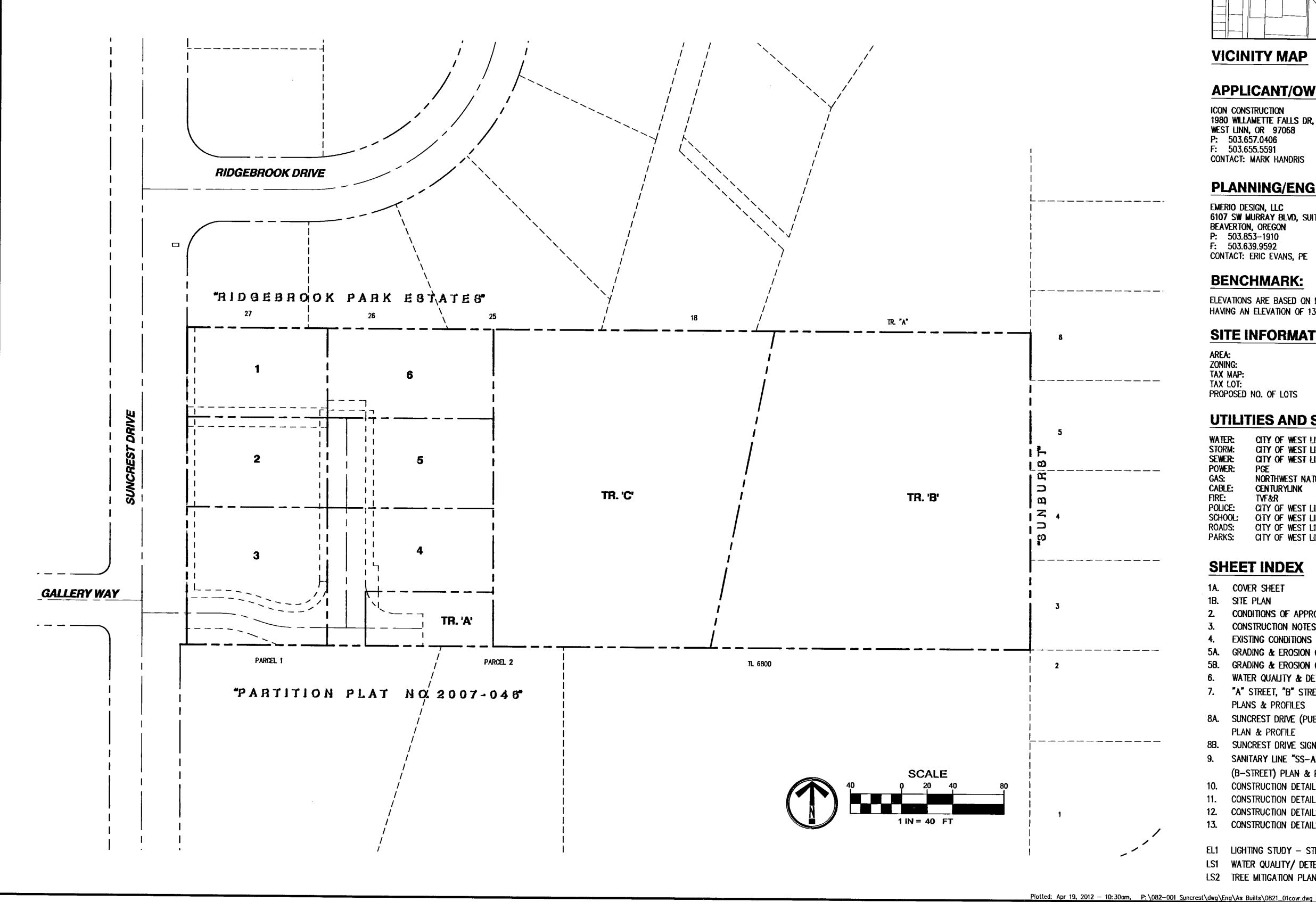
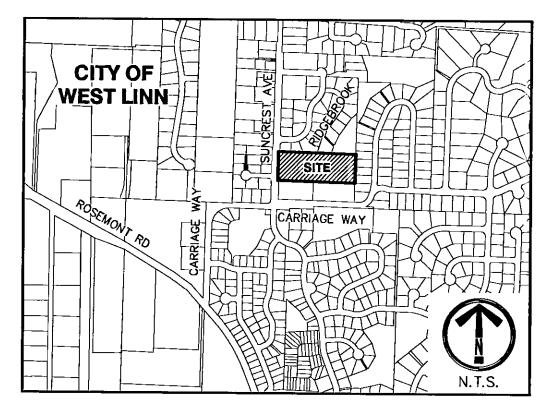
FERN CREEK PLACE

A 6-LOT SUBDIVISION OF T2S R1E SEC. 23, TAX LOT 6700 **CITY OF WEST LINN CLACKAMAS COUNTY, OREGON**





VICINITY MAP

APPLICANT/OWNER:

ICON CONSTRUCTION 1980 WILLAMETTE FALLS DR, SUITE 200 WEST LINN, OR 97068 P: 503.657.0406 CONTACT: MARK HANDRIS

SURVEYOR:

SUMMIT LAND SURVEYORS P.O. BOX 230149 TIGARD, OREGON 97281 P: 503.928.5589 F: 503.928.5589 CONTACT: JOHN WADE, PLS

PLANNING/ENGINEER:

EMERIO DESIGN, LLC 6107 SW MURRAY BLVD, SUITE 147 BEAVERTON, OREGON P: 503.853-1910 503.639.9592 CONTACT: ERIC EVANS, PE

BENCHMARK:

ELEVATIONS ARE BASED ON NGS BENCHMARK RD 0259 HAVING AN ELEVATION OF 130.31 FEET (NAVD 88).

SITE INFORMATION:

3.80 ACRES T2S R1E SEC. 23 PROPOSED NO. OF LOTS

UTILITIES AND SERVICES

CITY OF WEST LINN STORM: CITY OF WEST LINN CITY OF WEST LINN SEWER: POWER: PGE GAS: NORTHWEST NATURAL CABLE: CENTURYLINK FIRE: POLICE: SCHOOL: CITY OF WEST LINN CITY OF WEST LINN CITY OF WEST LINN CITY OF WEST LINN

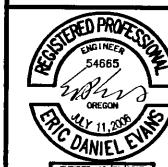
AS-BUILT APRIL 9, 2012

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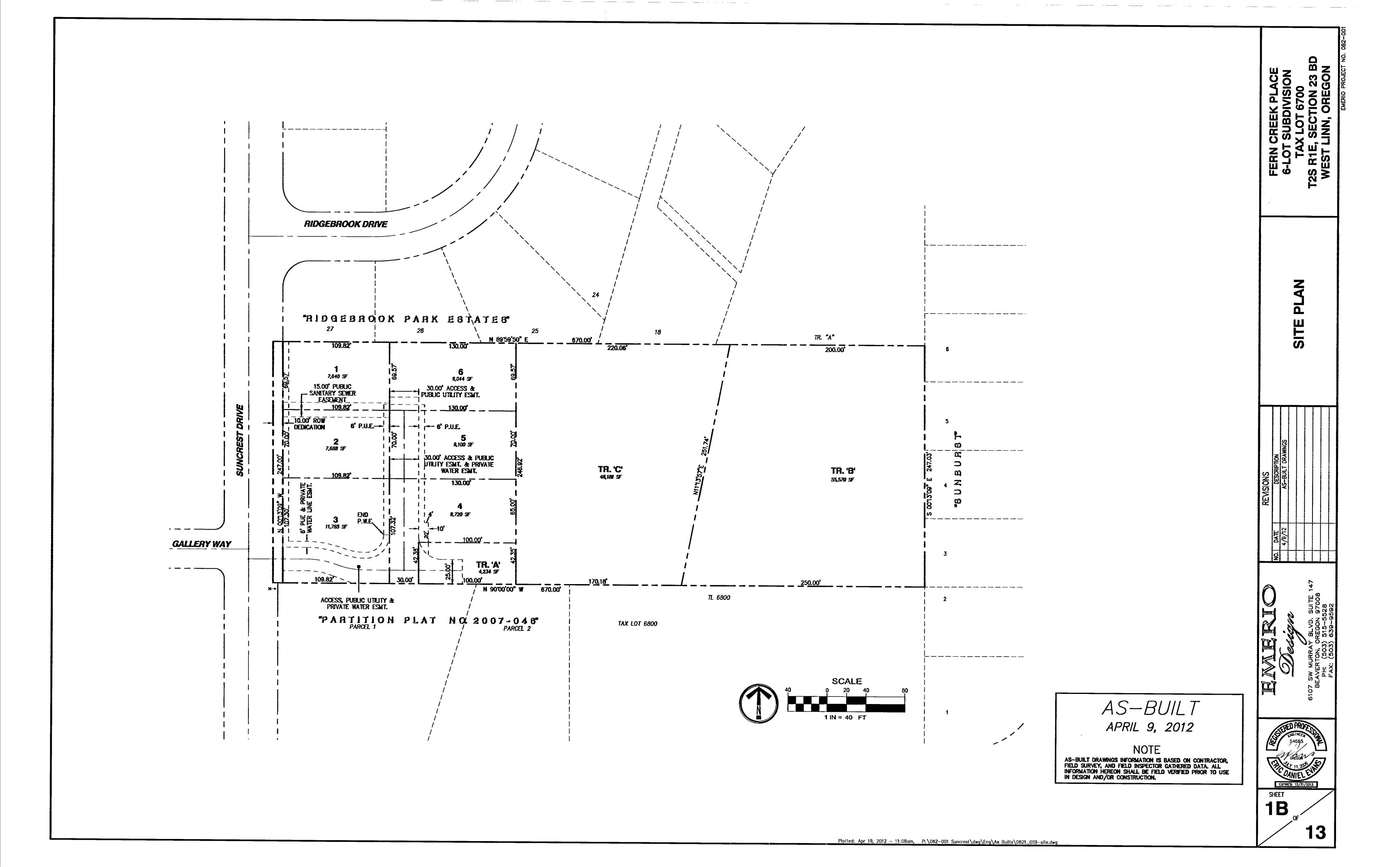
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- 1B. SITE PLAN
- 2. CONDITIONS OF APPROVAL
- CONSTRUCTION NOTES EXISTING CONDITIONS & DEMOLITION PLAN
- 5A. GRADING & EROSION CONTROL PLAN
- 5B. GRADING & EROSION CONTROL NOTES & DETAILS
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SHEET



1A



FERN CREEK PLACE
6-LOT SUBDIVISION
TAX LOT 6700
2S R1E, SECTION 23 BD
WEST LINN, OREGON Therefore the final approved conditions of approval are as follows: 15. A suitable covenant, or a conservation easement subject to the requirements of ORS Chapter 271, shall be established for Tract C for the benefit of the homeowners' Tract A and the storm water facility in Tract A shall be private, and the applicant association and the City of West Linn. (In the event the City does not accept the shall enter into a maintenance agreement with the City for the facility. The storm conservation easement or covenant, this condition shall be satisfied by dedication of a water line under the private street shall be private. conservation easement or suitable covenant in a form approved by the Planning Director in favor of the homeowners' association only, which shall be subject to the A 20-foot wide public trail easement extending north-to-south through the site shall use restriction in this condition.) This conservation easement shall forbid be provided on the final plat within Tract B, east of Fern Creek. The exact location of development of any kind, with the exception of the construction and maintenance of the easement shall be determined cooperatively between the applicant and the City. the fence and signs required below. The city shall be responsible for maintenance of the trail easement. The homeowners' association shall be responsible for maintenance of the entire tract consistent with City standards. The homeowners' association shall enter into a The applicant shall mitigate for the loss of the 5 trees determined to be significant by maintenance agreement with the City to provide for the maintenance of this tract. This the City Arborist that are proposed for removal. These trees shall be mitigated for on agreement is subject to approval by the City's Parks and Recreation Director and the an inch per inch basis per CDC Section 55.100(B) (2) (f), preferably on site. The City City's Environmental Services Engineer. The signed agreement shall be recorded on Arborist shall determine preferred on-site locations. If on site mitigation is not the title deed of records of Clackamas County, and referenced in the subdivision's possible for all mitigation planting, the applicant shall work with the Parks and covenants, codes and restrictions. The homeowners association shall periodically (at Recreation Department to mitigate at an appropriate city-owned site. Street trees shall no more than two -year intervals) remove all invasive plants (i.e., Himalayan not count towards the mitigation required in this condition. Blackberry, Garlic Mustard and English Ivy) from the tract. Homeowners shall be prohibited from storing materials, cutting or removal of trees (except for hazard trees All new and existing dry utilities along the project frontage, and that are affected by as approved by the City) or native vegetation and dumping yard waste or other debris the development, shall be placed underground. in Tract C. These and other requirements will be included in the easement or covenant and the maintenance agreement, including but not limited to: Houses on lots 1-3 shall have front facades oriented to Suncrest Drive. This requirement shall be recorded on the deed for lots 1-3 Provisions for enforcement and collection of costs; performance requirements; prohibited activities and uses; City authority to inspect; and City control over 6. Turning radii on the private street/shared driveway turnaround shall be at least 25 feet. extinguishment. The applicant shall be responsible for funding waterline upsizing along the subject A split-rail fence shall be constructed along the western boundary of Tract C. The site's frontage. The upsizing requirement is a Capital Improvement Project in the applicant shall install readily visible conservation zone signage per City standards 2008 Water System Master Plan and SDC eligible at 56%. It shall be the City's CONDITIONS OF APPROVAL along the edge of the tract (except where it borders Tract B) at approximately 30- foot option whether to contract directly for the improvement or have the developer intervals, identifying the use restriction specified above. The signage along the west contract for the work. If the City decides to upsize a greater length of water line side of Tract C shall be attached to the required fence. The homeowners' association replacement than the site frontage, the applicant will still only be responsible for shall be responsible for the maintenance of the fence and signs. The conservation funding the portion along the site frontage. easement and the use limitations in this condition shall be placed on the final plat and on the deed for each lot. Tract C shall be dedicated to the homeowners' association. The private street/shared driveway depict on the applicant's site plan dated October The applicant and subsequently the homeowners' association shall retain the option to 8, 2009 shall be built to City street structural standards. dedicate the tract to the City. The applicant shall commission a lighting study of the project's frontage, and provide 16. The applicant shall preserve the laurel hedge along the border of the subject property this to the Engineering Department who will use it to determine the street lighting and 1810 Carriage Way, and shall protect the health and root systems as best as needed to meet the City's lighting standards. If needed, the applicant will install street possible throughout the construction process. lights that meet City lighting standards. 17. This approval shall expire 3 years from the effective date of this decision. 10. The applicant shall perform fire flow tests, install hydrants, and install "No Parking" signs to the satisfaction of TVFR. 11. Prior to recording of the subdivision plat, the applicant shall remove all Himalayan Blackberry, Garlic Mustard and English Ivy on the ground within proposed Tracts B 12. The front yard setbacks of lots 1-3 shall be those of the underlying base zone R-10, which is 20 feet (15 feet to a porch) as measured from the front property line after the 10-foot ROW dedication. 13. The applicant shall provide 5-foot utility easement along the front and rear of each lot 18. Half-street improvements shall include on-street parking on the east side of Suncrest in areas not already covered by the proposed utility easements overlaid on the Drive in lieu of a bike lane, without changing the proposed width of the street proposed private street. pavement. 14. A suitable covenant, or a conservation easement subject to the requirements of ORS 19. The final plat shall be consistent with the approved preliminary plat dated October 8, Chapter 271, shall be established for Tract B, for the benefit of the homeowners' 2009, except as modified to comply with these conditions. association and the City of West Linn. (In the event the City does not accept the 20. CC&R language shall be reviewed by the City Attorney to ensure it meets all conservation easement or the covenant, this condition shall be satisfied by dedication of a conservation easement or suitable covenant in a form approved by the Planning requirements of the conditions of approval. Director, in favor of the homeowners' association only, which shall be subject to the use restriction in this condition.) This easement shall forbid all development of any 21. The applicant shall plant vegetative screening in the north side yard setback of Lots 1 kind, except for the installation and maintenance of required signs and a trail within and 6 to provide privacy, subject to the approval of the City Arborist to ensure the the trail easement described in Condition of Approval 2. vegetation is high enough to provide adequate screening between properties. The homeowners' association shall be responsible for maintenance of the entire tract. 22. The requirements of the Conditions of Approval that are applicable to the individual except for the area contained in the trail easement, if and when a trail is developed homeowners and/or to the homeowners' association shall be placed on the deed for within the easement, consistent with city standards. The City will be responsible for the maintenance of the area contained in the trail easement only upon construction of a trail within the easement. The homeowners' association shall enter into a This decision may be appealed to the Land Use Board of Appeals (LUBA) under its maintenance agreement with the City to provide for the maintenance of this tract. This statutory provisions. agreement is subject to approval by the City's Parks and Recreation Director and the City's Environmental Services Engineer. The signed agreement shall be recorded on the title deed of records of Clackamas County, and referenced in the subdivision's PATTI GALLE, MAYOR covenants, codes and restrictions. The homeowners' association shall periodically (at no more than two -year intervals) remove all invasive plants (i.e., Himalayan Blackberry, Garlic Mustard and English Ivy) from the tract. Homeowners shall be prohibited from storing materials, cutting or removal of trees (except for hazard trees as approved by the City) or native vegetation and dumping yard waste or other debris in Tract B. These and other requirements will be included in the easement or covenant and the maintenance agreement, including but not limited to: Devrev/Finaldecisions/AP-09-05 Provisions for enforcement and collection of costs; performance requirements; prohibited activities and uses; City authority to inspect; and City control over The applicant shall install readily visible conservation zone signage per City standards along the edge of the tract (except where it borders Tract C) identifying the use restrictions specified above. The signage shall be placed at approximately 30-foot AS-BUILT intervals. The homeowners' association shall be responsible for the maintenance of the signs. APRIL 9, 2012 The conservation easement and the use limitations in this condition shall be placed on the final plat and on the deed for each lot. Tract B shall be dedicated to the homeowners' association. The applicant and subsequently the homeowners' association shall retain the option to dedicate the tract to the City. NOTE AS-BUILT DRAWINGS INFORMATION IS BASED ON CONTRACTOR, FIELD SURVEY, AND FIELD INSPECTOR GATHERED DATA, ALL INFORMATION HEREON SHALL BE FIELD VERIFIED PRIOR TO USE SHEET IN DESIGN AND/OR CONSTRUCTION. Plotted: Apr 19, 2012 - 10:37am, P:\082-001 Suncrest\dwg\Eng\As Buits\0821_02cnds.dwg

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 retest.
- 9. All fees for street trees shall be paid to the City of West Linn Parks and Recreation Department.
- No building permits will be given until the improvements have been accepted by the City as substantially complete.
- 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.

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 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 3000 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.
- Fire hydrants shall conform with AWWASpecificiation C-502. Pumper outlet is to face the direction of access. Acceptable models are Mueller Centurion A-42 or Clow Medallion F-2545. Hydrant color shall be yellow.
- 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. 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".
- 7. Service laterals shall be Type K copper Lateral sizes shall be 1". For double services two 1" water services shall be laid side by side. Corporation stops shall be Mueller H 15008 or Ford F1000 4Q. Angle meter stop shall be Mueller H 14258 or Ford 1" KV43—444W—Q. 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.
- 8. 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.
- 9. Chiorination shall conform with Division 403.13 of the W.L.S.C.S.
- 10. 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.
- 11. A plumbing permit is required for service lateral installations beyond the water meter.
- 12. 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.

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 of 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 to 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 a the center and lowest edge of curb for each lot. Handicap ramps shall be constructed at each curb return at intersections by contractor unless otherwise noted on the plans. 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.
- 8. Monument boxes will be required at all street centerline intersections, points of curvature and points of tangency. Boxes shall conform to Clackamas County Surveyor requirements.

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 lides 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. Riprap where noted on the plans is to be Class 50 in accordance with Oregon State Highway Division specification 714. 9. Private catchbasin shall be trapped and sumped Gibson Steel pre-fabricated catchbasin or approved equal.
- 10. 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.
- 11. A plumbing permit form the City of West Linn Building Department is required for storm drains beyond the first cleanout.
- 12. All materials, installation, tests, and inspections to be in strict accordance with the City of West Linn Standard Construction Specifications.
- 13. Detention pond plantings to conform to planting plans, Sheet L-1.

SANITARY SEWER NOTES

- 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 7"x30" 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. Cernent 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.
- 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 18"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 first cleanout. 9. All materials, installation, test, and inspections to be made in strict accordance with City of West Linn Public Works Standard Construction Specifications.

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.)
- 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.
- 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.
- 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.

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.
- Fertilizer shall be 12-16-8 with 50% of the nitrogen derived from urea formaldehyde, and applied at a rate of 400 pounds per acre.
- Seed and mulch at a rate of 2000 lbs/ac with heavy bonding agent or netting and anchors. Mulch shall be a wood cellulose fiber or other material suitable for hydromulching.
- 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.

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.
- 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.
- 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.

EROSION CONTROL SUMMARY:

- 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.
 - 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.
 - where excavated material is placed on hard surfaces (such as streets) material must be broomed or scraped clean as soon as possible.
 - d) riprap exits from all culverts and storm drain pipes draining into the ditches or swales. riprap is to be class 50 riprap or larger or as noted elsewhere in the plans.
 - e) reseed 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 seeded areas show growth substantial to prevent erosion.

AS-BUILT APRIL 9, 2012

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AS-BUILT DRAWINGS INFORMATION IS BASED ON CONTRACTOR, FIELD SURVEY, AND FIELD INSPECTOR GATHERED DATA. ALL. INFORMATION HEREON SHALL BE FIELD VERIFIED PRIOR TO USE IN DESIGN AND/OR CONSTRUCTION.

STRUCTION NOTES

TAX LOT 6700

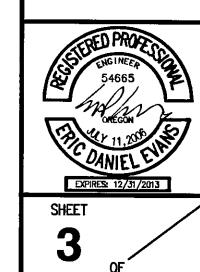
T2S R1E, SECTION 23 BD

WEST LINN, OREGON

CONSTRUCTIO

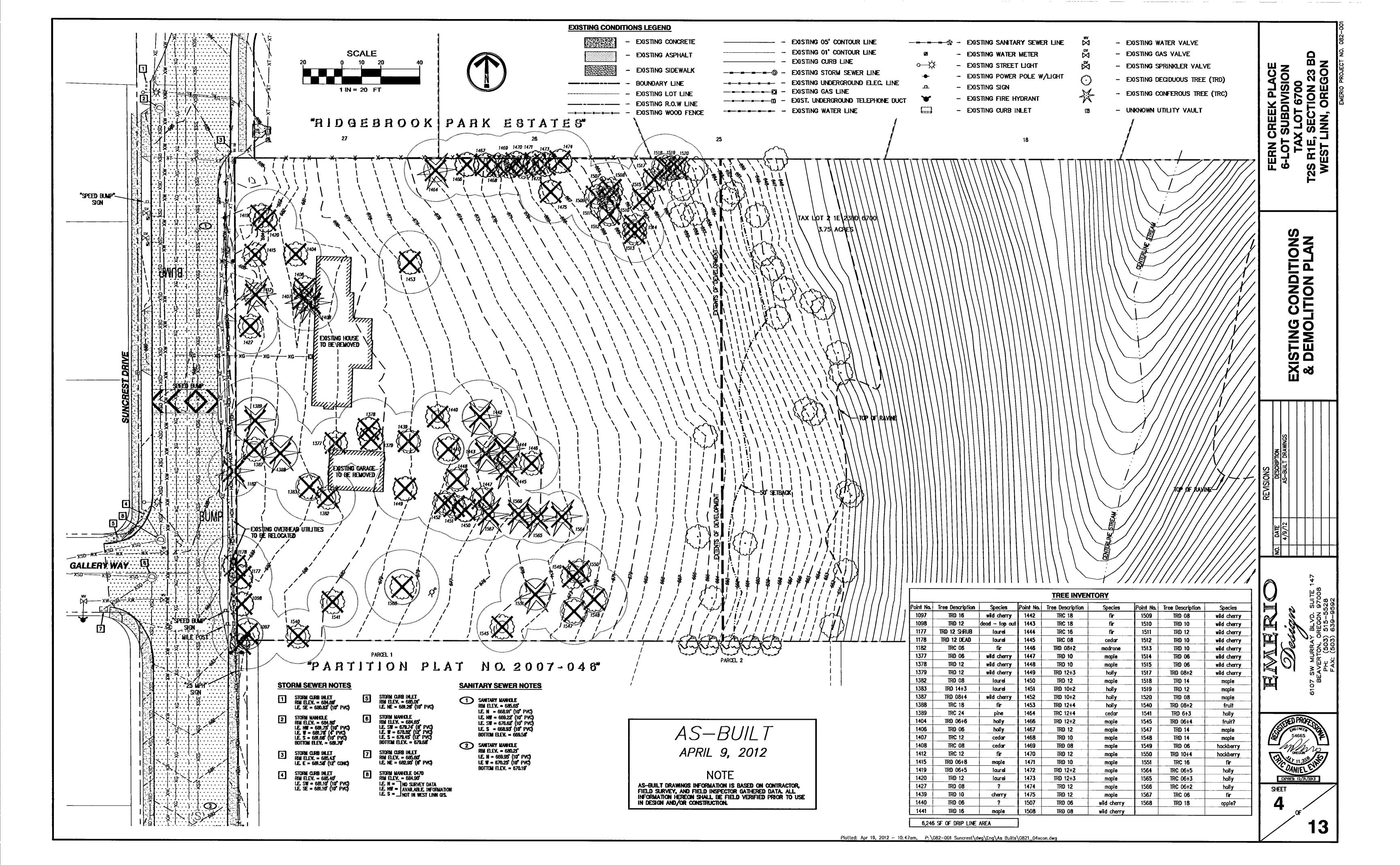
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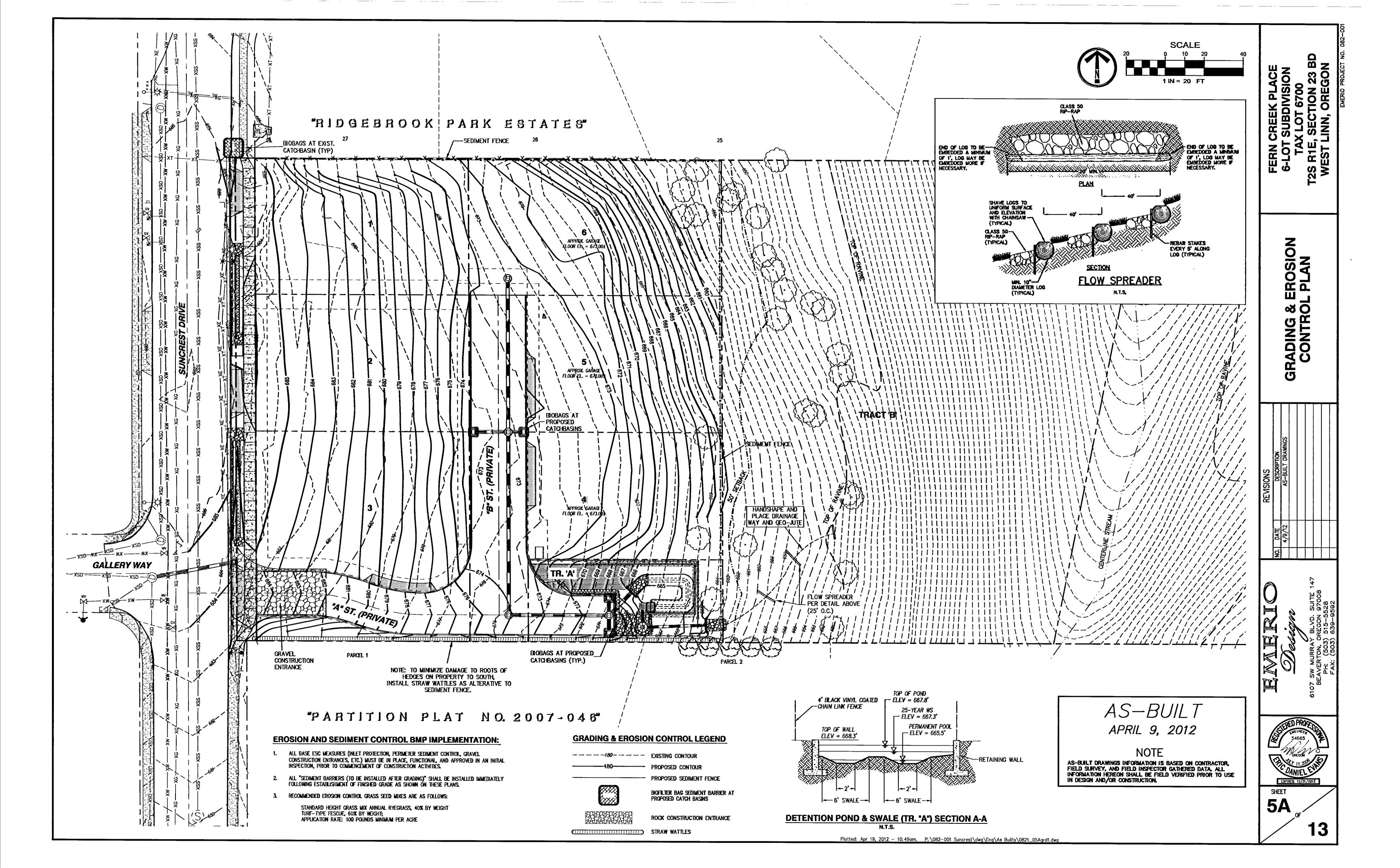
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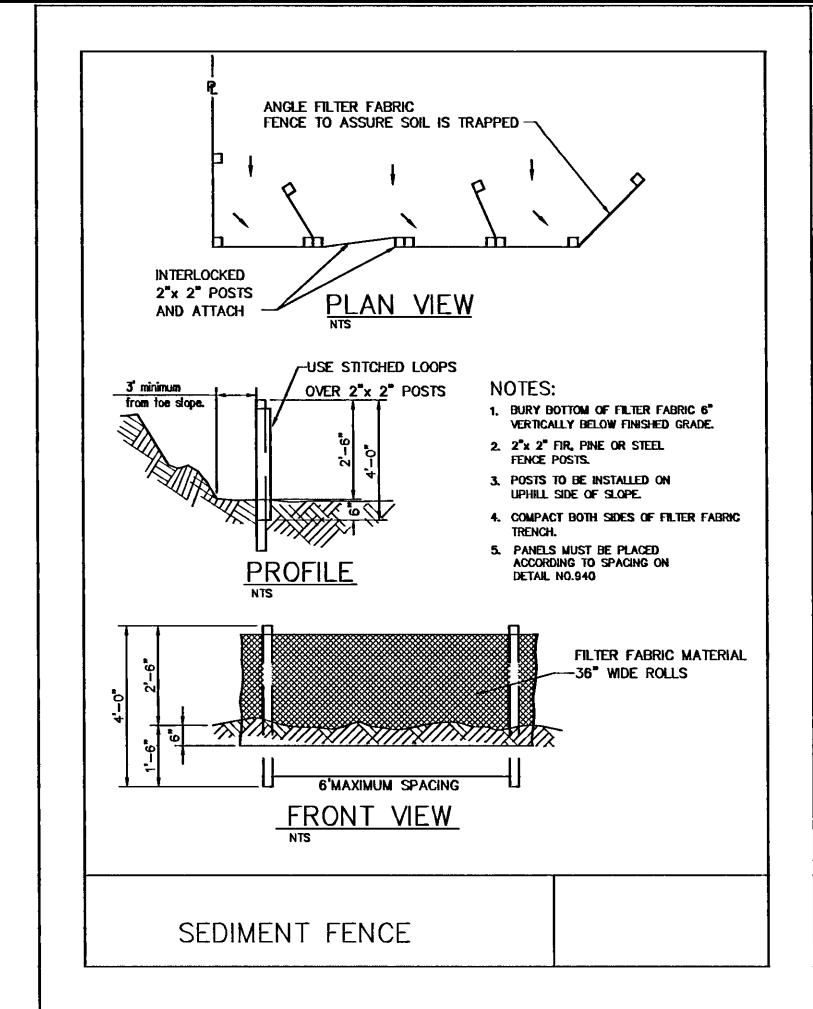
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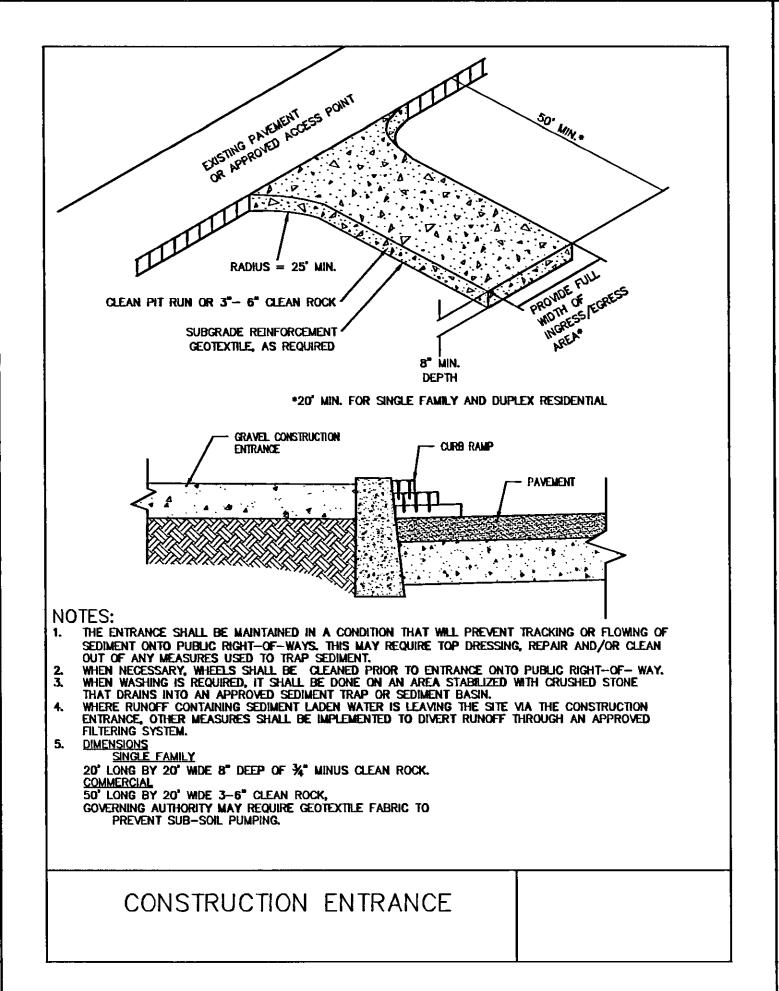


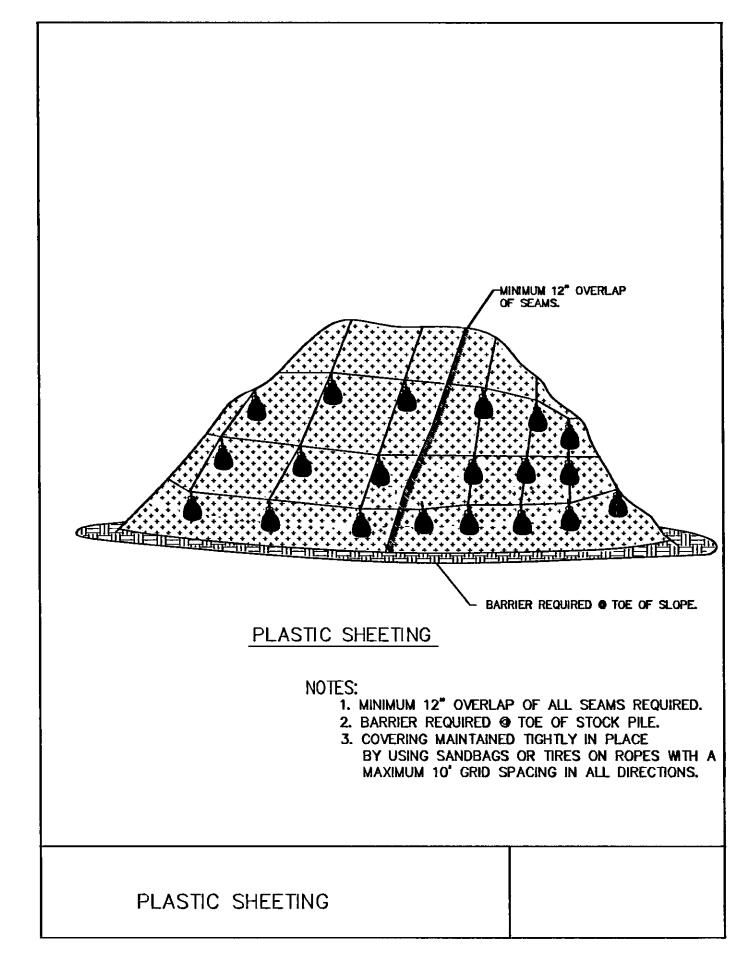


EROSION AND SEDIMENT CONTROL PLAN NOTES

- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. (SCH. A.5.b.ii.6)
- 2. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMAZE EXCAVATION AND CREATION OF BARE GROUND ON SLOPES FROM OCTOBER 1 THROUGH MAY 31 EACH YEAR. (SCH A.7.a.i.)
- 3. 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. (SCH A.7.q.ii.)
- 4. ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK MUST BE INSTALLEAD PRIOR TO ANY LAND DISTRUBANCE. (SCH. A.7.c.ii)
- 5. Preserve existing vegetation and re-vegetate open areas when practicable before AND AFTER GRADING OR CONSTRUCTION (SCH. A.7.c.ii.1)
- 6. ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED. (SCH. A.7.c.ii.3)
- SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION. (SCH. A.7.d.i.(1))
- 8. ALL ACTIVE CATCH BASINS SEDIMENT CONTROLS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. (SCH A.7.d.i.(2))
- 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. (SCH. A.7.d.ii.3)
- 10. 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. (SCH A.7.e.ii.2)
- 11. DEVELOP AND MAINTAIN ON-SITE A WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURE (SCH A.7.e.iii.3)
- 12. ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE. APPLICATION, AND DISPOSAL. (SCH. A.7.e.iii.(2))
- 13. 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. (SCHEDULE A.7.e.i.1 SCHEDULE A.7.e.ii.4)
- 14. 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.
- 15. SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR Waterbodies. Dry sweeping must be used to clean up released sediments, (sch
- 16. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH 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. (SCH A.7.f.i.3)
- 17. 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. (SCH A.7.f.ii.1)
- 18. SEDIMENT MUST BE REMOVED FROM BEHIND BIO BAGS AND OTHER BARRIERS IT HAS REACHED A HEIGHT OF TWO (2) INCHES AND BEFORE BMP REMOVAL. (SCHEDULE A.7.f.ii.2)
- 19. 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. (SCHEDULE A.7.f.ii.3)
- 20. 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)% AND AT COMPLETION OF PROJECT. (SCHEDULE A.7.f.ii.3,4)
- 21. 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. (SCHEDULE A.7.f.iii)
- 22. 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. (SCHEDULE A.8.a.)
- 23. SHOULD CONSTRUCTION ACTIVITIES CEASE FOR FIFETEEN (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. (SCHEDULE A.8.b.)

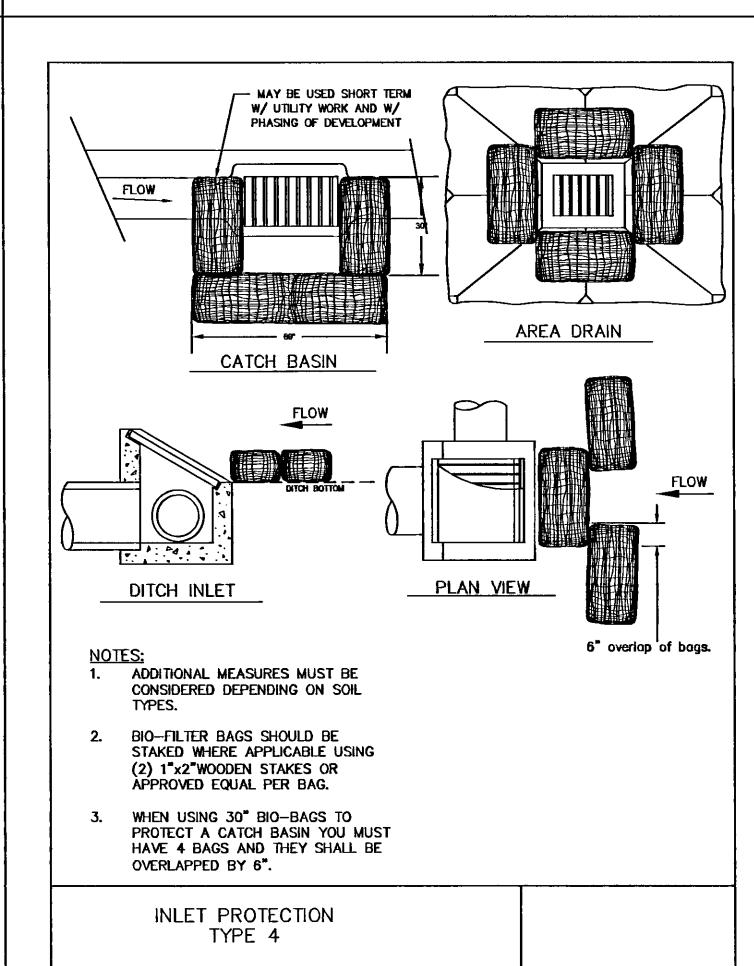


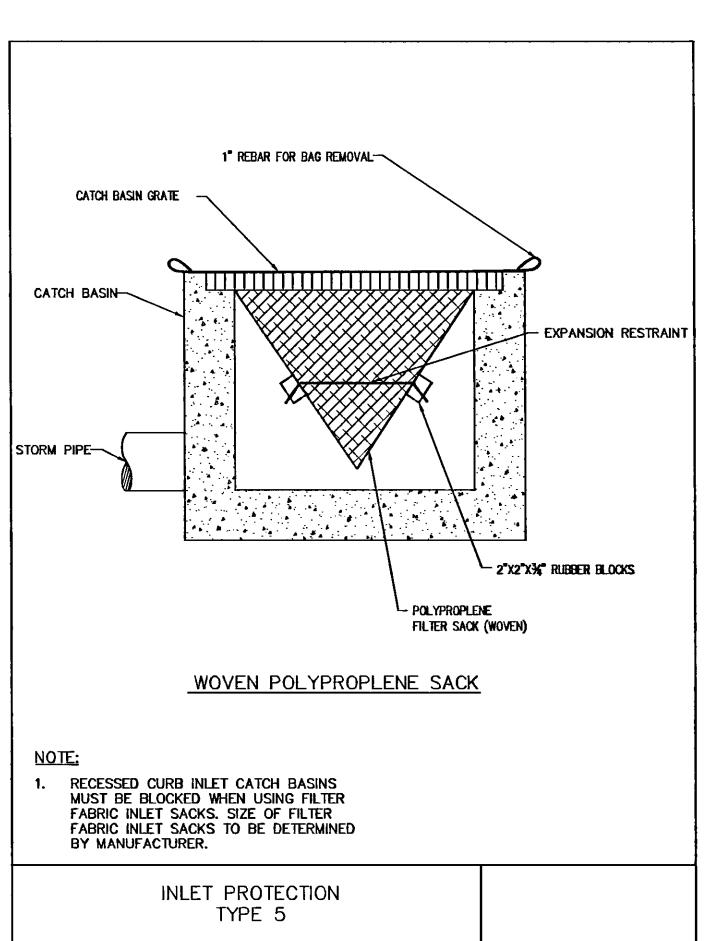


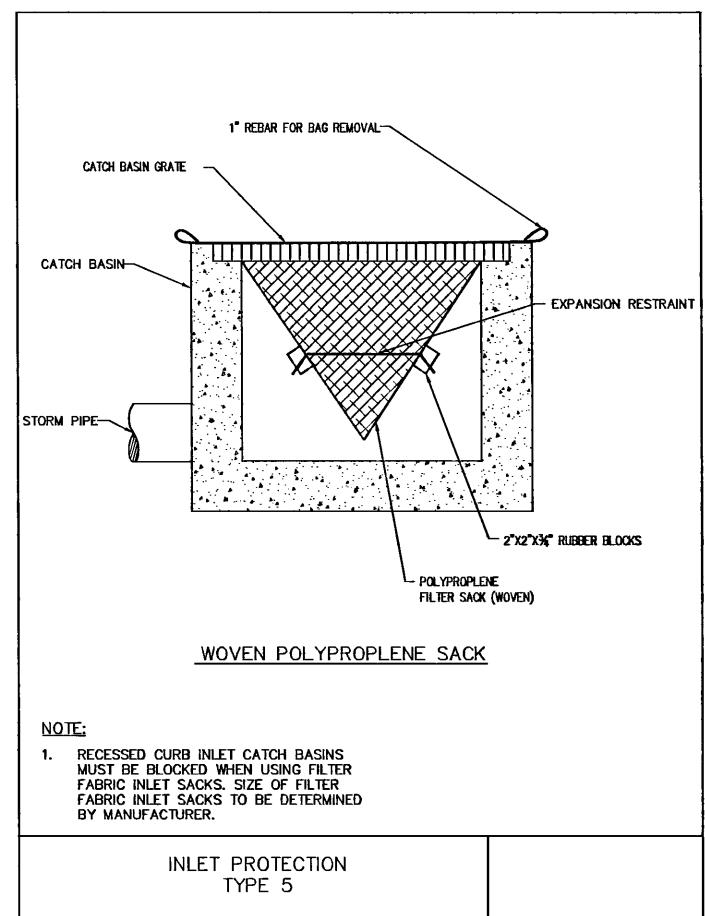




- 1. OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE LOCAL, STATE, AND FEDERAL REGULATIONS.
- 2. PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN O THIS PLAN SHALL BE CLEARLY DELINEATED 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.
- 3. 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
- 4. 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
- 5. 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.
- 6. THE ESC MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION CONTROL REGULATIONS. CHANGES OT THE APPROVED SDC PLAN MUST BE SUBMITTED IN THE FORM OF AN ACTION PLAN TO DEQ PRIOR TO THE 1200-C PERMIT.
- 7. ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD.







AS-BUILT APRIL 9, 2012

NOTE

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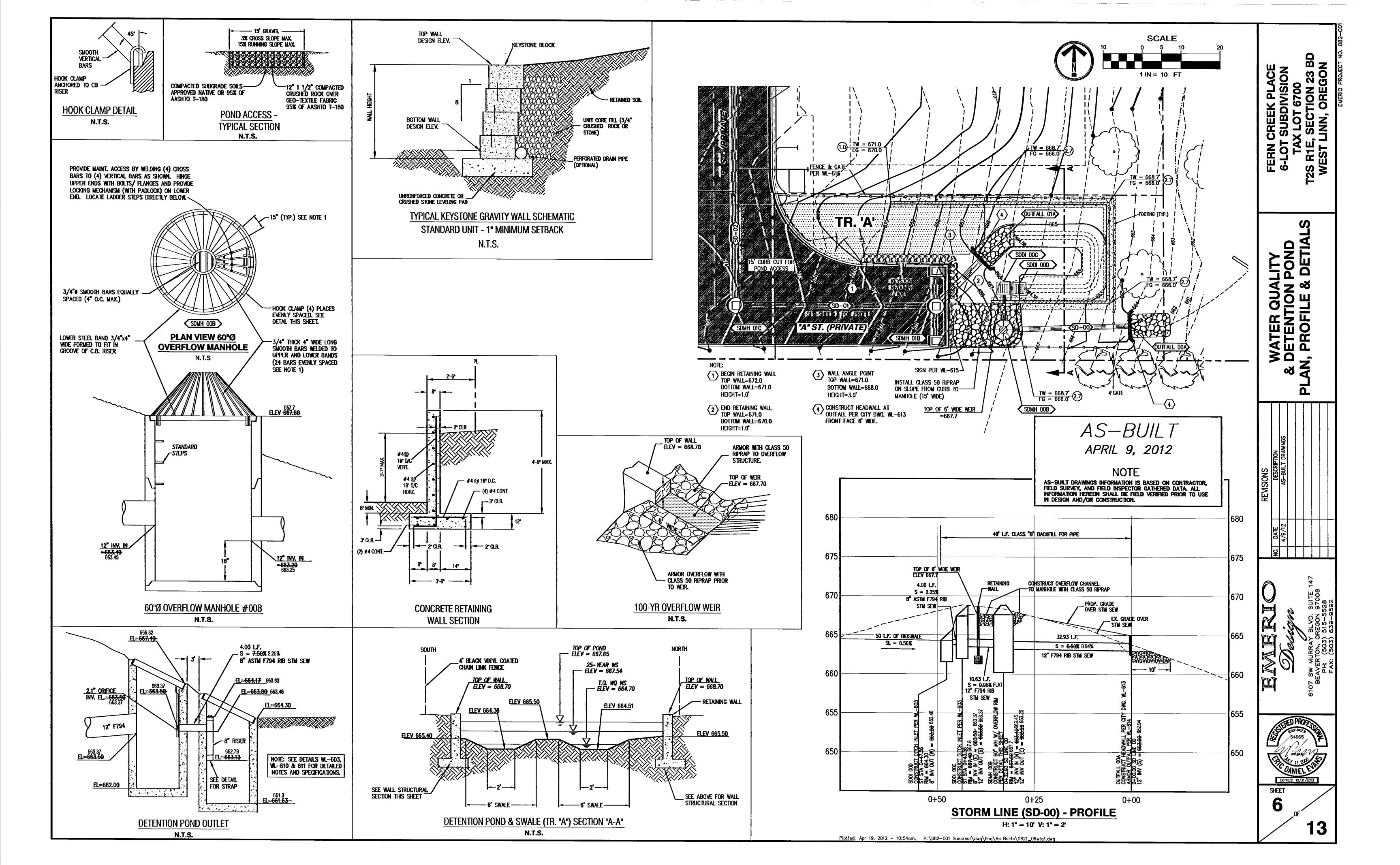
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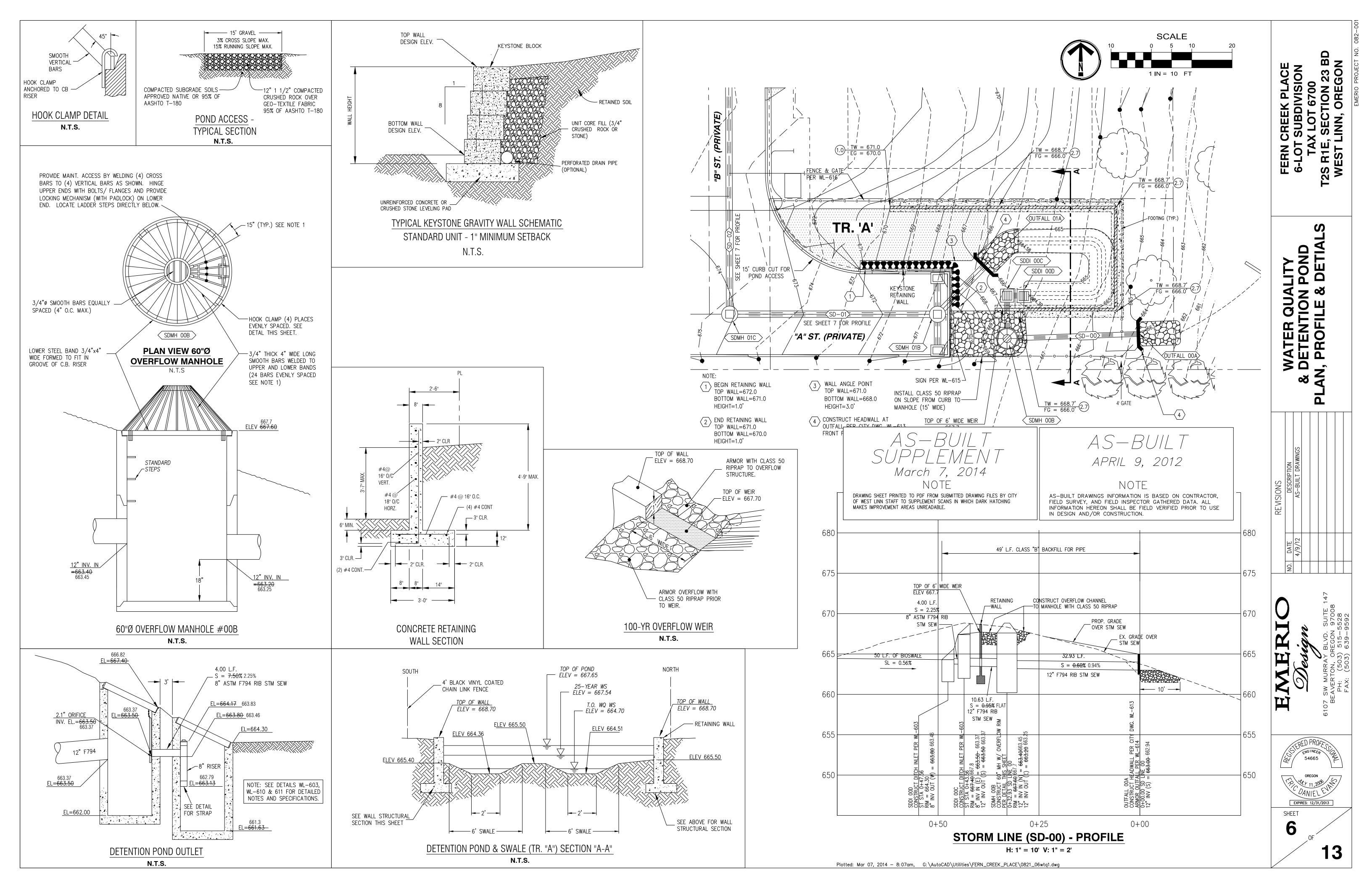
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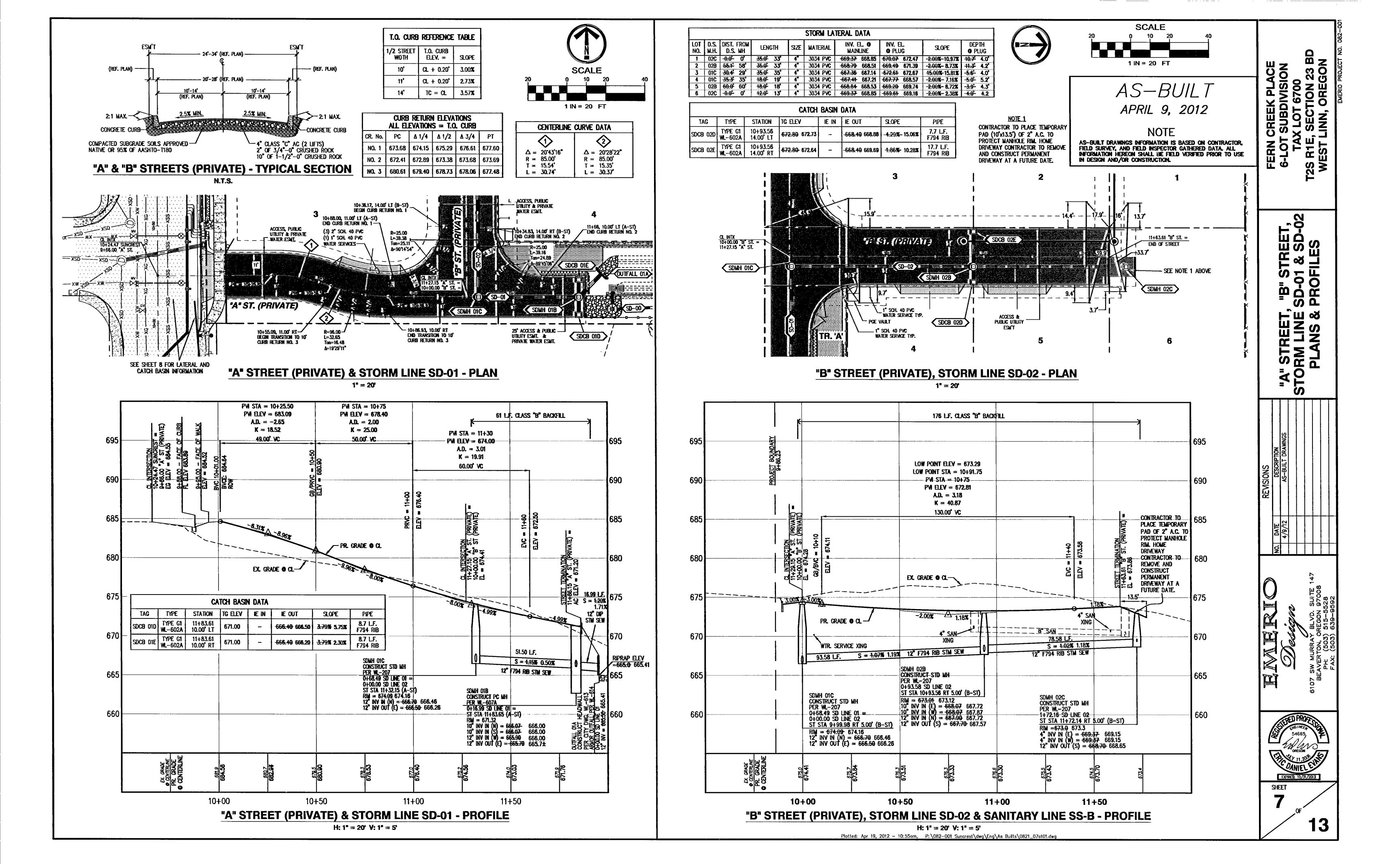
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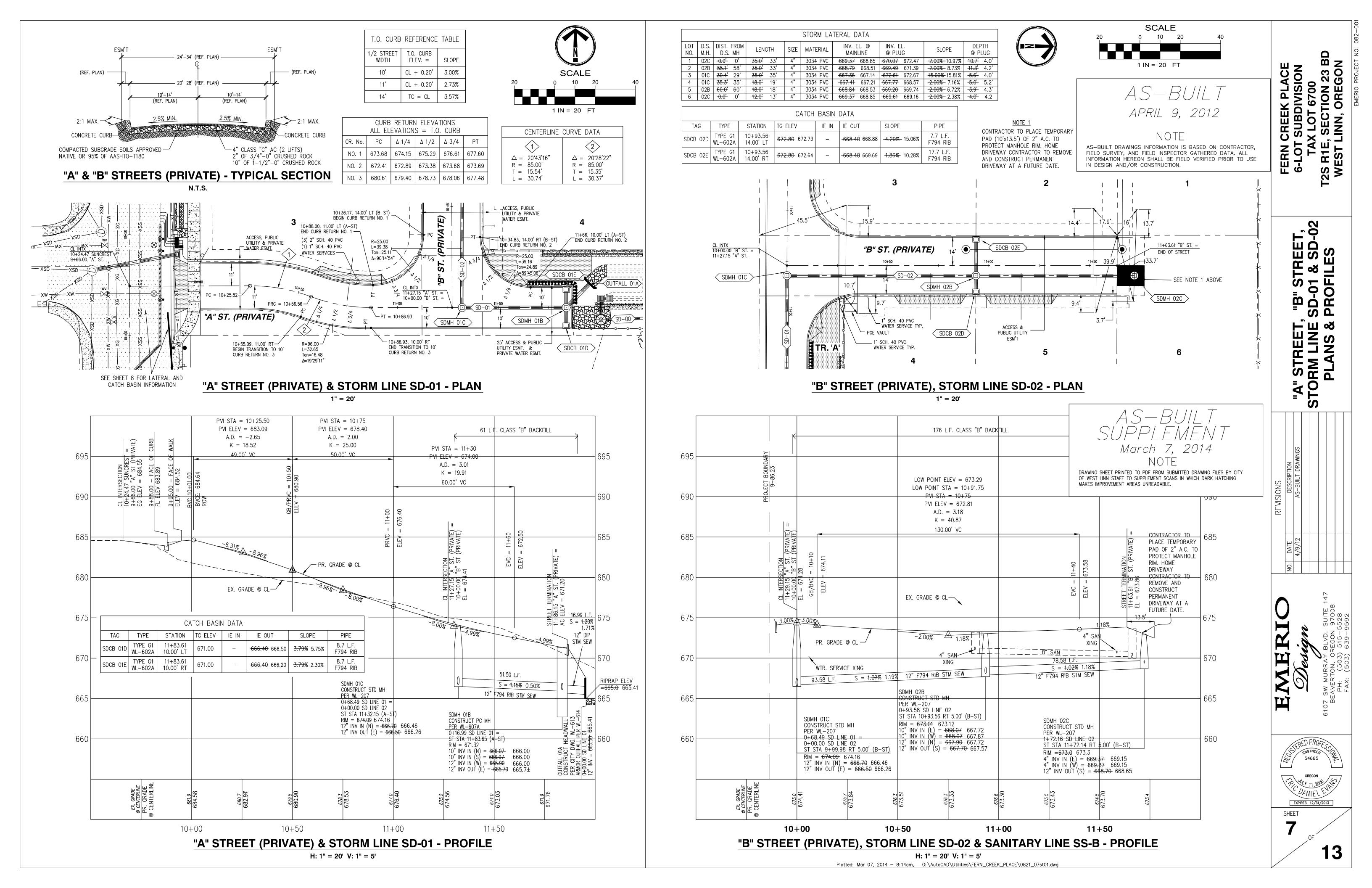
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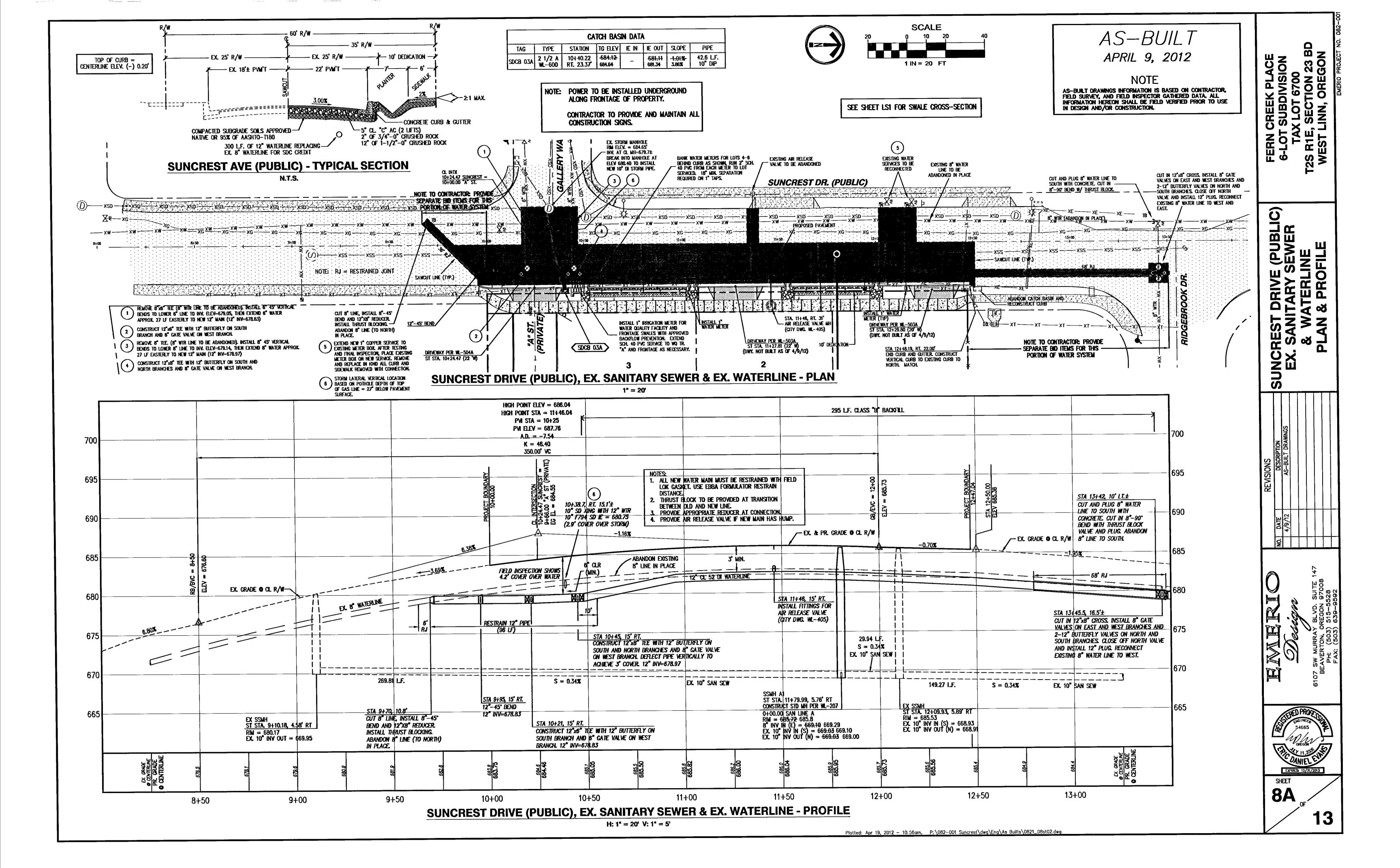
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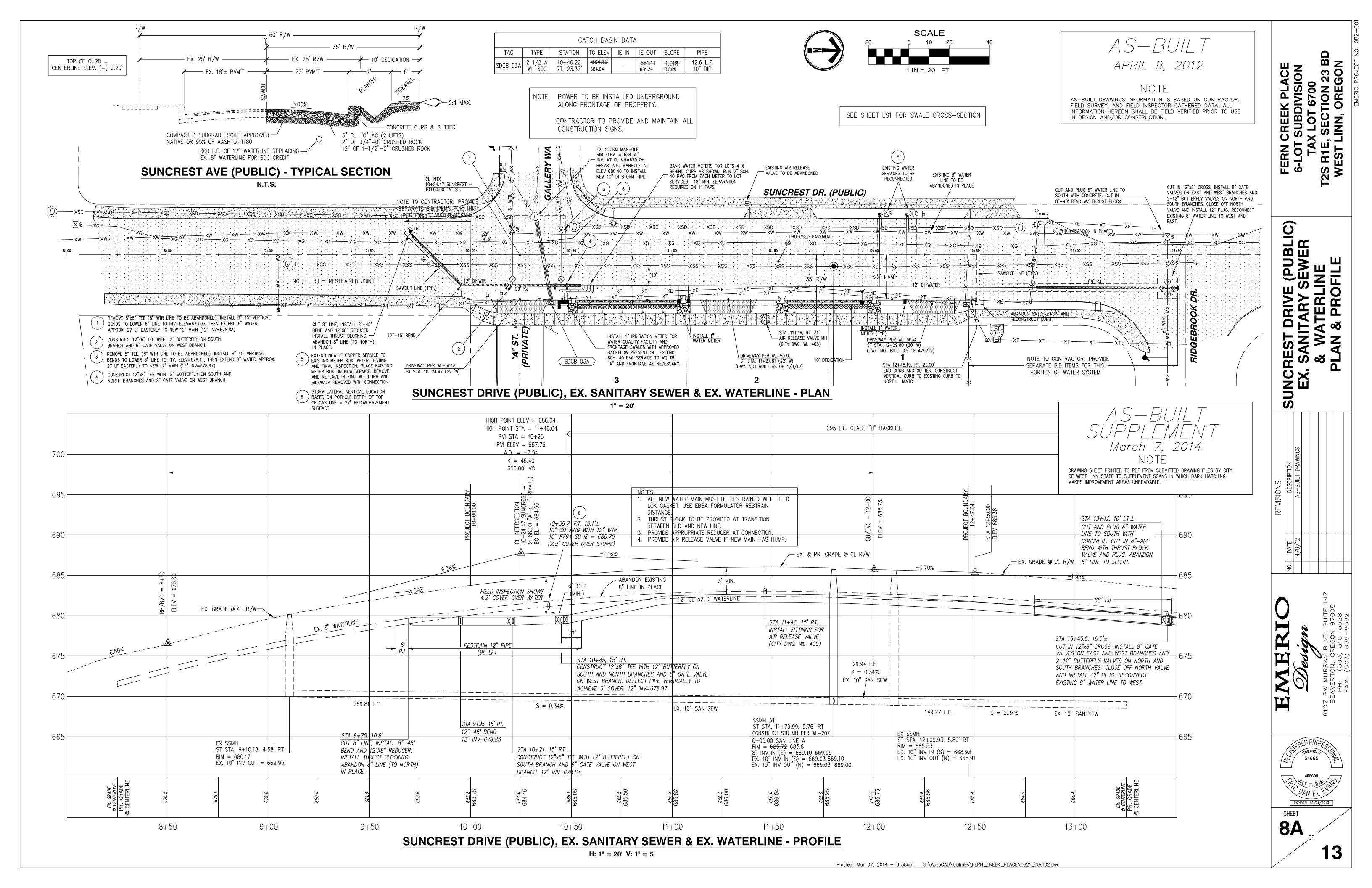


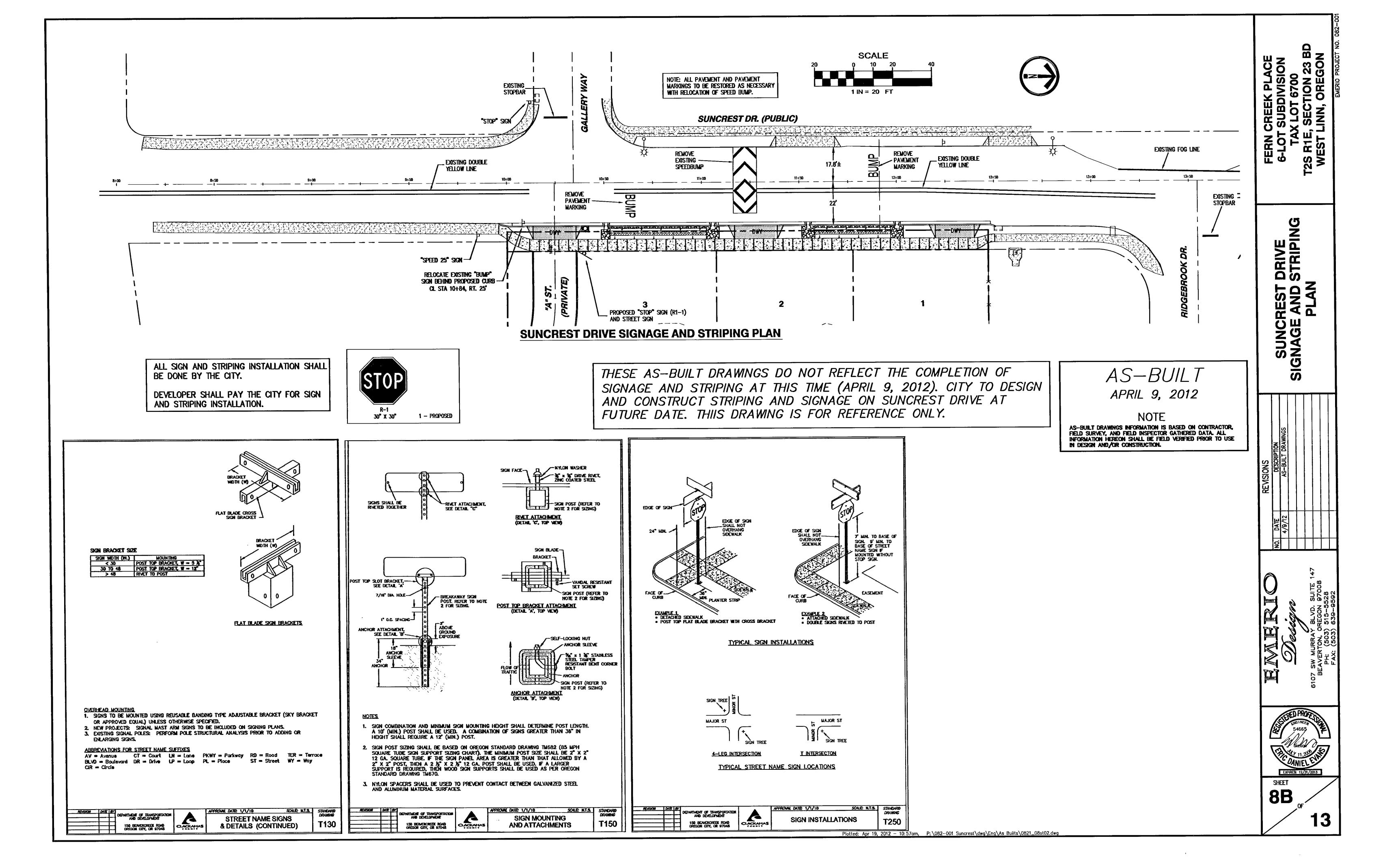


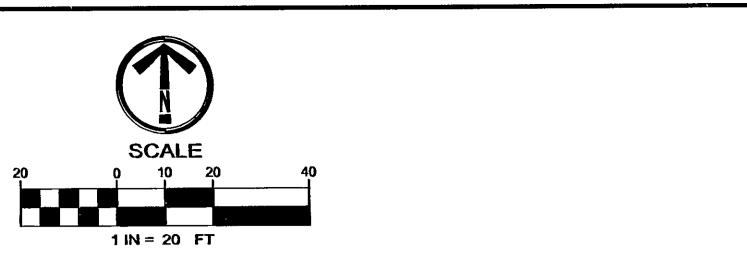




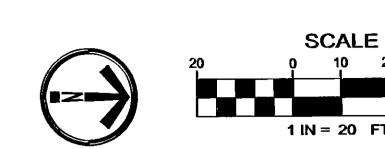


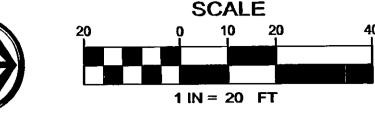


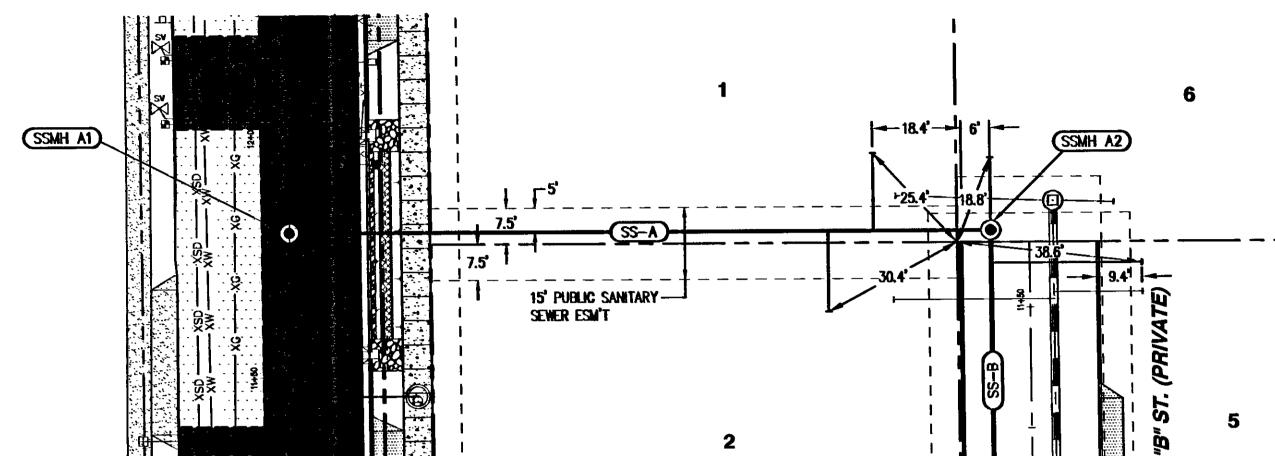


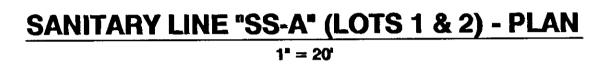


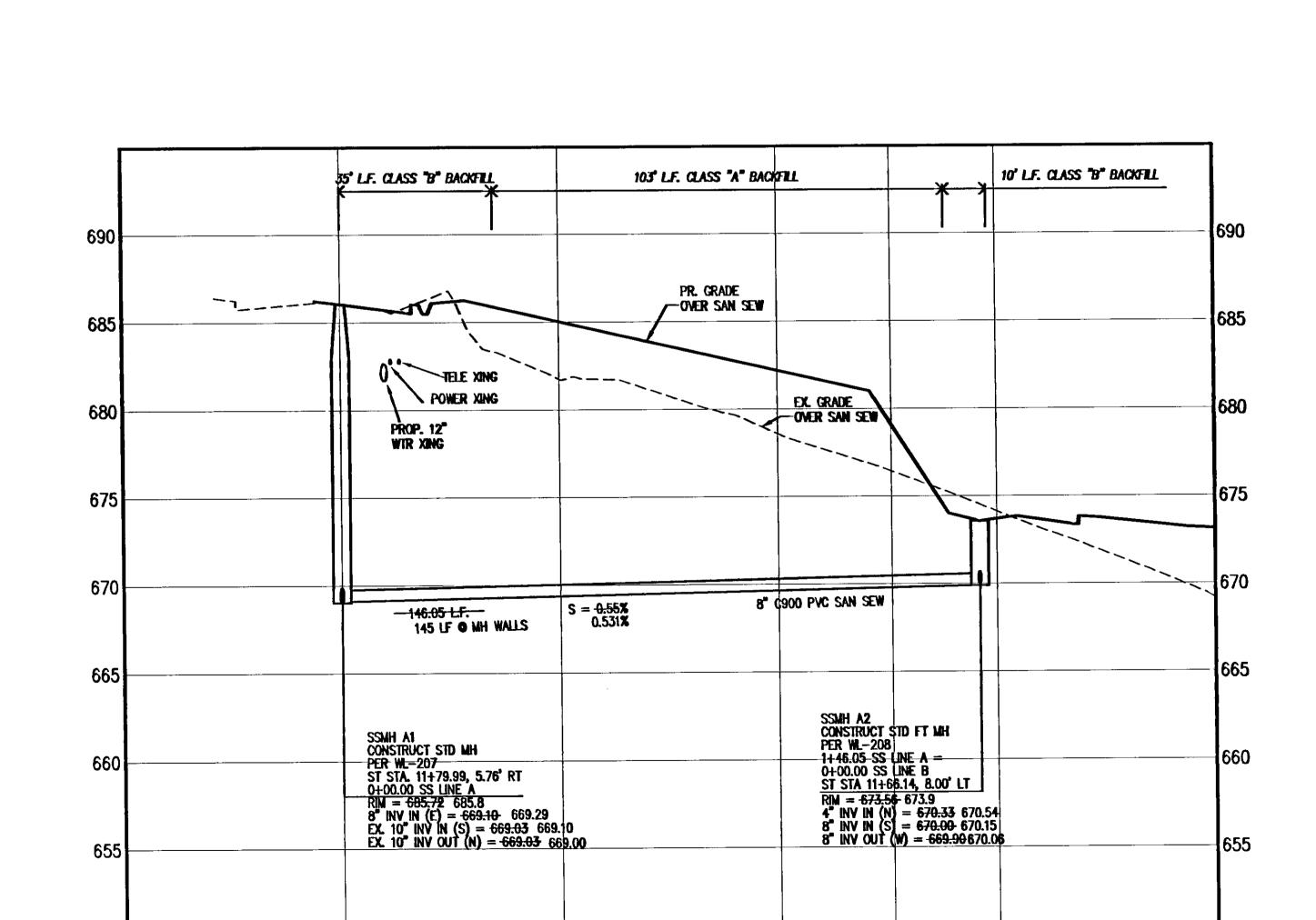
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LOT NO.	D.S. M.H.	DIST. FROM D.S. MH	LENGTH	SIZE	MATERIAL	INV. EL. () Mainline	INV. EL. O Plug	SLOPE	DEPTH • Plug	
1	A1	122.0°	15.0° 16'	4*	3034 PVC	669.93 670.11	675.20 674.47	35.10 % 27.27%	5.6' 2.0'	
2	A1	112.1'	15.0' 17'	4"	3034 PVC	-669.88 670.05	-675.20 675.44	35 .45 % 31.72%	5.7 2.4	
3	B2	0.0	22.0	4"	3034 PVC	670.76 670.64	-671.20 672.23	2.00 % 7.23%	9.6' 4.2'	
4	B2	0.0	31.0 30	4"	3034 PVC	670.76 670.64	671.38 670.89	2.00% 0.83%	2.0 2.8	
5	A2	7.6'	31.0	4"	3034 PVC	670.21 670.36	670.83 670.43	2.00% 0.24%	2.4 3.3	
6	A2	0.0	15.0	4"	3034 PVC	670.33 670.54	670.63 671.48	2.00% 6.27%	2.5 3.4	











0+50

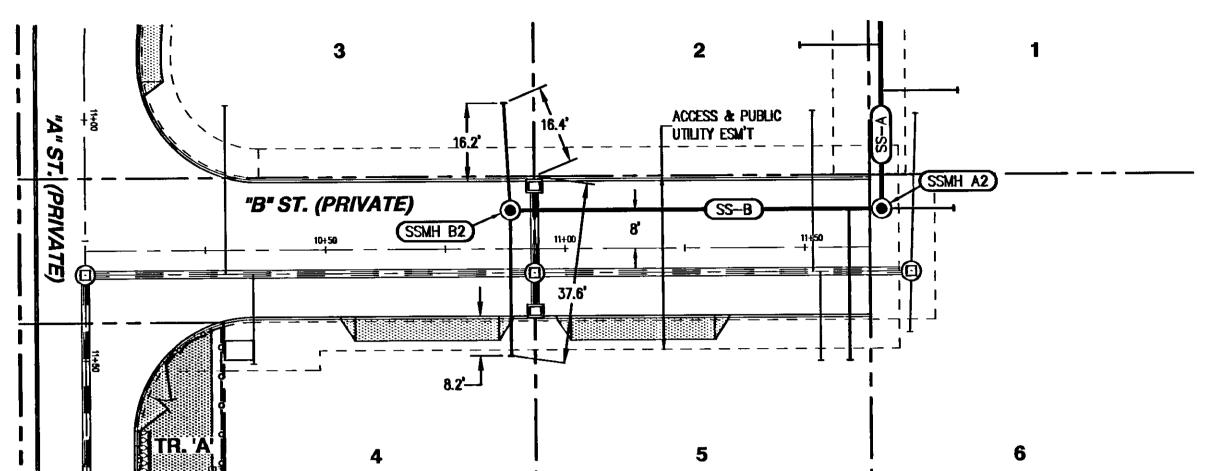
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1+50

1+00

SANITARY LINE "SS-A" (LOTS 1 & 2) - PROFILE

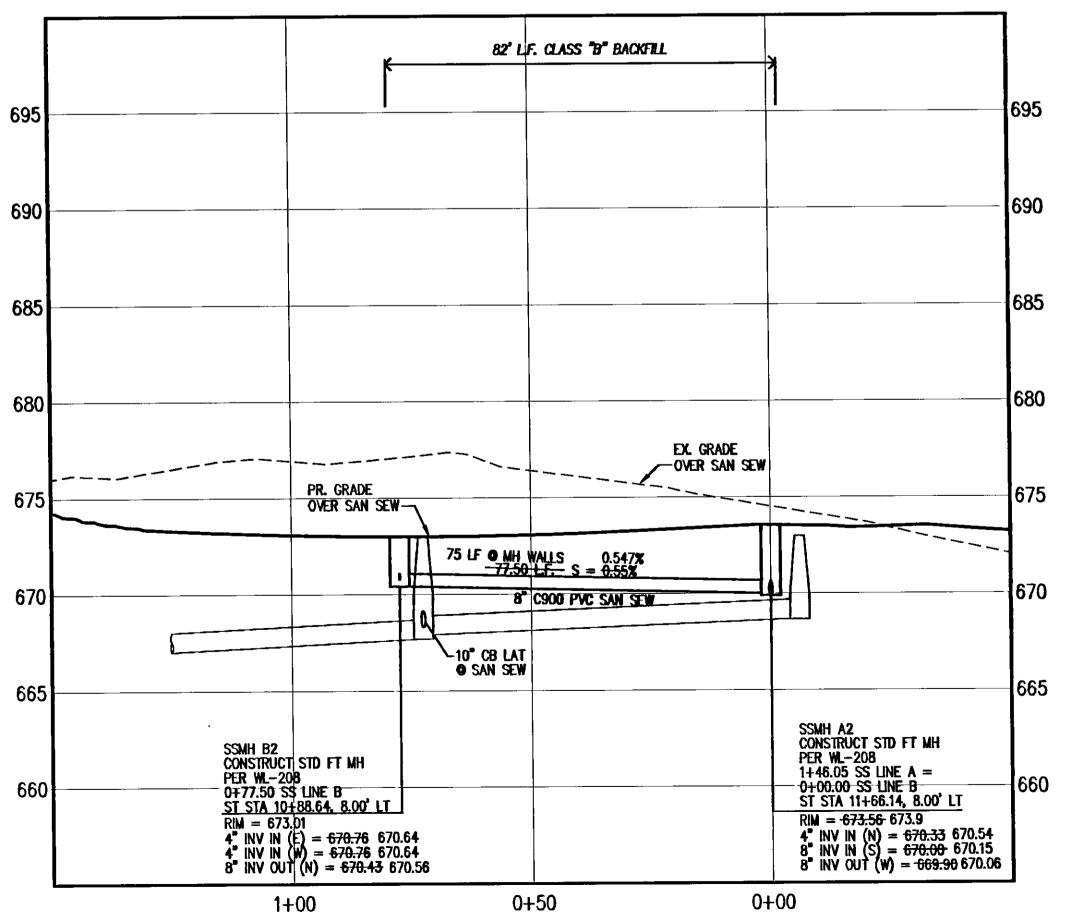
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SANITARY LINE "SS-B" (B-ST) - PLAN 1" = 20'

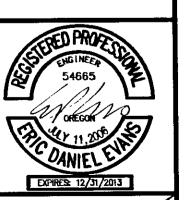
AS-BUILT APRIL 9, 2012

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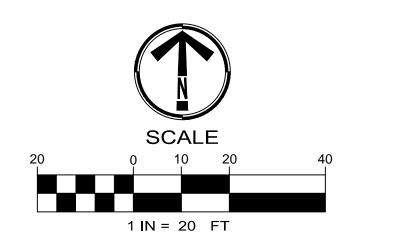
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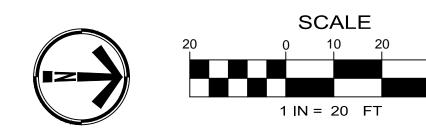


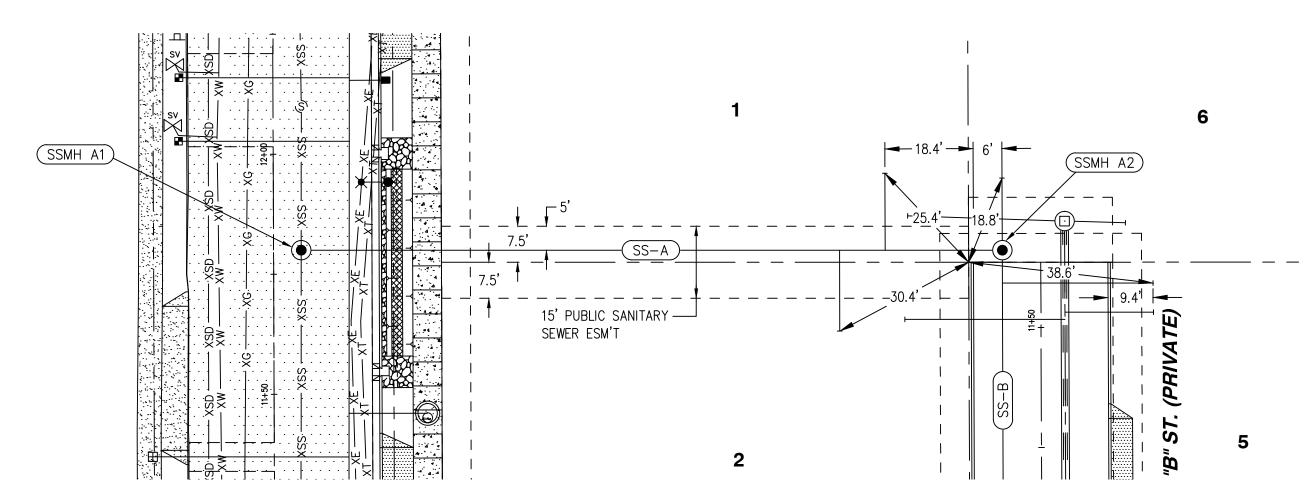
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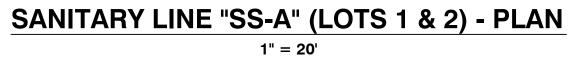
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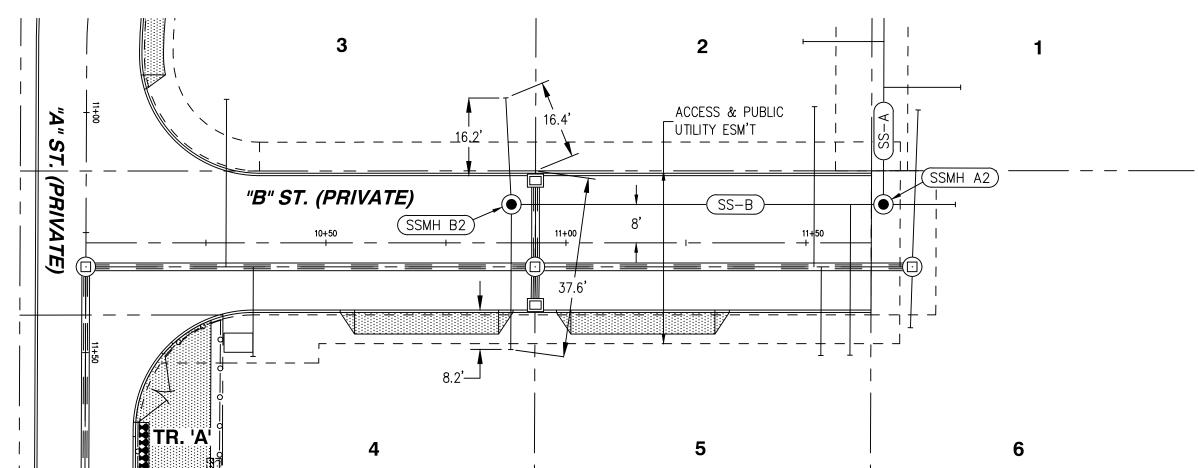


SANITARY LATERAL DATA										
LOT NO.	D.S. M.H.	DIST. FROM D.S. MH	LENGTH	SIZE	MATERIAL	INV. EL. @ MAINLINE	INV. EL. @ PLUG	SLOPE	DEPTH PLUG	
1	A1	122.0'	15.0 ' 16'	4"	3034 PVC	669.93 670.11	675.20 674.47	35.10 % 27.27%	5.6 ' 2.0'	
2	A1	112.1'	15.0' 17'	4"	3034 PVC	669.88 670.05	675.20 675.44	35.45 % 31.72%	5.7' 2.4'	
3	B2	0.0'	22.0'	4"	3034 PVC	670.76 670.64	671.20 672.23	2.00 % 7.23%	9.6 ' 4.2'	
4	B2	0.0'	31.0 ' 30'	4"	3034 PVC	670.76 670.64	671.38 670.89	2.00 % 0.83%	2.0 ' 2.8'	
5	A2	7.6'	31.0'	4"	3034 PVC	670.21 670.36	670.83 670.43	2.00 % 0.24%	2.4 ' 3.3'	
6	A2	0.0'	15.0'	4"	3034 PVC	670.33 670.54	670.63 671.48	2.00 % 6.27%	2.5 ' 3.4'	





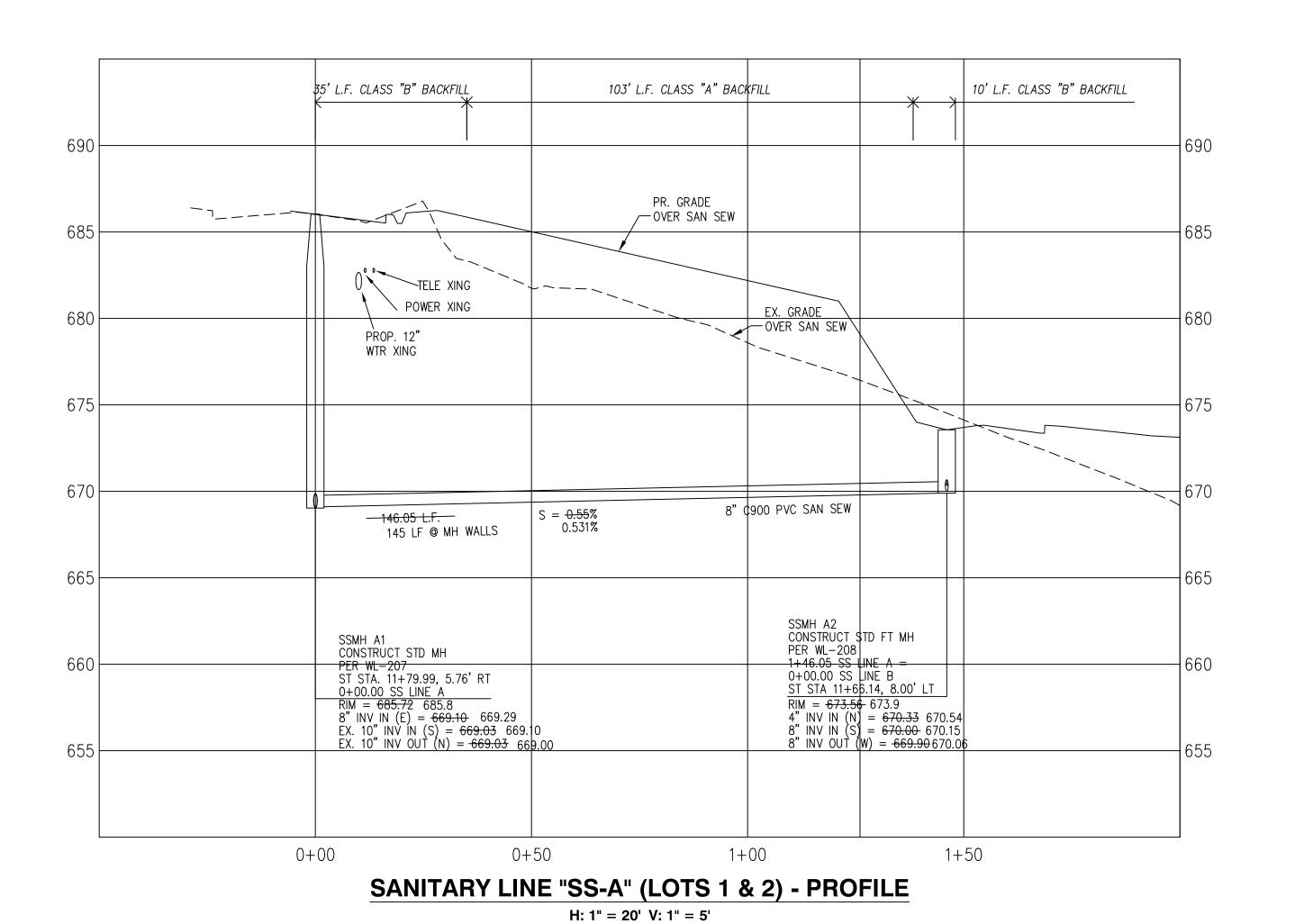


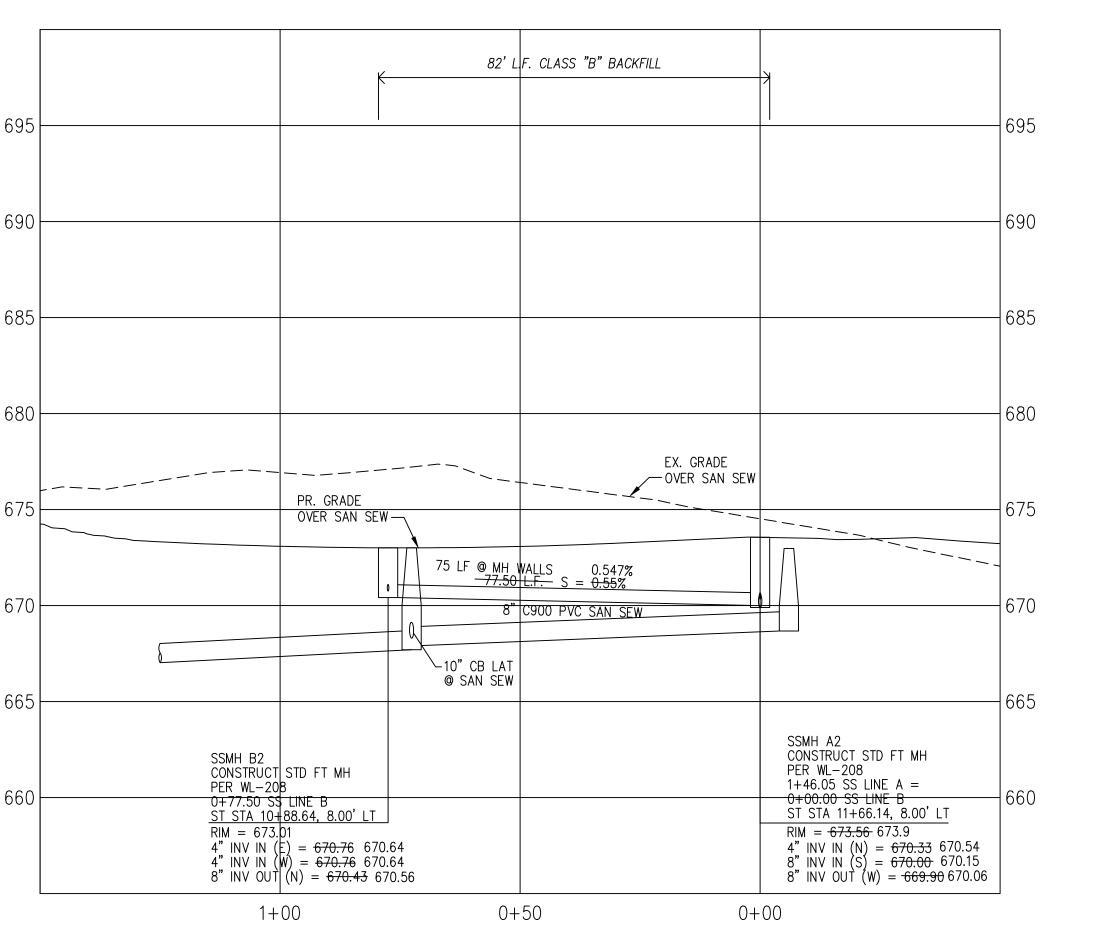


SANITARY LINE "SS-B" (B-ST) - PLAN 1" = 20'

AS-BUILTAPRIL 9, 2012

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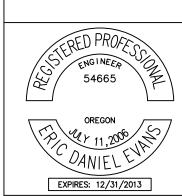




SANITARY LINE "SS-B" (B-ST) - PROFILE

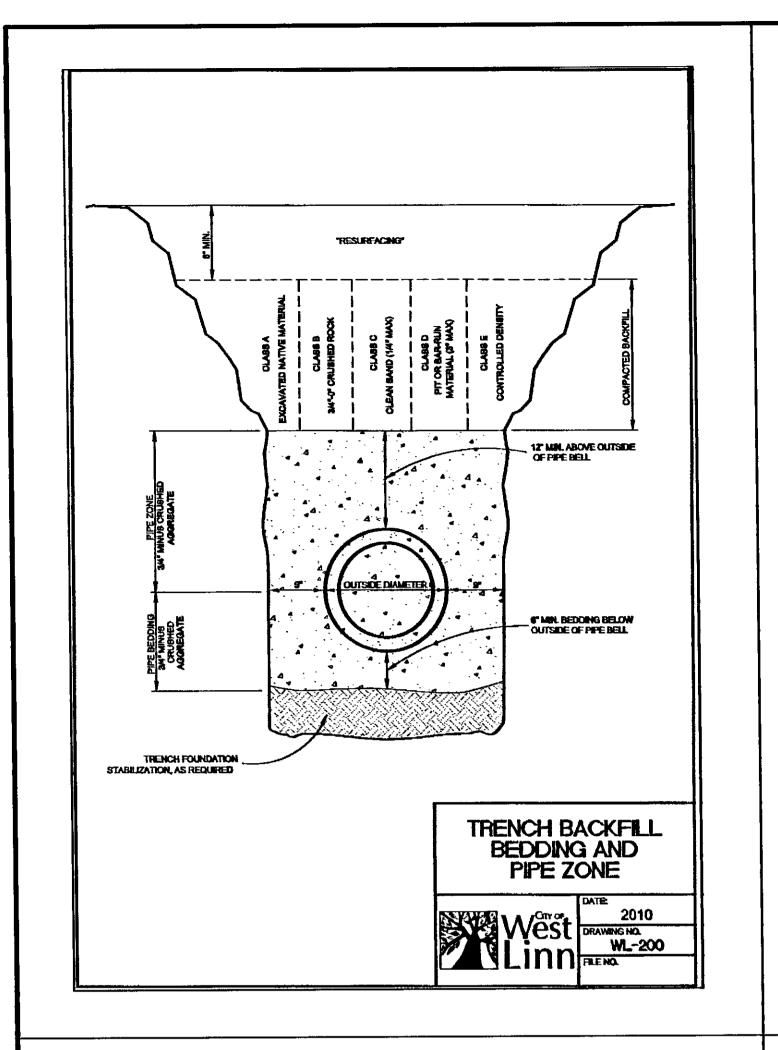
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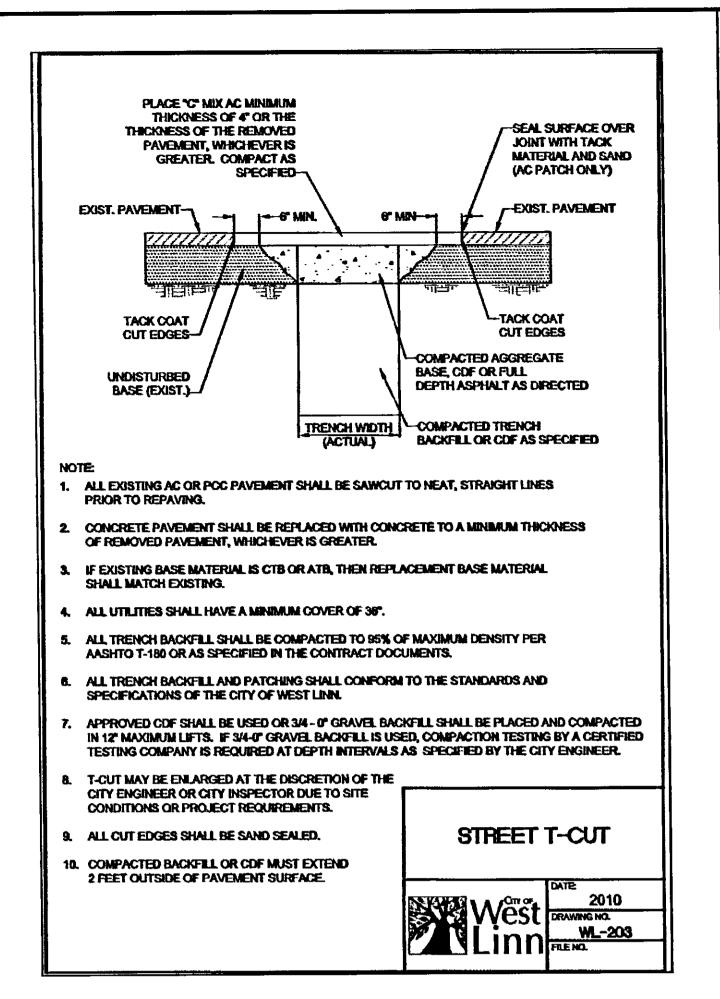
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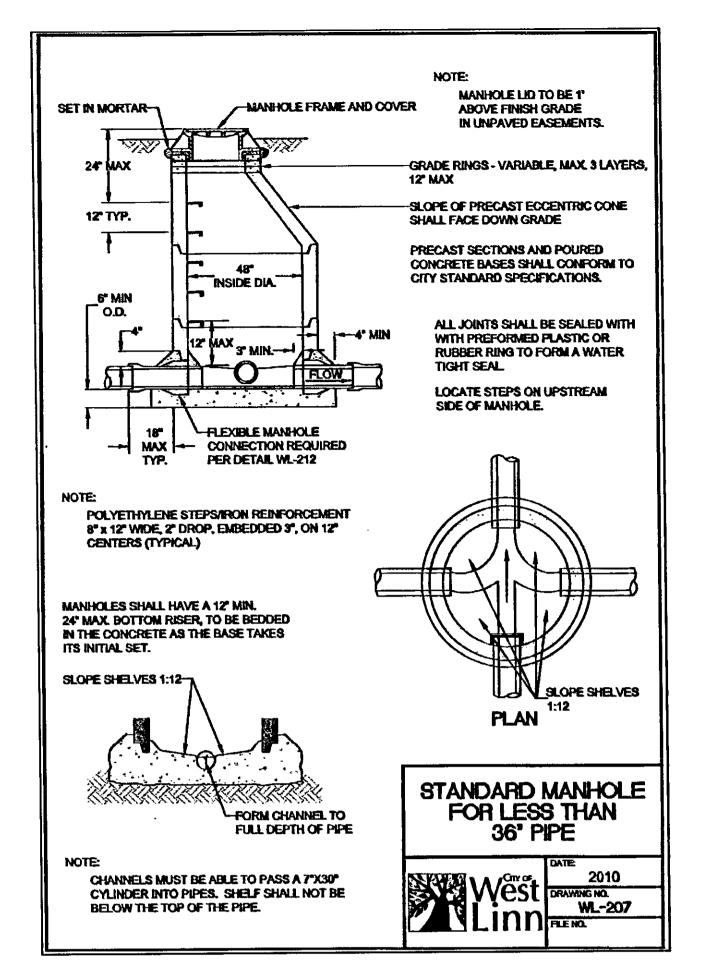


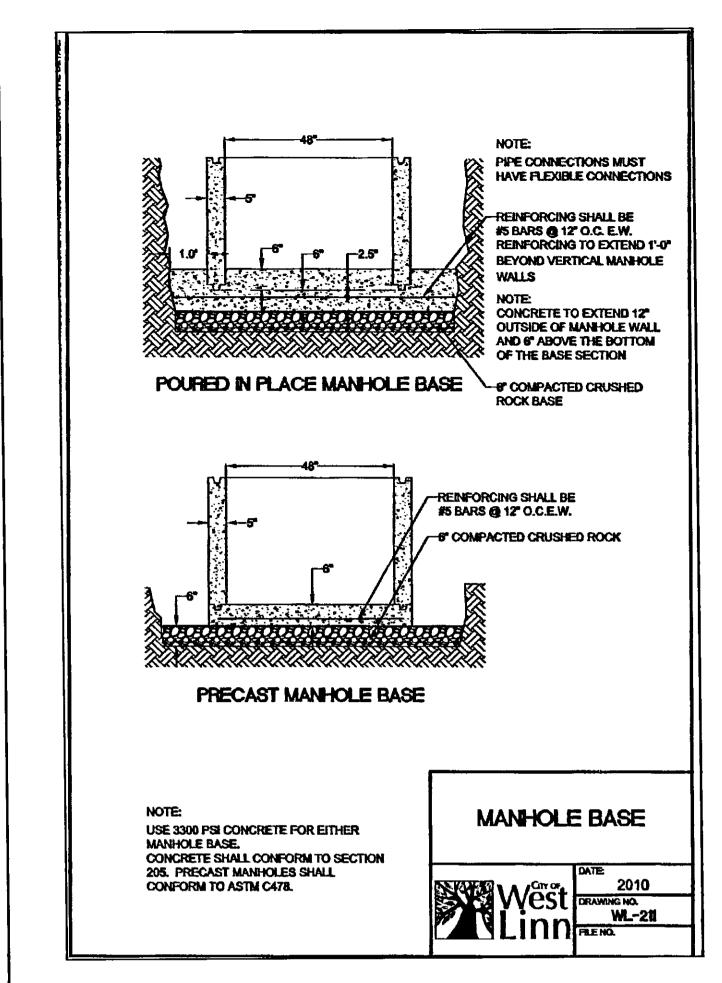
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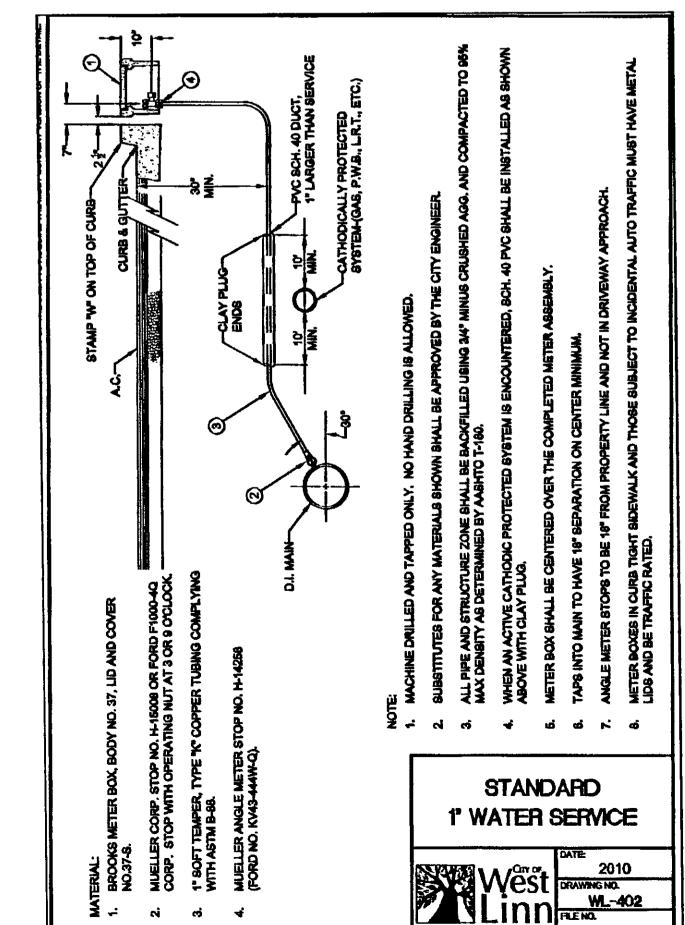
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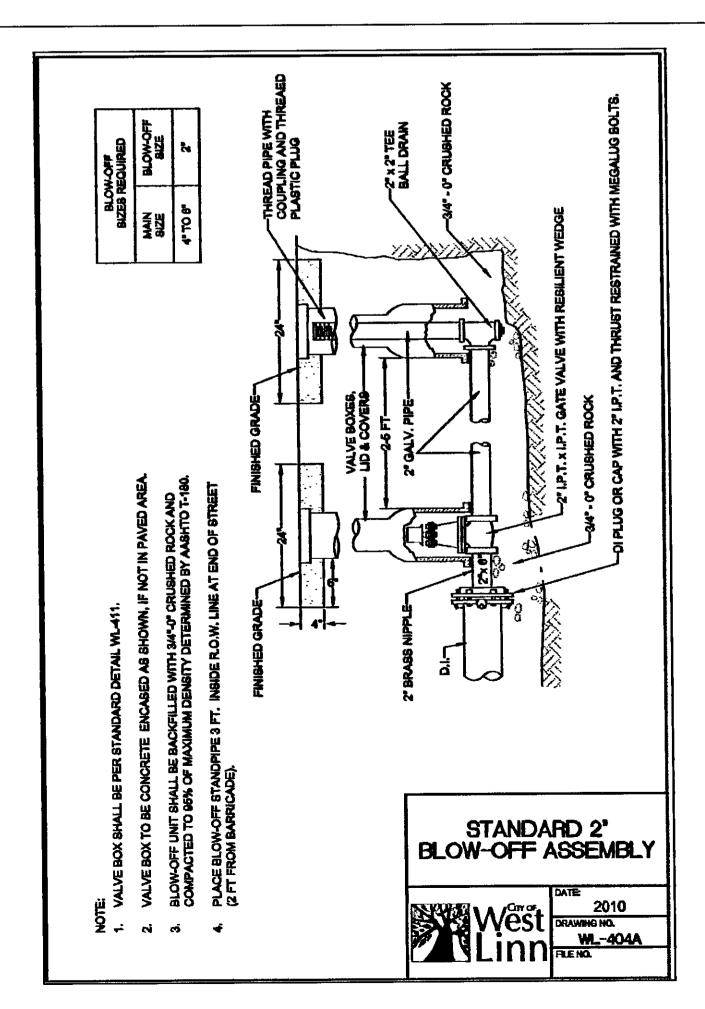


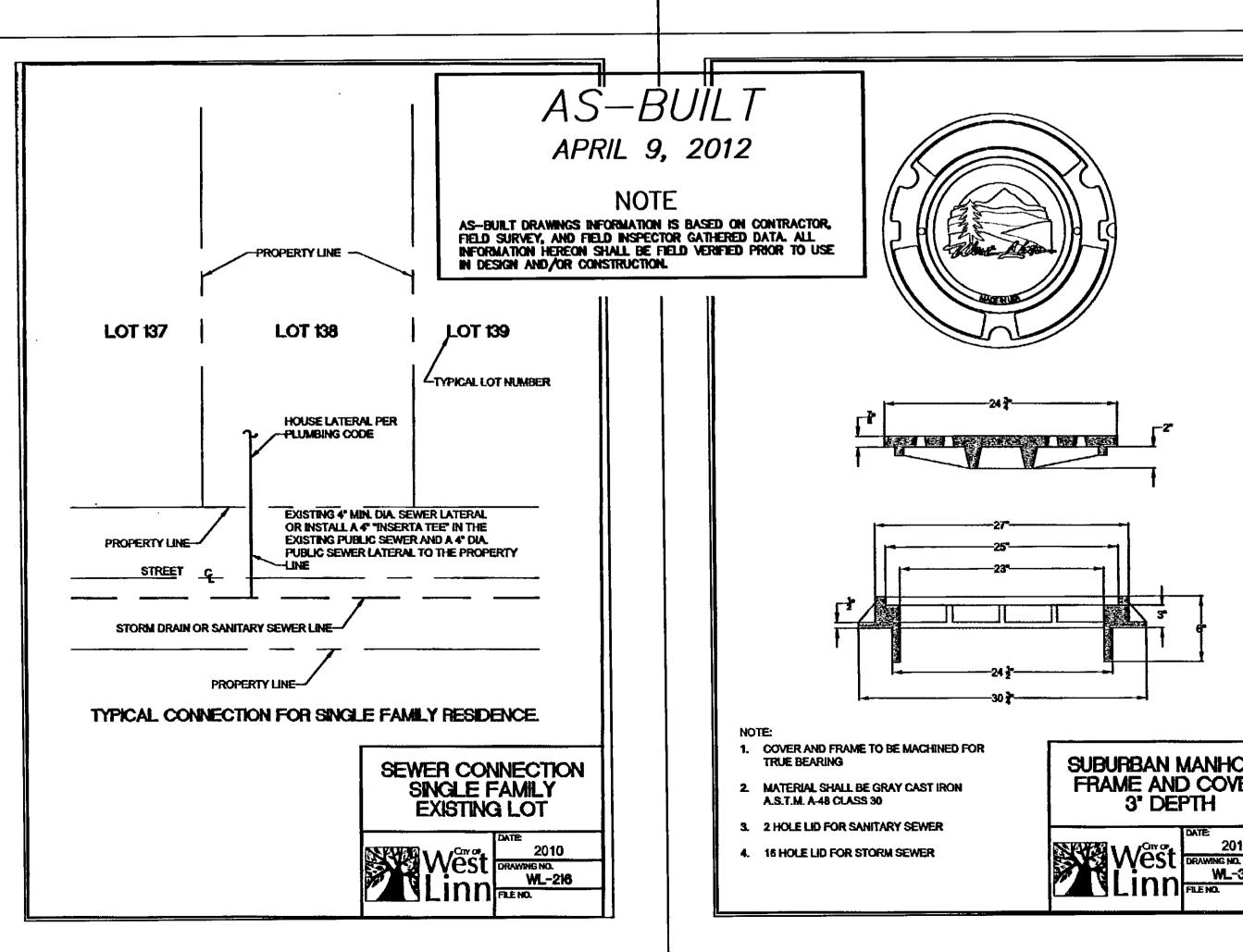


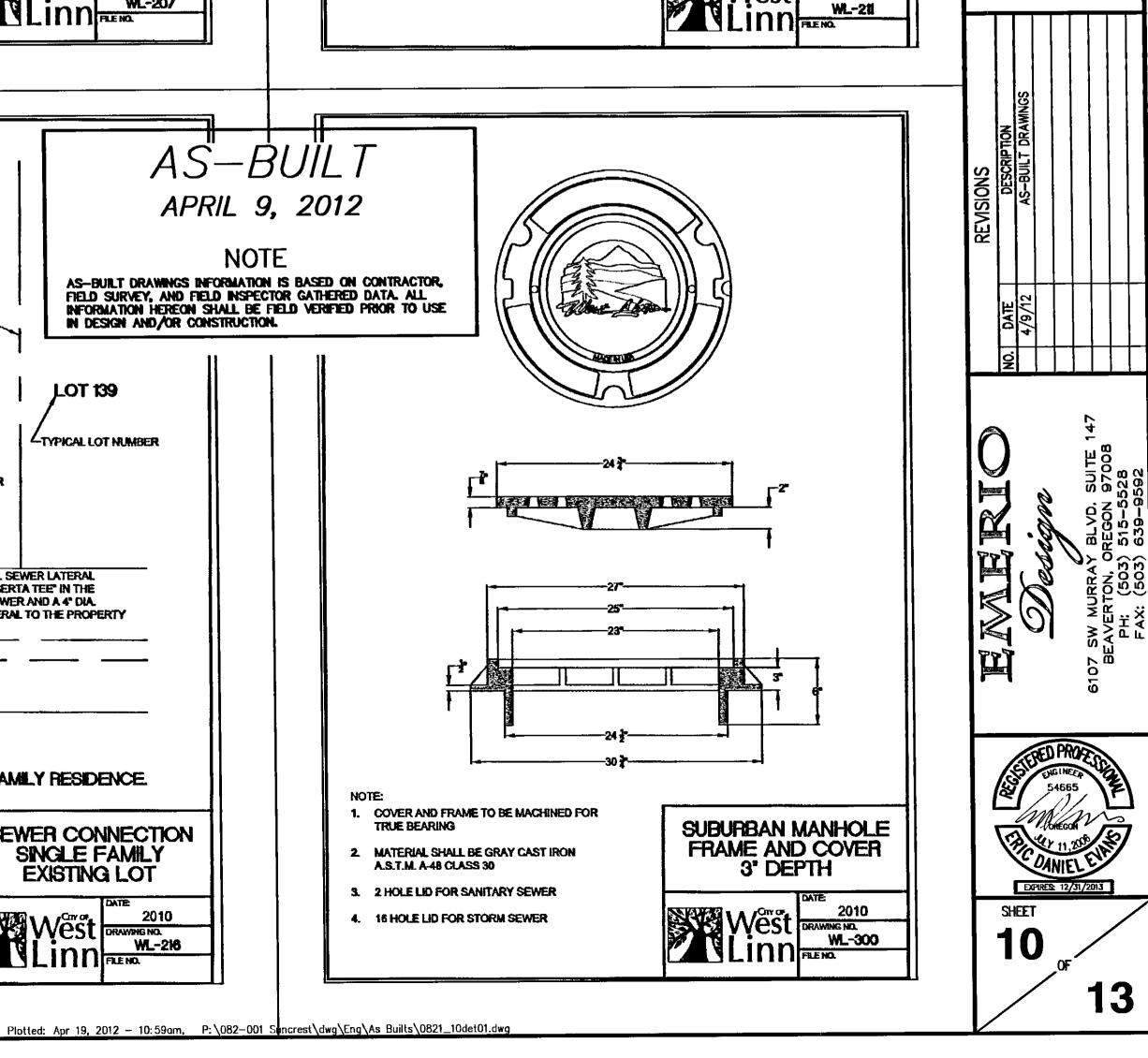


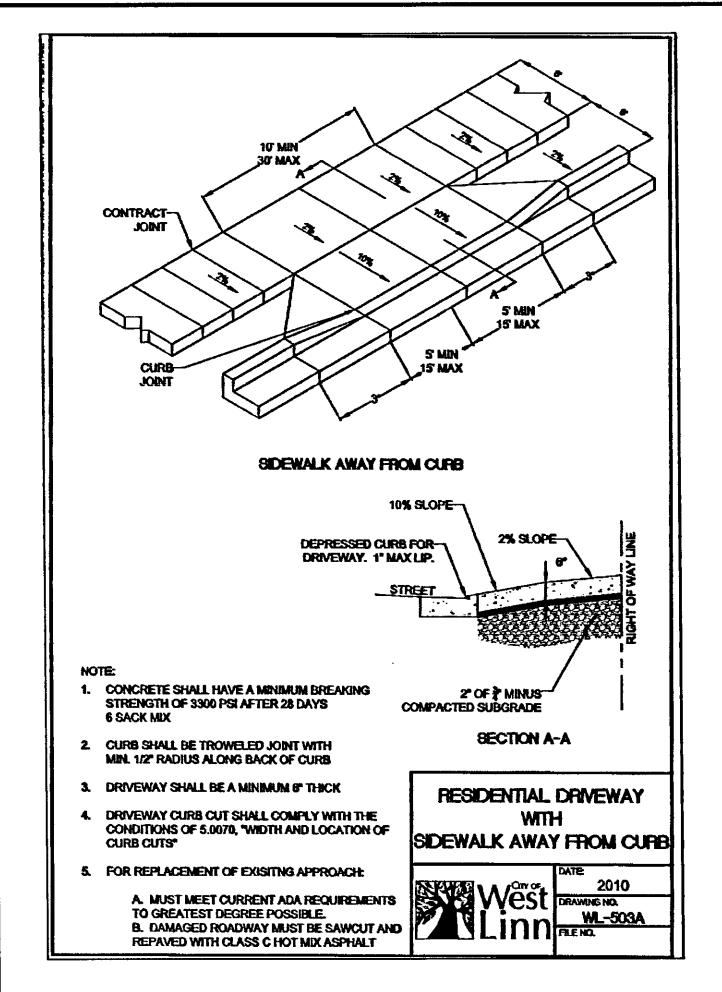


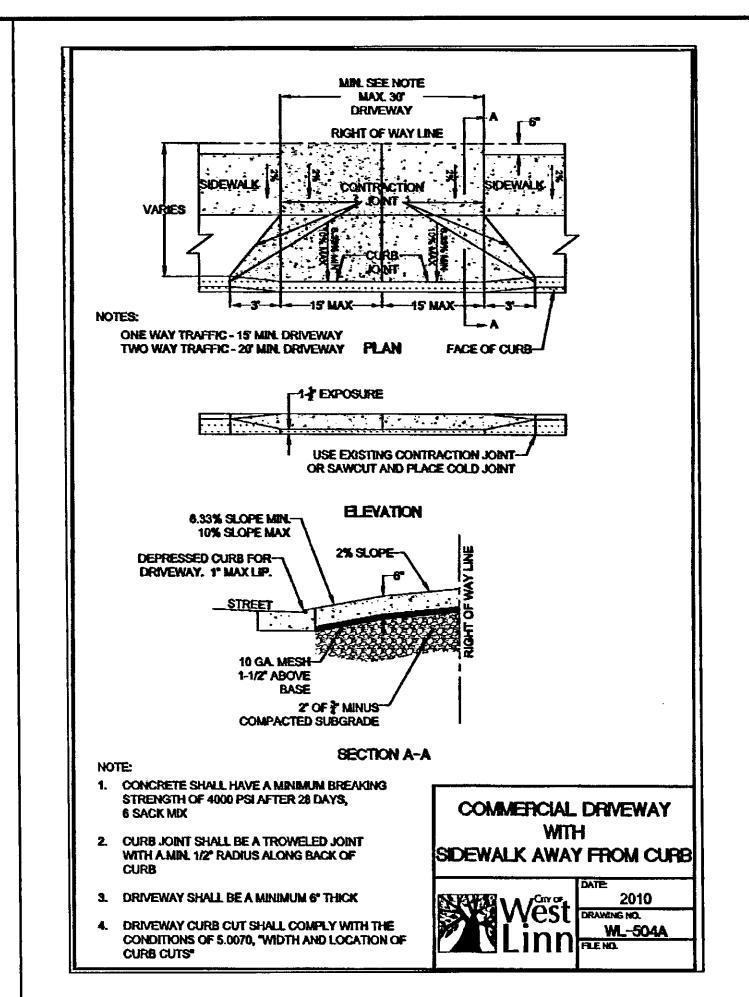


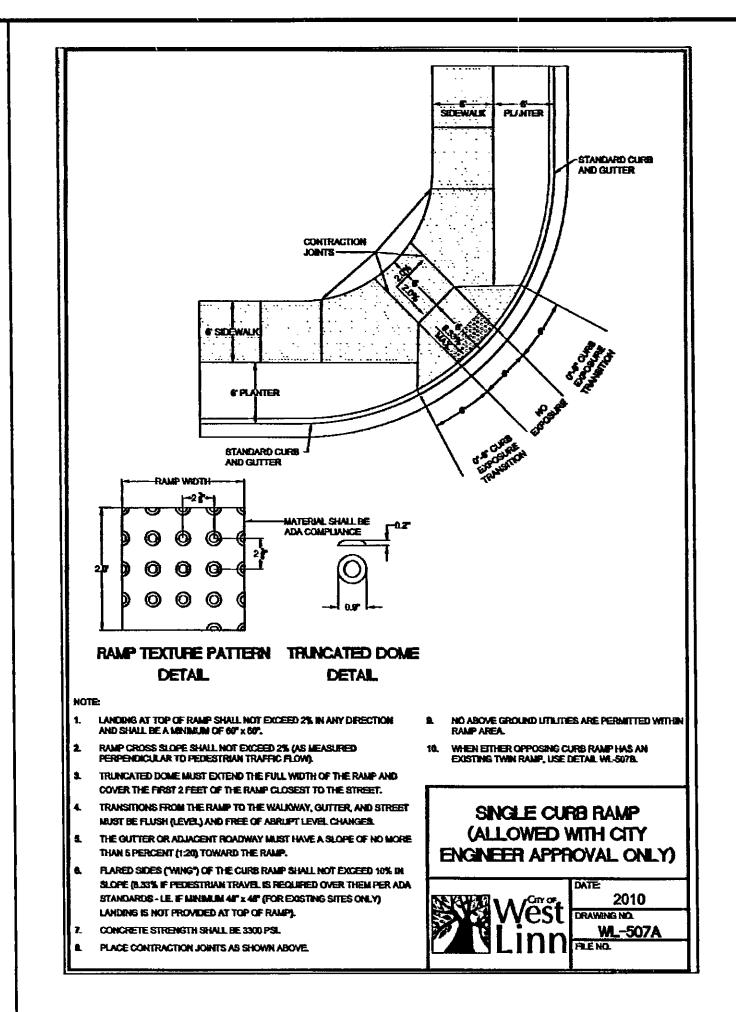


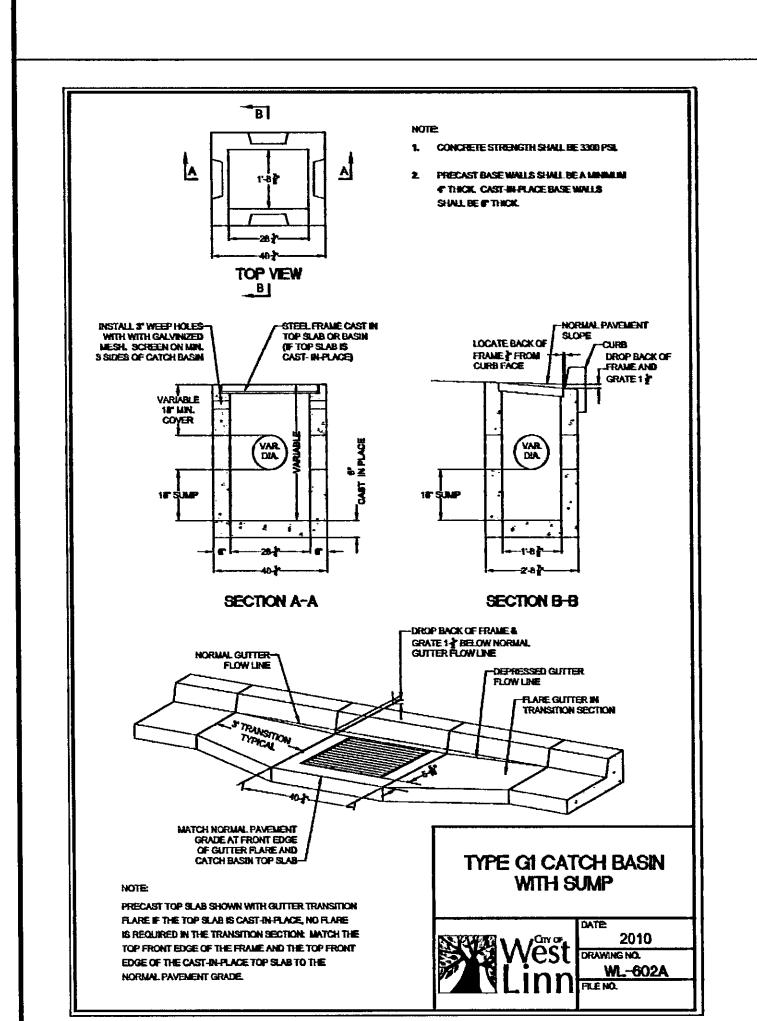


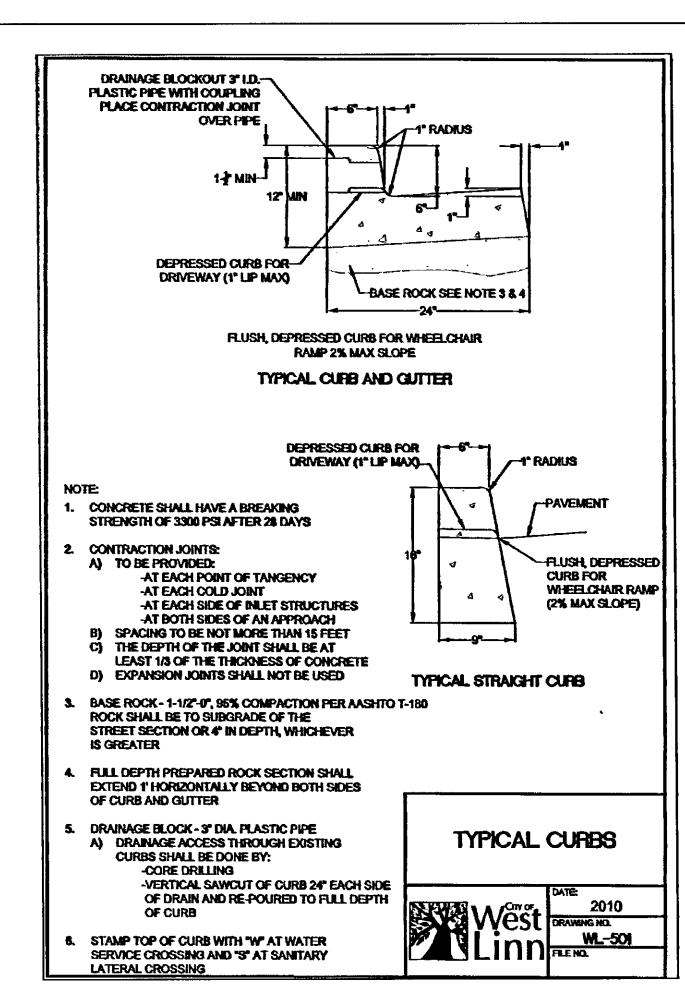


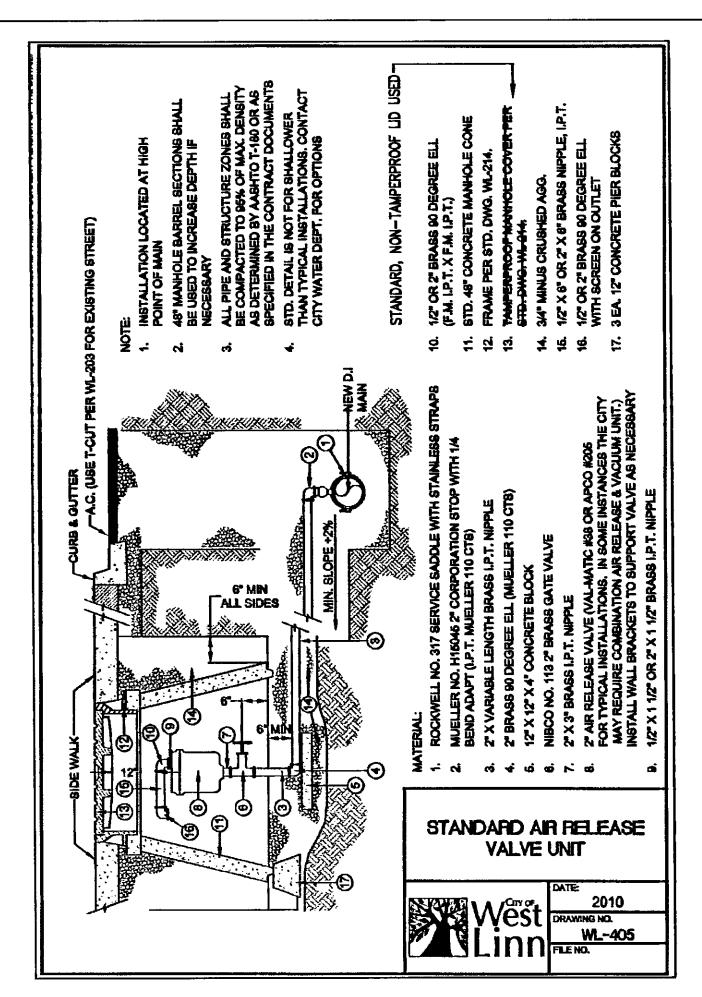












AS-BUILT APRIL 9, 2012

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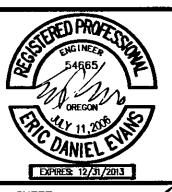
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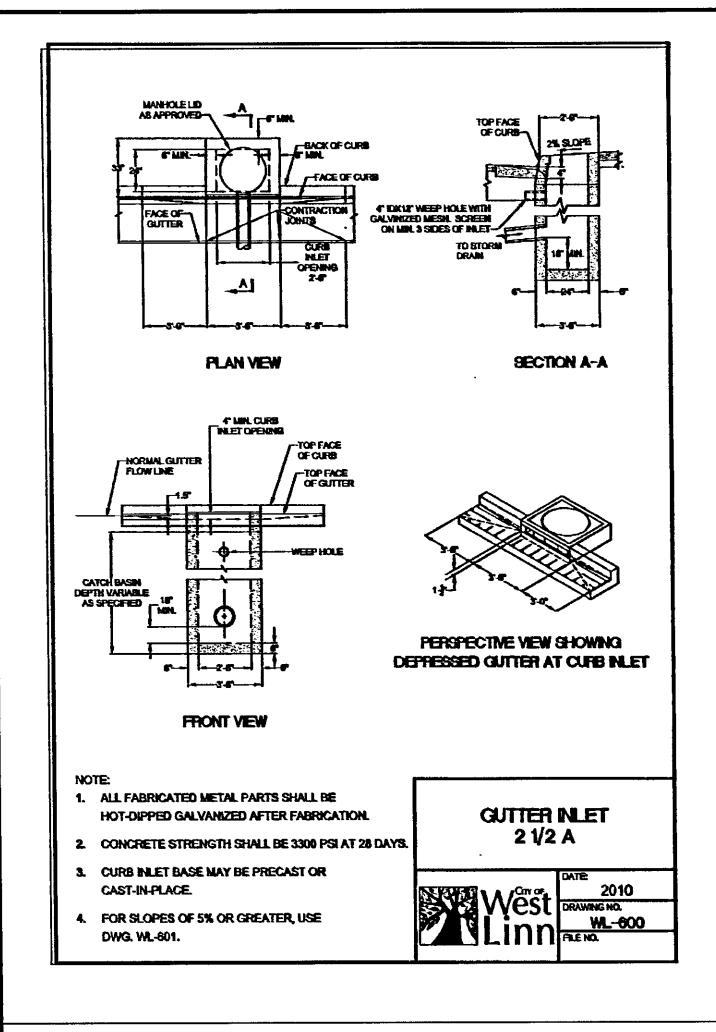
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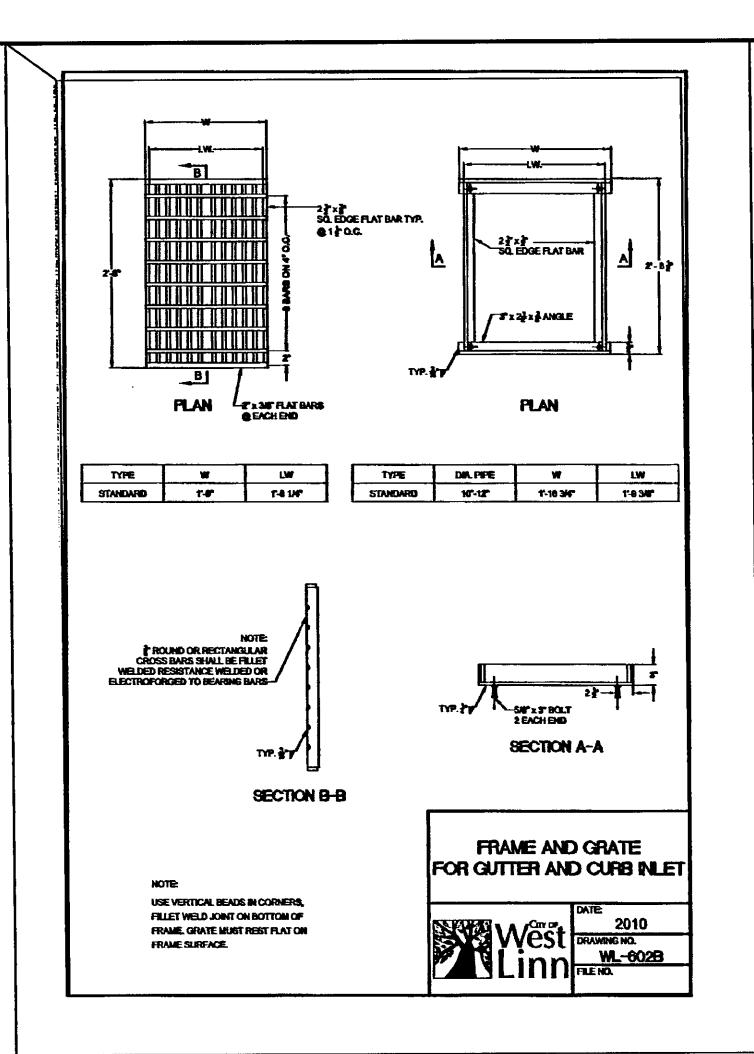


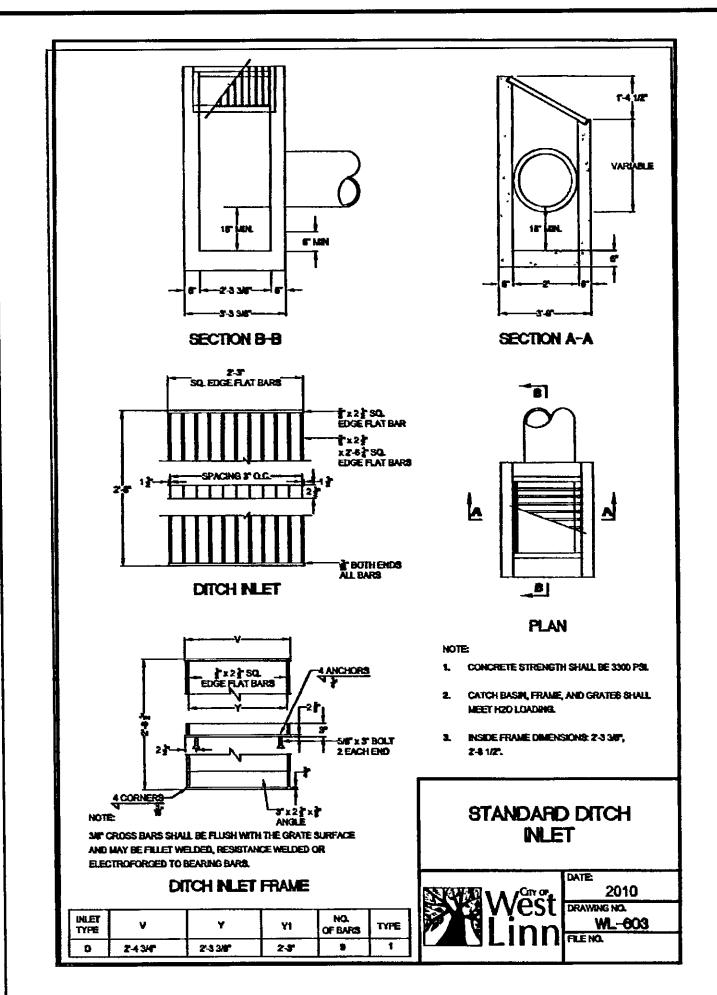
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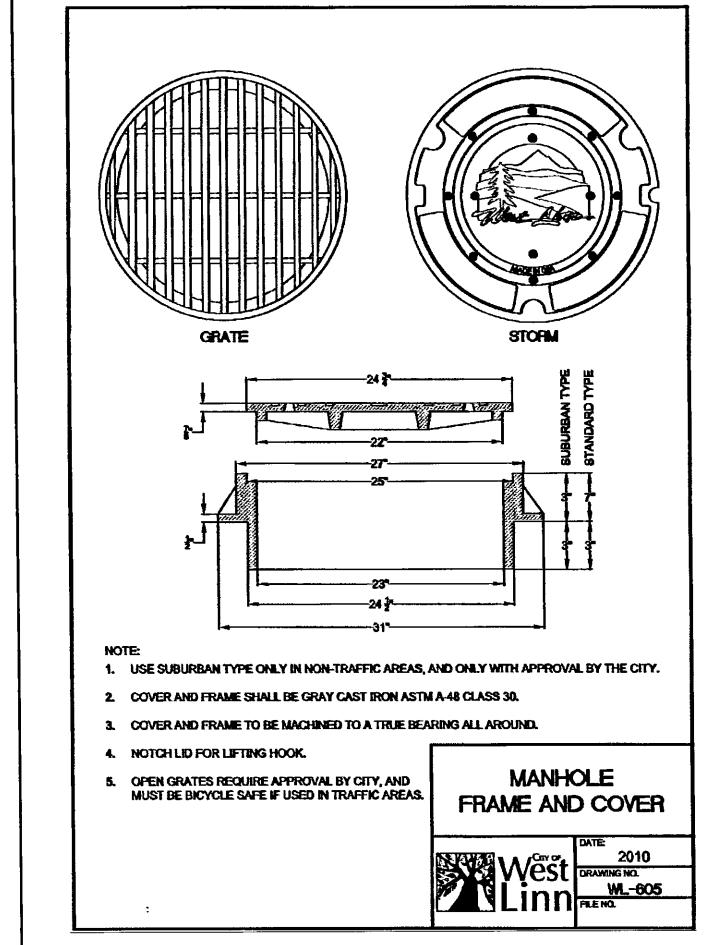
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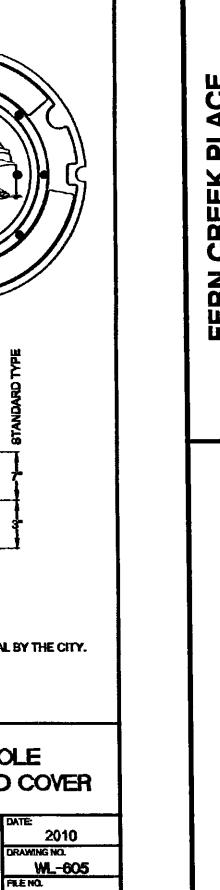
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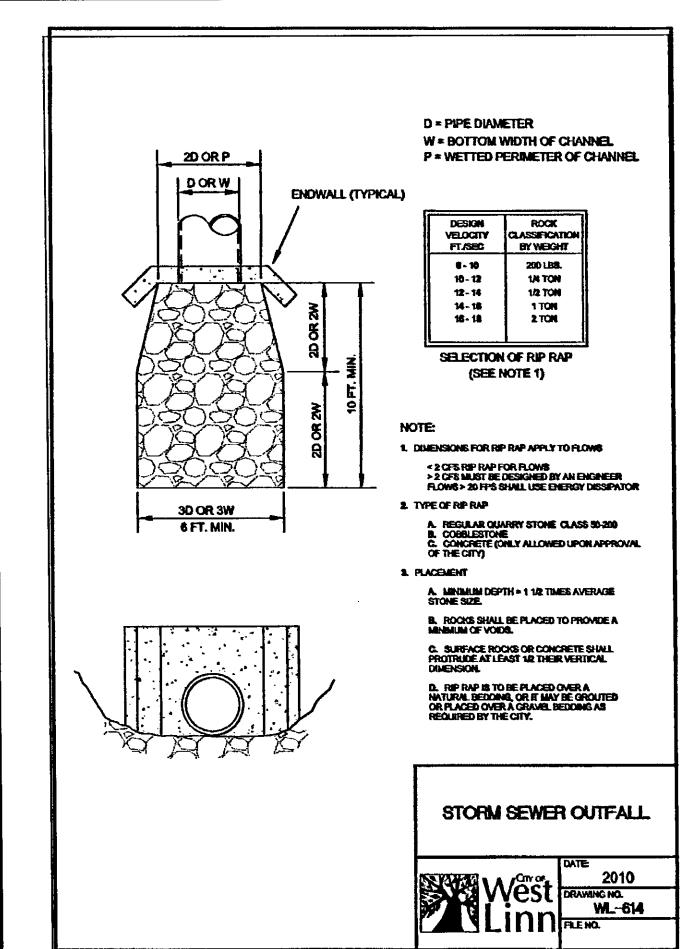


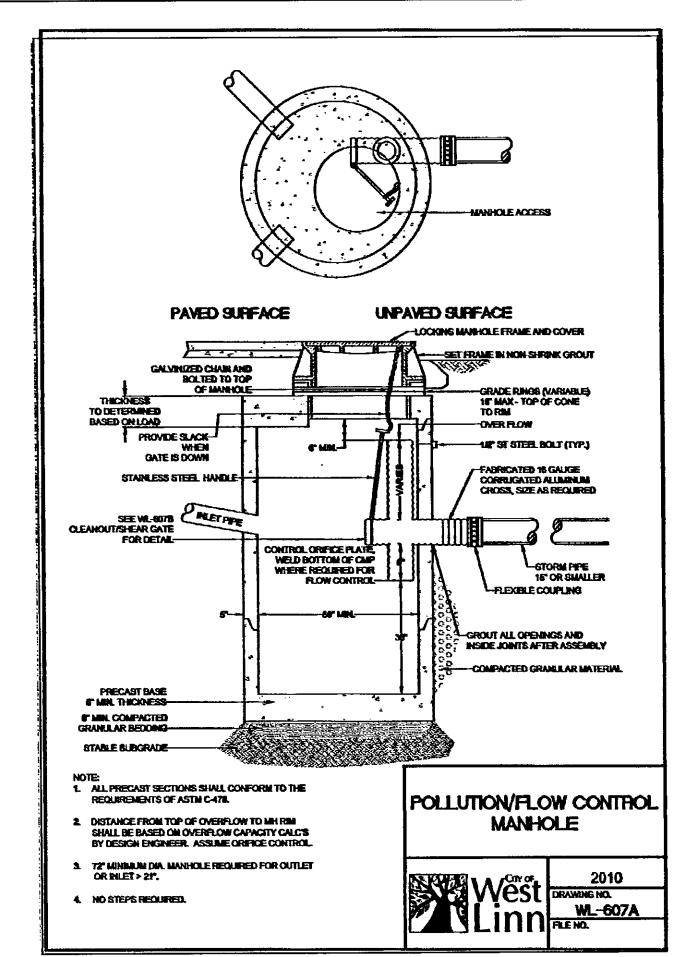


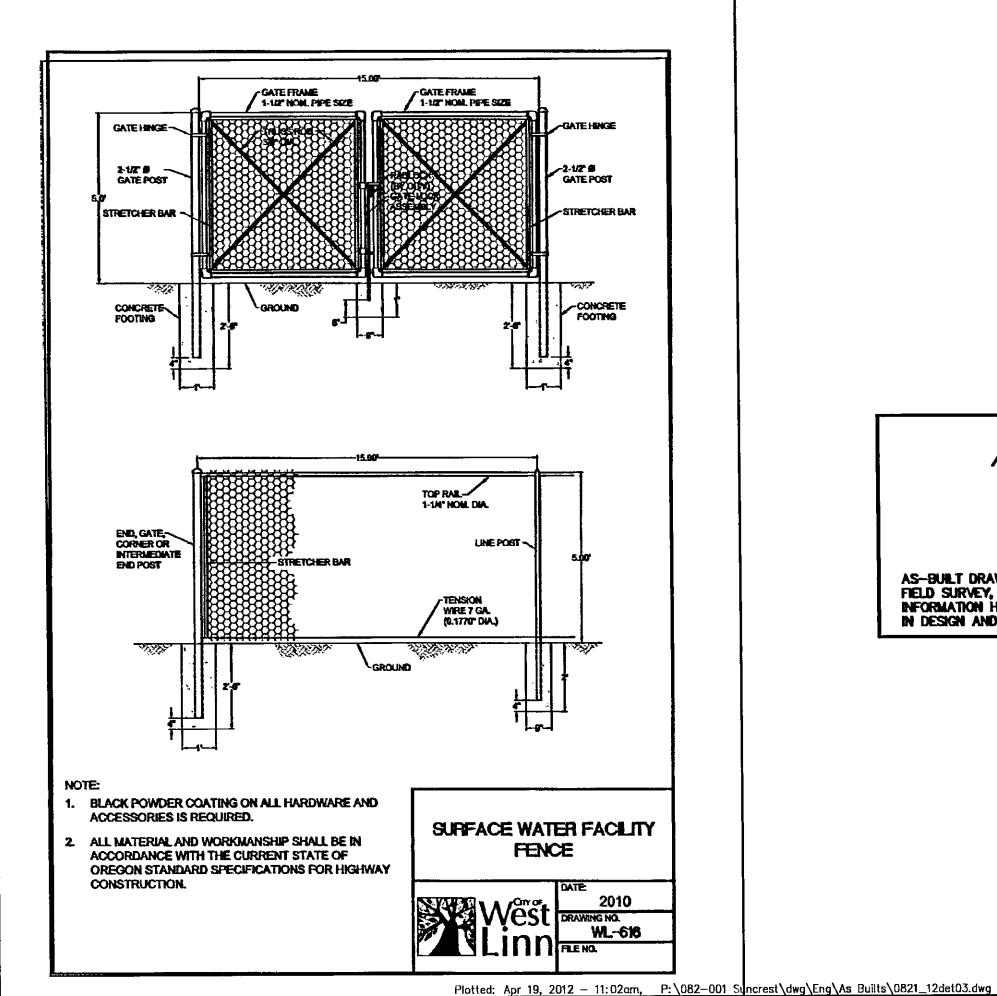


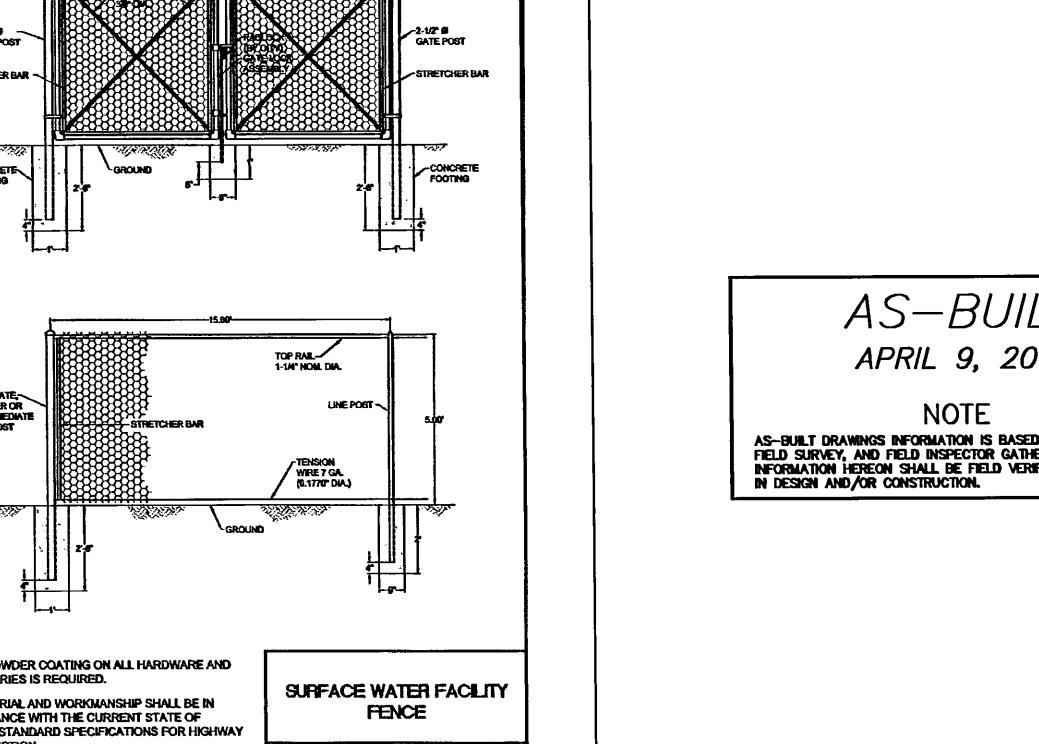






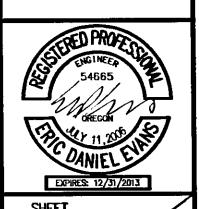






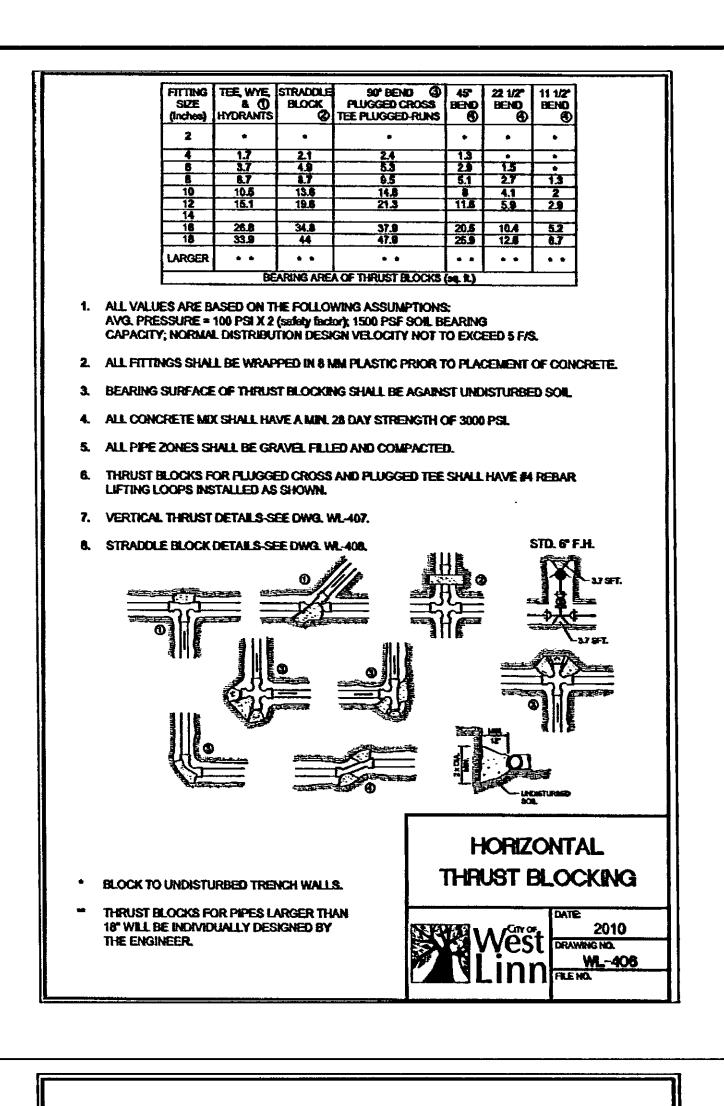
AS-BUILT APRIL 9, 2012

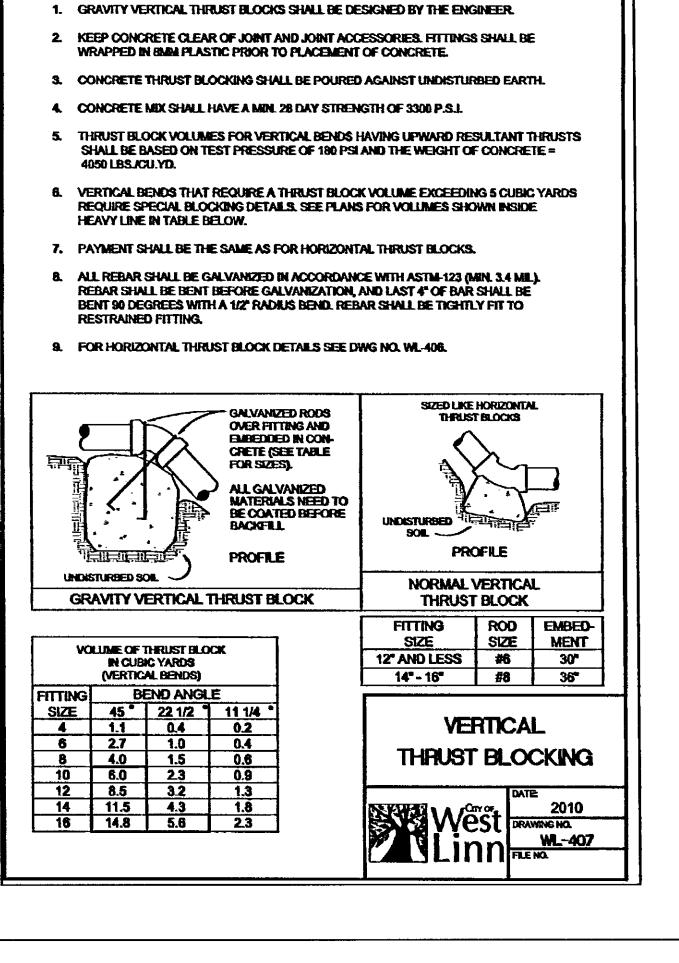
AS-BUILT DRAWINGS INFORMATION IS BASED ON CONTRACTOR, FIELD SURVEY, AND FIELD INSPECTOR GATHERED DATA. ALL INFORMATION HEREON SHALL BE FIELD VERIFIED PRIOR TO USE IN DESIGN AND/OR CONSTRUCTION.

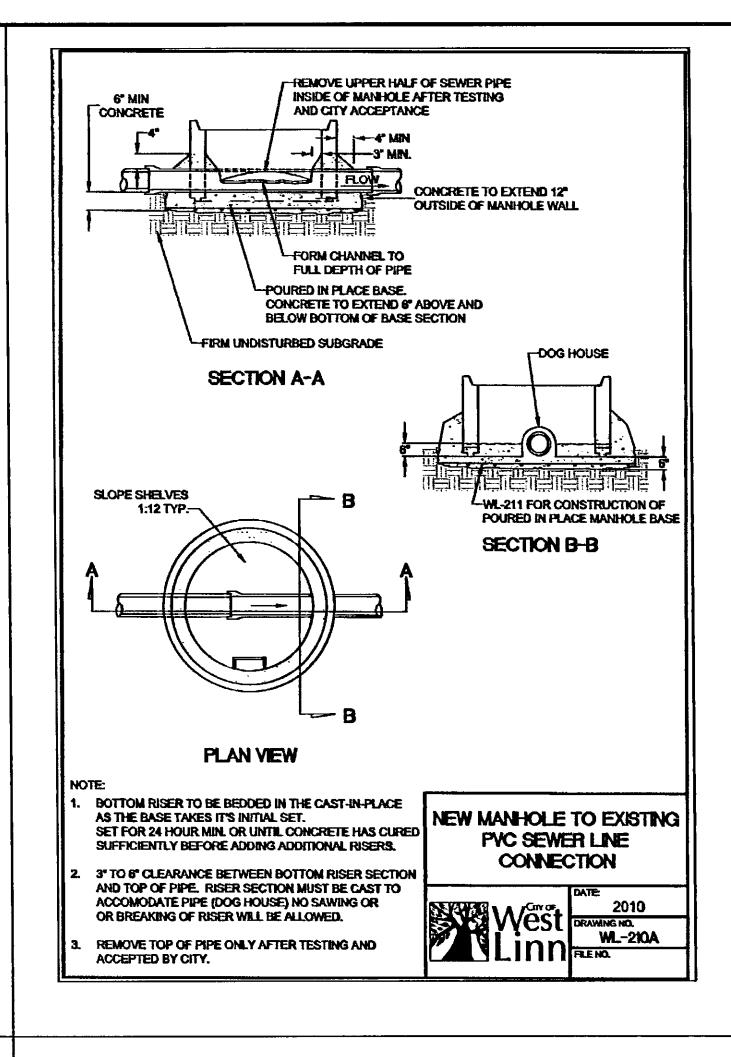


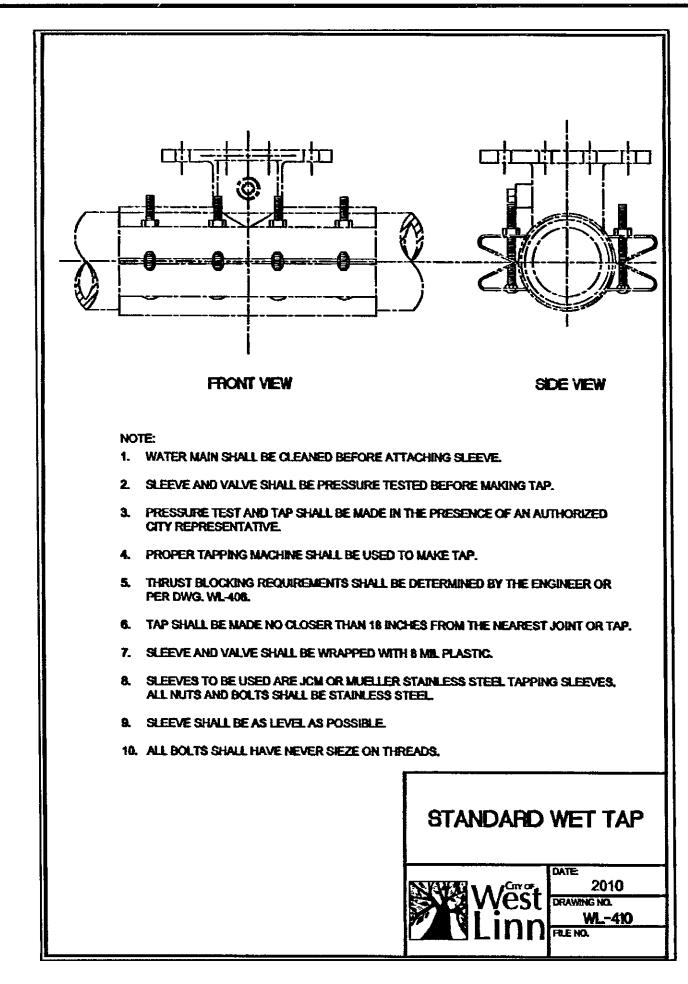
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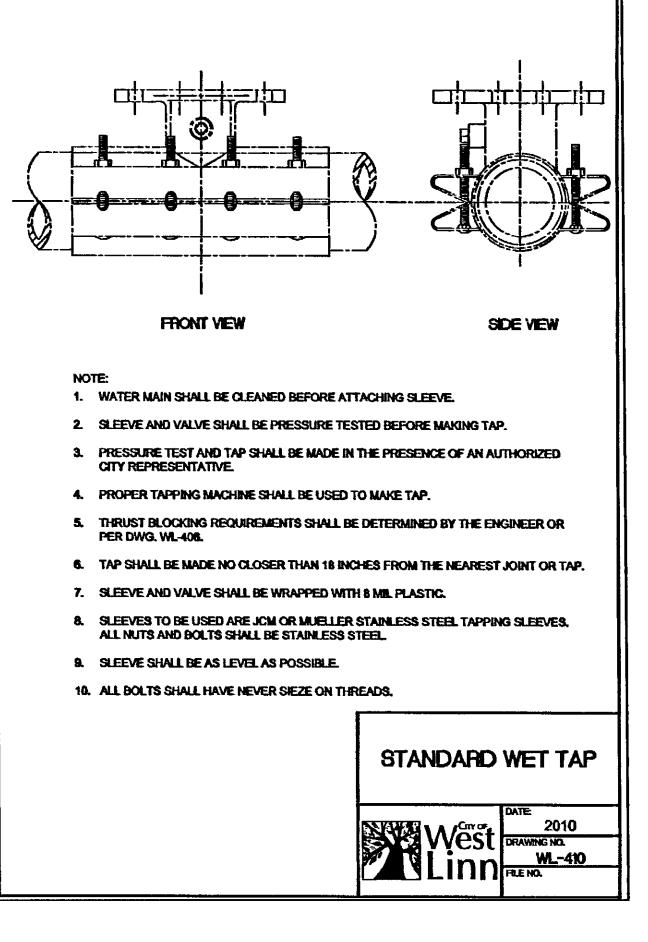
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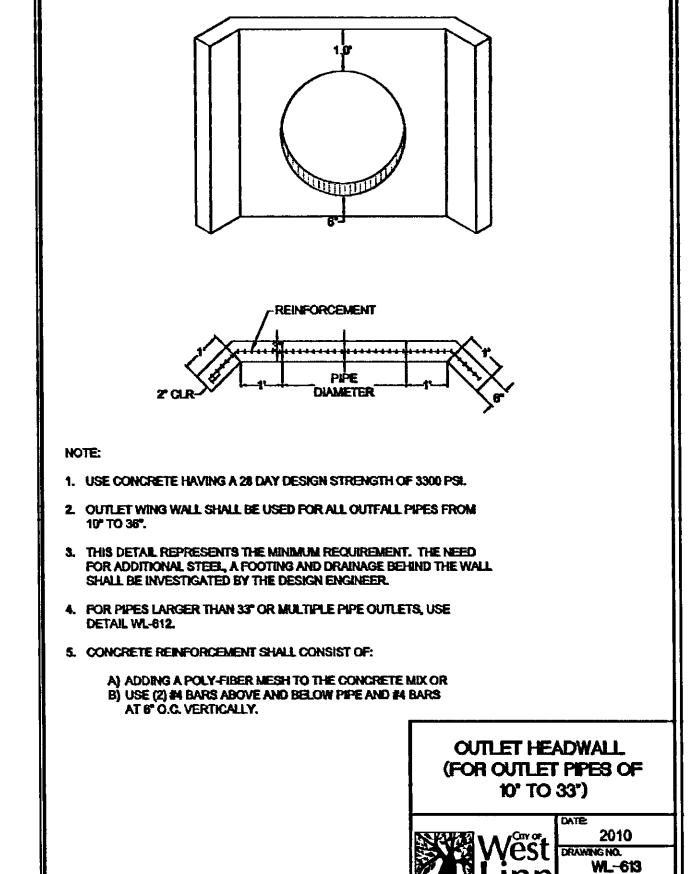


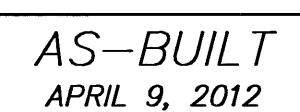






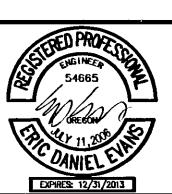






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Plotted: Apr 19, 2012 — 11:03am, P:\082—001 Suncrest\dwg\Eng\As Builts\0821_13det03.dwg

