

TECHNICAL MEMORANDUM

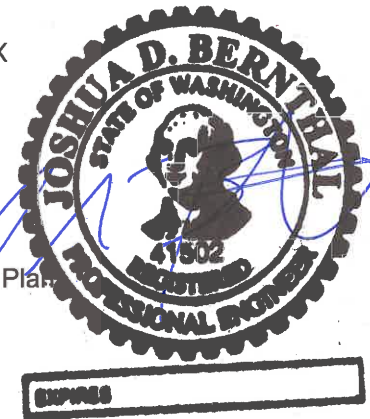
DATE: December 11, 2015

TO: Mr. Kyle Parker, Washington State Department of Ecology, Central Regional Office

CC: Bill Preston, Washington State Department of Transportation
Sam Hunn, Washington State Department of Ecology, Central Regional Office
Jeff Fowlow, U.S. Environmental Protection Agency, Region X
Dale Becker – U.S. Environmental Protection Agency, Region X
Elizabeth Sanchey – Yakima Nation
Neil Doherty – National Response Corporation

FROM: Josh Bernthal, P.E.

RE: Excavation Plan and Temporary Erosion and Sediment Control Plan
Emergency Response to Gasoline Spill
1-90 at Milepost 80
Cle Elum, Washington



EPI Project Number: 71201.0

INTRODUCTION

Environmental Partners, Inc. (EPI) has prepared this Excavation Plan and Temporary Erosion and Sediment Control (TESC) Plan to support an emergency response to a gasoline spill by a Kenan Advantage Group, Inc. (Kenan) fuel truck in the median of Interstate 90 (I-90), in Cle Elum, Washington (the "Site"). EPI and National Response Corporation (NRC) were collectively retained to assist with the remedial response to the release. The intent of this plan is to provide guidance for the remedial methods and erosion control requirements to be followed during the remedial work planned to begin on December 13, 2015. This plan was prepared in general accordance with the requirements of the Model Toxics Control Act (70.105D RCW) and its implementing regulations (WAC 173-340; collectively referred to in this plan as "MTCA").

The Washington State Department of Transportation (WSDOT) owns the property where the release occurred and is in full communication with EPI and NRC regarding the response actions taken to date. The Washington State Department of Ecology (Ecology), the U.S. Environmental Protection Agency (EPA), and Yakima Nation are additionally aware of the current progress made to date through several telephone conference calls and have accepted a draft version of this document. Contact information for the parties involved is provided below:

Bill Preston – WSDOT	email: prestob@wsdot.wa.gov
Sam Hunn – WA Ecology	email: sahu461@ecy.wa.gov
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Jeff Fowlow – EPA	email: Fowlow.Jeffrey@epa.gov
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Josh Bernthal – EPI	email: joshb@epi-wa.com
Neil Doherty – NRC	email: ndoherty@nrcc.com

While the spill occurred in the median of the interstate, the location of the release was immediately west of the interstate bridge that crosses the Cle Elum River. A steep slope to the river topographically divides the Site into two distinct areas, a flat area at roughly the interstate elevation, referred to as the “high bank,” and the sloped embankment of the river to the east, referred to as the “low bank.”

EXTENT OF IMPACTS

After emergency measures were completed, NRC dug three test pits:

- An 8-foot-deep test pit located approximately 275 feet west of the high bank.
- An 8-foot-deep test pit located in the area of the highest impacts.
- An 11-foot-deep test located approximately 10' west of the high bank.

All three test pits contained visible impacts to the depth of exploration.

From December 8 through December 10, NRC dug four additional test pits with oversight by EPI:

- A 12-foot-deep test pit located approximately 375 feet west of the high bank. No impacts observed.
- A 10-foot-deep test pit located just north of the area with the highest impacts. Impacts did not appear to be present on the north side of this test pit (approximately 10 feet south of the westbound lanes). Impacts were present in shallow soils near the center of the median in this test pit.
- A 12-foot-deep test pit located just east and south of the area with the highest impacts. Impacts did not appear to be present on the south side of this test pit (approximately 10 feet north of the eastbound lanes). Impacts were present in shallow soils near the center of the median in this test pit.
- A 3-foot-deep test pit located approximately 20 feet east of the high bank along the low bank. No impacts were observed down to groundwater.

Groundwater was consistently observed at approximately 12 feet below ditch level ground surface. Based on these test pits alone, the following assumptions have been used to estimate the remedial goals listed below:

East-West – To the east, it is estimated that impacts extend 10 feet east of the high bank towards to the low bank. To the west, it is estimated that impacts extend no more than 325 feet west of the high bank. Therefore, EPI estimates 335 feet of impacts in the east-west direction.

North-South – The median is approximately 70 feet wide and slopes towards a center ditch. Because of the slope, and evident vertical migration of impacts observed in the test pits, it is estimated that the average north-south extent of impacts is 25 feet.

Depth – Groundwater is estimated to be approximately 12 feet below ditch level ground surface. Impacts were observed throughout the test pits in the impacted zone. Therefore, it is estimated that the average depth of excavation throughout the 335-foot by 25-foot area will be 12 feet deep.

Using the assumptions listed above, EPI estimates approximately 3,800 cubic yards could potentially be excavated at the Site.

SITE CONTROL

In order to maintain adequate control of the progress of the excavation and confirmation meeting cleanup objectives, a grid system will be employed to methodically maintain aerial, and vertical extents of the Site work. All of the work will be coordinated around a single location and elevation. A “Zero” station will be set immediately west of the trusses of the westbound bridge at the edge of asphalt. This Zero station will be the reference point from which all soil and surface water samples will be collected. A grid spacing of 20 feet in the east and west directions from that point will be laid out such that each grid will represent 400 square feet, to satisfy the bottom sample requirement for establishing an adequate number of samples, as discussed below. Structural drawings of the bridge provided by WSDOT show an approximate elevation of 1,987 feet above mean sea level (AMSL).

Sample names will be created according to the following guidelines: sample names will begin with the east/west direction and distance of the sample location from the Zero station, then the north/south direction and distance of the sample location from the Zero station, then the depth below the Zero station, and lastly, a B or SW for bottom or sidewall sample. For example, a sample collected from the bottom of the excavation 160 feet west and 45 feet south of the zero station at 21 feet below the Zero station elevation would be called: W160-S45-21-B. A sample collected from the sidewall of the excavation 10 feet east and 20 feet south of the Zero station at 13 feet below the Zero station elevation would be called: E10-S20-13-SW.

REMEDIAL EXCAVATION METHODS

All excavation areas will be protected using Best Management Practices to prevent runoff to the river. Additional details are provided in the attached TESC Plan (Figure 1).

Excavation work will begin based on the results of the test pits. Excavation work will start at the eastern extent of confirmed impacts and proceed westerly, down the median. NRC will use a track hoe to excavate impacted soils and a front-end loader to transport soils to a pre-defined loading area west of the spill site for transport and disposal. Due to expected inclement weather, direct loading into trucks will

be preferred, but soils may also be stockpiled pending transportation to a disposal facility. Stockpiled soils will be covered whenever possible to prevent migration of petroleum products or sediment. Any stockpiled soils, equipment or materials will be located within areas of the median protected by concrete barriers placed along the shoulder(s) of the interstate. In addition, any vehicles or equipment parked on the shoulder of the interstate will necessarily require a lane closure. NRC will provide a traffic control plan that will be reviewed and approved by WSDOT prior to implementation.

The release is known to have been of “fresh” unleaded gasoline fuel. After impacted soils are excavated, soil samples will be collected from the excavation limits and analyzed by a certified fixed-base or mobile, laboratory for constituents of concern (COCs) including gasoline-range organics (GRO) and aromatic fuel compounds (i.e., benzene, toluene, ethylbenzene, and total xylenes [BTEX]). GRO analyses will be performed using the NWTPH-Gx method and BTEX analysis will be performed using EPA Method 8021B. For the purposes of this remediation the target cleanup levels (CULs) will be the MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses (Method A CUL). The Method A CULs in soil are considered protective of groundwater to a drinking water standard. Since the drinking water standards for the COCs are lower than the surface water standards, these CULs are deemed sufficiently protective. Groundwater will be evaluated according to the MTCA Method A Groundwater CULs. Surface water samples will be evaluated according to the MTCA Method B values for surface water.

If soil samples contain COC concentrations that exceed an applicable CUL, excavation will continue and the excavation limits will be resampled until concentrations of GRO and BTEX in final performance samples are less than applicable CULs. Work will continue in this fashion unless limited by access or other considerations. In all cases, soil samples from the final limits of excavation will be collected and analyzed to document soil conditions at the terminal limits.

Performance samples will be collected along the bottom of the excavation at a minimum of approximately one sample for every 400 square feet of excavation bottom, using the sample identification process described above. Samples will be collected along the sidewalls of the excavation at a minimum of approximately one sample for every 300 square feet of exposed sidewall.

For sidewalls deeper than 10 feet, two samples will be collected at varying depths at each sampling station. For example, on a 15-foot sidewall, samples will be collected at the mid-point of the upper 7.5 feet (approximately 3.25 feet deep) and at the mid-point of the lower 7.5 feet (i.e., 12.75 feet bgs). This sampling procedure may be modified based on field observations of obvious zones of impact within the soil. Additional samples may be collected or the sample depths may be modified. In addition, representative soil samples will be collected within 6 feet of ground surface at excavation limits to aid in the development of Terrestrial Ecological Evaluation (TEE) requirements.

During remedial activities, surface water runoff and groundwater will accumulate within the excavation area. Some free product may also accumulate within the excavation area. The water and product will be pumped from areas of accumulation using a vacuor truck. The water will then be transported to an appropriate disposal facility. Please see the attached TESC Plan for further details (Figure 1).

Depending on the progress of the remedial efforts to be conducted, it is possible that a series of perforated well screens may be installed in an east/west orientation in several areas within the median to allow for

the future applications of an oxygen-releasing compound, bioventing, or chemical oxidation methods. Piping would be installed immediately at or above the groundwater table and would be capped on the ends with a single riser pipe to the ground surface. Surface completion of the riser pipes would be similar to the groundwater well surface completion methods described below.

During excavation, overburden soils may be stockpiled for potential re-use as backfill. Due to the expected inclement weather, overburden may not be deemed suitable for re-use. EPI will collect samples from any overburden material prior to use as backfill. Any backfill materials hauled to the Site will be sampled or analytical data will be provided beforehand to confirm the absence of GRO. If overburden samples are collected by EPI, they will be analyzed using EPA Method HCID.

Any soils excavated or replaced within a 1'H:1'V roadway prism from the edge of pavement on either highway direction will be subjected to WSDOT approval prior to the work being performed. Initially, excavation will not approach either the roadway or the bridge footings at greater than a 1:1 slope. If evidence of impacts indicate that COCs are present closer to the roadway or bridge footings than a 1:1 slope, EPI will confer with WSDOT engineers.

Ecology will evaluate whether additional excavation using slot-cutting, institutional or engineering controls, or other techniques are reasonably practicable and/or warranted given the available data.

Waste Disposal

Results from test pit soil samples will be sent to a selected disposal facility and used to create a soil profile and waste manifest. The facility will submit its permit to accept the waste and will be approved as an acceptable disposal facility prior to transportation off-Site. NRC will provide transportation and disposal and will comply with appropriate land disposal restriction requirements.

Cultural Resources

Yakima Nation staff will observe the initial phases of remediation. Since much of the excavation area was previously disturbed for construction of I-90, it is not thought that previously undiscovered cultural artifacts may be present; however, the Yakima Nation will be notified if the excavation work extends to areas particularly near the river. EPI will keep the Yakima Nation staff apprised of excavation and drilling activities and schedule.

Well Installation and Sampling

A total of six monitoring wells have been installed to date using a track-mounted rotosonic drilling rig in the general locations shown on Figure 1. No observable impacts were detected at any of the well locations. The drilling method provided a continuous soil core for inspection and logging. Soil samples were generally retained for laboratory analysis on 5-foot vertical intervals above the water table. Soil samples were submitted for analysis of GRO using the NWTPH-Gx method and BTEX using EPA Method 8021B. Soil analytical results are currently pending as of the date of this plan. A full round of groundwater samples will be collected on December 14 and submitted for analysis of GRO using the NWTPH-Gx method and BTEX using EPA Method 8021B.

Wells MW-1, MW-2, and MW-5 were installed south of the eastbound lanes on the high bank. These three wells were installed to a total depth of 15 feet bgs with 10 feet of 2-inch diameter schedule 40 PVC screen. Water at the time of installation in these wells was generally observed at 9 feet bgs.

Wells MW-3 and MW-4 were installed south of each interstate lane on the lower bank, approximately 30 feet west of the river. These wells were installed to a total depth of 8 feet bgs with 5 feet of 2-inch diameter schedule 40 PVC screen. Depth to groundwater during installation was generally observed at 4.5 feet bgs. These wells will allow for the observance and collection of any separate phase light non-aqueous phase liquids (LNAPL) that may become present, and will be downgradient observation locations for monitoring for any migration of dissolved-phase constituents.

One additional well was installed west of the release site in the median of the high bank. This well was constructed similar to the other wells located on the high bank. Due to the topography of the ditch in the median, the grade is generally to the west towards the catch basin. This well will be utilized to monitor for the presence of petroleum migrating to the west, if it is occurring.

The details of well installation were recorded onto a boring log and well construction diagram. The wellheads were completed with flush mounted, locking, and sealed monuments set at grade with a concrete surface seal. Final groundwater monitoring locations will be surveyed. The wells were developed at the time of installation using surging and overpumping and a total of about 10 wetted casing volumes or if the extracted water was visibly clear before then.

Groundwater well sampling will be conducted using a peristaltic pump at a flow rate of less than 100 milliliters/minute to limit the potential loss of volatiles during sample collection. Samples will be retained in three 40 milliliter VOA vials with HCl preservative.

Initial sampling will occur on December 14, 2015. The wells will then be inspected twice a week using a transparent bailer to look for sheen or LNAPL for a period of 4 weeks. Additional sampling will be performed based on results of the remedial excavation.

Surface water sampling is not currently proposed or required; however, will be implemented if evidence of a sheen or seeps along the river banks are observed. If necessary, surface water samples will be collected in three 40 milliliter VOA vials with HCl preservative.

All wells were installed under the requirements of WAC 173-160, Minimum Standards for Well Construction and Maintenance, and were performed under the supervision of a Washington Licensed Well Driller.

After completion of excavation activities, an additional monitoring well will be installed in the center of the excavation area.

GENERAL NOTES

1. THESE PLANS ARE FOR GENERAL PURPOSES ONLY. ACTUAL SITE CONDITIONS ARE SUBJECT TO CHANGE. ANY SIGNIFICANT CHANGES REQUIRED TO MEET SITE OBJECTIVES WHICH ARE OUTSIDE OF THE PERMITTED REQUIREMENTS, SHALL BE BROUGHT TO THE ATTENTION OF JOSH BERNTHAL, P.E. (THE ENGINEER: 425-241-5400).
2. THE CONTRACTOR SHALL PERFORM PRIVATE AND PUBLIC UTILITY LOCATE PRIOR TO PERFORMING ANY UNDERGROUND WORK. CALL 1-800-424-5555.
3. WORK WILL BE CONDUCTED UNDER THE SUPERVISION OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT).
4. ALL PERSONNEL ARE TO PERFORM WORK ACCORDING TO THEIR SITE SPECIFIC HEALTH AND SAFETY PLANS (HASP) PER OSHA REGULATIONS; TITLE 29 CFR 1910, AND KEEP A COPY OF THE HASP ON SITE AT ALL TIMES.
5. ANY CHANGES IN CONDITIONS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY UPON DETECTION.
6. ALL GEOTECHNICAL CONDITIONS, MONITORING, SLOPE STABILITY, BRIDGE SETTLEMENT MONITORING, ETC., WILL BE THE RESPONSIBILITY OF WSDOT. EPI WILL ACT IN GOOD FAITH TO NOTIFY WSDOT OF ANY UNSAFE CONDITIONS AND WILL HAVE AUTHORITY OF SHUTTING DOWN WORK UNTIL POTENTIALLY UNSAFE CONDITIONS ARE ADEQUATELY ADDRESSED.
7. WORK TO BE CONDUCTED WITHIN APPROVED SCOPE OF WORK CONTAINED WITHIN THESE DRAWINGS.

TEMPORARY EROSION/SEDIMENT CONTROL (TESC) AND STORMWATER MANAGEMENT NOTES

1. THE CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES (BMP'S) TO REDUCE AND/OR DETER THE MOBILIZATION OF SEDIMENT OFF SITE.
2. LOWER BANK SILT FENCE TO BE INSTALLED FIRST, INSTALL UPPER BANK SILT FENCE AFTER 1:1 ACCESS SLOPE IS ESTIMATED.
3. STRAW BALES, SILT DIKE LOOSE STRAW MATTING, OR OTHER APPROPRIATE METHODS MAY SUBSTITUTE SILT FENCE IF COBBLES OR OTHER CONDITIONS RENDER SILT FENCE INEFFECTIVE.
4. IF UNUSUAL SIGNS OF SILT OR TURBIDITY IN SURFACE WATER IS OBSERVED, WORK WILL CEASE UNTIL EROSTION CONTROL MEASURES ARE CORRECTED.
5. IN GENERAL, STORMWATER WILL BE COLLECTED WITHIN THE EXCAVATION CAVITY AND WILL BE PUMPED BY A VACTOR TRUCK AS NECESSARY TO AID IN SOIL REMOVAL OR RETREIVE CONTAMINATED STORMWATER FOR DISPOSAL.
6. IF IT IS NECESSARY TO CAPTURE AND STORE STORMWATER, THIS WATER MAY NOT BE RELEASED TO THE STORM DRAIN UNLESS TESTED TO MEET ALL APPLICABLE SURFACE WATER STANDARDS, AND WRITTEN APPROVAL IS RECEIVED BY WA STATE DEPARTMENT OF ECOLOGY.
7. STOCKPILES ARE TO BE COVERED PER DIAGRAM AS NECESSARY TO PREVENT THE MIGRATION OF SOILS.
8. SEDIMENT SHALL BE REMOVED FROM TRUCKS AND EQUIPMENT BEFORE LEAVING THE CONSTRUCTION SITE. IN THE EVENT OF FAILURE OF THE TEMPORARY EROSION AND SEDIMENT CONTROL (TESC) SYSTEM RESULTING IN SEDIMENT TRACKING ONTO PAVEMENT, THE CONTRACTOR SHALL IMMEDIATELY IMPLEMENT MEASURES TO CORRECT THE FUNCTIONALITY OF THE TESC.
9. EROSION CONTROL FEATURES SHALL BE PLACED IN GENERAL CONFORMITY WITH THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON.
10. IF EROSION CONTROL FEATURES ARE NOT PROVIDING ADEQUATE PROTECTION AGAINST THE MIGRATION OF SOILS VIA RAINWATER/STORMWATER, ALL PROJECT WORK WILL STOP, AND WILL NOT BEGIN UNTIL SUCH TIME THAT ADEQUATE PROTECTIVE MEASURES ARE INSTALLED.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE EFFECTIVE MANAGEMENT OF EROSION CONTROL PROTECTION. THE CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL FEATURES TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

EXCAVATION NOTES

1. TRUCKS WILL BE LOADED WHILE PARKED ON PAVED SHOULDERS AS PRACTICABLE TO MINIMIZE TRACKING SEDIMENT ONTO THE HIGHWAY.
2. THE EXCAVATION WILL PROCEED FROM EAST TO WEST TO MINIMIZE PETROLEUM MIGRATION.
3. IF A PETROLEUM SHEEN IS OBSERVED ON SURFACE WATER, SAUSAGE BOOM, ABSORBANT PADS, OR OTHER METHODS WILL BE EMPLOYED TO MINIMIZE IMPACTS TO SURFACE WATER.
4. SEPARATE PHASE PETROLEUM OR HEAVY STAINING IN CAPTURED STORMWATER WITHIN THE EXCAVATION WILL BE PUMPED TO A VACTOR TRUCK OR BY TRASHPUMP TO A TEMPORARY SEDIMENT TANK FOR LATER TRANSFER TO A VACTOR TRUCK.
5. EXCAVATION SIDEWALLS WILL NOT EXCEED 1'H : 1'V UNLESS SPECIFICALLY ACKNOWLEDGED IN WRITING BY A LICENSED GEOTECHNICAL ENGINEER TO BE PROVIDED BY WSDOT AND IN AGREEMENT WITH ECOLOGY.
6. EXCAVATION LIMITS WILL NOT EXTEND ONTO PAVED PORTIONS OF THE HIGHWAY UNLESS ACKNOWLEDGED IN WRITING BY A QUALIFIED WSDOT REPRESENTITIVE.
7. NO SEDIMENT SHALL BE TRACKED ONTO THE ROADWAYS. SEDIMENT SHALL BE REMOVED FROM TRUCKS AND EQUIPMENT BEFORE LEAVING THE SITE.
8. GRADING SHALL CONFORM TO SHAPES AND CONFIGURATIONS SHOWN ON PLANS AND AS APPROVED BY THE ENGINEER.

SITE RESTORATION NOTES

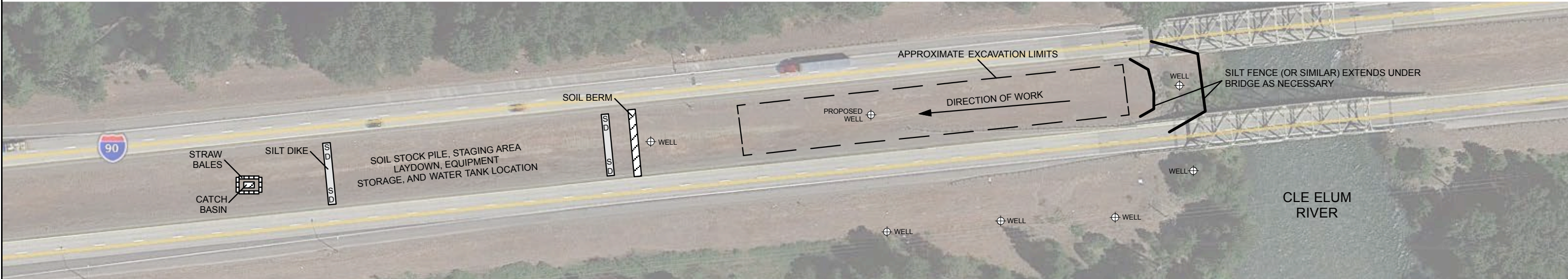
1. SITE RESTORATION TO BE NEGOTIATED WITH WSDOT BUT WILL BE RECONSTRUCTED AND MAINTAINED IN A MANNER CONSISTENT WITH BEST MANAGEMENT PRACTICES.
2. HYDROSEED IF APPLIED, TO BE LAID ACCORDING TO SUPPLIERS RECOMMENDATIONS. IF WEATHER DOES NOT CONDONE THE BENEFICIAL TIMING OF GRASS PLACEMENT, THE CONTRACTORS SHALL WAIT UNTIL SUCH TIME THAT THE HYDROSEED HAS REASONABLE CHANCE OF SURVIVAL.
3. ANY DISRUPTED UTILITIES SHALL BE FUNCTIONAL AND INSTALLED TO LOCAL, STATE, AND FEDERAL CODES AT COMPLETION OF PROJECT.
4. THE SLOPED AREAS BETWEEN THE HIGH BANK AND LOWER BANK TO BE RESORED TO A CONDITION ACCEPTABLE TO WSDOT AND ECOLOGY. THE SITE WILL BE RESTORED TO ITS PRE-IMPACTED CONDITION AS PRACTICABLE AND WILL BE GRADED IN A MANNER THAT WILL PREVENT SEDIMENT FROM ENTERING THE SURFACE WATER AS A RESULT OF STORMWATER.
5. FINAL GRADES WILL MATCH EXISTING SITE TOPOGRAPHY.

CATCH BASIN SILT TRAP NOTES

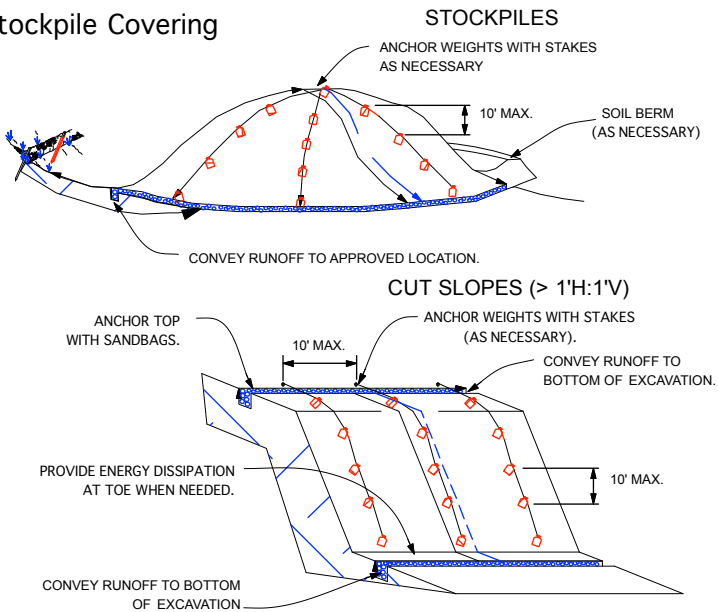
1. SILT TRAPS TO BE INSTALLED IN THE CATCH BASIN WEST OF THE EXCAVATION LOCATION PRIOR TO THE DISTURBANCE OF ANY SOIL.
2. SILT TRAPS ARE TO BE ROUTINELY CHECKED FOR THE ACCUMULATION OF SILT, AND ENSURE THEIR EFFECTIVE OPERATION. SILT TRAPS SHALL BE CLEANED FREE OF SILT AS NECESSARY TO PROMOTE THEIR EFFECTIVE OPERATION.
3. THE CONTRACTOR SHALL ENSURE THAT NO CHEMICALS, PETROLEUM PRODUCTS OR ENVIRONMENTALLY HAZARDOUS CHEMICALS ENTER THE STORM DRAIN AS A RESULT FROM SITE OPERATIONS.

TRIANGULAR SILT DIKE NOTES

1. TRIANGULAR SILT DIKE SHALL BE INSTALLED AS A PROTECTIVE MEASURE ONLY. SOILS WILL STILL BE HANDLED IN A MANNER THAT WILL MINIMIZE THE RELEASE OR MIGRATION OF SOILS VIA RAINWATER.
2. TRIANGULAR SILT DIKE OR STRAW BALES TO BE INSTALLED AROUND THE SOIL LOADING AND STOCKPILE AREA AT THE END OF EACH DAY TO PREVENT THE MIGRATION OF SOILS AND RAINWATER.
3. TRIANGULAR SILT DIKE TO BE HELD IN PLACE WITH SAND BAGS AS NECESSARY.
4. IF TRIANGULAR SILT DIKE IS NOT PROVIDING SUFFICIENT PROTECTION, ADDITIONAL PROTECTION SUCH AS HAY BALES MAY BE UTILIZED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

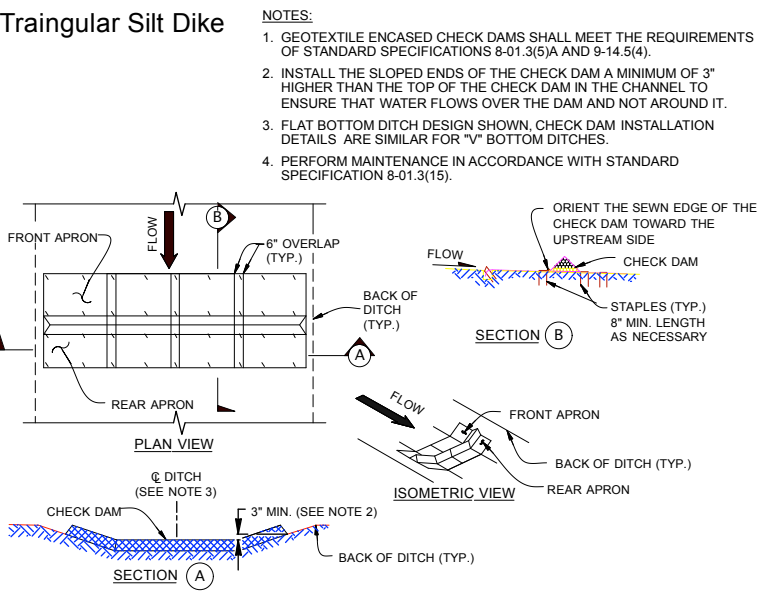


Stockpile Covering



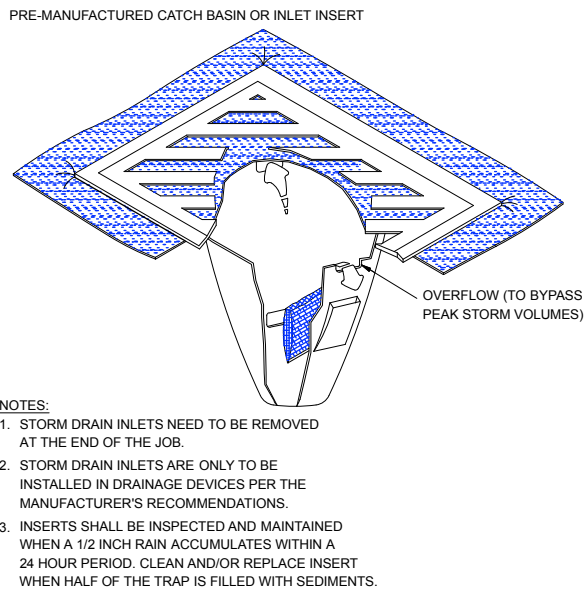
REASON: TO PROVIDE IMMEDIATE TEMPORARY EROSION PROTECTION TO SLOPES AND DISTURBED AREAS THAT CANNOT BE COVERED BY MULCHING & MATTINGREA

Traingular Silt Dike

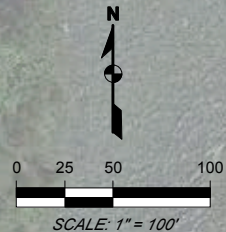


REASON: TO INTERCEPT & RETAIN SMALL AMOUNTS OF SEDIMENT AND DECREASE THE VELOCITY OF SHEET FLOW AND LOW TO MODERATE LEVEL CHANNEL FLOWS.

Storm Drain Silt Trap




REASON: TO PREVENT SEDIMENT FROM ENTERING STORM DRAINAGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA.



SOURCE: GOOGLE EARTH 7/15/14

FIGURE 1
TESC PLAN

PREPARED BY			
REPORT	EXCAVATION AND TEMPORARY EROSION AND SEDIMENT CONTROL PLAN		
LOCATION	INTERSTATE-90 MILEPOST 80 CLE ELUM, WASHINGTON		
PREPARED FOR	KENAN ADVANTAGE GROUP		
DATE 12/11/15	DRAWN BY CLM	REVIEWED BY JDB	PROJECT NUMBER 71201.0