

**ATTACHMENT 13 - Response to King County Comments
dated November 18, 2019, Associated Earth Sciences, Inc.**



associated
earth sciences
incorporated

June 8, 2020

Project No. 20170017H001

Lakeside Industries, Inc.
6505 226th Place SE, Suite 200
Issaquah, Washington 98027

Attention: Ms. Karen Deal

Subject: Response to King County Comments dated November 18, 2019
King County File COMM18-0014 & SHOR18-0032
Maple Valley Asphalt Plant
18825 SE Renton-Maple Valley Road
King County, Washington

Dear Ms. Deal:

Associated Earth Sciences, Inc. (AESI) is pleased to present this letter in response to comments provided by King County Permitting Division in a letter dated November 18, 2019 for the proposed Lakeside Asphalt Plant. This letter provides additional geologic, geomorphic, and hydrogeologic information in response to King County's November 18, 2019 comment letter. AESI reviewed the following additional documents: "Mitigation Plan, Maple Valley Asphalt Facility," revised June 4, 2020, by The Watershed Company (TWC,) "Critical Areas Report," revised June 2020, by TWC, and "Site Plan Exhibit," dated June 2, 2020, by David Evans and Associates, Inc. (DEA).

Comment:

Page 3, Site Engineering Comments, item 4. The site contains landslide hazard areas. These sensitive areas must be reviewed by our Geotech Review section for potential consideration in the design of the storm drainage system.

Response: Comment acknowledged.

Comment:

Page 4, Site Engineering Comments, item 5. The project is located within groundwater protection areas. These include but are not limited to critical aquifer recharge areas (CARAs), wellhead protection areas or zones (including 1, 5 and 10 year time of travel zones for municipal well protection areas, if available), and sole source aquifers. Provide explanation on how you meet the groundwater protection criteria as described in page 5-51 to 5-53 of the 2016 KCSWDM.

Response:

The underlying purpose of the Critical Aquifer Recharge Areas (CARAs) description contained in AESI's October 2, 2018 "Critical Area Assessment" (CAA) letter-report prepared for Lakeside

Industries, Inc. was to disclose the project site's high susceptibility rating to contamination of area groundwater resources. The letter-report specifically discloses the relevant King County CARA code (*King County Code* [KCC] 21A.06.253C), which identifies both areas with a high susceptibility and medium susceptibility to contamination. The referenced KCC specifically identifies the relationship between high or medium susceptibility and "wellhead protection areas for a municipal or district drinking water system" well. King County adopted a CARA map under KCC 21A.24.311. Figure 5 of the letter-report includes the mapped areas identified by King County as having either a high susceptibility or medium susceptibility. The map indicates the entire Cedar River valley classifies as either high or medium susceptibility, with most of the Cedar River valley and the northern portion of the project site classified as high susceptibility.

Areas mapped as highly susceptible to contamination are considered Category I, and medium susceptibility areas are considered Category II under KCC 21A.24.313. Development standards in CARAs are identified under KCC 21A.24.316. The CARA discussion discloses the proposed use of two 30,000-gallon heated asphalt cement storage tanks, one 10,000-gallon diesel tank, and one 10,000-gallon emulsified asphalt tank. As required under KCC 21A.24.316.A.8, the proposed aboveground storage tanks for hazardous substances will be protected with primary and secondary containment areas. This mitigation requirement was described in the CAA. The CAA also identified that a spill prevention and response plan would be developed in accordance with the General Permit.

Comment:

Page 10, Section G, below the third bullet: The plan should be prepared in conjunction with assessment by the geotechnical consultant to address sediment deposition processes. Recommendations should be provided to minimize the need for stream disturbance over time.

Response:

Stream A is an intermittent steep gradient gravel-bedded stream, and flows to the north down the steep slopes located along the southern margin of the site. The stream corridor bends to the west as it approaches the toe of the slope as shown on Sheet M1.0 of 14, provided by TWC, attached. The stream gradient flattens abruptly at the confluence with Stream B at the toe of the slope. Sediment accumulates in an alluvial fan at the abrupt change in slope at the confluence of Streams A and B where sediment transport energy is significantly reduced due to the change in slope gradient.

Alluvial fan deposition/aggradation. In the existing condition, sediment is transported from the upslope channel due to long-term incision due to off-site upslope stormwater runoff. The project has no control over the upslope, off-site runoff. The only available practical approach to mitigate on-site channel erosion in Stream A due to the off-site runoff includes maximizing the flow length of Stream A. The current geometry of Stream A already maximizes the flow length by flowing near the toe of slope prior to the confluence with Stream B at the change in gradient at the base of the slope. The longer flow path reduces the rate of headward erosion, as a result

of decreasing the stream gradient. The flattening of the stream gradient decreases flow velocity and minimizes erosion and sediment carrying capacity resulting in reduced sediment transport to the confluence of Streams A and B. The existing geometry of the long flow path must be maintained to minimize future headward erosion in Stream A and associated fan sedimentation at the toe of the slope.

According to information provided by TWC in an email dated May 21, 2020, no grading is proposed in the floodplain at the confluence of Streams A and B. Sediment is expected to continue to accumulate, and the water can back up into Stream B and its floodplain. The water would then travel northwest, downgradient, across the site and back into the existing Stream B channel.

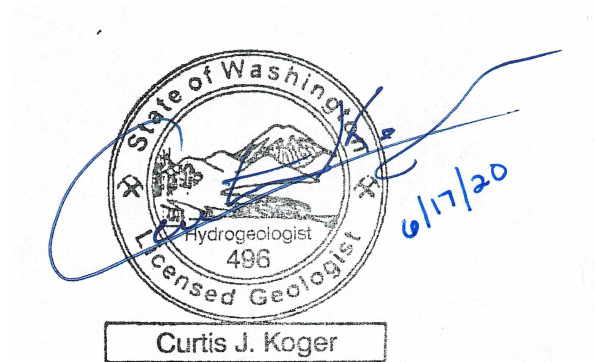
Streambank restoration area regrading/re-enforcement. Stream A has previously breached the streambank resulting in sediment transport and flooding of a portion of the site including the area around the existing wellhouse. TWC's proposed streambank restoration plan incorporates bioengineering techniques designed to minimize future streambank breaching during high flow events. The proposed bioengineered reinforcement plan is intended to mitigate the potential for avulsion (cut-off) in Stream A and associated erosion and sedimentation due to breaching of the streambank.

We appreciate the opportunity to be of service to you on this project. Should you have any questions regarding this letter or other geotechnical aspects of the site, please call at your earliest convenience.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington



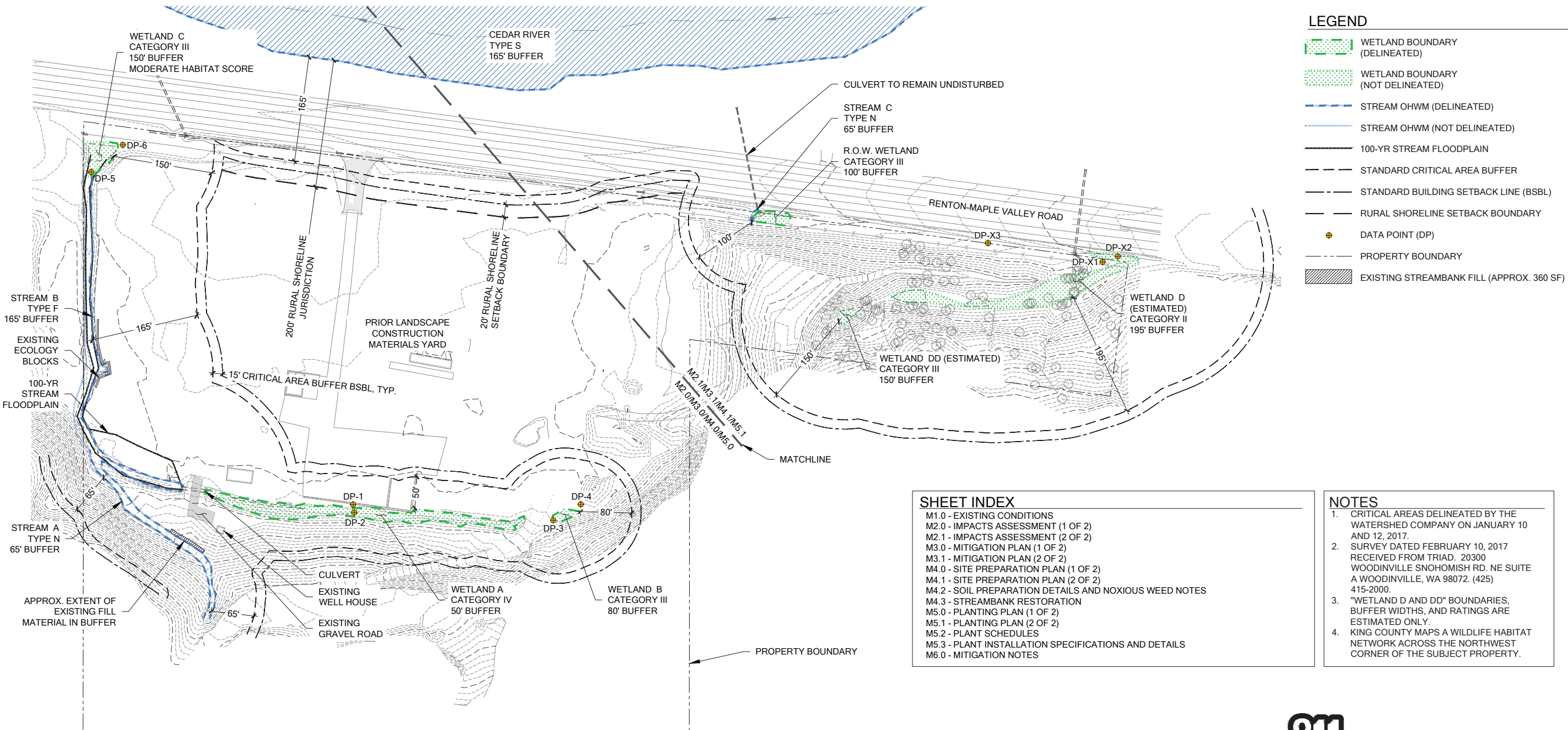
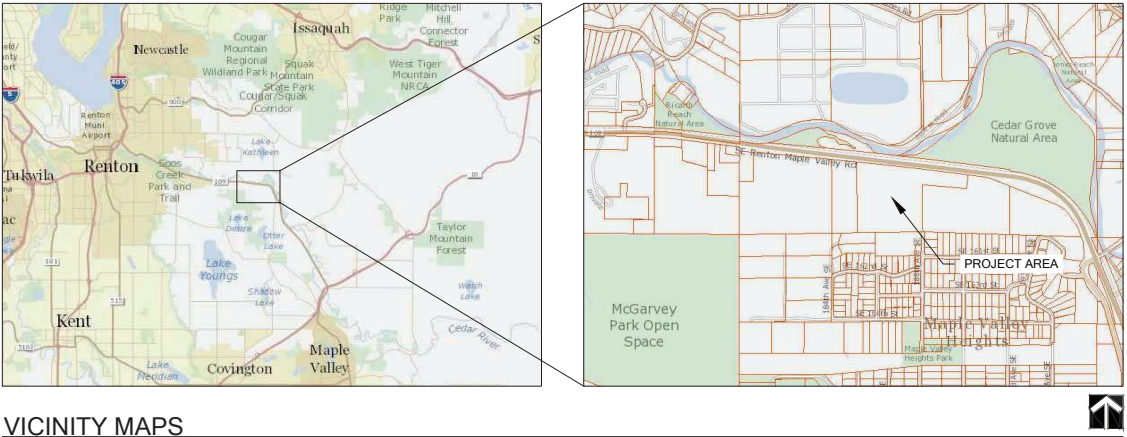
Stanley S. Thompson, L.G., L.Hg.
Senior Project Geologist



Curtis J. Koger, L.G., L.E.G., L.Hg.
Senior Principal Geologist/Hydrogeologist

Attachment: Sheet M1.0 of 14 (Existing Conditions), Mitigation Plan, Maple Valley Asphalt Facility, draft, dated June 4, 2020

MAPLE VALLEY ASPHALT FACILITY



EXISTING CONDITIONS
SCALE: 1" = 80' WHEN PRINTED AT 24" x 36"



Know what's below.
Call before you dig.

MAPLE VALLEY ASPHALT FACILITY
MITIGATION PLAN
KAREN DEAL, LAKESIDE INDUSTRIES
18825 RENTON MAPLE VALLEY RD SE
UNINCORPORATED KING COUNTY, WA 98058 (NEAR RENTON)

SUBMITTALS & REVISIONS			BY
NO.	DATE	DESCRIPTION	
1	08-27-2018	PERMIT SUBMITTAL	AAM
2	06-04-2020	REVISED PERMIT SUBMITTAL V2	AAM

GENERAL NOTES:
NOT FOR CONSTRUCTION

SHEET SIZE:
ORIGINAL PLAN IS 24" X 36".
SCALE ACCORDINGLY.
PROJECT MANAGER: HM
DESIGNED: SS/NL/AAM
DRAFTED: AAM
CHECKED: SS/AMC/MF
JOB NUMBER:
160414
SHEET NUMBER:
M1.0 OF 14