Parker Development
West Linn, Oregon

City File Nos. SUB 06-06, MISC-06-31, ZC-06-03, VAR-06-04

GENERAL NOTES:

1. ALL WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY OF WEST LINN EXISTING STANDARDS, THE APWA (OREGON CHAPTER) STANDARD SPECIFICATIONS AND DRAWINGS (1990, WITH 1992 AND 1998 AMENDMENTS), THE STATE OF OREGON PLUMBING CODE, THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ), THE OREGON DEPARTMENT OF HUMAN RESOURCES, AND AS APPROVED AND NOTED ON THESE DRAWINGS.
2. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
3. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL ARRANGE FOR THE RELOCATION OF ANY IN CONFLICT WITH THE PROPOSED CONSTRUCTION.
4. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
5. ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND THE ACTUAL SITE CONDITIONS SHALL BE REPORTED TO THE ENGINEER AS SOON AS THEY BECOME APPARENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF ALL DAMAGE OR DESTRUCTION OF PROPERTY MONUMENTATION OR CONSTRUCTION STAKES.
7. THE ENGINEER HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND CONSTRUCTION REVIEW SERVICES RELATING TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED FOR CONTRACTOR TO PERFORM HIS WORK.
8. ALL UTILITY TRENCHES WITHIN EXISTING OR PROPOSED RIGHT-OF-WAY SHALL BE BACKFILLED WITH 3/4"-0" GRANULAR BACKFILL WHICH IS COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180.
9. CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN AND RECEIVE APPROVAL PRIOR TO WORKING WITHIN THE PUBLIC RIGHT-OF-WAY.
10. THE DEVELOPER IS RESPONSIBLE FOR THREE YEARS OF MAINTENANCE OF THE DETENTION SYSTEM AFTER ACCEPTANCE BY THE CITY. HOMEOWNER ASSOCIATION OR PRIVATE PARTY WILL BE RESPONSIBLE FOR STORM WATER SYSTEM MAINTENANCE AND WILL ENTER INTO A MAINTENANCE AGREEMENT WITH THE CITY.
11. EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH CLACKAMAS COUNTY EROSION MANUAL.

STREET CONSTRUCTION AND PAVING:

1. ALL WORK AND MATERIALS SHALL CONFORM WITH EXISTING CITY OF WEST LINN STANDARDS
2. CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, ROOTS, BRUSH, AND OTHER ORGANIC MATERIAL IN THE WORK AREA AND WHERE INDICATED ON THE PLANS. THESE MATERIALS SHALL BE DISPOSED OF, OFF SITE, IN SUCH A MANNER AS TO MEET WITH LOCAL REGULATIONS.
3. CONTRACTOR SHALL PROVIDE THE NECESSARY EROSION PROTECTION, TO INCLUDE GRADING, DITCHING, HAY BALES, AND SILT FENCING TO MINIMIZE EROSION ONTO ADJACENT PROPERTIES.
4. THE STREET SECTION SHALL BE GRADED TO THE ELEVATIONS SHOWN ON THE DRAWINGS WITH THE NECESSARY ADJUSTMENTS TO ACCOMMODATE THE FINISHED PAVEMENT AS SPECIFIED.
5. MATERIAL IN SOFT SPOTS WITHIN THE PAVED AREAS SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH PIT RUN CRUSHED ROCK. THE SUBGRADE SHALL BE "PROOF ROLLED", WITNESSED BY THE ENGINEER AND THE CITY PRIOR TO PLACEMENT OF BASE ROCK. ADDITIONALLY, COMPACTION TESTING FOR AT LEAST TWO LOCATIONS IS REQUIRED FOR THE FINISHED BASE ROCK. COMPACTION TO BE 95% OF MODIFIED PROCTOR DENSITY (T-180). TESTING WILL BE BY AN INDEPENDENT LABORATORY WITH RESULTS TO THE CITY AND DESIGN ENGINEER. FINISH BASE ROCK SHALL BE PROOF ROLLED, WITNESSED BY THE ENGINEER AND CITY PRIOR TO PLACEMENT OF ASPHALT.
6. CONTRACTOR TO NOTIFY CITY OF WEST LINN, AND THE ENGINEER, 24-HOURS PRIOR TO STARTING CONSTRUCTION OF WORK TO BE ACCEPTED BY THE CITY.
7. ASPHALT CONCRETE PAVEMENT TO BE FROM A MIX DESIGN APPROVED BY THE OREGON DEPARTMENT OF TRANSPORTATION. CONTRACTOR TO PROVIDE DENSITY TESTING RESULTS FOR ASPHALTIC CONCRETE PLACED IN PUBLIC STREETS.

STORM SEWER:

1. ALL WORK AND MATERIALS USED FOR PUBLIC IMPROVEMENTS TO CONFORM WITH THE REQUIREMENTS OF THE CITY OF WEST LINN.
2. ALL WORK & MATERIALS FOR PRIVATE STORM DRAINS TO MEET REQUIREMENTS OF THE STATE OF OREGON PLUMBING CODE.
3. MATERIALS:

   • POLYVINYLCHLORIDE PIPE (PVC) SHALL CONFORM TO THE REQUIREMENTS OF ASTM D 3034 SDR 35 (8 INCHES OR LESS)

   • RIBBED PVC PIPE CONFORMING TO ASTM F-794.

   • DUCTILE IRON PIPE (DI) SHALL BE CLASS 150, CEMENT-MORTAR LINED PUSH-ON JOINT PIPE MEETING THE LATEST REVISIONS OF ANSI SPECIFICATIONS A 21.4/AWWA C-104.
4. PIPE BEDDING AND TRENCH BACKFILL WITHIN PAVED AREAS TO BE 3/4"-0" CRUSHED ROCK. PIPE BEDDING TO EXTEND A MINIMUM OF 6-INCHES IN ALL DIRECTIONS FROM THE OUTSIDE OF THE PIPE.
5. ALL MANHOLES OUTSIDE THE STREET RIGHT-OF-WAY SHALL HAVE TAMPER PROOF LIDS.
6. ALL STORM LINES SHALL BE MANDREL TESTED AND T.V. ACCEPTANCE INSPECTION SHALL BE COMPLETED BY THE CONTRACTOR.
7. ALL PIPE SHALL HAVE RUBBER GASKET JOINTS.
8. STORM DETENTION SHALL BE TESTED PER 2.0045 WEST LINN CONSTRUCTION STANDARDS.

SANITARY SEWER:

1. ALL WORK AND MATERIALS TO CONFORM WITH THE CITY OF WEST LINN STANDARDS (1990, APWA, OREGON CHAPTER, STANDARD SPECIFICATIONS AND DRAWINGS WITH 1992 AND 1998 AMENDMENTS), AND THE DEQ, FOR ALL PUBLIC SANITARY SEWER LINES.
2. ALL PRIVATE SERVICE CONNECTIONS SHALL BE A MINIMUM OF 4-INCH PVC AND INSTALLED AT A MINIMUM GRADE OF 2% UNLESS OTHERWISE NOTED.
3. CONTRACTOR TO "POT HOLE" EXISTING SEWER AT CONNECTION POINT PRIOR TO ACTUAL CONSTRUCTION TO VERIFY INVERT ELEVATION.
4. ALL PVC SANITARY SEWER PIPE SHALL CONFORM TO ASTM D-3034, SDR 35, UNLESS SHOWN OTHERWISE ON THE DRAWINGS. PVC SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURES. PVC SEWER PIPE SHALL BE CONNECTED TO CONCRETE MANHOLES BY MEANS OF AN APPROVED COUPLING WITH AN ELASTOMERIC GASKET, AN APPROVED WATERSTOP OR FLEXIBLE SLEEVE. IN ADDITION TO AIR TESTING, SANITARY SEWER CONSTRUCTED OF PVC SEWER PIPE SHALL BE DEFLECTION TESTED NO LESS THAN 30-DAYS AFTER THE TRENCH BACKFILL AND COMPACTION HAS BEEN COMPLETED. THE TEST SHALL BE CONDUCTED BY PULLING AN APPROVED SOLID POINTED MANDREL (95% OF INSIDE DIAMETER) THROUGH THE COMPLETED PIPE LINE.
5. CONTRACTOR SHALL CONDUCT A TV ACCEPTANCE INSPECTION UPON COMPLETION OF ALL SEWER CONSTRUCTION AND SUBMIT TO CITY.
6. PIPE BEDDING AND BACKFILL SHALL CONFORM TO THE APWA STANDARD DETAILS AND AS NOTED ON THE PLANS.
7. TRENCHES WITHIN THE ROADWAY OR DRIVEWAYS SHALL BE BACKFILLED WITH GRANULAR MATERIALS. COMPACTION SHALL BE SUFFICIENT TO PREVENT SETTLEMENT. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT, METHOD AND EFFORT REQUIRED TO ACHIEVE REQUIRED COMPACTION. SUBSEQUENT SETTLEMENT OF THE FINISH SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED THE RESULT OF IMPROPER COMPACTION AND SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER. COMPACTION TESTING IS REQUIRED.
8. ALL MANHOLES SHALL BE VACUUM TESTED AND ALL OUTSIDE THE STREET RIGHT-OF-WAY SHALL HAVE TAMPER PROOF LIDS.
9. CONTRACTOR SHALL MAINTAIN AS-CONSTRUCTED DATA INCLUDING STATION, LENGTH, AND DEPTH OF SERVICE CONNECTION, AND ANY CHANGES MADE DURING CONSTRUCTION. THAT DATA SHALL BE SUBMITTED TO THE ENGINEER UPON COMPLETION OF CONSTRUCTION.
10. THE NEW SANITARY SEWER SYSTEM SHALL NOT BE CONNECTED TO THE CITY SYSTEM PRIOR TO TESTING AND ACCEPTANCE BY THE CITY.

AS BUILT

WATER SYSTEM NOTES:

1. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF WEST LINN STANDARDS AND SPECIFICATIONS, THE OREGON STATE HEALTH DIVISION ADMINISTRATIVE RULES CHAPTER 333.
2. ALL PIPE TO HAVE A MINIMUM COVER OF 36-INCHES BELOW THE FUTURE FINISH GRADES.
3. DUCTILE IRON PIPE TO BE TYTON JOINT CEMENT MORTAR LINED, CLASS 52, AND SHALL CONFORM TO ASTM C-110, C-150, AND C-151.
4. GATE VALVES TO BE DOUBLE DISK TYPE CONFORMING TO AWWA C-500, WITH RESILIENT SEATS PER AWWA C-509-80. VALVE BOXES TO BE CAST IRON, RICH MODEL 925 OR EQUAL.
5. WATER SERVICES SHALL BE COPPER TUBING TYPE "K" 1-INCH DIAMETER FOR ALL SERVICES.
6. THRUST BLOCKING: ALL TEES, PLUGS, CAPS BENDS, AND AT ALL OTHER LOCATIONS WHERE UNBALANCED FORCE EXIST SHALL REQUIRE SUITABLE THRUST BLOCKING. CONCRETE TO BE POURED AGAINST UNDISTURBED EARTH AND SHALL HAVE A STRENGTH AT 28-DAYS OF 3000 PSI.
7. HYDROSTATIC TESTS: THE TEST PRESSURE SHALL BE 180 PSI AT THE HIGHEST POINT IN ANY SECTION. THE DURATION SHALL BE 60-MINUTES WITHOUT PRESSURE DROP AND SHALL BE MONITORED BY THE ENGINEER AND THE CITY OF WEST LINN.
8. STERILIZATION: PIPELINES INTENDED TO CARRY POTABLE WATER SHALL BE FLUSHED AND STERILIZED BEFORE PLACING INTO SERVICE. STERILIZING PROCEDURE SHALL CONFORM TO WEST LINN STANDARDS OR AS MODIFIED OR EXPANDED BY GOVERNING AGENCY HAVING JURISDICTION.
9. DISPOSAL OF THE STERILIZATION WATER SHALL BE DONE IN CONFORMANCE WITH DEQ REGULATIONS IN SUCH A WAY AS TO NOT CAUSE DAMAGE OR INJURY.
10. FIRE HYDRANTS & BLOWOFFS SHALL BE INSTALLED AT THE LOCATION SHOWN ON THE PLANS CONFORMING TO CITY CONSTRUCTION STANDARDS AND DRAWINGS # FH-300 & BO-301. FIRE HYDRANTS SHALL BE A CLOW "MEDALLION" MODEL F-2545 OR MUELLER "CENTURION" MODEL A-423.
11. ALL HOUSES SHALL BE SPRINKLERED AND A FIRE HYDRANT SHALL BE INSTALLED NEAR ACCESS WAY OFF BEACON HILL DRIVE PER FIRE MARSHALL COMMENTS.
12. THE NEW WATER SYTEM SHALL NOT BE CONNECTED TO THE CITY SYSTEM PRIOR TO TESTING AND ACCEPTANCE BY THE CITY.

CONDITIONS OF APPROVAL:

1. THE APPLICANT SHALL CONVEY THE NATURAL DRAINAGEWAY TRANSITION AREA TO THE CITY OF WEST LINN.
2. PUBLIC IMPROVEMENTS SHLL MEET TVF&R CURRENT REQUIREMENTS UNLESS EXPLICITLY EXCUSED BY TVF&R.
3. THE APPLICANT SHALL REMOVE ALL NON-NATIVE PLANT SPECIES FROM THE DRAINAGEWAY AND REPLANT WITH NATIVE SPECIES PER CDC 32.050 (9).
4. PUBLIC IMPROVEMENTS SHALL MEET THE CITY OF WEST LINN'S DESIGN AND CONSTRUCTION STANDARDS.
5. KING COUNTY METHOD SHALL BE USED FOR STORM DRAINAGE REPORT.

SEEDING/MULCHING

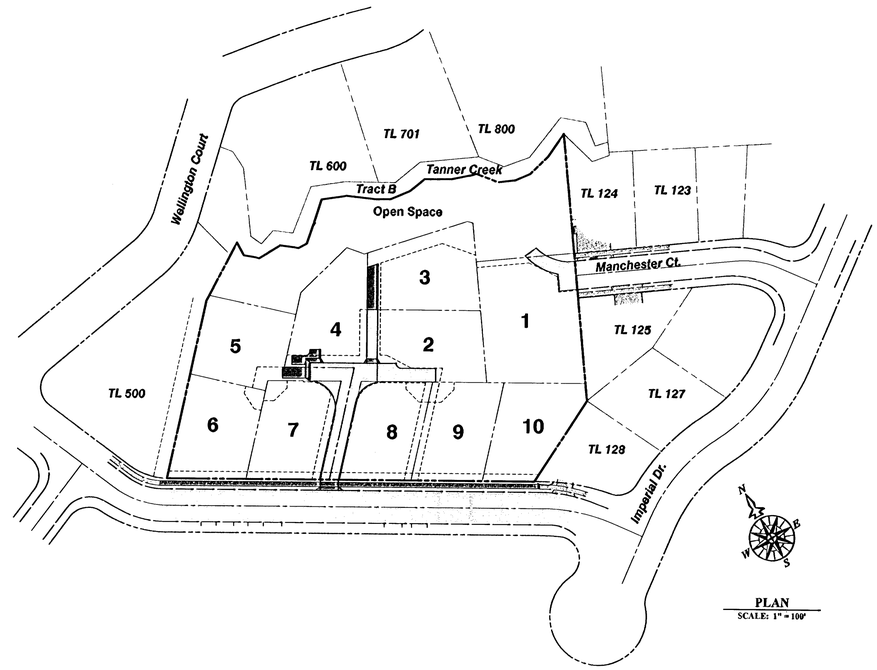
- ALL AREAS DISTURBED DURING CONSTRUCTION TO BE GRADED TO DRAIN AND COMPACTED TO A MINIMUM OF STANDARDS IMMEDIATELY AFTER INSTALLATION UTILITIES OR GRADING.
- RECOMMENDED SEED MIXTURE:

TYPE	PERCENT BY WEIGHT
ELKA DWARF PERENNIAL RYEGRASS	80
CREEPING RED FESCUE	20

  APPLICATION RATE: 100 POUNDS MINIMUM PER ACRE ANNUAL RYEGRASS RECOMMENDED WHEN RAPID GERMINATION IS REQUIRED.
- FERTILIZER SHALL BE 12-16-8 WITH 50% OF THE NITROGEN DERIVED FROM UREA-FORMALDEHYDE, AND APPLIED AT A RATE OF 400 POUNDS PER ACRE.
- SEED AND MULCH AT A RATE OF 2000 LB/AC/WITH HEAVY BONDING AGENT OR NETTING AND ANCHORS. MULCH SHALL BE A WOOD CELLULOSE FIBER OR OTHER MATERIAL SUITABLE FOR HYDROMULCHING.
- TEMPORARY/PERMANENT HYDROSEEDING OR ACCEPTABLE SEEDING AND MULCHING MUST BE PROVIDED WHENEVER PERENNIAL COVER CANNOT BE ESTABLISHED ON SITES WHICH WILL BE EXPOSED FOR 60 DAYS OR MORE.

SEEDING/MULCHING

1. APPLY TEMPORARY AND PERMANENT SOIL STABILIZATION MEASURES ON ALL DISTURBED AREAS AS GRADING PROGRESSES.
2. ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK MUST BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.
3. PRESERVE EXISTING VEGETATION AND RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION.
4. ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED.
5. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION.
6. ALL ACTIVE CATCH BASINS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
7. WATER-TIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON-SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMP'S; SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
8. TEMPORARY STABILIZATION OR COVERING OF SOIL STOCKPILES AND STEEP SLOPES MUST OCCUR WITHIN 7 DAYS OF DISTURBANCE DURING THE WET-WEATHER SEASON AND 21 DAYS OF DISTURBANCE DURING THE DRY WEATHER SEASON AT THE END OF EACH WORK DAY OR OTHER BMP's MUST BE IMPLEMENTED TO PREVENT TURBID DISCHARGES TO SURFACE WATERS.
9. ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL.
10. THE PERMITTEE MUST PROPERLY PREVENT AND MANAGE HAZARDOUS WASTE, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION.
11. SIGNIFICANT AMOUNTS OF SEDIMENT WHICH LEAVE THE SITE MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A REOCCURRENCE OF THE DISCHARGED WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIME FRAME.
12. SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATERBODIES. DRY SWEEPING MUST BE USED TO CLEAN UP RELEASED SEDIMENTS.
13. SEDIMENT MUST BE REMOVED FROM BEHIND SEDIMENT FENCE WHEN IT HAS REACHED A HEIGHT OF 1/3 THE HEIGHT OF THE FENCE ABOVE THE GROUND, AND BEFORE FENCE REMOVAL.
14. SEDIMENT MUST BE REMOVED FROM BEHIND BIO BAGS AND OTHER BARRIERS WHEN IT HAS REACHED A HEIGHT OF TWO (2) INCHES AND BEFORE BMP REMOVAL.
15. CLEANING OF TRAPPED CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT COMPLETION OF PROJECT.
16. OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
17. PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN ON THIS PLAN SHALL BE CLEARLY DELINEATED IN THE FIELD. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE IS PERMITTED BEYOND THE CLEARING LIMITS. THE OWNER/PERMITTEE MUST MAINTAIN THE DELINEATION FOR THE DURATION OF THE PROJECT. NOTE: VEGETATED CORRIDORS TO BE DELINEATED WITH ORANGE CONSTRUCTION FENCE OR APPROVED EQUAL.
18. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP f.e. (FILTER BAG).
19. THE ESC PLAN MUST BE KEPT ON SITE. ALL MEASURES SHOWN ON THE PLAN MUST BE INSTALLED PROPERLY TO ENSURE THAT SEDIMENT OR SEDIMENT LADEN WATER DOES NOT ENTER A SURFACE WATER SYSTEM, ROADWAY, OR OTHER PROPERTIES.
20. THE ESC MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION CONTROL REGULATIONS. CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED TO THE CITY.
21. IN AREAS SUBJECT TO WIND EROSION, APPROPRIATE BMP's MUST BE USED WHICH MAY INCLUDE THE APPLICATION OF FINE WATER SPRAYING, PLASTIC SHEETING, MULCHING, OR OTHER APPROVED MEASURES.



PLAN
SCALE: 1" = 100'

VICINITY MAP
SCALE: NTS

OWNER:
Jon Sallquist
1900 Manchester Court
West Linn, Oregon 97068

DEVELOPER:
Parker Development
1750 W Blankenship Road
West Linn, Oregon 97068
503-742-1942

ENGINEER/SURVEYOR:
Compass Engineering
4105 SE International Way, Suite 501
Milwaukie, Oregon 97222
503-653-9093
Contact: Bruce Goldson

UTILITY CONTACTS:

Water:	City of West Linn
Power:	PGE, Service & Design 503-736-5452
Sewer:	City of West Linn
Phone:	Qwest Communications 503-242-2793
Cable:	Comcast 503-605-6147
Gas:	NW Natural 503-721-2449

LEGEND

- EXISTING UTILITY POLE
- EXISTING STREET LIGHT
- EXISTING UTILITY RISER
- EXISTING POWER VAULT
- EXISTING GAS METER
- EXISTING MAILBOX
- EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- EXISTING CLEANOUT
- EXISTING SANITARY MANHOLE
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- NEW STORM MANHOLE
- NEW CATCH BASIN
- NEW CLEANOUT
- ROOF DRAIN
- NEW SANITARY MANHOLE
- EXISTING BLOW OFF ASSEMBLY
- NEW WATER METER
- NEW THRUST BLOCKING
- NEW WATER VALVE
- NEW BLOW OFF ASSEMBLY
- CATCH BASIN PROTECTION

- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING CENTERLINE
- EXISTING CURB
- EXISTING EASEMENT
- EXISTING FENCE LINE
- EXISTING GRAVEL EDGE
- EXISTING POWER LINE
- EXISTING GAS LINE
- EXISTING STORM SEWER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- PROPERTY BOUNDARY
- NEW PROPERTY LINE
- NEW CURB
- NEW EDGE OF PAVEMENT
- NEW EASEMENT
- NEW FENCE LINE
- NEW SANITARY SEWER LINE
- NEW STORM SEWER LINE
- NEW WATER LINE
- NEW SIDEWALK
- NEW PAVEMENT
- PAVEMENT OVERLAY

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REGISTERED PROFESSIONAL ENGINEER — OREGON — JULY 16, 1971 — BRUCE D. GOLDSON
EXPIRES: 06/30/2009
SIGNATURE DATE: 05/20/2008

AS-BUILTS ONLY

AS-BUILT
DATE: January, 2008

100' 0' 100' 200' 300'
SCALE: 1" = 100'

Existing Conditions

Cover

DATE	NO.	REVISION
01/22/08	5	AS-BUILTS
8/14/07	4	REVISED HAMMERHEAD AND DETENTION POND
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
6/25/07	2	REVISED PER COMMENTS DATED 5/31/07
5/04/07	1	REVISED PER COMMENTS DATED 3/27/07

DRAWN BJS | DESIGNED RCS | CHECKED RCS
SCALE 1" = 40' | DATE February, 2007
PLAN 06-6116-3011 | 6116 Civil

COMPASS ENGINEERING
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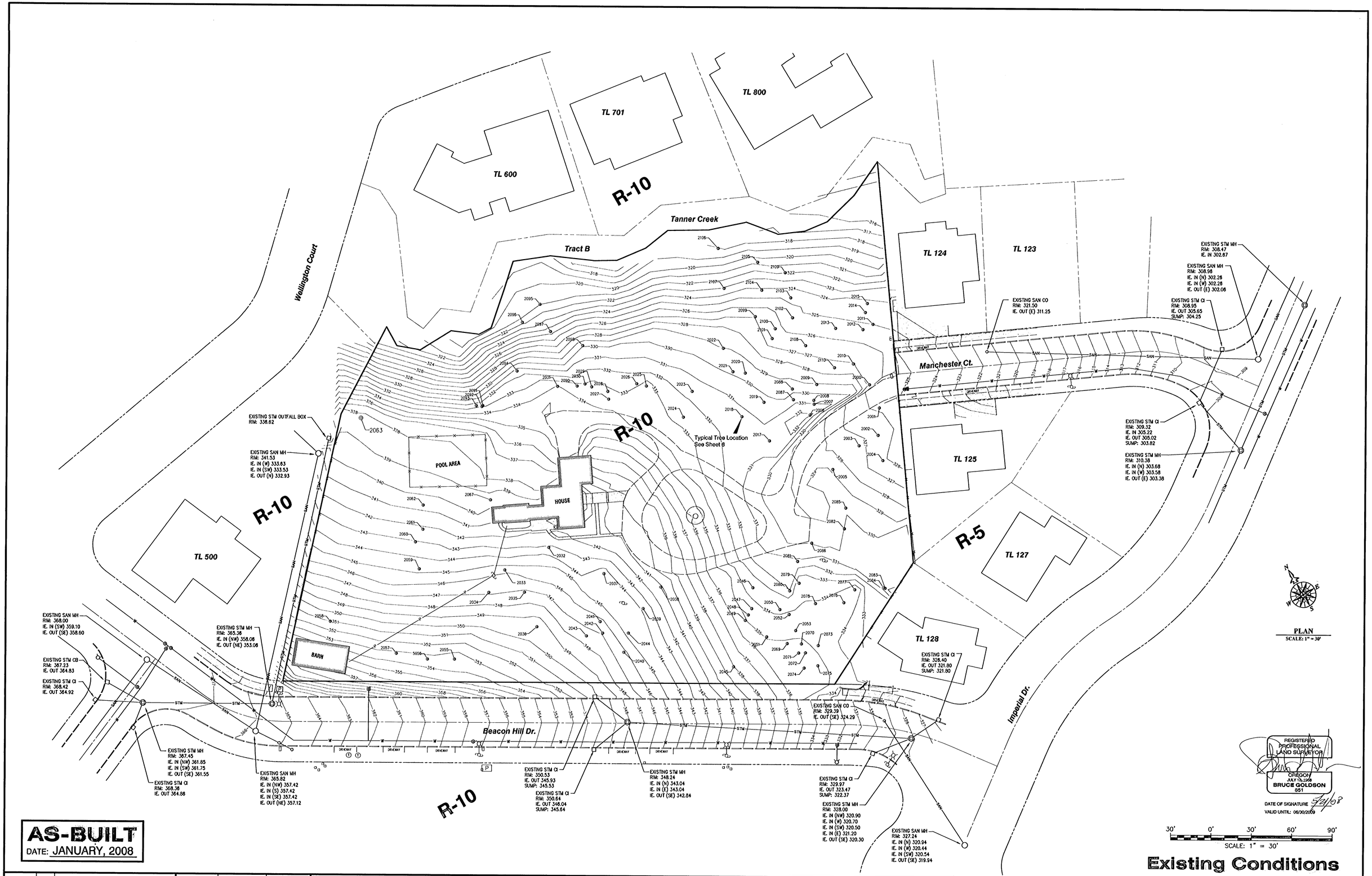
West Linn, Oregon 97068
503-742-1942

Cover
Map 2S1E36CA
West Linn, Oregon



AS-BUILT
DATE: JANUARY, 2008

Existing Conditions

DATE	NO.	REVISION
5/04/07	1	PER CITY REVIEW COMMENTS 3/27/07

DRAWN BJS | DESIGNED BDG | CHECKED BDG
SCALE 1" = 30' | DATE June, 2008
PLAN 06-6116-3011 | 6116 Civil Existing

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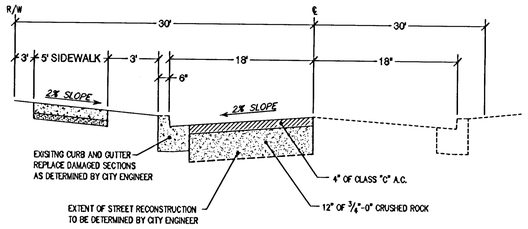
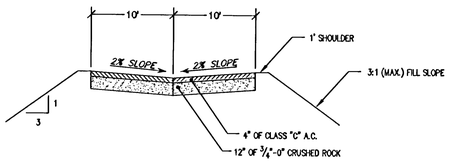
Tax Lots 400 & 300
Map 2S1E36CA
West Linn, Oregon

2/10



BEACON HILL DRIVE
TYPICAL STREET SECTION (A/3)
SCALE: NTS



FLAG LOT
TYPICAL STREET SECTION (B/3)
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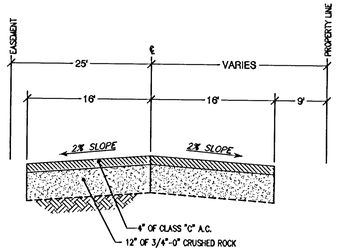
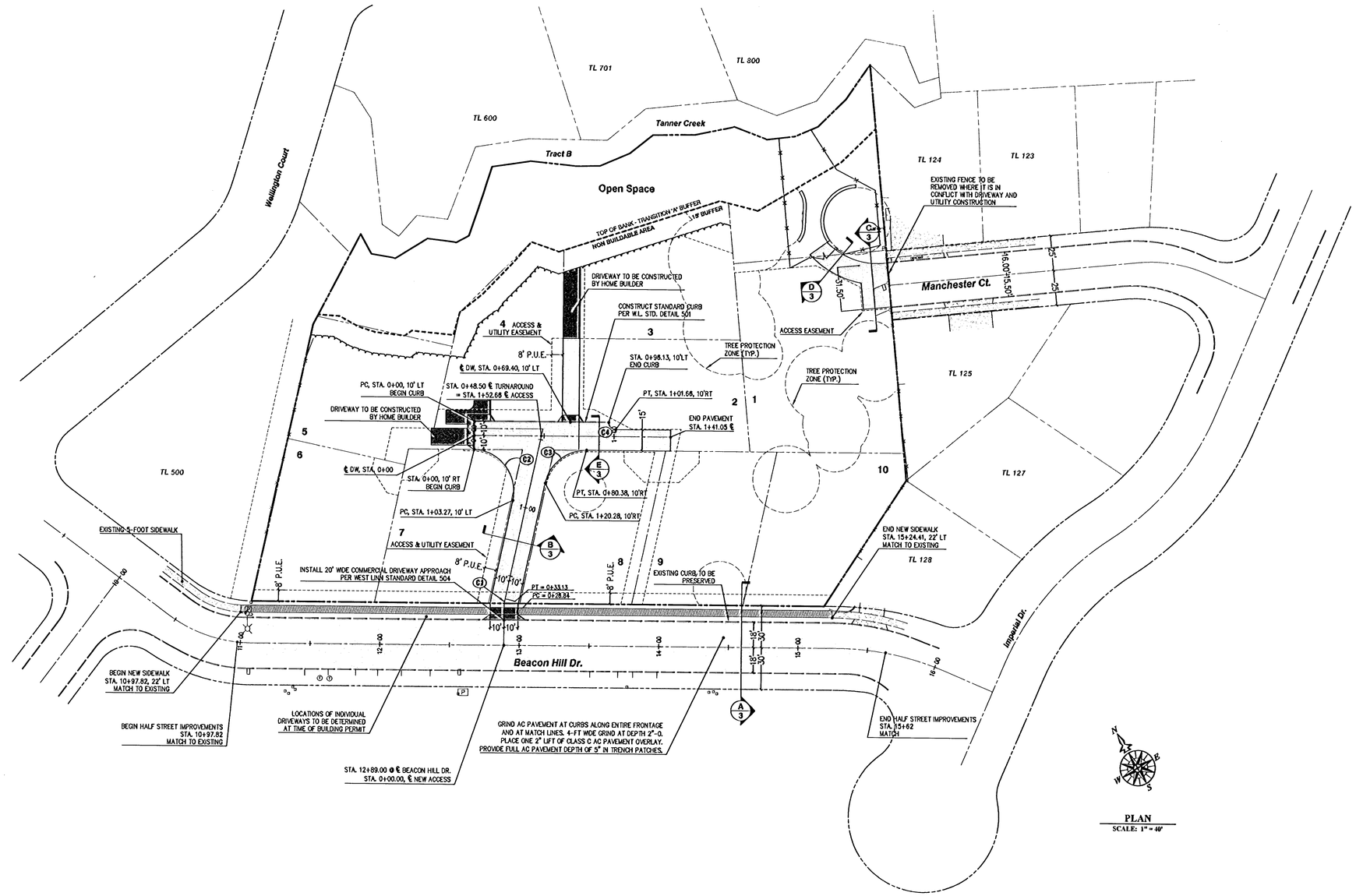
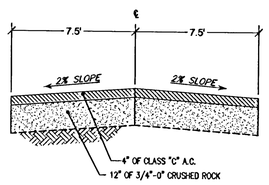


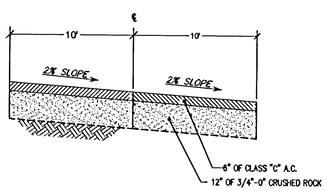
MANCHESTER COURT
TYPICAL STREET SECTION (C/3)
SCALE: NTS



PLAN
SCALE: 1" = 40'



POND ACCESS ROAD
TYPICAL STREET SECTION (D/3)
SCALE: NTS



TURNAROUND
TYPICAL STREET SECTION (E/3)
SCALE: NTS

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	30.00	6.29	3.16	6.28	S37° 23' 28"W	12° 00' 36"
C2	30.00	52.51	35.93	46.06	N06° 44' 38"W	100° 16' 48"
C3	30.00	40.84	24.29	37.76	N82° 23' 28"E	77° 59' 24"
C4	5.00	8.38	5.56	7.43	N10° 36' 10"W	96° 01' 19"

AS-BUILT
DATE: January, 2008

REGISTERED PROFESSIONAL ENGINEER 7130 OREGON July 16, 1971 BRUCE D. GOLDSON
EXPIRES: 06/30/2009
SIGNATURE DATE: 05/20/2008
AS-BUILTS ONLY

40' 0' 40' 80' 120'
SCALE: 1" = 40'

Street Plan

DATE	NO.	REVISION
5/19/08	5	REVISED AS-BUILTS PER COMMENTS DATED 5/19/08
1/22/08	4	AS-BUILTS
8/14/07	4	REVISED HAMMERHEAD AND DETENTION POND
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
6/25/07	2	REVISED PER COMMENTS DATED 5/31/07
5/04/07	1	REVISED PER COMMENTS DATED 3/27/07

DRAWN BJS | DESIGNED RCS | CHECKED RCS
SCALE 1" = 40' | DATE February, 2007
PLAN 08-6116-3011 | 6116 Civil

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(503) 653-9095 FAX

Parker Development
1750 SW Blankenship Road
West Linn, Oregon 97068
503-742-1942

Street Plan
Map 2S1E36CA
West Linn, Oregon

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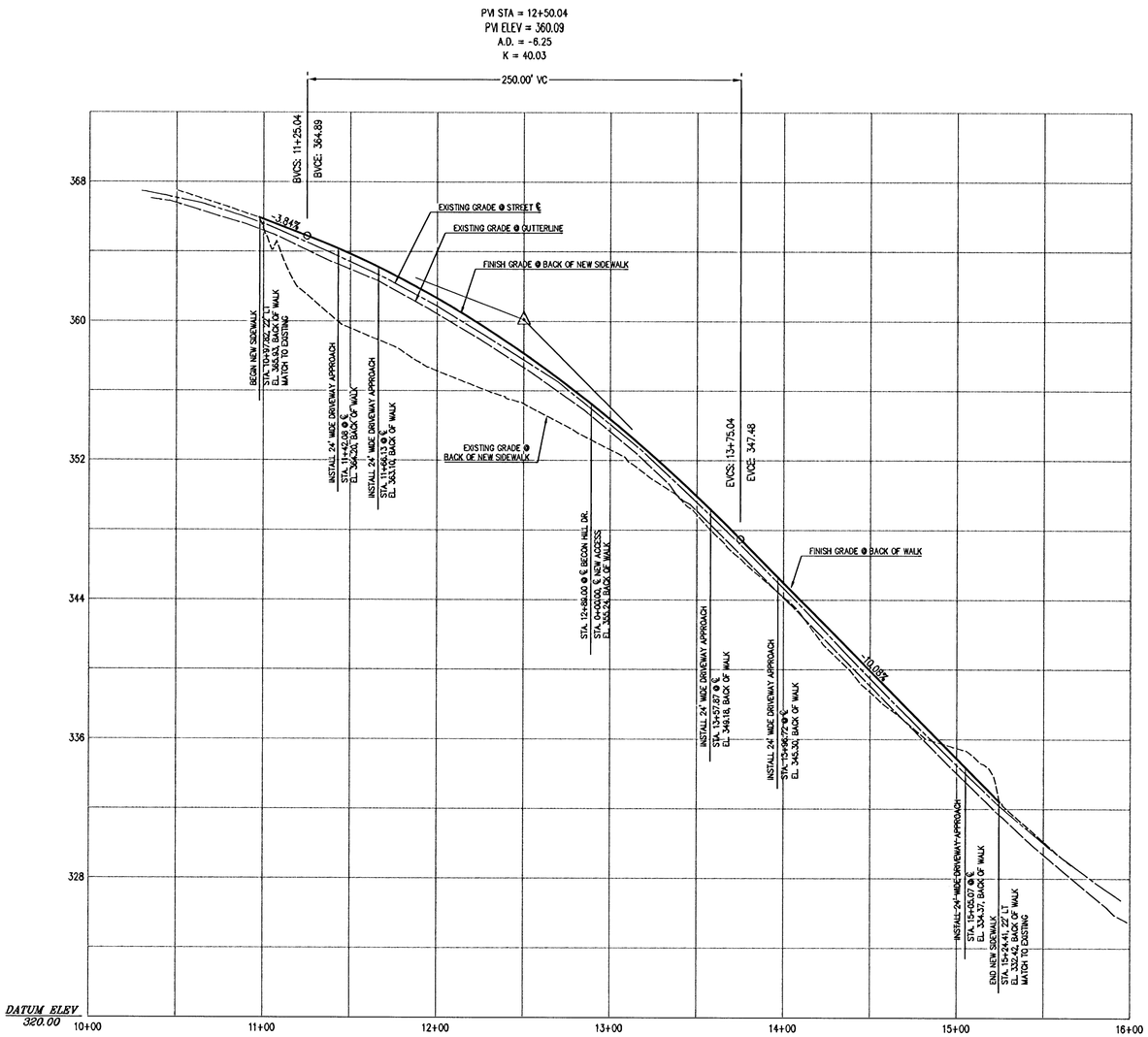
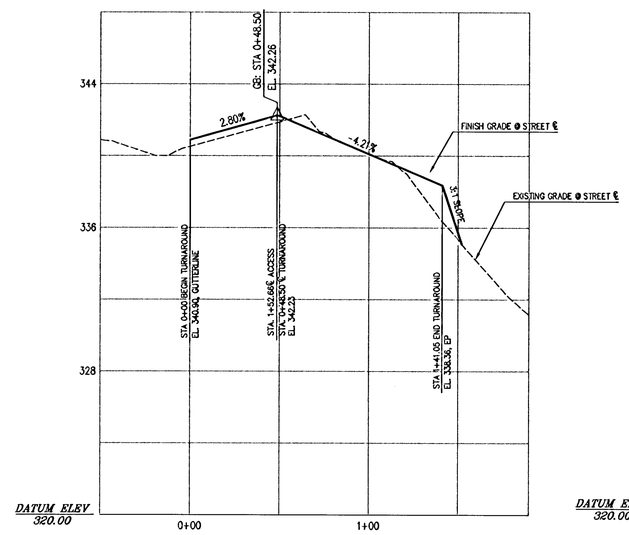


BEACON HILL DRIVE
CENTERLINE PROFILE

1/4

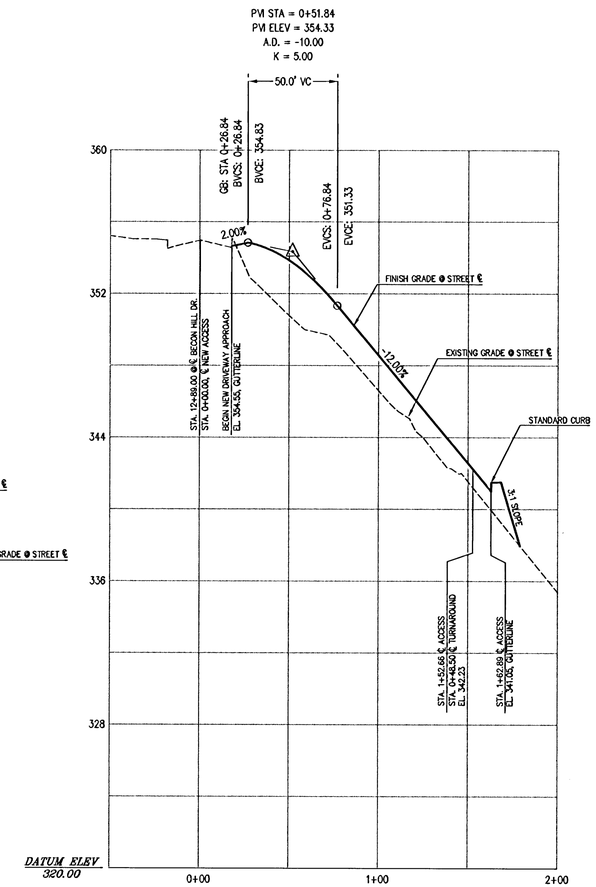
SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL



TURNAROUND
CENTERLINE PROFILE

3/4

SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL



ACCESS ROAD
CENTERLINE PROFILE

2/4

SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL

REGISTERED PROFESSIONAL ENGINEER
7120
OREGON
July 18, 1971
BRUCE D. GOLDSON

EXPIRES: 06/30/2009
SIGNATURE DATE: 05/20/2008

AS-BUILTS ONLY

40' 0' 40' 80' 120'
SCALE: 1" = 40'

AS-BUILT
DATE: January, 2008

Street Profiles

DATE	NO.	REVISION
01/22/08	4	AS-BUILTS
8/14/07	4	REVISED HAMMERHEAD AND DETENTION POND
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
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5/04/07	1	PER CITY REVIEW COMMENTS 3/27/07

DRAWN BJS | DESIGNED RCS | CHECKED RCS
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PLAN 08-6116-3011 | 6116 Civil

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503-742-1942

Tax Lots 400 & 300
Map 2S1E36CA
West Linn, Oregon

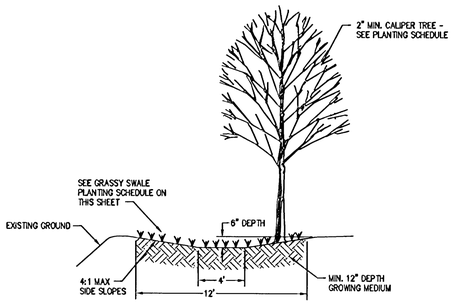
P:\8108\01159\ACAD\Civil\Dwg\6116 Civil.dwg, Street Profiles, 5/22/2008 8:23:01 AM, smacisaac

SWALE CONSTRUCTION NOTES:

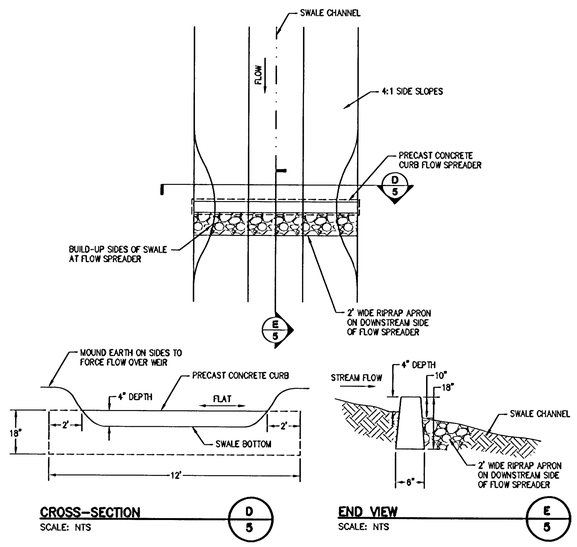
1. UNWANTED VEGETATION IN THE FACILITY AREA SHALL BE REMOVED DURING SITE PREPARATION WITH EQUIPMENT APPROPRIATE FOR THE TYPE OF MATERIAL ENCOUNTERED AND SITE CONDITIONS. IT IS RECOMMENDED THAT THE MAXIMUM AMOUNT OF PRE-EXISTING NATIVE VEGETATION BE RETAINED AND PROTECTED.
2. NO MATERIAL STORAGE OR HEAVY EQUIPMENT IS ALLOWED WITHIN THE STORMWATER FACILITY AREA AFTER SITE CLEARING AND GRADING HAS BEEN COMPLETED, EXCEPT TO EXCAVATE AND GRADE AS NEEDED TO BUILD THE FACILITY. NO EQUIPMENT ALLOWED IN TREE PROTECTION ZONES.
3. AFTER THE FACILITY AREA IS CLEARED AND GRADED, ALL DISTURBED SUBSOIL SHALL BE TILLED BEFORE CAPPING WITH 18 INCHES OF TOPSOIL. IF EXISTING AREAS SURROUNDING THE STORMWATER FACILITY ARE DISTURBED BY CONSTRUCTION, THE TOP 18 INCHES OF SOIL SHALL BE TILLED. NO TILLING SHALL OCCUR WITHIN THE DRIP LINE OF EXISTING TREES. AFTER TILLING IS COMPLETED, NO OTHER CONSTRUCTION TRAFFIC SHALL BE ALLOWED IN THE AREA, EXCEPT FOR PLANTING AND RELATED WORK.
4. APPROVED MULCHING MATERIALS AND PRACTICES INCLUDE ORGANIC MATERIALS SUCH AS COMPOST, BARK MULCH, LEAVES, SAWDUST, STRAW OR WOOD SHAVINGS, AS WELL AS SMALL RIVER GRAVEL, PUMICE, OR OTHER INERT MATERIALS, APPLIED IN A 1-FOOT RADIUS (MEASURED FROM THE CENTER OF THE PLANT) AROUND SPECIFIC TREES OR SHRUBS. FOR GROUND COVER PLANTINGS, THE MULCH SHALL BE APPLIED TO COVER ALL SOIL BETWEEN PLANTS. CARE SHOULD BE EXERCISED TO USE THE APPROPRIATE AMOUNT OF MULCH. OVER-USE CAN CAUSE EXCESSIVE NUTRIENTS TO LEACH INTO THE FACILITY. MULCH SHALL BE WEED-FREE. MANURE MULCHING AND HIGH-FERTILIZER HYDROSEEDING ARE PROHIBITED IN A FACILITY AREA DURING AND AFTER CONSTRUCTION.

NOTE:

CONDITION OF APPROVAL NUMBER 4 STATES THAT THE APPLICANT SHALL REMOVE ALL NON-NATIVE AND INVASIVE SPECIES FROM THE OPEN AREA DRAINAGE WAY AND SPRAYED TO PREVENT FUTURE GROWTH. THE AREA SHALL BE REPLANTED WITH NATIVE SPECIES PER CDC 32.050(9).



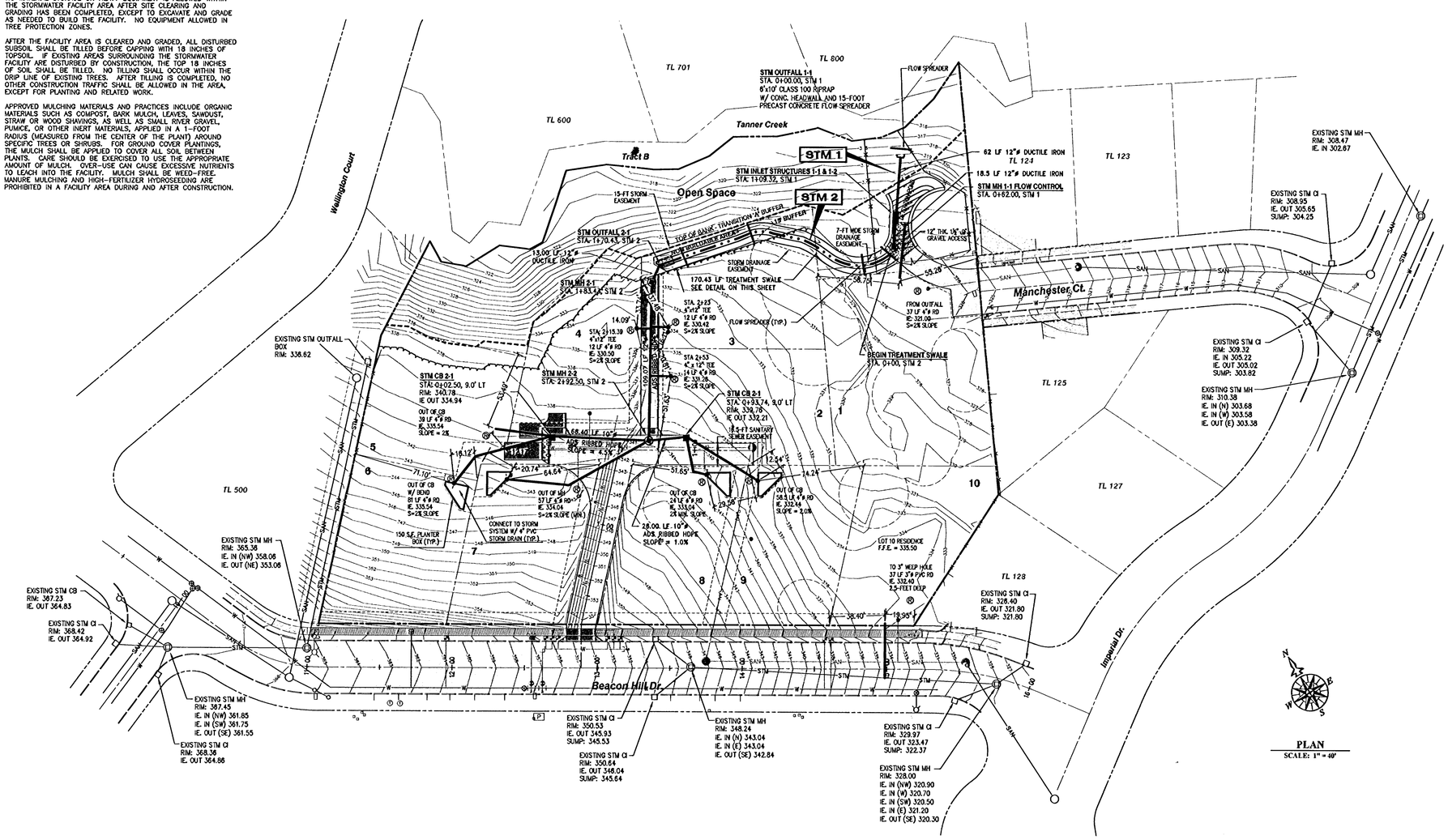
TREATMENT SWALE CROSS SECTION (C/5)
SCALE: NTS



CROSS-SECTION (D/5)
SCALE: NTS

END VIEW (E/5)
SCALE: NTS

FLOW SPREADER DETAILS
SCALE: NTS



PLAN
SCALE: 1" = 40'

REGISTERED PROFESSIONAL ENGINEER — OREGON — JULY 16, 1971 — BRUCE D. GOLDSON

EXPIRES: 06/30/2009
SIGNATURE DATE: 05/20/2008

AS-BUILTS ONLY

40' 0' 40' 80' 120'
SCALE: 1" = 40'

Storm Drainage Plan

AS-BUILT
DATE: January, 2008

DATE	NO.	REVISION
5/19/08	6	REVISED AS-BUILTS PER COMMENTS DATED 5/19/08
1/22/08	5	AS-BUILTS
8/28/07	4	REVISED HAMMERHEAD AND DETENTION POND
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
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5/04/07	1	PER CITY REVIEW COMMENTS 3/27/07

DRAWN BJS | DESIGNED RCS | CHECKED RCS
SCALE 1" = 40' | DATE February, 2007
PLAN 08-6116-3011 | 6116 Civil

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Tax Lots 400 & 300
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West Linn, Oregon

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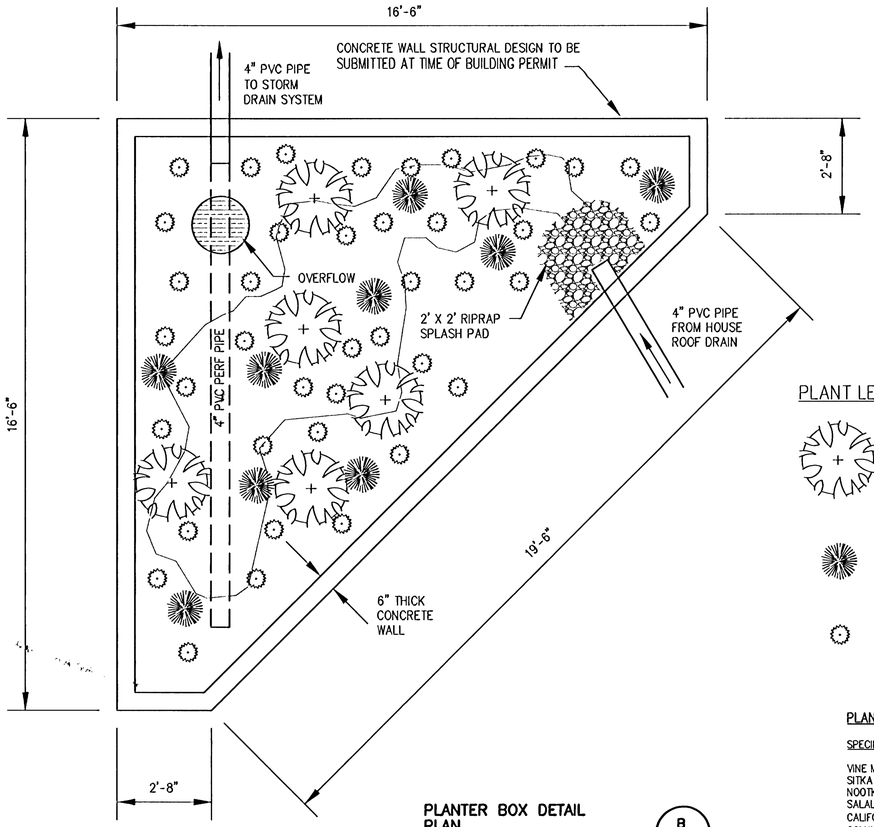


PLANTER BOX AREA = 150 SQUARE FEET
MINIMUM STORAGE = 150 CUBIC FEET
MINIMUM PERCOLATION RATE = 2 INCHES PER HOUR

PLANT LEGEND

TREE / LARGE SHRUB (3 GALLON)

SMALL SHRUB (1 GALLON)

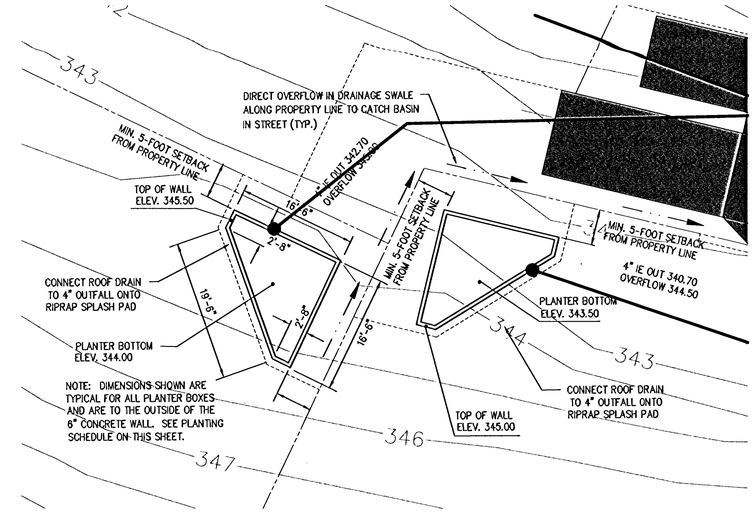
GROUNDCOVER / GRASS-LIKE PLANT (12" O.C.)

PLANTER BOX DETAIL
PLAN
SCALE: 1/2" = 1'
B / 5B

PLANTER BOX PLANTING SCHEDULE

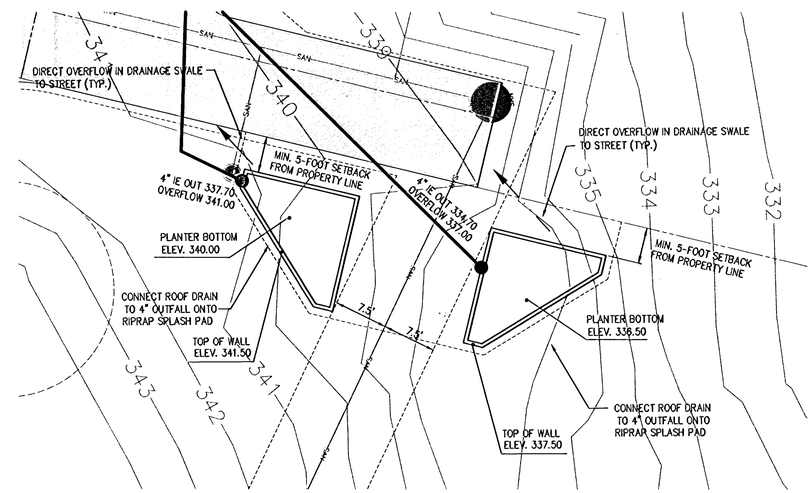
SPECIES	POT SIZE	NUMBER*	DIA. / SPACING
VINE MAPLE - Acer circinatum	3 GALLON	3	AS SHOWN
SITKA WILLOW - Salix sitchensis	3 GALLON	3	AS SHOWN
NOOTKA ROSE - Rosa nutkana	1 GALLON	4	AS SHOWN
SALAL - Gaultheria shallon	1 GALLON	5	AS SHOWN
CALIFORNIA BROME GRASS	4 INCH	55	12" O.C.
COLUMBIA BROME GRASS	4 INCH	55	12" O.C.

*NOTE: NUMBER SHOWN FOR EACH INDIVIDUAL PLANTER BOX

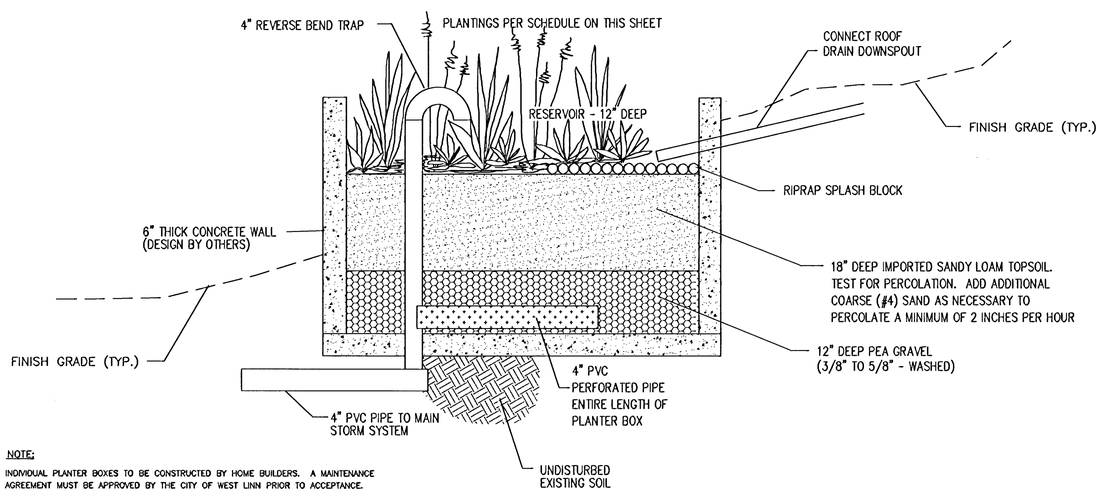


LOTS 6 AND 7
PLANTER BOX DETAIL
SCALE: 1" = 10'
A / 5B

PLAN
SCALE: 1" = 10'



LOTS 8 AND 9
PLANTER BOX DETAIL
SCALE: 1" = 10'
B / 5B



NOTE:

INDIVIDUAL PLANTER BOXES TO BE CONSTRUCTED BY HOME BUILDERS. A MAINTENANCE AGREEMENT MUST BE APPROVED BY THE CITY OF WEST LINN PRIOR TO ACCEPTANCE.

PLANTER BOX DETAIL
SECTION
SCALE: NTS
D / 5B

REGISTERED PROFESSIONAL ENGINEER 7120 OREGON July 18, 1971 BRUCE D. GOLDSON

EXPIRES: 06/30/2009
SIGNATURE DATE: 05/20/2008

AS-BUILTS ONLY

AS-BUILT
DATE: January, 2008

40' 0' 40' 80' 120'
SCALE: 1" = 40'

Rain Garden Plan and Details

DATE	NO.	REVISION
01/22/08	4	AS-BUILTS
9/18/07	4	ADDED PLANTER BOX DETAIL SHEET
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
6/25/07	2	REVISED PER COMMENTS DATED 5/31/07
5/04/07	1	PER CITY REVIEW COMMENTS 3/27/07

DRAWN BJS | DESIGNED RCS | CHECKED RCS
SCALE 1" = 10' | DATE February, 2007
PLAN 08-6118-3011 | 6118 Civil

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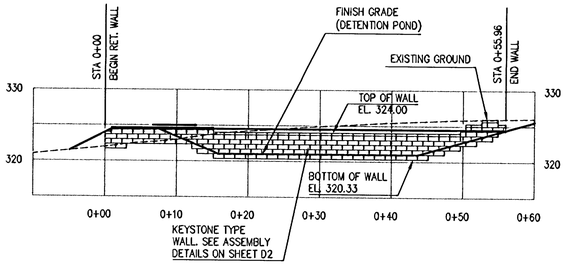
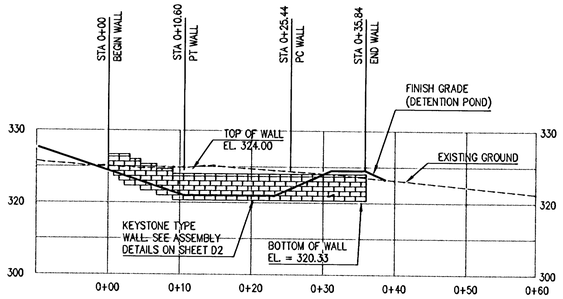
503-742-1942

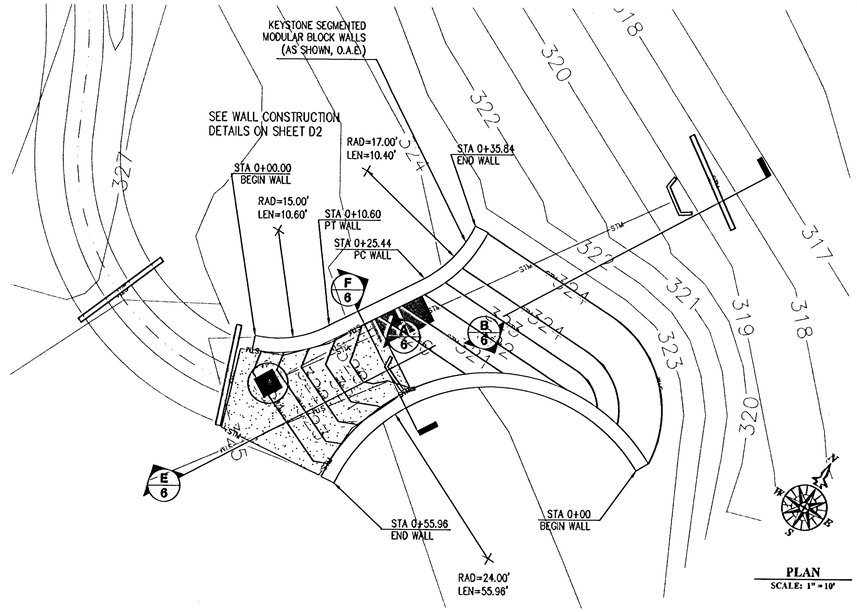
Tax Lots 400 & 300
Map 2S1E36CA
West Linn, Oregon



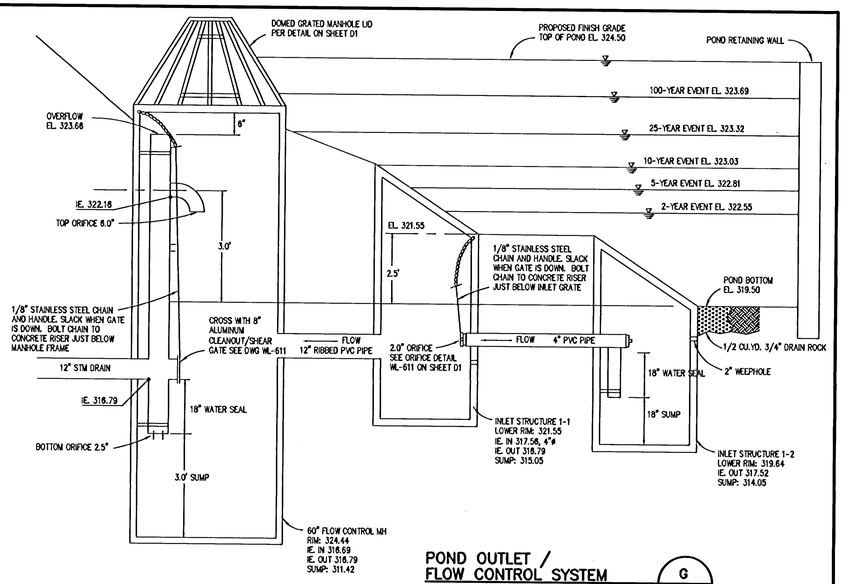
DETENTION POND EAST RETAINING WALL (B/6)
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL



DETENTION POND WEST RETAINING WALL (A/6)
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

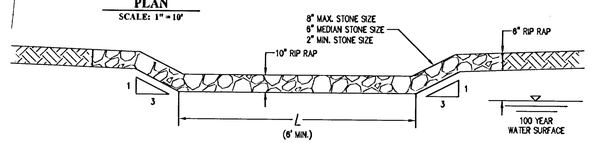


DETENTION POND – PLAN (C/6)
SCALE: 1" = 10'

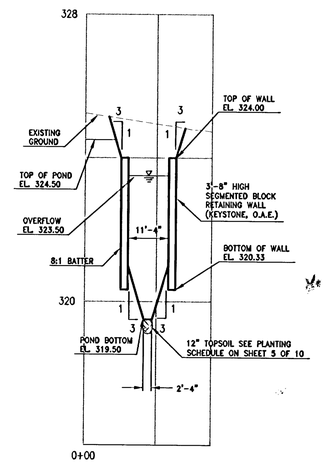


POND OUTLET / FLOW CONTROL SYSTEM (G/6)
SCALE: N.T.S.

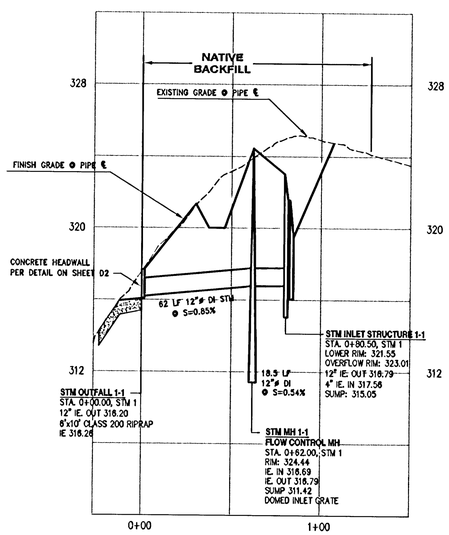
PLAN
SCALE: 1" = 10'



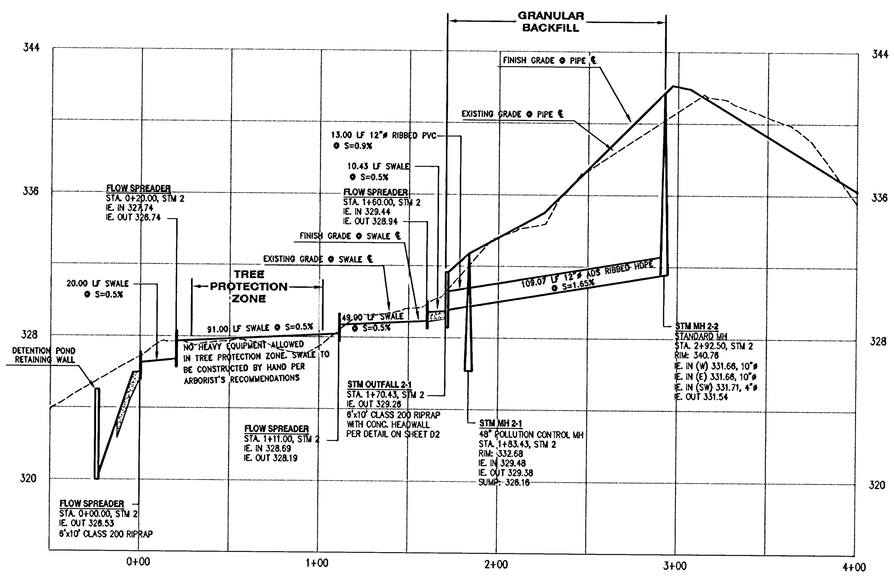
RIPRAP OVERFLOW WEIR (D/6)
SCALE: N.T.S.



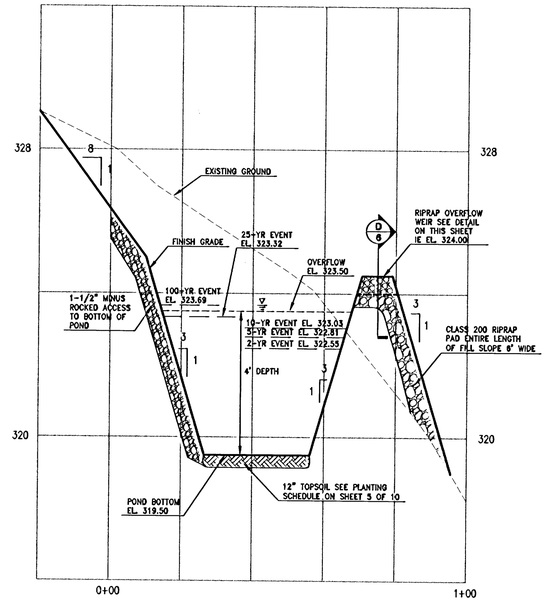
DETENTION POND TRANSVERSE SECTION (F/6)
SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL



STM 1 STORM DRAINAGE PROFILE (1/6)
SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL



STM 2 STORM DRAINAGE PROFILE (2/6)
SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL



DETENTION POND LONGITUDINAL SECTION (E/6)
SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

REGISTERED PROFESSIONAL ENGINEER 7128 OREGON July 16, 1971 BRUCE D. GOLDSON

EXPIRES: 06/30/2009
SIGNATURE DATE: 05/20/2008

AS-BUILTS ONLY

40' 0' 40' 80' 120'
SCALE: 1" = 40'

AS-BUILT
DATE: January, 2008

DATE	NO.	REVISION
5/19/08	6	REVISED AS-BUILTS PER COMMENTS DATED 5/19/08
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DRAWN BJS	DESIGNED RCS	CHECKED RCS
SCALE 1" = 40'	DATE February, 2007	
PLAN 06-6116-3011	6116 Civil	

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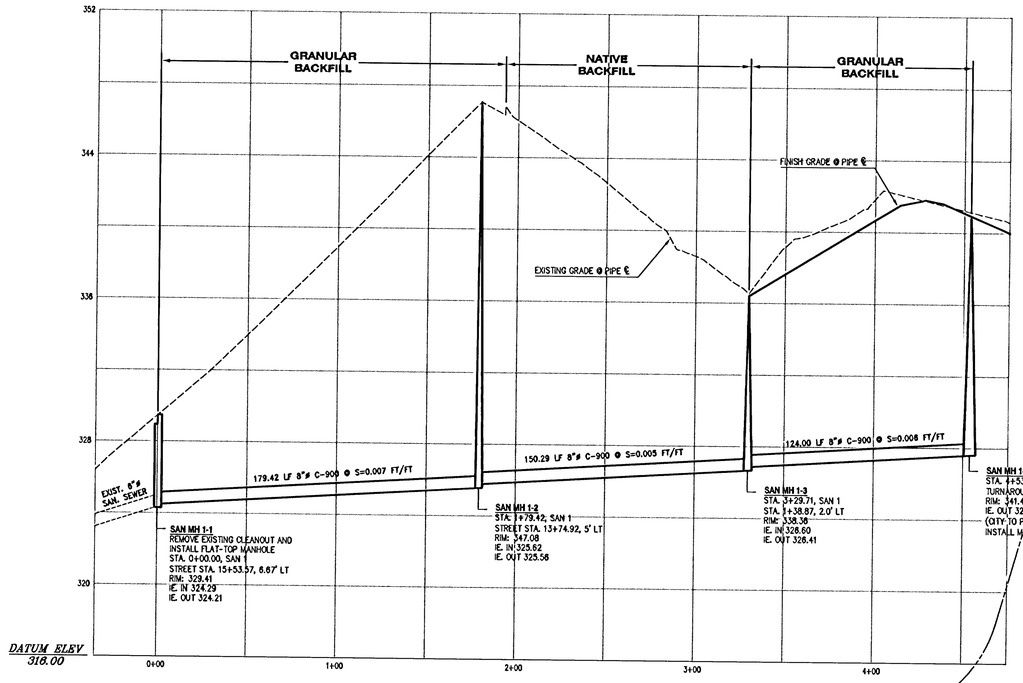
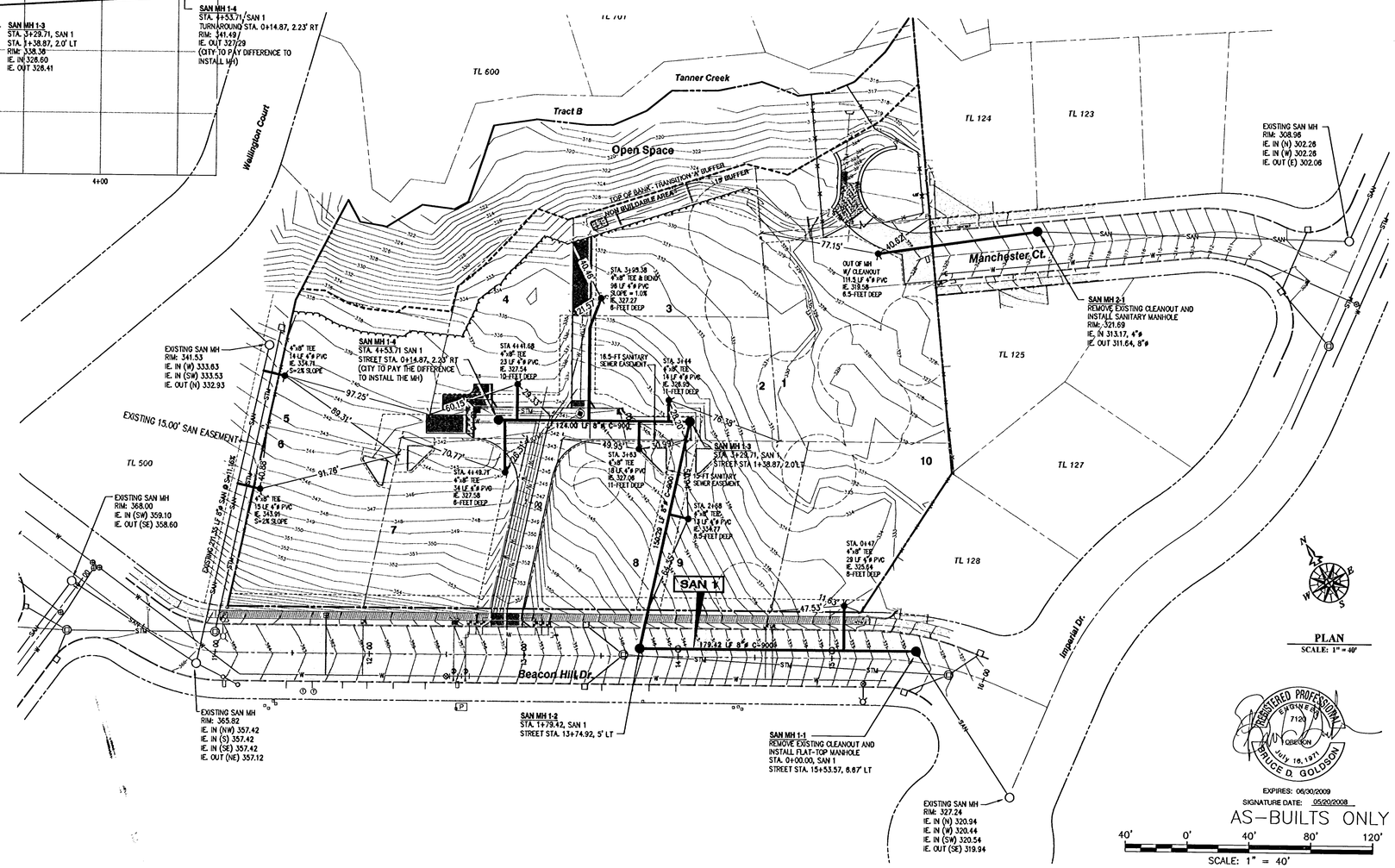
West Linn, Oregon

Storm Drainage Profiles and Pond Details

6/10



SAN 1
SANITARY SEWER PROFILE (1/4)
SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL



AS-BUILT
DATE: January, 2008

Sanitary Plan and Profiles

DATE	NO.	REVISION
01/22/08	4	AS-BUILTS
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
6/25/07	2	REVISED PER COMMENTS DATED 5/31/07
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DRAWN BJS | DESIGNED RCS | CHECKED RCS
SCALE 1" = 40' | DATE February, 2007
PLAN 06-6116-3011 | 6116 Civil

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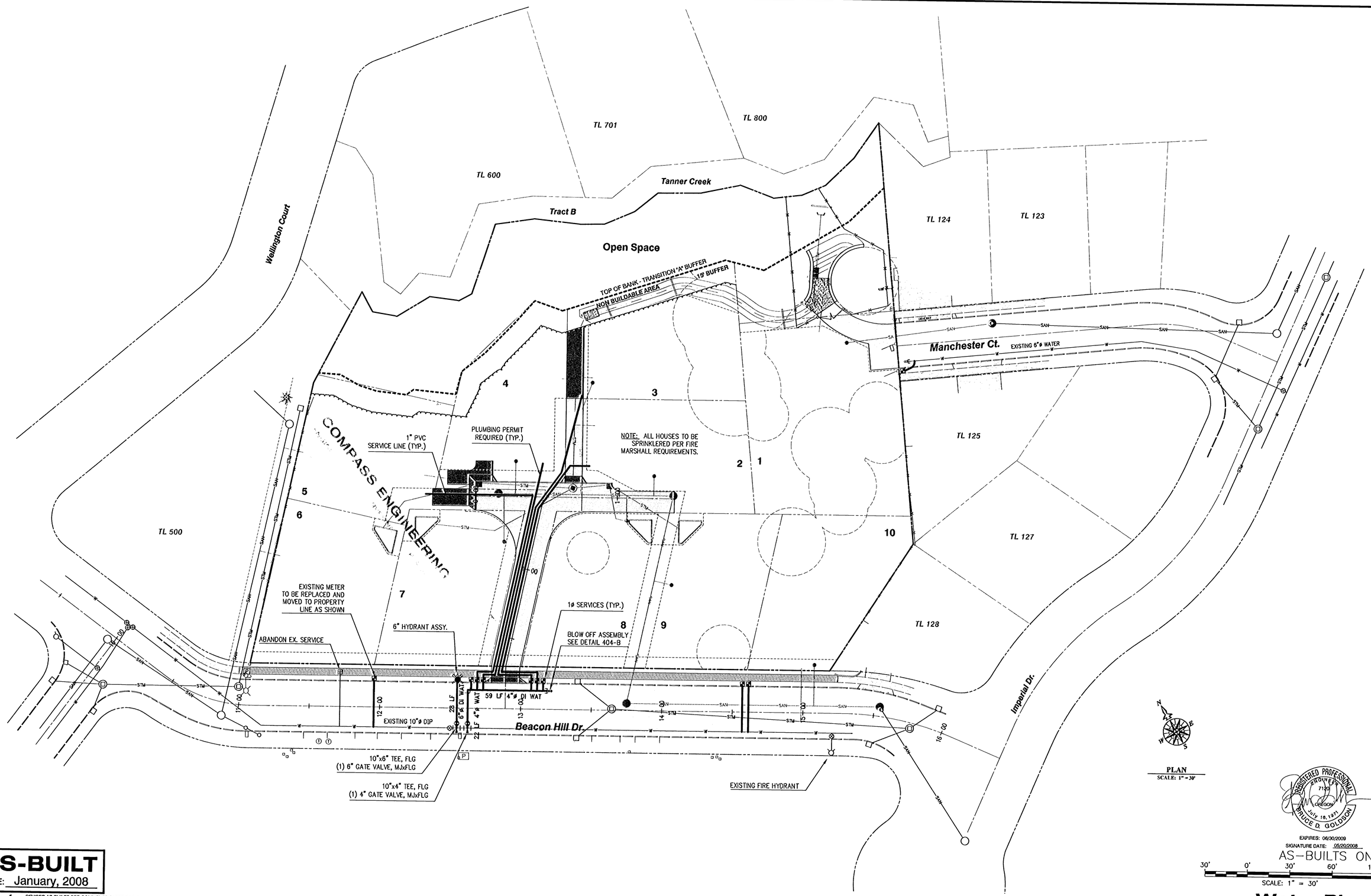

AS-BUILT
DATE: January, 2008

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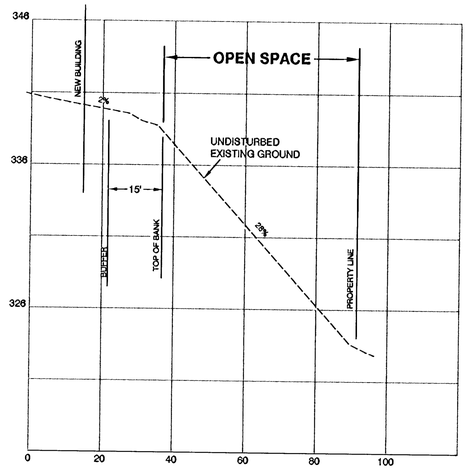
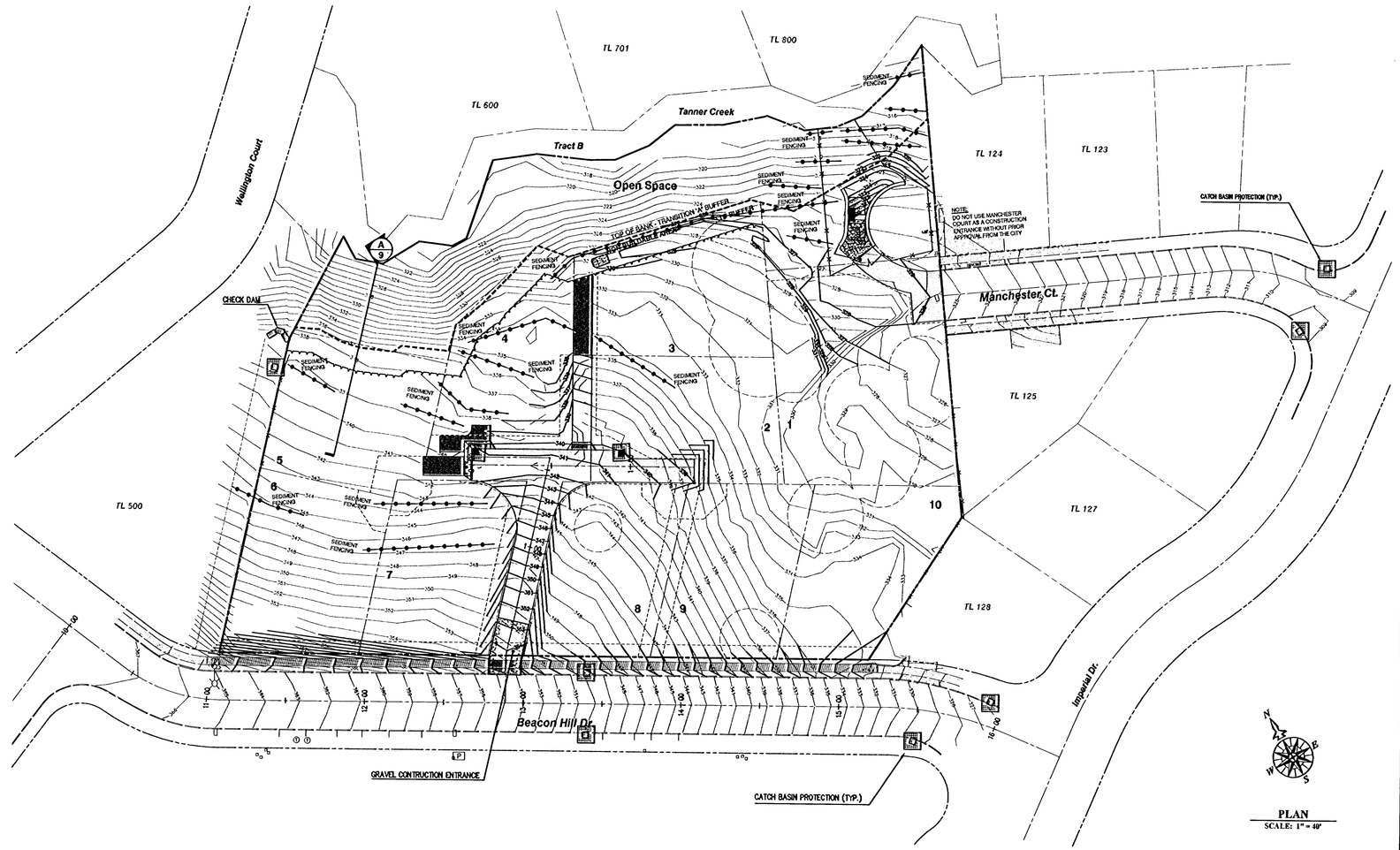
West Linn, Oregon

Water Plan

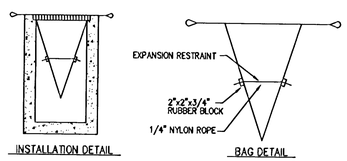
8 / 10



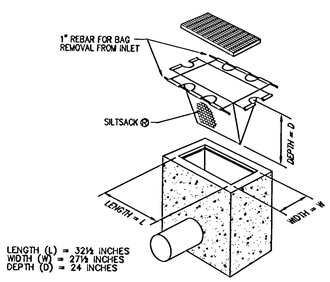
SECTION A/9
SCALE: 1" = 20' HORIZONTAL
1" = 5' VERTICAL



PLAN
SCALE: 1" = 40'

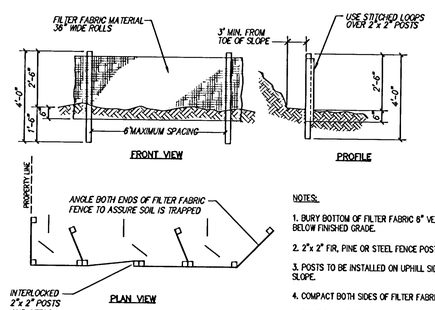


INSTALLATION DETAIL
BAG DETAIL



LENGTH (L) = 32½ INCHES
WIDTH (W) = 27½ INCHES
DEPTH (D) = 24 INCHES

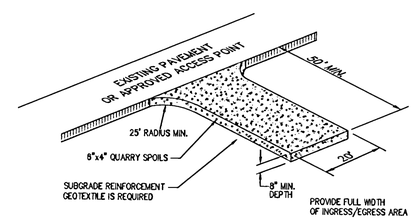
FILTER BAG INLET ENTRANCE
SCALE: NTS
FILTER90



NOTES:

1. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
2. 2"x 2" FIR, PINE OR STEEL FENCE POSTS.
3. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.
4. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.
5. PANELS MUST BE PLACED ACCORDING TO SPACING TABLE 4-7.

SEDIMENT FENCE
SCALE: NTS



GRAVEL CONSTRUCTION ENTRANCE
SCALE: NTS

REGISTERED PROFESSIONAL ENGINEER 7120 OREGON July 16, 1971 BRUCE D. GOLDSON
EXPIRES: 06/30/2009
SIGNATURE DATE: 05/20/2008
AS-BUILTS ONLY
40' 0' 40' 80' 120'
SCALE: 1" = 40'

AS-BUILT
DATE: January, 2008

DATE	NO.	REVISION
01/22/08	4	AS-BUILTS
8/14/07	4	REVISED HAMMERHEAD AND DETENTION POND
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
6/25/07	2	REVISED PER COMMENTS DATED 5/31/07
5/04/07	1	PER CITY REVIEW COMMENTS 3/27/07

DRAWN BJS | DESIGNED RCS | CHECKED RCS
SCALE 1" = 40' | DATE February, 2007
PLAN 06-6116-3011 | 6116 Civil

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Parker Development
1750 SW Blankenship Road
West Linn, Oregon 97068
503-742-1942

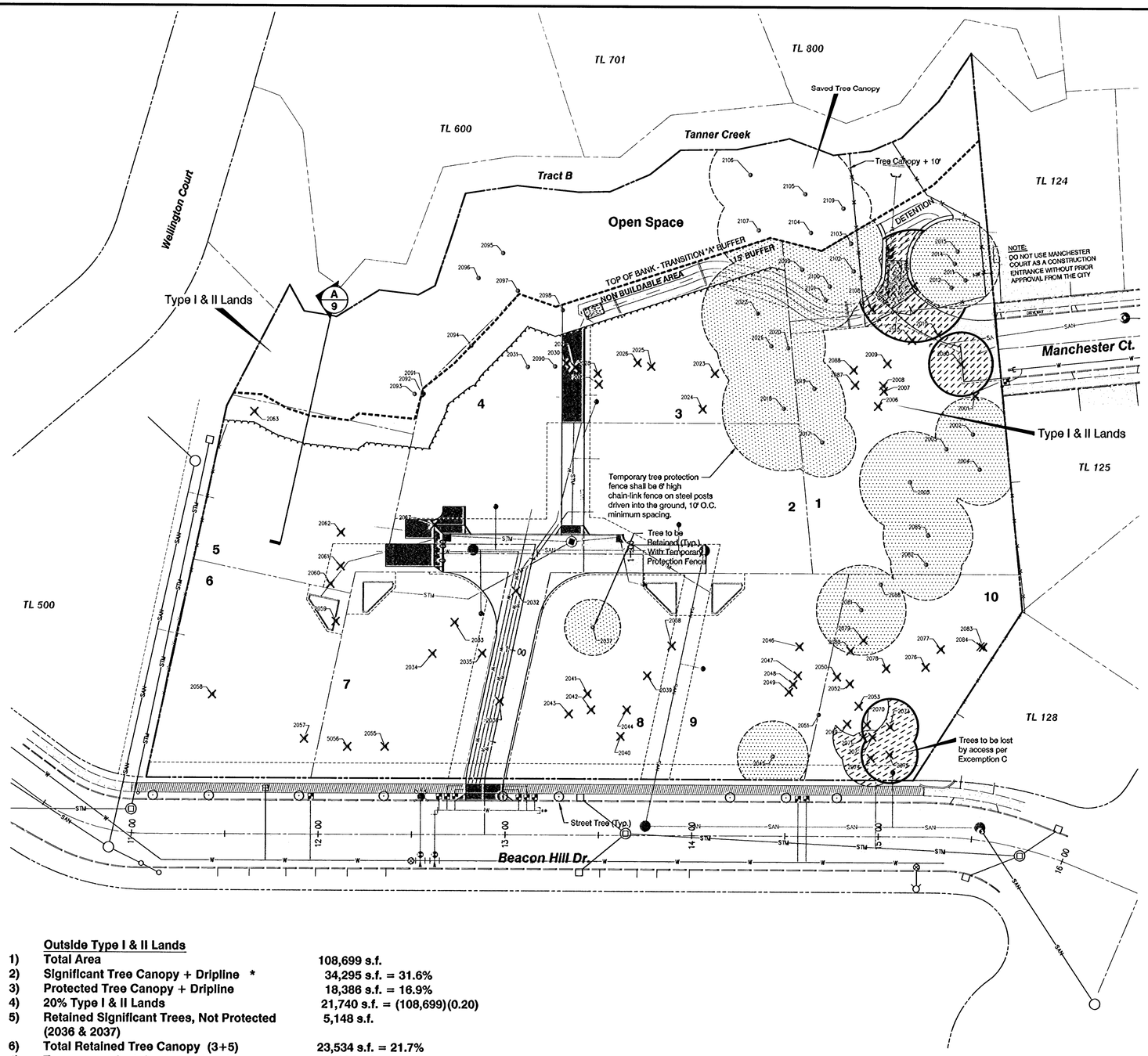
Tax Lots 400 & 300
Map 2S1E36CA
West Linn, Oregon

9/10

Grading and Erosion Control Plan

TREE TABLE

Tree Number	Tree Description	Significant	Condition	Save	Remove
2000	11" Garry Oak	S	F		X
2001	15.5" AND 8" OAK	S	F		X
2002	31.5" FIR	S	F	X	
2003	PACIFIC YEW		N/A	X	
2004	19" OAK	S	F	X	
2005	31" FIR	S	F	X	
2006	13" MAPLE		F		X
2007	8.5" OAK	S	F		X
2008	12.2" x 7.5" x 8.5" x 7" OAK	S	F		X
2009	27" OAK	S	F		X
2010	14" MAPLE		F		X
2011	10.5" MAPLE		F	X	
2012	12" OAK	S	F	X	
2013	38.5" FIR	S	F		X
2014	27.5" FIR	S	F	X	
2015	11" MAPLE		F	X	
2017	36" MAPLE @ BASE, MULTI STEM		F	X	
2018	46" REDWOOD	S	F	X	
2019	13.5" MAPLE	S	F	X	
2020	16" OAK	S	F	X	
2021	19" OAK	S	F	X	
2022	20" OAK	S	F	X	
2023	13" DECIDUOUS		N/A		X
2024	12" DECIDUOUS		N/A		X
2025	35" MAPLE @ BASE, 3 STEM		F		X
2026	11" MAPLE		F		X
2027	10" AND 12" MADRONE		N/A		X
2028	17" AND 27.5" MAPLE		F		X
2029	15.5" MAPLE		F		X
2030	15.5" AND 20.5" MAPLE		P		X
2031	12" MAPLE		P		X
2032	11.5" MAPLE		F	X	
2033	11" HAWTHORNE		N/A		X
2034	20" MAPLE		F		X
2035	26" MAPLE @ BASE, 4 STEM		F		X
2036	37" FIR	S	F	X	
2037	30" MAPLE	S	F	X	
2038	34" MAPLE @ BASE, 3 STEM		F		X
2039	30" MAPLE @ BASE, 4 STEM		F		X
2040	30" DECIDUOUS		N/A		X
2041	30" DECIDUOUS CLUSTER		N/A		X
2042	11" AND 14" DECIDIOUS		N/A		X
2043	8" DECIDUOUS	S	N/A		X
2044	2" AND 9" DECIDIOUS	S	N/A		X
2045	18" MAPLE	S	F	X	
2046	20.5" MAPLE @ BASE, 3 STEM	S	P		X
2047	3 STEM MAPLE	S	F		X
2048	18.5" MAPLE	S	F		X
2049	16.5" MAPLE	S	F		X
2050	11" AND 18" MAPLE	S	P		X
2051	18" MAPLE	S	F	X	
2052	11.5" MAPLE	S	F		X
2053	11.5" MAPLE	S	F		X
2055	9" PINE		N/A		X
2056	12" APPLE, 2		N/A		X
2057	8" PINE		N/A		X
2058	8" PINE		N/A		X
2059	HAWTHORN CLUSTER		N/A		X
2060	HAWTHORN CLUSTER		N/A		X
2061	HAWTHORN CLUSTER		N/A		X
2062	HAWTHORN CLUSTER		N/A		X
2063	3" DECIDUOUS		N/A		X
2067	PACIFIC MADRONE		N/A		X
2069	11.5" MAPLE	S	F		X
2070	14" MAPLE	S	F		X
2071	11" MAPLE	S	F		X
2072	6" AND 9" MAPLE	S	P		X
2073	10" AND 6.5" MAPLE	S	P		X
2074	10" MAPLE	S	F		X
2075	9" TO 14" MAPLE, 4 STEMS	S	F		X
2076	23.5" FIR	S	F		X
2077	22" FIR	S	F		X
2078	12.5" MAPLE	S	F		X
2079	20" MAPLE	S	F		X
2080	12.5" MAPLE	S	F		X
2081	27.5" FIR	S	F	X	
2082	17.5" MAPLE	S	P	X	
2083	17" FIR	S	F		X
2084	9" RED ALDER		N/A		X
2085	27" FIR	S	F	X	
2086	16" BLACK LOCUST		N/A	X	
2087	10" MAPLE		F		X
2088	9" MAPLE		F		X
2090	8" HAWTHORNE		N/A	X	
2091	10" WILLOW		N/A	X	
2092	15" WILLOW		N/A	X	
2093	20" WILLOW		F	X	
2094	12" WILLOW CLUSTER, 7 STEMS		N/A	X	
2095	18" WILLOW		F	X	
2096	10" WILLOW		N/A	X	
2097	12" WILLOW		N/A	X	
2098	10" WILLOW		N/A	X	
2099	13" OAK	S	F	X	
2100	16" OAK	S	F	X	
2101	12" OAK	S	F	X	
2102	10" OAK	S	F	X	
2103	12.5" OAK	S	F	X	
2104	22.5" OAK	S	F	X	
2105	33.5" FIR	S	F	X	
2106	24" WILLOW	S	F	X	
2107	23" OAK	S	F	X	
2108	8" OAK, 4 STEMS	S	F		X
2109	9" OAK	S	F	X	
2110	7.5" AND 11" OAK, 2 STEM	S	F		X



Outside Type I & II Lands

1)	Total Area	108,699 s.f.
2)	Significant Tree Canopy + Dripline *	34,295 s.f. = 31.6%
3)	Protected Tree Canopy + Dripline	18,386 s.f. = 16.9%
4)	20% Type I & II Lands	21,740 s.f. = (108,699)(0.20)
5)	Retained Significant Trees, Not Protected (2036 & 2037)	5,148 s.f.
6)	Total Retained Tree Canopy (3+5)	23,534 s.f. = 21.7%
7)	Tree canopy lost due to road and access	3,635 s.f.
8)	100% of Tree Canopy Area within Type I & II Lands is protected	

* Significant trees in Non-Type I & II Lands and not in the transition buffer

* 55.100.B.2f Removal due to grading that threatens the health of trees.

PLAN
SCALE: 1" = 40'

30' 0' 30' 60' 90'
SCALE: 1" = 30'

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 18, 1971
BRUCE D. GOLDSON
EXPIRES: 06/30/2009
SIGNATURE DATE: 05/20/2008

AS-BUILTS ONLY

Tree Protection Plan

AS-BUILT
DATE: January, 2008

DATE	NO.	REVISION
01/22/08	4	AS-BUILTS
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
6/25/07	2	REVISED PER COMMENTS DATED 5/31/07
5/04/07	1	PER CITY REVIEW COMMENTS 3/27/07

DRAWN BJS | DESIGNED RCS | CHECKED RCS
SCALE 1" = 40' | DATE February, 2007
PLAN 08-6118-3011 | 6118 Civil

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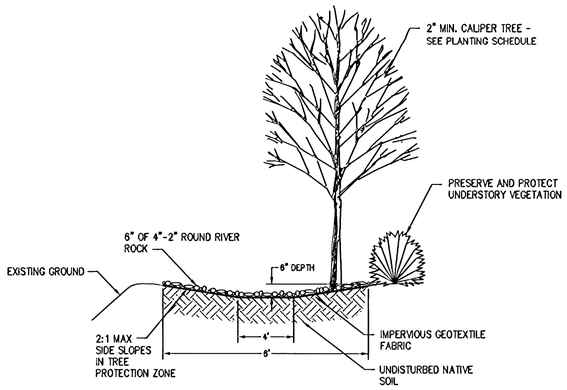


MODIFIED TREATMENT SWALE CONSTRUCTION NOTES:

1. ALL CONSTRUCTION WITHIN THE TREE PROTECTION ZONE (TPZ) SHALL BE SUBJECT TO THE REQUIREMENTS OF THE CITY OF WEST LINN TECHNICAL TREE MANUAL AND THE CITY ARBORIST RECOMMENDATIONS.

2. IN THE EVENT THESE SPECIFICATIONS CONFLICT WITH THE CITY ARBORIST RECOMMENDATIONS, THE CITY ARBORIST RECOMMENDATIONS SHALL PREVAIL.

3. NO CONSTRUCTION EQUIPMENT IS ALLOWED IN THE TPZ AT ANY TIME. METHODS PERMITTED ARE BY HAND DIGGING, HYDRAULIC OR PNEUMATIC AIR EXCAVATION TECHNOLOGY.

4. THE PROJECT ARBORIST SHALL BE ON SITE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES WITHIN THE TPZ. THE PROJECT ARBORIST AND CITY ARBORIST SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY WITHIN THE TPZ.

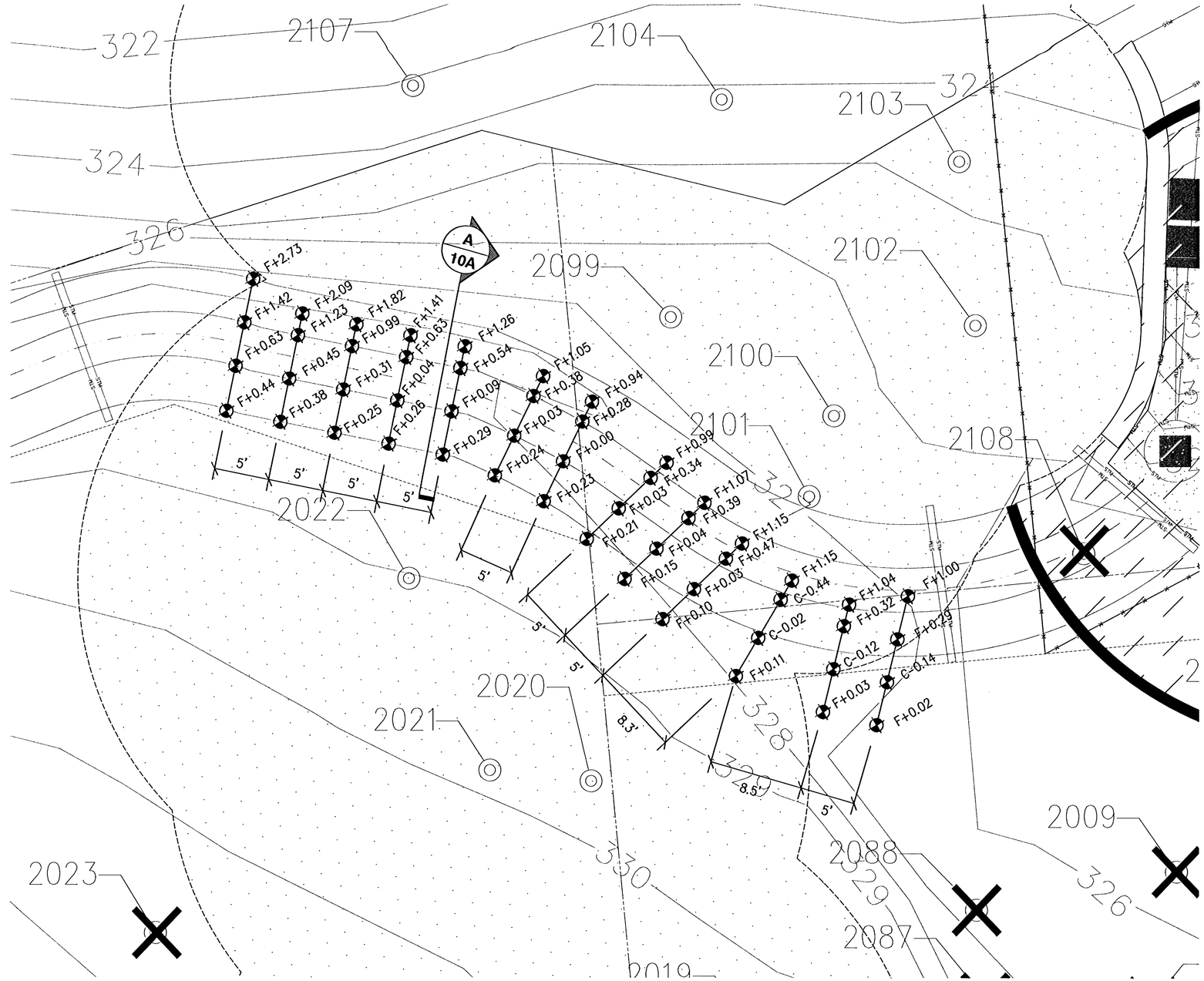
5. IMPERMEABLE GEOMEMBRANE LINER SHALL BE STAFF INDUSTRIES 36 MIL REINFORCED HYPALON, POTABLE WATER GRADE CONTAINMENT MEMBRANE, MIRAFI MCF 1212 IMPERMEABLE LINER, OR APPROVED EQUAL.

6. EXISTING NATIVE SOIL SHALL BE DISTURBED THE MINIMUM AMOUNT REQUIRED IN ORDER TO CONSTRUCT THE MODIFIED TREATMENT SWALE. UNDERSTORY VEGETATION SHALL BE PRESERVED AND PROTECTED WITHIN THE TPZ.

7. FILLS IN THE TPZ SHALL CONSIST OF TOPSOIL MIXED WITH ORGANIC MATERIALS SUCH AS COMPOST AND MULCH.

MODIFIED TREATMENT SWALE CROSS SECTION (A / 10A)

SCALE: NTS



PLAN
SCALE: 1" = 5'

30' 0' 30' 60' 90'
SCALE: 1" = 30'

REGISTERED PROFESSIONAL ENGINEER 7129 OREGON July 16, 1971 BRUCE D. GOLDSON

EXPIRES: 06/30/2009
SIGNATURE DATE: 05/20/2008

AS-BUILTS ONLY

AS-BUILT
DATE: January, 2008

Tree Protection Zone Detail

DATE	NO.	REVISION
01/22/08	4	AS-BUILTS
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
6/25/07	2	REVISED PER COMMENTS DATED 5/31/07
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10A / 10

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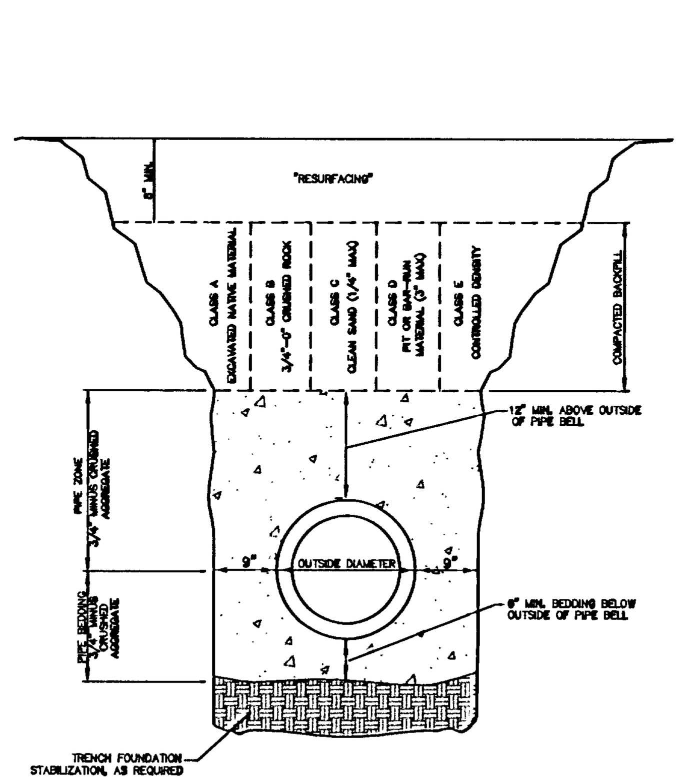
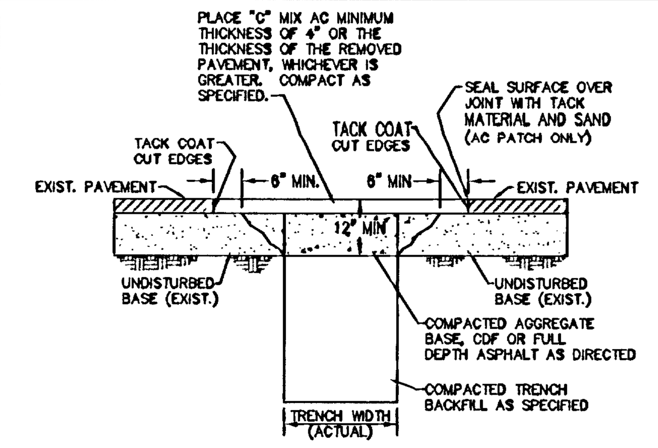


Trench Backfill, Bedding and Pipe Zone

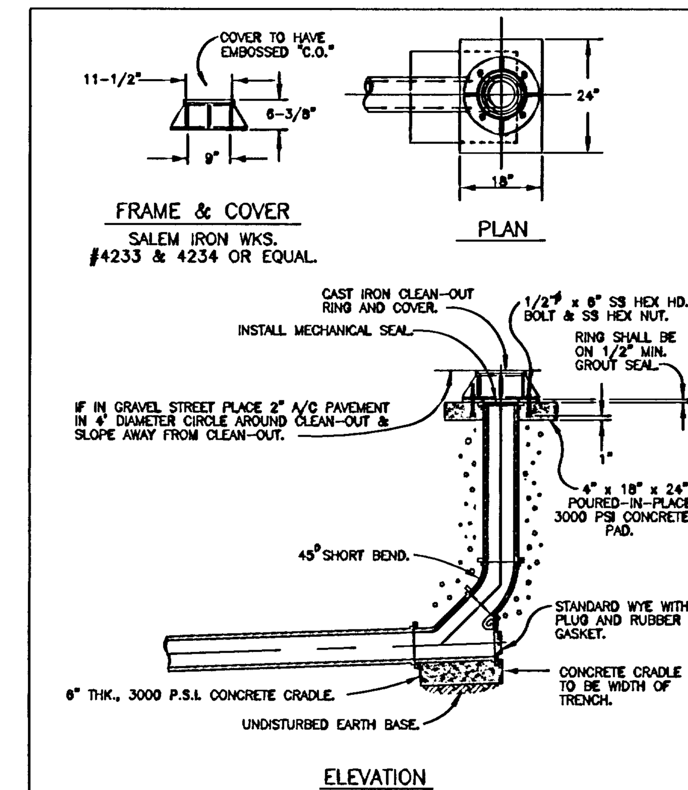
West Linn | DATE: JAN 2000 | DRAWING NO. WL-200 | FILE NO. 00-200



NOTES:
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. BACKFILL SHALL BE PLACED AND COMPACTED IN A MAXIMUM OF 6" LIFTS.

Street T-Cut

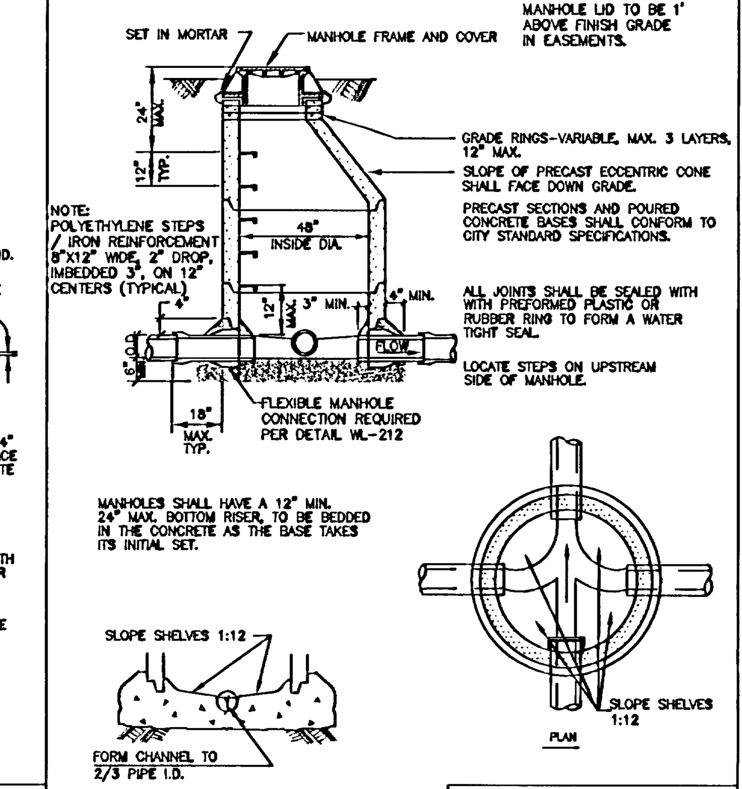
West Linn | DATE: JAN 2000 | DRAWING NO. WL-203 | FILE NO. 00-203



Standard Clean Out

West Linn | DATE: JAN 2000 | DRAWING NO. WL-206 | FILE NO. 00-206

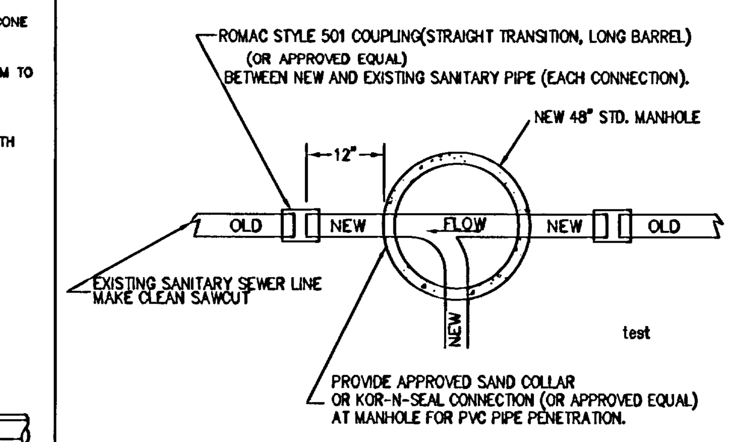
NOTE:
MANHOLE LID TO BE 1' ABOVE FINISH GRADE IN EASEMENTS.



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

Standard Manhole for Less than 36" Pipe

West Linn | DATE: JAN 2000 | DRAWING NO. WL-207 | FILE NO. 00-207

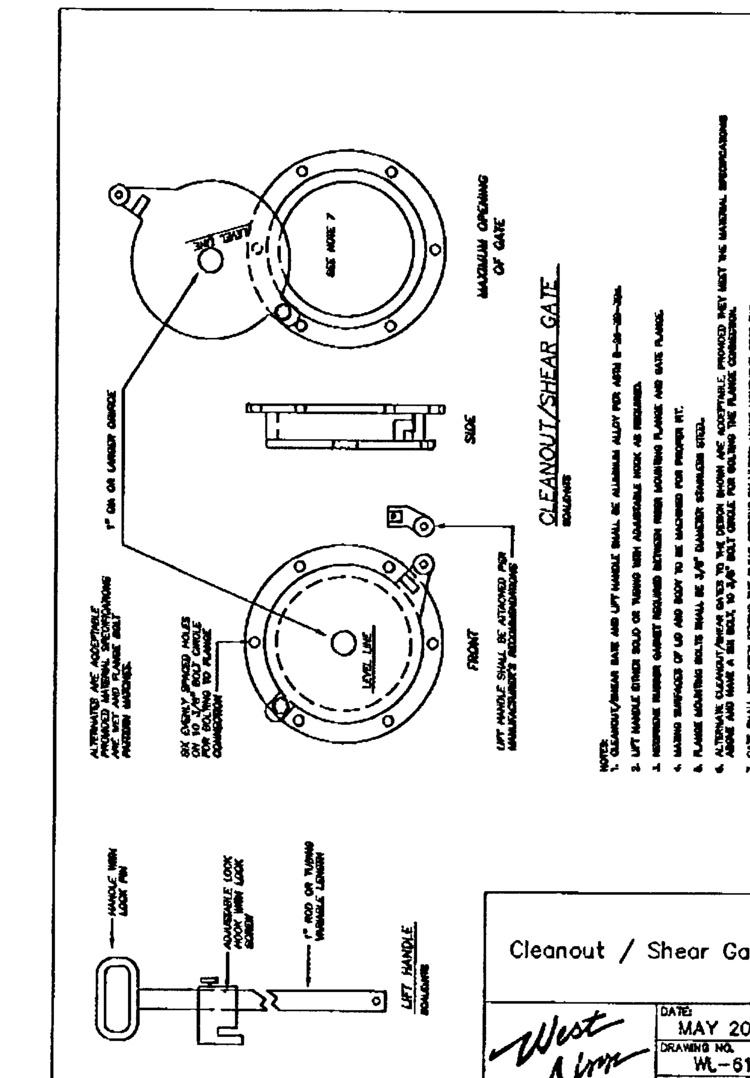


NEW PVC (ASTM 3034, SDR 35) PIPE
PIPE MATCHING EXISTING SANITARY SEWER LINE SIZE

(TYPICAL CONNECTION, MULTIPLE CONNECTIONS MAY EXIST)

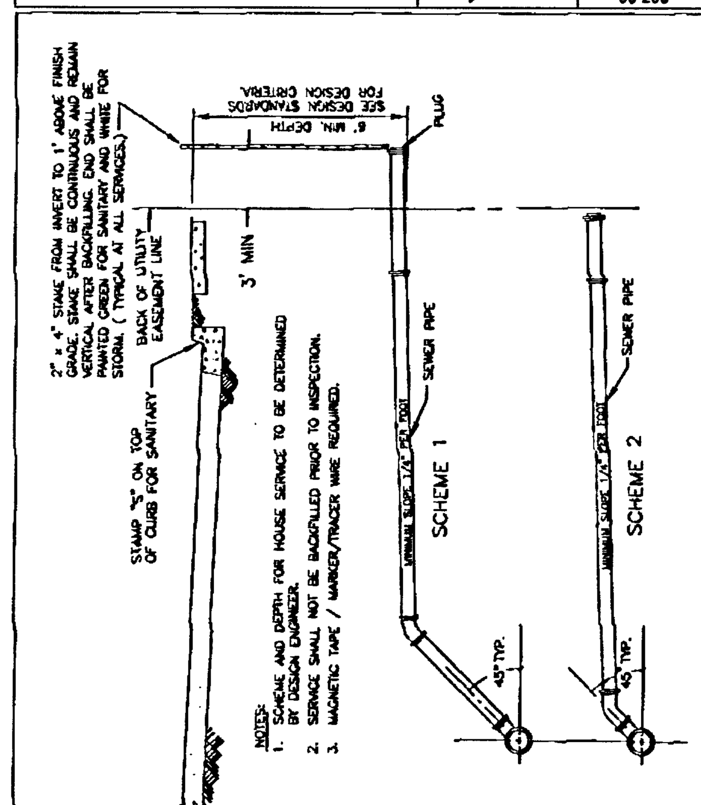
Manhole Detail-Plan View New Manhole to Existing Sewer Line Connection

West Linn | DATE: JAN 2000 | DRAWING NO. WL-210 | FILE NO. 00-210



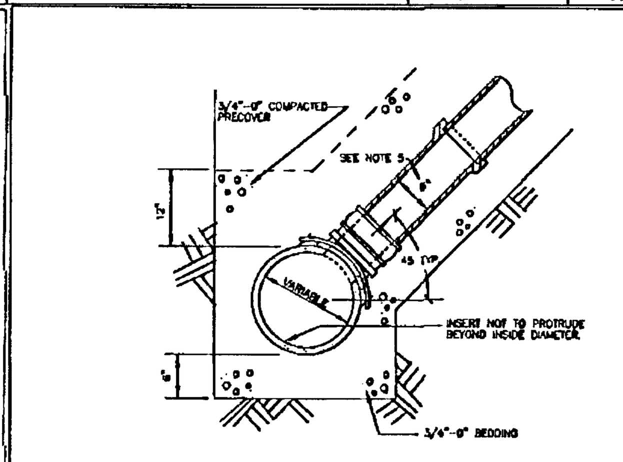
Cleanout / Shear Gate

West Linn | DATE: MAY 2005 | DRAWING NO. WL-611 | FILE NO. 00-611



Service Bronch

West Linn | DATE: JAN 2000 | DRAWING NO. WL-218 | FILE NO. 00-218

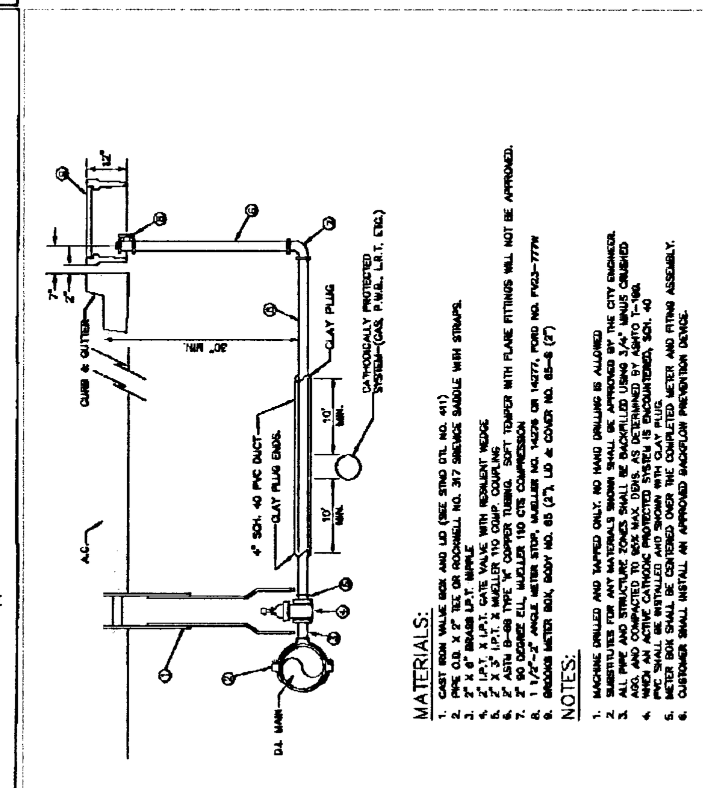


NOTES:
1. A MINIMUM OF 24 HOURS NOTICE IS REQUIRED PRIOR TO A TAP INSPECTION. ALL TRENCHES SHALL BE SHORED IN COMPLIANCE WITH OR-OSHA EXCAVATION RULES, CHAPTER 437, DIVISION "3", SUBDIVISION "P", ADOPTED SEPTEMBER 1, 1990. PUBLIC WORKS INSPECTORS WILL NOT INSPECT A TAP IN A TRENCH WITHOUT LEGAL SHORING.

   THE TAP SHALL BE INSPECTED BEFORE BACKFILL IS ALLOWED AND BEFORE THE SIDE SEWER CONNECTION IS MADE. THE CORE DRILLED "SLUG" IS TO BE SHOWN TO THE INSPECTOR TO INSURE IT WAS REMOVED FROM THE SEWER LINE.
2. ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN APPROVED CONNECTOR MANUFACTURED AND DESIGNED TO CONNECT TO A CORE DRILLED PIPE. FOWLER INSURT-A-TEE, SEAL TIGHT SADDLE, TAP TITE TEE, OR AN APPROVED EQUAL COMMERCIAL TAP.
3. THE CENTERLINE OF TAP IS TO BE ABOVE THE SPRINGLINE.
4. 4" MAXIMUM TAP FOR 8" MAIN (CUT-IN TEE TO BE USED FOR 6" HOUSE BRANCH ON 8" MAIN).
5. 4" HOUSE BRANCH MAY BE USED FOR SINGLE FAMILY LOTS ONLY.

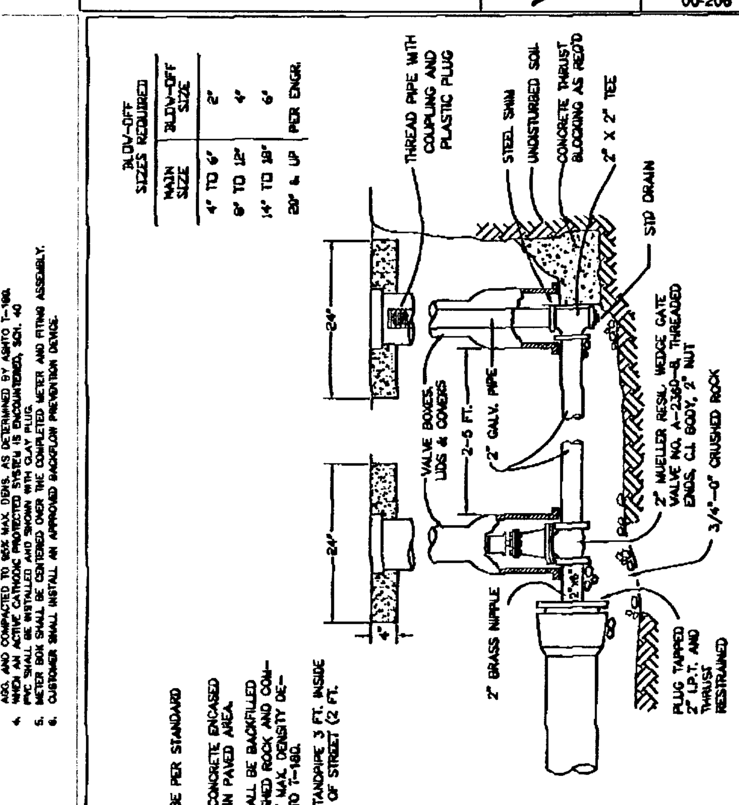
Sewer Service Tap to Existing Sewers for House Laterals

West Linn | DATE: JAN 2000 | DRAWING NO. WL-303 | FILE NO. 00-303



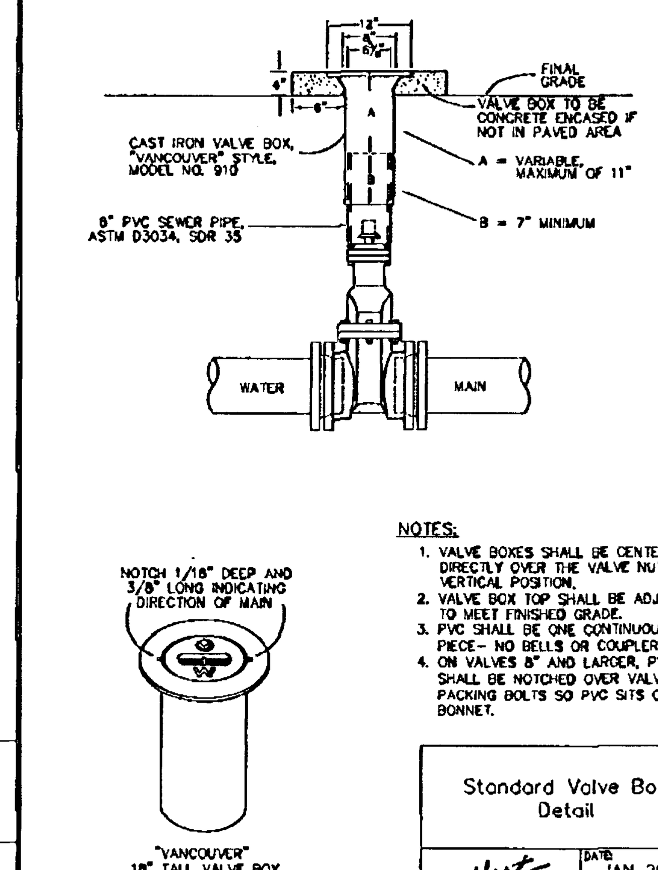
Standard 1 1/2" - 2" Single Service

DATE: MAY 2005 | DRAWING NO. WL-403 | FILE NO. 00-403



Standard 2" Blow-off Assembly

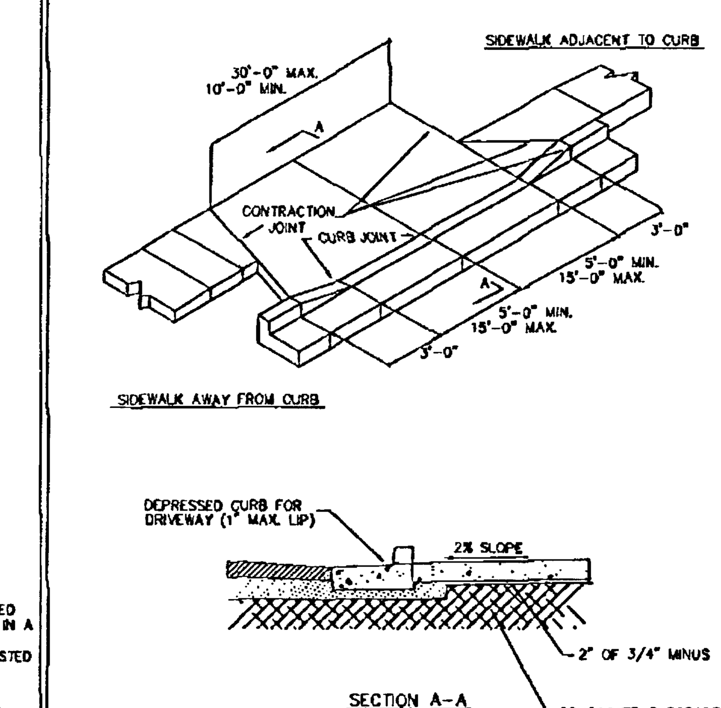
West Linn | DATE: MAY 2005 | DRAWING NO. WL-404A | FILE NO. 00-404A



NOTES:
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

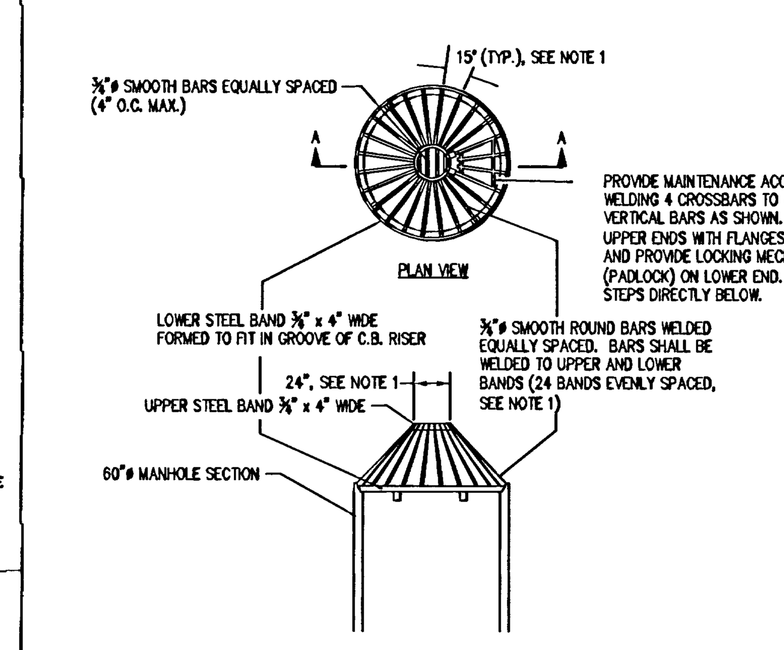
West Linn | DATE: JAN 2000 | DRAWING NO. WL-411 | FILE NO. 00-411



NOTES
1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS. 6 SACK MIX.
2. CURB SHALL BE TROWELED JOINT WITH A MIN. 1/2" RADIUS ALONG BACK OF CURB.
3. DRIVEWAY SHALL BE A MINIMUM 6" THICK.

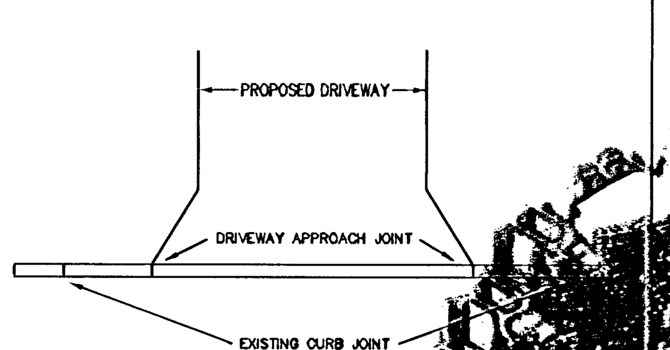
Residential Driveway

West Linn | DATE: JAN 2000 | DRAWING NO. WL-503 | FILE NO. 00-503



NOTES:
1. DIMENSIONS ARE FOR ILLUSTRATION. ADJUST TO MAINTAIN 45° ANGLE ON "VERTICAL" BARS AND 7" O.C. MAXIMUM SPACING OF BARS AROUND LOWER STEEL BAND.
2. METAL PARTS MUST BE CORROSION RESISTANT; STEEL BARS MUST BE GALVANIZE.

DOMED MANHOLE GRATE
SCALE: NTS

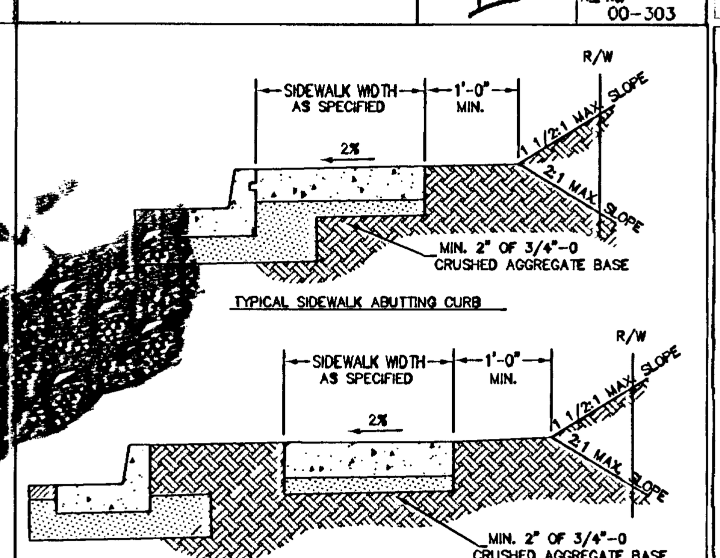


NOTES
1. FOR THE INSTALLATION OF A DRIVEWAY APPROACH, REMOVAL OF CURB SHALL ADHERE TO THE FOLLOWING:
   A. FOR STANDARD CURB, IF THE EXISTING CURB JOINT IS 8 FEET OR LESS FROM THE DRIVEWAY APPROACH JOINT, REMOVAL SHALL BE TO THE EXISTING CURB JOINT.
   B. IF THE EXISTING CURB JOINT IS MORE THAN 8 FEET FROM THE DRIVEWAY APPROACH JOINT, OR IF THE AREA IS CURB & GUTTER, THEN THE TOP AND FACE OF THE CURB SHALL BE SAW-CUT TO A MIN. DEPTH OF 2" PRIOR TO REMOVAL.
   C. THE REMOVAL OF CURB TO THE EXISTING CURB JOINT MAY BE ADJUSTED UPON THE CITY'S APPROVAL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF CURB DAMAGED DUE TO CONSTRUCTION.

AN INSPECTION OF THE CURBS SHALL BE PERFORMED PRIOR TO FINAL APPROVAL FOR OCCUPANCY.

Curb Removal and Damage Inspection

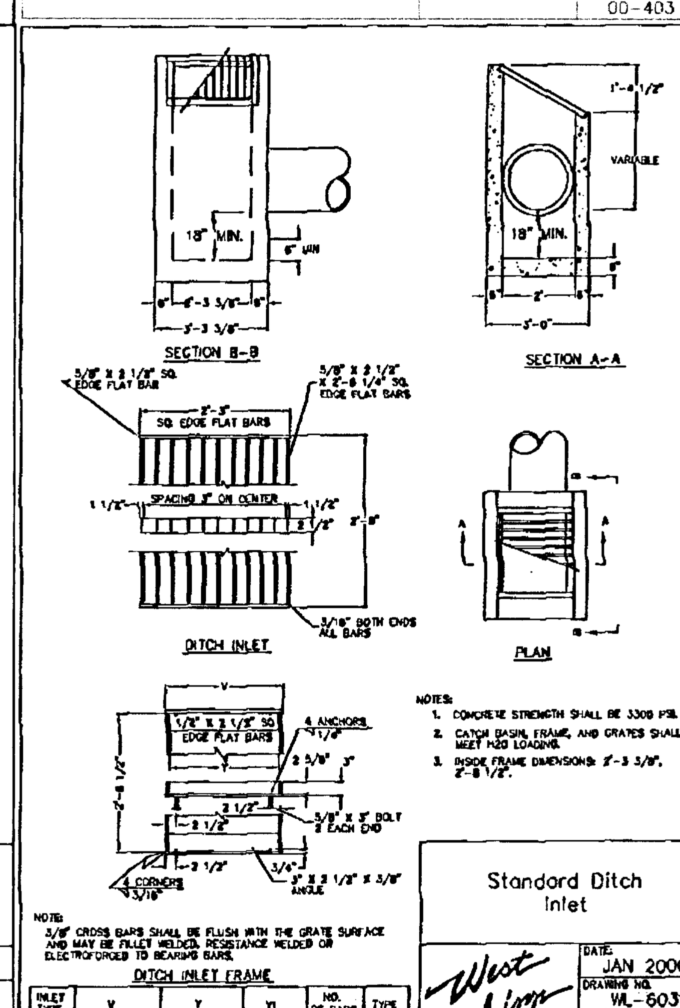
West Linn | DATE: JAN 2000 | DRAWING NO. WL-505 | FILE NO. 00-505



NOTES
1. CONCRETE SHALL BE 3300 PSI AT 28 DAYS, 6 SACK MIX, SLUMP RANGE OF 1 1/2" TO 3".
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 18 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 MOUNTABLE CURB IS USED OR IF THE SIDEWALK IS INTENDED AS A PORTION OF 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" DIA. PLASTIC PIPE AT A 2% SLOPE. A CONTRACTION JOINT SHALL BE PLACED OVER THE PIPE.

Concrete Sidewalk Cross Section

West Linn | DATE: JAN 2000 | DRAWING NO. WL-508 | FILE NO. 00-508



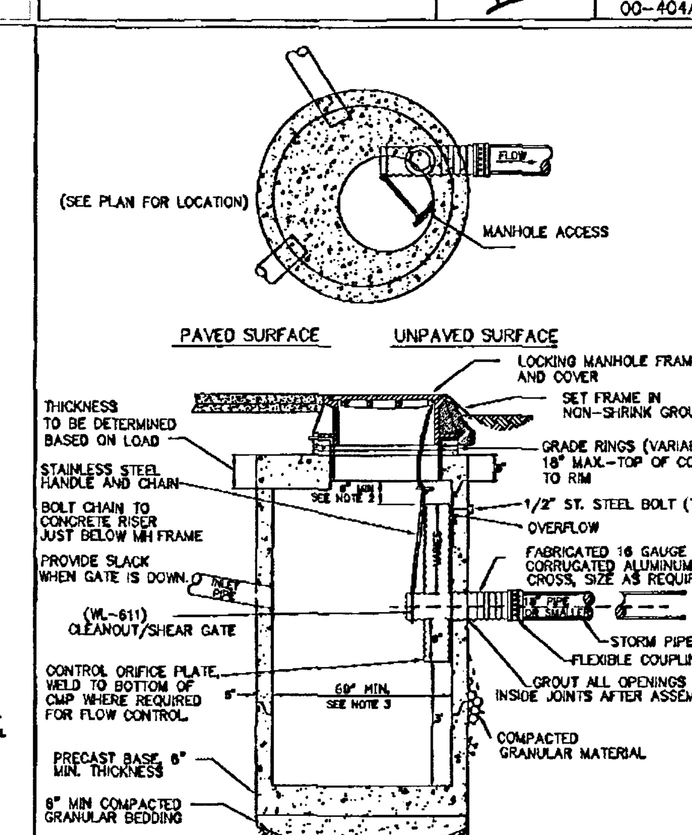
NOTES:
1. CONCRETE STRENGTH SHALL BE 3300 PSI.
2. CATCH BASIN, FRAME, AND GRATES SHALL MEET H20 LOADING.
3. INSIDE FRAME DIMENSIONS: 2'-3 3/8", 2'-8 1/2".

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

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

Standard Ditch Inlet

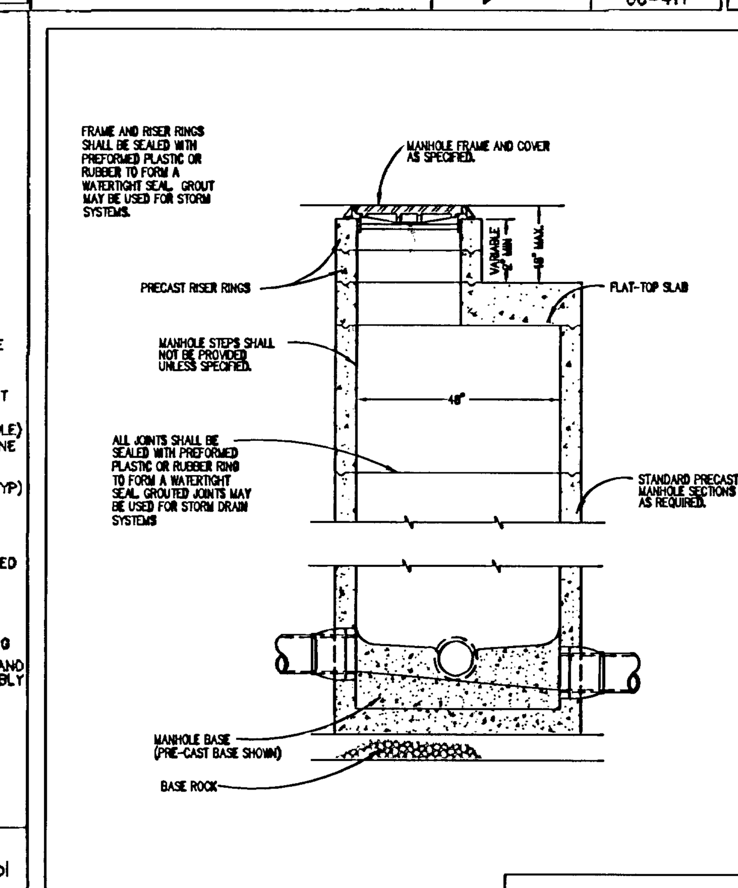
West Linn | DATE: JAN 2000 | DRAWING NO. WL-603 | FILE NO. 00-603



NOTES:
1. ALL PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478.
2. DISTANCE FROM TOP OF OVERFLOW TO MH RIM SHALL BE BASED ON OVERFLOW CAPACITY CALC'S BY DESIGN ENGINEER. ASSUME ORIFICE CONTROL.
3. 72" MINIMUM DIA. MANHOLE REQUIRED FOR OUTLET OR INLET > 21".
4. NO STEPS REQUIRED

Pollution / Flow Control Manhole

West Linn | DATE: MAY 2005 | DRAWING NO. WL-607 | FILE NO. 00-607



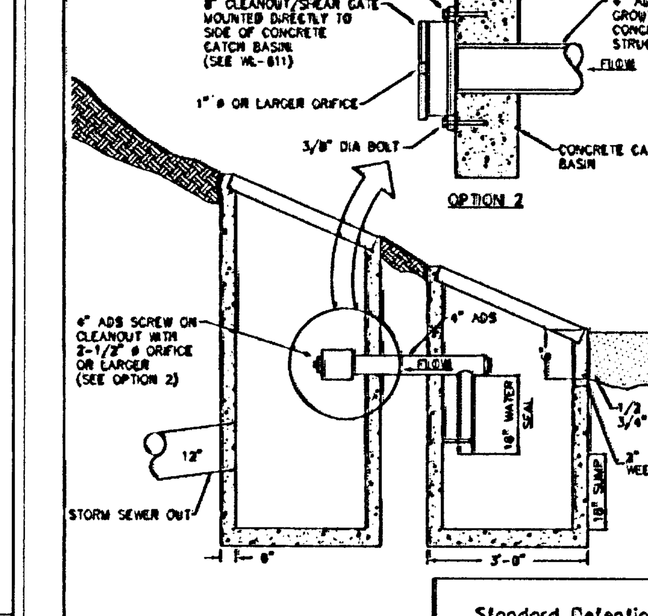
NOTE:
1. SEE MANHOLE BASE SECTION DRAWING FOR BASE DETAILS
2. MANHOLE MAY BE 42" DIAMETER IF DIRECTED BY ENGINEER.

FLAT TOP MANHOLE

DATE: AUG 1996 | DRAWING NO. 315-A

FILENAME: APWA2.BFT

NOTES:
1. NEOPRENE RUBBER GASKET REQUIRED BETWEEN GATE FLANGE AND CONCRETE CATCH BASIN.
2. CLEANOUT/SHEAR GATE TO HAVE LIFT HANDLE (SEE WL-611) ATTACHED WITH GALVANIZED CHAIN TO TOP OF CATCH BASIN.
3. FLANGE MOUNTING BOLTS SHALL BE 3/8" DIA STAINLESS STEEL.



Standard Detention Pond Outlet

West Linn | DATE: JAN 2000 | DRAWING NO. WL-610 | FILE NO. 00-610

Standard Details

DATE	NO.	REVISION
7/17/07	3	REVISED PER COMMENTS DATED 7/11/07
6/25/07	2	REVISED PER COMMENTS DATED 5/31/07
5/04/07	1	PER CITY REVIEW COMMENTS 3/27/07

DRAWN BJS	DESIGNED RCS	CHECKED RCS
SCALE NTS	DATE February, 2007	
PLAN 06-6116-3011	6116 Details	

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503-742-1942

Tax Lots 400 & 300
Map 2S1E36CA
West Linn, Oregon

D/1

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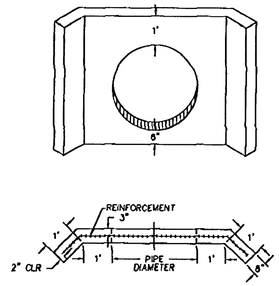


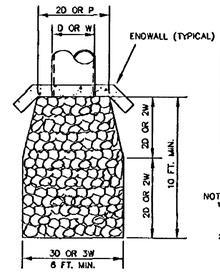
NOTES:
1. USE CONCRETE HAVING A 28 DAY DESIGN STRENGTH OF 3300 PSI.
2. OUTLET WING WALL SHALL BE USED FOR ALL OUTFALL PIPES FROM 10" TO 36".
3. THIS DETAIL REPRESENTS THE MINIMUM REQUIREMENT. THE NEED FOR ADDITIONAL STEEL, A FOOTING AND DRAINAGE BEHIND THE WALL SHALL BE INVESTIGATED BY THE DESIGN ENGINEER.
4. FOR PIPES LARGER THAN 33" OR MULTIPLE PIPE OUTLETS, USE DETAIL WL-612.
5. CONCRETE REINFORCEMENT SHALL CONSIST OF:
   A) ADDING A POLY-FIBER MESH TO THE CONCRETE MIX OR
   B) USE (2) #4 BARS ABOVE AND BELOW PIPE AND #4 BARS AT 8" O.C. VERTICALLY.

Outlet Headwall
(For Outlet Pipes of 10" to 33")

West Linn

DATE:	JAN 2000
DRAWING NO.	WL-613
FILE NO.	00-613

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



DESIGN VELOCITY FT./SEC	ROCK CLASSIFICATION BY WEIGHT
8 - 10	200 LBS.
10 - 12	1/4 TON
12 - 14	1/2 TON
14 - 16	1 TON
16 - 18	2 TON

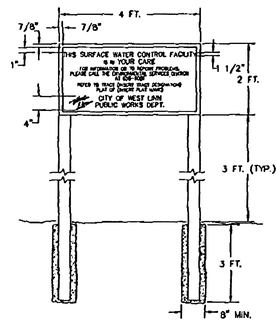
SELECTION OF RIP RAP
(SEE NOTE 1)

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

Storm Sewer Outfall

West Linn

DATE:	JAN 2000
DRAWING NO.	WL-614
FILE NO.	00-614

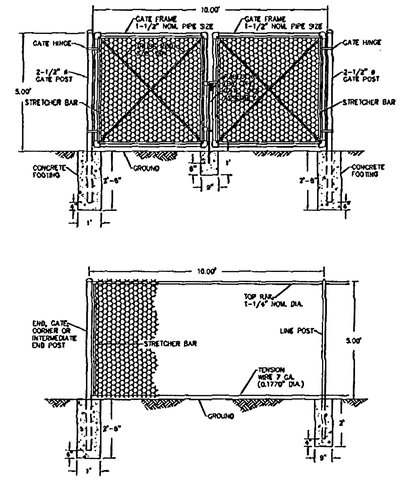


SPECIFICATIONS:
SIZE: 48" BY 24"
MATERIAL: GRADE "B" OR BETTER EXTERIOR PLYWOOD
PAINT: FACE – 3 COATS OUTDOOR ENAMEL (SPRAYED).
BACK – 1 COAT OUTDOOR ENAMEL (SPRAYED).
LETTERING: SILK SCREEN ENAMEL WHERE POSSIBLE, OR HAND PAINTED ENAMELS.
COLORS: BLACK AND WHITE. WHITE BACKGROUND, LETTERING AND BORDER IN BLACK
TYPE FACE: HELVETICA. 1 1/2" TALL WITH 7/8" SPACING BETWEEN LETTERS AND OUTER BORDER. OUTER BORDER 1/2" WIDTH
INSTALLATION: SECURED TO CHAIN LINK FENCE IF AVAILABLE, OTHERWISE INSTALL ON TWO 8 FT. LONG 4" X 4" POSTS, PRESSURE TREATED, INSTALLED IN 3 FT. DEEP CONCRETE FILLED POST HOLES (8" MIN. DIA.)

Surface Water Facility Sign

West Linn

DATE:	JAN 2000
DRAWING NO.	WL-615
FILE NO.	00-615

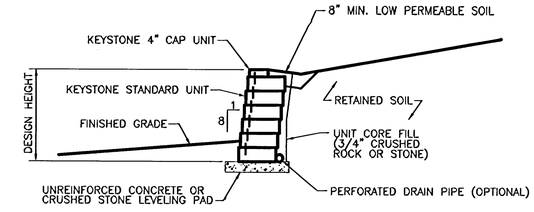


NOTES:
1. BLACK POWDER COATING ON ALL HARDWARE AND ACCESSORIES IS REQUIRED.
2. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF OREGON STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

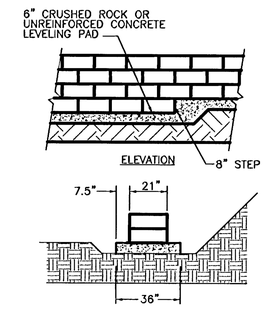
Surface Water Facility Fence

West Linn

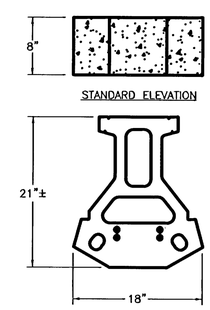
DATE:	JAN 2000
DRAWING NO.	WL-616
FILE NO.	00-616



TYPICAL GRAVITY WALL SECTION
STANDARD UNIT – 1" MINIMUM SETBACK



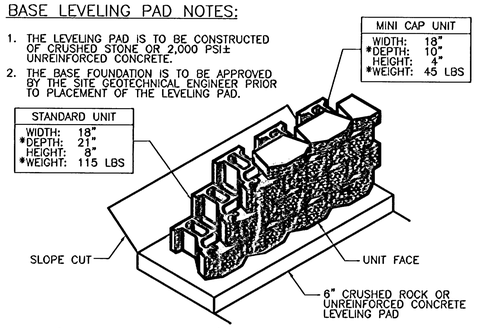
(2/3) LEVELING PAD DETAIL
SCALE: 1/4" = 1'-0"



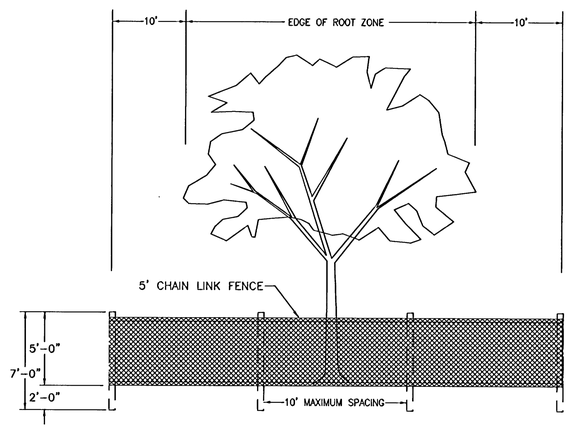
(4/3) STANDARD UNIT
SCALE: 1" = 1'-0"

BASE LEVELING PAD NOTES:

1. THE LEVELING PAD IS TO BE CONSTRUCTED OF CRUSHED STONE OR 2,000 PSI± UNREINFORCED CONCRETE.
2. THE BASE FOUNDATION IS TO BE APPROVED BY THE SITE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THE LEVELING PAD.

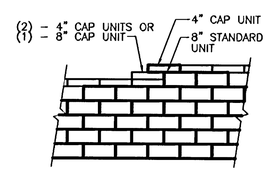


(1/3) STANDARD UNIT/BASE PAD ISOMETRIC VIEW
SCALE: 3/8" = 1'-0"
*DIMENSIONS & WEIGHT MAY VARY BY REGION

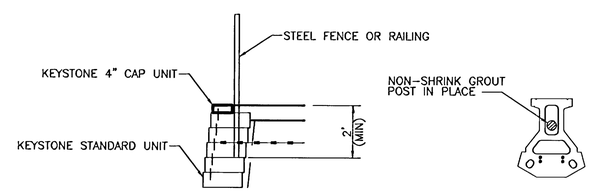


HEAVY 12 GUAGE WIRE TO BE STRUNG BETWEEN EACH POST AND ATTACHED TO THE TOP AND MIDPOINT OF EACH POST.

TREE PROTECTION FENCE
NOT TO SCALE



(3/3) TOP OF WALL STEPS
SCALE: 1/4" = 1'-0"



FENCE SECTION & PLAN DETAIL
STANDARD UNIT – 1" MINIMUM SETBACK

Standard Details

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