AS-BUILTS

WEST LINN OREGON
TAX LOT 02200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

WATER DETAILS

DESIGNED BY: DCN
DRAWN BY: JDR
CHECKED BY: MBH
SCALE: AS NOTED
DATE: 2/9/2015

REGISTERED PROFESSIONAL ENGINEER 58542PE OREGON JULY 9, 2005 MONTGOMERY B. HURLEY
RENEWAL DATE: 6/30/15

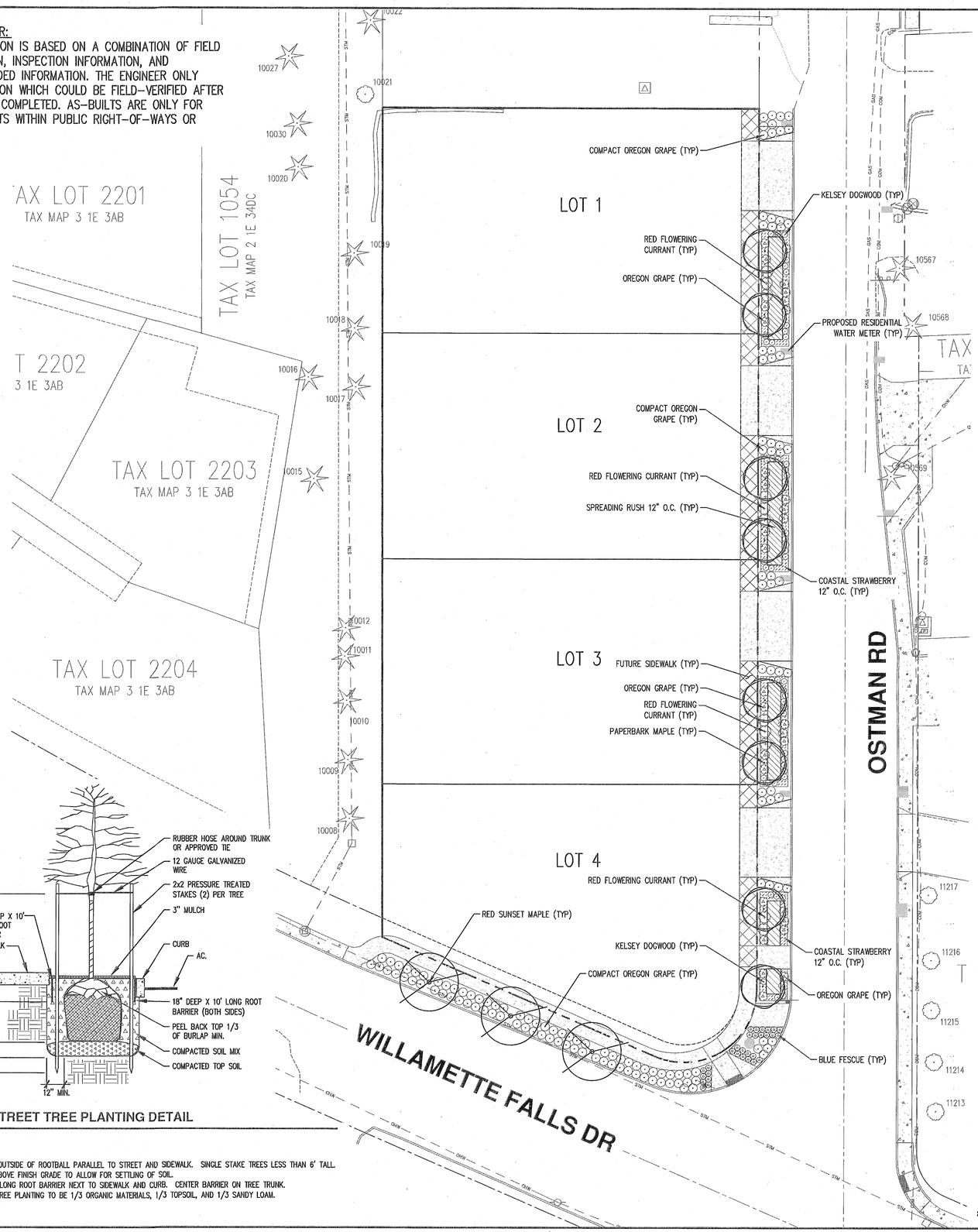
REVISIONS

JOB NUMBER 3745

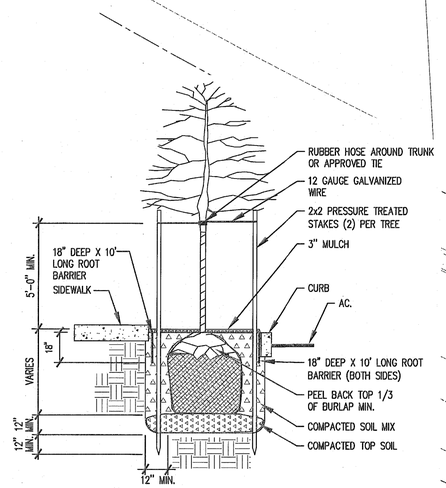
SHEET C401

AKS DRAWING FILE: 3745 C400 WATER PLAN.DWG | LAYOUT: C401

AS-BUILT DISCLAIMER:
AS-BUILT INFORMATION IS BASED ON A COMBINATION OF FIELD SURVEY INFORMATION, INSPECTION INFORMATION, AND CONTRACTOR-PROVIDED INFORMATION. THE ENGINEER ONLY CERTIFIES INFORMATION WHICH COULD BE FIELD-VERIFIED AFTER CONSTRUCTION WAS COMPLETED. AS-BUILTS ARE ONLY FOR PUBLIC IMPROVEMENTS WITHIN PUBLIC RIGHT-OF-WAYS OR EASEMENTS.



SCALE 1" = 20 FEET
20 0 8 12 16 20



1 / L100 TYPICAL STREET TREE PLANTING DETAIL

NTS

NOTES:
1. DRIVE STAKES OUTSIDE OF ROOTBALL PARALLEL TO STREET AND SIDEWALK. SINGLE STAKE TREES LESS THAN 6' TALL.
2. SET TREE 2" ABOVE FINISH GRADE TO ALLOW FOR SETTLING OF SOIL.
3. PROVIDE A 10' LONG ROOT BARRIER NEXT TO SIDEWALK AND CURB. CENTER BARRIER ON TREE TRUNK.
4. SOIL MIX FOR TREE PLANTING TO BE 1/3 ORGANIC MATERIALS, 1/3 TOPSOIL, AND 1/3 SANDY LOAM.

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME / COMMON NAME	SIZE/CONTAINER	SPACING
	3	ACER RUBRUM 'FRANKSRED' / RED SUNSET MAPLE	2" CAL. B&B	AS SHOWN
STORMWATER TREES	**QTY**	**BOTANICAL NAME / COMMON NAME**	**SIZE/CONTAINER**	**SPACING**
	8	ACER GRISEUM / PAPERBARK MAPLE	1.5" CAL. B&B	AS SHOWN
SHRUBS	**QTY**	**BOTANICAL NAME / COMMON NAME**	**SIZE/CONTAINER**	**SPACING**
	128	MAHONIA AQUIFOLIUM 'COMPACTA' / COMPACT OREGON GRAPE	1 GAL CONT.	36" o.c.
GRASSES	**QTY**	**BOTANICAL NAME / COMMON NAME**	**SIZE/CONTAINER**	**SPACING**
	30	FESTUCA GLAUCA / BLUE FESCUE	1 GAL CONT.	24" o.c.
STORMWATER SHRUBS	**QTY**	**BOTANICAL NAME / COMMON NAME**	**SIZE/CONTAINER**	**SPACING**
	50	CORNUS SERICEA 'KELSEYI' / KELSEY DOGWOOD	1 GAL CONT.	24" o.c.
	32	MAHONIA AQUIFOLIUM / OREGON GRAPE	1 GAL CONT.	36" o.c.
	11	RIBES SANGUINEUM / RED FLOWERING CURRANT	3 GAL CONT.	48" o.c.
STORMWATER HERBACEOUS PLANTS	**QTY**	**BOTANICAL NAME / COMMON NAME**	**SIZE/CONTAINER**	**SPACING**
	647	JUNCUS PATENS / SPREADING RUSH	1 GAL CONT.	12" o.c.
STORMWATER GROUNDCOVER	**QTY**	**BOTANICAL NAME / COMMON NAME**	**SIZE/CONTAINER**	**SPACING**
	601	FRAGARIA CHILOENSIS / COASTAL STRAWBERRY	1 GAL CONT.	12" o.c.

GENERAL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES. IF DISCREPANCIES OCCUR, DESIGN INTENT PREVAILS OVER QUANTITIES LISTED.
2. ALL PLANTS AND PLANTINGS SHALL CONFORM TO CITY OF WEST LINN DESIGN STANDARDS AND TO AMERICAN NURSERY STANDARDS ASN 1260.1.
3. REVISIONS OR SUBSTITUTIONS TO PLANTINGS, INCLUDING CHANGES TO LOCATION, QUANTITIES, SPECIES, SIZES, SPACING, ETC. DUE TO UNFORESEEN SITE CONDITIONS, PLANT AVAILABILITY, ETC. MAY BE MADE BY THE LANDSCAPE ARCHITECT WHERE ALLOWED BY CITY OF WEST LINN DESIGN STANDARDS, PRIOR TO FINAL INSTALLATION.
4. TREES TO BE PLANTED SHALL MEET THE REQUIREMENTS OF THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS FOR NURSERY STOCK (ANSI Z60.1) FOR GRADE NO. 1 OR BETTER. DOUBLE STAKE ALL TREES. PROVIDE ROOT BARRIERS WHERE ADJACENT TO HARD SURFACING, CURBS, SIDEWALKS, ETC. ROOT BARRIER SHALL BE A MINIMUM OF 18" DEEP BY 10' LONG. CENTER ROOT BARRIER ON TREE TRUNK.
5. CENTER TREES IN PLANTER STRIP WHERE NOT IN STORMWATER SWALES. KEEP SHRUBS AND GROUNDCOVERS A MINIMUM OF 24" O.C. FROM PAVING AND 3' O.C. FROM TREES. ADJUST PLANTINGS AS NECESSARY ON SITE TO AVOID CONFLICT WITH UTILITIES, HYDRANTS, LIGHT POLES, METERS, ETC.
6. MULCH: APPLY 3" DEEP WELL-AGED MEDIUM GRIND OR SHREDDED DARK HEMLOCK OR FIR BARK MULCH UNDER AND AROUND ALL PLANTINGS. CARE SHALL BE TAKEN TO AVOID COVERING FOLIAGE OR ROOT CROWN OF PLANTS WITH BARK MULCH.
   * SEE STORMWATER NOTES FOR BARK MULCH IN SWALES.
7. GROWING MEDIUM: GROWING MEDIUM IN ALL NEW PLANTING BEDS SHALL BE A MINIMUM OF 12" DEEP. EXISTING, NON-COMPACTED, NATIVE SOIL MAY COUNT TOWARDS THIS REQUIREMENT. REUSE SURFACE SOIL STOCKPILED ON THE SITE AND/OR IMPORT NEW TOPSOIL TO MAKE UP REQUIRED AMOUNTS FOR INSTALLATION. TOPSOIL SHALL BE FREE OF ROOTS, PLANTS, SOD, STONES, CLAY LUMPS, DEBRIS, ALKALI SALTS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH AND HAVE A MINIMUM OF 15%-30% ORGANIC MATERIAL CONTENT. SOIL PLACEMENT AND PLANTINGS SHALL OCCUR IN CONDITIONS THAT DO NOT RESULT IN OVER-COMPACTION OR EROSION, SATURATED SOIL OR OTHER CONDITIONS SUCH AS FREEZING OR ABOVE AVERAGE TEMPERATURES, RAINY CONDITIONS, ETC. SOIL SHALL BE IN FRIABLE (WORKABLE) CONDITION WHEN PLACED. FINISHED GRADE OF NEW PLANTING SHALL SEAMLESSLY MEET FINISH GRADE SET IN GRADING PLANS.
   * SEE STORMWATER NOTES FOR SOIL PREPARATION IN SWALES.
8. ALL PLANTING AREAS SHALL BE AUTOMATICALLY IRRIGATED USING THE LATEST IN WATER SAVING TECHNOLOGY (I.E. DRIP IRRIGATION, FOR PLANTING BEDS, EVAPOTRANSPIRATION (ET) CONTROL CLOCK, ETC.). LANDSCAPE CONTRACTOR TO 'DESIGN-BUILD' IRRIGATION SYSTEM AND SUBMIT PLANS TO CITY OF WEST LINN AND THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO BEGINNING INSTALLATION. COORDINATE POINT OF CONNECTION (POC), SLEEVING, AND CONTROL CLOCK LOCATION WITH GENERAL CONTRACTOR PRIOR TO PAVING AND OTHER HARD SURFACE CONSTRUCTION COMMENCEMENT.
   * SEE STORMWATER NOTES FOR IRRIGATION IN SWALES.

STORMWATER NOTES:

1. ALL PLANTS AND PLANTINGS SHALL CONFORM TO THE CITY OF WEST LINN DESIGN STANDARDS AND BUREAU OF ENVIRONMENTAL SERVICES (BES) MANUAL. PLANT IN ACCORDANCE WITH STANDARDS ADOPTED BY THE OREGON LANDSCAPE CONTRACTORS BOARD (OLCB).
2. PLANTING SHALL OCCUR IN THE SPRING (MARCH) OR EARLY FALL (SEPTEMBER THROUGH OCTOBER) UNLESS SUPPLEMENTAL MEASURES ARE TAKEN TO ENSURE PLANT SURVIVAL.
3. HATCHED AREAS ARE MEANT TO PORTRAY GENERAL PLANT AREAS. PLANT AREA FOR FULL COVERAGE AT SPACING NOTED IN PLANT LEGEND. ADJUST PLANTINGS AS NECESSARY TO AVOID VAULTS, INLETS, ETC.
4. GROWING MEDIUM: 18" DEEP; IMPORTED SOIL, SANDY LOAM MIXED WITH PLANT DERIVED COMPOST OR SAND/SOIL/COMPOST BLEND IN ACCORDANCE WITH BUREAU OF ENVIRONMENTAL SERVICES (BES) STANDARDS. GROWING MEDIUM SHALL BE APPROXIMATELY ONE-THIRD COMPOST BY VOLUME, FREE-DRAINING, AND SUPPORT PLANT GROWTH. COMPOST SHALL BE ENTIRELY PLANT DERIVED.
5. SOIL PLACEMENT AND PLANTING SHALL OCCUR IN CONDITIONS THAT DO NOT RESULT IN OVER-COMPACTION OR EROSION, SATURATED SOIL OR OTHER CONDITIONS SUCH AS FREEZING OR ABOVE AVERAGE TEMPERATURES, RAINY CONDITIONS, ETC.
6. INVASIVE PLANT MATERIAL, INCLUDING HIMALAYAN BLACKBERRY, THISTLE SPECIES, ETC. SHALL BE REMOVED ENTIRELY FROM THE STORMWATER SWALES BEFORE PLANTING IF PRESENT. REMOVE INVASIVE VEGETATION IN ACCORDANCE WITH BES STANDARDS.
7. MULCH: APPLY 3" DEEP FINE TO MEDIUM HEMLOCK MULCH OR WELL-AGED ORGANIC YARD DEBRIS COMPOST UNDER AND AROUND ALL PLANTINGS IN ZONE 'B' (DRY ZONE) ONLY. CARE SHALL BE TAKEN TO AVOID PLACING MULCH IN ZONE 'A' (WET ZONE), IN A STORMWATER FLOW PATH, OR IN AREAS WHERE IT MAY CLOG INLETS OR OUTLETS OR ESCAPE THE SWALES.
8. MANURE MULCHING AND HIGH-FERTILIZER HYDROSEEDING SHALL BE PROHIBITED IN THE SWALES DURING AND AFTER CONSTRUCTION.
9. IRRIGATION: CONTRACTOR SHALL PROVIDE A TEMPORARY 'DESIGN-BUILD' IRRIGATION SYSTEM FOR THE STORMWATER SWALES. TEMPORARY IRRIGATION SYSTEM SHALL MEET ALL CITY OF WEST LINN STANDARDS AND INCLUDE ALL NECESSARY COMPONENTS, CONTROL VALVES, DOUBLE CHECKVALVES, ETC. NECESSARY FOR FULL COVERAGE. IRRIGATION SYSTEM SHALL BE REMOVED AT THE END OF TWO-YEARS OR PLANT ESTABLISHMENT, WHICHEVER IS LONGER. COORDINATE WITH GENERAL CONTRACTOR AND/OR OWNER.
10. MAINTENANCE WARRANTY PERIOD: MAINTENANCE WARRANTY PERIOD SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR FOR A PERIOD OF 2-YEARS AFTER DATE OF COMPLETION. REGULAR MAINTENANCE TASKS SHALL BE PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARDS. THESE TASKS MAY INCLUDE, BUT ARE NOT LIMITED TO, REMOVAL OF UNDESIRABLE WEEDS OR INVASIVE VEGETATION, PRUNING, MULCHING, PLANT REPLACEMENT, AND IRRIGATION SYSTEM REPAIR.

AKS ENGINEERING AND FORESTRY, LLC
12965 SW HERMAN RD
SUITE 100
TUALATIN, OR 97062
PHONE: 503.563.6151
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RENAISSANCE AT WILLAMETTE AS-BUILTS
WEST LINN OREGON
TAX LOT 0200 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 3S1E03AB

LANDSCAPE PLAN

DESIGNED BY:	KAH/TEB
DRAWN BY:	SKW/TEB
CHECKED BY:	KAH
SCALE:	AS NOTED
DATE:	2/9/2015

REGISTERED 797 KIRSTI A. HAUSWALD OREGON 06/06/13 LANDSCAPE ARCHITECT

REVISIONS

JOB NUMBER 3745

SHEET L100

AKS DRAWING FILE: 3745 L100 LANDSCAPE PLANDING | LAYOUT: L100