



**WEST LINN PLANNING COMMISSION  
FINAL DECISION NOTICE  
SUB-13-02/VAR-13-05/VAR-13-06/VAR-13-07/VAR-13-08/VAR-13-09**

**IN THE MATTER OF AN 11-LOT SUBDIVISION WITH FIVE VARIANCES FOR LOT DEPTH IN RELATION TO LOT WIDTH AT 23150 BLAND CIRCLE**

At their meeting of October 2, 2013, the West Linn Planning Commission held a public hearing to consider the request by JT Smith Companies to approve an 11-lot subdivision with five Class II Variances for lots with depths more than 2.5 times their widths. The proposed development required Subdivision and Variance approval. The approval criteria for Subdivision are found in Chapter 85 of the Community Development Code (CDC). The approval criteria for Variance are found in Chapter 75 of the CDC. The hearing was conducted pursuant to the provisions of CDC Chapter 99.

The hearing commenced with a staff report presented by Tom Soppe, Associate Planner. Andrew Tull of 3J Consulting presented for the applicant. Alice Richmond spoke in favor of the application. Mr. Tull and Michael Robinson of Perkins Coie provided the applicant's rebuttal. After deliberations, a motion was made, seconded, and passed to approve the application with three new findings, with the proposed conditions of approval in the staff presentation, including changes to conditions 4 and 6 recommended in the October 2 memo, and with further modifications to conditions 2A, 4, 10, and 12. The additional findings are as follows:

**Additional Finding 1:** In concurring with the staff report that the variances requested for the depth of lots 3 and 4 comply with six variance criteria of Section 75.060, the Planning Commission determines that the variances for the depth of lots 8, 10, and 11 also meet these criteria. For each of these lots the request for the variance relates to the exceptional and extraordinary circumstance of having a long, thin site traversed by two stubbed streets with particular necessary trajectories across the site, meeting criteria 75.060(A). In proposing the variances the applicant preserves the property right to develop at this density without creating extra tracts with no further purpose, a right enjoyed by other developers in the R-7 zone and the area, meeting criteria 75.060(B). The variances also meet criteria 75.060(C), (D), (E), and (F) for the same reasons these are met for the variances for lots 3 and 4 as stated in staff responses 8-9, 10, 11, and 12 of the staff report, respectively.

**Additional Finding 2:** Because all requested variances meet the criteria of Section 75.060, Tracts B and C are not necessary in the site plan and should not be included in the final plat as they serve no practical purpose and as they might create a long-term maintenance problem.

**Additional Finding 3:** Condition of Approval 10 is correct in allowing for the option of screening the applicant's initially proposed wall height (13 ft), because it is not clear whether engineering a step-down (terraced) wall system will be possible. However because a step-down system is preferable, the condition should be worded to require this system unless only the initial proposed design is feasible. For the best effects on the community's environment, the condition should require that all landscaping utilize native trees and vegetation.

The approved conditions of approval are as follows:

1. **Site Plan.** With the exception of modifications required by these conditions, the project shall conform to the Subdivision Plat, Sheet C2.0, dated September 11, 2013.

2. **Trail and Pedestrian/Utility Easement /Tract**

A) The applicant shall provide a 15-foot-wide trail and public utility easement between lots 9 and 10 and a 15-foot wide easement at the rear of lots 10 and 11.

B) The applicant shall provide a five-foot-wide utility easement along the eastern boundary of Lot 11.

3. **Trees.**

A) The three significant trees to be removed for street construction shall be mitigated for on an inch-to-inch basis. Therefore 78 inches of new trees total shall be planted on site (in addition to proposed street trees). This shall include the planting of evergreen trees beside the retaining wall adjacent to the stormwater pond where possible and planting of appropriate trees elsewhere in or beside Tract A. If all of the trees cannot be appropriately accommodated of site given their size at maturity, they may be planted on City-owned land as approved by the Parks and Recreation Department. Any trees planted on lots 1 or 2 to screen the wall on Tract A shall be placed in a conservation easement using the tree conservation easement referred to in Condition of Approval 3B. If trees are planted that fulfill the 78-inch mitigation requirements and these do not fully screen the wall, additional trees shall be planted so the wall is fully screened.

B) The applicant shall use the City's standard tree conservation easement language, available from the Planning Department, for the proposed and conditioned tree conservation easements.

4. **Fence Along Trail.** Prior to occupancy, the applicant shall install a three- to four-foot high black matte chain link fence (or an alternative that is acceptable to the Parks and Recreation

Department) along all trail corridors, except in areas where other fences are proposed such as along the backyards of lots.

5. **Fire Access.**

A) All houses along Sunbreak Lane in the subdivision shall have NFPA 13D fire sprinklers installed, or alternately the easement document for the reservoir driveway to the west of the site could be amended to allow emergency access to Sunbreak Lane and a gate built to TVFR standards located at the western end of Sunbreak Lane.

B) Post no parking signs along one side of the new segment of Sunbreak Lane.

C) Provide evidence of a current fire flow test of the nearest fire hydrant demonstrating fire flow capabilities to the satisfaction of TVFR.

6. **Water Line Looping.** The applicant shall work with the City Engineer to determine if a looped water line is possible and, if so, how the looped water line shall be accomplished.

7. **Street Lighting.** Street light fixtures shall be LED fixtures.

8. **Street and Trail Improvements.**

A) The applicant shall install sidewalk, curb, and ADA ramps for pedestrian connection between Sunbreak Lane and Bland Circle as shown on sheet C2.7.

B) Fee-in-Lieu for Pavement Improvement. The applicant shall pay a fee-in-lieu for the eventual pavement improvement of the dedicated street right of way between Sunbreak Lane and Bland Circle at the west edge of the site as shown on Sheet C2.7.

C) The applicant shall pay a fee in-lieu for the eventual trail in the proposed and/or required trail segments between lots 9 and 10 and at the rear of lots 10 and 11.

9. **Utility Vaults.** Relocate and place existing and new utility vaults outside of roadway and ramp. If in the sidewalk, both existing and new vaults must be set at appropriate grade for ADA compliances.

10. **Retaining Wall in Tract A.** To break up the vertical dimension of the retaining wall at the detention pond in Tract A, the applicant shall construct a step down wall system which shall include native landscaping. If that is not possible the applicant shall use the initial wall design and add trees and native vegetation of sufficient height to screen the wall and effectively diminish its visual impact.

11. **Public Utility Improvement.** Utilities such as storm drainage, sanitary sewer, and water must be designed to accommodate the future street connection and current condition between

Sunbreak Lane and Bland Circle. Final design of the improvement shall be reviewed and approved by City Engineer.

12. **Tracts.** Tracts B and C shall be eliminated.

This decision will become effective 14 days from the date of mailing of this final decision as identified below. Those parties with standing (i.e., those individuals who submitted letters into the record, or provided oral or written testimony during the course of the hearings, or signed in on an attendance sheet or testimony form at either of the hearings, or who have contacted City Planning staff and made their identities known to staff) may appeal this decision to the West Linn City Council within 14 days of the mailing of this decision pursuant to the provisions of Chapter 99 of the Community Development Code. Such appeals would require a fee of \$400 and a completed appeal application form together with the specific grounds for appeal to the Planning Director prior to the appeal-filing deadline.

*Michael Babbitt*  
MICHAEL BABBITT, CHAIR  
WEST LINN PLANNING COMMISSION

10-8-13  
DATE

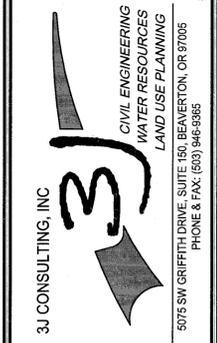
Mailed this 8<sup>th</sup> day of October, 2013.

Therefore, this decision becomes effective at 5 p.m., October 20, 2013.

D:\rev\projects folder\projects 2013\sub-13-02 23150 Bland Circle\SUB-13-02 Final Decision

**RECORD DRAWING**  
03/19/2015  
This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a combination of:  
• Contractor supplied redlines  
• Site observations by the engineer  
• Field measurements  
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**CONDITIONS OF APPROVAL**  
**SUNBREAK**  
**SUBDIVISION**  
LF 3, LLC  
WEST LINN, OR



3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 251E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
C of A

SHEET NUMBER  
**C001**

I:\13113-JTS - Sunbreak Subdivision\CAD\B13113-001-CONDITIONS OF APPROVAL.dwg, 3/20/2015 8:32:24 AM

**SANITARY SEWER NOTES**

- 1. PIPE SHALL BE PVC SEWER PIPE CONFORMING TO ASTM D-3034 SDR 35. MINIMUM STIFFNESS SHALL BE 46 PSI AND JOINT TYPE SHALL BE ELASTOMERIC GASKET CONFORMING TO ASTM D-3212.
- 2. MANHOLE BASE SHALL BE POURED IN PLACE CONCRETE BASE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI OR PRECAST. MANHOLE RISERS AND TOPS SHALL BE PRECAST SECTIONS WITH MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. TOPS SHALL BE ECCENTRIC CONES EXCEPT WHERE INSUFFICIENT HEADROOM REQUIRES FLAT TOPS. INVERTS SHALL BE CONSTRUCTED SO AS TO PROVIDE SMOOTH FLOW-THROUGH CHARACTERISTICS AND CHANNELS MUST BE ABLE TO PASS A 6"X36" CYLINDER INTO PIPES. PVC PIPE SHALL BE CONNECTED TO MANHOLE BY MEANS OF A FLEXIBLE CONNECTION AND SHALL HAVE A SHEAR JOINT LOCATED 18" OUTSIDE OF MANHOLE. CEMENT GROUT FOR CONNECTING PVC SEWER PIPE TO MANHOLE WILL NOT BE PERMITTED.
- 3. ALL MANHOLES LOCATED IN EASEMENT AREAS REQUIRE TAMPER PROOF LIDS AND THE LID SHALL BE SET 12" ABOVE THE PROPOSED GRADE WHEN PLACED IN UNPAVED AREAS.
- 4. CLEANOUT PIPE, FITTINGS, AND JOINTS SHALL BE THE SAME SPECIFICATIONS AS FOR PIPE. CASTINGS ARE AS SHOWN ON DETAIL AND SHALL CONFORM TO ASTM A48 (GRADE 30). CLEANOUT RISER SHALL MATCH DOWNSTREAM PIPE DIAMETER. FRAME SHALL SIT ON 24"X24" CONCRETE PAD.
- 5. GRANULAR BACKFILL (3/4"-0) IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL. EXCAVATION, BEDDING, AND BACKFILL SHALL BE IN ACCORDANCE WITH DIVISION 204 OF THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. BACKFILL UNDER NEW STREETS SHALL BE CLASS "B" AND BACKFILL IN EXISTING STREETS SHALL BE CLASS "E".
- 6. PVC SERVICE LATERALS SHALL BE 4" PIPE CONFORMING TO THE SAME SPECIFICATIONS AS THE SEWER MAINS. SERVICE LATERALS SHALL BE INSTALLED TO A POINT BEYOND THE LINE OF THE SEWER OR UTILITY EASEMENT AS SHOWN ON THE PLAN. THE SERVICE LATERAL SHALL BE PLUGGED WITH A 4" RUBBER RING PLUG, AND THE LOCATION OF THE LATERAL'S END MARKED WITH A 2"X4" STAKE PAINTED GREEN.
- 7. SANITARY SEWER PIPE AND APPURTENANCES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH W.L.S.C.S. DIVISION 301.03.09 AND MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH W.L.S.C.S. DIVISION 302.03.07. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER AND THE CITY OF WEST LINN. CONTRACTOR IS RESPONSIBLE FOR COORDINATING TESTING SO THAT ALL TEST SHALL BE PASSED AND NEW LINE SHALL BE ACCEPTED PRIOR TO CONNECTION TO EXISTING SYSTEM.
- 8. A PLUMBING PERMIT FROM THE CITY OF WEST LINN BUILDING DEPARTMENT IS REQUIRED FOR SANITARY SEWER LATERALS BEYOND THE RIGHT OF WAY.
- 9. ALL MATERIALS, INSTALLATION, TEST, AND INSPECTIONS TO BE MADE IN STRICT ACCORDANCE WITH CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS.

**WATER NOTES**

- 1. WATER MAINS SHALL BE DUCTILE IRON PIPE CONFORMING TO AWWA C151 CLASS 52. PIPE IS TO HAVE CEMENT MORTAR LINING AND BITUMINOUS SEAL COAT CONFORMING TO AWWA C104. JOINTS ARE TO BE PUSH-ON RUBBER GASKETED JOINTS UNLESS NOTED OTHERWISE ON THE PLAN. PIPE FITTINGS ARE TO BE OF THE SAME MATERIAL AND CLASS AS PIPE OF DOMESTIC ORIGIN.
- 2. WATER MAINS HAVE A MINIMUM COVER OF 36".
- 3. THRUST BLOCKS ARE TO BE PROVIDED AT ALL CHANGES IN DIRECTION AND BRANCHES. THRUST BLOCKING CONCRETE STRENGTH IS TO BE 3300 PSI. SEE DETAILS FOR THRUST BLOCK SIZING. POUR THRUST BLOCKS AGAINST UNDISTURBED EARTH.
- 4. GATE VALVES SHALL BE RESILIENT SEAT, NON-RISING STEM WITH "O" RING PACKING, COMPLYING WITH AWWA CLASS "C" SPECIFICATIONS. THE VALVES SHALL BE DESIGNED TO WITHSTAND A WORKING PRESSURE OF 150 PSI. GATE VALVES SHALL BE FURNISHED WITH A TWO-INCH SQUARE OPERATING NUT AND SHALL OPEN COUNTERCLOCKWISE WHEN VIEWING FROM ABOVE. BUTTERFLY VALVES SHALL BE RUBBER SEAT TYPE AND BUBBLE-TIGHT AT 150 PSI, AND SHALL CONFORM TO AWWA C504. BUTTERFLY VALVES SHALL BE MUELLER OR APPROVED EQUAL. OPERATING NUT SHALL BE LOCATED ON THE SIDE OF THE MAIN SHOWN ON THE PLANS. VALVE BOXES SHALL BE "VANCOUVER" PATTERN.
- 5. GRANULAR BACKFILL (3/4"-0) IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL. EXCAVATION, BEDDING, AND BACKFILL SHALL BE IN ACCORDANCE WITH DIVISION 204 OF THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. BACKFILL UNDER NEW STREETS SHALL BE CLASS "E".
- 6. SERVICE LATERALS SHALL BE TYPE K COPPER LATERAL SIZES SHALL BE LAID SIDE BY SIDE. CORPORATION STOPS SHALL BE MUELLER H 1500B OR FORD F1000 4Q. ANGLE METER STOP SHALL BE MUELLER H 1425B OR FORD F1000 4Q. METER BOXES SHALL BE EQUAL TO BROOKS #37 WITH A 37-S LID AND COVER. METER BOXES ARE TO BE INSTALLED 3/4" ABOVE FINISH GRADE AND 2'-1/2" FROM THE CURB IN PLANTER STRIPS OR FLUSH WITH SIDEWALK SURFACE IN A SIDEWALK.
- 7. ALL WATERLINES WILL BE PRESSURE TESTED AND PURIFICATION TESTED BEFORE CONNECTION TO THE CITY WATER SYSTEM. PRESSURE TEST SHALL BE CONDUCTED AT 180 PSI OR 1.5 TIMES THE NORMAL WORKING PRESSURE, WHICHEVER IS HIGHER AND SHALL MEET THE REQUIREMENTS OF DIVISION 403.14 OF THE WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS.
- 8. CHLORINATION SHALL CONFORM WITH DIVISION 403.13 OF THE W.L.S.C.S.
- 9. DO NOT CONNECT NEW PIPE TO EXISTING PIPE PRIOR TO TESTING. THE CITY OF WEST LINN REQUIRES ACCEPTANCE OF NEW WATERLINE PRIOR TO CONNECTION TO EXISTING WATER SYSTEM.
- 10. A PLUMBING PERMIT IS REQUIRED FOR SERVICE LATERAL INSTALLATIONS BEYOND THE WATER METER.
- 11. ALL MATERIALS, INSTALLATION, TESTS, AND CHLORINATION TO BE IN STRICT ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, AND THE OREGON STATE HEALTH DIVISION ADMINISTRATION RULES, CHAPTER 333.

**STORM SEWER NOTES**

- 1. EIGHT INCH TO 24-INCH STORM DRAIN PIPE IS PREFERRED TO BE SEAMLESS RIBBED PVC PIPE CONFORMING TO ASTM F 794. WHERE LARGER PIPE IS REQUIRED OR LACK OF COVER PREVENTS USE OF RIBBED PVC PIPE, PIPE SHALL BE CLASS 3 NON-REINFORCED, CONCRETE PIPE CONFORMING TO ASTM C14. REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76, CLASS IV, OR DUCTILE IRON PIPE CONFORMING TO AWWA C151 CLASS 52. RUBBER JOINTS ARE REQUIRED FOR ALL CONCRETE PIPE. SIX INCH AND SMALLER STORM DRAIN PIPE SHALL CONFORM TO ASTM D 3034 PVC PIPE.
- 2. GUTTER INLETS SHALL BE POURED IN-PLACE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI. FRAME SHALL BE FABRICATED OF STRUCTURAL STEEL, ASTM A-7, A-36, A-373.
- 3. MANHOLE BASE MAY BE POURED IN PLACE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI OF PRECAST. MANHOLE RISERS AND TOPS SHALL BE PRECAST SECTIONS WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. TOPS SHALL BE ECCENTRIC CONES EXCEPT WHERE INSUFFICIENT HEADROOM REQUIRES FLAT TOPS. INTERIOR DIMENSIONS NOTED ON THE PLANS ARE MINIMUMS. SOME OR ALL OF THE STORM DRAIN REQUIRED WILL BE OVERSIZED MANHOLES. CONTRACTOR SHALL CHECK WITH MANHOLE MANUFACTURER FOR ACTUAL SIZE OF MANHOLE NEEDED FOR TYPE AND SIZE OF PIPE TO BE USED. INVERTS SHALL BE CONSTRUCTED SO AS TO PROVIDE SMOOTH FLOW-THROUGH CHARACTERISTICS. PIPE SHALL BE CONNECTED TO MANHOLE BY MEANS OF A FLEXIBLE CONNECTION AND SHALL HAVE A SHEAR JOINT LOCATED 18" OUTSIDE OF THE MANHOLE.
- 4. ALL MANHOLES LOCATED IN EASEMENT AREAS REQUIRE TAMPER PROOF LIDS AND LID SHALL BE SET 12 INCHES ABOVE PROPOSED GRADE.
- 5. CLEANOUT PIPE, FITTINGS, AND JOINTS SHALL BE THE SAME SPECIFICATIONS AS FOR PIPE. CASTINGS ARE SHOWN ON DETAILS AND SHALL CONFORM TO ASTM A48 (GRADE 30). CLEANOUT RISER SHALL MATCH DOWNSTREAM PIPE DIAMETER.
- 6. GRANULAR BACKFILL (3/4"-0) IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL.
- 7. STORM DRAIN SERVICE LATERALS SHALL BE 4" PIPE CONFORMING TO THE SAME SPECIFICATIONS AS THE STORM DRAIN MAIN LINES. SERVICES LATERALS SHALL BE INSTALLED TO A POINT BEYOND THE LINE OR UTILITY EASEMENT AS SHOWN ON THE PLAN. THE SERVICE LATERAL SHALL BE PLUGGED WITH 4" RUBBER RING PLUG, AND THE LOCATION OF THE LATERALS END MARKED WITH A 2"X4" STAKE PAINTED WHITE.
- 8. STORM DRAINS SHALL BE TESTED FOR DEFLECTION IN ACCORDANCE WITH DIVISION 601.03.11 AND VIDEO INSPECTED IN ACCORDANCE WITH DIVISION 601.03.12 OF THE WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER AND A REPRESENTATIVE OF THE CITY.
- 9. A PLUMBING PERMIT FROM THE CITY OF WEST LINN BUILDING DEPARTMENT IS REQUIRED FOR STORM DRAINS BEYOND THE FIRST CLEANOUT.
- 10. ALL MATERIALS, INSTALLATION, TESTS, AND INSPECTIONS TO BE IN STRICT ACCORDANCE WITH THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS.
- 11. INFILTRATION RAIN GARDEN PLANTINGS TO CONFORM TO PLANTING SPECIFICATION AS SHOWN ON THE PLANS AND DETAILS CONTAINED HEREIN.

**STREET NOTES**

- 1. NEW STREET SECTIONS ARE TO BE CLEARED OF ALL SURFACE VEGETATION AND OTHER MISCELLANEOUS STRUCTURES OR MATERIALS. GRUB IMPROVEMENT AREAS TO REMOVE ALL BURIED VEGETATIVE MATTER AND DEBRIS TO A DEPTH 8" BELOW SUBGRADE. PROPERLY DISPOSE OF ALL WASTE MATERIAL.
- 2. STREET SUBGRADE SHALL CONFORM TO DIVISION 501 OF THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. AREAS TO RECEIVE FILL ARE TO BE INSPECTED BY CITY OF WEST LINN PERSONNEL PRIOR TO PLACEMENT OF THE FILL. THE CONTRACTOR SHALL HAVE FILL AREAS TESTED FOR COMPACTION BY A CERTIFIED TESTING LAB IN ACCORDANCE WITH W.L.S.C.S. DIVISION 501.03.08. SUCH TESTING WILL BE AT THE CONTRACTOR'S EXPENSE.
- 3. AGGREGATE BASE ROCK SHALL CONFORM TO THE REQUIREMENTS OF W.L.S.C.S. DIVISION 205. BASE COURSE SHALL BE 1-1/2" -0 CRUSHED ROCK AND LEVELING COURSE SHALL BE 3/4" -0. CITY OF WEST LINN REQUIRES A PROOF ROLL WITH A LOADED 10 YARD DUMP TRUCK OF THE SUBGRADE PRIOR TO PLACEMENT OF THE ROCK AND AGAIN AFTER PLACEMENT OF THE BASE ROCK AND PRIOR TO PAVING. ALL UNDERGROUND UTILITIES INCLUDING LATERALS, SERVICES, AND POWER OR GAS CONDUITS WILL BE IN PLACE BEFORE SUBGRADE PROOF ROLL WILL TAKE PLACE.
- 4. ASPHALT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF W.L.S.C.S. DIVISION 205. 2" BASE LIFT SHALL BE CLASS "B" A.C. AND 2" FINAL LIFT SHALL BE CLASS "C" A.C. MEETING THE SPECIFICATIONS OF W.L.S.C.S. DIVISION 505. THE TOP LIFT OF ASPHALT CONCRETE SHALL NOT BE PLACED PRIOR TO RECEIVING PERMISSION FROM THE CITY OF WEST LINN ENGINEERING DEPARTMENT.
- 5. CONSTRUCT CURB AND GUTTER USING 3300 PSI CONCRETE MEETING THE SPECIFICATIONS OF W.L.S.C.S. DIVISION 205 (AFTER 28 DAYS) WITH MAXIMUM 1-1/2" AGGREGATE SIZE. CONTRACTION JOINTS AT 15' MAXIMUM ON CENTERS. THREE INCH WEEPHOLES ARE TO BE INSTALLED ON ALL LOTS UPHILL OR EVEN WITH THE STREET. GENERALLY, WEEPHOLES SHALL BE LOCATED AT THE CENTER AND LOWEST EDGE OF CURB FOR EACH LOT. CONTRACTOR SHALL STAMP LOCATION OF SEWER AND WATER CROSSINGS WITH AN (S) OR A (W). A PROOF ROLL OF THE CURBLINES IS REQUIRED PRIOR TO POURING CURBS.
- 6. ALL MATERIALS, INSTALLATION, TESTS, AND INSPECTIONS TO BE IN STRICT ACCORDANCE WITH CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS.
- 7. A STREET CONSTRUCTION ENCROACHMENT PERMIT OR SIMILAR PERMIT MAY BE REQUIRED FROM THE CITY OF WEST LINN. CONSTRUCTION PERMIT FEES OR OTHER SIMILAR FEES OR BONDING REQUIRED OF THE CONTRACTOR WILL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN.

**GENERAL NOTES**

- 1. ALL REFERENCES TO CITY DESIGN STANDARDS REFER TO THE CURRENT STANDARDS.
- 2. THE DESIGN ENGINEER WILL BE RESPONSIBLE FOR INSPECTION OF THE PROPOSED IMPROVEMENTS WITH OVERSIGHT FROM THE CITY'S PUBLIC WORKS AND ENGINEERING STAFF.
- 3. A WORK SCHEDULE WILL BE REQUIRED FROM THE CONTRACTOR SO THAT THE ENGINEER CAN HAVE AN INSPECTOR ONSITE AT THE APPROPRIATE TIMES. IF THE WORK SCHEDULE IS REVISED THE CONTRACTOR IS TO NOTIFY THE ENGINEER AT LEAST 24 HOURS NOTICE OF ANY TESTING REQUIRING THE PRESENCE OF THE ENGINEER AND/OR CITY STAFF.
- 4. THE CONTRACTOR IS TO RECEIVE THE APPROVAL OF THE ENGINEER AND THE CITY OF ANY PROPOSED CHANGES TO THE PLANS OR STANDARD REQUIREMENTS.
- 5. A BUILDING DEPARTMENT PLUMBING PERMIT IS REQUIRED FOR UTILITIES BEYOND THE FIRST CLEANOUT OR METER ON PRIVATE PROPERTY.
- 6. A PUBLIC IMPROVEMENT GUARANTEE AGREEMENT OR A PUBLIC WORKS PERMIT, A PRE-CONSTRUCTION MEETING WITH THE CITY OF WEST LINN, AND INSTALLATION OF EROSION CONTROL MEASURES ARE REQUIRED PRIOR TO BEGINNING CONSTRUCTION.
- 7. PRIOR TO SITE CLEARING, 8' TALL CHAIN-LINK FENCING SHALL BE PLACED AT TREE EASEMENT BOUNDARIES PRIOR TO SITE GRADING. THE CITY ARBORIST SHALL INSPECT & APPROVE ALL ONSITE TREE PROTECTION MEASURES PRIOR TO THE START OF THE SITE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CITY ARBORIST AND ARRANGE FOR THIS APPROVAL TO TAKE PLACE. NO PERMITS WILL BE ISSUED FROM ENGINEERING, PLANNING, OR BUILDING DEPARTMENTS WITHOUT TREE PROTECTION APPROVAL FROM THE CITY ARBORIST. ALL TREE PROTECTION MEASURES SHALL REMAIN IN PLACE AND FULLY FUNCTIONAL FOR THE ENTIRE TIME THAT SITE WORK AND CONSTRUCTION IS TAKING PLACE.
- 8. A CITY REPRESENTATIVE AND A REPRESENTATIVE OF THE ENGINEER MUST BE PRESENT AT ALL TESTING AND THE CITY SHALL BE FURNISHED A COPY OF ALL TEST RESULTS. IF ENGINEER OR CITY DO NOT WITNESS TESTING, CONTRACTOR WILL BE REQUIRED TO RE-TEST.
- 9. ALL FEES FOR STREET TREES SHALL BE PAID TO THE CITY OF WEST LINN PARKS AND RECREATION DEPARTMENT.
- 10. NO BUILDING PERMITS WILL BE GIVEN UNTIL THE IMPROVEMENTS HAVE BEEN ACCEPTED BY THE CITY AS SUBSTANTIALLY COMPLETE.
- 11. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES AND POINTS OF CONNECTION PRIOR TO ORDERING MANHOLES. IF DISCREPANCIES ARE FOUND, CONTRACTOR SHALL NOTIFY THE ENGINEER.

**GENERAL GRADING AND EROSION CONTROL (PART 1)**

- 1. APPROVAL OF THIS EROSION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
- 2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, AND VEGETATION OF LANDSCAPING IS ESTABLISHED.
- 3. THE ESC FACILITIES ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
- 4. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
- 5. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- 6. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH, OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
- 7. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- 8. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

**GENERAL GRADING AND EROSION CONTROL (PART 2)**

- 1. CLEAN WASTE MATERIAL EXCAVATED FROM ROAD CUT OR TRENCHING AREAS NOT USED IN STREET FILL AREAS MAY BE SPREAD EVENLY ACROSS LOT AREAS IN DEPTHS NOT TO EXCEED SIX INCHES, EXCEPT WHERE NOTED OTHERWISE ON THE PLANS.
- 2. DURING CONSTRUCTION, STRAW BALES, CUTOFF TRENCHES OR SOME OTHER METHOD OF RUNOFF CONTROL SHALL BE USED TO PREVENT EROSION AND/OR SILTATION FROM CROSSING OUTSIDE THE WORK AREA BOUNDARIES.
- 3. LARGE ORGANIC MATERIAL, MISCELLANEOUS PIPE OR CONSTRUCTION MATERIAL MUST BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
- 4. NO FILLING OR CUTTING SHALL BE DONE OUTSIDE OF APPROVED GRADING AREAS.
- 5. ALL EROSION CONTROL FACILITIES SHALL MEET THE REQUIREMENTS OF THE CLACKAMAS COUNTY DEPARTMENT OF UTILITIES, EROSION PREVENTION AND SEDIMENT CONTROL PLANS TECHNICAL GUIDANCE HANDBOOK (ECTGH), REVISED AUGUST, 1994, CHAPTER 31 OF THE COMMUNITY DEVELOPMENT CODE, AND THE OREGON ADMINISTRATIVE RULES.
- 6. SEE 1200 CN PERMIT FOR EROSION CONTROL MEASURES.

**EROSION CONTROL SUMMARY**

- 1. THE INTENT OF THE REQUIREMENT IS TO PREVENT SILTATION FROM REACHING STORM DRAIN SYSTEMS AND DRAINAGE WAYS.
- 2. THE MINIMUM MEASURES NEED TO BE MADE ON ALL PROJECTS.
- A. A GRAVEL PAD, AT LEAST 50 FEET LONG, IS REQUIRED WHERE VEHICLES WILL LEAVE THE CONSTRUCTION SITE.
- B. A SEDIMENT BARRIER IS TO BE CONSTRUCTED OF STRAW BALES OR A SEDIMENT FENCE WHERE NOTED IN THE DETAILS OR WHERE SEDIMENT WILL CROSS OUTSIDE THE WORK AREA.
- C. WHERE EXCAVATED MATERIAL IS PLACED ON HARD SURFACES (SUCH AS STREETS) MATERIAL MUST BE BROOMED OR SCRAPPED CLEAN AS SOON AS POSSIBLE.
- D. RE-SEED OR COVER DISTURBED AREAS AS SOON AS IS POSSIBLE AND PRACTICAL, BUT NO LATER THAN THE COMPLETION OF CONSTRUCTION ON THE OTHER PHASES OF WORK. EROSION CONTROL MEASURES SUCH AS HAY BALES AND SILT FENCES MUST REMAIN IN PLACE UNTIL SEEDING AREAS SHOW GROWTH SUBSTANTIAL TO PREVENT EROSION.

**SEDIMENT FENCE**

- 1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST.
- 2. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS, WHERE FEASIBLE. THEN FENCE POSTS SHALL BE SPACED A MAXIMUM OF SIX FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 18 INCHES.
- 3. A TRENCH SHALL BE EXCAVATED, ROUGHLY 6 INCHES WIDE BY 6 INCHES DEEP, UPSLOPE AND ADJACENT TO THE WOOD POST TO ALLOW THE FILTER FABRIC TO BE BURIED. BURY THE BOTTOM OF THE FABRIC 6" VERTICALLY BELOW FINISHED GRADE. ALL AREAS OF FILTER FABRIC TRENCH SHALL BE COMPACTED.
- 4. THE FILTER FABRIC SHALL BE INSTALLED WITH STITCHED LOOPS OVER FENCE POSTS. THE FENCE POST SHALL BE CONSTRUCTED OF 2" X 2" FIR, PINE, OR STEEL. THE FENCE POST MUST BE A MINIMUM OF 48" LONG. THE FILTER FABRIC SHALL NOT BE STAPLED OR ATTACHED TO EXISTING TREES.
- 5. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
- 6. SEDIMENT FENCES SHALL BE INSPECTED BY APPLICANT/CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

**SEEDING/MULCHING**

- 1. ALL AREAS DISTURBED DURING CONSTRUCTION TO BE GRADED TO DRAIN AND COMPACTED TO A MINIMUM OF 90% OF AASHTO T-99 IMMEDIATELY AFTER INSTALLATION OF UTILITIES OR GRADING.
- 2. RECOMMENDED SEED MIXTURE: 80% ELKA DWARF PERENNIAL RYEGRASS AND 20% CREEPING RED FESCUE, BY WEIGHT. APPLICATION RATE SHALL BE 100 POUNDS MINIMUM PER ACRE.
- 3. 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.
- 4. SEED AND MULCH AT A RATE OF 2000 LBS/AC WITH HEAVY BONDING AGENT OR NETTING AND ANCHORS. MULCH SHALL BE A WOOD CELLULOSE FIBER OR OTHER MATERIAL SUITABLE FOR HYDROMULCHING.
- 5. TEMPORARY OR PERMANENT HYDROSEEDING ARE ACCEPTABLE SEEDING AND MULCHING MUST BE PROVIDED WHENEVER PERENNIAL COVER CANNOT BE ESTABLISHED ON SITES WHICH WILL BE EXPOSED FOR 60 DAYS OR MORE.

RECORD DRAWING  
03/19/2015

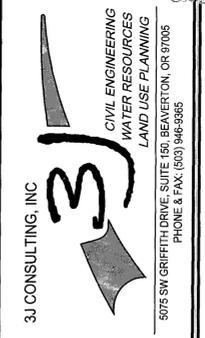
This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a combination of:  
• Contractor supplied field notes  
• Field measurements  
• The engineer  
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

GENERAL NOTES

SUNBREAK  
SUBDIVISION  
LF 3, LLC  
WEST LINN, OR



Digital Signature  
03/23/2015



3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 281E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

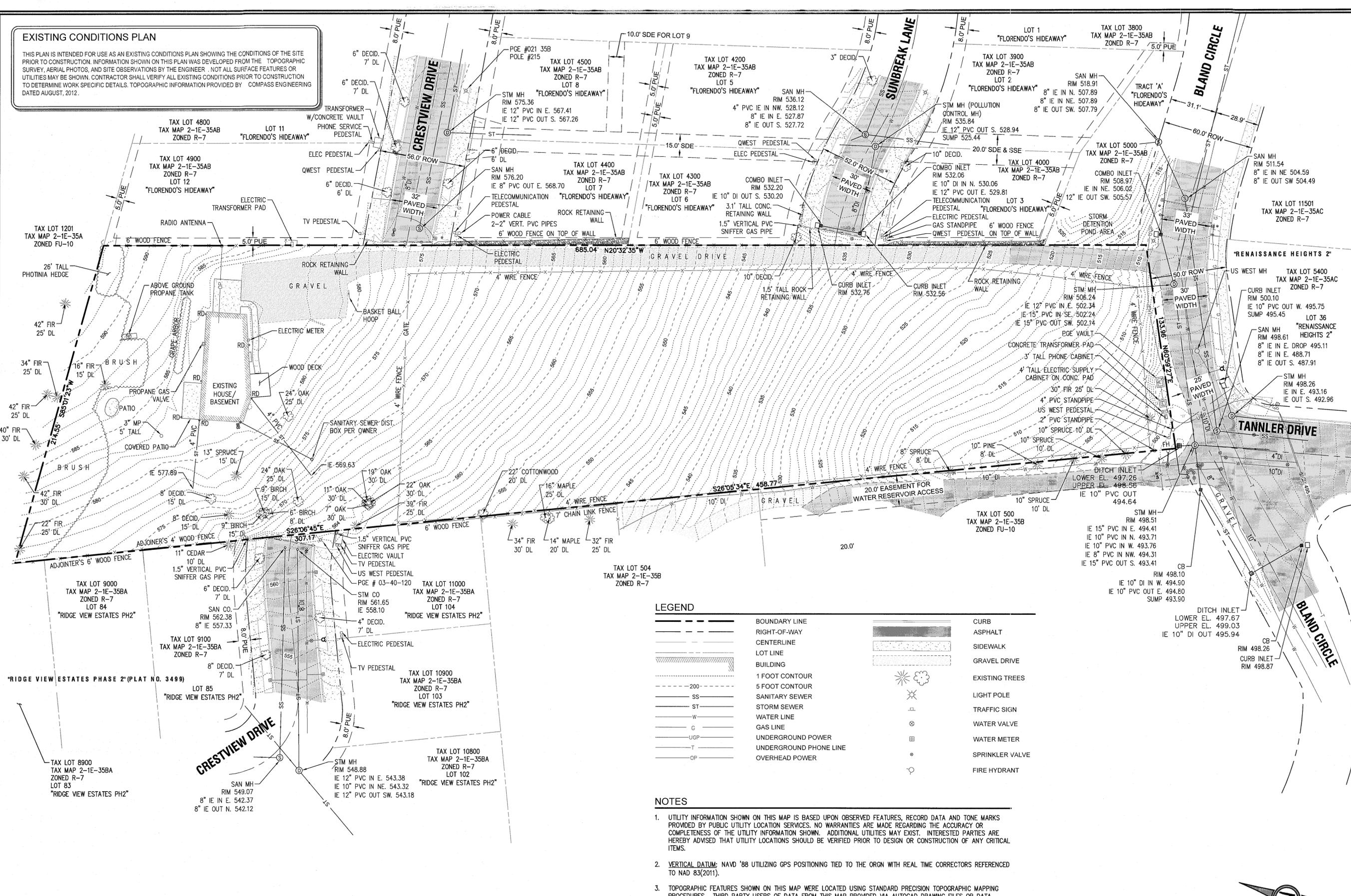
SHEET TITLE  
GENERAL NOTES

SHEET NUMBER

C002

**EXISTING CONDITIONS PLAN**

THIS PLAN IS INTENDED FOR USE AS AN EXISTING CONDITIONS PLAN SHOWING THE CONDITIONS OF THE SITE PRIOR TO CONSTRUCTION. INFORMATION SHOWN ON THIS PLAN WAS DEVELOPED FROM THE TOPOGRAPHIC SURVEY, AERIAL PHOTOS, AND SITE OBSERVATIONS BY THE ENGINEER. NOT ALL SURFACE FEATURES OR UTILITIES MAY BE SHOWN. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION TO DETERMINE WORK SPECIFIC DETAILS. TOPOGRAPHIC INFORMATION PROVIDED BY COMPASS ENGINEERING DATED AUGUST, 2012.



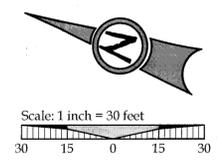
A PORTION OF LOT 28, "BLAND ACRES"  
 TAX LOT 1300, LOCATED IN THE NW & NE  
 1/4 OF SECTION 35, T.2S., R.1E., W.M.  
 CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

**LEGEND**

	BOUNDARY LINE		ASPHALT
	RIGHT-OF-WAY		SIDEWALK
	CENTERLINE		GRAVEL DRIVE
	LOT LINE		EXISTING TREES
	BUILDING		LIGHT POLE
	1 FOOT CONTOUR		TRAFFIC SIGN
	5 FOOT CONTOUR		WATER VALVE
	SANITARY SEWER		WATER METER
	STORM SEWER		SPRINKLER VALVE
	WATER LINE		FIRE HYDRANT
	GAS LINE		
	UNDERGROUND POWER		
	UNDERGROUND PHONE LINE		
	OVERHEAD POWER		

**NOTES**

- UTILITY INFORMATION SHOWN ON THIS MAP IS BASED UPON OBSERVED FEATURES, RECORD DATA AND TONE MARKS PROVIDED BY PUBLIC UTILITY LOCATION SERVICES. NO WARRANTIES ARE MADE REGARDING THE ACCURACY OR COMPLETENESS OF THE UTILITY INFORMATION SHOWN. ADDITIONAL UTILITIES MAY EXIST. INTERESTED PARTIES ARE HEREBY ADVISED THAT UTILITY LOCATIONS SHOULD BE VERIFIED PRIOR TO DESIGN OR CONSTRUCTION OF ANY CRITICAL ITEMS.
- VERTICAL DATUM:** NAVD '88 UTILIZING GPS POSITIONING TIED TO THE ORGN WITH REAL TIME CORRECTORS REFERENCED TO NAD 83(2011).
- TOPOGRAPHIC FEATURES SHOWN ON THIS MAP WERE LOCATED USING STANDARD PRECISION TOPOGRAPHIC MAPPING PROCEDURES. THIRD PARTY USERS OF DATA FROM THIS MAP PROVIDED VIA AUTOCAD DRAWING FILES OR DATA EXCHANGE FILES SHOULD NOT RELY ON ANY AUTOCAD GENERATED INFORMATION WHICH IS BEYOND THE LIMITS OF PRECISION OF THIS MAP. THIRD PARTIES USING DATA FROM THIS MAP IN AN AUTOCAD FORMAT SHOULD VERIFY ANY ELEMENTS REQUIRING PRECISE LOCATIONS PRIOR TO COMMENCEMENT OF ANY CRITICAL DESIGN OR CONSTRUCTION. CONTACT COMPASS ENGINEERING FOR FURTHER INFORMATION. FURTHERMORE, COMPASS ENGINEERING WILL NOT BE RESPONSIBLE NOR HELD LIABLE FOR ANY DESIGN OR CONSTRUCTION RELATED PROBLEMS THAT ARISE OUT OF THIRD PARTY USAGE OF THIS MAP (IN AUTOCAD OR OTHER FORMAT) FOR ANY PURPOSE OTHER THAN SPECIFICALLY STATED HEREIN. THIS STATEMENT IS AN OFFICIAL PART OF THIS MAP.



**RECORD DRAWING**  
 03/19/2015  
 This drawing has been prepared to reflect constructed conditions from permit documents. The basis of this information is derived in whole or in part from a contract. The engineer is not responsible for:  
 • Contractor supplied utilities  
 • Site observations by the engineer  
 • Field measurements  
 The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**EXISTING CONDITIONS**  
**SUNBREAK**  
**SUBDIVISION**  
 LF 3, LLC  
 WEST LINN, OR

J.T. SMITH  
 companies



Digital Signature  
 03/23/2015

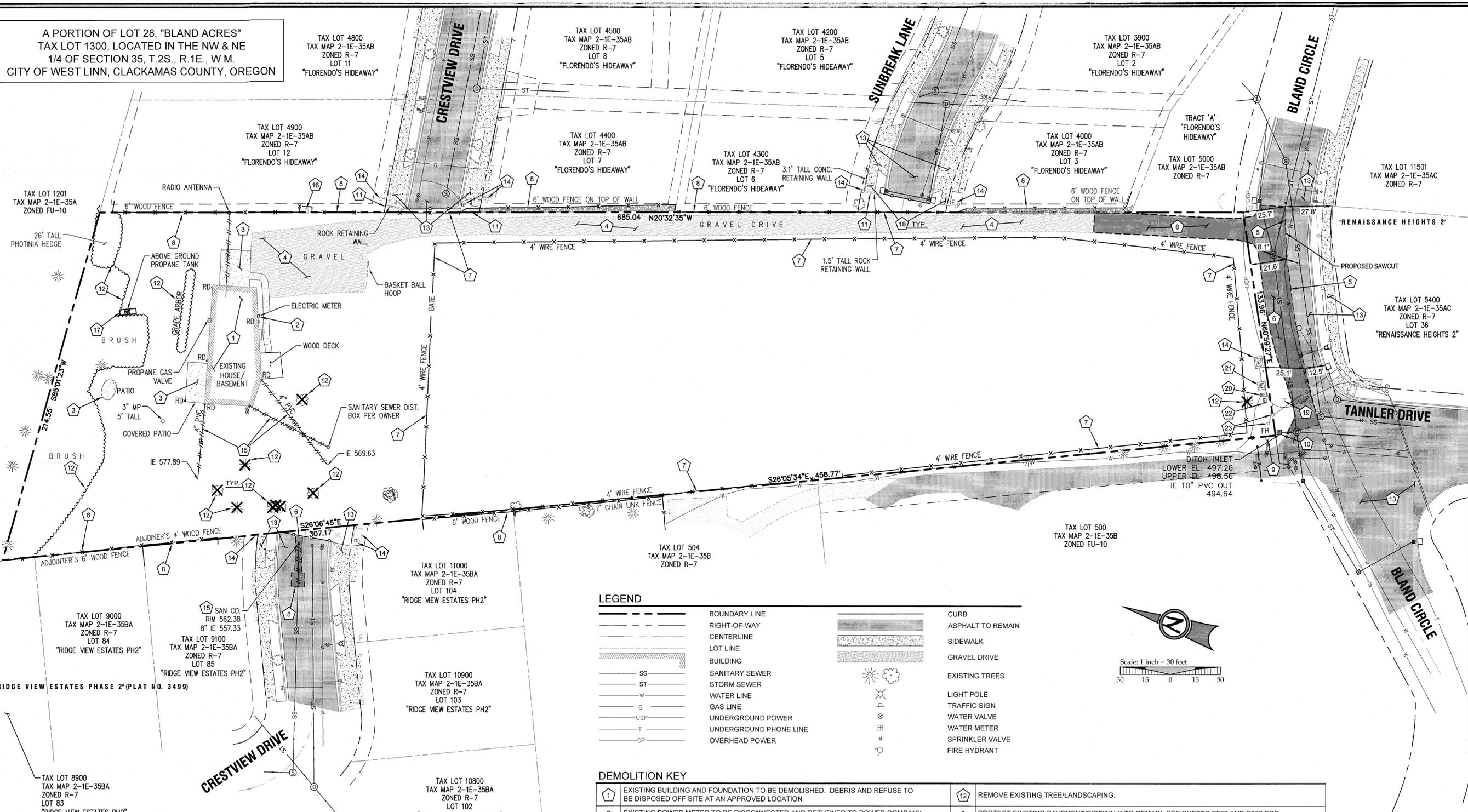
3J CONSULTING, INC  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-9385

3J JOB ID # | 13113  
 LAND USE # | SUB-13-02  
 TAX LOT # | 2S1E35A01300  
 DESIGNED BY | CLF/JTE  
 CHECKED BY | JDH

SHEET TITLE  
**EXISTING**

SHEET NUMBER  
**C100**

A PORTION OF LOT 28, "BLAND ACRES"  
TAX LOT 1300, LOCATED IN THE NW & NE  
1/4 OF SECTION 35, T.2S., R.1E., W.M.  
CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON



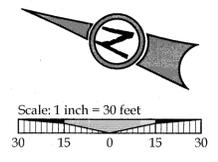
- GENERAL DEMOLITION NOTES**
- DEMOLITION NOTES ARE FOR CLARIFICATION ONLY AND ARE SHOWN FOR THE CONTRACTOR'S BENEFIT. THESE NOTES ARE NOT INTENDED TO BE COMPREHENSIVE. THE CONTRACTOR SHALL REMOVE OR RELOCATE ALL EXISTING ON-SITE IMPROVEMENTS NECESSARY TO ACCOMMODATE THE PROPOSED CONSTRUCTION.
  - ALL EXISTING PROPERTY UTILITY SERVICES TO BE TERMINATED AND CAPPED AT THE RIGHT OF WAY PRIOR TO DEMOLISHING ANY EXISTING BUILDINGS.
  - CONTRACTOR IS TO REMOVE ALL EXISTING SURFACE IMPROVEMENTS AND DEBRIS WITHIN THE LIMITS OF WORK UNLESS OTHERWISE NOTED. ALL DEBRIS FOUND ON SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE STATE CODES.
  - CONTRACTOR TO PROTECT EXISTING FEATURES WHICH ARE TO REMAIN.
  - CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURES, VALVE BOXES, VAULT LIDS AND UTILITY ACCESS STRUCTURES TO FINISH GRADE WITHIN AREAS AFFECTED BY PROPOSED CONSTRUCTION.
  - CONSTRUCTION AND DEMOLITION ACTIVITIES SHALL BE PHASED IN SUCH A MANNER AS TO ENSURE THAT PUBLIC ACCESS ROADS ARE NOT BLOCKED AND REMAIN OPERATIONAL.
  - SEE TREE PROTECTION AND REMOVAL PLAN (SHEET C1.1) FOR ALL TREE REMOVAL INFORMATION.

**LEGEND**

	BOUNDARY LINE		CURB
	RIGHT-OF-WAY		ASPHALT TO REMAIN
	CENTERLINE		SIDEWALK
	LOT LINE		GRAVEL DRIVE
	BUILDING		GRAVEL DRIVE
	SANITARY SEWER		EXISTING TREES
	STORM SEWER		LIGHT POLE
	WATER LINE		TRAFFIC SIGN
	GAS LINE		WATER VALVE
	UNDERGROUND POWER		WATER METER
	UNDERGROUND PHONE LINE		SPRINKLER VALVE
	OVERHEAD POWER		FIRE HYDRANT

**DEMOLITION KEY**

	EXISTING BUILDING AND FOUNDATION TO BE DEMOLISHED. DEBRIS AND REFUSE TO BE DISPOSED OFF SITE AT AN APPROVED LOCATION.		REMOVE EXISTING TREE/LANDSCAPING.
	EXISTING POWER METER TO BE DISCONNECTED AND RETURNED TO POWER COMPANY. CAP SERVICE LINES AND REMOVE ALL CONDUITS AND WIRING WITHIN PROPERTY.		PROTECT EXISTING PAVEMENT/SIDEWALK TO REMAIN, SEE SHEETS C202 AND C203 FOR IMPROVEMENT PLANS.
	REMOVE EXISTING CONCRETE AND BASE ROCK. DISPOSE OF RUBBLE AND REFUSE OFF SITE.		PROTECT EXISTING UTILITIES TO REMAIN.
	REMOVE EXISTING GRAVEL DRIVEWAY. DISPOSE OF RUBBLE AND REFUSE OFF SITE.		REMOVE EXISTING STORM AND/OR SEWER LINES AND STRUCTURES.
	SAWCUT EXISTING ASPHALT PAVEMENT.		REMOVE EXISTING TRANSFORMER AND ELECTRICAL LINE TO EXISTING RESIDENCE. CONTRACTOR TO COORDINATE WITH PORTLAND GENERAL ELECTRIC.
	REMOVE EXISTING ASPHALT SURFACING AND BASE ROCK. DISPOSE OF RUBBLE AND REFUSE OFF SITE.		REMOVE EXISTING PROPANE TANK AND GAS LINE. CONTRACTOR TO COORDINATE WITH NW NATURAL GAS.
	REMOVE EXISTING FENCING AND DISPOSE OF OFF SITE.		DEMOLISH EXISTING CONCRETE/SIDEWALK TO NEAREST JOINT. SAWCUT NEW JOINT IF PROPOSED IMPROVEMENTS ARE TO MATCH EXISTING. SEE SHEETS C200 AND C202 FOR IMPROVEMENT PLANS.
	PROTECT EXISTING FENCING TO REMAIN.		REMOVE AND REPLACE STOP SIGN. SEE SHEET C200 FOR IMPROVEMENT PLANS.
	REMOVE AND RELOCATE EXISTING FIRE HYDRANT, SEE SHEETS C200 AND C202 FOR IMPROVEMENT PLANS.		REMOVE AND RELOCATE EXISTING COMMUNICATIONS PEDESTAL. SEE SHEET C200 FOR IMPROVEMENT PLANS. CONTRACTOR TO COORDINATE WITH QWEST COMMUNICATIONS.
	REMOVE EXISTING DITCH INLET AND PIPING AND DISPOSE OF OFF-SITE.		PGE TO REMOVE AND RELOCATE EXISTING TRANSFORMER AND PRIMARY CABLE. CONTRACTOR TO REMOVE VAULT AND ALL ASSOCIATED APPURTENANCES.
	PROVIDE TEMPORARY SHORING AND REMOVE RETAINING WALL IN AREA OF IMPROVEMENTS.		REMOVE AND RELOCATE EXISTING STREET LIGHT CABINET. SEE SHEET C200 FOR IMPROVEMENT PLANS.
			REMOVE EXISTING COMMUNICATIONS PEDESTAL AND GAS LINE INDICATOR OUT OF PROPOSED SIDEWALK. CONTRACTOR TO COORDINATE WITH QWEST AND NW NATURAL GAS.



**RECORD DRAWING**  
03/19/2015  
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• Contractor supplied by the engineer  
• Site observations by the engineer  
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**DEMOLITION PLAN**  
**SUNBREAK SUBDIVISION**  
LF 3, LLC  
WEST LINN, OR

J.T. SMITH  
companies

REGISTERED PROFESSIONAL ENGINEER  
NOV 12, 2009  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

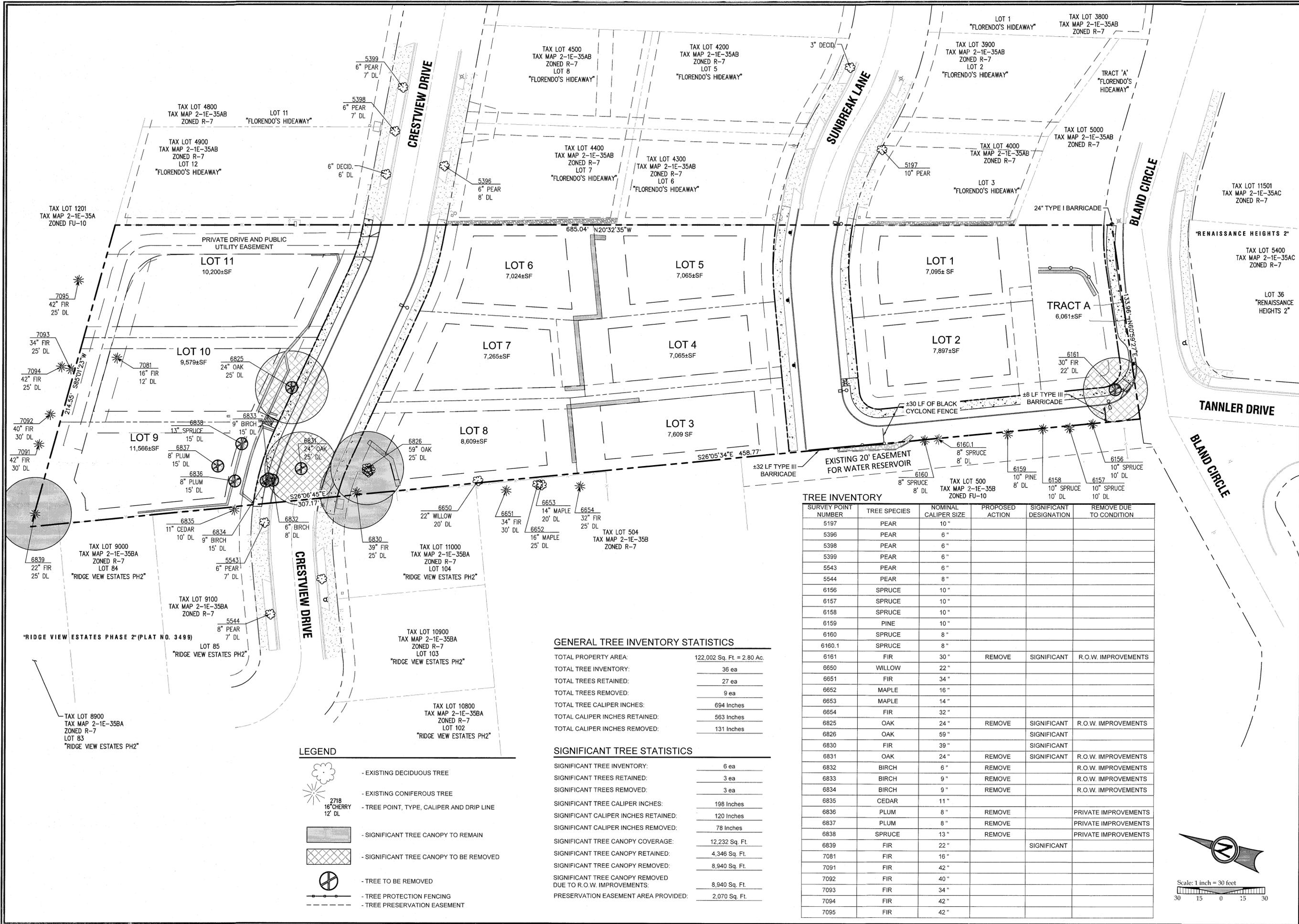
3J CONSULTING, INC  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9365

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH



Know what's below.  
Call before you dig.

SHEET TITLE  
**DEMOLITION**  
SHEET NUMBER  
**C101**



**RECORD DRAWING**  
03/19/2015

This drawing has been prepared to reflect constructed conditions. It is based on field measurements and is not intended to be used for any other purpose. The basis of this drawing is the information provided in whole or in part from a combination of the following:

- Contractor supplied records
- Site observations by the engineer
- Field measurements

The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**TREE PROTECTION AND REMOVAL PLAN**

**SUNBREAK SUBDIVISION**  
LF 3, LLC  
WEST LINN, OR



3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
**TREE PLAN**  
SHEET NUMBER  
**C102**

**TREE INVENTORY**

SURVEY POINT NUMBER	TREE SPECIES	NOMINAL CALIPER SIZE	PROPOSED ACTION	SIGNIFICANT DESIGNATION	REMOVE DUE TO CONDITION
5197	PEAR	10"			
5398	PEAR	6"			
5399	PEAR	6"			
5543	PEAR	6"			
5544	PEAR	8"			
6156	SPRUCE	10"			
6157	SPRUCE	10"			
6158	SPRUCE	10"			
6159	PINE	10"			
6160	SPRUCE	8"			
6160.1	SPRUCE	8"			
6161	FIR	30"	REMOVE	SIGNIFICANT	R.O.W. IMPROVEMENTS
6650	WILLOW	22"			
6651	FIR	34"			
6652	MAPLE	16"			
6653	MAPLE	14"			
6654	FIR	32"			
6825	OAK	24"	REMOVE	SIGNIFICANT	R.O.W. IMPROVEMENTS
6826	OAK	59"		SIGNIFICANT	
6830	FIR	39"		SIGNIFICANT	
6831	OAK	24"	REMOVE	SIGNIFICANT	R.O.W. IMPROVEMENTS
6832	BIRCH	6"	REMOVE		R.O.W. IMPROVEMENTS
6833	BIRCH	9"	REMOVE		R.O.W. IMPROVEMENTS
6834	BIRCH	9"	REMOVE		R.O.W. IMPROVEMENTS
6835	CEDAR	11"			
6836	PLUM	8"	REMOVE		PRIVATE IMPROVEMENTS
6837	PLUM	8"	REMOVE		PRIVATE IMPROVEMENTS
6838	SPRUCE	13"	REMOVE		PRIVATE IMPROVEMENTS
6839	FIR	22"		SIGNIFICANT	
7081	FIR	16"			
7091	FIR	42"			
7092	FIR	40"			
7093	FIR	34"			
7094	FIR	42"			
7095	FIR	42"			

**GENERAL TREE INVENTORY STATISTICS**

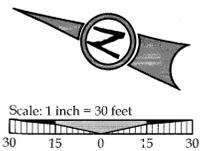
TOTAL PROPERTY AREA:	122,002 Sq. Ft. = 2.80 Ac.
TOTAL TREE INVENTORY:	36 ea
TOTAL TREES RETAINED:	27 ea
TOTAL TREES REMOVED:	9 ea
TOTAL TREE CALIPER INCHES:	694 Inches
TOTAL CALIPER INCHES RETAINED:	563 Inches
TOTAL CALIPER INCHES REMOVED:	131 Inches

**SIGNIFICANT TREE STATISTICS**

SIGNIFICANT TREE INVENTORY:	6 ea
SIGNIFICANT TREES RETAINED:	3 ea
SIGNIFICANT TREES REMOVED:	3 ea
SIGNIFICANT TREE CALIPER INCHES:	198 Inches
SIGNIFICANT CALIPER INCHES RETAINED:	120 Inches
SIGNIFICANT CALIPER INCHES REMOVED:	78 Inches
SIGNIFICANT TREE CANOPY COVERAGE:	12,232 Sq. Ft.
SIGNIFICANT TREE CANOPY RETAINED:	4,346 Sq. Ft.
SIGNIFICANT TREE CANOPY REMOVED:	8,940 Sq. Ft.
SIGNIFICANT TREE CANOPY REMOVED DUE TO R.O.W. IMPROVEMENTS:	8,940 Sq. Ft.
PRESERVATION EASEMENT AREA PROVIDED:	2,070 Sq. Ft.

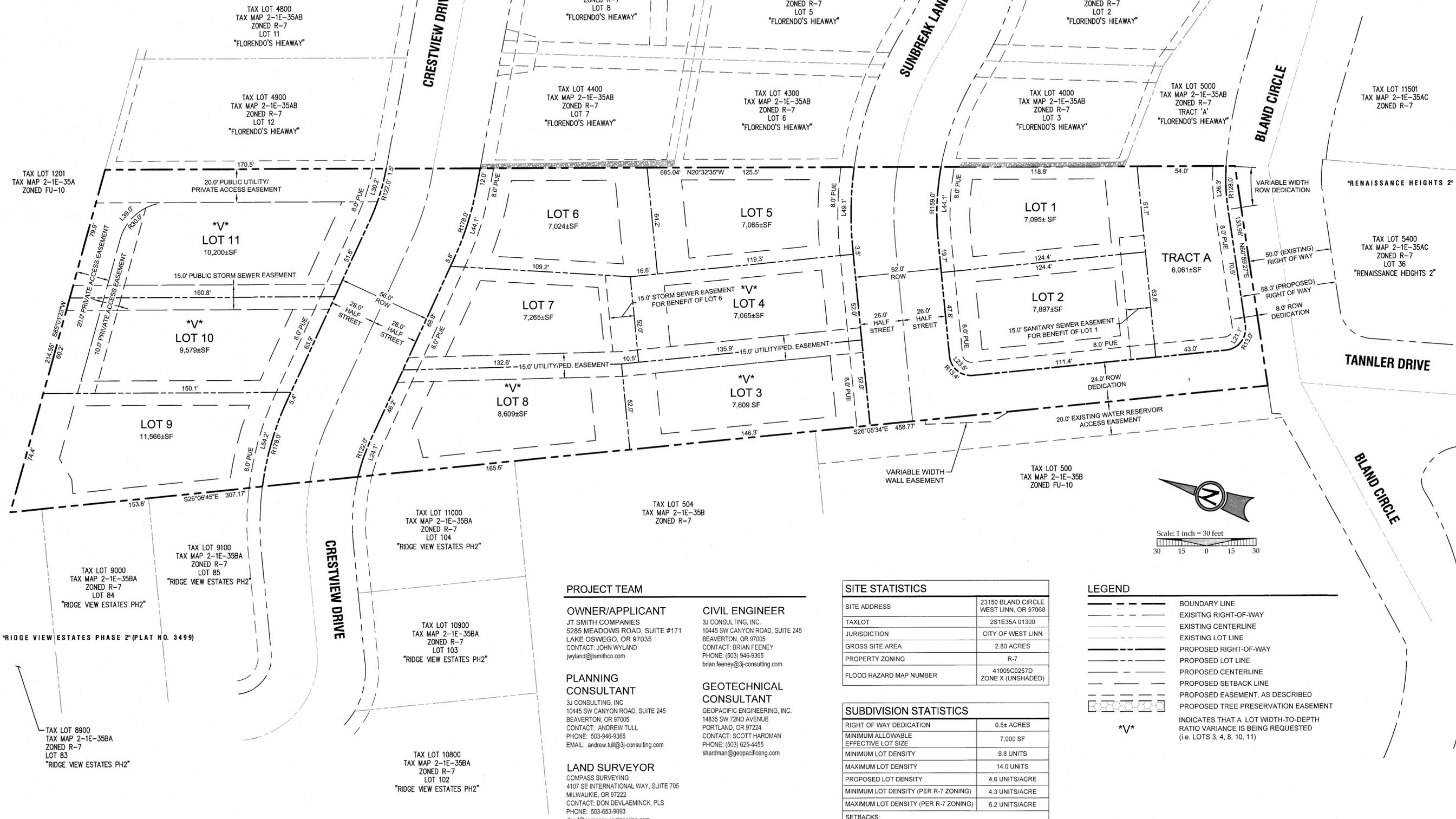
**LEGEND**

- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- TREE POINT, TYPE, CALIPER AND DRIP LINE
- SIGNIFICANT TREE CANOPY TO REMAIN
- SIGNIFICANT TREE CANOPY TO BE REMOVED
- TREE TO BE REMOVED
- TREE PROTECTION FENCING
- TREE PRESERVATION EASEMENT



1:13113-JTS - Sunbreak Subdivision CAD/AB/13113-C102-TREE PROTECTION, REMOVAL.dwg, 3/20/2015 11:21:26 AM

A PORTION OF LOT 28, "BLAND ACRES"  
 TAX LOT 1300, LOCATED IN THE NW & NE  
 1/4 OF SECTION 35, T.2S., R.1E., W.M.  
 CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON



TAX LOT 1201  
 TAX MAP 2-1E-35A  
 ZONED FU-10

TAX LOT 4800  
 TAX MAP 2-1E-35AB  
 ZONED R-7  
 LOT 11  
 "FLORENDO'S HIEAWAY"

TAX LOT 4900  
 TAX MAP 2-1E-35AB  
 ZONED R-7  
 LOT 12  
 "FLORENDO'S HIEAWAY"

TAX LOT 4500  
 TAX MAP 2-1E-35AB  
 ZONED R-7  
 LOT 8  
 "FLORENDO'S HIEAWAY"

TAX LOT 4200  
 TAX MAP 2-1E-35AB  
 ZONED R-7  
 LOT 5  
 "FLORENDO'S HIEAWAY"

TAX LOT 3900  
 TAX MAP 2-1E-35AB  
 ZONED R-7  
 LOT 2  
 "FLORENDO'S HIEAWAY"

TAX LOT 4400  
 TAX MAP 2-1E-35AB  
 ZONED R-7  
 LOT 7  
 "FLORENDO'S HIEAWAY"

TAX LOT 4300  
 TAX MAP 2-1E-35AB  
 ZONED R-7  
 LOT 6  
 "FLORENDO'S HIEAWAY"

TAX LOT 4000  
 TAX MAP 2-1E-35AB  
 ZONED R-7  
 LOT 3  
 "FLORENDO'S HIEAWAY"

TAX LOT 5000  
 TAX MAP 2-1E-35AB  
 ZONED R-7  
 TRACT 'A'  
 "FLORENDO'S HIEAWAY"

TAX LOT 11501  
 TAX MAP 2-1E-35AC  
 ZONED R-7

TAX LOT 5400  
 TAX MAP 2-1E-35AC  
 ZONED R-7  
 LOT 36  
 "RENAISSANCE HEIGHTS 2"

TAX LOT 500  
 TAX MAP 2-1E-35B  
 ZONED FU-10

TAX LOT 11000  
 TAX MAP 2-1E-35BA  
 ZONED R-7  
 LOT 104  
 "RIDGE VIEW ESTATES PH2"

TAX LOT 10900  
 TAX MAP 2-1E-35BA  
 ZONED R-7  
 LOT 103  
 "RIDGE VIEW ESTATES PH2"

TAX LOT 10800  
 TAX MAP 2-1E-35BA  
 ZONED R-7  
 LOT 102  
 "RIDGE VIEW ESTATES PH2"

TAX LOT 9100  
 TAX MAP 2-1E-35BA  
 ZONED R-7  
 LOT 85  
 "RIDGE VIEW ESTATES PH2"

TAX LOT 9000  
 TAX MAP 2-1E-35BA  
 ZONED R-7  
 LOT 84  
 "RIDGE VIEW ESTATES PH2"

TAX LOT 8900  
 TAX MAP 2-1E-35BA  
 ZONED R-7  
 LOT 83  
 "RIDGE VIEW ESTATES PH2"

**PROJECT TEAM**

**OWNER/APPLICANT**  
 JT SMITH COMPANIES  
 5285 MEADOWS ROAD, SUITE #171  
 LAKE OSWEGO, OR 97035  
 CONTACT: JOHN WYLAND  
 jwyland@jtsmithco.com

**CIVIL ENGINEER**  
 3J CONSULTING, INC.  
 10445 SW CANYON ROAD, SUITE 245  
 BEAVERTON, OR 97005  
 CONTACT: BRIAN FEENEY  
 PHONE: (503) 946-9365  
 brian.feeneey@3j-consulting.com

**PLANNING CONSULTANT**  
 3J CONSULTING, INC.  
 10445 SW CANYON ROAD, SUITE 245  
 BEAVERTON, OR 97005  
 CONTACT: ANDREW TULL  
 PHONE: 503-946-9365  
 EMAIL: andrew.tull@3j-consulting.com

**GEOTECHNICAL CONSULTANT**  
 GEOPACIFIC ENGINEERING, INC.  
 14835 SW 72ND AVENUE  
 PORTLAND, OR 97224  
 CONTACT: SCOTT HARDMAN  
 PHONE: (503) 625-4455  
 shardman@geopacificeng.com

**LAND SURVEYOR**  
 COMPASS SURVEYING  
 4107 SE INTERNATIONAL WAY, SUITE 705  
 MILWAUKIE, OR 97222  
 CONTACT: DON DEVLAE MINCK, PLS  
 PHONE: 503-653-9093  
 dond@compass-engineering.com

**SITE STATISTICS**

SITE ADDRESS	23150 BLAND CIRCLE WEST LINN, OR 97068
TAXLOT	2S1E35A 01300
JURISDICTION	CITY OF WEST LINN
GROSS SITE AREA	2.80 ACRES
PROPERTY ZONING	R-7
FLOOD HAZARD MAP NUMBER	41005C0257D ZONE X (UNSHADED)

**SUBDIVISION STATISTICS**

RIGHT OF WAY DEDICATION	0.5± ACRES
MINIMUM ALLOWABLE EFFECTIVE LOT SIZE	7,000 SF
MINIMUM LOT DENSITY	9.8 UNITS
MAXIMUM LOT DENSITY	14.0 UNITS
PROPOSED LOT DENSITY	4.6 UNITS/ACRE
MINIMUM LOT DENSITY (PER R-7 ZONING)	4.3 UNITS/ACRE
MAXIMUM LOT DENSITY (PER R-7 ZONING)	6.2 UNITS/ACRE
<b>SETBACKS:</b>	
FRONT	20 FEET
SIDE	7.5 FEET
REAR	20 FEET
STREET SIDE	15 FEET
MAX. HEIGHT	35 FEET

**LEGEND**

- BOUNDARY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE
- EXISTING LOT LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED LOT LINE
- PROPOSED CENTERLINE
- PROPOSED SETBACK LINE
- PROPOSED EASEMENT, AS DESCRIBED
- PROPOSED TREE PRESERVATION EASEMENT

\*V\* INDICATES THAT A LOT WIDTH-TO-DEPTH RATIO VARIANCE IS BEING REQUESTED (i.e. LOTS 3, 4, 8, 10, 11)

**RECORD DRAWING**  
 03/19/2015

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- Site observations by the engineer
- Field measurements

The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**TENTATIVE SUBDIVISION PLAT**

**SUNBREAK SUBDIVISION**

LF 3, LLC  
 WEST LINN, OR

**J.T. SMITH companies**

REGISTERED PROFESSIONAL  
 CIVIL ENGINEER  
 2822PE  
 OREGON  
 JOHN D. HOWORTH  
 EXPIRES: 06/30/15

Digital Signature  
 03/23/2015

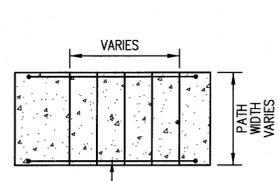
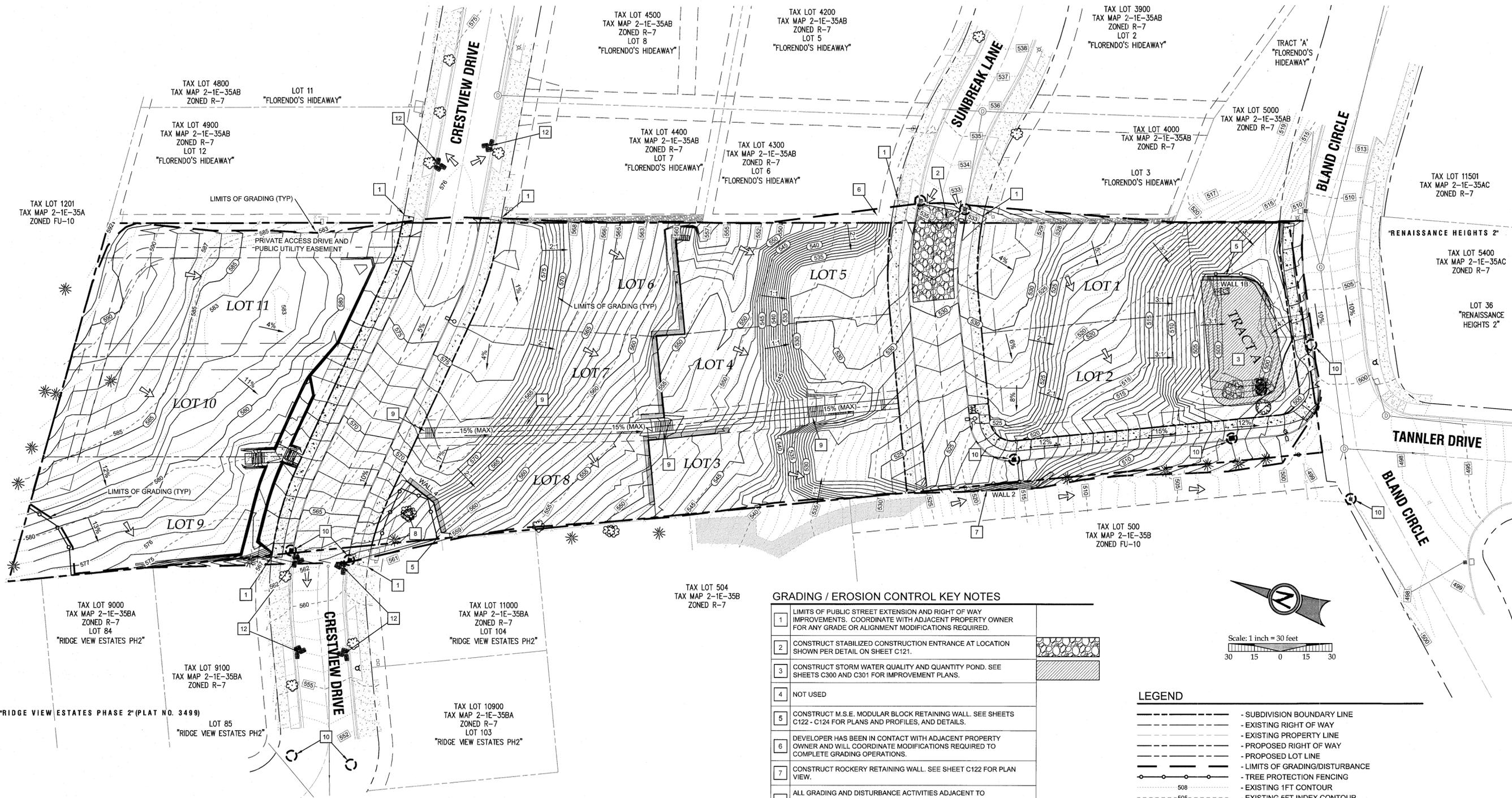
**3J CONSULTING, INC**

CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING

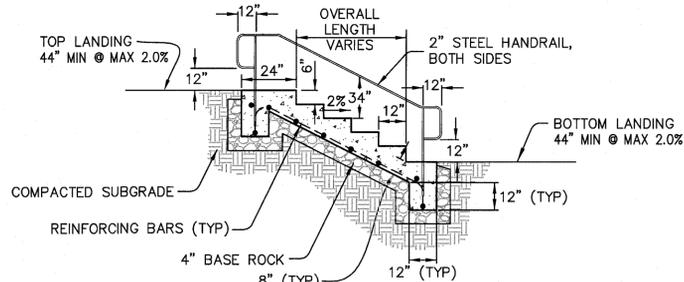
5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-9365

3J JOB ID # | 13113  
 LAND USE # | SUB-13-02  
 TAX LOT # | 2S1E35A01300  
 DESIGNED BY | CLF/JTE  
 CHECKED BY | JDH

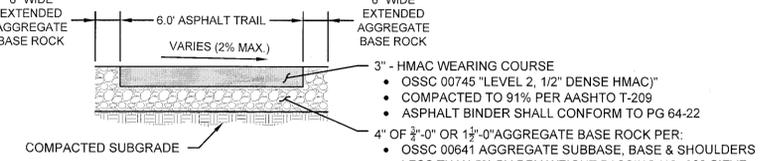
SHEET TITLE  
**SUBDIVISION PLAT**  
 SHEET NUMBER  
**C110**



**6" CONCRETE STAIR DETAIL**  
SCALE: NTS



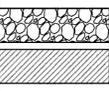
**6" CONCRETE STAIR DETAIL**  
SCALE: NTS



**TYPICAL CONCRETE PATH SECTION**  
SCALE: NTS

**GRADING / EROSION CONTROL KEY NOTES**

- 1 LIMITS OF PUBLIC STREET EXTENSION AND RIGHT OF WAY IMPROVEMENTS. COORDINATE WITH ADJACENT PROPERTY OWNER FOR ANY GRADE OR ALIGNMENT MODIFICATIONS REQUIRED.
- 2 CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION SHOWN PER DETAIL ON SHEET C121.
- 3 CONSTRUCT STORM WATER QUALITY AND QUANTITY POND. SEE SHEETS C300 AND C301 FOR IMPROVEMENT PLANS.
- 4 NOT USED
- 5 CONSTRUCT M.S.E. MODULAR BLOCK RETAINING WALL. SEE SHEETS C122 - C124 FOR PLANS AND PROFILES, AND DETAILS.
- 6 DEVELOPER HAS BEEN IN CONTACT WITH ADJACENT PROPERTY OWNER AND WILL COORDINATE MODIFICATIONS REQUIRED TO COMPLETE GRADING OPERATIONS.
- 7 CONSTRUCT ROCKERY RETAINING WALL. SEE SHEET C122 FOR PLAN VIEW.
- 8 ALL GRADING AND DISTURBANCE ACTIVITIES ADJACENT TO SIGNIFICANT TREES SHALL BE COMPLETED UNDER SUPERVISION AND DIRECTION BY THE PROJECT ARBORIST AND THE CITY OF WEST LINN.
- 9 CONSTRUCT 6" WIDE ASPHALT PATHWAY PER "TYPICAL ASPHALT PATH SECTION" DETAIL THIS SHEET. IN AREAS OF UNAVOIDABLE TOPOGRAPHY, 15% MAX GRADES SHALL BE ACCOMPANIED BY SHORT STAIR SECTIONS EVERY 450 FEET PER "6" CONCRETE STAIR DETAIL" THIS SHEET.
- 10 INSTALL INLET PROTECT PER DETAILS ON SHEET C121.
- 11 NOT USED
- 12 INSTALL BIO BAG CHECK DAM FOR SEDIMENT CONTROL WITHIN RIGHT OF WAY AT 50' O.C. PER DETAIL ON SHEET C121.



**LEGEND**

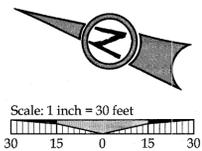
- - - - - SUBDIVISION BOUNDARY LINE
- - - - - EXISTING RIGHT OF WAY
- - - - - EXISTING PROPERTY LINE
- - - - - PROPOSED RIGHT OF WAY
- - - - - PROPOSED LOT LINE
- - - - - LIMITS OF GRADING/DISTURBANCE
- - - - - TREE PROTECTION FENCING
- - - - - EXISTING 1FT CONTOUR
- - - - - EXISTING 5FT INDEX CONTOUR
- - - - - PROPOSED 1FT CONTOUR
- - - - - PROPOSED 5FT INDEX CONTOUR
- - - - - EROSION CONTROL: SILT FENCING (BLACK)
- - - - - EROSION CONTROL: FESCUE STRAW WATTLE
- - - - - EROSION CONTROL: BIO BAG CHECK DAM
- - - - - EROSION CONTROL: INLET PROTECTION
- - - - - PROPOSED RETAINING WALL

**SITE GRADING INFORMATION**

CUT	7,591 CY
FILL	2,843 CY
STRIPPINGS*	1,150 CY
(* ASSUMED REPLACEMENT / STOCKPILE ON SITE OUTSIDE BUILDING ENVELOPE)	
MAXIMUM CUT DEPTH	17.3 FT
MAXIMUM FILL DEPTH	10.7 FT
MAXIMUM PROPOSED SLOPE	2:1 (H:V)
TOTAL AREA OF DISTURBANCE	1.66 ACRES

**GRADING GENERAL NOTES:**

1. ALL GRADING ACTIVITIES SHALL CONFORM TO THE UNIFORM BUILDING CODE AND THE OREGON SPECIALTY CODE AMENDMENTS, INCLUDING APPENDIX J.



**RECORD DRAWING**  
03/19/2015  
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• Site observations by the engineer  
• Field measurements  
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the remaining improvements are in conformance with the standards of the City of West Linn.

**PHASE II GRADING AND EROSION AND SEDIMENT CONTROL PLAN AND SEDIMENT CONTROL PLAN**  
**SUNBREAK SUBDIVISION**  
LF 3, LLC  
WEST LINN, OR



3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
**PH II GRADING/ESCP**  
SHEET NUMBER

**C120**

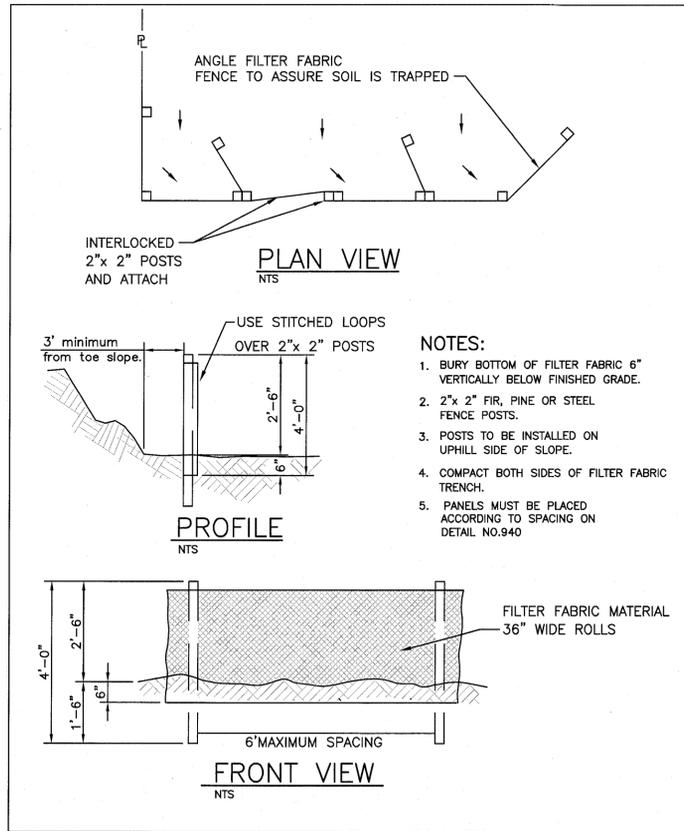


**EROSION AND SEDIMENT CONTROL PLAN NOTES**

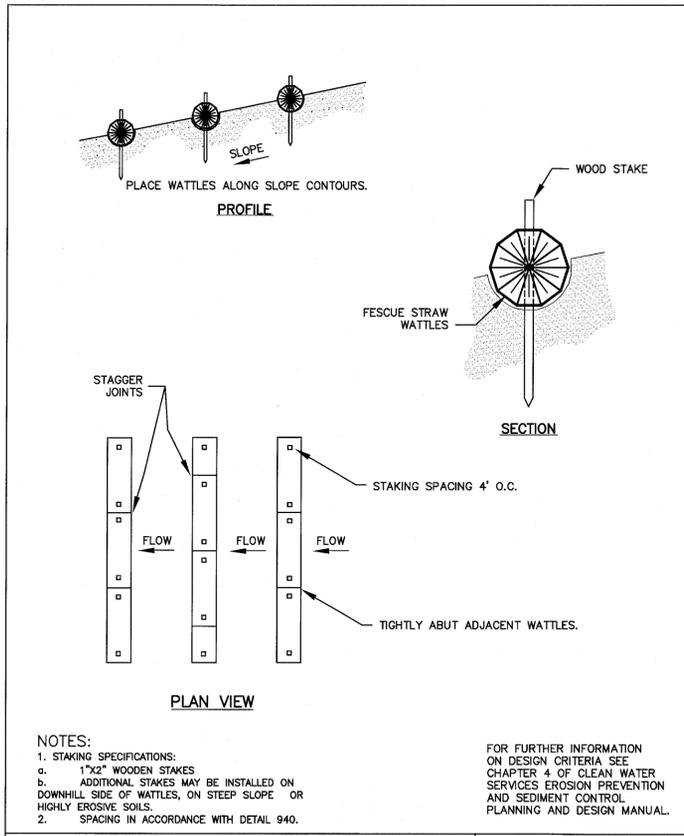
- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES.
- CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND ON SLOPES FROM OCTOBER 1 THROUGH MAY 31 EACH YEAR.
- DURING WET WEATHER PERIODS TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORKDAY IF RAINFALL IS FORECAST IN THE NEXT 24 HOURS.
- ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK MUST BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.
- PRESERVE EXISTING VEGETATION AND RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION.
- ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED.
- SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION.
- ALL ACTIVE CATCH BASINS SEDIMENT CONTROLS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- 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 BMPs. SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
- TEMPORARY STABILIZATION OR COVERING OF SOIL STOCKPILES MUST OCCUR AT THE END OF EACH WORKDAY OR OTHER BMPs MUST BE IMPLEMENTED TO PREVENT TURBID DISCHARGES TO SURFACE WATERS.
- DEVELOP AND MAINTAIN ON-SITE A WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURE.
- ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL.
- THE PERMITEE MUST PROPERLY PREVENT AND MANAGE HAZARDOUS WASTES, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION AND MEET ALL STATE AND FEDERAL REGULATIONS AND APPROVALS.
- SIGNIFICANT AMOUNTS OF SEDIMENT, WHICH LEAVES 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 RECURRENCE OF THE DISCHARGE 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.
- SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATERBODIES. DRY SWEEPING MUST BE USED TO CLEAN UP RELEASED SEDIMENTS.
- THE APPLICATION RATE OF FERTILIZERS USED TO RE-ESTABLISH VEGETATION MUST FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE TAKEN IN THE APPLICATION OF FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE.
- SEDIMENT MUST BE REMOVED FROM BEHIND A SEDIMENT FENCE WHEN IT HAS REACHED A HEIGHT OF 1/3 THE HEIGHT OF THE FENCE ABOVEGROUND AND BEFORE FENCE REMOVAL.
- 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.
- CLEANING OF TRAPPED CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT THE COMPLETION OF A PROJECT.
- REMOVAL OF TRAPPED SEDIMENT IN A SEDIMENT BASIN OR SEDIMENT TRAP OR CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT AND AT COMPLETION OF PROJECT.
- DEQ MUST APPROVE OF ANY TREATMENT SYSTEM AND OPERATIONAL PLAN THAT MAY BE NECESSARY TO TREAT CONTAMINATED CONSTRUCTION DEWATERING OR SEDIMENT AND TURBIDITY IN STORMWATER RUNOFF.
- SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR THIRTY DAYS OR MORE, THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD.
- SHOULD CONSTRUCTION ACTIVITIES CEASE FOR FIFTEEN (15) DAYS OR MORE ON ANY SIGNIFICANT PORTION OF A CONSTRUCTION SITE TEMPORARY STABILIZATION IS REQUIRED FOR THAT PORTION OF THE SITE WITH STRAW, COMPOST, OR OTHER TACKIFIED COVERING THAT PREVENT SOIL OR WIND EROSION UNTIL WORK RESUMES ON THAT PORTION OF THE SITE.

**LOCAL AGENCY SPECIFIC EROSION CONTROL NOTES**

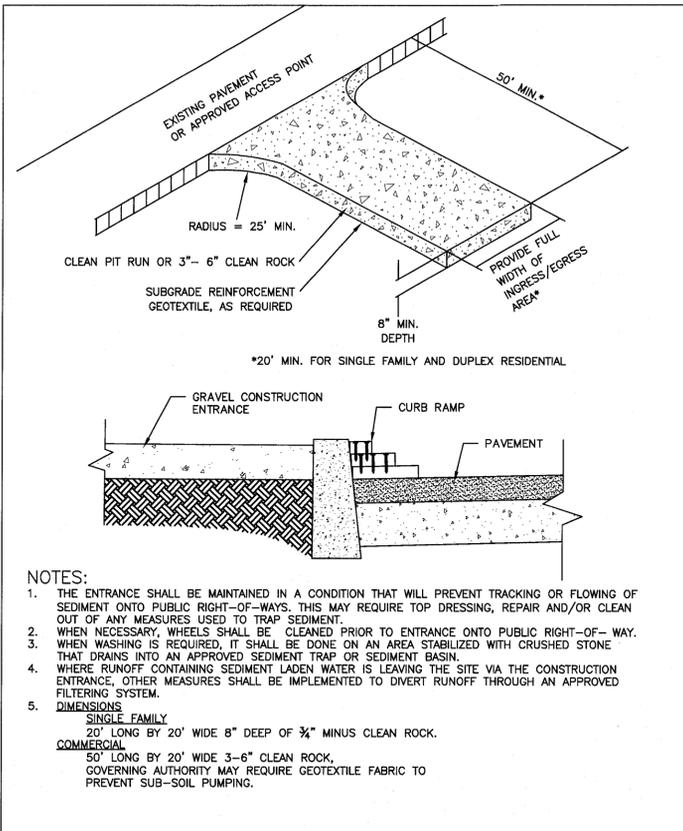
- OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE LOCAL, STATE, AND FEDERAL REGULATIONS.
- PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN ON THIS PLAN SHALL BE CLEARLY DELINEATED LID IN THE FIELD. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE IS PERMITTED BEYOND THE CLEARING LIMITS. THE OWNER/PERMITEE MUST MAINTAIN THE DELINEATION FOR THE DURATION OF THE PROJECT. NOTE: VEGETATED CORRIDORS TO BE DELINEATED WITH ORANGE CONSTRUCTION FENCE OR APPROVED EQUAL.
- PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMPs THAT MUST BE INSTALLED ARE A GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMPs MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT.
- IF VEGETATED SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1; THE TYPE AND PERCENTAGES OF SEED IN THE MIX MUST BE IDENTIFIED ON THE PLANS.
- 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.
- 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.
- ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD.



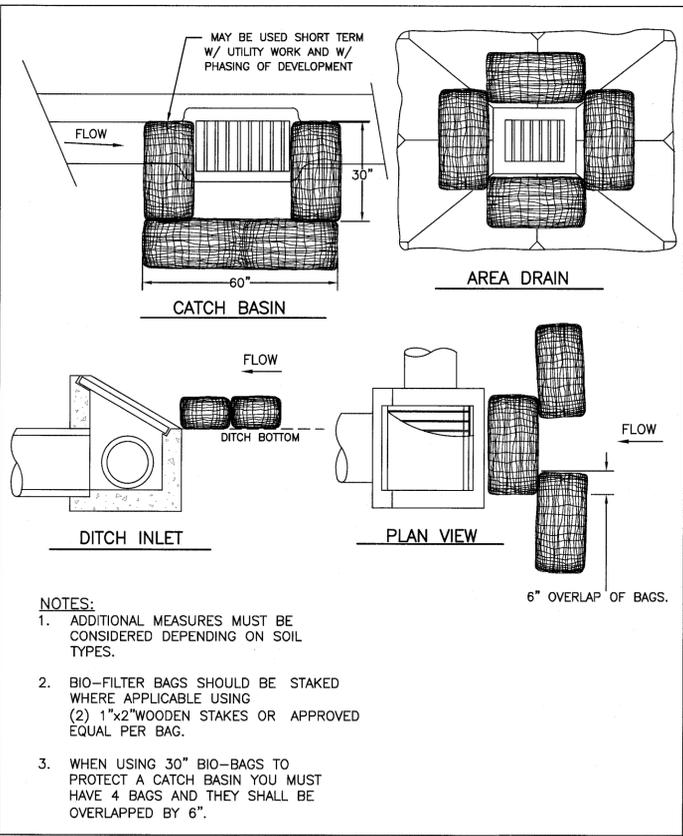
**SEDIMENT FENCE**



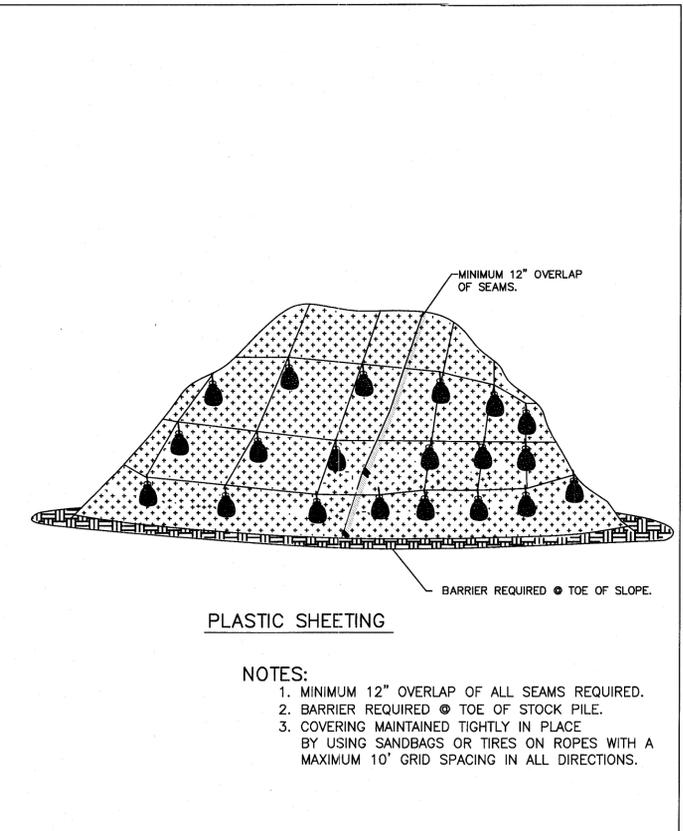
**WATTLES**



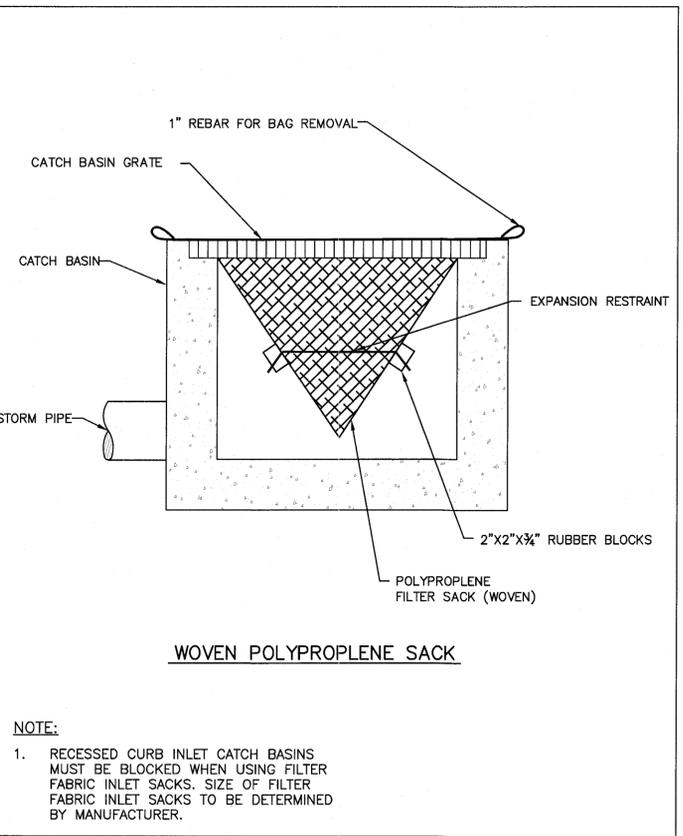
**CONSTRUCTION ENTRANCE**



**INLET PROTECTION TYPE 4**



**PLASTIC SHEETING**



**INLET PROTECTION TYPE 5**

EROSION AND SEDIMENT CONTROL DETAILS

**SUNBREAK SUBDIVISION**

LF 3, LLC  
WEST LINN, OR

J.T. SMITH companies

REGISTERED PROFESSIONAL ENGINEER  
OR2PE  
OREGON  
NOV. 12, 2009  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

3J CONSULTING, INC

**3J**

CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING

507E SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9585

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/UTE  
CHECKED BY | JDH

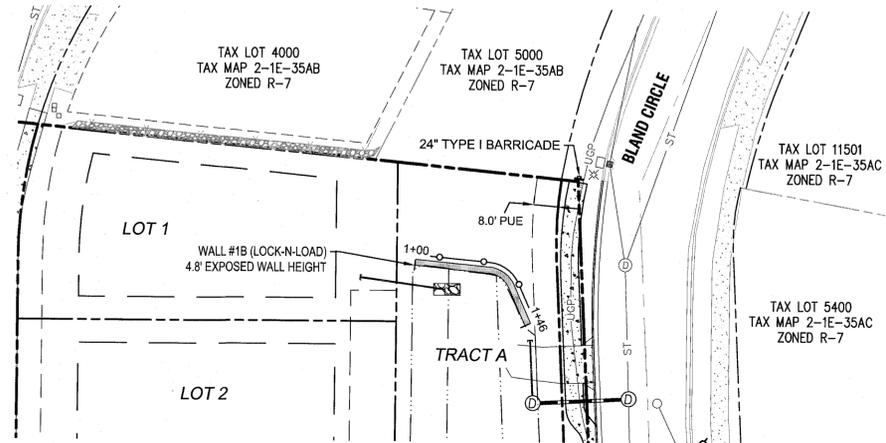
SHEET TITLE  
**ESCP DETAILS**  
SHEET NUMBER  
**C121**

RECORD DRAWING  
03/19/2015

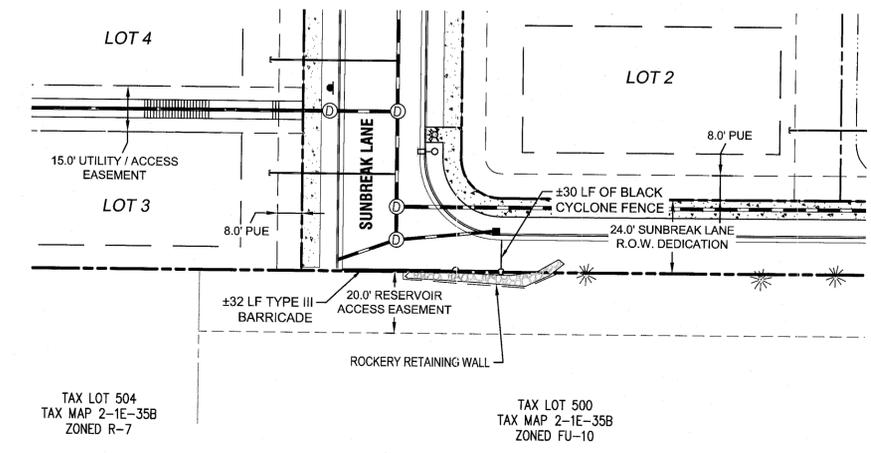
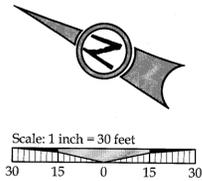
This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a contract with the following parties:

- Contractor supplied reelines
- Site observations by the engineer
- Field measurements

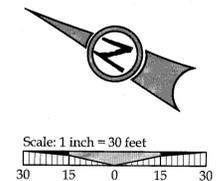
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.



WALLS 1A AND 1B - PLAN VIEW

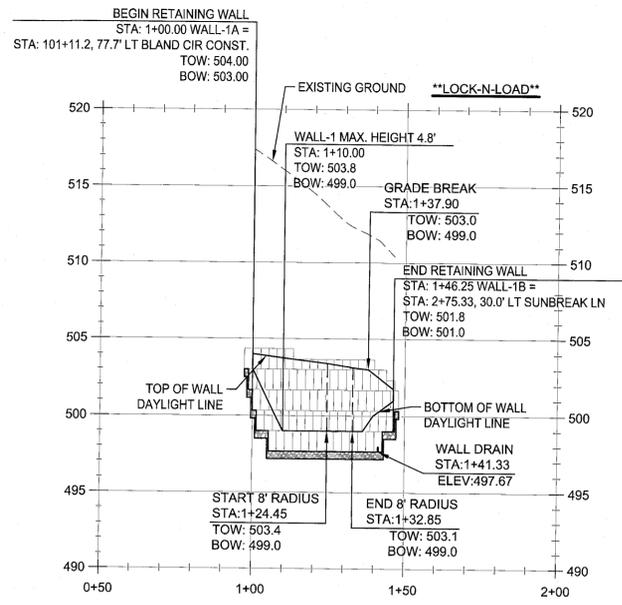


WALL 2 - PLAN VIEW



**LEGEND**

	BOUNDARY LINE		EXISTING TREES TO REMAIN
	RIGHT-OF-WAY		PROPOSED RETAINING WALL
	EXISTING CENTERLINE		PROPOSED STREET FRONTAGE TREE
	EXISTING EASEMENT LINE		
	EXISTING LOT LINE		
	EXISTING CURB AND GUTTER		
	EXISTING SIDEWALK		
	EXISTING LIGHT POLE		
	EXISTING TRAFFIC SIGN		
	EXISTING FIRE HYDRANT		
			PROPOSED EASEMENT LINE
			PROPOSED STORMWATER POND
			PROPOSED CURB AND GUTTER
			PROPOSED CONCRETE



WALL 1B PROFILE  
(STA:0+50.00 - STA:2+00.00)  
SCALE: HORIZ 1"=30'  
VERT 1"=6'  
WALL AREA = 275 SF

- NOTE:**
1. ALL STATIONS GIVEN AT TOE-FACE OF WALL (CONTROL)
  2. TOW = TOP OF WALL  
BOW = BOTTOM OF WALL (DAYLIGHT LINE)
  3. WALL BLOCK & BASE ROCK LIMITS SHOWN FOR REFERENCE ONLY

**RECORD DRAWING**  
03/19/2015

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- Contractor supplied redlines
- Site observations by the engineer
- Field measurements

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RETAINING WALL PLAN AND PROFILES I

**SUNBREAK SUBDIVISION**

LF 3, LLC  
WEST LINN, OR

J.T. SMITH  
companies

REGISTERED PROFESSIONAL  
ENGINEER  
282PE  
OREGON  
NOV 12 2003  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

3J CONSULTING, INC  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
8075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-8888

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 251E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

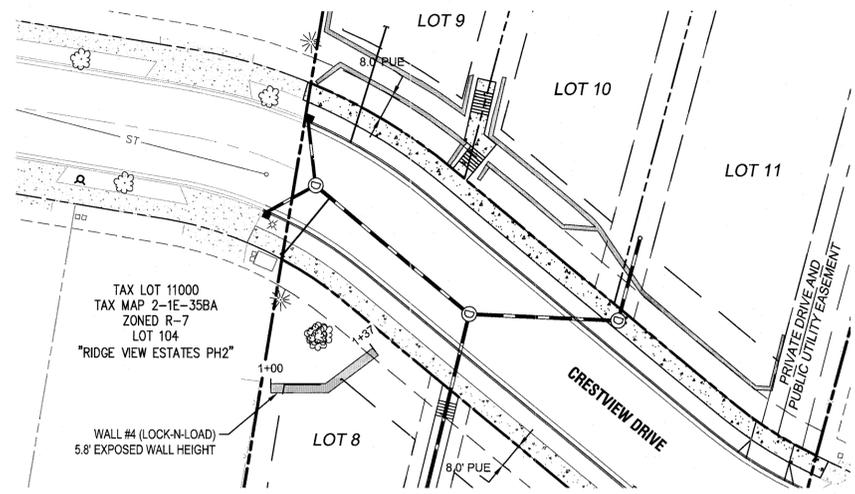
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WALL PROFILES I  
SHEET NUMBER

**C122**

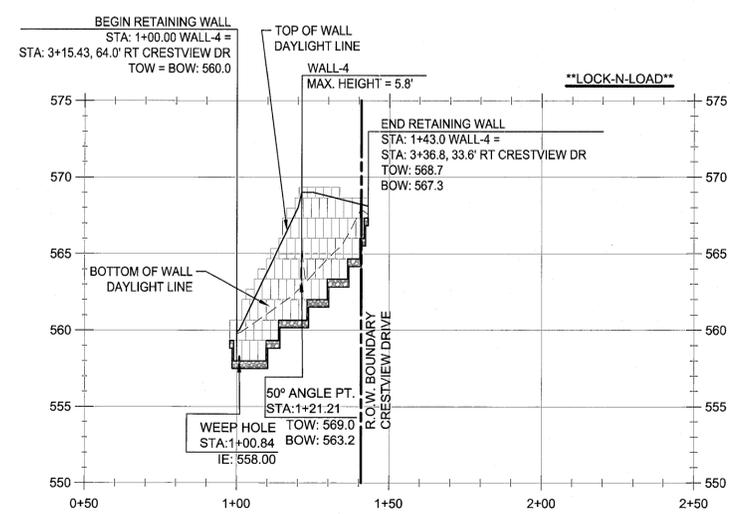


**LEGEND**

	BOUNDARY LINE		EXISTING TREES TO REMAIN
	RIGHT-OF-WAY		PROPOSED EASEMENT LINE
	EXISTING CENTERLINE		PROPOSED CURB AND GUTTER
	EXISTING EASEMENT LINE		PROPOSED CONCRETE
	EXISTING LOT LINE		PROPOSED RETAINING WALL
	EXISTING CURB AND GUTTER		
	EXISTING SIDEWALK		
	EXISTING LIGHT POLE		PROPOSED STREET FRONTAGE TREE
	EXISTING TRAFFIC SIGN		
	EXISTING FIRE HYDRANT		



WALL 4 - PLAN VIEW



WALL 4 PROFILE  
(STA: 0+50.00 - STA: 2+50.00)  
SCALE: HORIZ 1"=30'  
VERT 1"=6'  
WALL AREA = 251 SF

- NOTE:
1. ALL STATIONS GIVEN AT TOP/BACK OF WALL (CONTROL)
  2. TOW = TOP OF WALL  
BOW = BOTTOM OF WALL (DAYLIGHT LINE)
  3. WALL BLOCK & BASE ROCK LIMITS SHOWN FOR REFERENCE ONLY

**RECORD DRAWING**  
03/19/2015

This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a combination of the following:

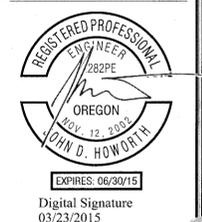
- Contractor supplied redlines
- Site observations by the engineer
- Field measurements

The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

RETAINING WALL PLAN AND PROFILES II

**SUNBREAK**  
**SUBDIVISION**

LF 3, LLC  
WEST LINN, OR



3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

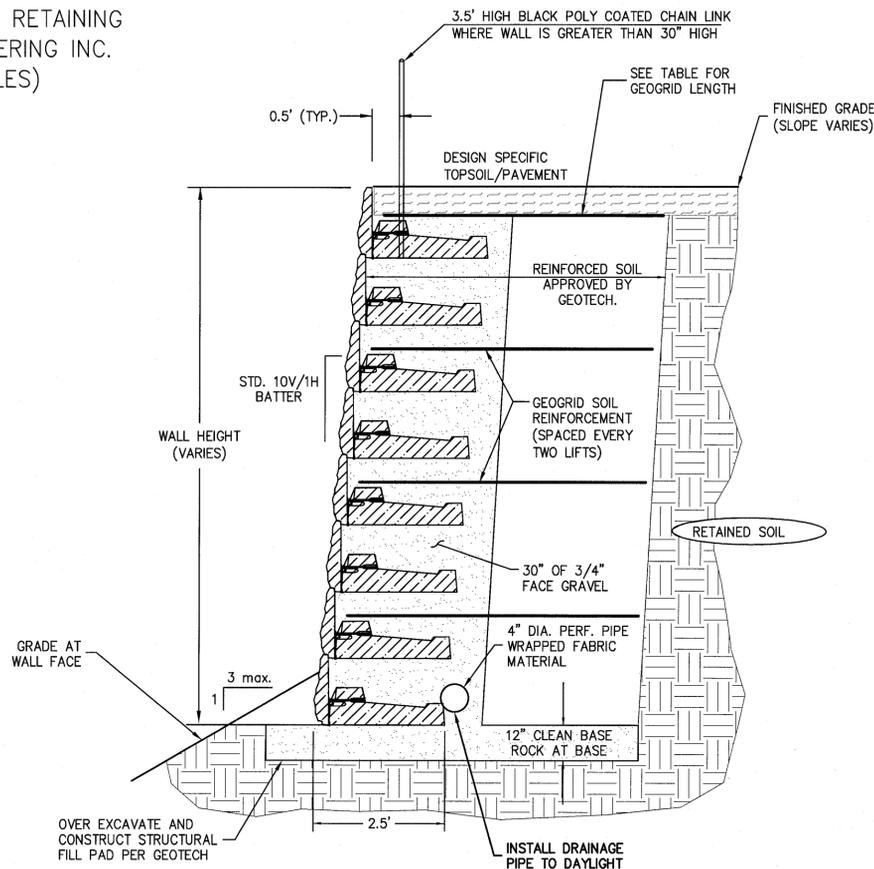
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SHEET NUMBER

**C123**

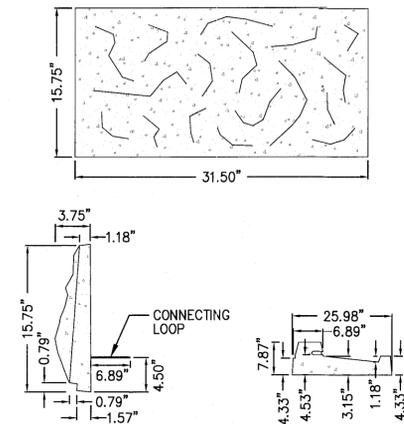


Know what's below.  
Call before you dig.

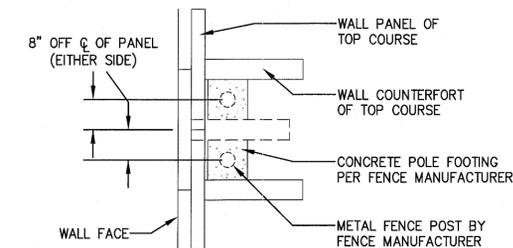
LOCK+LOAD WALL WAS DESIGNED BY: GEOPACIFIC ENGINEERING, INC. SEE "LOCK+LOAD RETAINING WALL DESIGN & CONSTRUCTION RECOMMENDATIONS" PREPARED BY GEOPACIFIC ENGINEERING INC. DATED: OCTOBER 29, 2013 (SEE SHEET C122 AND C123 FOR WALL PLANS AND PROFILES)



**LOCK + LOAD WALL TYPICAL SECTION + PLACEMENT**  
SCALE: N.T.S.



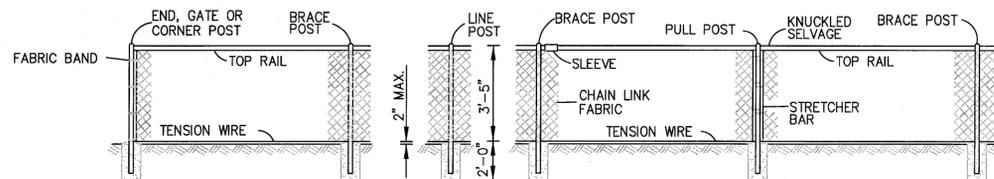
**LOCK + LOAD WALL PANEL AND COUNTERFORT DIMENSIONS**  
SCALE: N.T.S.



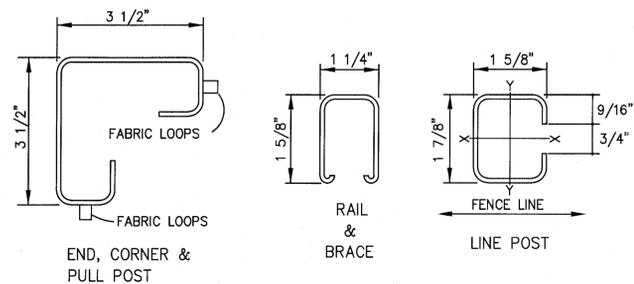
**SAFETY FENCE POLE PLACEMENT DETAIL**  
SCALE: N.T.S.

**NOTES:**

1. WALL HEIGHT (H) IS THE TOTAL HEIGHT FROM TOP INCLUDING EMBEDMENT.
2. REINFORCED SOIL, RETAINED SOIL, & FOUNDATION SOIL: INTERNAL ANGLE OF FRICTION = 30-35 DEGREES; UNIT WEIGHT= 120 LBS/CF.
3. FINISHED GRADE TO PROVIDE FOR POSITIVE DRAINAGE.
4. FOUNDATION ROW SET ON GRADED AND COMPACT SOIL OR GRANULAR PAD TO BE CONFIRMED BY GEOTECH.
5. ALL BACKFILL TO BE COMPACTED TO 95% MAX. STANDARD PROCTOR DENSITY.
6. GRADING AT TOP OF WALL AND EMBEDMENT AS SPECIFIED.
7. FACE GRAVEL - 12" LAYER OF 3/4" CRUSHED GRAVEL LESS THAN 6% PASSING #200 SIEVE.
8. USE OF ON SITE SOIL IN REINFORCED ZONE SHALL BE APPROVED BY A GEOTECHNICAL ENGINEER.
9. SEE GEOTECHNICAL REPORT FROM GEOPACIFIC DATED: APRIL 26, 2013 FOR ALL DESIGN SPECIFICATIONS.



**BLACK POLY COATED CHAIN LINK FENCE TYPE 6**  
SCALE: N.T.S.



**ROLL FORMED SECTIONS**  
SCALE: N.T.S.

**NOTES:**

1. ALL CONCRETE POST BASES SHALL BE CLASS 3000, 10" MINIMUM DIAMETER.
2. ALL POSTS SHALL BE SPACED AT 10' MAXIMUM INTERVALS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. TOP OR BOTTOM TENSION WIRES SHALL BE PLACED WITHIN THE LIMITS OF THE FIRST FULL FABRIC WEAVE.
4. DETAILS ARE ILLUSTRATIVE AND SHALL NOT LIMIT HARDWARE DESIGN OR POST SELECTION FOR ANY PARTICULAR FENCE TYPE.

TYPE	MEMBER																		
	BRACE RAIL & TOP RAIL						LINE & BRACE POST						END, CORNER & PULL POST				GATE POST		ALL POSTS
	ROUND		H-COLUMN		ROLL FORMED		ROUND		H-COLUMN		ROLL FORMED		ROUND		ROLL FORMED		ROUND		
	I.D. Pipe (Inches)	Weight Per Foot (Pounds)	Size (Inches)	Weight Per Foot (Pounds)	Size (Inches)	Weight Per Foot (Pounds)	I.D. Pipe (Inches)	Weight Per Foot (Pounds)	Size (Inches)	Weight Per Foot (Pounds)	Size (Inches)	Weight Per Foot (Pounds)	I.D. Pipe (Inches)	Weight Per Foot (Pounds)	Size (Inches)	Weight Per Foot (Pounds)	I.D. Pipe (Inches)	Weight Per Foot (Pounds)	Length
6	1 1/4	2.27	1 1/4 x 1 5/8	1.35	1 5/8 x 1 1/4	1.35	2	3.65	2 1/4	4.0	1 5/8 x 1 7/8	2.34	2 1/2	5.79	3 1/2 x 3 1/2	5.14	3 1/2	9.1	5'-6"

**BLACK POLY COATED CHAIN LINK FENCE**



Know what's below.  
Call before you dig.

**RECORD DRAWING**  
(03/19/2015)  
This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a contractor supplied redlines.  
• Contractor supplied redlines  
• Site observations by the engineer  
• Field measurements  
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**RETAINING WALL DETAILS**  
**SUNBREAK**  
**SUBDIVISION**  
LF 3, LLC  
WEST LINN, OR

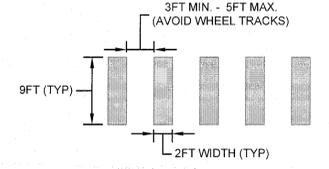
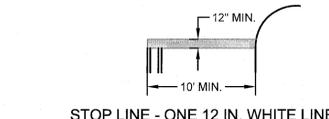
**J.T. SMITH** companies  
REGISTERED PROFESSIONAL ENGINEER  
OREGON  
NOV 12, 2009  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

**3J CONSULTING, INC**  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9365

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 281E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
**WALL DETAILS**  
SHEET NUMBER

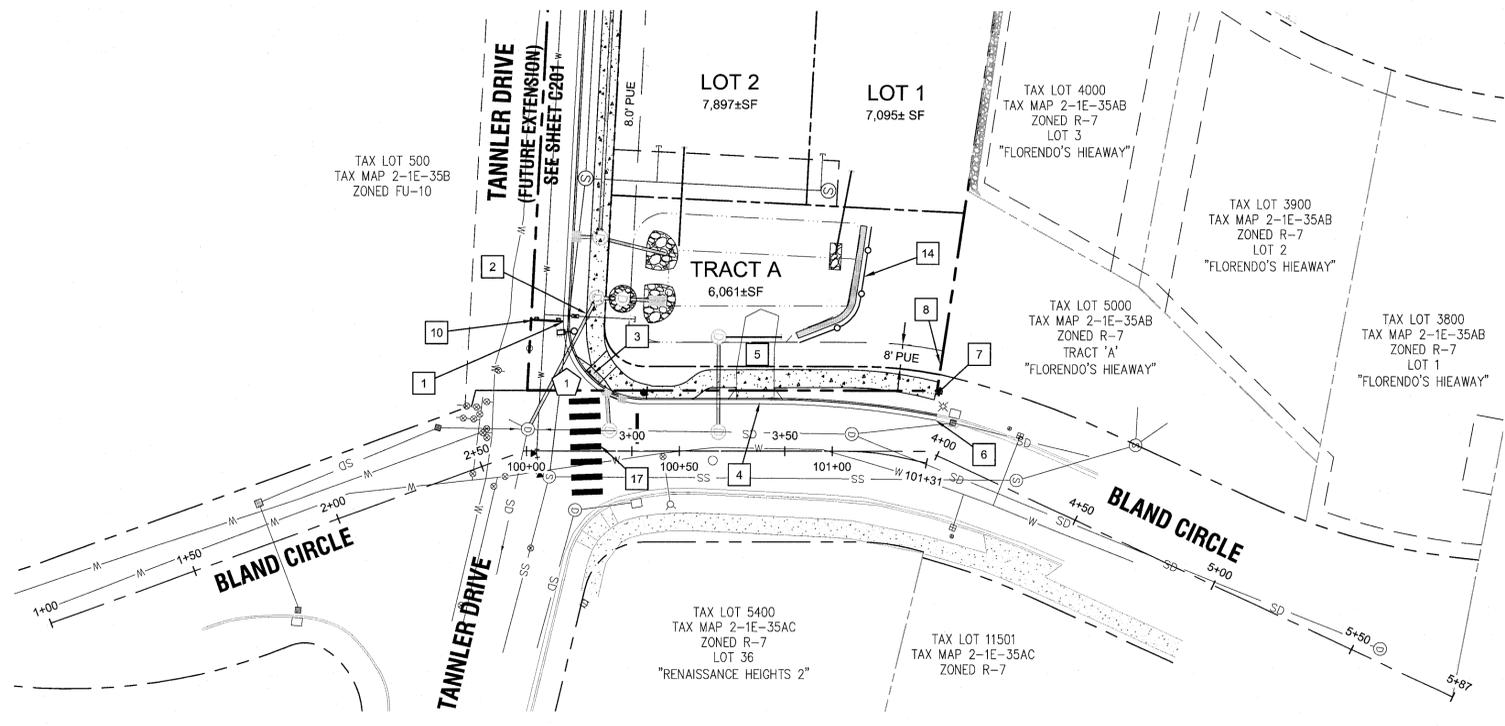
**C124**



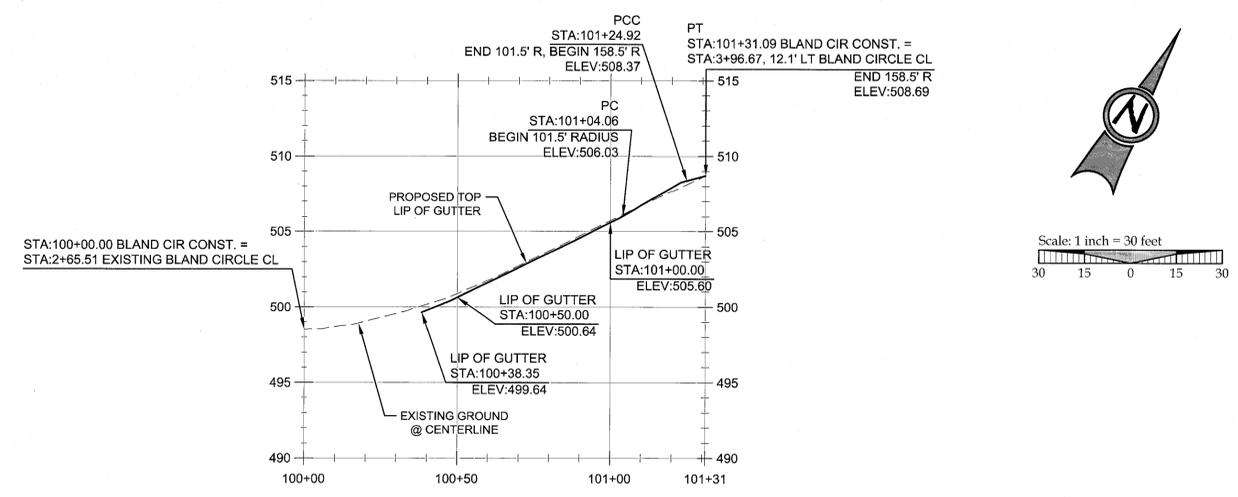
CROSS WALK: STAGGERED CONTINENTAL STYLE

**STRIPING NOTES**

- STRIPING SHALL BE THERMOPLASTIC PAVEMENT MARKING MATERIAL.
- LOCATE FINAL STOP LINE 4' MIN. FROM CURB FACE IN ADVANCE OF THE NEAREST MARKED CROSSWALK LINE.
- LOCATE STOP LINE 12" MIN. FROM CURB FACE.
- ALIGN CROSSWALK WITH WHEELCHAIR RAMP LOCATIONS.
- ALL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED AS PER OREGON STANDARD SPECIFICATIONS.



BLAND CIRCLE - PLAN VIEW

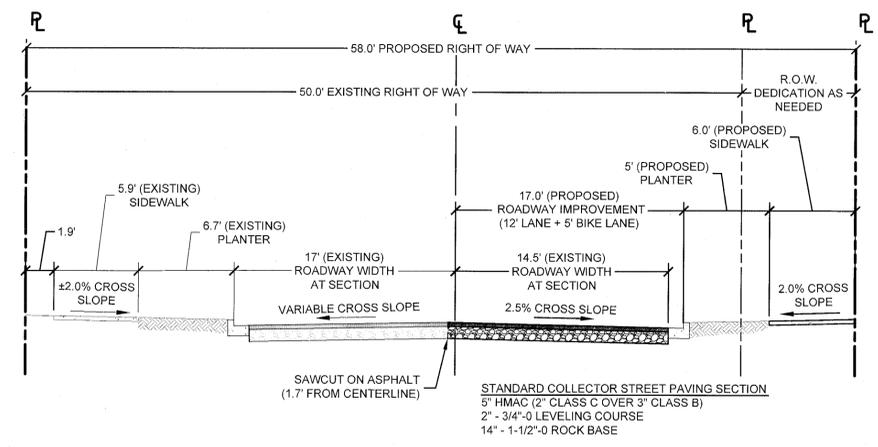


CL-BLAND CONSTRUCTION PROFILE  
(STA:100+00.00 - STA:101+31.09)  
SCALE: HORIZ 1"=10'  
VERT 1"=6'

**CURB RETURN TABLE**

TAG NO.	PC STATION	DELTA	RADIUS	TANGENT	LENGTH	PT STATION	PC ELEV.	1/4	LP	LP STATION	1/2	3/4	PT. ELEV.	
1	100+38.3	14.5'L BLAND CONST. CL	92d55'0"	26.5'	27.9'	43.0'	1+45.0, 12.5'R TANNLER CL	499.64	498.86	498.63	100+25.9; 18.6'L BLAND CONST. CL	498.65	499.38	499.85

\* ALL GEOMETRY MEASUREMENTS AND ELEVATIONS REFERENCE LIP OF GUTTER.



BLAND CIRCLE IMPROVEMENTS - TYPICAL SECTION  
SCALE: N.T.S.

**CONSTRUCTION KEY NOTES**

- STA: 100+13.18, 43.3' LT BLAND CIR CONST. CL. BEGIN STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DETAIL WL-501 (TYPICAL CURBS) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET.
- STA: 100+19.32, 42.0' LT BLAND CIR CONST. CL. BEGIN 6 FT WIDE DETACHED SIDEWALK PER CITY OF WEST LINN STANDARD DETAIL WL-508 (CONCRETE SIDEWALK CROSS SECTION) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET.
- STA: 100+17, 16.0' LT TO STA: 100+35, 16.5' LT BLAND CIR CONST. CL. CONSTRUCT CURB RAMP PER CITY OF WEST LINN STANDARD DETAIL WL-507A ON SHEET C210.
- STA: 100+68.75, 16.0' LT TO STA: 100+83.75, 16.0' LT BLAND CIR CONST. CL. CONSTRUCT DRIVEWAY ACCESS TO BLAND CIRCLE (15 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-504A (COMMERCIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210.
- EXTEND 15FT WIDE COMPACTED GRAVEL ACCESS INTO STORM POND AS SHOWN PER CITY OF WEST LINN PUBLIC WORKS STANDARD 2.0054
- STA: 101+31, 14.5' LT BLAND CIR CONST. CL. END STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DETAIL WL-501 (TYPICAL CURBS) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET. MATCH EXISTING CURB AND GUTTER.
- STA: 101+28.5, 22.0' LT TO STA: 100+35, 16.5' LT BLAND CIR CONST. CL. END 6 FT WIDE DETACHED SIDEWALK PER CITY OF WEST LINN STANDARD DETAIL WL-508 (CONCRETE SIDEWALK CROSS SECTION) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET.
- INSTALL ROADWAY BARRICADE PER CITY OF WEST LINN STANDARD DETAIL WL-515B ON SHEET C211.
- \*NOT USED\*
- INSTALL ROADWAY BARRICADE @ 6FT O.C. PER CITY OF WEST LINN STANDARD DETAIL WL-516A ON SHEET C211.
- STA: 100+36, 17.5' LT BLAND CIR CONST. CL. REINSTALL EXISTING STOP SIGN ON NEW POST AT WITH V-LOC BREAKAWAY POST ANCHOR SYSTEM PER TYPICAL INSTALLATION DETAIL ON SHEET 211.
- STA: 100+39, 23.0' LT BLAND CIR CONST. CL. INSTALL NEW LIGHT POLE BASE, JUNCTION BOX AND CONDUIT. CONTRACTOR TO CONFIRM ALL LOCATIONS AND INSTALLATION REQUIREMENTS WITH PORTLAND GENERAL ELECTRIC. POTHOLE TO VERIFY EXISTING UTILITY LOCATIONS AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- CONSTRUCT MONOLITHIC CURB AND SIDEWALK IN THE TRANSITION OF 6 FT SIDEWALK TO CURB TIGHT AROUND PROTECTED UTILITIES. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- CONSTRUCT BLACK VINYL CLAD CHAIN LINK FENCE AT TOP OF RETAINING WALL TO LIMITS SHOWN. SEE DETAIL ON C124.
- \*NOT USED\*
- INSTALL 12" WHITE STOP BAR PER DETAIL AND NOTES THIS SHEET.
- INSTALL STAGGERED CONTINENTAL STYLE CROSSWALK STRIPING PER DETAIL AND NOTES THIS SHEET.

**LEGEND**

- BOUNDARY LINE
- - - EXISTING RIGHT-OF-WAY
- - - EXISTING CENTERLINE
- - - EXISTING LOT LINE
- - - EXISTING CURB
- - - EXISTING SIDEWALK
- - - EXISTING LIGHT POLE
- - - PROPOSED RIGHT-OF-WAY
- - - PROPOSED LOT LINE
- - - PROPOSED CENTERLINE
- - - PROPOSED SAWCUT LINE
- - - PROPOSED CURB
- - - PROPOSED SIDEWALK
- - - STORM DRAIN LINE AND MANHOLE
- - - STORM SEWER CURB INLET
- - - PROPOSED STREET LIGHT
- - - PROPOSED RETAINING WALL
- - - PROPOSED POND LIMITS

**GENERAL NOTES**

- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE DEVELOPER.
- STREET LIGHT PLAN DESIGNED BY PORTLAND GENERAL ELECTRIC. CONTRACTOR TO VERIFY STREET LIGHT LOCATION, TYPE, AND MATERIALS WITH PORTLAND GENERAL ELECTRIC PLAN PRIOR TO INSTALLATION.
- UTILITIES TO BE INSTALLED UNDERGROUND SHALL BE INSPECTED AND APPROVED BEFORE BACKFILLING. CONTRACTOR SHALL NOTIFY THE AUTHORITIES INSPECTORS 48 HOURS BEFORE INSPECTION SERVICES ARE REQUIRED.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.

BLAND CIRCLE STREET IMPROVEMENT PLAN

SUNBREAK  
SUBDIVISION  
LF 3, LLC  
WEST LINN, OR

J.T. SMITH  
CORPORATION  
REGISTERED PROFESSIONAL ENGINEER  
NOV. 12, 2009  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

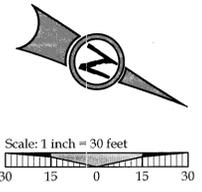
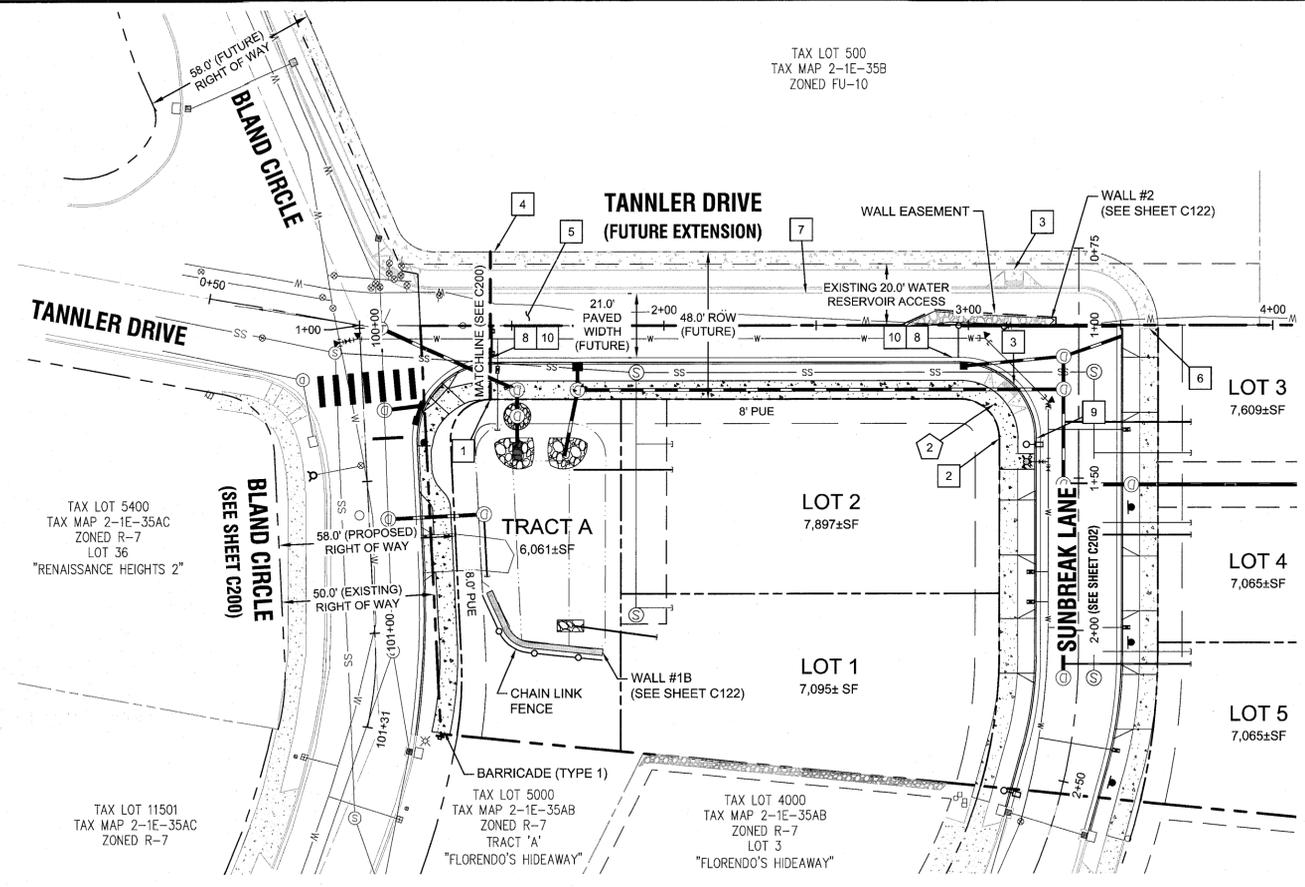
3J CONSULTING, INC  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (800) 946-9365

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
BLAND CIRC. PLAN  
SHEET NUMBER  
C200



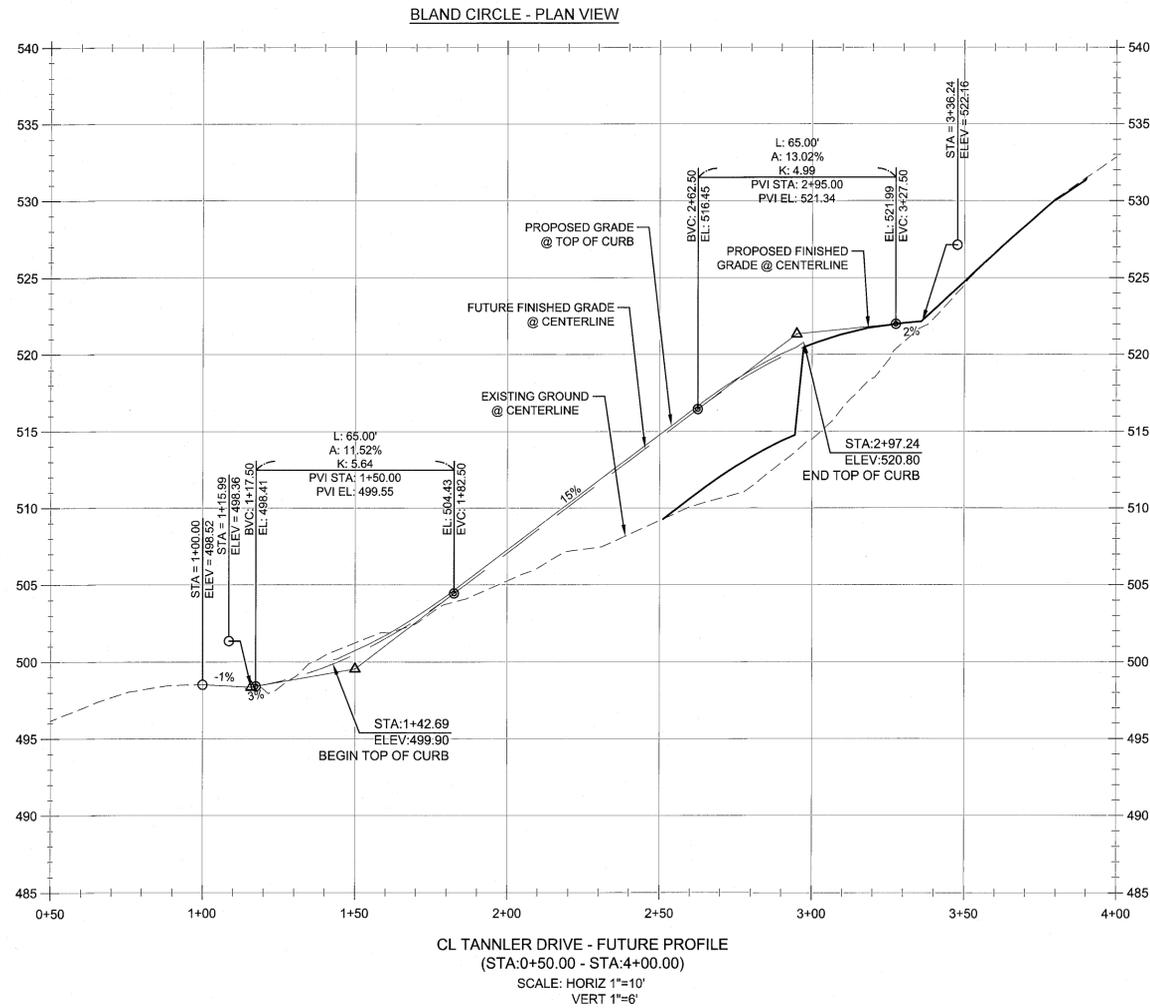
RECORD DRAWING  
03/19/2015  
This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a combination of:  
• Contractor supplied plans  
• Site observations by the engineer  
• Field measurements  
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.



**LEGEND**

BOUNDARY LINE	PROPOSED RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY	PROPOSED LOT LINE
EXISTING CENTERLINE	PROPOSED CENTERLINE
EXISTING LOT LINE	PROPOSED SAWCUT LINE
EXISTING CURB	PROPOSED CURB
EXISTING SIDEWALK	PROPOSED SIDEWALK
EXISTING LIGHT POLE	STORM DRAIN LINE AND MANHOLE
SIDEWALK BY HOME BUILDER	STORM SEWER CURB INLET
ASPHALT PAVING	PROPOSED STREET LIGHT
	PROPOSED RETAINING WALL
	PROPOSED POND LIMITS

- CONSTRUCTION KEY NOTES**
- STA: 1+42.9, 24' LT TANNLER DR. CL. BEGIN 6 FT WIDE DETACHED SIDEWALK PER CITY OF WEST LINN STANDARD DETAIL WL-508 (CONCRETE SIDEWALK CROSS SECTION) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET.
  - STA: 1+37.0, 26.0' RT SUNBREAK LANE. END 6 FT WIDE DETACHED SIDEWALK PER CITY OF WEST LINN STANDARD DETAIL WL-508 (CONCRETE SIDEWALK CROSS SECTION) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET.
  - STA: 2+97.24, 10.5' RT TANNLER TO STA: 1+37.00, 12.5' RT SUNBREAK LN. CONSTRUCT FUTURE CURB RAMP PER CITY OF WEST LINN STANDARD DETAIL WL-507A ON SHEET C210.
  - FUTURE 6-FT WIDE DETACHED SIDEWALK (SHOWN FOR REFERENCE ONLY).
  - FUTURE PAVEMENT (SHOWN FOR REFERENCE ONLY).
  - FUTURE CONNECTION TO PROPOSED IMPROVEMENTS (SHOWN FOR REFERENCE ONLY).
  - FUTURE STANDARD CURB AND GUTTER (SHOWN FOR REFERENCE ONLY).
  - STA: 1+42.9, 10.5' RT TANNLER DRIVE. CONSTRUCT STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DETAIL WL-501 (TYPICAL CURBS) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET.
  - STA: 1+37.0, 12.5' RT SUNBREAK. CONSTRUCT STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DETAIL WL-501 (TYPICAL CURBS) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET.
  - COMPLETE PAVING TO CENTERLINE ON TANNLER DRIVE ADJACENT TO CURB RETURN.

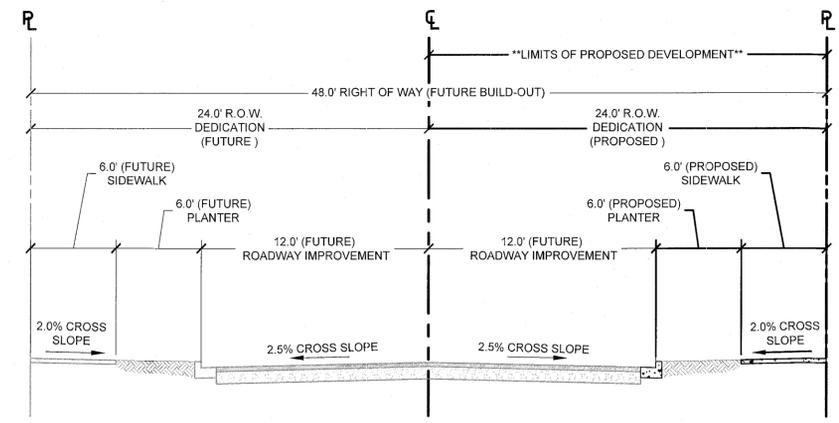


**CURB RETURN TABLE**

TAG NO	PC STATION	DELTA	RADIUS	TANGENT	LENGTH	PT STATION	PC. ELEV.	1/4	1/2	3/4	PT. ELEV
2	2+97.2, 10.5'L TANNLER CL	90d0'0"	26.5'	26.5'	41.6'	1+37.0, 12.5'R SUNBREAK CL	520.29	521.55	522.91	524.22	525.36

\* ALL GEOMETRY MEASUREMENTS AND ELEVATIONS REFERENCE LIP OF GUTTER.

- GENERAL NOTES**
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE DEVELOPER.



**RECORD DRAWING**  
03/19/2015

This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a contractor's field measurements.

- Contractor supplied relines
- Site observations by the engineer
- Field measurements

The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**TANNLER DRIVE FUTURE EXTENSION**

**SUNBREAK SUBDIVISION**  
LF 3, LLC  
WEST LINN, OR

**J.T. SMITH**  
companies

REGISTERED PROFESSIONAL ENGINEER  
282PE  
OREGON  
NOV. 12, 2009  
JOHN D. HOWARTH  
EXPIRES: 06/30/15

Digital Signature  
03/23/2015

**3J CONSULTING, INC**  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-5985

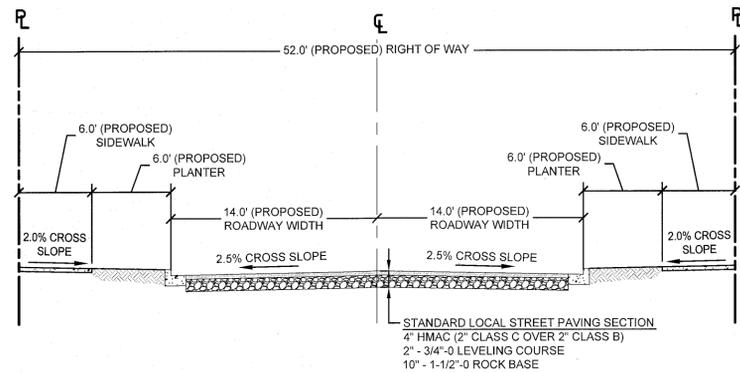
3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
**FUTURE TANNLER EX.**  
SHEET NUMBER  
**C201**

811  
Know what's below.  
Call before you dig.

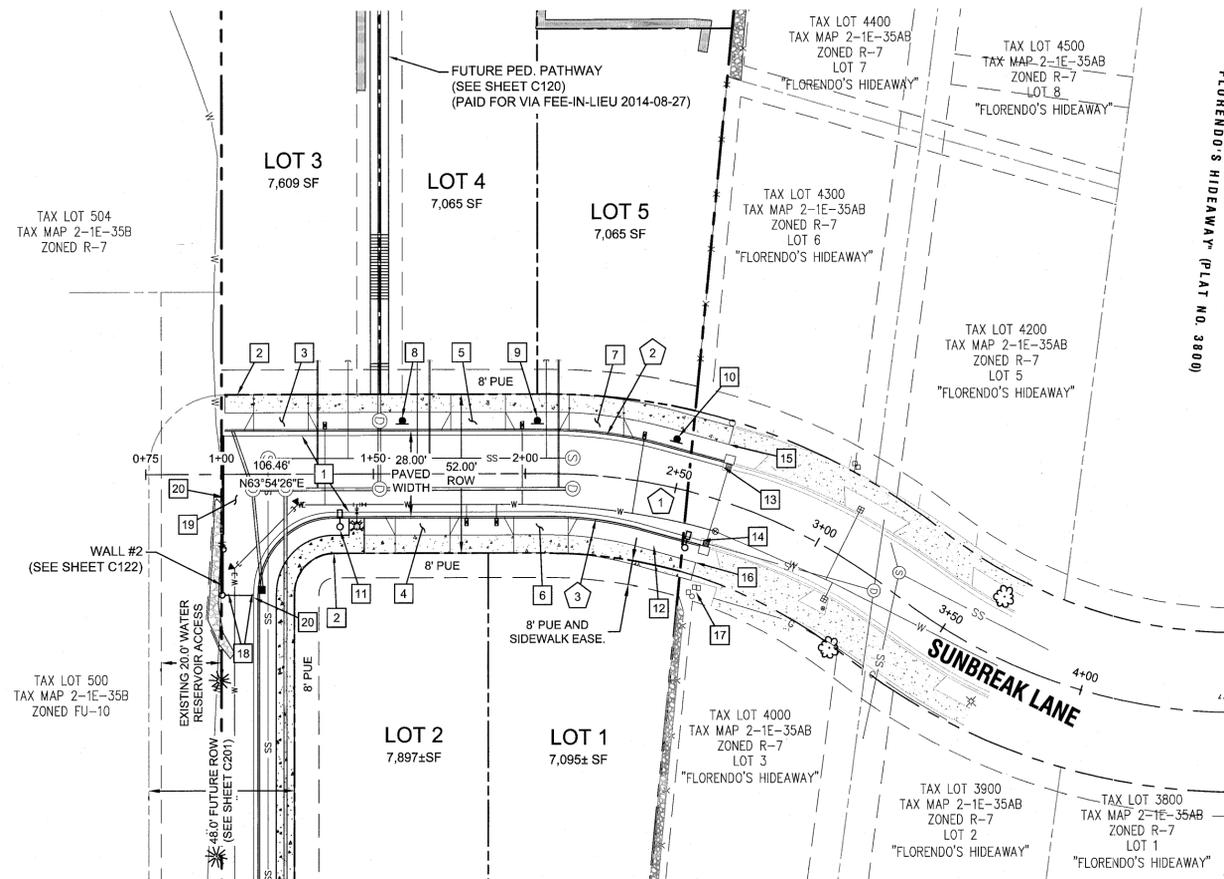
**CONSTRUCTION KEY NOTES**

- 1 CONSTRUCT STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DETAIL WL-501 (TYPICAL CURBS) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET.
- 2 CONSTRUCT 6 FT WIDE DETACHED SIDEWALK PER CITY OF WEST LINN STANDARD DETAIL WL-508 (CONCRETE SIDEWALK CROSS SECTION) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT.*
- 3 STA: 1+07.50, 14.0' LT TO STA: 1+31.50, 14.0' LT SUNBREAK LANE: CONSTRUCT DRIVEWAY ACCESS TO SUNBREAK LANE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT.*
- 4 STA: 1+54.10, 14.0' LT TO STA: 1+78.10, 14.0' LT SUNBREAK LANE: CONSTRUCT DRIVEWAY ACCESS TO SUNBREAK LANE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT OR AT END OF 18 MONTH MAINTENANCE BOND.*
- 5 STA: 1+72.50, 14.0' LT TO STA: 1+96.50, 14.0' LT SUNBREAK LANE: CONSTRUCT DRIVEWAY ACCESS TO SUNBREAK LANE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT.*
- 6 STA: 1+93.10, 14.0' LT TO STA: 2+17.90, 14.0' LT SUNBREAK LANE: CONSTRUCT DRIVEWAY ACCESS TO SUNBREAK LANE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT.*
- 7 STA: 2+11.21, 14.0' LT TO STA: 2+33.54, 13.9' LT SUNBREAK LANE: CONSTRUCT DRIVEWAY ACCESS TO SUNBREAK LANE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT.*
- 8 STA: 1+59.50, 17.25' LT SUNBREAK LANE: "NO PARKING" SIGN (SEE DETAIL ON SHEET C211). PARKING SHALL BE RESTRICTED ALONG ONE SIDE OF SUNBREAK LANE.
- 9 STA: 2+04.00, 17.25' LT SUNBREAK LANE: "NO PARKING" SIGN (SEE DETAIL ON SHEET C211). PARKING SHALL BE RESTRICTED ALONG ONE SIDE OF SUNBREAK LANE.
- 10 STA: 2+47.00, 15.66' LT SUNBREAK LANE: "NO PARKING" SIGN (SEE DETAIL ON SHEET C211). PARKING SHALL BE RESTRICTED ALONG ONE SIDE OF SUNBREAK LANE.
- 11 STA: 1+39.00, 17.25' RT SUNBREAK LANE: INSTALL NEW LIGHT POLE BASE, JUNCTION BOX AND CONDUIT. CONTRACTOR TO CONFIRM ALL LOCATIONS AND INSTALLATION REQUIREMENTS WITH PORTLAND GENERAL ELECTRIC.
- 12 STA: 2+47.00, 18.90' RT SUNBREAK LANE: INSTALL NEW LIGHT POLE BASE, JUNCTION BOX AND CONDUIT. CONTRACTOR TO CONFIRM ALL LOCATIONS AND INSTALLATION REQUIREMENTS WITH PORTLAND GENERAL ELECTRIC.
- 13 STA: 2+62.80, 10.70' LT SUNBREAK LANE: MATCH EXISTING CURB AND GUTTER. CONTRACTOR TO PROTECT EXISTING STORM STRUCTURES.
- 14 STA: 2+63.15, 14.30' RT SUNBREAK LANE: MATCH EXISTING CURB AND GUTTER. CONTRACTOR TO PROTECT EXISTING STORM STRUCTURES.
- 15 STA: 2+62.60, 18.20' LT SUNBREAK LANE: MATCH EXISTING 6' WIDE SIDEWALK. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT.*
- 16 STA: 2+63.55, 21.90' RT SUNBREAK LANE: MATCH EXISTING 6' WIDE SIDEWALK. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT.*
- 17 CONTRACTOR TO PROTECT EXISTING VAULTS AND PEDESTALS FROM DAMAGE. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- 18 NOT USED
- 19 INSTALL PAVEMENT WITHIN AREA SHOWN (APPROX. 450 SY). SEE LOCAL STREET PAVING REQUIREMENTS ON TYPICAL SECTION DETAIL THIS SHEET.
- 20 INSTALL 4FT BLACK VINYL CLAD CHAIN LINK FENCE AT TOP OF FILL WALL TO LIMITS SHOWN. SEE DETAIL SHEET C124

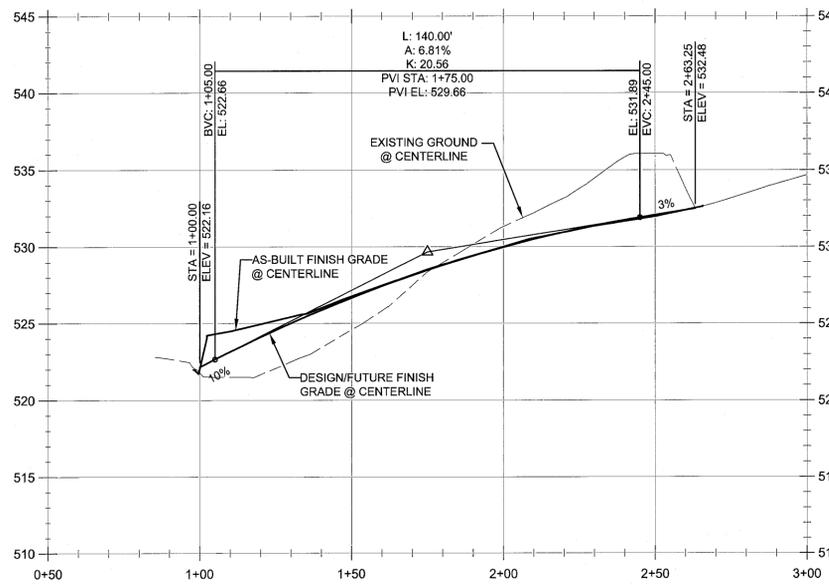


**TYPICAL SECTION - SUNBREAK LANE IMPROVEMENTS**

SCALE: N.T.S



**SUNBREAK LANE - PLAN VIEW**



**CL-SUNBREAK PROFILE (STA:0+50.00 - STA:3+00.00)**

SCALE: HORIZ 1"=10'  
VERT 1"=6'

**STREET CENTERLINE CURVE TABLE**

TAG NO.	PC STA.	PT STA.	PI STA.	DELTA	RADIUS	LENGTH	TANGENT
1	STA: 2+07.5	STA: 2+62.9	STA: 2+07.50	17°10'53"	185.0'	65.5'	27.9'

**CURB RETURN TABLE**

TAG NO.	PC STA.	OFFSET	PT STA.	OFFSET	RADIUS	LENGTH	DELTA	TANGENT
2	STA: 2+08.2	14.0' LT	STA: 2+43.2	12.7' LT	140.0'	37.5'	15°21'38"	18.9'
3	STA: 2+08.4	14.0' RT	STA: 2+40.9	15.2' RT	112.0'	30.0'	15°21'38"	15.1'

NOTE: TABLES REFERENCES SUNBREAK LANE STATIONING.

**GENERAL NOTES**

1. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE DEVELOPER.
2. STREET LIGHT PLAN DESIGNED BY PORTLAND GENERAL ELECTRIC. CONTRACTOR TO VERIFY STREET LIGHT LOCATION, TYPE, AND MATERIALS WITH PORTLAND GENERAL ELECTRIC PLAN PRIOR TO INSTALLATION.
3. LINES TO BE INSTALLED UNDERGROUND SHALL BE INSPECTED AND APPROVED BEFORE BACKFILLING. CONTRACTOR SHALL NOTIFY THE AUTHORITIES INSPECTORS 48 HOURS BEFORE INSPECTION SERVICES ARE REQUIRED.
4. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.

**LEGEND**

- BOUNDARY LINE
- - - EXISTING RIGHT-OF-WAY
- - - EXISTING CENTERLINE
- - - EXISTING LOT LINE
- - - EXISTING CURB
- - - EXISTING SIDEWALK
- ⊗ EXISTING LIGHT POLE
- - - PROPOSED RIGHT-OF-WAY
- - - PROPOSED LOT LINE
- - - PROPOSED CENTERLINE
- - - PROPOSED SAWCUT LINE
- - - PROPOSED CURB
- - - PROPOSED SIDEWALK
- ⊙ STORM DRAIN LINE AND MANHOLE
- ⊙ STORM SEWER CURB INLET
- ⊙ PROPOSED STREET LIGHT
- - - PROPOSED RETAINING WALL
- - - PROPOSED POND LIMITS
- - - SIDEWALK BY HOME BUILDER

SUNBREAK LANE PLAN AND PROFILE

**SUNBREAK SUBDIVISION**  
LF 3, LLC  
WEST LINN, OR

**J.T. SMITH**  
companies



Digital Signature  
03/23/2015

**3J CONSULTING, INC**  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-5885

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 251E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
**SUNBREAK PLAN**  
SHEET NUMBER

**C202**



**RECORD DRAWING**  
03/19/2015  
This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a combination of:  
• Site observations by the engineer  
• Field measurements  
• The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

11:31:13 - JTS - Sunbreak Subdivision CAD (A) 13113-C202-SUNBREAK STREET PLAN AND PROFILE.dwg, 3/20/2015 11:30:25 AM

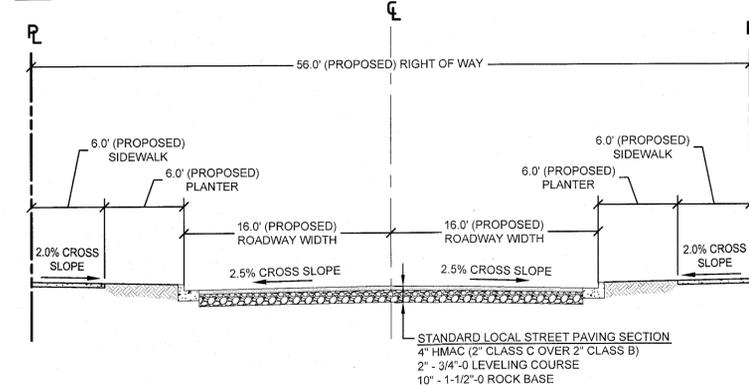
**CONSTRUCTION KEY NOTES**

- 1 CONSTRUCT STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DETAIL WL-501 (TYPICAL CURBS) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET.
- 2 CONSTRUCT 6 FT WIDE DETACHED SIDEWALK PER CITY OF WEST LINN STANDARD DETAIL WL-508 (CONCRETE SIDEWALK CROSS SECTION) ON SHEET C210 AND TYPICAL SECTION DETAIL THIS SHEET. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT OR 18TH MONTH AFTER PLAT HAS BEEN RECORDED*
- 3 STA: 3+11.5, 16.0' LT TO STA: 3+36.7, 16.0' LT CRESTVIEW DRIVE: CONSTRUCT DRIVEWAY ACCESS TO CRESTVIEW DRIVE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT*
- 4 STA: 3+26.3, 16.0' RT TO STA: 3+53.0, 16.0' RT CRESTVIEW DRIVE: CONSTRUCT DRIVEWAY ACCESS TO CRESTVIEW DRIVE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT*
- 5 STA: 3+77.2, 16.0' LT TO STA: 4+03.3, 16.0' LT CRESTVIEW DRIVE: CONSTRUCT DRIVEWAY ACCESS TO CRESTVIEW DRIVE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT*
- 6 STA: 3+96.0, 16.0' RT TO STA: 4+21.7, 16.0' RT CRESTVIEW DRIVE: CONSTRUCT DRIVEWAY ACCESS TO CRESTVIEW DRIVE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT*
- 7 STA: 4+44.3, 16.0' LT TO STA: 4+72.6, 16.0' LT CRESTVIEW DRIVE: CONSTRUCT DRIVEWAY ACCESS TO CRESTVIEW DRIVE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT*
- 8 STA: 4+56.9, 16.0' RT TO STA: 4+79.4, 16.0' RT CRESTVIEW DRIVE: CONSTRUCT DRIVEWAY ACCESS TO CRESTVIEW DRIVE (24 FT WIDE) PER CITY OF WEST LINN STANDARD DETAIL WL-503A (RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB) ON SHEET C210. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT*
- 9 STA: 4+32.5, 19.25' RT CRESTVIEW DRIVE: INSTALL NEW LIGHT POLE BASE, JUNCTION BOX AND CONDUIT. CONTRACTOR TO CONFIRM ALL LOCATIONS AND INSTALLATION REQUIREMENTS WITH PORTLAND GENERAL ELECTRIC.
- 10 STA: 2+74.8, 16.0' RT CRESTVIEW DRIVE: MATCH EXISTING CURB AND GUTTER. CONTRACTOR TO PROTECT EXISTING STORM STRUCTURES.
- 11 STA: 2+75.7, 16.0' LT CRESTVIEW DRIVE: MATCH EXISTING CURB AND GUTTER. CONTRACTOR TO PROTECT EXISTING STORM STRUCTURES.
- 12 STA: 4+83.0, 16.0' LT CRESTVIEW DRIVE: MATCH EXISTING CURB AND GUTTER. CONTRACTOR TO PROTECT EXISTING STORM STRUCTURES.
- 13 STA: 4+89.2, 16.0' RT CRESTVIEW DRIVE: MATCH EXISTING CURB AND GUTTER. CONTRACTOR TO PROTECT EXISTING STORM STRUCTURES.
- 14 STA: 2+74.4, 22.0' RT CRESTVIEW DRIVE: MATCH EXISTING 6' WIDE SIDEWALK. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT OR 18TH MONTH AFTER PLAT HAS BEEN RECORDED*
- 15 STA: 2+73.1, 22.0' LT CRESTVIEW DRIVE: MATCH EXISTING 6' WIDE SIDEWALK. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT OR 18TH MONTH AFTER PLAT HAS BEEN RECORDED*
- 16 STA: 4+83.0, 22.0' LT CRESTVIEW DRIVE: MATCH EXISTING 6' WIDE SIDEWALK. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT OR 18TH MONTH AFTER PLAT HAS BEEN RECORDED*
- 17 STA: 4+92.0, 22.0' RT CRESTVIEW DRIVE: MATCH EXISTING 6' WIDE SIDEWALK. *SHOWN FOR REFERENCE ONLY - TO BE INCLUDED AS PART OF THE BUILDING PERMIT OR 18TH MONTH AFTER PLAT HAS BEEN RECORDED*
- 18 CONTRACTOR TO PROTECT EXISTING VAULTS AND PEDESTALS FROM DAMAGE. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. REPLACE EXISTING STREET LIGHT POLE AND LUMINAIRE TO MATCH NEW POLES WITHIN SUNBREAK SUBDIVISION.
- 19 INSTALL PAVEMENT WITHIN AREA SHOWN (APPROX. 680 SY). SEE LOCAL STREET PAVING REQUIREMENTS ON TYPICAL SECTION DETAIL THIS SHEET.
- 20 REPAIR ASPHALT SURFACE AFTER SEWER INSTALLATION PER CITY OF WEST LINN STANDARD DETAIL WL-203 (STREET T-CUT) ON SHEET C210.
- 21 INSTALL BLACK VINYL CLAD CHAIN LINK FENCE AT TOP OF WALL TO LIMITS SHOWN.

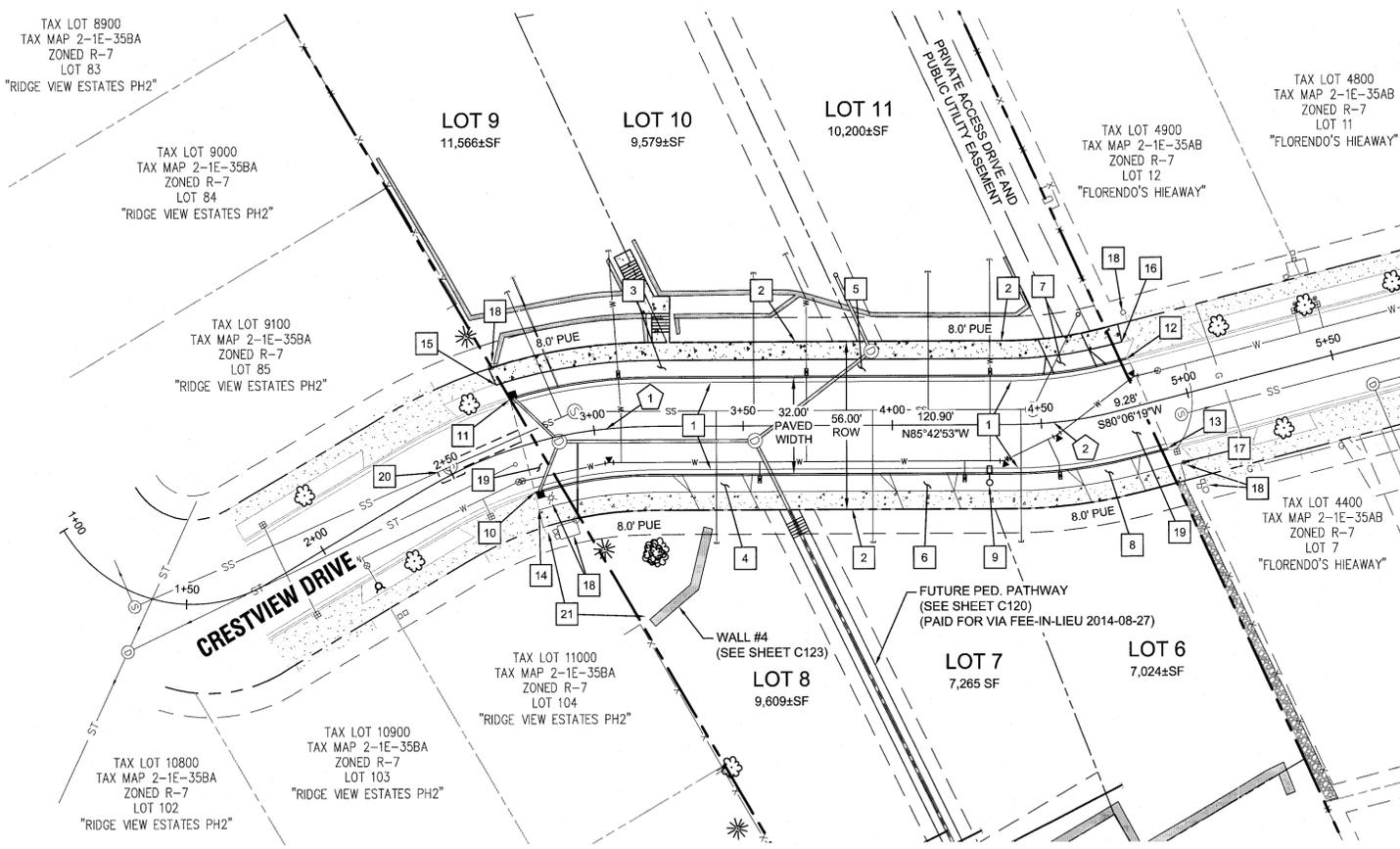
**STREET CENTERLINE CURVE TABLE**

TAG NO.	PC STA.	PT STA.	PI STA.	DELTA	RADIUS	LENGTH	TANGENT
1	STA: 2+75.4	STA: 3+19.1	STA: 2+79.3	16°41'59"	150.0'	43.7'	22.0'
2	STA: 4+40.0	STA: 4+77.2	STA: 4+58.6	14°10'48"	150.0'	37.2'	18.7'

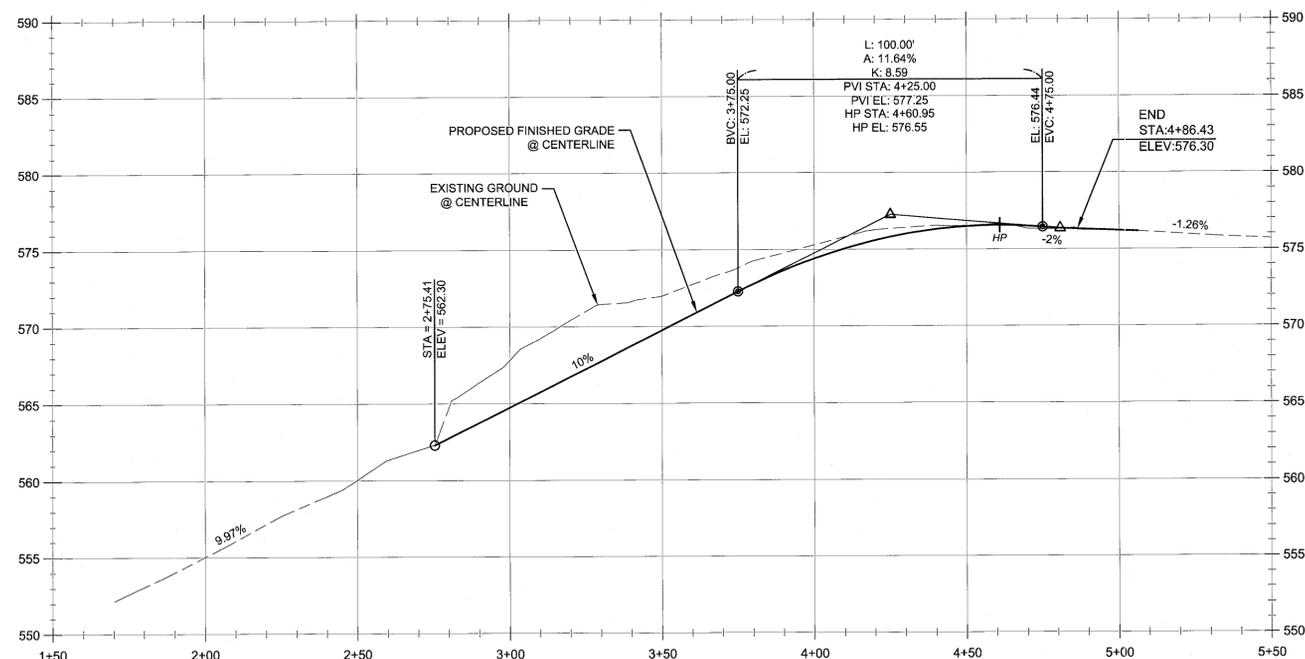
NOTE: TABLE REFERENCES CRESTVIEW DRIVE STATIONING.



**TYPICAL SECTION - CRESTVIEW DRIVE IMPROVEMENTS**  
SCALE: N.T.S.



**CRESTVIEW DRIVE - PLAN VIEW**



**CL - CRESTVIEW PROFILE**  
(STA: 1+50.00 - STA: 5+50.00)  
SCALE: HORIZ 1"=10'  
VERT 1"=6'

**LEGEND**

- BOUNDARY LINE
- - - EXISTING RIGHT-OF-WAY
- - - EXISTING CENTERLINE
- - - EXISTING LOT LINE
- - - EXISTING CURB
- - - EXISTING SIDEWALK
- - - EXISTING LIGHT POLE
- - - PROPOSED RIGHT-OF-WAY
- - - PROPOSED LOT LINE
- - - PROPOSED CENTERLINE
- - - PROPOSED SAWCUT LINE
- - - PROPOSED CURB
- - - PROPOSED SIDEWALK
- - - STORM DRAIN LINE AND MANHOLE
- - - STORM SEWER CURB INLET
- - - PROPOSED STREET LIGHT
- - - PROPOSED RETAINING WALL
- - - SIDEWALK BY HOME BUILDER

**GENERAL NOTES**

1. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE DEVELOPER.
2. STREET LIGHT PLAN DESIGNED BY PORTLAND GENERAL ELECTRIC. CONTRACTOR TO VERIFY STREET LIGHT LOCATION, TYPE, AND MATERIALS WITH PORTLAND GENERAL ELECTRIC PLAN PRIOR TO INSTALLATION.
3. LINES TO BE INSTALLED UNDERGROUND SHALL BE INSPECTED AND APPROVED BEFORE BACKFILLING. CONTRACTOR SHALL NOTIFY THE AUTHORITIES INSPECTORS 48 HOURS BEFORE INSPECTION SERVICES ARE REQUIRED.
4. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.

Scale: 1 inch = 30 feet

**RECORD DRAWING**  
03/19/2015

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- Site observations by the engineer
- Field measurements
- The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**CRESTVIEW DRIVE PLAN & PROFILE**

**SUNBREAK SUBDIVISION**

LF 3, LLC  
WEST LINN, OR

**J.T. SMITH companies**

REGISTERED PROFESSIONAL ENGINEER  
282PE  
OREGON  
NOV 12 2003  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

**3J CONSULTING, INC**

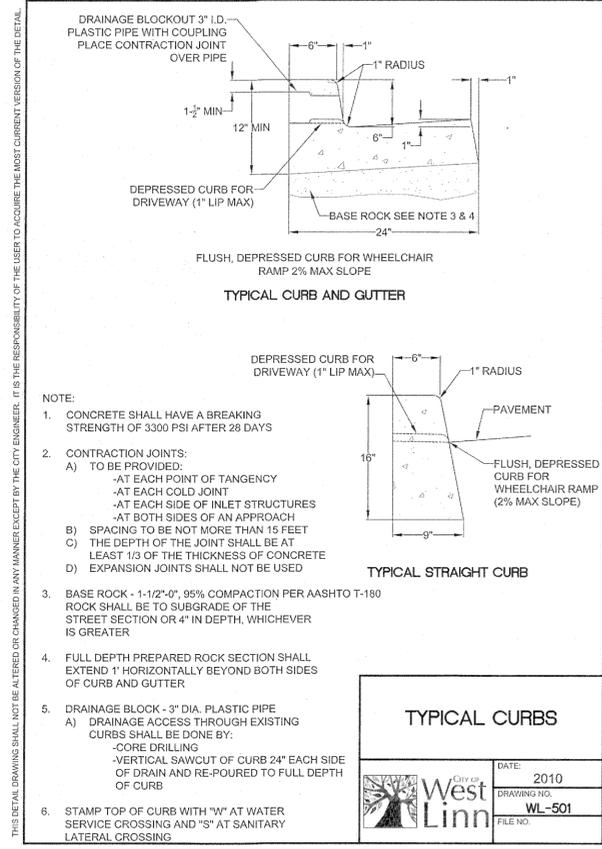
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING

5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-5365

3J JOB ID #	13113
LAND USE #	SUB-13-02
TAX LOT #	251E35A01300
DESIGNED BY	CLF/JTE
CHECKED BY	JDH
SHEET TITLE	CRESTVIEW P&P
SHEET NUMBER	

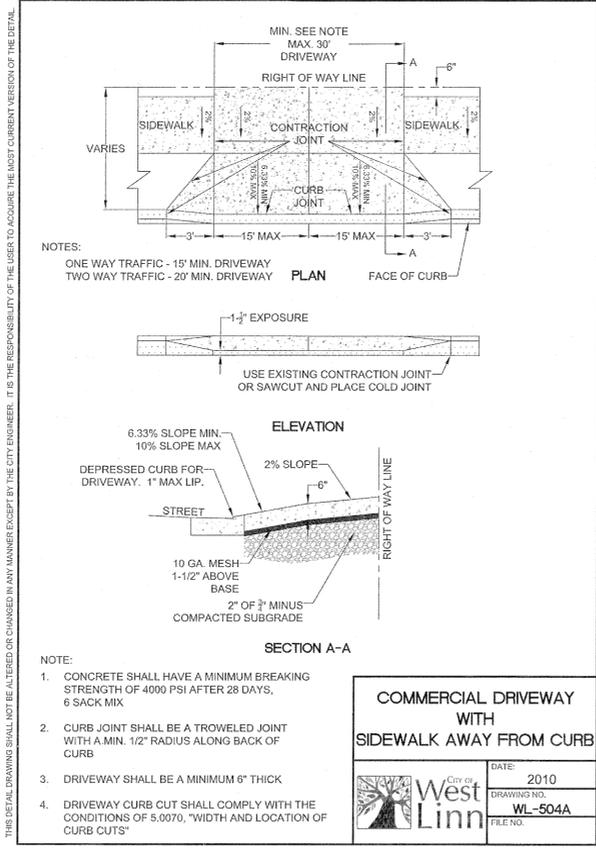
**C203**





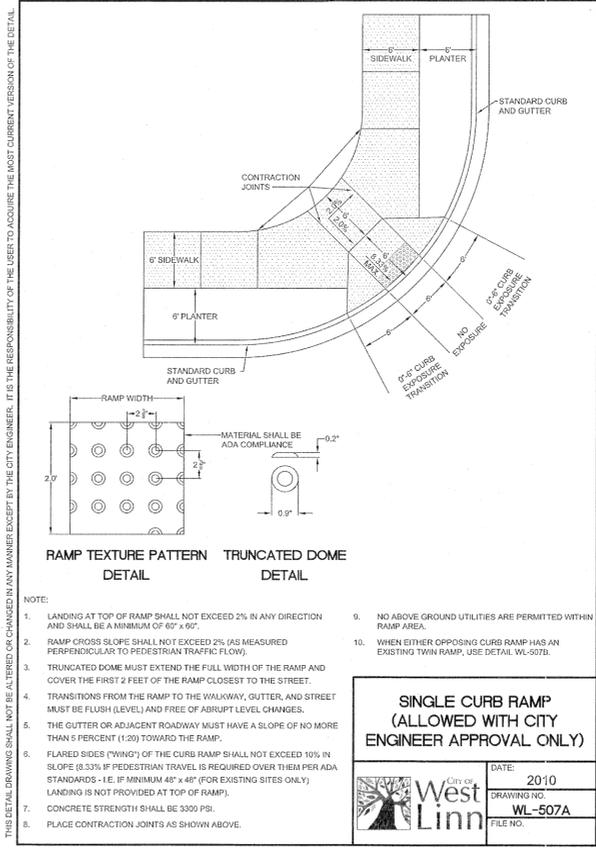
**TYPICAL CURBS**

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



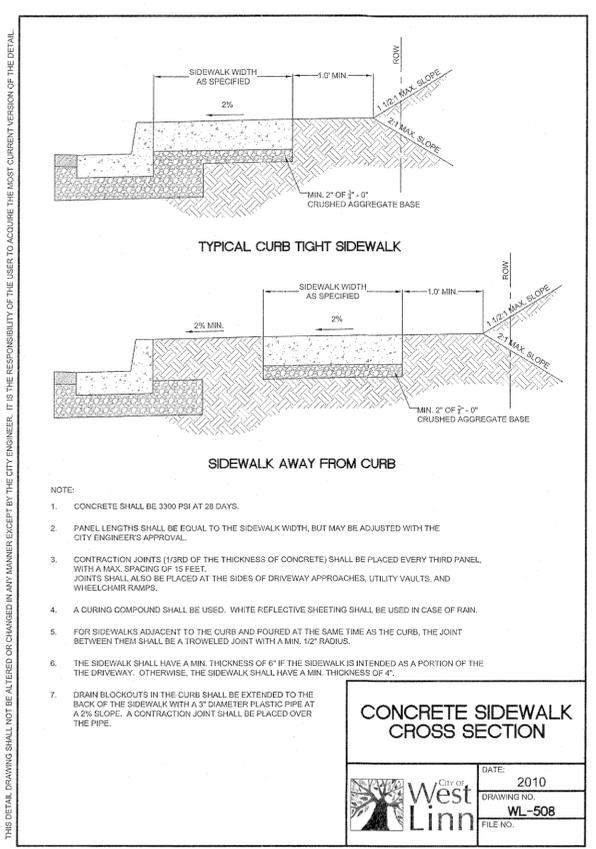
**COMMERCIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB**

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



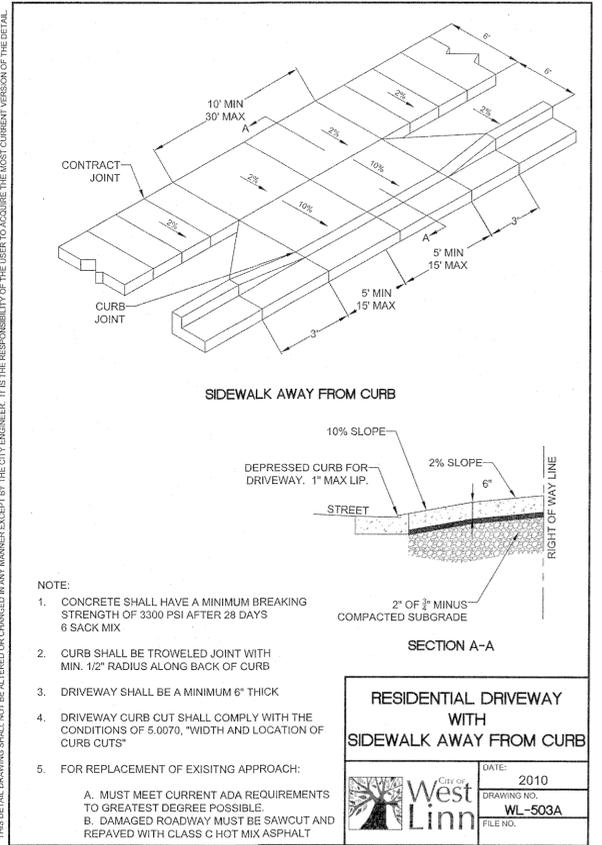
**SINGLE CURB RAMP (ALLOWED WITH CITY ENGINEER APPROVAL ONLY)**

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



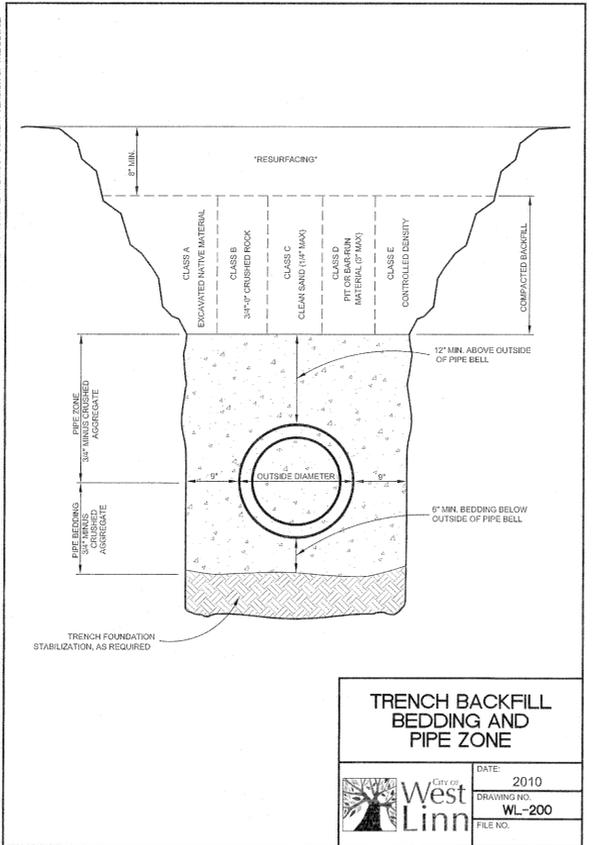
**CONCRETE SIDEWALK CROSS SECTION**

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



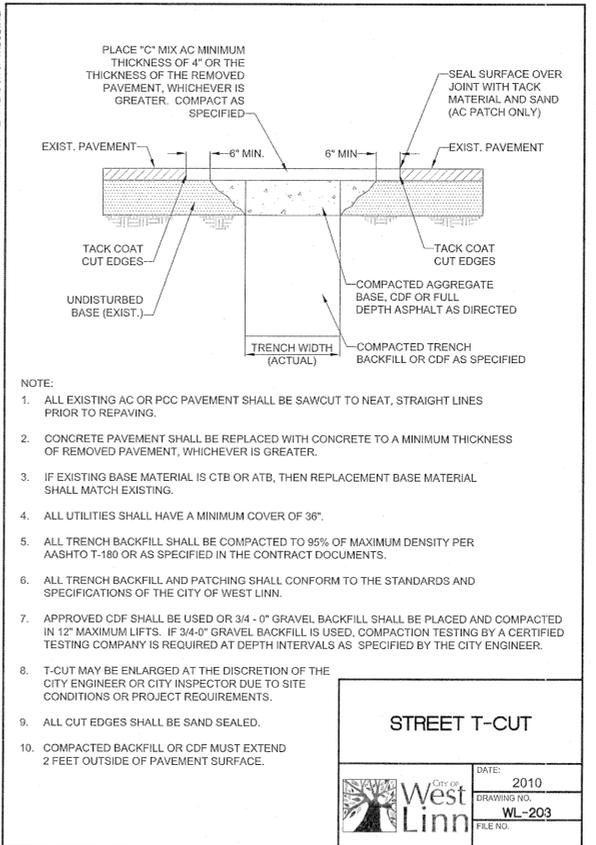
**RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB**

DATE: 2010  
 DRAWING NO. WL-503A  
 FILE NO.



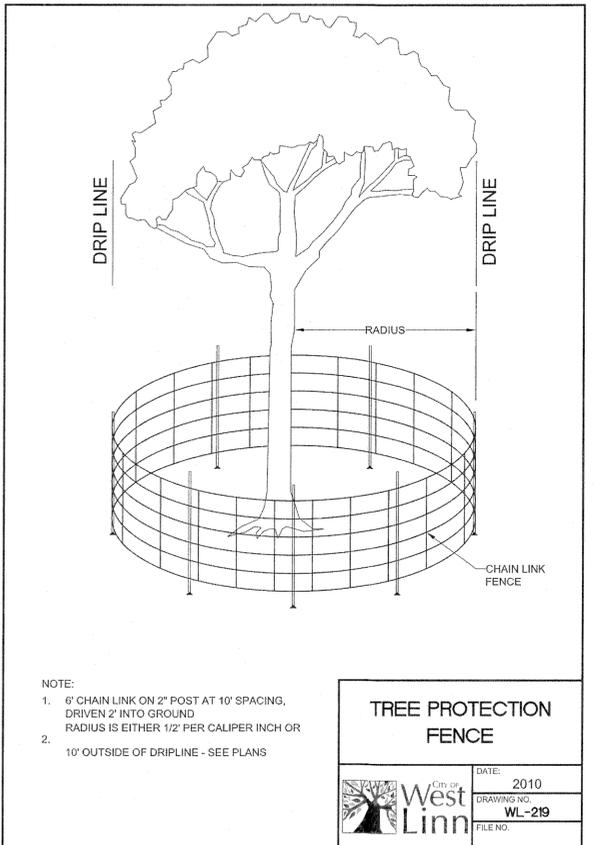
**TRENCH BACKFILL BEDDING AND PIPE ZONE**

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



**STREET T-CUT**

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



**TREE PROTECTION FENCE**

DATE: 2010  
 DRAWING NO. WL-219  
 FILE NO.

**RECORD DRAWING**  
 03/19/2015

The drawing has been prepared to reflect constructed conditions from permit documents. The basis of this information is derived in whole or in part from a contractor's field measurements.

- Contractor supplied profiles
- Field measurements by the engineer

The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**CONSTRUCTION DETAILS I**

**SUNBREAK SUBDIVISION**  
 LF 3, LLC  
 WEST LINN, OR

**J.T. SMITH companies**  
 REGISTERED PROFESSIONAL ENGINEER  
 1822PE  
 OREGON  
 JOHN D. HOWARTH  
 NOV 12, 2009  
 EXPIRES: 06/30/15  
 Digital Signature  
 03/23/2015

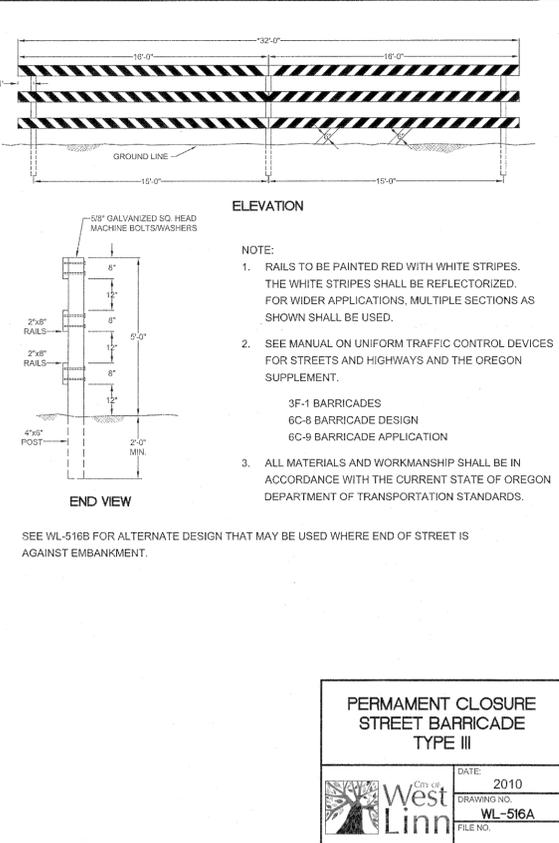
**3J CONSULTING, INC**  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-9685

3J JOB ID # | 13113  
 LAND USE # | SUB-13-02  
 TAX LOT # | 2S1E35A01300  
 DESIGNED BY | CLP/JTE  
 CHECKED BY | JDH

SHEET TITLE  
 DETAILS I

SHEET NUMBER  
**C210**

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.

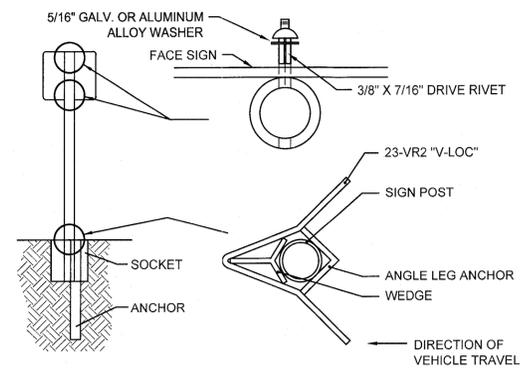


**PERMANENT CLOSURE STREET BARRICADE TYPE III**

DATE:	2010
DRAWING NO.:	WL-516A
FILE NO.:	

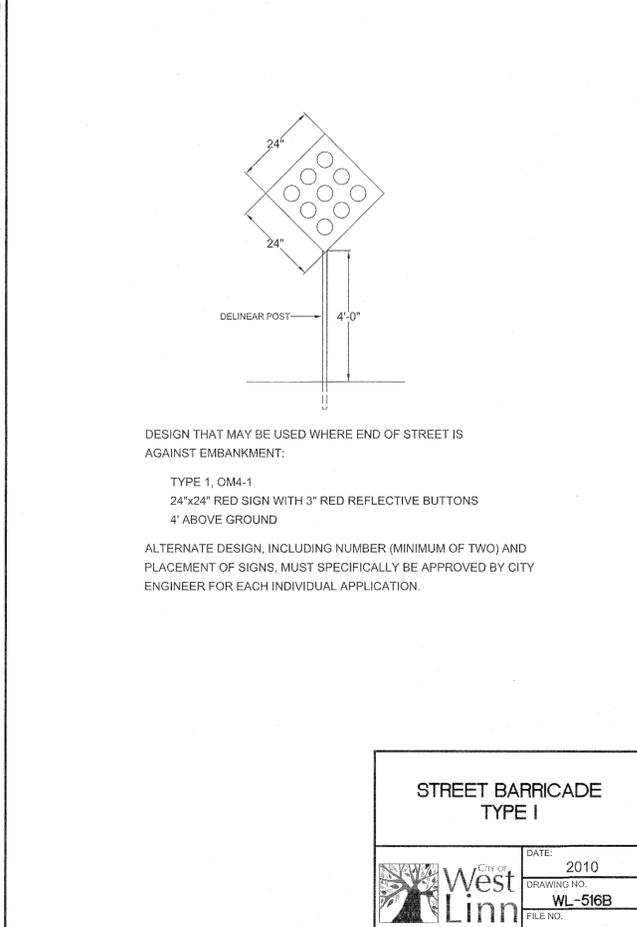


R7-1  
12 X 18



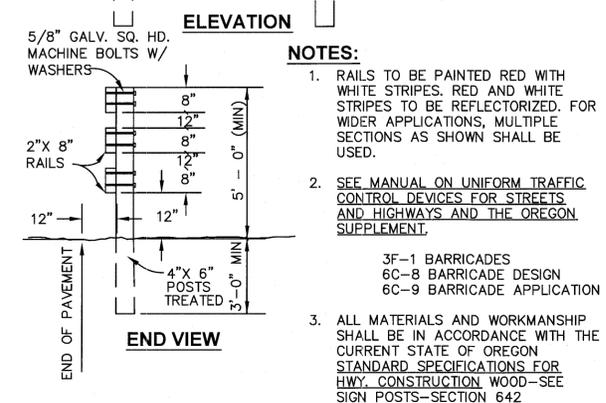
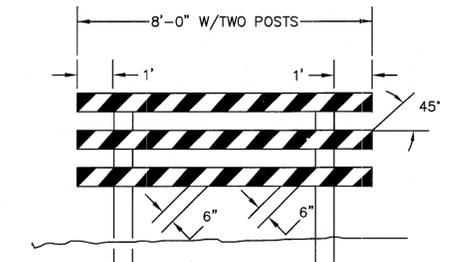
"NO PARKING" SIGN AND TYPICAL INSTALLATION DETAIL  
SCALE: NTS

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.



**STREET BARRICADE TYPE I**

DATE:	2010
DRAWING NO.:	WL-516B
FILE NO.:	



SIDEWALK BARRICADE  
SCALE: NTS

**RECORD DRAWING**  
03/19/2015

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- Contractor supplied redlines
- Site observations by the engineer
- Field measurements

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**CONSTRUCTION DETAILS II**

**SUNBREAK SUBDIVISION**

LF 3, LLC  
WEST LINN, OR

**J.T. SMITH companies**

REGISTERED PROFESSIONAL ENGINEER  
282PE  
OREGON  
NOV 12, 2005  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

**3J CONSULTING, INC**

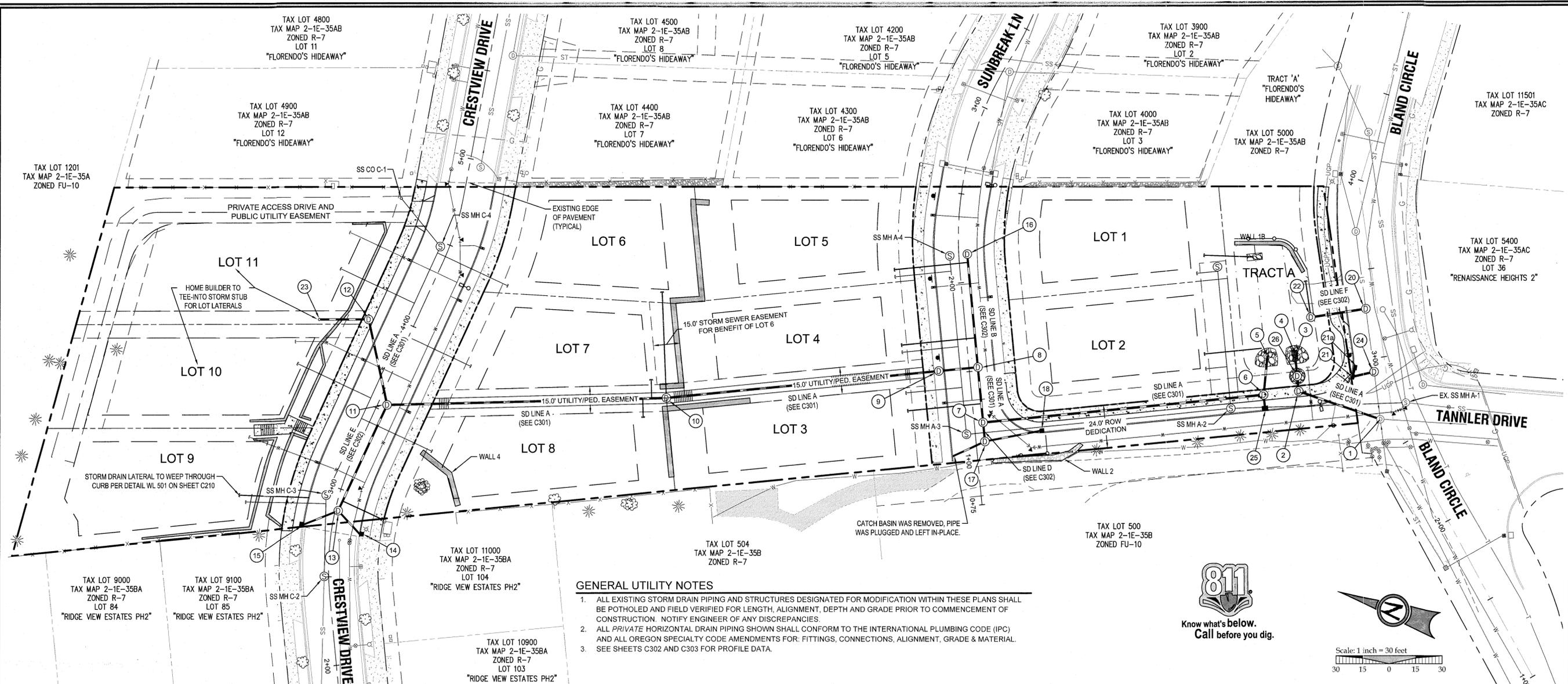
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING

5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9385

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

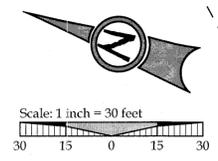
SHEET TITLE  
**DETAILS II**

SHEET NUMBER  
**C211**



**GENERAL UTILITY NOTES**

1. ALL EXISTING STORM DRAIN PIPING AND STRUCTURES DESIGNATED FOR MODIFICATION WITHIN THESE PLANS SHALL BE POTHOLED AND FIELD VERIFIED FOR LENGTH, ALIGNMENT, DEPTH AND GRADE PRIOR TO COMMENCEMENT OF CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. ALL PRIVATE HORIZONTAL DRAIN PIPING SHOWN SHALL CONFORM TO THE INTERNATIONAL PLUMBING CODE (IPC) AND ALL OREGON SPECIALTY CODE AMENDMENTS FOR: FITTINGS, CONNECTIONS, ALIGNMENT, GRADE & MATERIAL.
3. SEE SHEETS C302 AND C303 FOR PROFILE DATA.



**STORM DRAIN STRUCTURE TABLE**

1	EX. SD MH A-1 (SEE C301)	7	SD MH A-4 (SEE C301)	14	SD CI E-1.1 STA: 2+76.71, 16.00' RT CRESTVIEW DR FL: 561.14 IE OUT (10° N): 559.64 INSTALL 16.8 LF 10" DIP @ S=0.0363 SUMP: 558.10
2	SD MH A-2 (48"Ø) (SEE C301)	8	SD MH A-5 (SEE C301)	15	SD CI E-1.2 STA: 2+77.04, 16.0' LT CRESTVIEW DR FL: 563.33 IE OUT (10° N): 559.83 INSTALL 20.7 LF 10" DIP @ S=0.0290 SUMP: 558.33
3	SD DI A-2 (SEE C301)	9	SD MH A-6 (SEE C301)	16	SD MH B-1 (SEE C302)
4	SD DI A-1 (SEE C301)	10	SD MH A-7 (SEE C301)	17	SD MH D-1 (SEE C302)
5	SD LINE A POND OFFFALL STA: 1+88.61 SD LINE A = STA: 3+10.54, 65.12' LT BLAND CIRCLE IE OUT (12°): 499.26 CLASS 100 RIP RAP PAD (APPROX. 8 CY) APPROXIMATELY 10'Lx10'Wx2'D	11	SD MH A-8 (SEE C301)	18	SD CI D-1.1 STA: 1+12.00, 37.80' RT SUNBREAK LN FL: 520.14 IE OUT (10° N): 517.49 INSTALL 34.3 LF 10" DIP @ S=0.0125 SUMP: 516.08
6	SD MH A-3 (SEE C301)	12	SD MH A-8 (SEE C301)	19	NOT USED
		13	SD MH E-1 (SEE C301)	20	SD MH F-1 (SEE C302)
				21	SD CB F-1.1 STA: 2+92.17, 20.00' LT BLAND CIR FL: 498.80 IE OUT (10° SE): 496.80 INSTALL 11.4 LF 10" DIP @ S=0.0246 SUMP: 495.30
				21a	SD CI F-1.2 STA: 2+96.86, 18.00' LT BLAND CIR FL: 498.94 IE OUT (10° SE): 497.44 INSTALL 5.2 LF 10" DIP @ S=0.0269 SUMP: 495.90

**STORM LATERAL TABLE**

STORM LATERAL	LATERAL SIZE	LENGTH	INVERT AT MAIN	INVERT AT END	DEPTH AT END	MAIN LINE STATION
LOT 1	4"	32.5 LF	499.00	501.10	9.6 FT	POND OFFFALL
LOT 2	4"	32.5 LF	499.00	500.25	6.7 FT	POND OFFFALL
LOT 3	4"	42.0 LF	517.61	515.39	11.0 FT	STA: 3+90.63, STORM LINE A
LOT 4	4"	42.0 LF	520.97	523.95	5.5 FT	STA: 0+16.50, STORM LINE B
LOT 5	4"	42.0 LF	524.62	529.52	3.2 FT	STA: 0+59.00, STORM LINE B
LOT 6	4"	59.0 LF	547.41	555.52	4.2 FT	STA: 5+82.30, STORM LINE A
LOT 7	4"	10.5 LF	543.59	552.10	3.2 FT	STA: 5+90.63, STORM LINE A
LOT 8	4"	10.5 LF	544.09	549.50	4.8 FT	STA: 5+95.63, STORM LINE A
LOT 9	4"	42.0 LF	N/A	571.30	5.3 FT	N/A
WALL 1B	4"	12.4 LF	500.00	501.17	1.3 FT	POND OFFFALL

**LEGEND**

- BOUNDARY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE
- EXISTING LOT LINE
- EXISTING CURB
- EXISTING ASPHALT
- EXISTING SIDEWALK
- EXISTING GRAVEL DRIVE
- EXISTING LIGHT POLE
- EXISTING TRAFFIC SIGN
- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- EXISTING STORM LINE
- EXISTING GAS LINE
- EXISTING UNDERGROUND POWER
- EXISTING SANITARY MANHOLE
- EXISTING STORM MANHOLE
- EXISTING CATCHBASIN
- PROPOSED LOT LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED CENTERLINE
- PROPOSED CURB
- PROPOSED SIDEWALK
- PROPOSED SETBACK LINE
- STORM SEWER CURB INLET
- STORM SEWER DITCH INLET
- STORM DRAIN LINE AND MANHOLE
- DETENTION POND LIMITS
- STORM SEWER LATERAL AS NOTED
- SANITARY SEWER LATERAL
- SANITARY SEWER LINE AND MANHOLE
- DOMESTIC WATER SERVICE & METER
- PROPOSED STREET LIGHT
- PROPOSED RETAINING WALL

**STORMWATER DRAINAGE PLAN**  
**SUNBREAK SUBDIVISION**

**RECORD DRAWING**  
03/19/2015  
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• Contractor supplied profiles  
• Site observations by the engineer  
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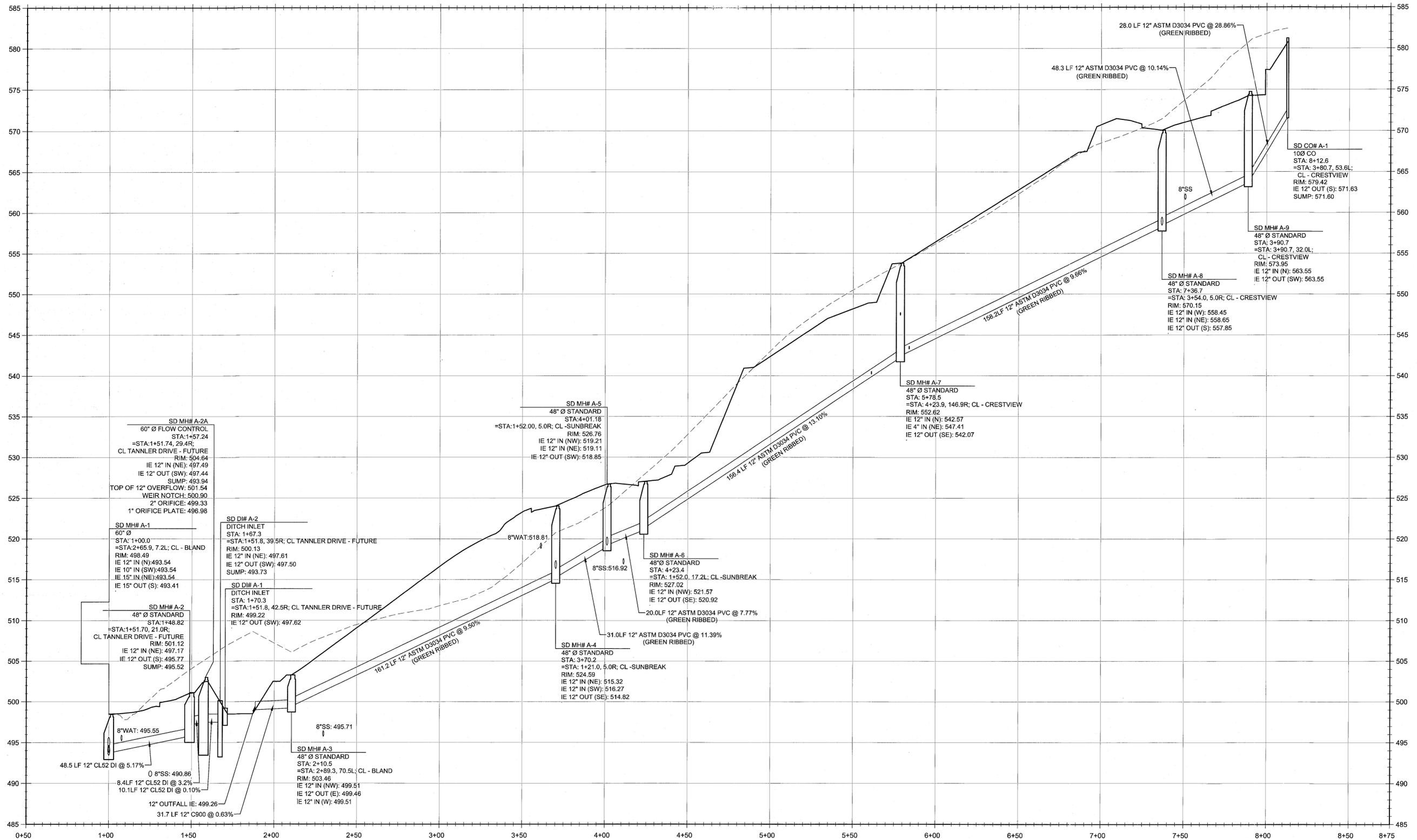
J.T. SMITH companies

REGISTERED PROFESSIONAL ENGINEER  
282PE  
OREGON  
JOHN D. HORTWORTH  
EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

3J CONSULTING, INC  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
6075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9365

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 251E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
**STORM PLAN**  
SHEET NUMBER  
**C300**



CL SD LINE A PROFILE  
 (STA:0+50.00 - STA:8+75.00)  
 SCALE: HORIZ 1"=30'  
 VERT 1"=6'

**RECORD DRAWING**  
 03/19/2015

This drawing has been prepared to reflect constructed elevations from permit documents. The basis of this information is derived in whole or in part from a contract. Contractor supplied redlines.

- Contractor supplied redlines
- Field observations by the engineer

The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**STORMWATER PROFILES I - SD LINE 'A'**

**SUNBREAK**  
**SUBDIVISION**

LF 3, LLC  
 WEST LINN, OR



3J JOB ID # | 13113  
 LAND USE # | SUB-13-02  
 TAX LOT # | 2S1E35A01300  
 DESIGNED BY | CLF/JTE  
 CHECKED BY | JDH

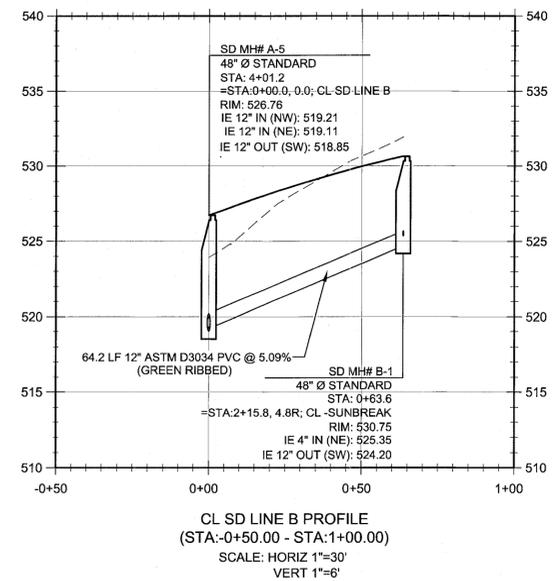
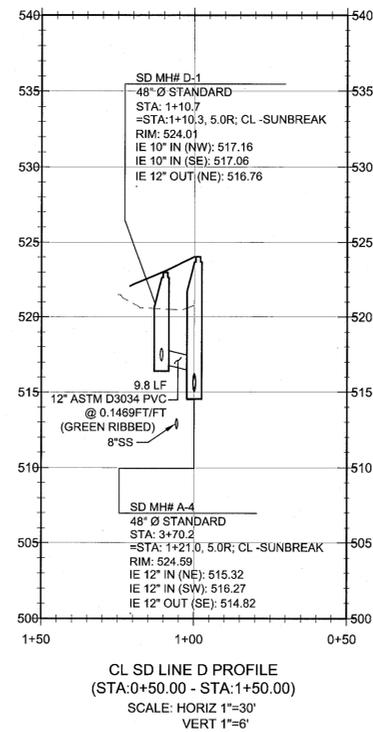
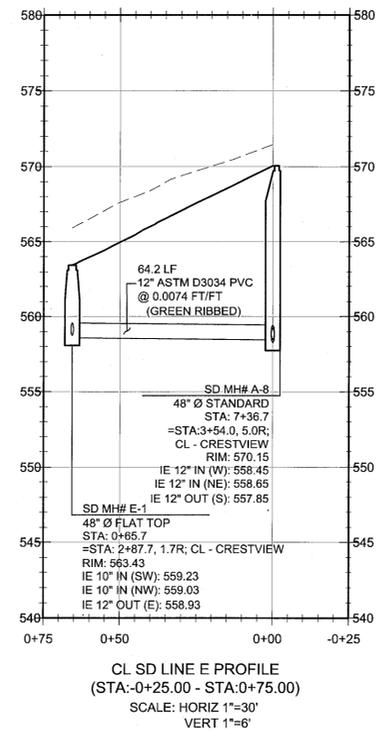
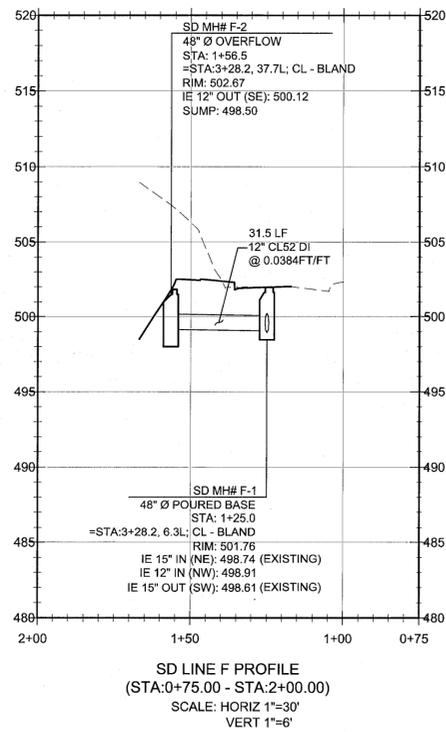
SHEET TITLE  
**SD LINE 'A'**

SHEET NUMBER  
**C301**



Know what's below.  
 Call before you dig.

\\13113-1\JTS - Sunbreak\_Subdivision\CAD\A\B1\3115-C301-Stormwater Profiles.dwg, 3/20/2015 10:25:02 AM



STORMWATER PROFILES II -  
 SD LINES 'B', 'D', 'E', 'F'  
**SUNBREAK**  
**SUBDIVISION**  
 LF 3, LLC  
 WEST LINN, OR



EXPIRES: 06/30/15

Digital Signature  
 03/23/2015

**3J CONSULTING, INC**

CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING

5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 846-9385

3J JOB ID # | 13113  
 LAND USE # | SUB-13-02  
 TAX LOT # | 251E35A01300  
 DESIGNED BY | CLF/JTE  
 CHECKED BY | JDH

SHEET TITLE  
 SD LINES 'B', 'D', 'E', 'F'  
 SHEET NUMBER

**C302**



Know what's below.  
 Call before you dig.

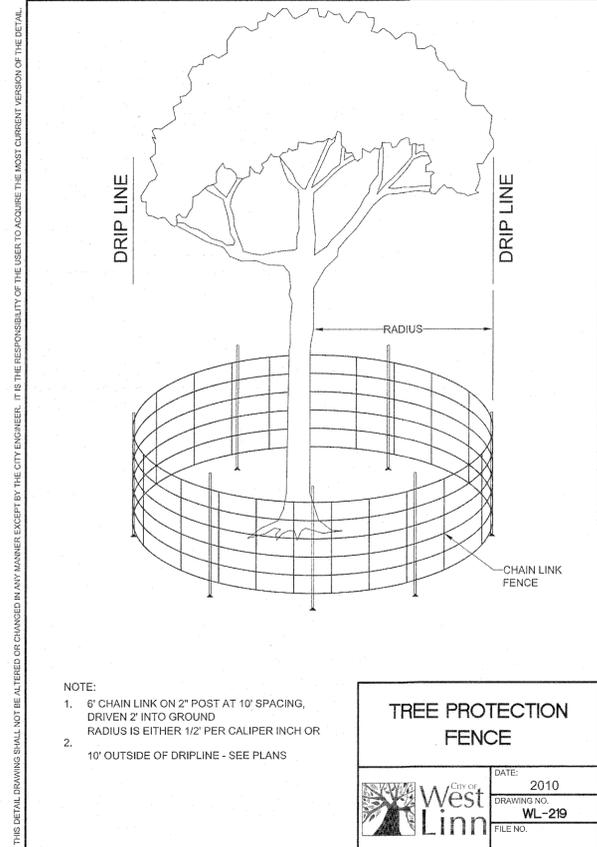
**RECORD DRAWING**  
 03/19/2015

This drawing has been prepared to reflect constructed conditions from permit documents. The basis of this information is derived in whole or in part from a contract.

- Site observations by the engineer
- Field measurements
- Contractor supplied redlines

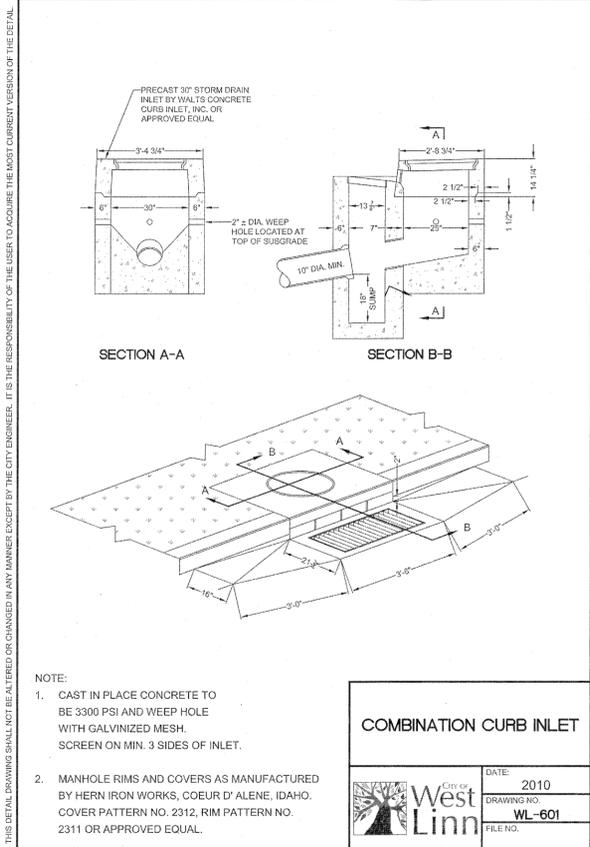
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.





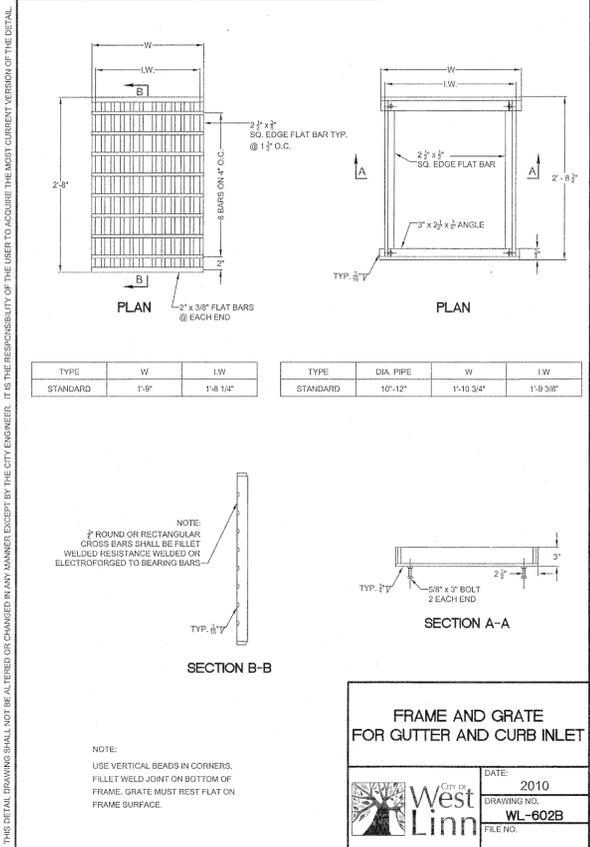
**TREE PROTECTION FENCE**

DATE: 2010  
DRAWING NO.: WL-219  
FILE NO.



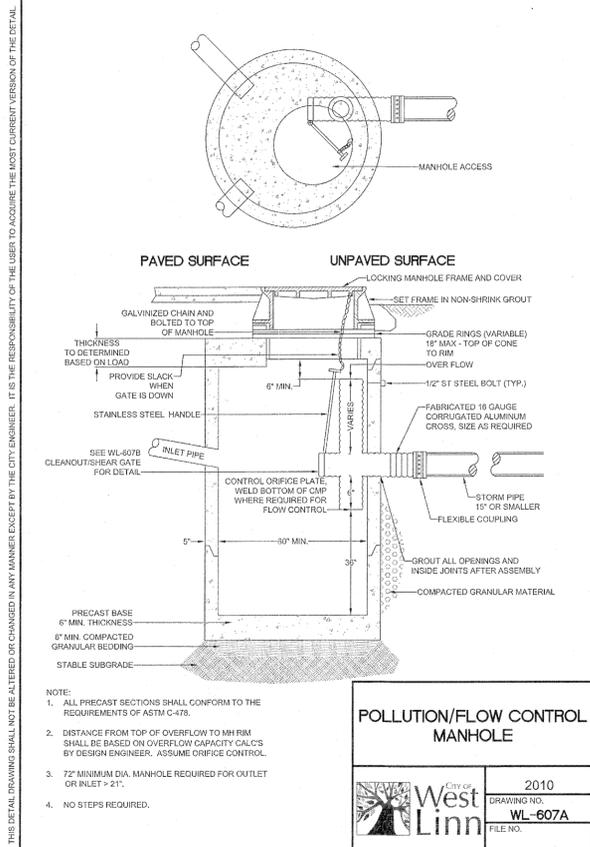
**COMBINATION CURB INLET**

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



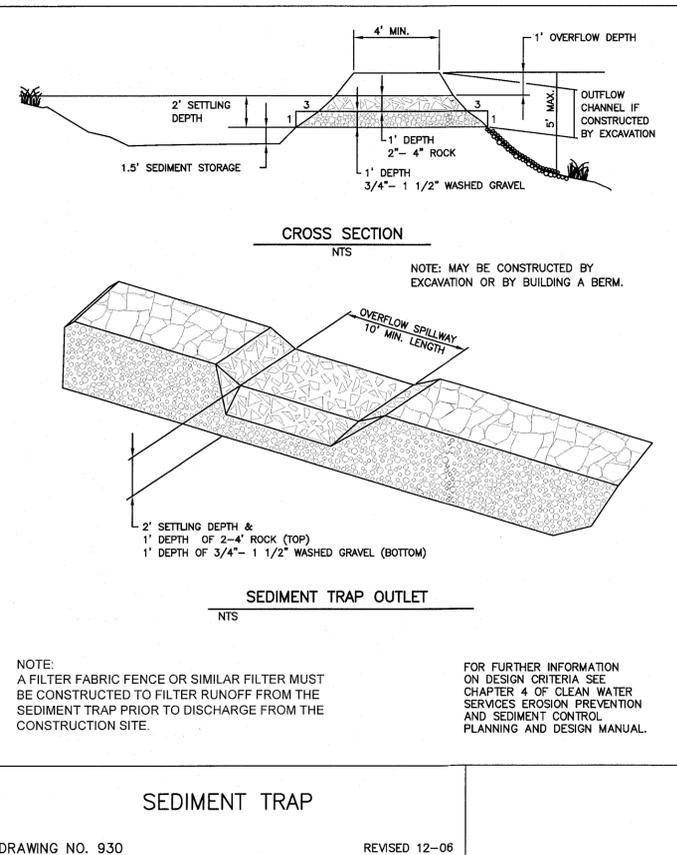
**FRAME AND GRATE FOR GUTTER AND CURB INLET**

DATE: 2010  
DRAWING NO.: WL-602B  
FILE NO.



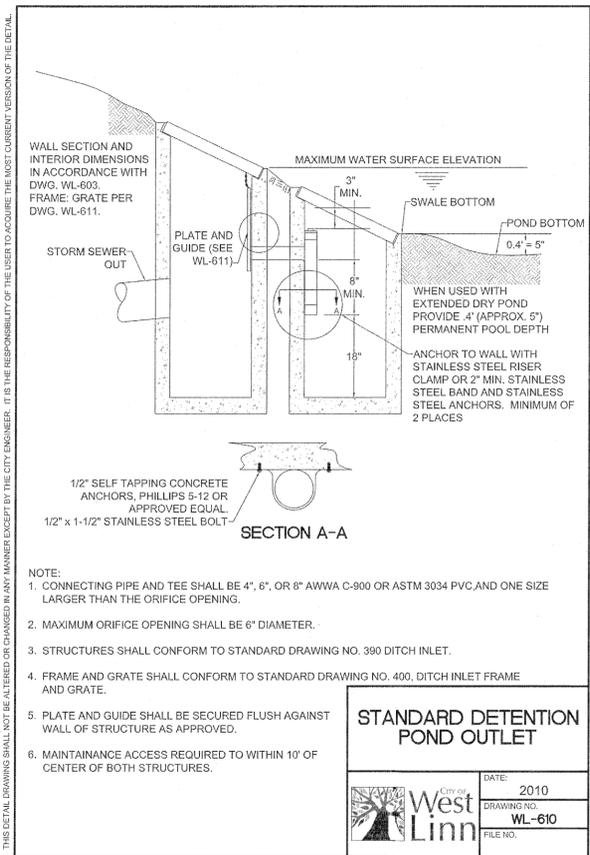
**POLLUTION/FLOW CONTROL MANHOLE**

DATE: 2010  
DRAWING NO.: WL-607A  
FILE NO.



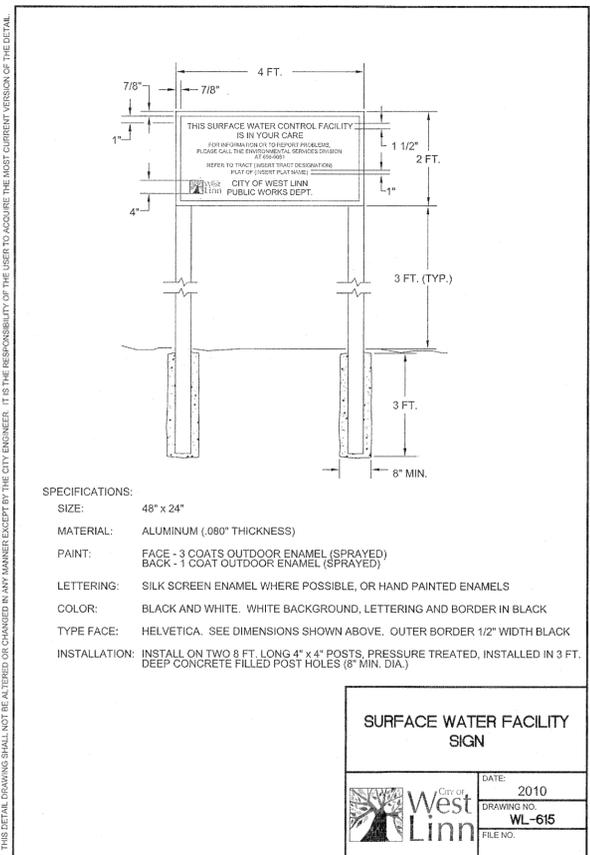
**SEDIMENT TRAP**

DRAWING NO. 930 REVISED 12-06



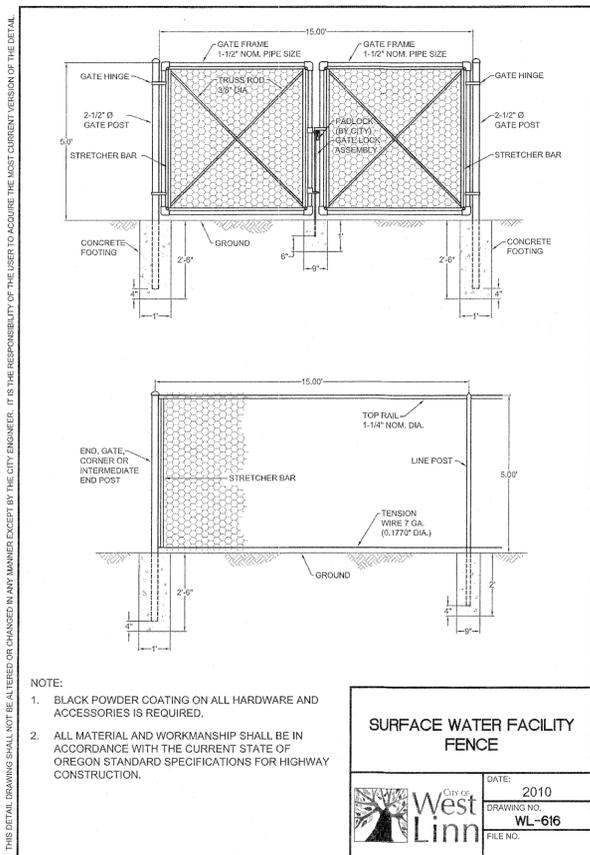
**STANDARD DETENTION POND OUTLET**

DATE: 2010  
DRAWING NO.: WL-610  
FILE NO.



**SURFACE WATER FACILITY SIGN**

DATE: 2010  
DRAWING NO.: WL-615  
FILE NO.



**SURFACE WATER FACILITY FENCE**

DATE: 2010  
DRAWING NO.: WL-616  
FILE NO.

**RECORD DRAWING**  
03/19/2015  
This drawing has been prepared to reflect constructed conditions from permit documents. The basis of this information is derived in whole or in part from a contract. The engineer is not responsible for:  
• Contractor supplied rebar  
• Site observations by the engineer  
• Field measurements  
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

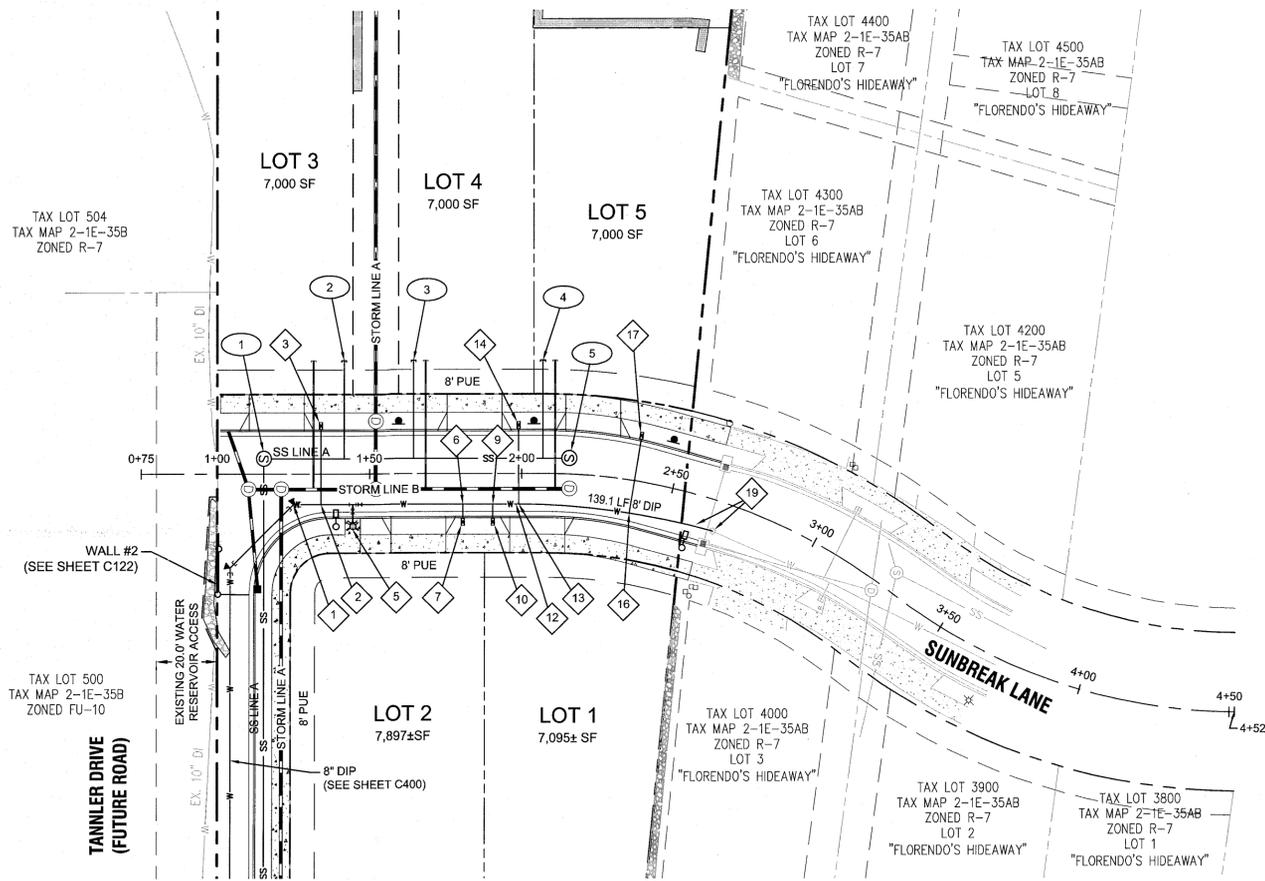
**STORMWATER DRAINAGE DETAILS II**  
**SUNBREAK**  
**SUBDIVISION**  
LF 3, LLC  
WEST LINN, OR

**J.T. SMITH**  
companies  
REGISTERED PROFESSIONAL ENGINEER  
NOV 12, 2009  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

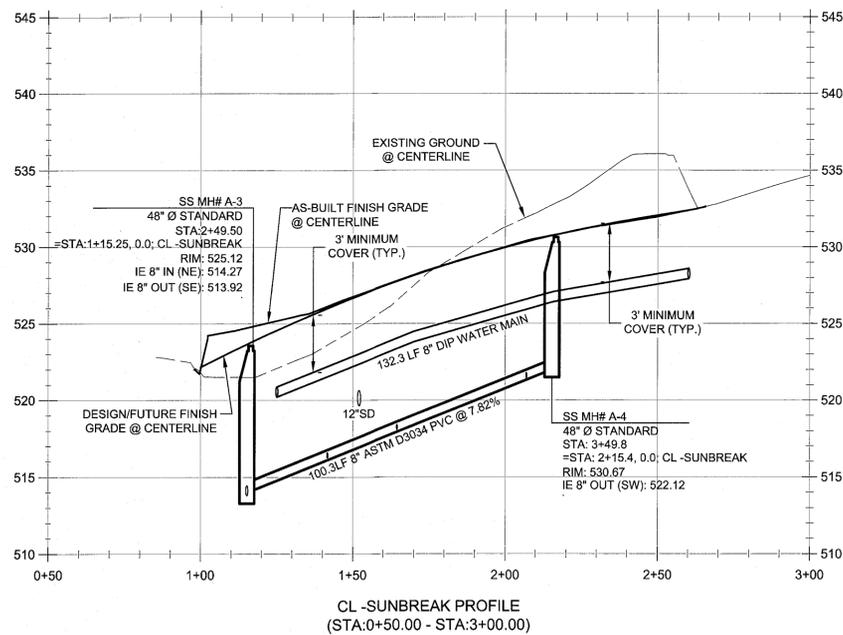
**3J CONSULTING, INC**  
CIVIL ENGINEERING  
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LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9365

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | J.DH  
SHEET TITLE  
**DETAILS II**  
SHEET NUMBER  
**C311**





SUNBREAK LANE - PLAN VIEW



MJ RESTRAINT TABLE

ALL ANGLES 45°

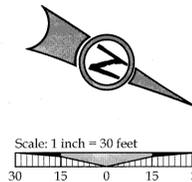
DIA	DEPTH	RESTRAINT LENGTH
8"	3'	21'
8"	4'	16'

SANITARY LATERAL TABLE

SANITARY LATERAL	LATERAL SIZE	LENGTH	INVERT AT END	INVERT AT MAIN	DEPTH AT END	MAIN LINE STATION
LOT 3 SANITARY	4"	32.0 lf	525.80	516.26	6.0FT	STA: 2+75.9, SANITARY SEWER LINE 'A'
LOT 4 SANITARY	4"	32.0 lf	522.81	518.08	6.0FT	STA: 2+98.7, SANITARY SEWER LINE 'A'
LOT 5 SANITARY	4"	32.0 lf	525.30	521.47	6.0FT	STA: 3+41.2, SANITARY SEWER LINE 'A'

GENERAL NOTES

- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE DEVELOPER.
- ALL WATER PIPE TO BE DUCTILE IRON PIPE UNLESS OTHERWISE NOTED.
- WATER SYSTEM TO BE INSTALLED AND TESTED PER CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS.
- ALL SEWER PIPE TO BE PVC AND SHALL CONFORM TO ASTM D-3034 UNLESS OTHERWISE NOTED.
- MAINTAIN 10' MINIMUM HORIZONTAL CLEARANCE FROM WATER MAIN TO SEWER MAIN.
- EXTEND PRIVATE UTILITIES WITH A JOINT TRENCH WITHIN 8' PUE SHOWN. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER TO OBTAIN DESIGN INFORMATION.
- ALL UTILITY LATERAL LOCATIONS MUST BE STAMPED ON NEW CURB.



LEGEND

- BOUNDARY LINE
- - - RIGHT-OF-WAY
- - - EXISTING CENTERLINE
- - - EXISTING EASEMENT LINE
- - - EXISTING LOT LINE
- - - EXISTING CURB AND GUTTER
- - - EXISTING SANITARY SEWER LINE
- - - EXISTING WATER LINE
- - - EXISTING STORM LINE
- - - EXISTING SIDEWALK
- - - EXISTING LIGHT POLE
- - - EXISTING TRAFFIC SIGN
- - - EXISTING FIRE HYDRANT
- - - EXISTING WATER METER
- - - EXISTING SANITARY MANHOLE
- - - EXISTING STORM MANHOLE
- - - EXISTING CATCHBASIN
- - - PROPOSED RIGHT-OF-WAY
- - - PROPOSED LOT LINE
- - - PROPOSED CENTERLINE
- - - PROPOSED CURB AND GUTTER
- - - PROPOSED SIDEWALK
- - - STORM DRAIN LINE AND MANHOLE
- - - STORM SEWER CURB INLET
- - - PROPOSED STREET LIGHT
- - - PROPOSED RETAINING WALL
- - - PROPOSED POND LIMITS
- - - PROPOSED SANITARY LINE
- - - PROPOSED WATER LINE

WATER LINE CONSTRUCTION NOTES

- (CONTINUATION FROM SHEET C400)  
STA: 1+25.0, 10.0' RT SUNBREAK LN = STA: 3+26.2, 25.0' RT TANLER DR:  
INSTALL 45° BEND, & FIELD LOK JOINT RESTRAINT
- (STA: 1+34.0, 10.0' RT SUNBREAK LN)  
INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402.
- (STA: 1+34.0, 15.8' LT SUNBREAK LN)  
INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- NOT USED
- (STA: 1+44.5, 10.0' RT SUNBREAK LN)  
INSTALL 8"X8"X6" (FLGXFLG) TEE, 1-6" GATE VALVE (FLGXJM), 1-8" GATE VALVE (FLGXJM), 1-8" FLGXJM ADAPTER, AND 7.3 LF OF 6" PIPE PER CITY OF WEST LINN STANDARD DETAIL WL-401 (STANDARD FIRE HYDRANT ASSEMBLY) ON SHEET C410.
- (STA: 1+80.7, 10.0' RT SUNBREAK LN)  
INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- (STA: 1+80.7, 15.8' RT SUNBREAK LN)  
INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- NOT USED
- (STA: 1+90.5, 10.0' RT SUNBREAK LN)  
INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- (STA: 1+90.5, 15.8' RT SUNBREAK LN)  
INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- NOT USED
- (STA: 1+98.1, 10.0' RT SUNBREAK LN)  
DEFLECT PIPE; BEGIN 237.5' R
- (STA: 1+99.0, 10.0' RT SUNBREAK LN)  
INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- (STA: 1+99.0, 15.8' LT SUNBREAK LN)  
INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- NOT USED
- (STA: 2+37.1, 10.75' RT SUNBREAK LN)  
INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- (STA: 2+37.1, 15.0' LT SUNBREAK LN)  
INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- NOT USED
- (STA: 2+66.8, 10.0' RT SUNBREAK LN)  
DEFLECT PIPE; END 237.5' R  
REMOVE EXISTING BLOW-OFF ASSEMBLY AND CONNECT TO EXISTING 8" WATER MAIN.

SANITARY SEWER LINE CONSTRUCTION NOTES

- SS MH #A-3 (PROPOSED)  
STA: 1+15.3, 5.0' LT SUNBREAK LN = STA: 3+41.2, 15.3' RT TANLER DR:  
INSTALL SANITARY SEWER MANHOLE PER CITY OF WEST LINN STANDARD DETAIL WL-207 (STANDARD MANHOLE FOR LESS THAN 36 IN. PIPE). SEE PROFILE THIS SHEET FOR ELEVATION DATA.
- SANITARY SEWER STUB (LOT 3)  
STA: 1+41.7, 37.0' LT SUNBREAK LN:  
SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA.  
CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 (SERVICE BRANCH) ON SHEET C411.
- SANITARY SEWER STUB (LOT 4)  
STA: 1+64.5, 37.0' LT SUNBREAK LN:  
SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA.  
CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 (SERVICE BRANCH) ON SHEET C411.
- SANITARY SEWER STUB (LOT 5)  
STA: 2+07.0, 37.0' LT SUNBREAK LN:  
SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA.  
CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 (SERVICE BRANCH) ON SHEET C411.
- SS MH #A-4 (PROPOSED)  
STA: 2+15.4, 5.2' LT SUNBREAK LN:  
INSTALL SANITARY SEWER MANHOLE PER CITY OF WEST LINN STANDARD DETAIL WL-207 (STANDARD MANHOLE FOR LESS THAN 36 IN. PIPE). SEE PROFILE THIS SHEET FOR ELEVATION DATA.

**RECORD DRAWING**  
 03/19/2015  
 This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a combination of:  
 • As-built field notes  
 • Field measurements  
 • Site observations by the engineer  
 The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

**SUNBREAK LANE - SANITARY SEWER AND WATER PLAN AND PROFILE**  
**SUNBREAK SUBDIVISION**  
 LF 3, LLC  
 WEST LINN, OR

**J.T. SMITH**  
 companies

REGISTERED PROFESSIONAL ENGINEER  
 282PE  
 OREGON  
 NOV. 12, 2009  
 JOHN D. HOWARTH  
 EXPIRES: 06/30/15  
 Digital Signature  
 03/23/2015

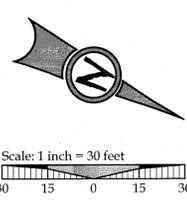
**3J CONSULTING, INC**  
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3J JOB ID # | 13113  
 LAND USE # | SUB-13-02  
 TAX LOT # | 2S1E35A01300  
 DESIGNED BY | CLF/JTE  
 CHECKED BY | JDH

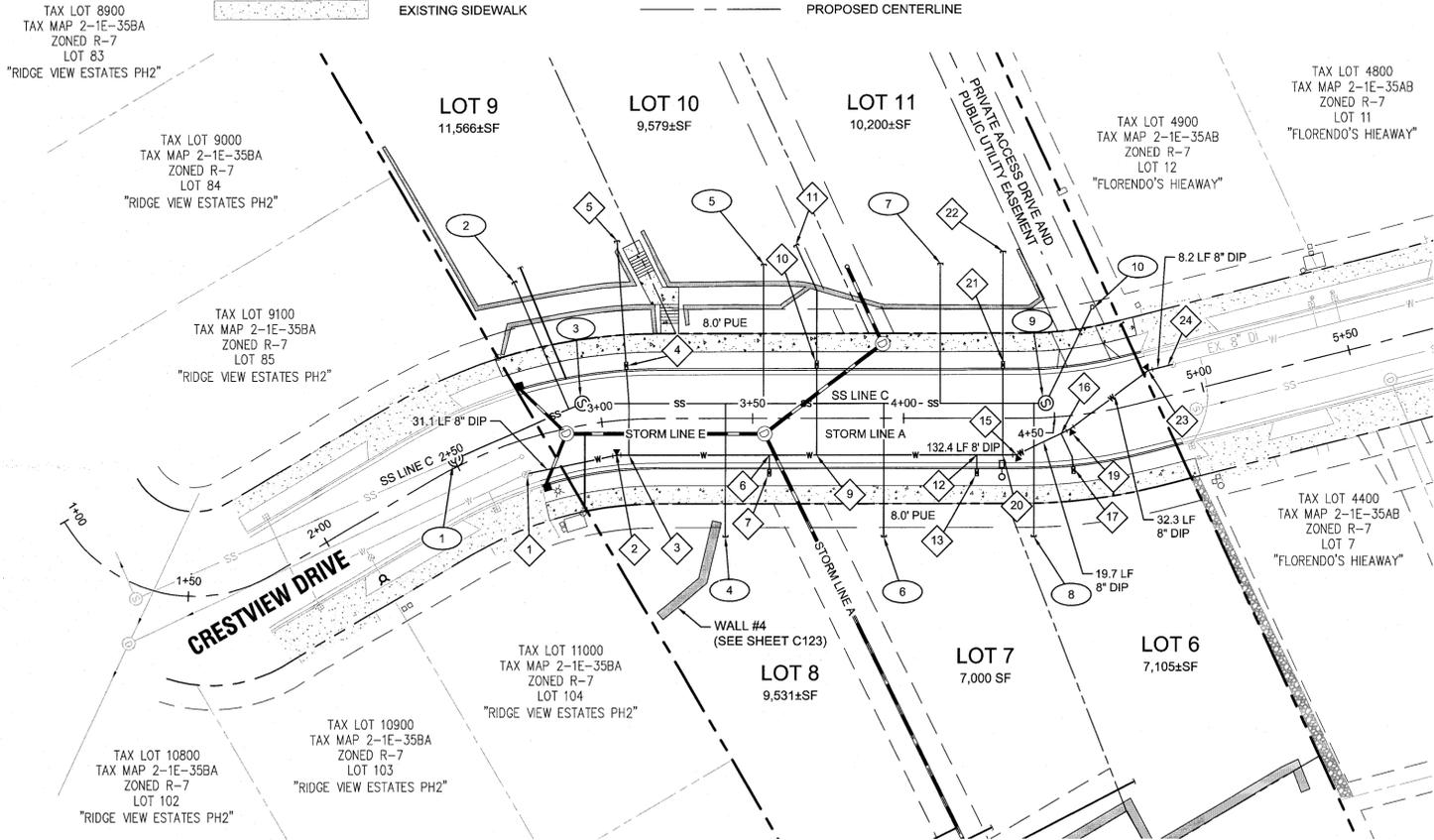
SHEET TITLE  
**SUNBREAK SS-WTR**  
 SHEET NUMBER  
**C401**



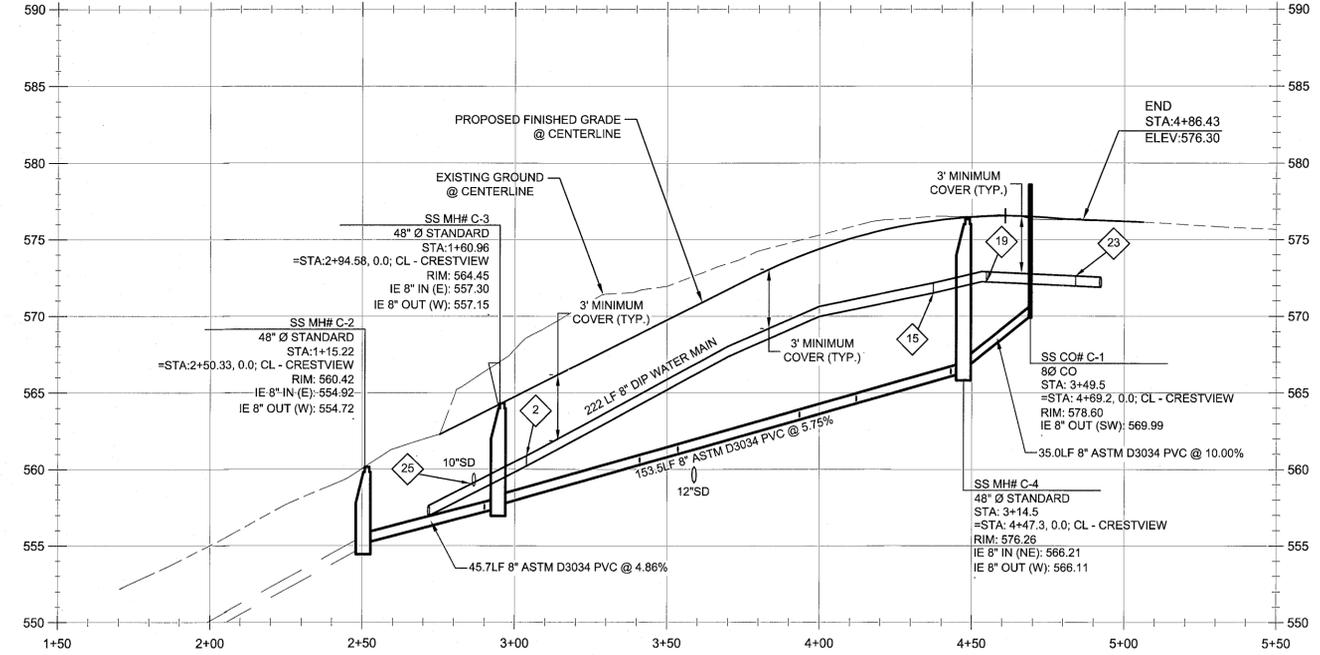
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LEGEND	
	BOUNDARY LINE
	RIGHT-OF-WAY
	EXISTING CENTERLINE
	EXISTING EASEMENT LINE
	EXISTING LOT LINE
	EXISTING CURB AND GUTTER
	EXISTING SANITARY SEWER LINE
	EXISTING WATER LINE
	EXISTING STORM LINE
	EXISTING SIDEWALK
	EXISTING LIGHT POLE
	EXISTING TRAFFIC SIGN
	EXISTING FIRE HYDRANT
	EXISTING WATER METER
	EXISTING SANITARY MANHOLE
	EXISTING STORM MANHOLE
	EXISTING CATCHBASIN
	PROPOSED RIGHT-OF-WAY
	PROPOSED LOT LINE
	PROPOSED CENTERLINE
	PROPOSED CURB AND GUTTER
	PROPOSED SIDEWALK
	STORM DRAIN LINE AND MANHOLE
	STORM SEWER CURB INLET
	PROPOSED STREET LIGHT
	PROPOSED RETAINING WALL
	PROPOSED SANITARY LINE
	PROPOSED WATER LINE



CRESTVIEW DRIVE - PLAN VIEW



CL - CRESTVIEW PROFILE  
(STA:1+50.00 - STA:5+50.00)  
SCALE: HORIZ 1"=10'  
VERT 1"=6'

WATER LINE CONSTRUCTION NOTES

- STATION 2+71.8, 11.1' RT CRESTVIEW DR. REMOVE EXISTING BLOW-OFF ASSEMBLY AND CONNECT TO EXISTING 8" WATER MAIN. INSTALL 11.25' BEND, & THRUST BLOCKING AS REQUIRED PER CITY OF WEST LINN STANDARD DETAIL WL-406 (HORIZONTAL THRUST BLOCKING).
- STATION 3+03.9, 11.3' RT CRESTVIEW DR. INSTALL 11.25' BEND, & FIELD LOK JOINT RESTRAINT
- STATION 3+08.2, 11.6' RT CRESTVIEW DR. INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- STATION 3+09.3, 17.8' LT CRESTVIEW DR. INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- STATION 3+09.1, 39.0' LT CRESTVIEW DR. CAP 1" STUB-OUT 3' BEYOND PUE AND MARK w/ 2x4.
- STATION 3+55.5, 12.0' RT CRESTVIEW DR. INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- STATION 3+55.5, 17.8' RT CRESTVIEW DR. INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- NOT USED
- STATION 3+74.8, 12.0' RT CRESTVIEW DR. INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- STATION 3+71.3, 17.8' LT CRESTVIEW DR. INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- STATION 3+74.8, 39.0' LT CRESTVIEW DR. CAP 1" STUB-OUT 3' BEYOND PUE AND MARK w/ 2x4.
- STATION 4+24.2, 12.0' RT CRESTVIEW DR. INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- STATION 4+37.4, 12.0' RT CRESTVIEW DR. INSTALL 22.5' BEND, & FIELD LOK JOINT RESTRAINT
- STATION 4+51.7, 5.4' RT CRESTVIEW DR. INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- STATION 4+54.5, 17.8' RT CRESTVIEW DR. INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- NOT USED
- STATION 4+54.8, 4.3' RT CRESTVIEW DR. INSTALL 11.25' BEND, & THRUST BLOCKING AS REQUIRED PER CITY OF WEST LINN STANDARD DETAIL WL-406 (HORIZONTAL THRUST BLOCKING).
- STATION 4+32.8, 12.2' RT CRESTVIEW DR. INSTALL 1" WATER SERVICE INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- STATION 4+32.8, 18.7' LT CRESTVIEW DR. INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- STATION 4+65.3, 39.0' LT CRESTVIEW DR. CAP 1" STUB-OUT 3' BEYOND PUE AND MARK w/ 2x4.
- STATION 4+84.0, 9.8' LT CRESTVIEW DR. INSTALL 22.5' BEND, & FIELD LOK JOINT RESTRAINT
- STATION 2+71.8, 11.1' RT CRESTVIEW DR. REMOVE EXISTING BLOW-OFF ASSEMBLY AND CONNECT TO EXISTING 8" WATER MAIN.
- INSTALL VERTICAL BENDS AS REQUIRED & THRUST BLOCKING AS REQUIRED PER CITY OF WEST LINN STANDARD DETAIL WL-406 (VERTICAL THRUST BLOCKING).

SANITARY SEWER LINE CONSTRUCTION NOTES

- SS MH #C-1 (PROPOSED)  
STATION 2+50.3, 2.5' LT CRESTVIEW DR. CONSTRUCT CAST-IN-PLACE MANHOLE BASE AND INSTALL STANDARD MANHOLE OVER EXISTING 8" SANITARY LINE. MATCH RIM TO EXISTING ROAD GRADE. CUT AND REMOVE ASPHALT OFFSITE TO AN APPROVED LOCATION. REPLACE ASPHALT FOLLOWING SANITARY LINE INSTALLATION. MANHOLE PER CITY OF WEST LINN STANDARD DETAIL WL-210A (NEW MANHOLE TO EXISTING PVC SEWER LINE CONNECTION). SEE PROFILE THIS SHEET FOR ELEVATION DATA.
- SANITARY SEWER STUB (LOT 9)  
STATION 2+84.4, 39.0' LT CRESTVIEW DR. SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA. CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 (SERVICE BRANCH) ON SHEET C411.
- SS MH #C-2 (PROPOSED)  
STATION 2+94.6, 7.1' LT CRESTVIEW DR. INSTALL SANITARY SEWER MANHOLE PER CITY OF WEST LINN STANDARD DETAIL WL-207 (STANDARD MANHOLE FOR LESS THAN 36 IN. PIPE). SEE PROFILE THIS SHEET FOR ELEVATION DATA.
- SANITARY SEWER STUB (LOT 8)  
STATION 3+41.0, 39' RT CRESTVIEW DR. SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA. CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 (SERVICE BRANCH) ON SHEET C411.
- SANITARY SEWER STUB (LOT 10)  
STATION 3+53.6, 39' LT CRESTVIEW DR. SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA. CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 (SERVICE BRANCH) ON SHEET C411.
- SANITARY SEWER STUB (LOT 7)  
STATION 3+53.6, 39' RT CRESTVIEW DR. SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA. CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 (SERVICE BRANCH) ON SHEET C411.
- SANITARY SEWER STUB (LOT 11)  
STATION 4+12.1, 39' LT CRESTVIEW DR. SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA. CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 (SERVICE BRANCH) ON SHEET C411.
- SANITARY SEWER STUB (LOT 6)  
STATION 4+42.5, 39' RT CRESTVIEW DR. SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA. CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 (SERVICE BRANCH) ON SHEET C411.
- SS MH #C-3 (PROPOSED)  
STATION 4+47.3, 4.8' LT CRESTVIEW DR. INSTALL SANITARY SEWER MANHOLE PER CITY OF WEST LINN STANDARD DETAIL WL-207 (STANDARD MANHOLE FOR LESS THAN 36 IN. PIPE). SEE PROFILE THIS SHEET FOR ELEVATION DATA.
- SS CO #C-1 (PROPOSED)  
STATION 4+69.2, 34.3' LT CRESTVIEW DR. INSTALL SANITARY SEWER CLEANOUT PER CITY OF WEST LINN STANDARD DETAIL WL-206 (STANDARD CLEAN OUT). SEE PROFILE THIS SHEET FOR ELEVATION DATA.

SANITARY LATERAL TABLE

SANITARY LATERAL	LATERAL SIZE	LENGTH	INVERT AT END	INVERT AT MAIN	DEPTH AT END	MAIN LINE STATION
LOT 6 SANITARY	4"	44.0 lf	570.93	566.24	6.0FT	STA: 3+10.5, SANITARY SEWER LINE 'C'
LOT 7 SANITARY	4"	44.0 lf	568.40	563.44	6.0FT	STA: 2+60.9, SANITARY SEWER LINE 'C'
LOT 8 SANITARY	4"	44.0 lf	563.44	560.49	6.0FT	STA: 2+08.5, SANITARY SEWER LINE 'C'
LOT 9 SANITARY	4"	45.7 lf	558.45	557.37	6.0FT	STA: 1+56.1, SANITARY SEWER LINE 'C'
LOT 10 SANITARY	4"	45.8 lf	575.2	561.20	6.0FT	STA: 2+21.1, SANITARY SEWER LINE 'C'
LOT 11 SANITARY	4"	46.1lf	570.07	564.49	6.0FT	STA: 2+79.5, SANITARY SEWER LINE 'C'

MJ RESTRAINT TABLE

ALL ANGLES 45°

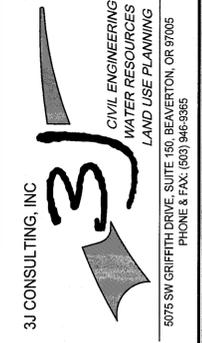
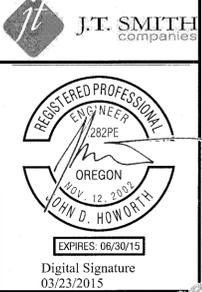
DIA	DEPTH	RESTRAINT LENGTH
8"	3'	21'
8"	4'	16'

GENERAL NOTES

- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE DEVELOPER.
- ALL WATER PIPE TO BE DUCTILE IRON PIPE UNLESS OTHERWISE NOTED.
- WATER SYSTEM TO BE INSTALLED AND TESTED PER CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS.
- ALL SEWER PIPE TO BE PVC AND SHALL CONFORM TO ASTM D-3034 UNLESS OTHERWISE NOTED.
- MAINTAIN 10' MINIMUM HORIZONTAL CLEARANCE FROM WATER MAIN TO SEWER MAIN.
- EXTEND PRIVATE UTILITIES WITH A JOINT TRENCH WITHIN 8' PUE SHOWN. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER TO OBTAIN DESIGN INFORMATION.
- ALL UTILITY LATERAL LOCATIONS MUST BE STAMPED ON NEW CURB.

RECORD DRAWING  
03/19/2015  
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• Site photographs  
• Site measurements  
• Field observations by the engineer  
The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

CRESTVIEW DRIVE - SANITARY SEWER AND WATER PLAN AND PROFILE  
SUNBREAK  
SUBDIVISION  
LF 3, LLC  
WEST LINN, OR



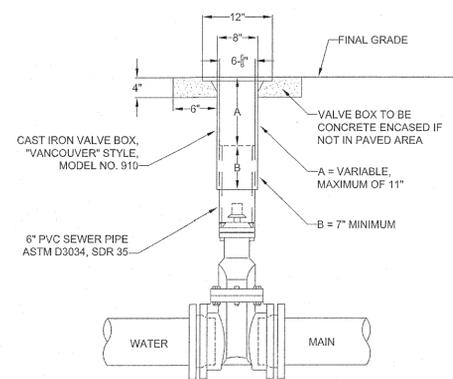
SJ JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
CRESTVIEW SS-WTR  
SHEET NUMBER

C402



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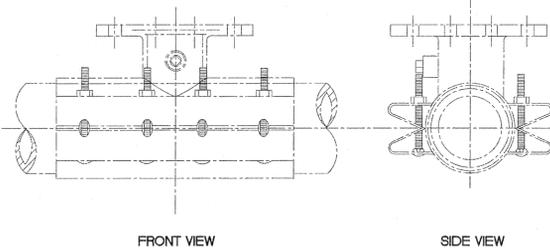
- NOTE:
1. VALVE BOXES SHALL BE CENTERED DIRECTLY OVER THE VALVE NUT IN A VERTICAL POSITION.
  2. VALVE BOX TOP SHALL BE ADJUSTED TO MEET FINISHED GRADE.
  3. PVC SHALL BE ONE CONTINUOUS PIECE-NO BELLS OR COUPLERS.
  4. ON VALVES 8" AND LARGER, PVC SHALL BE NOTCHED OVER VALVE PACKING BOLTS SO PVC SITS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



**STANDARD VALVE BOX DETAIL**

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

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.

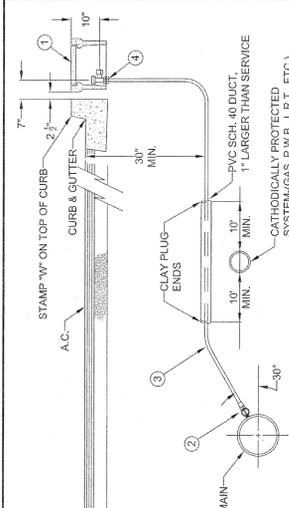


- NOTE:
1. WATER MAIN SHALL BE CLEANED BEFORE ATTACHING SLEEVE.
  2. SLEEVE AND VALVE SHALL BE PRESSURE TESTED BEFORE MAKING TAP.
  3. PRESSURE TEST AND TAP SHALL BE MADE IN THE PRESENCE OF AN AUTHORIZED CITY REPRESENTATIVE.
  4. PROPER TAPPING MACHINE SHALL BE USED TO MAKE TAP.
  5. THRUST BLOCKING REQUIREMENTS SHALL BE DETERMINED BY THE ENGINEER OR PER DWG. WL-406.
  6. TAP SHALL BE MADE NO CLOSER THAN 18 INCHES FROM THE NEAREST JOINT OR TAP.
  7. SLEEVE AND VALVE SHALL BE WRAPPED WITH 6 MIL PLASTIC.
  8. SLEEVES TO BE USED ARE JCM OR MUELLER STAINLESS STEEL TAPPING SLEEVES. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL.
  9. SLEEVE SHALL BE AS LEVEL AS POSSIBLE.
  10. ALL BOLTS SHALL HAVE NEVER SIEZE ON THREADS.

**STANDARD WET TAP**

City of West Linn  
 DATE: 2010  
 DRAWING NO. WL-410  
 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.



- 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 PASSTO T-100.
  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\"/>**

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

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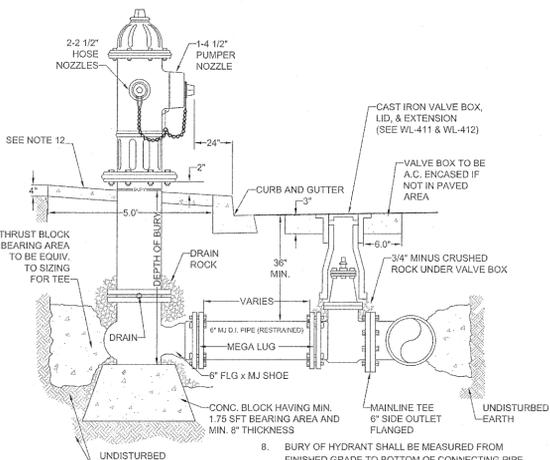
- To ensure proper operation and accessibility of all backflow prevention device assemblies, the following requirements shall apply to installation of these devices, unless specifically approved by the Water Division Engineer.
1. No part of the backflow prevention device shall be submerged in water or installed in a location subject to flooding. If installed in a vault or chamber, adequate drainage shall be provided by either drainage to daylight or by sump pump with high water alarm system. Test cocks shall be plugged. The plugs shall not be of dissimilar metals.
  2. The device assembly must be protected from freezing and other severe weather conditions.
  3. Only devices approved for vertical installation may be installed vertically.
  4. The device assembly shall be readily accessible with adequate room for maintenance and testing. Devices 2 inches and smaller shall have at least a 12-inch clearance below and on both sides of the device assembly; and if located in a vault, the top of this device assembly shall be between 12 and 24 inches below grade.
  5. All device assemblies larger than 2 inches shall have a 12-inch clearance on the backside, a 24-inch clearance on the test-cock side, and 12 inches below the device assemblies. Adequate clearance (3 inches minimum) must be maintained above O.S. & Y. gate-valve stem. Headroom of 6' 0" is required in vaults. Access to the device and to any vault or chamber shall remain clear at all times. An OSHA approved chamber ladder that extends 3 ft. above surface of vault shall be installed.
  6. No indicating valves are allowed on Double Check Device assemblies.
  7. Only approved Double Check Detector Check Valve Assemblies are to be used for system containment on fire line services in the City of West Linn. The meter on bypass assembly shall read in cubic feet.
  8. If a Fire Line Flow, or Tamper Switch is installed, it must be connected to a monitored Fire Detection System approved by the Fire Marshal. No installation will modify the backflow device assembly or interfere with its operation or maintenance.
  9. All backflow devices shall be installed at the service connection to the premises per Oregon Administrative Rules 333-081-070, Cross Connection Control Requirements, unless specifically approved by the Water Division Engineer. (service connection - a location where the public water facilities end at or near the property line)
  10. All pipe between main and device shall be restrained. Use Mega-Lug retainer glands on m/j fittings and Field-Lok gaskets on bell joints. Uni-Flange adapters may be used in vaults.

**BACKFLOW PREVENTION DEVICES**

City of West Linn  
 DATE: 2010  
 DRAWING NO. WL-414C  
 FILE NO.

11/31/13-17S - Sunbreak Subdivision CAD/AB/13113-C410-WATER CONSTRUCTION DETAILS.dwg, 3/20/2015 10:51:33 AM

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.



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

**STANDARD FIRE HYDRANT ASSEMBLY**

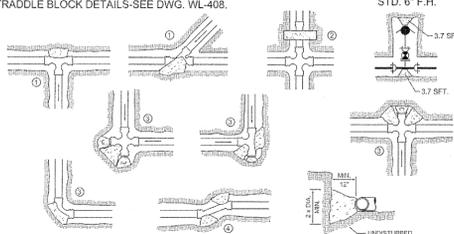
City of West Linn  
 DATE: 2010  
 DRAWING NO. WL-401  
 FILE NO.

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FITTING SIZE (Inches)	TEE, WYE & HYDRANTS	STRADDLE BLOCK	90° BEND PLUGGED CROSS	45° BEND	22 1/2° BEND	11 1/2° BEND
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	13.8	14.8	8	4.1	2
12	15.1	19.8	21.3	11.6	5.9	2.9
14	20.8	34.8	37.9	20.5	10.4	5.2
16	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.

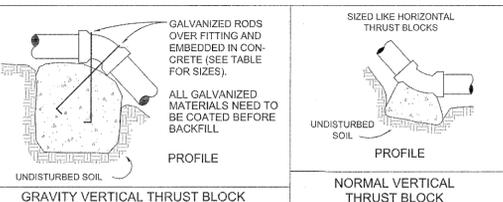


**HORIZONTAL THRUST BLOCKING**

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

- NOTE:
1. GRAVITY VERTICAL THRUST BLOCKS SHALL BE DESIGNED BY THE ENGINEER.
  2. KEEP CONCRETE CLEAR OF JOINT AND JOINT ACCESSORIES. FITTINGS SHALL BE WRAPPED IN 8MM PLASTIC PRIOR TO PLACEMENT OF CONCRETE.
  3. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
  4. CONCRETE MIX SHALL HAVE A MIN. 28 DAY STRENGTH OF 3300 P.S.I.
  5. THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS SHALL BE BASED ON TEST PRESSURE OF 180 PSI AND THE WEIGHT OF CONCRETE = 4050 LBS./CU.YD.
  6. VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CUBIC YARDS REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS FOR VOLUMES SHOWN INSIDE HEAVY LINE IN TABLE BELOW.
  7. PAYMENT SHALL BE THE SAME AS FOR HORIZONTAL THRUST BLOCKS.
  8. ALL REBAR SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM-123 (MIN. 3.4 MIL). REBAR SHALL BE BENT BEFORE GALVANIZATION, AND LAST 4" OF BAR SHALL BE BENT 90 DEGREES WITH A 1/2" RADIUS BEND. REBAR SHALL BE TIGHTLY FIT TO RESTRAINED FITTING.
  9. FOR HORIZONTAL THRUST BLOCK DETAILS SEE DWG. NO. WL-406.



VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS)

FITTING SIZE	BEND ANGLE		
	45°	22 1/2°	11 1/4°
4	1.1	0.4	0.2
6	2.7	1.0	0.4
8	4.0	1.5	0.6
10	6.0	2.3	0.9
12	8.5	3.2	1.3
14	11.5	4.3	1.8
16	14.8	5.6	2.3

**VERTICAL THRUST BLOCKING**

City of West Linn  
 DATE: 2010  
 DRAWING NO. WL-407  
 FILE NO.

RECORD DRAWING 03/19/2015

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 • Contractor supplied profiles  
 • Site observations by the engineer  
 • Field measurements  
 The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

WATER CONSTRUCTION DETAILS  
**SUNBREAK SUBDIVISION**  
 LF 3, LLC  
 WEST LINN, OR

J.T. SMITH companies



Digital Signature 03/23/2015

3J CONSULTING, INC  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-9365

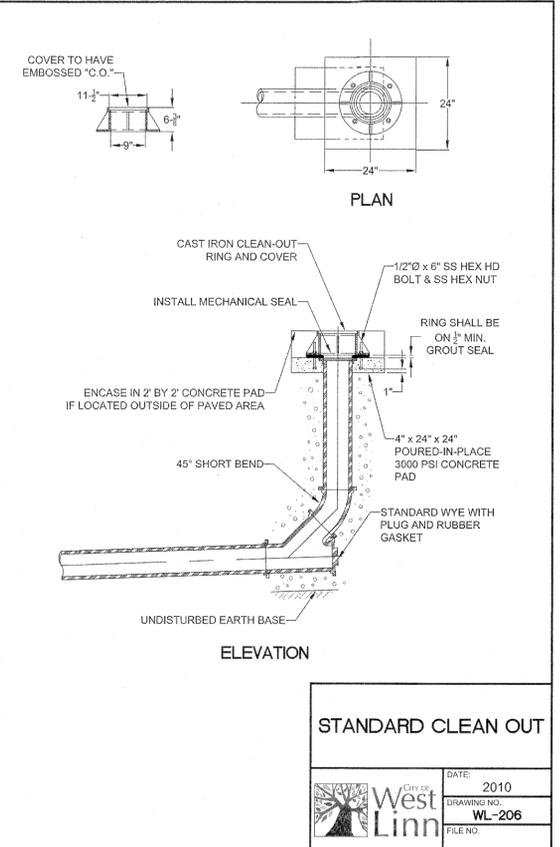
3J JOB ID # | 13113  
 LAND USE # | SUB-13-02  
 TAX LOT # | ZS1E35A01300  
 DESIGNED BY | CLF/JTE  
 CHECKED BY | JQH

SHEET TITLE  
**WATER DETAILS**  
 SHEET NUMBER

**C410**

\\13115-ITS - Sunbreak Subdivision\CAD\B13113-041-SANITARY CONSTRUCTION DETAILS.dwg, 3/20/2015 10:52:43 AM

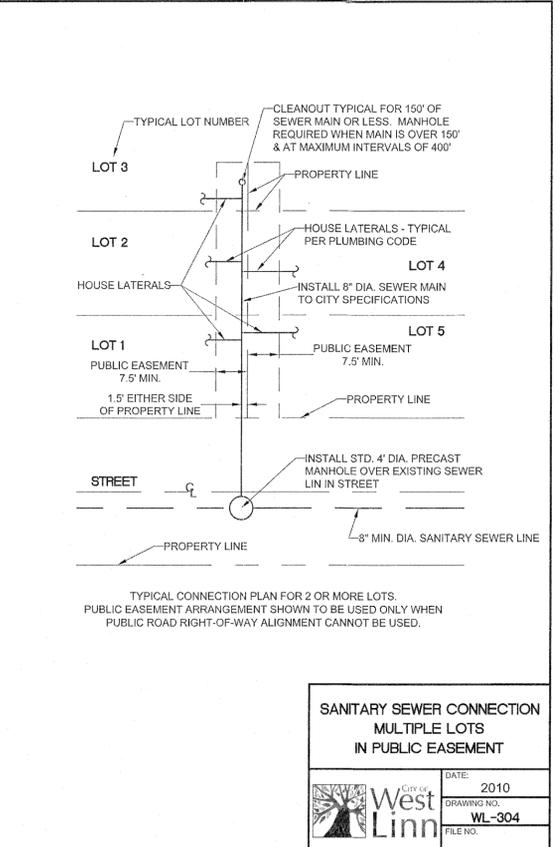
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STANDARD CLEAN OUT

DATE:	2010
DRAWING NO.:	WL-206
FILE NO.:	

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SANITARY SEWER CONNECTION MULTIPLE LOTS IN PUBLIC EASEMENT

DATE:	2010
DRAWING NO.:	WL-304
FILE NO.:	

SANITARY CONSTRUCTION DETAILS

SUNBREAK SUBDIVISION

LF 3, LLC  
WEST LINN, OR



Digital Signature  
03/23/2015

**3J CONSULTING, INC**  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 846-9885

3J JOB ID #	13113
LAND USE #	SUB-13-02
TAX LOT #	251E35A01300
DESIGNED BY	CLF/JTE
CHECKED BY	J.DH

SHEET TITLE  
SANITARY DETAILS

SHEET NUMBER  
**C411**

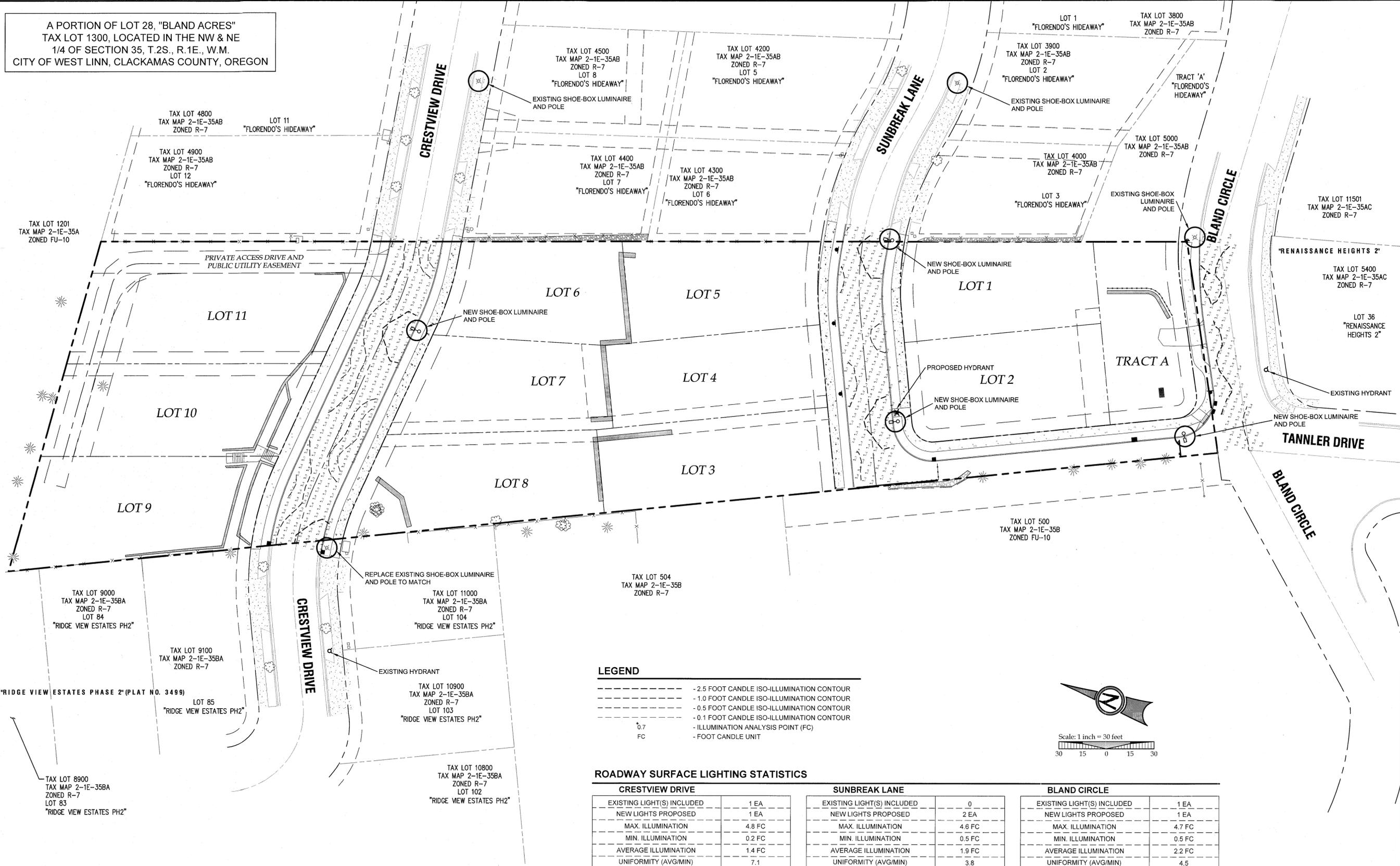
**RECORD DRAWING**  
03/19/2015

This drawing has been prepared to reflect constructed conditions from permit documents. The basis of this information is derived in whole or in part from a contractor supplied record.

- Contractor supplied record
- Site observations by the engineer
- Field measurements

The stamping engineer of record certifies this drawing is an accurate portrayal of the final construction, and the resulting improvements are in conformance with the standards of the City of West Linn.

A PORTION OF LOT 28, "BLAND ACRES"  
 TAX LOT 1300, LOCATED IN THE NW & NE  
 1/4 OF SECTION 35, T.2S., R.1E., W.M.  
 CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

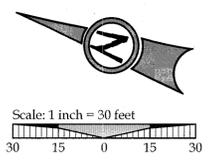


**LEGEND**

- - - - - 2.5 FOOT CANDLE ISO-ILLUMINATION CONTOUR
- - - - - 1.0 FOOT CANDLE ISO-ILLUMINATION CONTOUR
- - - - - 0.5 FOOT CANDLE ISO-ILLUMINATION CONTOUR
- - - - - 0.1 FOOT CANDLE ISO-ILLUMINATION CONTOUR
- - - - - ILLUMINATION ANALYSIS POINT (FC)
- FC - FOOT CANDLE UNIT

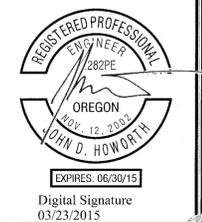
**ROADWAY SURFACE LIGHTING STATISTICS**

CRESTVIEW DRIVE		SUNBREAK LANE		BLAND CIRCLE	
EXISTING LIGHT(S) INCLUDED	1 EA	EXISTING LIGHT(S) INCLUDED	0	EXISTING LIGHT(S) INCLUDED	1 EA
NEW LIGHTS PROPOSED	1 EA	NEW LIGHTS PROPOSED	2 EA	NEW LIGHTS PROPOSED	1 EA
MAX. ILLUMINATION	4.8 FC	MAX. ILLUMINATION	4.6 FC	MAX. ILLUMINATION	4.7 FC
MIN. ILLUMINATION	0.2 FC	MIN. ILLUMINATION	0.5 FC	MIN. ILLUMINATION	0.5 FC
AVERAGE ILLUMINATION	1.4 FC	AVERAGE ILLUMINATION	1.9 FC	AVERAGE ILLUMINATION	2.2 FC
UNIFORMITY (AVG/MIN)	7.1	UNIFORMITY (AVG/MIN)	3.8	UNIFORMITY (AVG/MIN)	4.5



**RECORD DRAWING**  
 03/19/2015  
 This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is derived in whole or in part from a contractor supplied redlines.  
 Contractor supplied redlines  
 • Site observations by the engineer  
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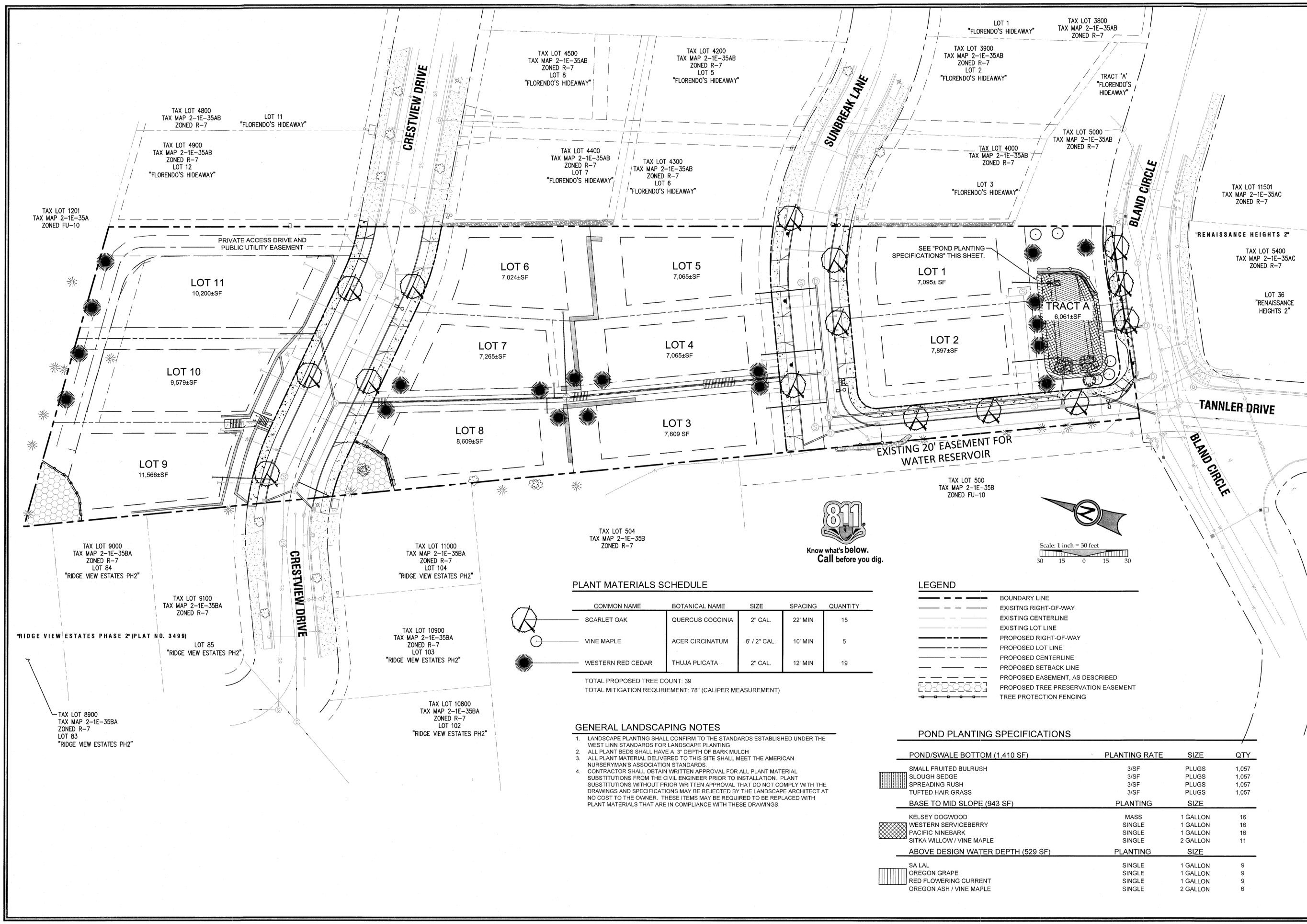
**STREET LIGHTING PLAN**  
**SUNBREAK**  
**SUBDIVISION**  
 LF 3, LLC  
 WEST LINN, OR



Know what's below.  
 Call before you dig.

3J JOB ID # | 13113  
 LAND USE # | SUB-13-02  
 TAX LOT # | 2S1E35A01300  
 DESIGNED BY | CLF/JTE  
 CHECKED BY | JDH  
 SHEET TITLE:  
**LIGHTING PLAN**  
 SHEET NUMBER  
**C500**

Y:\13113-175 - Sunbreak Subdivision\CAD\DWG\13113-C500-STREET LIGHTING.dwg - 3/20/2015 11:38:51 AM



**RECORD DRAWING**  
03/19/2015

This drawing has been prepared to reflect constructed deviations from permit documents. The basis of this information is deemed in whole or in part from a contractor's field observations.

- Contractor supplied profiles
- Site observations by the engineer
- Field measurements

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**MITIGATION PLANTING PLAN**

**SUNBREAK SUBDIVISION**

LF 3, LLC  
WEST LINN, OR

**J.T. SMITH**  
companies

REGISTERED PROFESSIONAL ENGINEER  
282PE  
OREGON  
NOV. 12, 2002  
JOHN D. HOWARTH

EXPIRES: 06/30/15  
Digital Signature  
03/23/2015

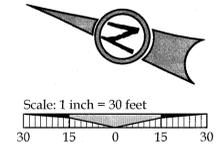
**3J CONSULTING, INC.**

CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING

5075 SW GRIFFITH DRIVE, SUITE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9385

3J JOB ID # | 13113  
LAND USE # | SUB-13-02  
TAX LOT # | 2S1E35A01300  
DESIGNED BY | CLF/JTE  
CHECKED BY | JDH

SHEET TITLE  
**PLANTING PLAN**  
SHEET NUMBER  
**L100**



**PLANT MATERIALS SCHEDULE**

COMMON NAME	BOTANICAL NAME	SIZE	SPACING	QUANTITY
SCARLET OAK	QUERCUS COCCINIA	2" CAL.	22' MIN	15
VINE MAPLE	ACER CIRCINATUM	6' / 2" CAL.	10' MIN	5
WESTERN RED CEDAR	THUJA PLICATA	2" CAL.	12' MIN	19

TOTAL PROPOSED TREE COUNT: 39  
TOTAL MITIGATION REQUIREMENT: 78" (CALIPER MEASUREMENT)

**GENERAL LANDSCAPING NOTES**

1. LANDSCAPE PLANTING SHALL CONFIRM TO THE STANDARDS ESTABLISHED UNDER THE WEST LINN STANDARDS FOR LANDSCAPE PLANTING
2. ALL PLANT BEDS SHALL HAVE A 3" DEPTH OF BARK MULCH
3. ALL PLANT MATERIAL DELIVERED TO THIS SITE SHALL MEET THE AMERICAN NURSERYMAN'S ASSOCIATION STANDARDS
4. CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ALL PLANT MATERIAL SUBSTITUTIONS FROM THE CIVIL ENGINEER PRIOR TO INSTALLATION. PLANT SUBSTITUTIONS WITHOUT PRIOR WRITTEN APPROVAL THAT DO NOT COMPLY WITH THE DRAWINGS AND SPECIFICATIONS MAY BE REJECTED BY THE LANDSCAPE ARCHITECT AT NO COST TO THE OWNER. THESE ITEMS MAY BE REQUIRED TO BE REPLACED WITH PLANT MATERIALS THAT ARE IN COMPLIANCE WITH THESE DRAWINGS.

**LEGEND**

- BOUNDARY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE
- EXISTING LOT LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED LOT LINE
- PROPOSED CENTERLINE
- PROPOSED SETBACK LINE
- PROPOSED EASEMENT, AS DESCRIBED
- PROPOSED TREE PRESERVATION EASEMENT
- TREE PROTECTION FENCING

**POND PLANTING SPECIFICATIONS**

POND/SWALE BOTTOM (1,410 SF)	PLANTING RATE	SIZE	QTY
SMALL FRUITED BULRUSH	3/SF	PLUGS	1,057
SLOUGH SEDGE	3/SF	PLUGS	1,057
SPREADING RUSH	3/SF	PLUGS	1,057
TUFTED HAIR GRASS	3/SF	PLUGS	1,057
BASE TO MID SLOPE (943 SF)	PLANTING	SIZE	
KELSEY DOGWOOD	MASS	1 GALLON	16
WESTERN SERVICEBERRY	SINGLE	1 GALLON	16
PACIFIC NINEBARK	SINGLE	1 GALLON	16
SITKA WILLOW / VINE MAPLE	SINGLE	2 GALLON	11
ABOVE DESIGN WATER DEPTH (529 SF)	PLANTING	SIZE	
SA LAL	SINGLE	1 GALLON	9
OREGON GRAPE	SINGLE	1 GALLON	9
RED FLOWERING CURRENT	SINGLE	1 GALLON	9
OREGON ASH / VINE MAPLE	SINGLE	2 GALLON	6

113113-13-JTS - Sunbreak Subdivision CAD (13113-100)-TREE MITIGATION.dwg, 3/20/2015 10:58:48 AM