

**Residential Site Plan Template**

Ref: KCC 21a.12.030

Max. Impervious Surface Allowed \_\_\_\_\_

Max. Bldg. Height Allowed \_\_\_\_\_

Ref: KCC 21a.12.170

Min. Blg. Setback From Street \_\_\_\_\_

Min. Garage Setback From Street \_\_\_\_\_

Min. Blg. Setback From Interior \_\_\_\_\_

Permit Center validation:

- Zoning
- Site Review Not Applicable

Validated Signature \_\_\_\_\_

Login Initials \_\_\_\_\_ Date: \_\_\_\_\_

**Engineering / Drainage Approval**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Critical Areas Approval**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Clearing / Grading Approval**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

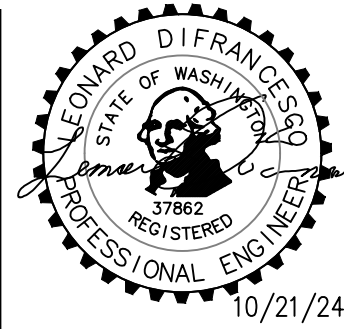
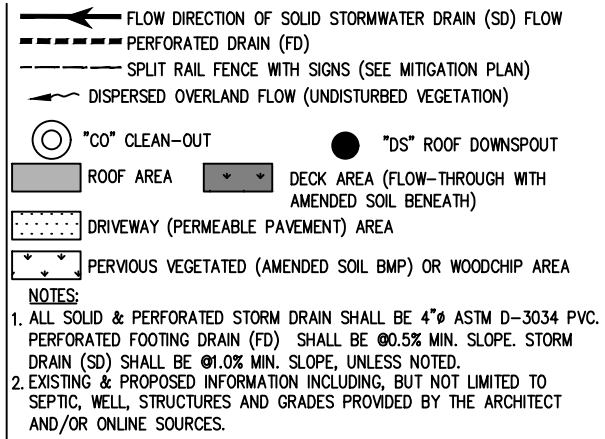
**Fire Approval**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**DRAINAGE KEY NOTES:**

- ① 4"CO TOP=174.5±, IE=173.0
- ② 4"CO TOP=174.5±, IE=173.0
- ③ TYPE 1 CB, GRATE LID W/ SUMP RIM=173.0±, 4"SD IE IN(N), OUT(W)=170.50, OVERFLOW(S)=171.5
- ④ INFILTRATION TRENCH (SEE SHT 3 DETAIL), 90' TOTAL LF (80' REQ'D), INSTALL TRENCH LEVEL FOLLOWING THE APPROX. CONTOURS, AVOID IMPACTING LARGE TREES, IF FEASIBLE. INSTALL FLAT PIPES (NO SLOPE) FOR BOTH TRENCHES 4" PERFORATED & CONNECTING PIPE BETWEEN TRENCHES IE'S=170.50'
- ⑤ 3'x3'x2' DEEP ROCK PAD FOR FOOTING DRAIN AND INFILTRATION TRENCH OVERFLOW
- ⑥ CONNECT FOOTING DRAINS DIRECTLY HERE, TO DISCHARGE TO THE ROCK PAD

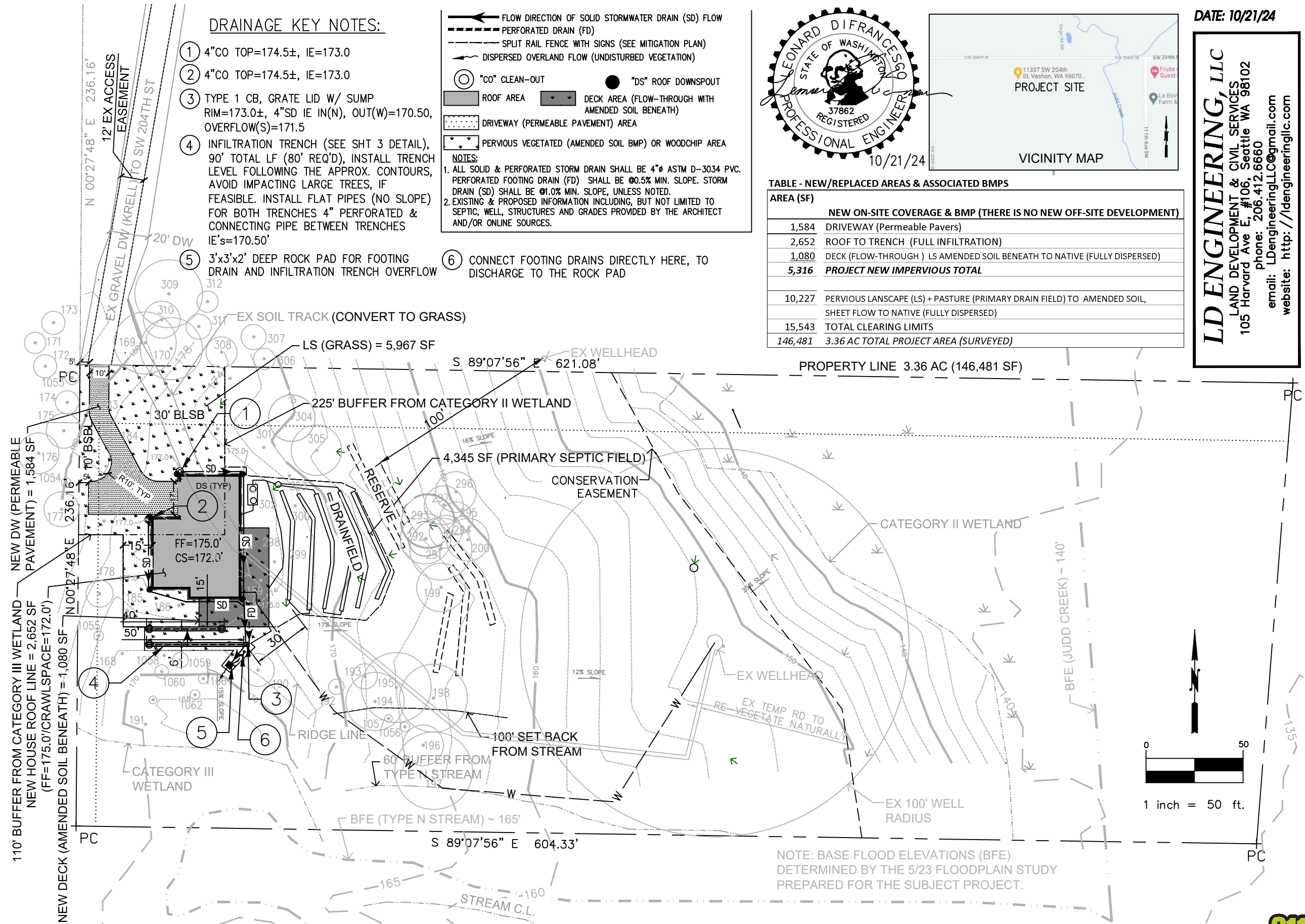


DATE: 10/21/24

**LD ENGINEERING, LLC**  
 LAND DEVELOPMENT & CIVIL SERVICES  
 105 Harvard Ave E, #106, Seattle WA 98102  
 phone: 206.412.6660  
 email: LDengineeringLLC@gmail.com  
 website: http://ldengineeringllc.com

**TABLE - NEW/REPLACED AREAS & ASSOCIATED BMPS**

AREA (SF)	NEW ON-SITE COVERAGE & BMP (THERE IS NO NEW OFF-SITE DEVELOPMENT)
1,584	DRIVEWAY (Permeable Pavers)
2,652	ROOF TO TRENCH (FULL INFILTRATION)
1,080	DECK (FLOW-THROUGH ) LS AMENDED SOIL BENEATH TO NATIVE (FULLY DISPERSED)
<b>5,316</b>	<b>PROJECT NEW IMPERVIOUS TOTAL</b>
10,227	PERVIOUS LANDSCAPE (LS) + PASTURE (PRIMARY DRAIN FIELD) TO AMENDED SOIL, SHEET FLOW TO NATIVE (FULLY DISPERSED)
15,543	TOTAL CLEARING LIMITS
146,481	3.36 AC TOTAL PROJECT AREA (SURVEYED)





**King County**  
Department of Permitting  
and Environmental Review

**Residential TESC Template**

**RECOMMENDED CONSTRUCTION SEQUENCE**

1. Hold the pre-construction meeting, if required
2. Post sign with name and phone number of TESC supervisor (may be consolidated with the required notice of construction sign).
3. Flag or fence clearing limits.
4. Install catch basin protection, if required.
5. Grade and install construction entrance(s)
6. Install perimeter protection (silt fence, brush barrier, etc.).
7. Construct sediment pond and traps, if required.
8. Grade and stabilize construction roads.
9. Construct surface water controls (interceptor dikes, pipe slope drains, etc.) simultaneously with clearing and grading for project development.
10. Maintain erosion control measures in accordance with King County standards and manufacturer's recommendations.
11. Relocate erosion control measure, or install new measures so that as site conditions change, the erosion and sediment control is always in accordance with the King County Erosion and Sedimentation Control Standards.
12. Cover all areas that will be unworked for more than seven days during the dry season or two days during the wet season with straw, wood fiber mulch, compost, plastic sheeting, or equivalent.
13. Stabilize all areas within seven days of reaching final grade.
14. Seed, sod, stabilize, or cover any areas to remain unworked for more than 30 days.
15. Upon completion of the project, stabilize all disturbed areas and remove BMP's if appropriate.

**Engineering / Drainage Approval**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Clearing / Grading Approval**

Signature: \_\_\_\_\_

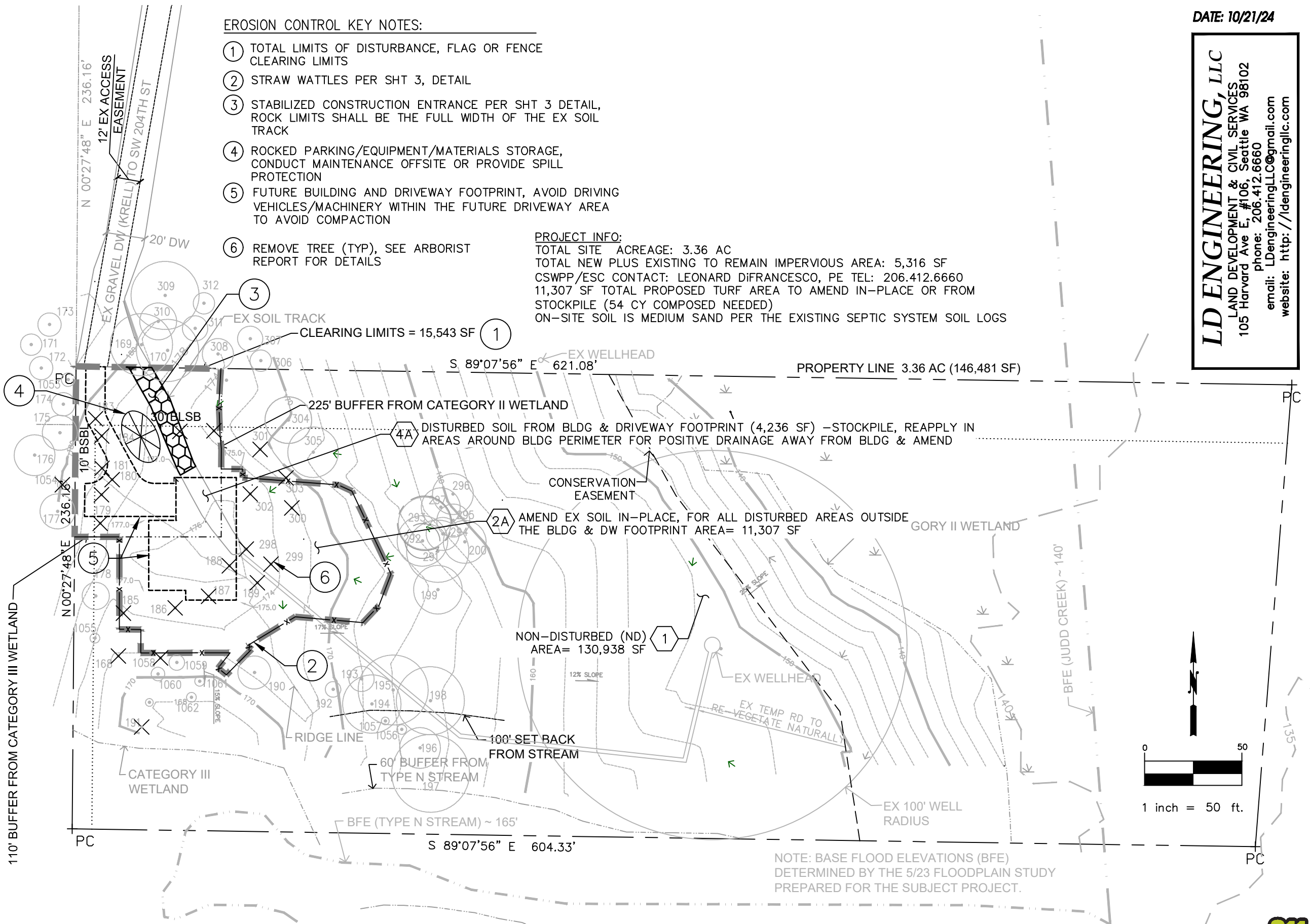
Date: \_\_\_\_\_

**EROSION CONTROL KEY NOTES:**

- ① TOTAL LIMITS OF DISTURBANCE, FLAG OR FENCE CLEARING LIMITS
- ② STRAW WATTLES PER SHT 3, DETAIL
- ③ STABILIZED CONSTRUCTION ENTRANCE PER SHT 3 DETAIL, ROCK LIMITS SHALL BE THE FULL WIDTH OF THE EX SOIL TRACK
- ④ ROCKED PARKING/EQUIPMENT/MATERIALS STORAGE, CONDUCT MAINTENANCE OFFSITE OR PROVIDE SPILL PROTECTION
- ⑤ FUTURE BUILDING AND DRIVEWAY FOOTPRINT, AVOID DRIVING VEHICLES/MACHINERY WITHIN THE FUTURE DRIVEWAY AREA TO AVOID COMPACTION
- ⑥ REMOVE TREE (TYP), SEE ARBORIST REPORT FOR DETAILS

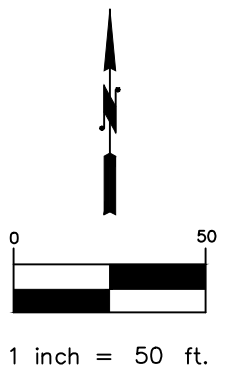
**PROJECT INFO:**

TOTAL SITE ACREAGE: 3.36 AC  
 TOTAL NEW PLUS EXISTING TO REMAIN IMPERVIOUS AREA: 5,316 SF  
 CSWPP/ESC CONTACT: LEONARD DIFRANCESCO, PE TEL: 206.412.6660  
 11,307 SF TOTAL PROPOSED TURF AREA TO AMEND IN-PLACE OR FROM STOCKPILE (54 CY COMPOSED NEEDED)  
 ON-SITE SOIL IS MEDIUM SAND PER THE EXISTING SEPTIC SYSTEM SOIL LOGS



DATE: 10/21/24

**LD ENGINEERING, LLC**  
 LAND DEVELOPMENT & CIVIL SERVICES  
 105 Harvard Ave E, #106, Seattle WA 98102  
 phone: 206.412.6660  
 email: LDengineeringLLC@gmail.com  
 website: http://ldengineeringllc.com



NOTE: BASE FLOOD ELEVATIONS (BFE) DETERMINED BY THE 5/23 FLOODPLAIN STUDY PREPARED FOR THE SUBJECT PROJECT.







**King County**  
Department of Permitting  
and Environmental Review

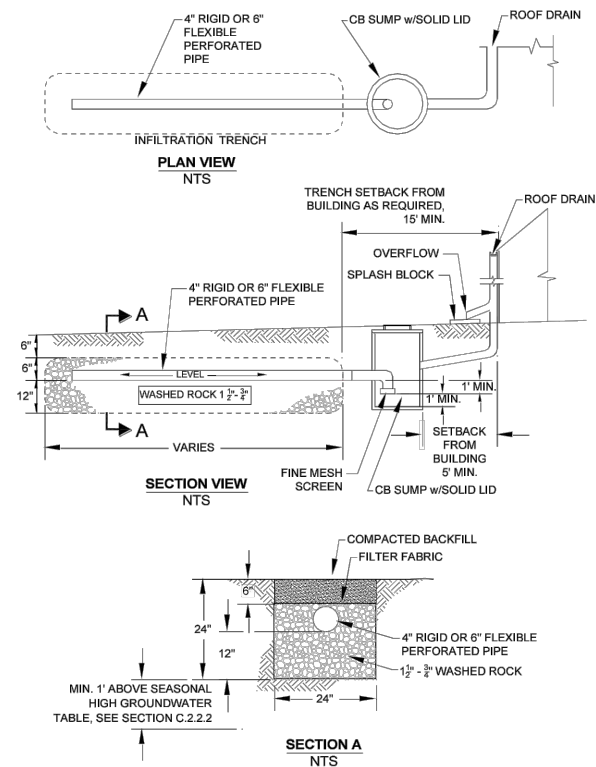
**STANDARD DETAILS**

DATE: 10/21/24

**LD ENGINEERING, LLC**  
LAND DEVELOPMENT & CIVIL SERVICES  
105 Harvard Ave E, #106, Seattle WA 98102  
phone: 206.412.6660  
email: LDengineeringLLC@gmail.com  
website: http://ldengineeringllc.com

C.2.2 FULL INFILTRATION

FIGURE C.2.2.A TYPICAL TRENCH INFILTRATION SYSTEM



D.2.1.2 COVER MEASURES

FIGURE D.2.1.2.E STRAW WATTLES

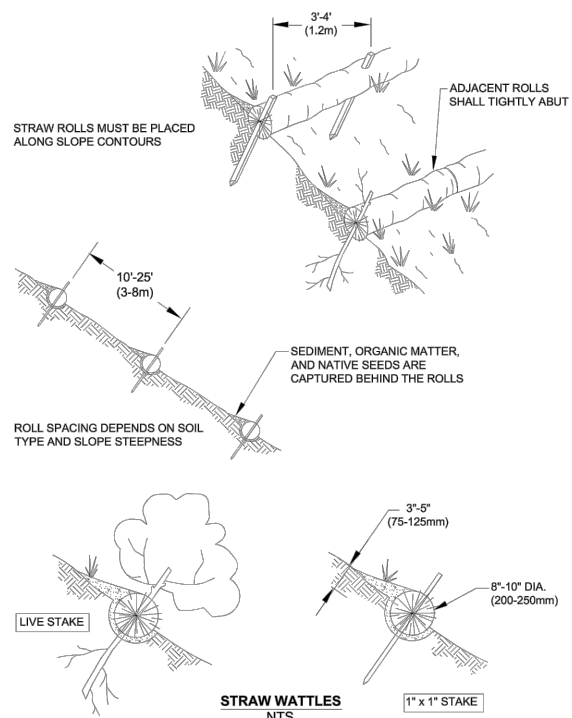
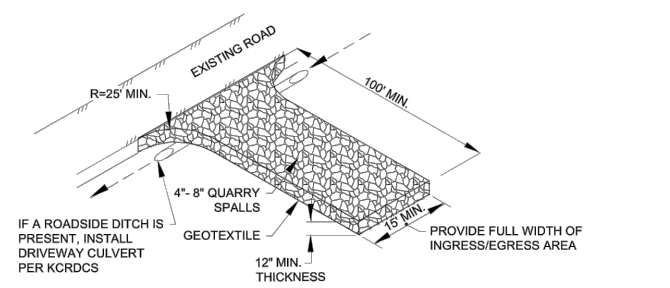


FIGURE D.2.1.4.A STABILIZED CONSTRUCTION ENTRANCE



- NOTES:**
- PER KING COUNTY ROAD DESIGN AND CONSTRUCTION STANDARDS (KCRDCS), DRIVEWAYS SHALL BE PAVED TO EDGE OF R-O-W PRIOR TO INSTALLATION OF THE CONSTRUCTION ENTRANCE TO AVOID DAMAGING OF THE ROADWAY.
  - IT IS RECOMMENDED THAT THE ENTRANCE BE CROWNED SO THAT RUNOFF DRAINS OFF THE PAD.

**LD ENGINEERING GENERAL ENGINEERING NOTES:**

- EXISTING UTILITIES UNDERGROUND STRUCTURES AND CONTOUR INFORMATION SHOWN ON THE SURVEY / PLAN ARE BASED UPON THE BEST AVAILABLE PUBLIC RECORDS AND/OR PRIVATE RECORDS AS SUPPLIED BY THE PROJECT OWNER AND/OR DATA OBTAINED VERBALLY FROM OWNERS OR OFFICIALS ASSOCIATED WITH THE PARTICULAR UTILITY. NEITHER THE OWNER NOR THE ENGINEER GUARANTEE THE ACCURACY OR COMPLETENESS OF THIS INFORMATION AND ASSUME NO RESPONSIBILITY FOR IMPROPER LOCATIONS OR FAILURE TO SHOW UTILITY LOCATIONS ON THE CONSTRUCTION PLANS. OTHER UNDERGROUND FACILITIES NOT SHOWN ON THE DRAWINGS MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL INVERT ELEVATIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- IF CHANGED CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PROMPTLY OF (1) PREEXISTING SUBSURFACE CONDITIONS DIFFERING FROM THOSE INDICATED IN THE PLANS, OR (2) PREEXISTING UNKNOWN SUBSURFACE CONDITIONS, OF AN UNUSUAL NATURE, DIFFERING MATERIALLY FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE CONTRACT. THE CONTRACTOR AND/OR THE OWNER SHALL MAKE NO CLAIMS TO THE ENGINEER FOR RECOMPENSATION FOR EXTRA WORK RESULTING FROM CHANGED CONDITIONS UNLESS THE ENGINEER HAS APPROVED THE WORK IN WRITING. (WSDOT SEC 1-04.7).
- THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS AND EXERCISE SOUND ENGINEERING AND CONSTRUCTION PRACTICES IN CONDUCTING THE WORK. THE CONTRACTOR SHALL PROTECT EXISTING PUBLIC AND PRIVATE UTILITIES FROM DAMAGE DURING CONSTRUCTION. IF EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE ENGINEER. THE CONTRACTOR SHALL RESTORE THE UTILITY TO ITS EXISTING CONDITION. (WSDOT SECTION 1-07.17 APWA SUPPLEMENT). THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION FOR DESIGNS SHOWN ON THESE PLANS.
- WHERE THE PLANS CALL FOR UTILITIES TO BE RELOCATED BY OTHERS, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY AND COORDINATE HIS WORK SO AS TO AVOID CONFLICTS.
- ENGINEERING DESIGN AND APPROVAL FOR STRUCTURES SUCH AS, BUT NOT LIMITED TO, WALLS AND VAULTS MUST BE PREPARED BY THE APPROPRIATE PROFESSIONAL ENGINEER AND ARE NOT A PART OF THESE PLANS.





**King County**  
 Department of Permitting  
 and Environmental Review

**STANDARD NOTES**

**DATE: 10/21/24**

**LD ENGINEERING, LLC**  
 LAND DEVELOPMENT & CIVIL SERVICES  
 105 Harvard Ave E, #106, Seattle WA 98102  
 phone: 206.412.6660  
 email: LDengineeringLLC@gmail.com  
 website: http://ldengineeringllc.com

**REFERENCE 7-B  
 KING COUNTY STANDARD PLAN NOTES**

The standard plan notes must be included on all engineering plans. Notes which in no way apply to the project may be omitted; however, the remaining notes must not be renumbered. For example, if General Note #3 were omitted, the remaining notes should remain numbered 1, 2, 4, 5, 6, etc.

**GENERAL NOTES**

- (1) All design and construction shall be in accordance with permit conditions, the King County Code (KCC), the King County Road Design and Construction Standards (KCRDCS), Washington State DOT (WSDOT) Standard Specifications and the conditions of preliminary approval. It shall be the sole responsibility of the applicant and the professional civil engineer to correct any error, omission, or variation from the above requirements found in these plans. All corrections shall be at no additional cost or liability to King County.
- (2) The design elements within these plans have been reviewed according to the King County Department of Local Services, Permitting Division(DLS-Permitting) Engineering Review checklist. Some elements may have been overlooked or missed by the DLS-PERMITTING plan reviewer. Any variance from adopted standards is not allowed unless specifically approved by King County prior to construction.
- (3) Approval of this road, grading, parking and drainage plan does not constitute an approval of any other construction (e.g. domestic water conveyance, sewer conveyance, gas, electrical, etc.)
- (4) Before any construction or development activity, a preconstruction meeting must be held between the DLS-PERMITTING's Development Inspector, the Applicant, and the Applicant's Construction Representative.
- (5) A copy of these approved plans must be on the job site whenever construction is in progress.
- (6) Grading activities (site alteration) are limited to the hours of 7 a.m. to 7 p.m. Monday through Saturday and 10 a.m. to 5 p.m. on Sunday, unless otherwise approved with a written decision by the Reviewing Agency.
- (7) It shall be the applicant's/contractor's responsibility to obtain all construction easements necessary before initiating off-site work. Easements require review and approval prior to construction.
- (8) Franchised utilities or other installations that are not shown on these approved plans shall not be constructed unless an approved set of plans that meet all requirements of KCRDCS Chapter 8 are submitted to the DLS-PERMITTING's Development Inspector three days prior to construction.
- (9) Datum shall be NAVD88 unless otherwise approved by DLS-PERMITTING.
- (10) Dewatering system (underdrain) construction shall be within a right-of-way or appropriate drainage easement, but not underneath the roadway section. All underdrain systems must be constructed in accordance with WSDOT Standard Specifications.
- (11) All utility trenches and roadway subgrade shall be backfilled and compacted to 95 percent maximum density per WSDOT Standard Specifications 2-03.3(14)D, Method C.
- (12) Open cutting of existing roadways for non-franchised utility or storm work is not allowed unless specifically approved by DLS-PERMITTING and noted on these approved plans. Any open cut shall be restored in accordance with KCRDCS.
- (13) The Contractor shall be responsible for providing adequate safeguards, safety devices, protective equipment, flaggers, and any other needed actions to protect the life, health, and safety of the public, and to protect property in connection with the performance of work covered by the contractor. Any work within the traveled right-of-way that may interrupt normal traffic flow shall require at least one flagger for each lane of traffic affected. Manual on Uniform Traffic Control Devices (MUTCD) shall apply. Work in right-of-way is not authorized until a traffic control plan is approved by King County.

**EROSION AND SEDIMENTATION CONTROL NOTES**

- (1) Approval of this erosion and sedimentation 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/ESC supervisor until all construction is approved.
- (3) The boundaries of the clearing limits shown on this plan shall be clearly flagged by survey tape or fencing, if required, prior to construction (King County SWDM Appendix D). During the construction period, no disturbance beyond the clearing limits shall be permitted. The clearing limits shall be maintained by the applicant/ESC supervisor for the duration of construction.
- (4) Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures, such as constructed wheel wash systems or wash pads, may be required to ensure that all paved areas are kept clean and track out to road right of way does not occur for the duration of the project.
- (5) The ESC facilities shown on this plan must be constructed prior to or in conjunction with all clearing and grading so as to ensure that the transport of sediment to surface waters, drainage systems, flow control BMP locations (existing and proposed), and adjacent properties is minimized.
- (6) 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 modified to account for changing site conditions (e.g. additional cover measures, additional sump pumps, relocation of ditches and silt fences, perimeter protection etc.).
- (7) The ESC facilities shall be inspected daily by the applicant/ESC supervisor and maintained to ensure continued proper functioning. Written records shall be kept of weekly reviews of the ESC facilities.
- (8) Any areas of exposed soils, including roadway embankments, that will not be disturbed for two days during the wet season or seven days during the dry season shall be immediately stabilized with the approved ESC cover methods (e.g., seeding, mulching, plastic covering, etc.).
- (9) Any area needing ESC measures, not requiring immediate attention, shall be addressed within seven (7) days.
- (10) The ESC facilities on *inactive* sites shall be inspected and maintained a minimum of once a month (more frequently as required by the DLS-PERMITTING site inspector) or within 24 hours following a storm event.
- (11) At no time shall more than one (1) foot of sediment be allowed to accumulate within a 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.
- (12) Any permanent retention/detention facility used as a temporary settling basin shall be modified with the necessary erosion control measures and shall provide adequate storage capacity. If the permanent facility is to function ultimately as an infiltration system, the temporary facility must be rough graded so that the bottom and sides are at least three feet above the final grade of the permanent facility. Flow control BMP facility areas (existing or proposed) shall not be used as temporary facilities and shall be protected from sedimentation and intrusion.
- (13) Cover measures will be applied in conformance with Appendix D of the King County Surface Water Design Manual.
- (14) Prior to the beginning of the wet season (Oct. 1), all disturbed areas shall be reviewed to identify which ones can be seeded in preparation for the winter rains. Disturbed areas shall be seeded within one week of the beginning of the wet season. A sketch map of those areas to be seeded and those areas to remain uncovered shall be submitted to the DLS-PERMITTING inspector for review.

**DRAINAGE NOTES**

- (1) Proof of liability insurance shall be submitted to DLS-PERMITTING prior to the construction of the drainage facilities, preferably at the preconstruction meeting.
- (2) All pipe and appurtenances shall be laid on a properly prepared foundation in accordance with WSDOT specifications. This shall include leveling and compacting the trench bottom, the top of the foundation material, and any required pipe bedding, to a uniform grade so that the entire pipe is supported by a uniformly dense unyielding base.
- (3) Steel pipe shall be aluminized, or galvanized with asphalt treatment #1 or better inside and outside.
- (4) All drainage structures, such as catch basins and manholes, not located within a traveled roadway or sidewalk, shall have solid locking lids. All drainage structures associated with a permanent retention/detention facility shall have solid locking lids.
- (5) All catch basin grates shall conform to KCRDCS, which includes the stamping "OUTFALL TO STREAM, DUMP NO POLLUTANTS" and "Property of King County", except that private drainage systems shall not have the words "Property of King County".
- (6) All driveway culverts located within King County right-of-way shall be of sufficient length to provide a minimum 3:1 slope from the edge of the driveway to the bottom of the ditch. Culverts shall have beveled end sections to match the side slope per KCRDCS.
- (7) Rock for erosion protection of roadway ditches, where required, must be of sound quarry rock, placed to a depth of 1 foot, and must meet the following specifications: 4"-8"/40%-70% passing; 2"- 4" rock/30%-40% passing; and -2" rock/10%-20% passing. Installation shall be in accordance with KCRDCS.
- (8) Drainage outlets (stub-outs) shall be provided for each individual lot, except for those lots approved for infiltration by King County. Stub-outs shall conform to the following:
  - a) Each outlet shall be suitably located at the lowest elevation on the lot, so as to service all future roof downspouts and footing drains, driveways, yard drains, and any other surface or subsurface drains necessary to render the lots suitable for their intended use. Each outlet shall have free-flowing, positive drainage to an approved stormwater conveyance system or to an approved outfall location.
  - b) Outlets on each lot shall be located with a five-foot-high, 2" x 4" stake marked "storm" or "drain". The stub-out shall extend above surface level, be visible, and be secured to the stake.
  - c) Pipe material shall conform to underdrain specifications described in KCRDCS and, if non-metallic, the pipe shall contain wire or other acceptable detection.
  - d) Drainage easements are required for drainage systems designed to convey flows through individual lots.
  - e) The applicant/contractor is responsible for coordinating the locations of all stub-out conveyance lines with respect to the utilities (e.g. power, gas, telephone, television).
  - f) All individual stub-outs shall be privately owned and maintained by the lot home owner.
- (9) All disturbed pervious areas (compacted, graded, landscaped, etc.) of the development site must demonstrate one of the following, in accordance with KCC and the Low Impact Development (LID) components of the approved site plan: The existing duff layer shall be staged and redistributed to maintain the moisture capacity of the soil, OR; Amended soil shall be added to maintain the moisture capacity.
- (10) Seasonal clearing is limited between October 1 and April 30 inclusive, unless otherwise approved with a written decision by the Reviewing Agency.
- (11) Improvements and/or buildings shall not be installed until drainage facilities are "in operation", (KCC 9.04).

**STRUCTURAL NOTES**

- (1) These plans are approved for standard road and drainage improvements only. Plans for structures such as bridges, vaults, and retaining walls require a separate review and approval by DLS-PERMITTING prior to construction (KCC 16.04, 16.70, 14.20).
- (2) Rockeries are considered to be a method of bank stabilization and erosion control. Rockeries shall not be constructed to serve as retaining walls. All rockeries in County road right-of-way shall be constructed in accordance with KCRDCS. Rockeries outside of road right-of-way shall be constructed in accordance with the International Building Code.

