RAVENSDALE RECLAMATION TRENCH FILLING AND RESTORATION PROJECT

PORTIONS OF SECTION 1, TOWNSHIP 21 NORTH, RANGE 6 EAST,

SECTION 36, TOWNSHIP 22 NORTH, RANGE 6 EAST, AND SECTION 31, TOWNSHIP 22 NORTH, RANGE 7 EAST, W.M. KING COUNTY, WASHINGTON

Danville-

Georgetown

Open Space

COVER SHEET

LEGAL DESCRIPTION:

THE EAST 1/2 OF SEC. 1, TWP 21 N, RGE 6 E. W.M.

VERTICAL DATUM:

KING COUNTY POINT NUMBER 6201 NORTHEAST SECTION CORNER OF SECTION 36, TOWNSHIP 22N, RANGE 6 E, ELEVATION BEING 623.74

BASIS OF BEARING:

BEARING IS BASED OFF RECORD OF SURVEY AFN NO. 9303159008

SITE DATA:

LOCATED IN THE 26900 BLOCK OF SE RAVENSDALE WAY, RAVENSDALE WA., KING COUNTY.

N.P.D.E.S. NOTE:

NO CONSTRUCTION OR SITE DISTURBANCE FOR THIS PROJECT MAY BEGIN BEFORE THE APPLICANT FIRST OBTAINS A GENERAL PERMIT TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY PERMIT FROM THE WASHINGTON STATE DEPARTMENT OF ECOLOGY (DOE).

PLAN NOTES:

1. FILLING SHALL OCCUR ON ONE TRENCH AT A TIME TO MINIMIZE POTENTIAL EROSION ISSUES. 2. EXISTING PROPERTY LINES AND EASEMENTS WERE OBTAINED FROM KING COUNTY ASSESSOR'S MAPS.

NOTES:

SOILS MAP PER "RAVENSDALE MINE TRENCH" BY GENESIS RESOURCE CONSULTING DATED NOV, 28

PARCEL NUMBER:

TRENCH	FILL (CY±)
E	210,285

TOTAL 210,285

EARTHWORK:

THIS CALCULATION IS FOR REVIEW AND PERMIT PURPOSES ONLY, CONTRACTOR SHALL DO THEIR OWN CALCULATION BASED ON THE INFORMATION PROVIDED WITHIN THESE PLANS.

THE QUANTITIES MAY VARY BASED ON THE FOLLOWING FACTORS:

1. SHRINK/SWELL OF SOILS. 2. SURFACE STRIPPING.

3. VARIANCE OF STRUCTURAL MATERIAL REQUIRED FOR ACCESS

Valley SE Kent-Kangley Rd SE Kent-Kangley Rd Henrys Georgetown Ravensdale Ridge Open Retreat Space Natural Retreat Ravensdale SE 285th y Henrys Black Lake Diamond Sawyer Open Space Lake Sawyer Regiona Park Black Diamond e Hundred Morganville

SHEET INDEX:

Maple

T.E.S.C. NOTES AND DETAILS SHEET 4

TRENCH - E GRADING AND T.E.S.C. PLAN SHEET 5

SHEET 7 TRENCH - E GRADING PROFILE SECTIONS

COVER SHEET SHEET 2 TRENCH AND PARCEL LOCATIONS MAP NOTES AND DETAILS SHEET 3

TRENCH - E GRADING PROFILE SECTIONS SHEET 6

SHEET 8 TRENCH - E GRADING PROFILE SECTIONS

WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW.

TRENCH NOTES:

UTILITY NOTES: EXISTING UTILITY INFORMATION DEPICTED ON THESE PLANS WAS OBTAINED FROM BEST AVAILABLE SOURCES AT THE TIME OF DESIGN. CONTRACTOR SHALL BE SOLELY

RESPONSIBLE FOR THE RELOCATION OF EXISTING UNDERGROUND CONFLICTING

IF WORKERS ENTER ANY TRENCH OR OTHER EXCAVATION FOUR OR MORE FEET IN DEPTH

THAT DOES NOT MEET THE OPEN PIT REQUIREMENTS OF WSDOT SECTION 2-09.3(3)B, IT

SAFETY. ALL TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF THE

SHALL BE SHORED AND CRIBBED. THE CONTRACTOR IS ALONE RESPONSIBLE FOR WORKER

FILL SPECIFICATION:

UTILITIES DEPICTED OR NOT DEPICTED ON THESE PLANS.

FILL MATERIAL SHALL NOT CONTAIN PETROLEUM PRODUCTS, OR SUBSTANCES WHICH ARE HAZARDOUS, DANGEROUS, TOXIC, OR WHICH OTHERWISE VIOLATE ANY STATE, FEDERAL, OR LOCAL LAW ORDINANCE, CODE, REGULATION, RULE, ORDER, OR STANDARD. ONLY EARTH MATERIAL SHALL BE PLACED IN FILLS.

ONE CALL AT 1-800-424-5555

UNDERGROUND UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE, AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURE. TO DETERMINE ACTUAL LOCATIONS, SIZE, AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 1-800-424-5555 AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

> (Note to Engineer: This approval signature block not required for cover page.

KING COUNTY DDES APPROVAL		
Review Engineer	Date	
Senior Engineer	Date	
Wally Archuketa, P.E. DEVELOPMENT ENGINEER	Date	

Notice Required

Contractors shall notify operators who maintain underground utility lines in the area of proposed excavation or blasting at least two business days, but not more than ten working days prior to commencement of excavation or demolition in accordance with RCW Title 19. Names and telephone numbers of the operators of underground utility lines in this project appear below. These numbers shall also be used to serve in an emergency conditions as required.

Sanitary Sewer			
Water District			
Gas Company	_	-	
, , , , , , , , , , , , , , , , , , ,			

Phone

1-800-424-5555

Notes

DIAL-A-DIG

- 1. The Developer is required to notify the Land Use Services Division, Land Use Inspection Section (206) 296-6642, three days prior to the beginning of construction for a preconstruction conference and specifically request inspection before beginning:
- A. Installing siltation and erosion control measures
- B. Clearing and grubbing C. Earthwork

Power Company

Call Before You Dig

- D. Installation of any underground utility E. Before placing subbase, base or paving surfaces F. Installation of any forms or placing any concrete
- 2. A permit must be obtained from the office of the Resident Engineer, Washington State Department of Transportation, before any construction is started on any existing state route.
- 3. A Hydraulic Project Approval (HPA) Permit must be obtained from the Washington State Department of Fisheries prior to any work when required.

Rondina Information

Donaing in	OTTI CTOTI
estoration Bond Amount	\$
Performance Bond Amount	\$

S Ш

Other Related Permit Numbers Received: Right-of-Way Use Permit Grading Building/Structural

Site Plan Approval

Approval of these plans is for construction of road and drainage

improvements, site drainage & grading and temporary erosion control in unincorporated King County only. These plans do not

authorize any other utility approval or improvements proposed

Site plan approval is void if the commercial building permit has

Subdivision plan approval is void if the final plat is not recorded

PRO RATA SHARE ASSESSMENT ANALYSIS

Peak Runoff Assessment Rate(\$) per c.f.s. increases.(10 year, 2 hour stor

Peak Volume Assessment Rate(\$) per Ac. Ft. increases.(2 year, 2 hour sto

AGREEMENTS, PLAN REFERENCES, PERMITS ETC.

(To be completed by Consultant)

(County Use Only)

Site Location is within the _____ drainage shed(s)

Pro Rata Share Assessment(s) are: ☐ Required ☐ Not Required

from the site due to development for increased storm water runoff.

Preliminary Plat Approval/Permit Issued Date:

not been obtained or renewed within two years of approval.

prior to the preliminary plat approval expiration.

Section Township Range Tax Parcel

___Date

Expiration Date:

in any State right of way.

Board feet of tree removal on site:

Cubic yards of material hauled on/off the site:

Is this a highly sensitive area site? (Yes/No): ____ Note: If "yes", per SWDM Appendix D44 a Highly Sensitive Site Erosion Control Supervisor is required. See ESC plan.

Emergency

Polic	e-Fire-Rescue	$ $ \vdash
	ENDED FOR APPROVAL ompleted by King County)	Щ
		X
	Review Engineer	
	Senior Engineer	
	Traffic & Planning Engineer	Ш
	Sensitive Areas	
	Structural Review Engineer	$ \lesssim$
	Othor	

King County

DEPARTMENT OF DEVELOPMENT & ENVIRONMENTAL SERVICES

Date	Molly A. Johnson, P.E. Development Engineer
	PROJECT CONTACT INFORMATION

بر بر		
Applicant Contract Owner -ease	Name	Phone
	Address and Zip Code	

(To be completed by Consultant)

	□ A Partner □ An Individ
RAVENSDALE LLC (KURT ERICKSON)	(253) 606-6
Name	 Phone
41306 90TH AVENUE F FATONVILLE W.	A 98328

41306 90TH AVENUE E, EATONVILLE, WA 98328 Address and Zip Code

□ □ Address and Zip Code

□ A Corporatio □ A Partnership ☐ An Individual

CONTOUR ENGINEERING LLC (BRETT ALLEN) (253) 857-5454 Phone Name 3309 56TH STREET NW, SUITE 106, GIG HARBOR, WA 98335

Sheet 1 of 8

TELEPHONE: NONE CABLE: NONE

UTILITIES:

SCHOOL: TAHOMA #409 FIRE PROTECTION: K.C. FIRE PROTECTION DISTRICT #43

TOPOGRAPHIC NOTE:

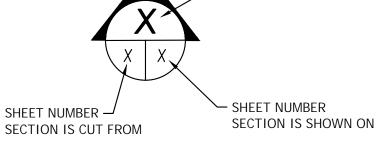
THE EXISTING CULTURAL AND TOPOGRAPHIC DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY DAN PRICE LAND SURVEYING AND APEX ENGINEERING PLLC. WHILE THIS INFORMATION IS BELIEVED RELIABLE, CONTOUR ENGINEERING CANNOT ENSURE ITS ACCURACY AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THAT INFORMATION OR FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.



LOT BOUNDARY LINES

EXISTING WETLAND

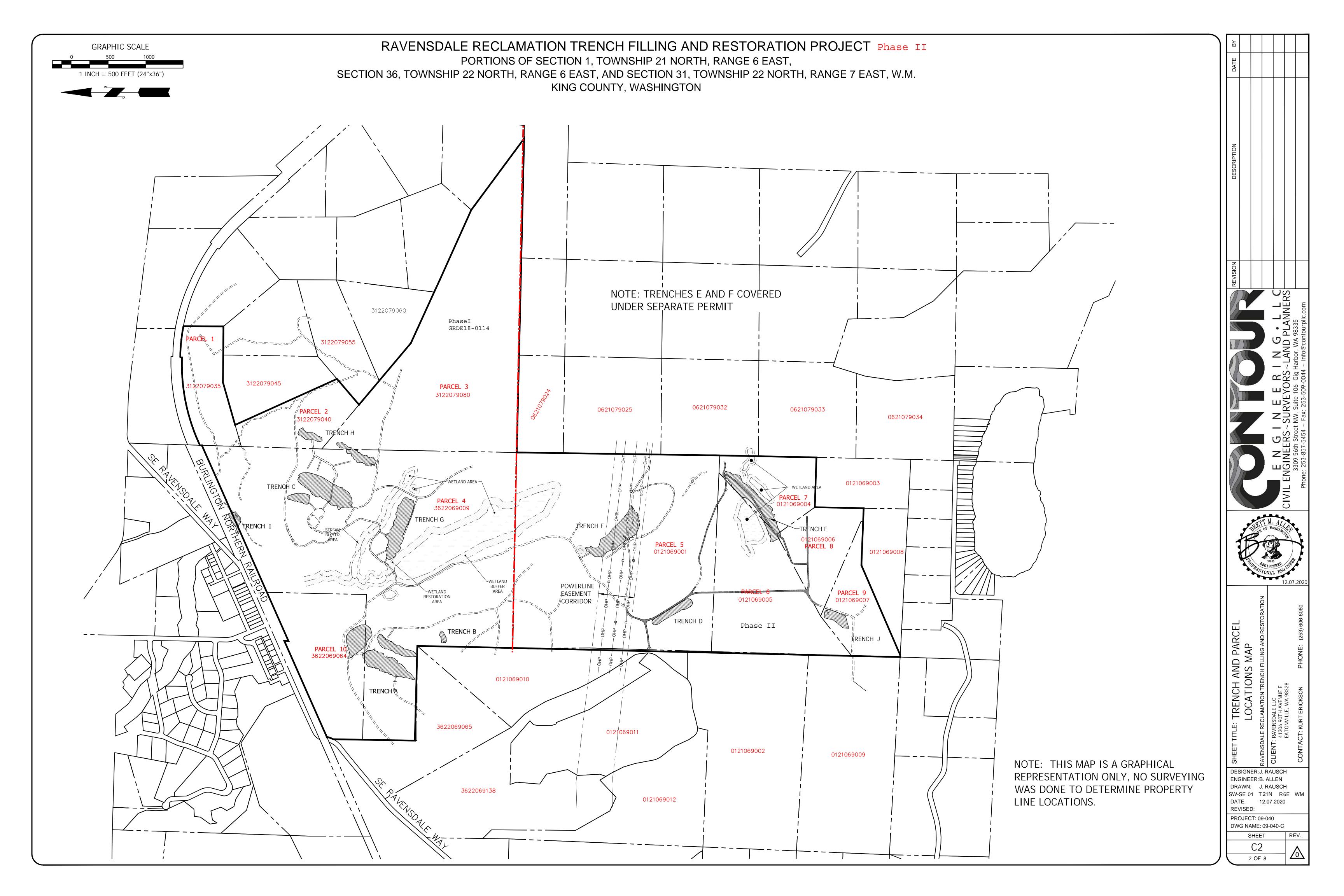
PROPOSED EASEMENT SHEET NUMBER -



SECTION NUMBER

VICINITY MAP

SCALE: 1" = 2000'



RAVENSDALE RECLAMATION TRENCH FILLING AND RESTORATION PROJECT

PORTIONS OF SECTION 1, TOWNSHIP 21 NORTH, RANGE 6 EAST,

SECTION 36, TOWNSHIP 22 NORTH, RANGE 6 EAST, AND SECTION 31, TOWNSHIP 22 NORTH, RANGE 7 EAST, W.M.
KING COUNTY, WASHINGTON

GENERAL NOTES:

- (1) ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PERMIT CONDITIONS, THE KING COUNTY CODE (KCC), ROAD STANDARDS (KCRS), 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 DEVELOPMENT AND ENVIRONMENTAL SERVICES (DDES) ENGINEERING REVIEW CHECKLIST SOME ELEMENTS MAY HAVE BEEN OVERLOOKED OR MISSED BY THE DDES 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 DDES'S LAND USE INSPECTION SECTION, 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 KCRS CHAPTER 8 ARE SUBMITTED TO THE DDES'S LAND USE INSPECTION SECTION THREE DAYS PRIOR TO CONSTRUCTION.
- (9) DATUM SHALL BE KCAS UNLESS OTHERWISE APPROVED BY DDES.
- (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 DENSITY, STANDARD PROCTOR.
- (12) OPEN CUTTING OF EXISTING ROADWAYS FOR NON-FRANCHISED UTILITY OR STORM WORK IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY DDES AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH KCRS.
- (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.

BPA EASEMENT NOTES:

- 1. COORDINATE WITH BPA PRIOR TO ANY CONSTRUCTION. ALL WORK SHALL CONFORM TO BPA REQUIREMENTS AND CONDITIONS.
- 2. VERIFY ACTUAL TOWER LOCATIONS AND CLEARANCES PRIOR TO ANY CONSTRUCTION / WORK.
- 3. APPROXIMATE LOCATIONS OF POWER LINE TOWERS WERE OBTAINED FROM EXHIBIT A OF THE NON-TRANSFERABLE LAND USE AGREEMENT.
- 4. MAINTAIN 50' MINIMUM CLEARANCE AROUND TOWERS
- 5. MAINTAIN 20' MINIMUM CLEARANCE BETWEEN ALL CONSTRUCTION EQUIPMENT AND TRANSMISSION LINE CONDUCTORS (WIRES).

GEOTECHNICAL NOTES:

- 1. A GEOTECHNICAL ENGINEER IS TO MONITOR AND DOCUMENT ALL CUTS, FILLS, BENCHING AND COMPACTION ON SITES INCLUDING COAL MINE HAZARDS. A COPY OF THE DOCUMENTATION SHALL BE GIVEN TO THE LU.I.S. INSPECTOR UPON HIS/HER REQUEST. PROVIDE COPIES TO ENGINEER.
- 2. PROPOSED CUT AND FILL SLOPES SHALL NOT EXCEED 2: 1 WITHOUT GEO TECHNICAL ENGINEER'S APPROVAL
- 3. FILL MATER/AL IS TO BE IMPORTED FROM OFFS/TE, LOCAL AREA PROJECTS. SOILS ARE TO BE CLEAN, AND BELOW MTCA SOIL LEVEL STANDARDS.
- 4. ALL WORK WITHIN COAL MINE HAZARD AREAS ARE TO CONFORM TO KING COUNTY ZONING CODE/REQUIREMENTS AND GEOTECHNICAL ENGINEERS RECOMMENDATIONS.

SLOPE COVER / PROTECTION NOTES:

- 1. ALL PERMANENT SLOPES 3: 1 OR STEEPER SHALL BE PROTECTED AS FOLLOWS:
 - a) ROUGHEN SURFACE LEAVING CLEAT IMPRINTS PARALLEL TO SLOPE CONTOURS.
- HYDROSEED ENTIRE AREA WITH THE APPROVED FORESTRY SEED MIX ..
- b) INSTALL MULCH.
- SECURE ENTIRE AREA WITH EROSION CONTROL BLANKET.

EROSION AND SEDIMENTATION CONTROL

- (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 (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. 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 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
- (13) COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE
- (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 DDES INSPECTOR FOR REVIEW.

SOIL NOTES

LAND SHOULD BE RESTORED IN ACCORDANCE WITH KING COUNTY'S BEST MANAGEMENT PRACTICES FOR RECLAIMING SURFACE MINES.

AFTER THE LAND HAS BEEN SHAPED, IT SHOULD BE REGRADED TO PRODUCE A ROUGH, IRREGULAR SURFACE, PARTICULARLY ON SLOPES TO ENSURE THAT REPLACED SOIL IS KEYED INTO THE SUBSTRATE TO SLOW EROSION.

TOPSOIL SHOULD BE REPLACED ON SLOPES AS SOON AS POSSIBLE AFTER RESTORING TOPOGRAPHY. SOIL HORIZONS FROM STOCKPILES SHOULD BE REPLACED SEPARATELY IN PROPER ORDER FOR BEST USE OF THE RESOURCE. AFTER THE TOP SOIL IS SPREAD, IT SHOULD BE TILLED TO CONSTRUCT A PROPER SEED BED. A MINIMUM SOIL REPLACEMENT DEPTH OF 12 INCHES OF TOPSOIL IS RECOMMENDED FOR RECLAMATION FOR POST-MINE USES.

WHERE LITTLE OR NO TOPSOIL EXISTS PRIOR TO MINING, IT MAY BE NECESSARY TO AMEND SOILS. RECONSTRUCTED SOILS SHOULD HAVE THE SAME CHARACTERISTICS AS TOPSOIL.

CLEAN SOIL MATERIAL IS DEFINED AS IMPORTED SOIL THAT DOES NOT CONTAIN DELETERIOUS MATERIAL SUCH AS WOOD, METAL, WIRE, REBAR, CONCRETE, ASPHALT, AND CONTAMINATED SOIL (HYDROCARBONS, HEAVY METALS, PCBS, AND OTHER REGULATED CONTAMINATES). (PER ICICLE CREEK ENGINEERS)

T.E.S.C. PLAN NOTES:

- 1. EROSION AND SEDIMENT CONTROL BMP'S SHALL CONFORM TO APPENDIX D, KING COUNTY SURFACE WATER DESIGN MANUAL A COPY SHALL BE ONS/TE AT ALL TIMES DURING CONSTRUCTION.
- 2. WHERE CONSTRUCTION VEHICLES CROSS PROPOSED. TEMPORARY INTERCEPTOR DITCHES PROVIDE TEMPORARY (12" CMP OR APPROVED EQUAL) CULVERTS.
- 3. ALL PERMANENT SLOPES 3: 1 OR STEEPER SHALL BE PROTECTED AS FOLLOWS:
 (a) ROUGHEN SURFACE LEAVING CLEAT IMPRINTS PARALLEL TO SLOPE CONTOURS.
 (b) HYDROSEED ENTIRE AREA WITH THE APPROVED FORESTRY SEED MIX ..

CLEAN SOIL MATERIAL NOTE

CLEAN SOIL MATERIAL IS DEFINED AS IMPORTED SOIL THAT DOES NOT CONTAIN DELETERIOUS MATERIAL SUCH AS WOOD, METAL, WIRE, REBAR, CONCRETE, ASPHALT, AND CONTAMINATED SOIL (HYDROCARBONS, HEAVY METALS, PCBS, AND OTHER REGULATED CONTAMINATES).

CONSTRUCTION SEQUENCE:

- (1) PRE-CONSTRUCTION MEETING.
- (2) POST SIGN WITH NAME AND PHONE NUMBER OF ESC 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 PONDS AND TRAPS.
- (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 MEASURES 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 SEDIMENT 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 THAT REACH FINAL GRADE WITHIN SEVEN DAYS.
- (14) SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
- (15) UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BMPS REMOVED IF APPROPRIATE.

DRAINAGE NOTES:

- (1) PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO DDES 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 KCRS, 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 KCRS.
- (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 KCRS.
- (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 KCRS 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.
- (1) ALL DISTURBED PERVIOUS AREAS (COMPACTED, GRADED, LANDSCAPED, ETC.) OF THE DEVELOPMENT SITE MUST DEMONSTRATE ONE OF THE FOLLOWING: 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.
- (2) SEASONAL CLEARING IS LIMITED BETWEEN OCTOBER 1 AND MARCH 30 INCLUSIVE, UNLESS OTHERWISE APPROVED WITH A WRITTEN DECISION BY THE REVIEWING AGENCY.
- (3) IMPROVEMENTS AND/OR BUILDINGS SHALL NOT BE INSTALLED UNTIL DRAINAGE FACILITIES ARE "IN OPERATION", (KCC 9.04).

SEEDING NOTES: (WHERE REQUIRED)

- 1. SEEDING SHOULD BE DONE IMMEDIATELY AFTER FINAL SHAPING IF COMPLETED DURING THE PERIODS OF APRIL 1 THROUGH JUNE 30 AND SEPTEMBER I THROUGH OCTOBER 31 (IF PLANTED BETWEEN JULY 1 AND AUGUST 31, IRRIGATION MAY BE REQUIRED). SITES WHICH CANNOT BE SEEDED DURING THIS TIME PERIOD SHOULD BE PROTECTED UNTIL THE NEXT SEEDING PERIOD WITH MULCHING.
- 2. PERMANENT VEGETATION MAY BE IN THE FORM OF GRASS SEED MIXTURES, SOD, OR WETLAND SEED / TUBER MIXTURES. SEED ESTABLISHMENT SHALL INCLUDE THE USE OF SUPPLEMENTAL MATERIALS, SUCH AS MULCH.
- 3. SITE PREPARATION INSTALL SURFACE RUNOFF CONTROL MEASURES.
- 4. SEEDBED PREPARATION MAY INCLUDE THE FOLLOWING:
- a. IF INFERTILE OR COARSE TEXTURED SUBSOIL MILL BE EXPOSED DURING GRADING, STOCKPILE TOPSOIL AND RE-SPREAD IT OVER THE FINISHED SLOPE AND ROLL IT TO PROVIDE A FIRM SEEDBED.
- b. IF CONSTRUCTION FILLS HAVE LEFT SOIL EXPOSED WITH A LOOSE, ROUGH, OR IRREGULAR SURFACE, TRACK WALK UP SLOPE.
- c. IF CUTS OR CONSTRUCTION EQUIPMENT HAVE LEFT A TIGHTLY COMPACTED SURFACE, BREAK WITH CHISEL PLOW OR OTHER SUITABLE IMPLEMENT.
- 5. PERFORM ALL CULTURAL OPERATIONS ACROSS OR AT RIGHT ANGLES TO THE SLOPES (CONTOURED). THE SEEDBED SHOULD BE FIRM WITH A FAIRLY FINE SURFACE AFTER ROUGHENING.
- 6. FERTILIZATION AS PER SUPPLIER'S RECOMMENDATIONS. DEVELOPMENTS ADJACENT TO WATER BODIES MUST USE NON-PHOSPHOROUS FERTILIZER.
- 7. "HYDROSEEDING" APPLICATIONS WITH APPROVED SEED-MULCH-FERTILIZER MIXTURES MAY ALSO BE USED.
- 8. SEEDING APPLY APPROPRIATE MIXTURE TO THE PREPARED SEEDBED AT A RATE OF 120 LBS/ACRE COVER THE SEED WITH TOPSOIL OR MULCH NO DEEPER THAN 1/2 INCH.
- 9. INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RE-SEEDINGS IMMEDIATELY.

a. IF VEGETATION COVER IS INADEQUATE TO PREVENT RILL EROSION, OVERSEED AND FERTILIZE IN ACCORDANCE WITH SOIL TEST RESULTS.

b. IF A STAND HAS LESS THAN 40% COVER, REEVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER. REESTABLISH THE STAND FOLLOWING SEEDBED PREPARATION AND SEEDING RECOMMENDATIONS, OMITTING LIME AND FERTILIZER IN THE ABSENCE OF SOIL TEST RESULTS.

10. TEMPORARY EROSION CONTROL SEED MIXTURES

SEED MIX TYPE	PROPORTIONS BY WEIGHT	PERCENT PURITY	PERCENT GERMINATION
CHEWINGS OR RED FESCUE	40%	98%	90
ANNUAL OR PREENNIAL RYE	40%	98%	90
REDTOP OR COLONIAL BENTGRASS	10%	92%	85
WHITE DUTCH OLOVED	10%	0.0%	00

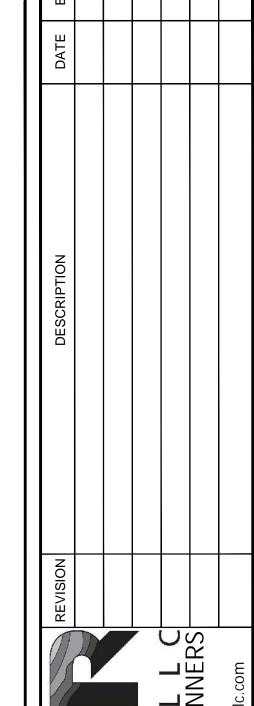
*APPLY THIS MIXTURE AT A RATE OF 120 LBS/ACRE. THIS RATE CAN BE REDUCED IF SOIL AMENDMENTS OR SLOW RELEASE FERTILIZERS ARE USED.

MULCHING:

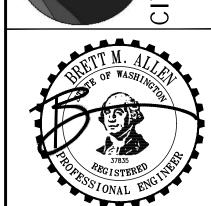
- 1. MULCH MATERIALS USED SHALL BE HAY OR STRAW, AND SHALL BE APPLIED AT THE RATE OF 2-3 TONS PER ACRE.
- 2. MULCHES SHALL BE APPLIED ON ALL EXPOSED AREAS.
- 3. MULCHING SHALL BE USED IMMEDIATELY AFTER SEEDING OR IN AREAS WHICH CANNOT BE SEEDED BECAUSE OF THE SEASON.
- 4. ALL AREAS NEEDING MULCH SHALL BE COVERED BY NOVEMBER 1

PLANTING NOTES

- 1. THE PROJECT AREAS WILL HAVE A CAP OF TOPSOIL WITH AN APPROPRIATE MIXTURE OF FUNGI PERFECTI AND GLOMALIN TO SUPPORT SOIL DEVELOPMENT AND VEGETATION SURVIVAL.
- 2. THE PRIMARY CONIFER SPECIES WILL CONSIST OF DOUGLAS-FIR 2+0 SEEDLINGS AND THE PLANTING RATE WILL BE APPROXIMATELY 680 TREES PER ACRE. THE SPACING ON THE PLANTED SEEDLINGS WILL BE 8 FEET BY 8 FEET. ADDITIONALLY, RED ALDER IS A PIONEER SPECIES FOR THIS REGION AND WILL NATURALLY REGENERATE ON EXPOSED SOILS.
- 3. AN APPROVED FORESTRY SEED MIX WILL BE APPLIED EVENLY ACROSS THE COMPLETED SITE.



E N G I N E E R I N G · L L NGINEERS ~ SURVEYORS ~ LAND PLANNER 3309 56th Street NW, Suite 106 Gig Harbor, WA 98335



AND DETAILS

RENCH FILLING AND RESTORATION

8

ALE RECLAMATION TRENCH FILLIN RAVENSDALE LLC 41306 90TH AVENUE E EATONVILLE, WA 98328

S

DESIGNER: J. RAUSCH
ENGINEER: B. ALLEN
DRAWN: J. RAUSCH
SW-SE 01 T21N R6E WM

12.07.2020

REVISED:
PROJECT: 09-040
DWG NAME: 09-040-C

DATE:

C3

3 OF 8



MAINTENANCE STANDARDS

- 1. Any damage shall be repaired immediately.
- 2. If concentrated flows are evident uphill of the fence, they must be intercepted and conveyed to a sediment trap or pond.
- 3. It is important to check the uphill side of the fence for signs of the fence clogging and acting as a barrier to flow and then causing channelization of flows parallel to the fence. If this occurs, replace the fence or remove the trapped sediment.
- 4. Sediment must be removed when the sediment is 6 inches high.
- 5. If the filter fabric (geotextile) has deteriorated due to ultraviolet breakdown, it shall be replaced.

FILTER FABRIC FENCE NOTES:

SEE FIGURE C.3.6.A AND FIGURE C.3.6.B FOR DETAILS. THE GEOTEXTILE USED MUST MEET THE STANDARDS LISTED BELOW. A COPY OF THE MANUFACTURER'S FABRIC SPECIFICATIONS MUST BE AVAILABLE ONSITE.

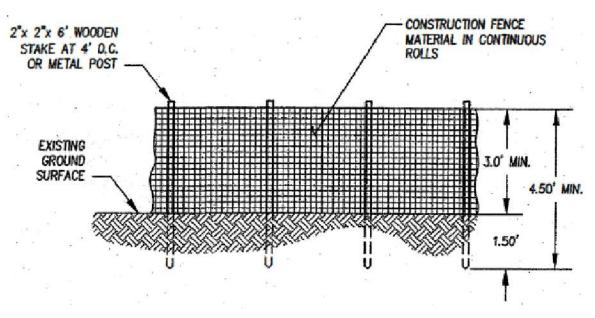
AOS (ASTM D4751)	30-100 sieve size (0.60-0.15 mm) for slit film 50-100 sieve size (0.30-0.15 mm) for other fabrics
Water Permittivity (ASTM D4491)	0.02 sec ⁻¹ minimum
Grab Tensile Strength (ASTM D4632)	180 lbs. min. for extra strength fabric 100 lbs. min. for standard strength fabric
Grab Tensile Elongation (ASTM D4632)	30% max.
Ultraviolet Resistance (ASTM D4355)	70% min.

- STANDARD STRENGTH FABRIC REQUIRES WIRE BACKING TO INCREASE THE STRENGTH OF THE FENCE. WIRE BACKING OR CLOSER POST SPACING MAY BE REQUIRED FOR EXTRA STRENGTH FABRIC IF FIELD
- PERFORMANCE WARRANTS A STRONGER FENCE. WHERE THE FENCE IS INSTALLED, THE SLOPE SHALL BE NO STEEPER THAN 2H:1V. IF A TYPICAL SILT FENCE (PER FIGURE C.3.6.A) IS USED, THE STANDARD 4 X 4 TRENCH MAY NOT BE REDUCED AS LONG AS THE BOTTOM 8 INCHES OF THE SILT FENCE IS WELL BURIED AND SECURED IN A

SALMONIDS ATTEMPTING TO ENTER OFF-CHANNEL AREAS OR DRAINAGES.

TRENCH THAT STABILIZES THE FENCE AND DOES NOT ALLOW WATER TO BYPASS OR UNDERMINE THE 6. SILT FENCES SHALL BE LOCATED SO AS TO AVOID INTERFERING WITH THE MOVEMENT OF JUVENILE

FILTER FABRIC FENCE DETAIL



MAINTENANCE STANDARDS:

- 1. IF THE FENCE HAS BEEN DAMAGED OR VISIBLY REDUCED, IT SHALL BE REPAIRED OR REPLACED IMMEDIATELY AND VISIBILITY RESTORED.
- 2. DISTURBANCE OF A CRITICAL AREA, CRITICAL BUFFER, NATIVE GROWTH RETENTION AREA, OR ANY OTHER AREA REQUIRED TO BE LEFT UNDISTURBED SHALL BE REPORTED TO THE COUNTY FOR

PROTECTION FENCE NOTES:

- 1. THE FENCE SHALL DESIGNED AND INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
- 2. THE FENCE SHALL BE AT LEAST 3 FEET HIGH AND MUST BE HIGHLY VISIBLE.
- 3. THE FENCE SHALL NOT BE WIRED OR STAPLED TO TREES.
- 4. THE FENCE SHALL BE REMOVED UPON THE COMPLETION OF THE WORK AND THE SITE IS STABILIZED.

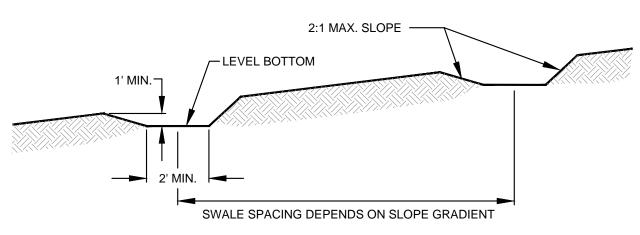
PROTECTION FENCE DETAIL

NOT TO SCALE

RAVENSDALE RECLAMATION TRENCH FILLING AND RESTORATION PROJECT

PORTIONS OF SECTION 1, TOWNSHIP 21 NORTH, RANGE 6 EAST,

SECTION 36, TOWNSHIP 22 NORTH, RANGE 6 EAST, AND SECTION 31, TOWNSHIP 22 NORTH, RANGE 7 EAST, W.M. KING COUNTY, WASHINGTON



DESIGN AND INSTALLATION SPECIFICATIONS

- 1. SEE FIGURE D.2.1.6.B FOR DETAILS OF AN INTERCEPTOR DIKE AND FIGURE D.2.1.6.C FOR AN INTERCEPTOR SWALE.
- 2. INTERCEPTOR DIKES AND SWALES SHALL BE SPACED HORIZONTALLY AS FOLLOWS:

AVERAGE SLOPE	SLOPE PERCENT	FLOWPATH LENGT
20H:1V OR LESS	3-5%	300 FEET
(10 TO 20)H:1V	5-10%	200 FEET
(4 TO 10)H:1V	10-25%	100 FEET
(2 TO 4)H:1V	25-50%	50 FEET

- 3. FOR SLOPES STEEPER THAN 2H:1V WITH MORE THAN 10 FEET OF VERTICAL RELIEF, BENCHES MAY BE CONSTRUCTED OR CLOSER SPACED INTERCEPTOR DIKES OR SWALES MAY BE USED. WHICHEVER MEASURE IS CHOSEN, THE SPACING AND CAPACITY OF THE MEASURES MUST BE DESIGNED BY THE ENGINEER AND THE DESIGN MUST INCLUDE PROVISIONS FOR EFFECTIVELY INTERCEPTING THE HIGH VELOCITY RUNOFF ASSOCIATED WITH STEEP SLOPES.
- 4. IF THE DIKE OR SWALE INTERCEPTS RUNOFF FROM DISTURBED AREAS, IT SHALL DISCHARGE TO A STABLE CONVEYANCE SYSTEM THAT ROUTES THE RUNOFF TO A SEDIMENT POND OR TRAP (SEE SECTION D.2.1.5). IF THE DIKE OR SWALE INTERCEPTS RUNOFF THAT ORIGINATES FROM UNDISTURBED AREAS, IT SHALL DISCHARGE TO A STABLE CONVEYANCE SYSTEM THAT ROUTES THE RUNOFF DOWNSLOPE OF ANY DISTURBED AREAS AND RELEASES THE WATER
- 5. CONSTRUCTION TRAFFIC OVER TEMPORARY DIKES AND SWALES SHALL BE MINIMIZED.

MAINTENANCE STANDARDS

- 1. DAMAGE RESULTING FROM RUNOFF OR CONSTRUCTION ACTIVITY SHALL BE REPAIRED IMMEDIATELY.
- 2. IF THE FACILITIES DO NOT REGULARLY RETAIN STORM RUNOFF, THE CAPACITY AND/OR FREQUENCY OF THE DIKES/SWALES SHALL BE INCREASED.

INTERCEPTOR SWALES NOTES:

- 1. SEED AND MULCH SHALL BE APPLIED WITHIN 5 DAYS OF CONSTRUCTION (SEE VEGETATION).
- 2. NO EROSION SHALL OCCUR AT THE OUTLET. PROVIDE ENERGY DISSIPATION MEASURES AS NECESSARY.
- SEDIMENT LADEN RUNOFF MUST BE RELEASED THROUGH A SEDIMENT TRAPPING FACILITY SUCH AS A POND, TRAP, OR SILT FENCE AS APPROPRIATE TO DRAINAGE AREA SIZE.

INTERCEPTOR DITCH DETAIL

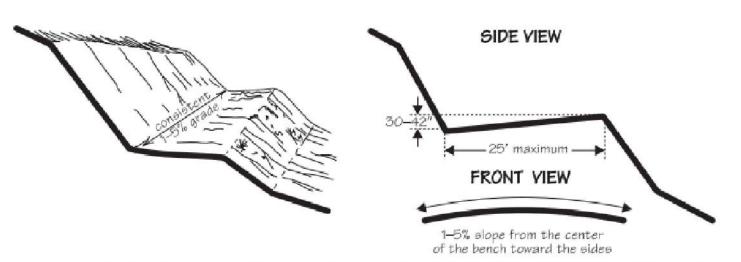
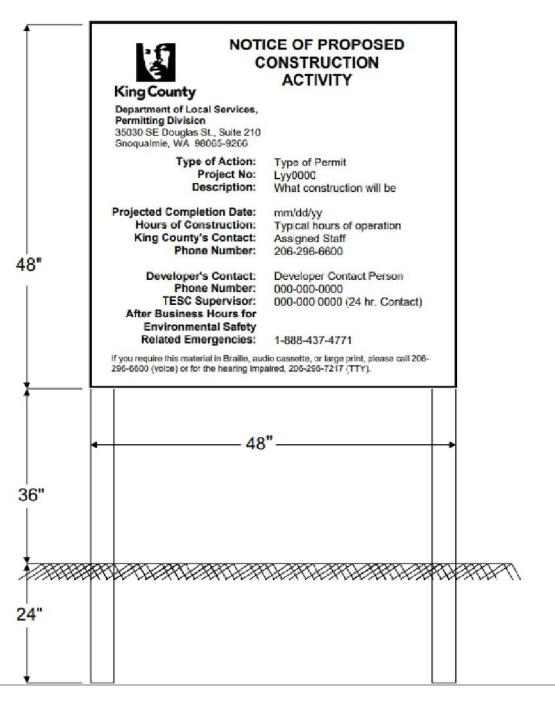


Figure 2.4. Benching and terracing of unconsolidated material to control runoff. Benches cut in overburden or other material likely to erode should be sloped into the hillside (side view) and away from the center of the bench (1-5% slope or grade) to allow drainage to either side (front view). (Modified from Law, 1984. Copyright @ 1984 by Van Nostrand Reinhold Company Inc. Used by permission of the publisher.)

BENCHING AND TERRACING DETAIL



NOTICE BOARD CONSTRUCTION SPECIFICATIONS

THE NOTICE BOARD SHALL BE CONSTRUCTED WITH 4' X 4' X 1/2" PLYWOOD, EXTERIOR GRADE, GOOD SURFACE ONE SIDE. PROFESSIONALLY PREPARED PLASTIC BOARD OVERLAYS, PERMANENTLY AFFIXED TO THE BOARD ARE PERMISSIBLE. THE NOTICE BOARD SHALL DISPLAY THE INFORMATION AS SHOWN IN THE FIGURE ON PAGE TWO AND AS SPECIFIED AT THE PRE-CONSTRUCTION MEETING. NOTICE BOARDS MAY BE REUSED, BUT THEY MUST BE CLEAN AND SHOW NO EVIDENCE OF FORMER WORDING.

HELVETICA OR SIMILAR TYPEFACE TITLE SHOULD BE 3" CAPITAL LETTERS (NOTICE OF PROPOSED CONSTRUCTION ACTIVITY). OTHER LETTERS SHOULD BE 2" LETTERS AND THE 'EMERGENCY' TEXT AND PHONE MAY BE 1-1/2" LETTERS. SEE ILLUSTRATION ON PAGE TWO FOR USE OF CAPITAL AND LOWERCASE LETTERS. THE SIZE OF THE COUNTY LOGO WITH THE DEPARTMENT OF PERMITTING AND ENVIRONMENTAL REVIEW'S (PERMITTING) ADDRESS (LETTERING HEIGHT 1") SHALL FIT THE AVAILABLE SPACE AS SHOWN. BORDER AREA AND LINES OF TEXT SHALL BE EVENLY SPACED TO APPROXIMATE THE SAMPLE SHOWN.

LETTERING

BLACK (PERMANENT INK OR SILK-SCREEN)

4. BACKGROUND COLOR WHITE KING COUNTY EMBLEM, IN BLACK LOGO

THE APPLICANT/DEVELOPER SHALL ERECT THE NOTICE BOARD BY SOLIDLY SETTING TWO 4" X 4" POSTS TO 12 TO 24 INCHES INTO THE GROUND: OR STRUCTURALLY ATTACHING IT TO AN EXISTING BUILDING. POST LENGTH SHALL BE AT LEAST 7 FEET ABOVE THE GROUND. TWO 2" X 4" DIAGONAL BRACES SHOULD BE NAILED TO THE INSIDE BACK OF THE POSTS AND STAKED AT THE GROUND TO PROVIDE STABILITY AGAINST WIND OR SOFT SOIL CONDITIONS IF POSTS ARE LESS THAN 24 INCHES INTO THE GROUND. THE NOTICE BOARD SHALL BE ATTACHED TO THE POSTS WITH FOUR LAG BOLTS AND WASHERS (3/8-INCH

NOTICE BOARD LOCATION THE NOTICE BOARD SHALL BE LOCATED:

- AT THE MIDPOINT ON THE SITE STREET FRONTAGE OR AS OTHERWISE DIRECTED BY PERMITTING STAFF
- AT A LOCATION 5 FEET INSIDE THE STREET PROPERTY LINE; A NOTICE BOARD STRUCTURALLY ATTACHED TO AN EXISTING BUILDING SHALL BE EXEMPT FROM THE SETBACK PROVISIONS, PROVIDED THAT THE NOTICE BOARD IS LOCATED NOT MORE THAN 5 FEET FROM THE PROPERTY LINE WITHOUT APPROVAL
- SO THAT THE TOP OF THE NOTICE BOARD IS BETWEEN 7 TO 9 FEET ABOVE GRADE. SO THAT IT IS TOTALLY VISIBLE TO PEDESTRIANS.

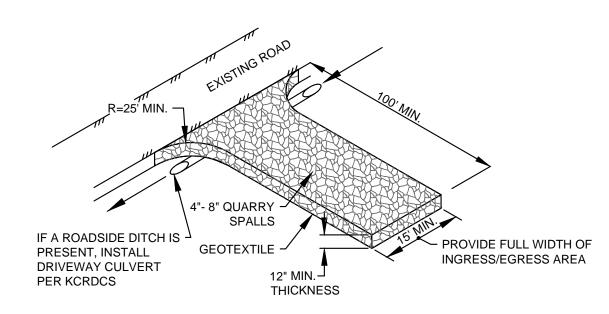
MAINTENANCE AND REMOVAL OF NOTICE BOARD

THE APPLICANT/DEVELOPER SHALL MAINTAIN THE NOTICE BOARD IN GOOD CONDITION THROUGHOUT THE SITE IMPROVEMENT CONSTRUCTION PERIOD, WHICH SHALL EXTEND THROUGH THE TIME OF FINAL CONSTRUCTION APPROVAL BY KING COUNTY PERMITTING OR ITS SUCCESSOR AGENCY OR JURISDICTION.

THE NOTICE BOARD SHALL BE REMOVED WITHIN 14 DAYS AFTER FINAL CONSTRUCTION APPROVAL. EARLY REMOVAL OF THE NOTICE BOARD MAY RESULT IN ENFORCEMENT ACTIONS AUTHORIZED UNDER KCC, TITLE 23 AND MAY DELAY FINAL CONSTRUCTION APPROVAL.

NOTICE OF **CONSTRUCTION ACTIVITY SIGN**

NOT TO SCALE



- 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.

DESIGN AND INSTALLATION SPECIFICATIONS

- 1. SEE FIGURE D.2.1.4.A FOR DETAILS
- A SEPARATION GEOTEXTILE SHALL BE PLACED UNDER THE SPALLS TO PREVENT FINE SEDIMENT FROM PUMPING UP INTO THE ROCK PAD. THE GEOTEXTILE SHALL MEET THE FOLLOWING STANDARDS:

GRAB TENSILE STRENGTH (ASTM D4632) GRAB TENSILE ELONGATION (ASTM D4632) PUNCTURE STRENGTH (ASTM D6241) AOS (ASTM D4751)

200 LBS MIN. 30% MAX.(WOVEN) 495 LBS MIN. 20-45 (U.S. STANDARD SIEVE SIZE)

- DO NOT USE CRUSHED CONCRETE, CEMENT, OR CALCIUM CHLORIDE FOR CONSTRUCTION ENTRANCE STABILIZATION BECAUSE THESE PRODUCTS RAISE PH LEVELS IN STORMWATER AND CONCRETE DISCHARGE TO SURFACE WATERS OF
- 4. HOG FUEL (WOOD BASED MULCH) MAY BE SUBSTITUTED FOR OR COMBINED WITH QUARRY SPALLS IN AREAS THAT WILL NOT BE USED FOR PERMANENT ROADS. THE EFFECTIVENESS OF HOG FUEL IS HIGHLY VARIABLE, BUT IT HAS BEEN USED SUCCESSEULLY ON MANY SITES. IT GENERALLY REQUIRES MORE MAINTENANCE THAN QUARRY SPALLS. HOG FUEL IS NOT RECOMMENDED FOR ENTRANCE STABILIZATION IN URBAN AREAS. THE INSPECTOR MAY AT ANY TIME REQUIRE THE USE OF QUARRY SPALLS IF THE HOG FUEL IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT OR IF THE HOG FUEL IS BEING CARRIED ONTO PAVEMENT. HOG FUEL IS PROHIBITED IN PERMANENT ROADBEDS BECAUSE ORGANICS IN THE SUBGRADE SOILS CAUSE DIFFICULTIES WITH COMPACTION.
- 5. FENCING (SEE SECTION D.2.1.1) SHALL BE INSTALLED AS NECESSARY TO RESTRICT TRAFFIC TO THE CONSTRUCTION
- 6. WHENEVER POSSIBLE, THE ENTRANCE SHALL BE CONSTRUCTED ON A FIRM. COMPACTED SUBGRADE. THIS CAN SUBSTANTIALLY INCREASE THE EFFECTIVENESS OF THE PAD AND REDUCE THE NEED FOR MAINTENANCE.

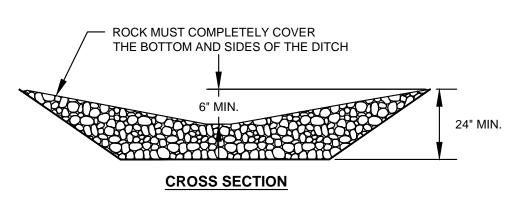
MAINTENANCE STANDARDS

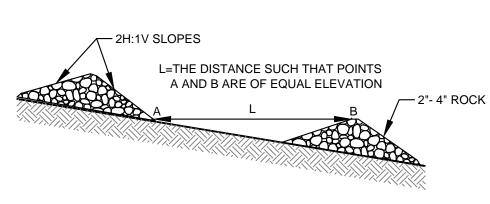
- QUARRY SPALLS (OR HOG FUEL) SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE
- 2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED, IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK, AND WASH WATER SHALL DRAIN TO A SEDIMENT
- 3. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON SITE. THE PAVEMENT SHALL NOT BE CLEANED B' WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, A SMALL SUMP MUST BE CONSTRUCTED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP WHERE IT CAN BE CONTROLLED. WASH WATER MUST BE PUMPED BACK ONTO THE SITE AND CANNOT DISCHARGE TO SYSTEMS TRIBUTARY TO SURFACE WATERS
- 4. ANY QUARRY SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED
- 5. IF VEHICLES ARE ENTERING OR EXITING THE SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING (SEE SECTION D.2.1.1) SHALL BE INSTALLED TO CONTROL TRAFFIC.

CONSTRUCTION ENTRANCE DETAIL

ACCESS ROAD AND ACCESS POINT NOTES

ACCESS ROADS AND ACCESS POINTS SHALL BE A MINIMUM OF 15' WIDE WITH A MAXIMUM OF A 2% CROSS SLOPE, 15% DOWNWARD/UPWARD SLOPE, AND SHALL BE CONSTRUCTED AND SUBSEQUENTLY RECLAIMED AS TRENCH FILLING DICTATES, ENSURING NO ROAD REMAINS LONGER THAN NECESSARY.

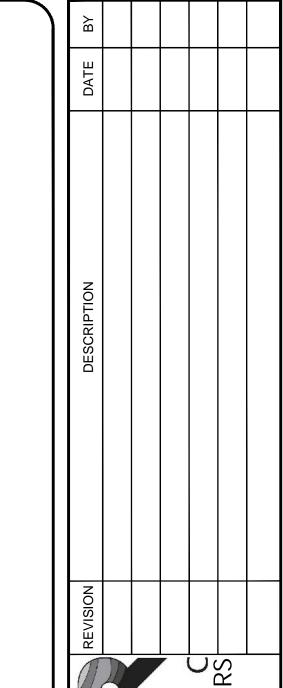




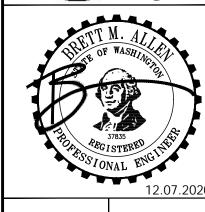
CHECK DAM SPACING

ROCK CHECK DAMS

NOT TO SCALE





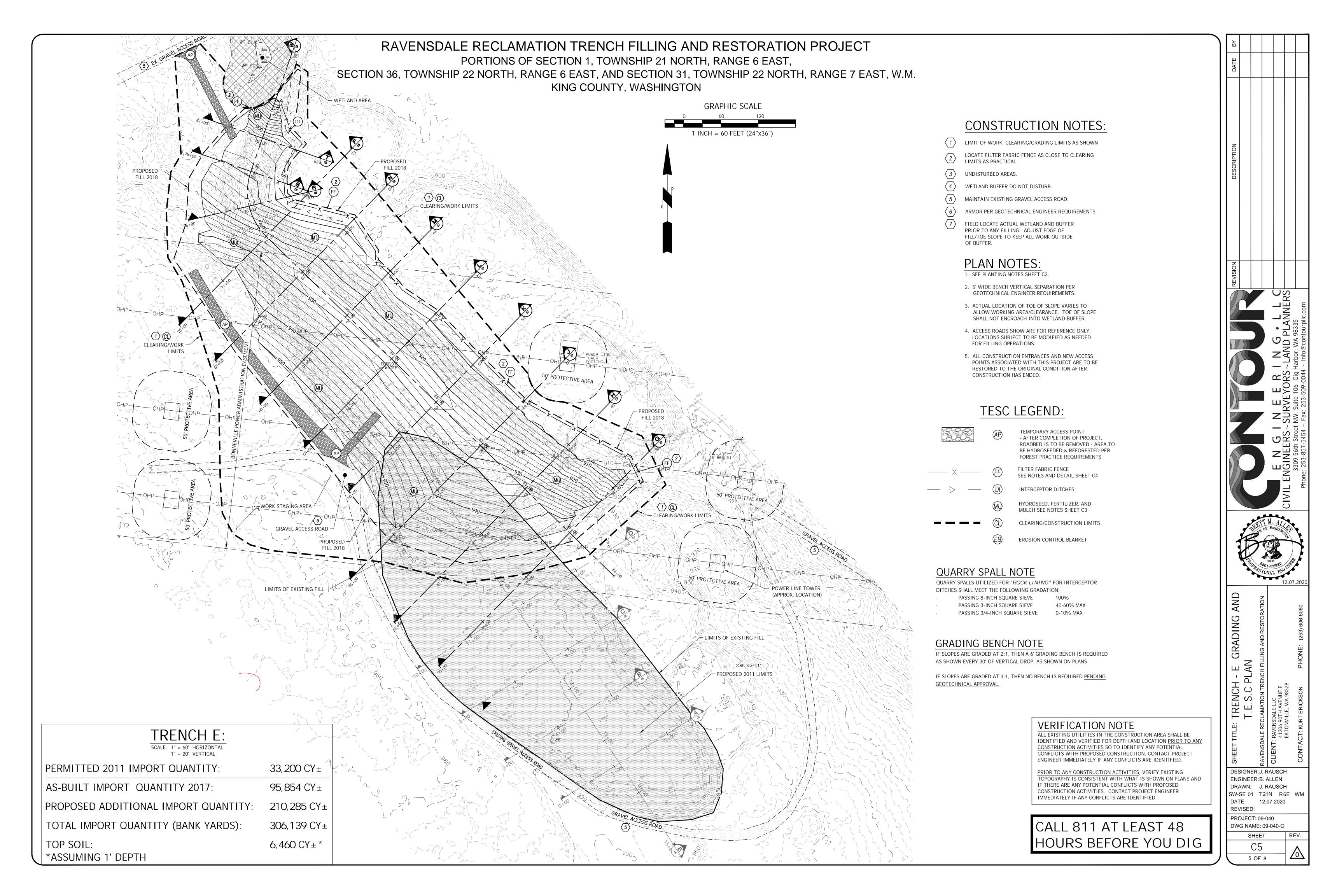


DESIGNER: J. RAUSCH ENGINEER:B. ALLEN DRAWN: J. RAUSCH SW-SE 01 T21N R6E WM DATE: 12.07.2020

REVISED: PROJECT: 09-040 DWG NAME: 09-040-C

SHEET

4 OF 8



GRAPHIC SCALE 0 60 120 1 INCH = 60 FEET (24"x36")

RAVENSDALE RECLAMATION TRENCH FILLING AND RESTORATION PROJECT

PORTIONS OF SECTION 1, TOWNSHIP 21 NORTH, RANGE 6 EAST,

SECTION 36, TOWNSHIP 22 NORTH, RANGE 6 EAST, AND SECTION 31, TOWNSHIP 22 NORTH, RANGE 7 EAST, W.M.
KING COUNTY, WASHINGTON

TRENCH E:

SCALE: 1" = 60' HORIZONTAL

1" = 20' VERTICAL

PERMITTED 2011 IMPORT QUANTITY: 33,200 CY±

AS-BUILT IMPORT QUANTITY 2017: 95,854 CY±

PROPOSED ADDITIONAL IMPORT QUANTITY: 210, 285 CY±

TOTAL IMPORT QUANTITY (BANK YARDS): 306,139 CY±

6,460 CY±*

FILL DURING 2011 -

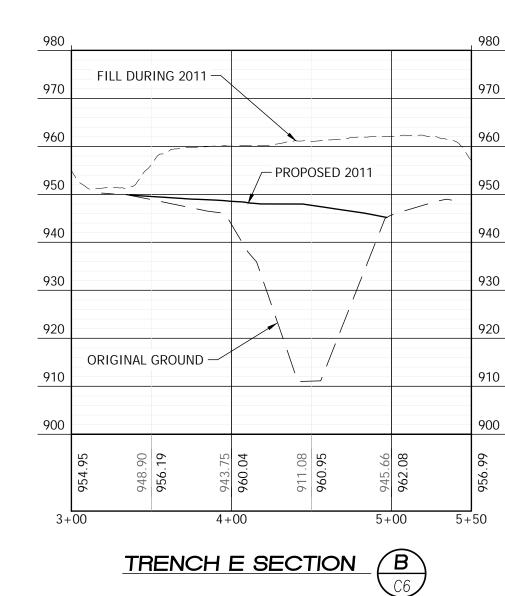
PROPOSED 2011

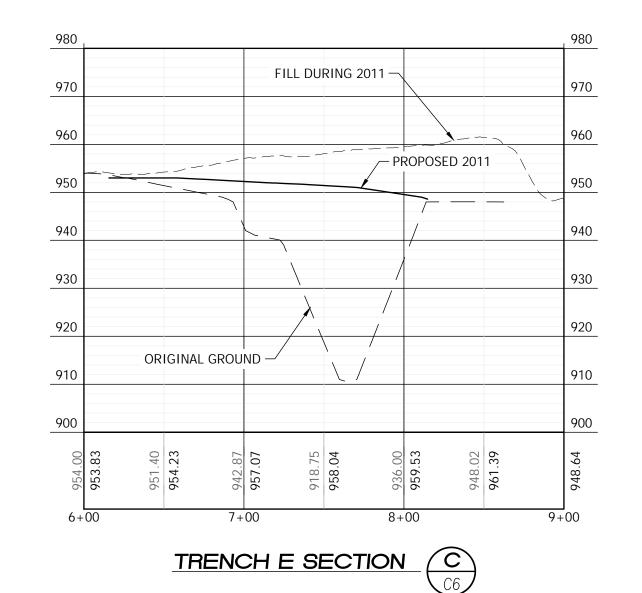
ORIGINAL GROUND

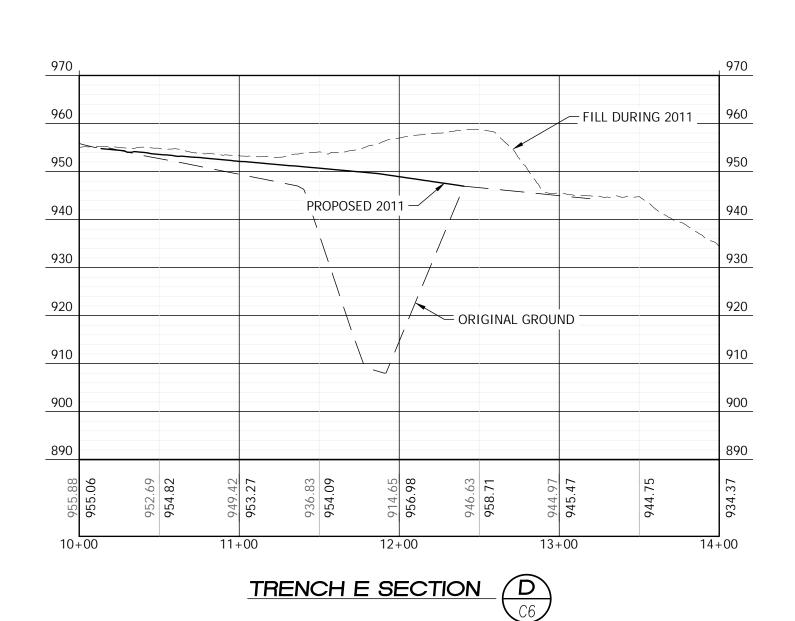
TRENCH E SECTION (A)

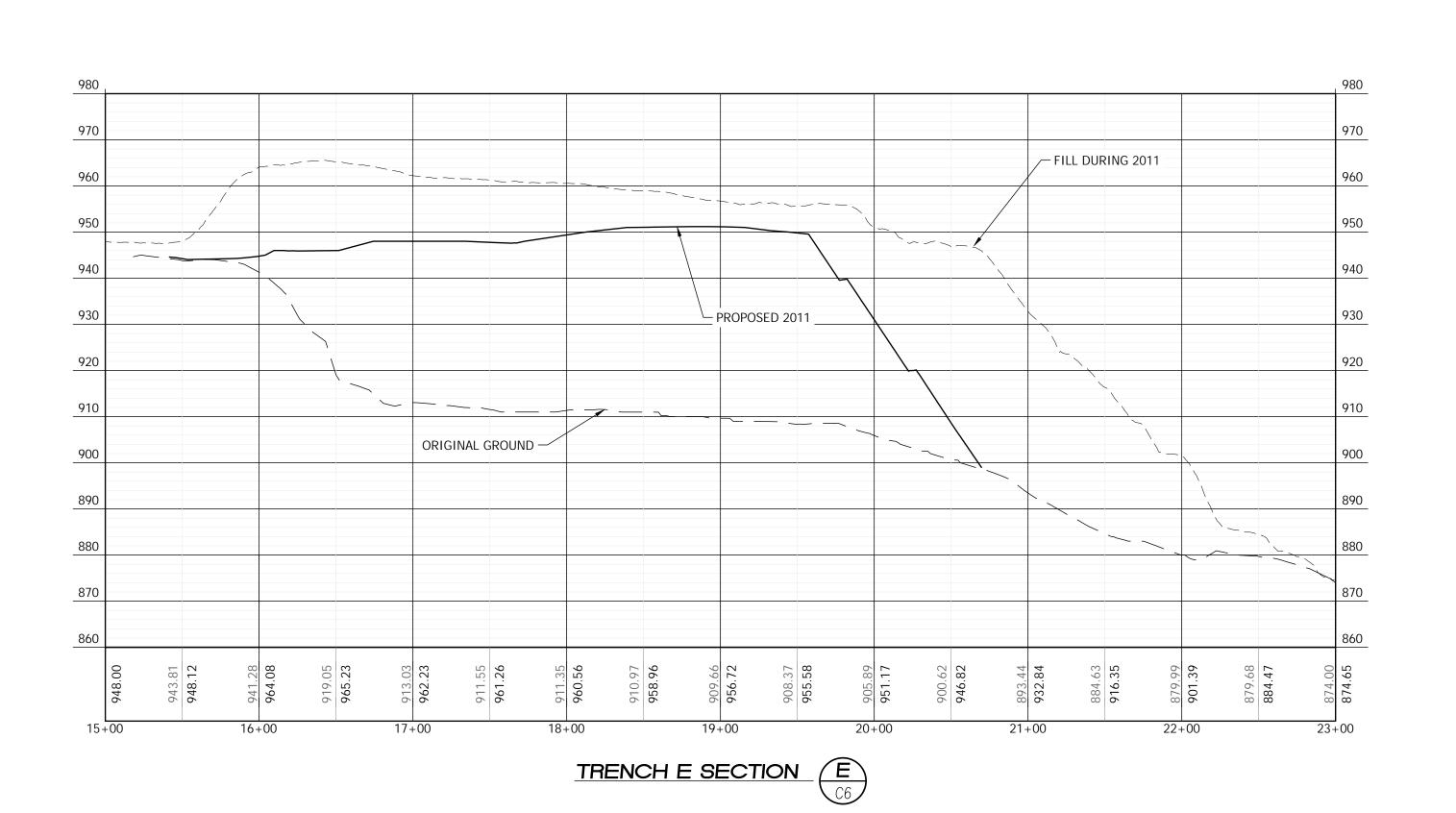
TOP SOIL:

*ASSUMING 1' DEPTH











RAVENSDALE RECLAMATION TRENCH FILLING AND RESTORATION PROJECT GRAPHIC SCALE PORTIONS OF SECTION 1, TOWNSHIP 21 NORTH, RANGE 6 EAST, SECTION 36, TOWNSHIP 22 NORTH, RANGE 6 EAST, AND SECTION 31, TOWNSHIP 22 NORTH, RANGE 7 EAST, W.M. 1 INCH = 60 FEET (24"x36")KING COUNTY, WASHINGTON TRENCH E: SCALE: 1" = 60' HORIZONTAL 1" = 20' VERTICAL PERMITTED 2011 IMPORT QUANTITY: 33,200 CY± AS-BUILT IMPORT QUANTITY 2017: 95,854 CY± PROPOSED ADDITIONAL IMPORT QUANTITY: 210,285 CY± TOTAL IMPORT QUANTITY (BANK YARDS): 306,139 CY± TOP SOIL: 6,460 CY±* PROPOSED GRADE AT TOP OF AMENDED SOILS CAP. 1 FOOT *ASSUMING 1' DEPTH MIN. DEPTH (2018) — PROPOSED GRADE AT TOP OF AMENDED SOILS CAP. 1 FOOT MIN. DEPTH (2018) CLEAN SOIL PROPOSED GRADE AT TOP OF -AMENDED SOILS CAP. 1 FOOT MIN. DEPTH (2018) -CLEAN SOIL - EXISTING GROUND = EXISTING GROUND -EXISTING GROUND $\overline{-}$ 944.91 931.83 908.55 900.18 890.64 932.96 879.16 916.97 925.13 TRENCH E SECTION G TRENCH E SECTION C7 TRENCH E SECTION (H) - Proposed grade at top of $\,--$ = PROPOSED GRADE AT TOP OF -AMENDED SOILS CAP. 1 FOOT AMENDED SOILS CAP. 1 FOOT PROPOSED GRADE AT TOP OF AMENDED SOILS CAP. 1 FOOT MIN. DEPTH (2018) MIN. DEPTH (2018) MIN. DEPTH (2018) -CLEAN SO'IL CLEAN SOIL MATERIĄL MATERIAL −CLEAN SÓIL-MATERIAL EXISTING GROUND -EXISTING GROUND — ENGINEER:B. ALLEN DRAWN: J. RAUSCH SW-SE 01 T21N R6E WM DATE: 12.07.2020 TRENCH E SECTION (K) TRENCH E SECTION (L) TRENCH E SECTION REVISED: PROJECT: 09-040 DWG NAME: 09-040-C SHEET 7 OF 8

GRAPHIC SCALE 1 INCH = 60 FEET (24"x36")

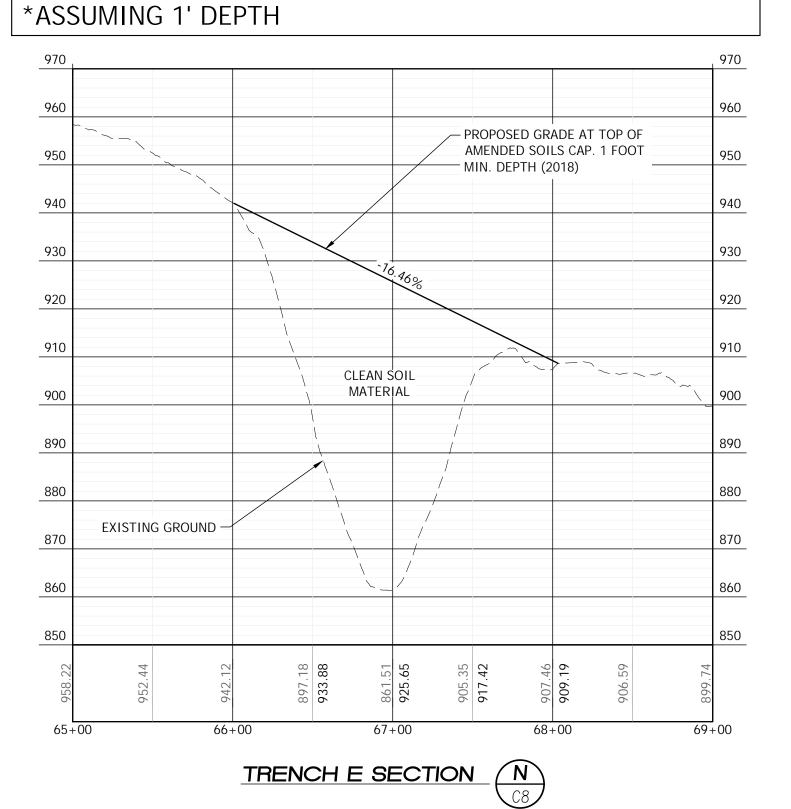
TOP SOIL:

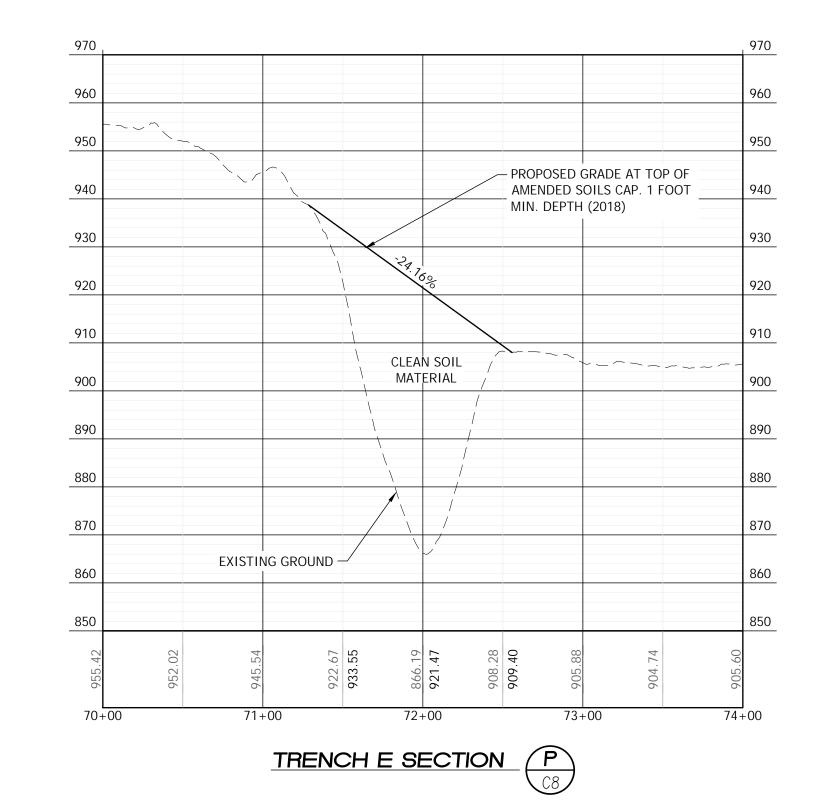
RAVENSDALE RECLAMATION TRENCH FILLING AND RESTORATION PROJECT

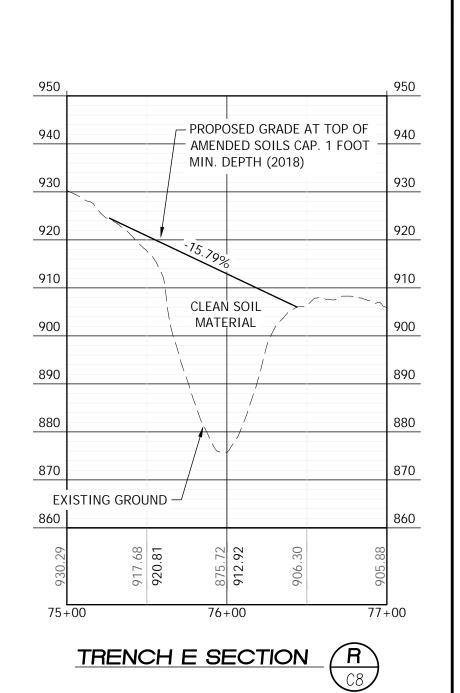
PORTIONS OF SECTION 1, TOWNSHIP 21 NORTH, RANGE 6 EAST,

SECTION 36, TOWNSHIP 22 NORTH, RANGE 6 EAST, AND SECTION 31, TOWNSHIP 22 NORTH, RANGE 7 EAST, W.M. KING COUNTY, WASHINGTON









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