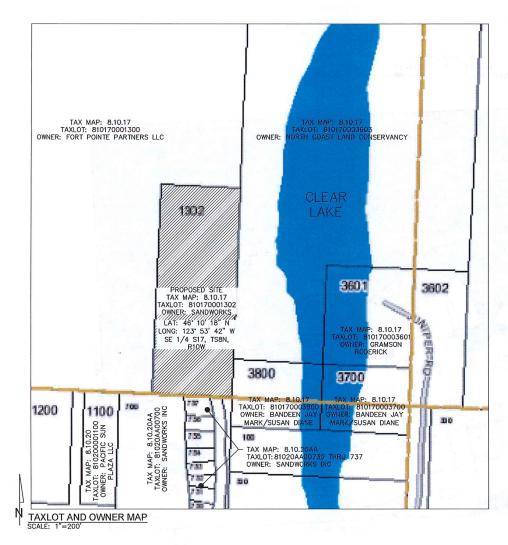
CLEAR LAKE SUBDIVISION LAND USE SUBMITTAL

LOCATED AT THE NORTHERLY TERMINUS OF KALMIA AVENUE



OWNER:

GILL GRAMSON SANDWORKS 15 N 17TH PLACE WARRENTON, OREGON 97146

ENGINEER:

FIRWOOD DESIGN GROUP, LLC 359 E. HISTORIC COLUMBIA RIVER DRIVE TROUTDALE, OREGON 97060 (503) 668-3737

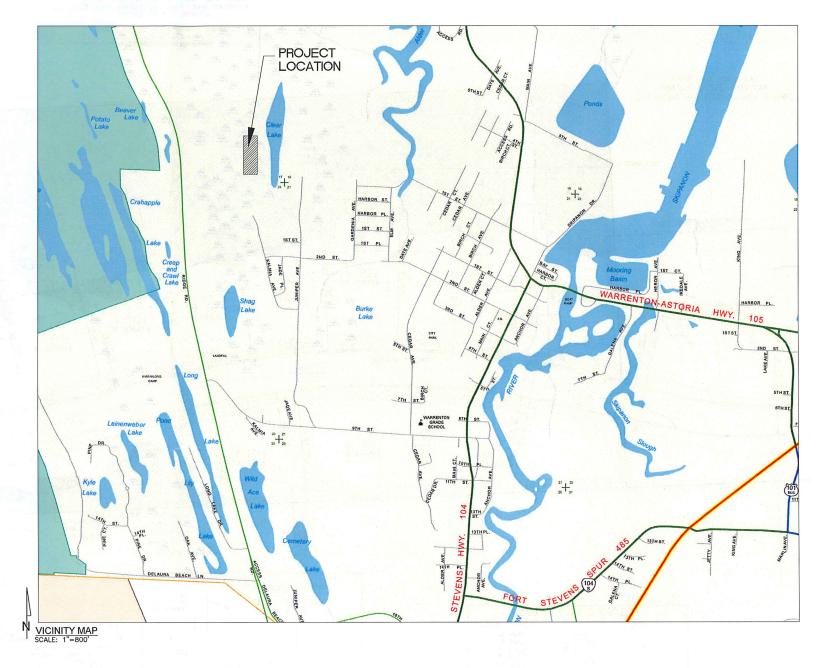
SHEET INDEX

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- 8 WATER AND SANITARY SEWER PLAN 9 SANITARY SEWER SERVICE PROFILES

DATUM

HORIZONTAL DATUM:
NAD_1983_HARN_STATEPLANE_OREGON_NORTH_FIPS_3601_FEET_INTL

VERTICAL DATUM:



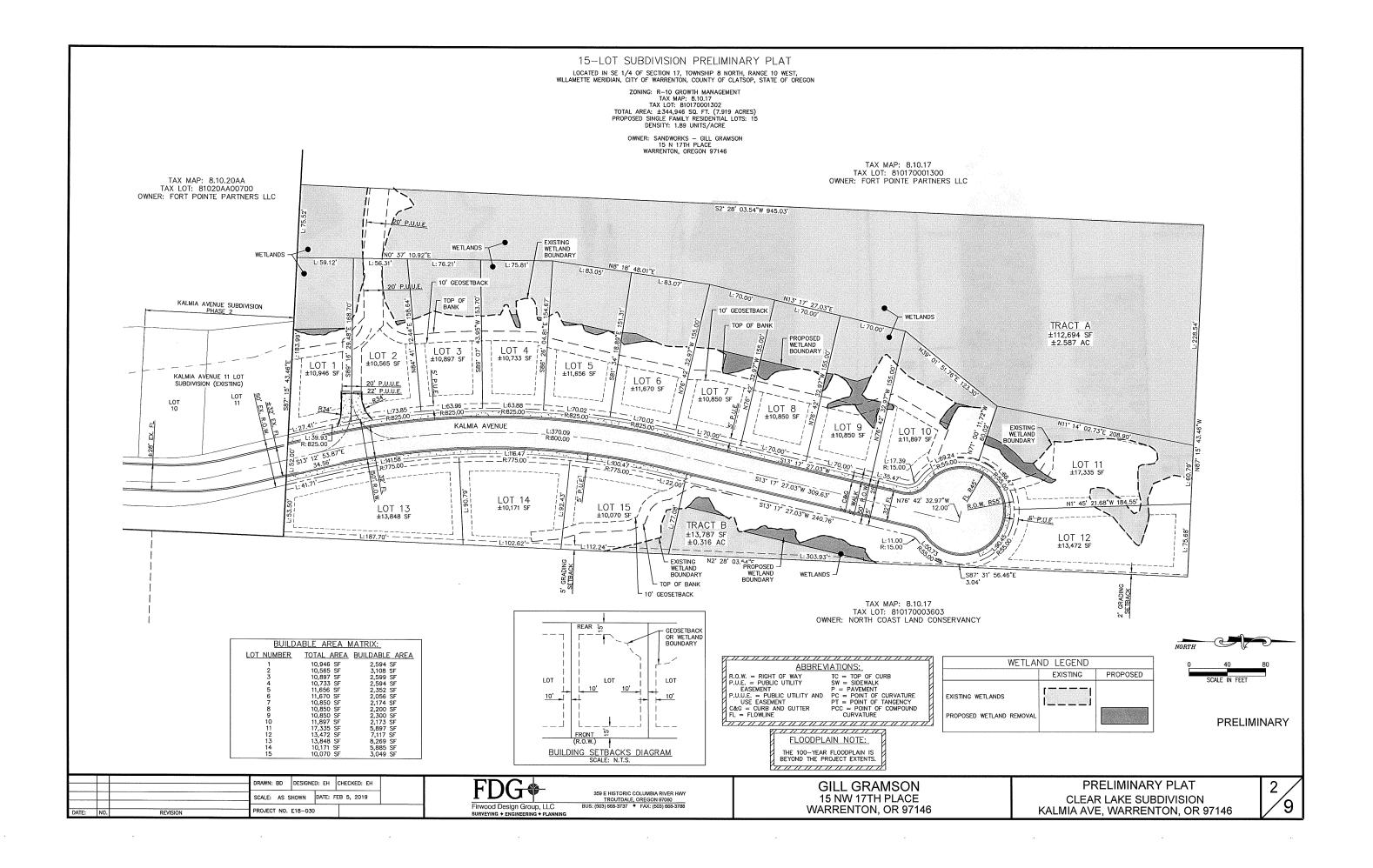
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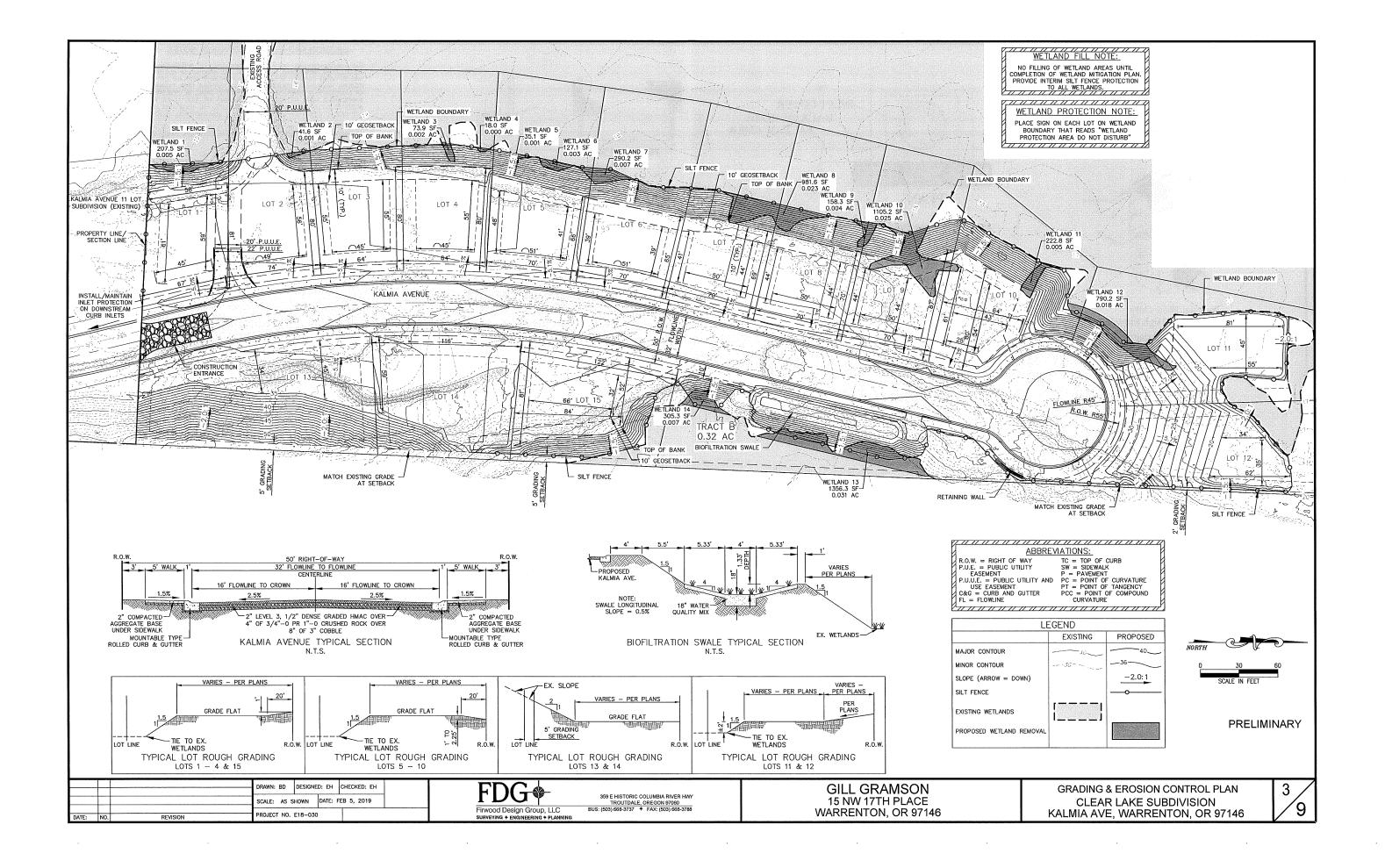
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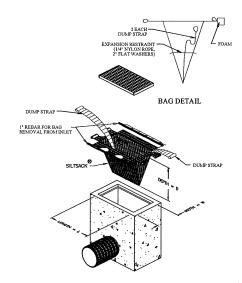


GILL GRAMSON 15 NW 17TH PLACE WARRENTON, OR 97146

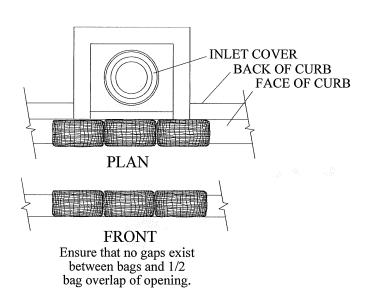
COVER SHEET & VICINITY MAP CLEAR LAKE SUBDIVISION KALMIA AVE, WARRENTON, OR 97146



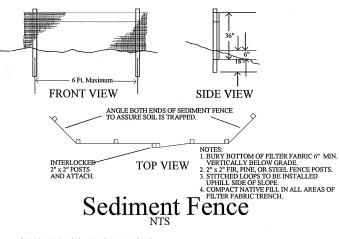




Regular Flow Only Do not use High Flow Insert Bags. Catch Basin Insert Bag INLET PROTECTION DETAIL



"CURB INLET" INLET PROTECTION



SEDIMENT CONTROL FENCES:

1. AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE BEHIND A SEDIMENT FENCE MORE THAN ONE—THIRD OF THE FENCE HEIGHT ABOVE GROUND. SEDIMENT SHOULD BE REMOVED OR REGRADED ONTO SLOPES, AND THE SEDIMENT FENCES REPAIRED AND

2. FENCE SHALL BE REMOVED ONLY WHEN UPSLOPE AREAS ARE PERMANENTLY STABILIZED.

RECOMMENDED EROSION CONTROL GRASS SEED MIXES ARE AS SPECIFIED AS BELOW. SIMILAR MIXES DESIGNED TO ACHIEVE EROSION CONTROL MAY BE SUBSTITUTED WITH APPROVAL. IN GENERAL, USE OF QUICK GROWING, STERILE GRASSES MIXTURE WITH PERMANENT VEGETATIVE COVER IS RECOMMENDED TO ACHIEVE QUICK COVER OF EXPOSED SOILS.

DWARF GRASS MIX (LOW HEIGHT, LOW MAINTENANCE), 100
 POUNDS PER ACRE SEED RATE

- 2. IT IS RECOMMENDED THAT TOP SOIL ON SLOPES BE PREPARED BY ROUGHENING THE SLOPES BEFORE SEEDING.
- AREAS THAT FAIL TO ESTABLISH GRASS COVER ADEQUATE TO 3. ARCAS INTELLED E ESTABLISH ORASS COVER ADEQUATE AS ARE IDENTIFIED, AND ALL APPROPRIATE MEASURES TAKEN TO ESTABLISH COVER.
- MULCH SHALL BE SPREAD UNIFORMLY IMMEDIATELY FOLLOWING

RESEEDING/ESTABLISHMENT OF VEGETATIVE COVER:

- 1. DWARF PERENNIAL RYEGRASS, 80% BY SEED COUNT.
 2. CREEPING RED FESCUE, 20% BY SEED COUNT.
- 4. EROSION CONTROL MEASURES SHALL BE MAINTAINED BY CONTRACTOR UNTIL GRASS COVER IS ESTABLISHED AND UP TO ONE YEAR AFTER COMPLETION OF CONSTRUCTION, WHICHEVER IS SOONER.

EROSION AND SEDIMENT CONTROL NOTES

- 1. THE OWNER/PERMITTEE, OR EPSC MANAGER, SHALL BE RESPONSIBLE FOR PROPER INSTALLATION, MONITORING, MAINTENANCE, AND REMOVAL OF ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH THE CITY, STATE, AND FEDERAL REQULATIONS, RESPONSIBILITY WILL CONTINUE UNTIL PERMANENT VEGETATION OR LANDSCAPE IS COMPLETE. OWNER/PERMITTEE SHALL BE RESPONSIBLE FOR MAINTENANCE UNTIL THE FOLLOWING CONDITIONS ARE MET: 1) THE PROJECT HAS BEEN ACCEPTED BY THE CITY; 2) ALL INDIVIDUAL LOTS ARE SOLD; AND 3) TERMINATION OF THE 1200-C PERMIT BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ).
- 2. APPROVAL OF THE PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OR ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES).
- 3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON A PLAN SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE MARKINGS SHALL BE MAINTAINED BY THE OWNER/PERMITTEE OR DESIGNEE FOR THE DURATION OF
- 4. THE EPSC BMPS SHOWN ON THE PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, IN ACCORDANCE WITH THE CONDITIONS OF APPROVAL, PUBLIC WORKS STANDARDS, DEVELOPMENT CODE, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT LADEN WATER, AND OTHER POLLUTAINS DO NOT ENTER THE DRAINAGE SYSTEM OR ROADWAYS, OR VIOLATE APPLICABLE WATER QUALITY STANDARDS.
- 5. THE EPSC BMPS SHOWN ON THE PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED
- SITE
 6. CONDITIONS. DURING THE CONSTRUCTION PERIOD, THE BMPS SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
- 7. THE EPSC BMPS SHALL BE INSPECTED DAILY DURING STORMWATER AND SNOWMELT RINGEF AND AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT THAT PRODUCES AT LEAST & OF AN INCH OF RAIN PER 24—HOUR PERIOD. ON INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, INSPECTIONS ARE REQUIRED EVERY TWO (2) WEEKS.
- 8. AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE MORE THAN ONE—THIRD THE HEIGHT OF ANY SEDIMENT CONTROL BARRIER. TRAPPED SEDIMENTS SHALL BE REMOVED FROM CATCH BASINS WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PROJECT FINAL INSPECTION. THE CLEANING OPERATION SHALL NOT FLUSH OR INTENTIONALLY WASH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM STORMWATER SYSTEM, STREAMS OR
- SEDIMENT THAT LEAVES THE SITE SHALL BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE OR PROPERLY DISPOSED. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO REQUIREMENTS OF THE U.S. ARMY CORPS OF ENGINEERS AND THE OREGON DEPARTMENT OF STATE LANDS.
- 10. STORM DRAIN INLETS, CATCH BASINS, AND AREA DRAINS SHALL BE PROTECTED UNTIL PAVEMENT SURFACES ARE COMPLETED AND PERMANENT VEGETATION HAS BEEN ESTABLISHED.
- 11. STABILIZED GRAVEL 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.
- 12. CONCRETE WASHOUT LOCATION SHALL BE PROVIDED FOR WASHING OF CONCRETE TRUCKS AND EQUIPMENT SO THAT CONCRETE SLURRY IS NOT WASHED INTO THE STORMWATER SYSTEM, STREAMS, OR DRAINAGE WAYS. IDENTIFY THE LOCATION ON THE PLAN AND INCLUDE THE NOTE: "DO NOT OVERFILL AND BURY WHEN FINISHED."
- 13. GROUNDCOVER AND/OR SEEDING SHALL BE COMPLETED AS SOON AS PRACTICABLE FOR EACH PHASE OF CONSTRUCTION AND NOT LATER THAN SEPTEMBER 1. IF FERTILIZERS ARE USED TO ESTABLISH VEGETATION, THE APPLICATION RATES SHALL FOLLOW MANUFACTURERS GUIDELINES AND THE APPLICATION SHALL BE PERFORMED IN SUCH A WAY TO MINIMIZE NUTRIENT-LADER RUNOFF TO RECEIVING WATERS. THE PLAN SHALL STATE THE CONDITIONS FOR DETERMINING SUCCESSFUL VEGETATION ESTABLISHMENT.
- 14. NON-STORMWATER POLLUTANT CONTROL MEASURES INCLUDING ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS SHALL INCLUDE PROPER STORAGE, SPILL CONTAINMENT APPLICATION, AND DISPOSAL.
- 15. WET WEATHER MEASURES SHALL BE ESTABLISHED BY OCTOBER 1ST AND CONTINUE TO FUNCTION THROUGH MAY 31ST OF THE FOLLOWING YEAR, PRIOR TO DISCONTINUING ACTIVITIES ON ANY PORTION OF THE SITE BETWEEN OCTOBER 1 AND MAY 31, ANY EXPOSED AREA SHALL BE STABLIZED WITHIN 7 DAYS TO PREVENT EROSION, BETWEEN JUNE 1 AND SEPTEMBER 30, THE SITE MUST BE STABILIZED WITHIN 30 DAYS. STABILIZATION MAY OCCUR BY APPLYING APPROPRIATE COVER (F.G., MUI.CH, FROSION CONTROL BLANKETS, BINDERS, TACKIFIERS) OR ESTABLISHING ADEQUATE VEGETATIVE
- 16. PRIOR TO FINAL PROJECT ACCEPTANCE BY THE CITY, THE SITE SHALL BE PERMANENTLY STABILIZED (SEED AND MULCH OR TACKIFIER, OR PERMANENT LANDSCAPING). SEE APPENDIX F: CITY OF WARRENTON NATIVE PLANT RESTORATION GUIDE AS A RESOURCE. FOR SUBDIVISIONS, TEMPORARY GROUNDCOVER WILL BE ACCEPTED IF HOME CONSTRUCTION WILL BEGIN WITHIN 30 DAYS OF PROJECT FINALIZATION.
- 17. THE OWNER/PERMITTEE IS RESPONSIBLE FOR REMOVING ALL SEDIMENT CONTROL MEASURES ONCE PERMANENT STABILIZATION HAS BEEN ESTABLISHED. DEQ WILL NOT TERMINATE THE 1200-C PERMIT UNTIL PERMANENT VEGETATION IS ESTABLISHED.

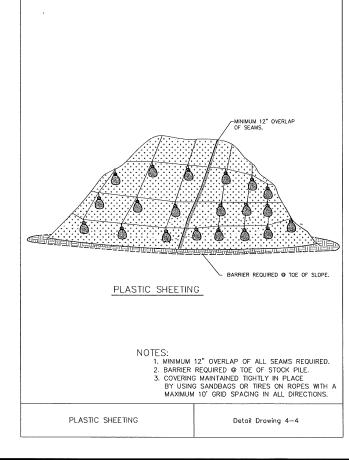
PRELIMINARY

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Length = 50 Feet Min.
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ocotextile required Deptil d literies will.
Radius=25' Min. 6" - 4" Quarry Spalls Subgrade Reinforcement Geotextile Required Depth 8 Inches Min. RONDH FORESS WORK REELAN

*20' MIN. FOR SINGLE FAMILY AND DUPLEX RESIDENTIAL

GRAVEL CONSTRUCTION ENTRANCES:

- 1. STABILIZED CONSTRUCTION ENTRANCE(S) 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.
- 2. ALL VEHICLES LEAVING THE SITE SHALL LEAVE BY DRIVING ACROSS THE GRAVEL CONSTRUCTION ENTRANCE(S) IF GRAVEL ENTRANCE BECOME FILLED WITH MUD AND IS NO LONGER FUNCTIONAL, ADDITIONAL GRAVEL SHALL BE PLACED. VEHICLE TIRES SHALL BE FREE FROM DIRT BEFORE LEAVING THE SITE.
- 3. AT TIME OF ROAD CONSTRUCTION THE GRAVEL CONSTRUCTION ENTRANCE SHALL BE REBUILD TO ALLOW FOR THE APPROPRIATE ROAD BASE AND ASPHALT THICKNESS.



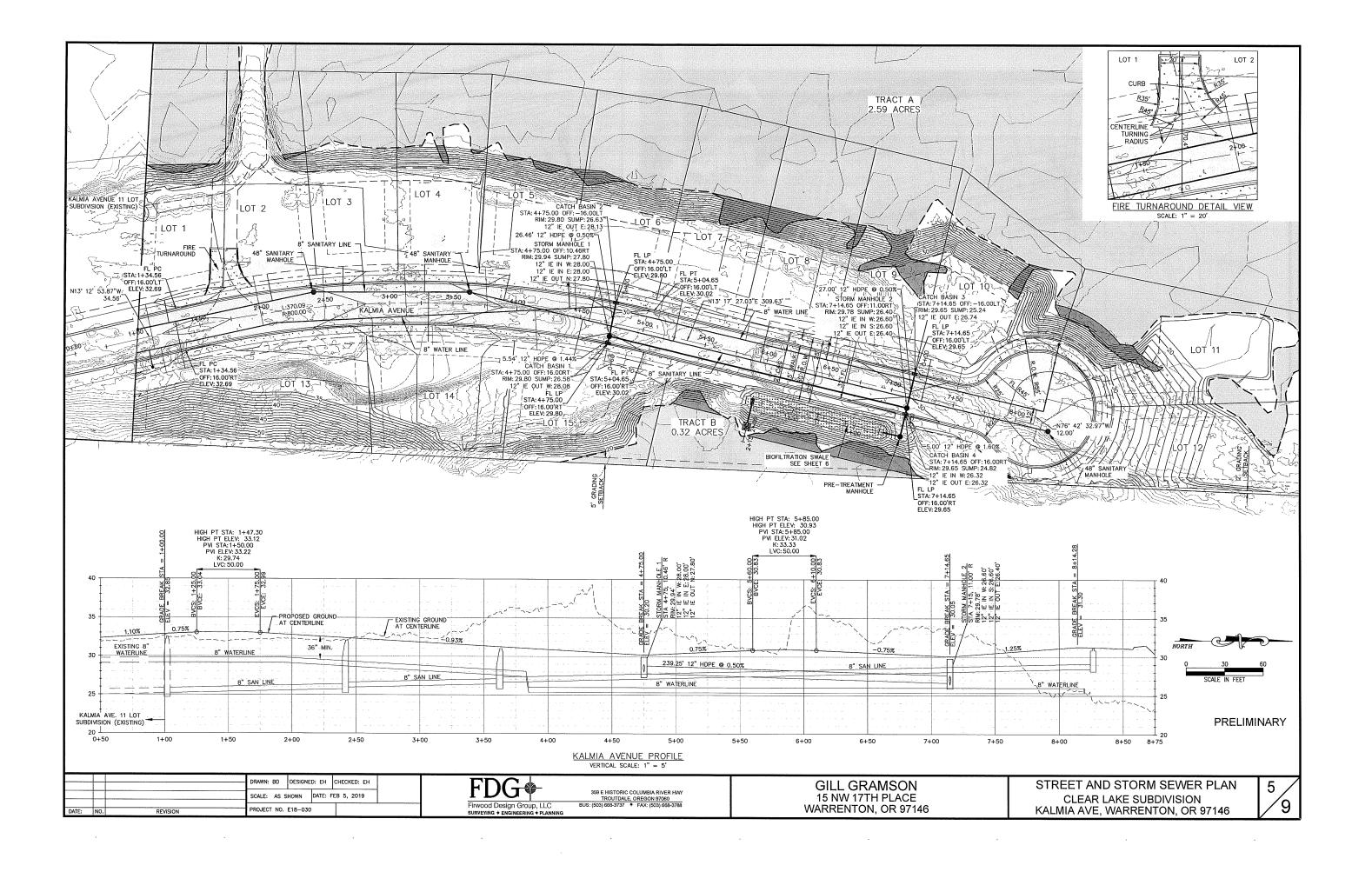
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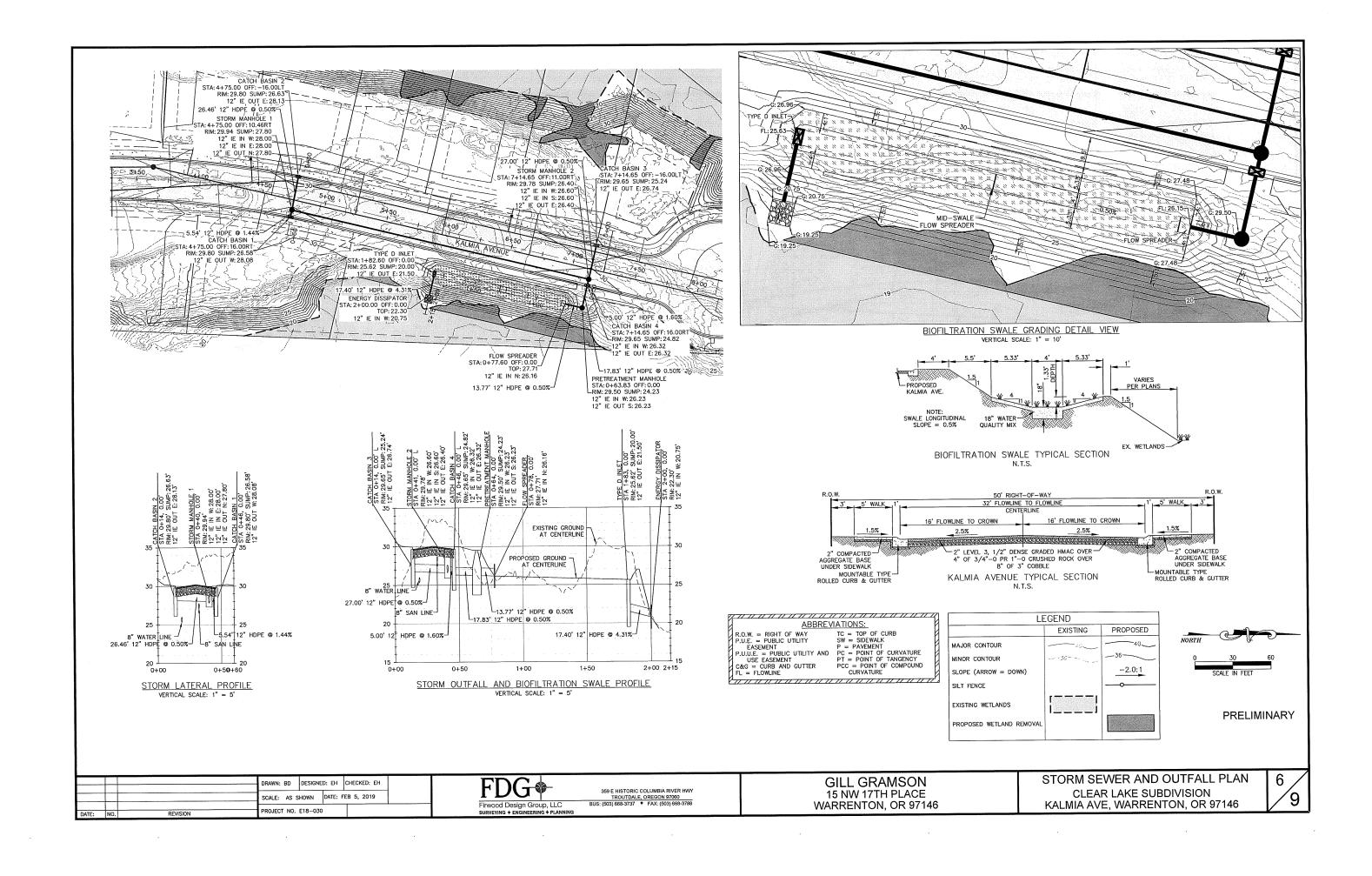
Firwood Design Group, LLC

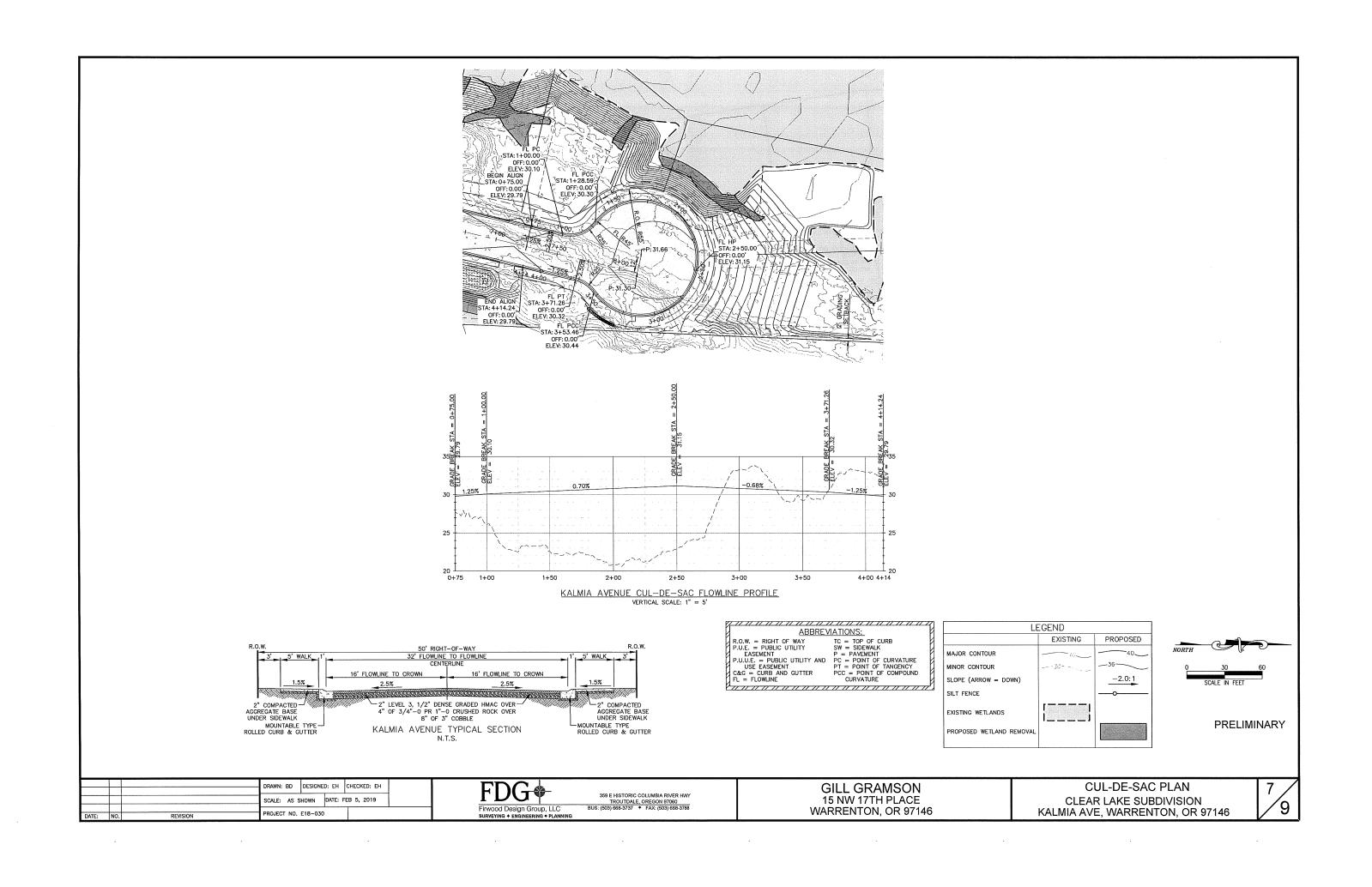
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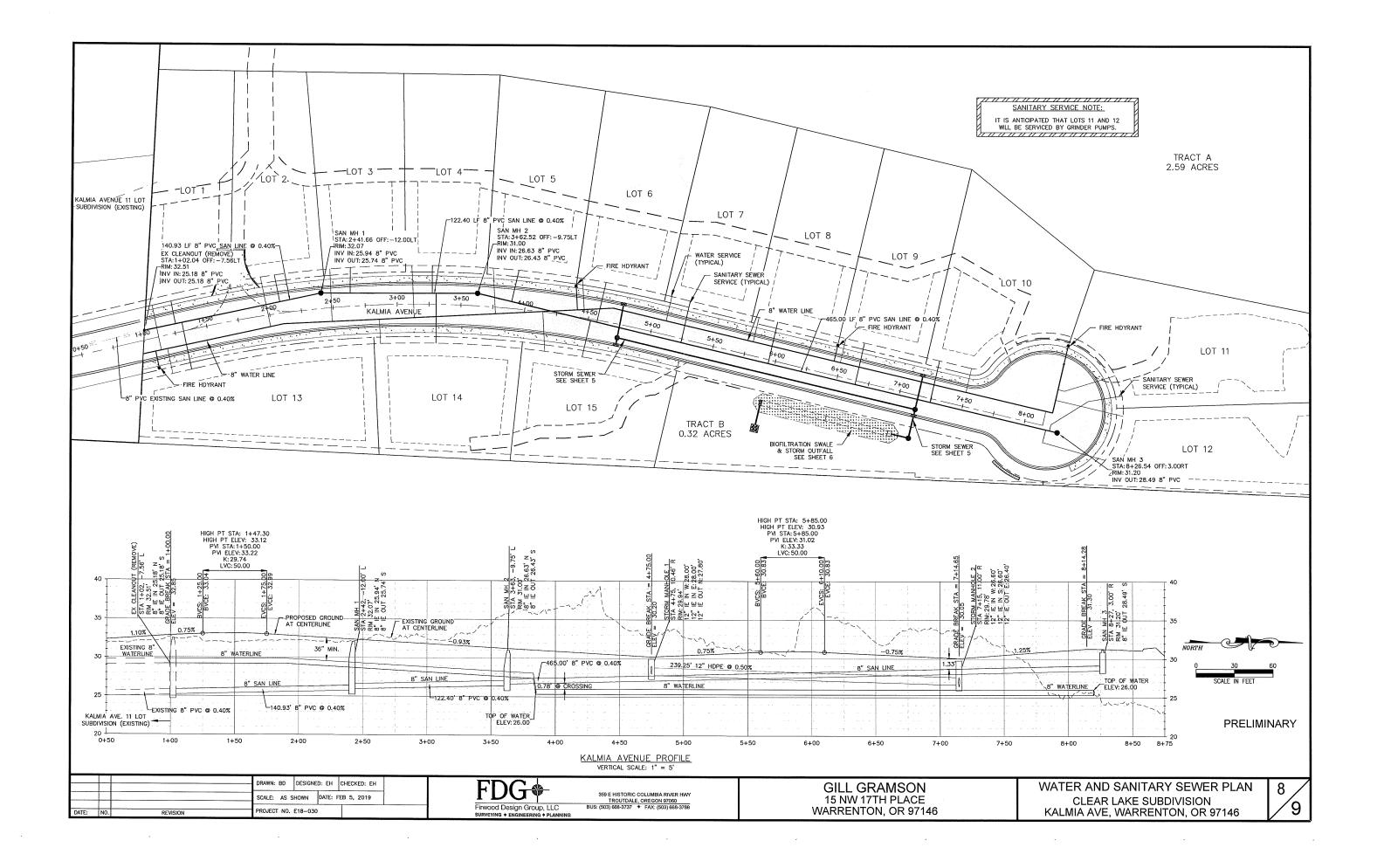
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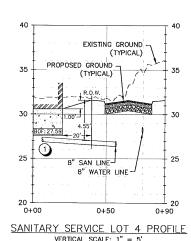
EROSION CONTROL NOTES & DETAILS CLEAR LAKE SUBDIVISION KALMIA AVE, WARRENTON, OR 97146

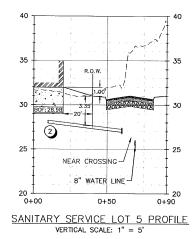


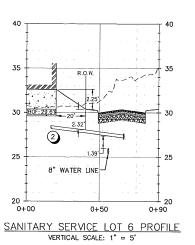


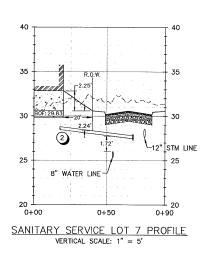


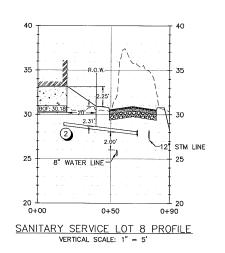


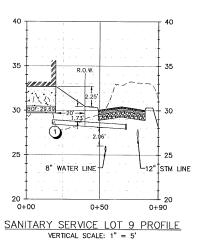


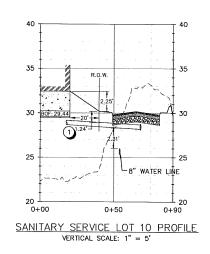












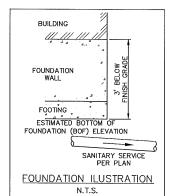


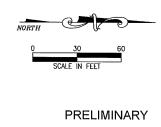
SANITARY SERVICE NOTE:

IT IS ANTICIPATED THAT LOTS 11 AND 12

WILL BE SERVICED BY CRINDER PUMPS.

2 4" C900 PVC SANITARY SEWER SERVICE SLOPED AT 2%





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			SCALE:	AS S	HOWN	DATE: FEB 5, 2019		7
DATE:	NO.	REVISION	PROJECT NO. E18-030					

Firwood Design Group, LLC

GILL GRAMSON 15 NW 17TH PLACE WARRENTON, OR 97146

SANITARY SEWER SERVICE PROFILES

CLEAR LAKE SUBDIVISION

KALMIA AVE, WARRENTON, OR 97146

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