Exhibit C-51: CSVN SUP Project Comments with attachments 7-1-22

LORING ADVISING

By Electronic Portal and Email

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Re: File No. PL16-0097 & PL16-0098; Concrete Nor'West Grip Road Gravel Mine
Central Samish Valley Neighbors Project Permit Comments

Dear Mr. Cricchio,

These public comments are being submitted on behalf of Central Samish Valley Neighbors ("CSVN") to address Special Use Permit application No. PL16-0097 and Forest Practice Conversion application no. PL16-0098, which propose to convert a forest into a 51-acre gravel mine anticipated to excavate 4.28 million cubic yards of gravel and sand and haul those materials with large gravel trucks and trailers on substandard, rural roads for the next quarter century. The project would clear 68 acres and excavate to within 10 feet of the water table, which is hydrologically connected to the Samish River and its associated wetlands. Eschewing the 300+-foot buffer required for industrial development next to such critical areas with steep slopes, the mine would observe just a 200-foot buffer. The mine and its undersized buffer would cut into an important wildlife corridor provided by one of the last remaining blocks of undeveloped land in the vicinity. Mine operations would impact a quiet, rural community and the school routes, cyclists, pedestrians, and commuters who rely on the roads. And the impacts are not limited to those that will occur in the future; a 2018 conversion of the 2.2-mile-long forest road into a gravel hauling road without review or approval has already caused unexamined impacts to the 36 wetlands and 25 streams and seeps along its route, including Swede Creek.

Due to these impacts, and as explained in detail below, the mine application does not demonstrate compliance with Skagit County's special use permit criteria and thus cannot be approved without revision. Nor do the conditions set forth in the County's Mitigated Determination of NonSignificance ("MDNS") ameliorate the impacts – the impacts summarized above and detailed below would occur with those conditions in place. As discussed separately in CSVN's appeal of that MDNS, the conditions do not address these impacts and, at least with respect to the 200-foot wetland buffer, exacerbate mine impacts by including conditions that violate County regulations. Consequently, the SUP application must be denied in its current

form so that the applicant can revise the proposal to ensure that it meets SUP requirements to: (1) not create undue noise for existing, surrounding dwelling units; (2) avoid causing potential adverse effects on the general public health, safety, and welfare; (3) not conflict with the health and safety of the community; (4) be served by adequate public facilities or services; and (5) maintain the character, landscape, and lifestyle of the rural area.

In drafting this letter, we reviewed all of the publicly-available application materials, including the following:

(1) the March 7, 2016 fact sheet, special use narrative, and project description;
(2) subsequent special use narratives and revised project description;
(3) SEPA Checklist;
(4) fish and wildlife documents by Graham-Bunting Associates;
(5) the December 2021 NW Ecological Services' Impact Assessment & Mitigation Plan ("NES Report");
(6) the Hydrogeologic Site Assessment and December 16, 2021 Response to Skagit County Geologic Hazard Requirement from Associated Earth Sciences ("AES Memo"); and
(7) traffic documents by DN Traffic Consultants and the September 10, 2020 Traffic Impact Analysis for Grip Road Mine.

We also reviewed comment letters by state agency officials and well-informed members of the public, consulted with a transportation planner, critical areas specialist, licensed engineering geologist, fish and wildlife expert, and local cycling leader, and reviewed publicly-available information about the site and environs like aerial photographs and the regional bicycle map. We have attached as exhibits several independently-obtained expert reports and our March 9, 2022 SEPA comments and February 7, 2022 comments on the flaws in the NES Report and the AES Memo and incorporate by reference the content of those materials.

I. BACKGROUND

A. Project Details and Work Completed to Date.

In 2016, Concrete Nor'West ("Applicant" or "CNW") submitted two applications for approval to convert three parcels tallying 77 acres into an open pit gravel mine.[1] The first, PL16-0097 requests a Mining Special Use Permit to excavate approximately 4,280,000 cubic yards of

[1] According to the County's June 2022 staff report, the applicant has now determined that its parcels are smaller than originally stated. We have not independently evaluated the property size. For consistency with the application materials and all prior records over the previous 6-year application period, these comments continue to use the parcel sizes set forth in the application.

sand and gravel in a 51-acre open pit mine in the Central Samish Valley.[2] The mining would excavate 60 feet down toward the water table to leave 10 feet between the mine and the aquifer. CNW projects that the mining would occur over 25 years, though the proposal would not be limited to a specified period of time and the rate of excavation would depend on demand for sand and gravel. To facilitate this mining, CNW also requested a Forest Practice Conversion permit, PL16-0098, which would authorize it to fully clear 68 acres for the mine, including harvest of approximately 50,000 board feet, removal of stumps, and removal of all other vegetation and soils.[3] The 77-acre mining site forms a portion of an overall block of parcels that CNW owns that totals more than 735 acres.[4] The property has been managed for forestry historically and has been approved for active harvest by the Washington Department of Natural Resources.[5]

1. Hours and staffing.

According to conditions in the MDNS, standard mining hours at the site would extend Monday through Friday from 7:00 AM to 5:00 PM.[6] To address seasonal demand, CNW could expand these hours to Saturday, Sunday, and a longer work day upon approval by and/or notification of PDS.[7] CNW estimates that one to two full-time employees would work on-site and an unspecified number of truck drivers would haul gravel off-site throughout the day.[8] On-site operations would involve heavy equipment like a front-end loader, excavator, dozer, and dump trucks.[9]

2. Public haul routes and volume.

CNW would haul the gravel and sand by truck and trailer on narrow rural roads with speed limits that range from 35 to 50 miles per hour, though it is unclear just which roads would be used at which times because the Application and MDNS do not establish a specific haul route. The Traffic Impact Analysis ("TIA") estimates that 95 percent of the trips would be assigned to and from the west on Prairie Road, with 80 percent south to the existing Belleville Pit Operation using either Old Highway 99N or I-5 south; 10 percent of the trips to end users via

[2] CNW, Revised Project Description (Section A), 8 of 17 (received Feb. 23, 2018).
[3] Skagit County Planning & Development Services, SEPA Mitigated Determination of Nonsignificance (MDNS), 2-3 (February 22, 2022) ("MDNS").
[4] CNW Special Use Narrative, at 2.
[5] Attachment A shows a DNR timber harvest map for the area, with approved Class II timber harvests marked in blue overlay.
[6] MDNS.
[7] *Id.* at condition 2 (while the MDNS indicates that approval likely would be required, the most recent staff report for the project indicates that notification of Skagit Planning and Development Services might suffice).
[8] CNW, Revised Project Description (Section A), 8 of 17 (received Feb. 23, 2018).
[9] CNW, Revised Project Description (Section A), 10 of 17 (received Feb. 23, 2018).

I-5 south, and 5 percent to end users west of I-5 on Bow Hill Road; as well as 5 percent to end users east of the Mine access via Grip Road."[10] The MDNS does not direct the hauling traffic to follow any of these routes, and application materials did not evaluate traffic impacts associated with F&S Grade Road or Grip Road east of the mine, both of which exhibit a narrow road prism, sharp turns, and 40-mile per hour speed limits.

Based on the information provided in the application and MDNS conditions, the mine could generate a virtually unlimited amount of truck traffic on any given day without notice to the community. The TIA estimates that the mine would generate an average of approximately 30 truck-and-trailer trips per hour, or one every two minutes, during extended hour operations and 46 trips per day during average conditions.[11] Consequently, the MDNS authorizes an average of 46 daily trips during standard mining operations and a maximum of 30 trucks per hour under extended hours operations, but does not identify the time span over which the daily trips would be averaged.[12] As a consequence, the MDNS authorizes the mine to generate significantly more than 46 trips on any given day without notice to other users of the local roads.

The roads to be used for hauling exhibit hazardous conditions. Road widths along Prairie Road, Grip Road, and F&S Grade Road are just 20-22 feet and posted speed limits reach 50 mph. Although the TIA suggests that shoulders exist along each of these roads but Grip Road, the Skagit County Bike Map identifies Grip Road, Prairie Road, and F&S Grade Road as roads without shoulders.[13] A simple review of these roads through google maps' street view function confirms that paved shoulders are largely non-existent on those roads and that narrow gravel shoulders along some stretches slope sharply down to ditches. A substantial amount of guard rail exists along the southern edge of Prairie Road, further shrinking the actual and perceived width of the road prism.[14] In addition, the TIA asserts that there are no known bike routes in the subject area, yet the readily-available Skagit County Bike Map identifies Prairie and F&S Grade Roads as part of a federal bike route, US Route 87. Also, there are two locations along the haul route that regularly flood each winter: one at the bottom of the Grip Road hill where Swede Creek overflows onto the roadway, and the other on Prairie Road, just east of the intersection with Park Ridge Lane. Furthermore, Grip Road recently experienced slope instability on the hill near its junction with the internal mine haul road, necessitating repairs.

[10] DN Traffic Consultants, Traffic Impact Analysis for Grip Road Mine, 13 (Sept. 10, 2020).
[11] DN Traffic Consultants, Traffic Impact Analysis for Grip Road Mine (Sept. 10, 2020) (the TIA does not define "extended hours" operations).
[12] MDNS, at Condition 13.vii.
[13] See Skagit Valley Bike Map, attached hereto as Attachment B.
[14] See Prairie Road Guard Rail map, attached hereto as Attachment C.

None of these hazards has been examined during this application process.

One of the options in the TIA assumes that truck/trailer combinations using Old Highway 99 would be short-loaded to comply with current weight restrictions on the Old Highway 99 Samish River bridge or that those restrictions would be removed. The Application does not evaluate the number of truck trips that would be required if vehicles were short-loaded to meet current bridge weight limits.

3. Private haul route.

To transport gravel from the mine site, gravel trucks and trailers would negotiate a 2.2-mile-long private haul road across CNW's contiguous property to access the public road system at Grip Road. This hauling was not acknowledged to be a component of the mining project until five (5) years after the initial application; the application narrative initially implied that such a road did not exist, stating that the "site is accessed via Grip Road, which is a County Road," and that "[t]he mine site will not have a defined road system per se, as the mine floor and elevation will be constantly changing as mining progresses."[15]

In 2018, during the pendency of the applications at issue here, significant road construction activities occurred along the full length of the haul road--expanding its width, building up the surface with gravel, replacing culverts, and cutting vegetation along the sides.[16] An April 30, 2021 letter by Skagit River System Cooperative ("SRSC") noted that google map images showed that the forest roads were widened and that three culverts were replaced.[17] SRSC estimated that the widening of the haul route by approximately 10 feet over its two miles and the conversion to a gravel surface had added 2 acres of compacted gravel. As explained in CSVN's February 7, 2022 letter to County, communications about the road project from the Washington Department of Natural Resources ("DNR"), in conjunction with a CNW forest practice application, did not identify the need for forestry-related upgrades to the road; this DNR communication indicates that the road development occurred to promote the new mine.[18]

Although the recent NES Report found that 36 wetlands, one fish-bearing stream, and 21 seasonal, non-fishbearing streams lie within 300 feet of the roadway, the report did not

[15] CNW, Revised Project Description (Section A), 9 of 17 (received Feb. 23, 2018).
[16] Letter from N. Kammer to M. Cerbone re: Concrete Nor'West gravel pit (April 30, 2021) (hereafter, "SRSC letter") (attached hereto as an attachment to Letter from Loring Advising to Kevin Cricchio re: File No. PL16-0097 & PL16-0098; Concrete Nor'West Grip Road Gravel Mine Critical Areas Review (Feb. 7, 2022) (Attachment D)).
[17] Attachment D at 12, SRSC Letter.
[18] Attachment D, Letter from Loring Advising to Kevin Cricchio re: File No. PL16-0097 & PL16-0098; Concrete Nor'West Grip Road Gravel Mine Critical Areas Review (Feb. 7, 2022).

evaluate the road conversion impacts on those ecological resources.[19] There is no record of County approval for the road work.

B. Valuable Ecological Setting.

The mine excavation and frequent gravel hauling would occur within a rich ecological setting. The 51 acres to be deforested, stripped, and mined lie within an overall property of approximately 735 acres that has been managed for forestry for decades. The site is bounded by residential development to the west and north, CNW's forested properties to the south, and the Samish River and associated, undelineated wetlands on the east.[20] The site sits on a terrace about 100 feet above the Samish River, which hosts hatchery-raised Chinook salmon, along with native runs of chum salmon, coho salmon, coastal cutthroat trout, bull trout and Puget Sound steelhead, the latter two of which are listed as threatened under the federal Endangered Species Act, and the Oregon spotted frog, which is listed as threatened federally and endangered under Washington law.

The gravel truck and trailers will travel along a 2.2-mile-long private haul road on the property that traverses a biologically-rich landscape. Thirty-six (36) wetlands lie within just 300 feet of that haul road. Those wetlands range from Category IV to Category II wetlands and score at the moderate or high level for wildlife habitat. In addition to these wetlands, the haul road passes over or reaches within 300 feet of Swede Creek, 21 smaller streams, and three seeps. Limited observations of listed species by the applicant's consultant found one wetland suitable for the Oregon spotted frog; they also noted pileated woodpecker excavations.

The property serves as one of the largest undeveloped tracts of privately-owned, forested land remaining in lowland Skagit County. It serves as valuable wildlife habitat due to the rural nature of the site and surrounding area, its connectivity to a large undisturbed corridor, and the condition of the property. The applicant's consultant observed beavers and amphibian breeding habitat and noted that it contains suitable breeding and foraging habitat for a variety of mammals. In response to the lack of information in application materials, local residents have commented that the site hosts deer, bears, cougars, bobcats, and elk, as well as small mammal species, many species of birds, and water-dependent amphibians.

[19] NW Ecological Servs., Grip Road Gravel Mine Impact Assessment & Mitigation Plan, i (Dec. 2021) ("NES Report").
[20] As explained below, the applicant estimated average widths for the river, its floodplain, and associated wetlands, but did not survey or delineate the boundaries of those areas and thus has not specifically measured them.

C. MDNS Conditions.

In March 2022, County issued an MDNS with conditions that: (1) require compliance with existing laws; (2) set the mine's regular hours of operations from 7am-5pm Monday through Friday; (3) direct CNW to submit a request for temporary deviation when it desires to mine over extended hours and weekends; (4) limit further expansion of the internal haul road; (5) direct CNW to install flashing beacons in two locations; (6) require road improvements to allow trucks with trailers to stay within their lanes at sharp turns on Prairie Road; (7) establish an overall average of 46 "daily trips" during regular operations and 30 "trucks" per hour under extended hours operations; (8) authorize mining to within 10 feet of the groundwater table; (9) direct CNW to maintain drainage infrastructure like roadside swales and check dams; (10) rely on the Shoreline Master Program to impose 200-foot wetland buffers that conflict with the 300+ foot buffers that the Critical Areas Ordinance requires for wetlands; and (11) redirect stormwater runoff into the mine.

D. CSVN Appeal of the MDNS and Project Impacts.

On March 25, CSVN appealed the MDNS on the grounds that it did not evaluate the impacts below. Based on existing project and site information, as summarized by the reports attached as Attachments E-G, at least several of these impacts likely will be significant.

<u>Earth</u>

- the landslide and erosion hazard consisting of the slope along the haul road in the vicinity of Swede Creek;

<u>Air</u>

- carbon emissions associated with large equipment mining and hauling rock at the site, or with removing trees, shrubs, and soils at the site that would otherwise absorb carbon;[21]
- the diesel emissions from the gravel hauling trucks and trailers;

<u>Water</u>

- the impacts associated with likely unstable slopes along the haul road where it may erode into Swede Creek. A report submitted in December 2021 concluded that there was no landslide risk, but erroneously reported that there were no non-planar slopes at the site and overlooked possible old slides in the glacial marine drift at the site. The

[21] The SEPA Checklist stated at page 5 that "[t]here are no off-site sources of emissions that would impact the proposal." Per attachment G, Tilghman Group report at 8, the project would generate approximately 718.02 metric tons of carbon annually.

report thus failed to evaluate or propose mitigation for those impacts;[22]

- Swede Creek's stream processes and the possibility that active erosion is occurring there;
- light, noise, and dust impacts to Swede Creek and other streams and wetlands along the internal haul road; and
- the impacts associated with redirecting surface water away from the Samish River and its wetlands and into the mine site.

Plants and Animals

- the impacts associated with a 200-foot buffer for the undelineated Samish River wetlands at the excavation site and with similarly undersized buffers for other wetlands along the internal haul road, rather than the 300+-foot buffer required by the Skagit County Critical Areas Ordinance for Category II wetlands and the standard buffers required for other wetlands. These impacts include those to the Oregon spotted frog listed as endangered in Washington and threatened federally;[23]
- the ecological and biological impacts associated with widening and graveling the 2.2-mile-long internal haul road in 2018 and with converting it from infrequent logging use to frequent gravel hauling use, including impacts to high value wetlands and fish-bearing streams. The December 2021 NES Report provided by the applicant overlooked the 2018, post-application road development and vegetation cutting to conclude that the lack of vegetation cutting or road development for the project would avoid water quality impacts along the road. That report also acknowledged increased traffic from the new use but did not quantify the amount of increased traffic, examine its impacts, or evaluate the difference in vehicles between any current traffic and the proposed gravel truck and trailer combinations;[24]
- the ecological and biological impacts of converting a portion of a forested corridor used by bears, cougars, bobcats, and other species;

Noise

- the noise impacts of loaded gravel-hauling trucks and trailers applying compression brakes when traveling down the steep grade on the internal haul road where it descends to the bridge over Swede Creek;
- the noise impacts of loaded gravel-hauling trucks and trailers applying compression brakes when traveling down the 8% average grade of the hill on Grip Road;
- the noise impacts at the property line 100 feet from mining activities;
- the additional noise impacts, including both mining and hauling activity, generated by a

[22] Attachment E, McShane Report.
[23] Attachment F, Mahaffie Report.
[24] Attachment F, Mahaffie Report.

maximum production scenario;

- the noise impacts from off-site gravel truck hauling through the community;

Transportation and Recreation[25]

- impacts associated with hauling gravel east of the intersection of the internal haul road and Grip Road or of using F&S Grade Road or other, previously unspecified, routes;
- the impact to recreational users, like cyclists, of driving an unlimited number of gravel trucks and trailers on substandard roads without shoulders;
- the impacts associated with gravel truck and trailer use of Grip Road and its unstable shoulder and the costs associated with more frequent repairs of that frail section of roadway;
- the impacts associated with extended hours mining and gravel hauling;
- conflict analysis to predict or measure accident potential. This analysis could determine the number of conflict points, frequency of conflicts, and severity of conflicts based on expected traffic volumes and mix of traffic; and
- the impacts of potential interference with school buses.

E. Public Comments About Unevaluated Impacts.

Agency and organization comments identified deficiencies in the project materials and the SEPA review, including the following.

The Washington Department of Ecology ("Ecology") submitted at least four comments, culminating in a March 11, 2022 letter that expressed concerns that: (1) the application materials did not identify whether the Samish River wetland had been delineated as required by the Skagit County Code; (2) the Samish River wetland had been rated using outdated methodology; and (3) the Samish River wetland requires a 300-foot buffer due to the proposed gravel mine's high impact use.[26] An earlier letter stated that the application needed to meet the following wetland requirements: (1) flagging of the ordinary high water mark along the Samish River banks by a qualified biologist, and survey of the boundaries; (2) a jurisdictional determination from the U.S. Army Corps of Engineers stating whether the delineated wetlands on the property are under federal jurisdiction; (3) ratings of all wetlands based on Ecology standards; (4) a critical area report describing wetland conditions on the property, wetland data sheets, wetland rating forms, and photographs; and (5) a mitigation plan for unavoidable

[25] Attachment G, Tilghman Report.

[26] Luerkens letter to K. Cricchio re: Ecology Comments on the Grip Road Gravel Mine, Project File # PL16-0097 and PL16-0098 (March 11, 2022) (attached hereto as Attachment H).

wetland and buffer impacts per Ecology standards.[27]

The Skagit River System Cooperative commented that: (1) impacts due to the development of the internal haul road had not been considered or approved by Skagit County; (2) the internal haul road passes through a ravine with over-steepened slopes and failure of that slope could lead to sediment delivery that impacts the salmon-bearing Swede Creek; (3) the application should include a road maintenance plan; and (4) a mine reclamation plan should be made available to the public.

F. Sample Inconsistencies and Errors in the PDS Staff Report/Findings of Fact.

The Staff Report/Findings of Fact circulated to the public in June 2022 offers little independent County analysis of the proposed mine, instead largely adopting the applicant's language to describe the project's alleged consistency with Skagit County criteria. In addition, it contains several errors or inconsistencies with other materials, like the MDNS. A sampling follows:

- Density of neighboring housing. While the staff report characterizes residential development east and west of the mine as "sporadic," (staff report, at 4), it reports that 1,600 feet to the east of the site is the Prairie Lane Meadows subdivision consisting of 33 residential lots, and 1,300 feet to the west of the mine site is the subdivision Wildlife Acres, consisting of 52 residential parcels. Staff report, at 5.
- Peak hour hauling. The staff report assumes that gravel hauling will occur during off peak hours between 9am and 3pm, but the MDNS does not limit the hauling to those times and no such condition has been proposed by staff. Staff report, at 13.
- Hauling frequency. While the MDNS appears to establish a maximum hauling number at 30 trucks and trailers per hour, the staff report proposes to double that number, stating that: "[i]n order to maintain the LOS C, the maximum operation limit may not exceed 30 trucks (60 trips) per hour with a maximum operation limit of 720 full truck trips per day (24-hour work day)." The applicant's Traffic Impact Assessment does not evaluate 60 trips per hour, and states expressly that truck trips will not exceed 30 per hour.
- Internal haul road impacts. In discussing geologically hazardous areas, the staff report relies for its analysis on a quote from the applicant's geo-hazard report, which states that "the [internal] haul road will have similar function and will be subject to similar truck loads compared to its past use." Thus, like the applicant, staff made no effort to vet that statement by identifying the frequency and type of use that the historic

[27] Gresham letter to J. Cooper re: Ecology Comments on the Grip Road Gravel Mine, Project File # PL16-0097 and PL16-0098, 2 (June 1, 2016) (attached hereto as Attachment I).

forestry operations made of the internal haul road. For example, they didn't compare the trucks themselves or their relative weights. They did not compare the number of daily forestry trucks using that road with the annual average of 5,883 truck and trailer combinations that would burden those roads. These oversights are particularly inexcusable given the County's knowledge that the applicant upgraded the road without approval in 2018.

- Internal haul road upgrade. The staff report contemplates that "[t]he forest practice road will be upgraded as necessary to meet Skagit County's private road standards" nowithstanding that that work was conducted in 2018 without prior county review and approval. Staff Report, at 12.

II. DISCUSSION OF CODE REQUIREMENTS

The following section demonstrates that CNW has not met its burden of demonstrating that the proposed mine is consistent with Skagit County Code requirements for a mining special use permit. The numerous unaddressed impacts identified above must be mitigated to ensure that the issuance of an SUP will protect the public welfare, health, and safety.

A. The Mineral Resource Overlay Does Not Shield Mines from the Need to Identify and Address Impacts.

The designation of a property as Mineral Resource Overlay ("MRO") indicates an intent that such property be used for mining, but applications must nonetheless meet Skagit County Code criteria and must be conditioned to ensure that inappropriate impacts or elevated risk to public health and safety are addressed. The purpose of an MRO is to maintain and enhance natural resource-based industries by conserving mineral resource lands, allowing the continued operation of existing legally established uses, and assuring that the use of adjacent lands does not interfere with mineral extraction and quarrying. SCC 14.16.440(1). But nothing in the purpose suggests that mines should be allowed to impact wetlands and streams if they are located on lands designated MRO. Nor does the purpose indicate that taxpayers must bear the extra cost to repair roads damaged by previously unanticipated heavy mine traffic, or that neighbors should bear unexamined increased risk to safety when using the narrow, rural roads.

The proposed mine would be developed amidst a rural residential community that preexisted the County rezone of the CNW property as Mineral Resource Overlay. Thus, while CNW asserts that the new mine's neighbors, families who have lived in the valley there for decades, must subordinate themselves to CNW's mining operations, those families had no reason to expect that a 51-acre mining operation would be developed in their neighborhood. Neighbors had grown accustomed to the forestry operations that had occurred on the property

for years, and had purchased their properties with the knowledge that they lived next door to working timber lands. Now that their reasonable expectations have been upended, the neighbors naturally ask that County balance the mine's operations against its impacts consistent with the directives of Skagit County's development code.

B. Application No. PL16-0097 Does Not Satisfy Skagit County's Mining Special Use Permit Criteria.

An applicant for a mine permit bears the burden of proving that the impacts of the mine comply with Skagit County's Mineral Resource Overlay ("MRO") regulations and Special Use Permit ("SUP") criteria, and that conditions will mitigate detrimental impacts to the environment and will protect the general welfare, health and safety. SCC 14.16.440(9)(a), .900. If the impacts are mitigable, then the permit shall be granted. SCC 14.16.440(9)(a). Mitigating conditions must be performance-based, objective standards. *Id.* In addition, the County's mining rules are "minimum standards based on unique site-specific factors or conditions as appropriate to protect public health, safety, and the environment." SCC 14.16.440(9)(b). Ultimately, appropriate conditions "shall be required to mitigate existing and potential incompatibilities between the mineral extraction operation and adjacent parcels." SCC 14.16.440(9)(c). In addition, site-specific conditions are required to mitigate a mine's stormwater runoff and erosion impact. SCC 14.16.440(9)(d).

The following sections explain the deficiencies in the application materials and the failure to satisfy the MRO regulations and SUP criteria and the incorporated critical areas criteria and traffic standards.

1. The Application does not provide the information required for a mining SUP application.

Application materials failed to provide required information about mine operations and critical areas impacts. A mining SUP application must include, among other information: (1) an operations proposal that estimates the number of truckloads per day; and (2) any critical areas studies that may be required by Chapter 14.24 SCC. SCC 14.16.440(8)(f), .440(8)(g).

a. The Application does not provide adequate information about truck trips.

The application provides an "average" number of 23 truckloads per day and a high-end estimate of 30 trucks per hour, but it does not identify the actual number of truck trips per day, or even describe the timeframe over which the number of trips would be averaged.[28]

[28] CNW's May 15, 2017 letter from Dan Cox to John Cooper emphasizes that "[t]he information new provided describes 46 truck trips per day – on average – as being easily accommodated by the existing road system. This is

Consequently, the application provides no guidance to members of the public about the number of gravel trucks and trailers that they will encounter on the narrow roads on any given day.

b. The application does not provide required critical areas site assessment information.

The application omits necessary site assessment information for the project site's wetlands, streams, and geologically hazardous areas. Skagit County's Critical Areas Ordinance ("CAO") applies to any land use or development under County jurisdiction within the geographic area that meets the definition and criteria for critical areas. SCC 14.24.040(1). Any non-exempt activity that can impair the functions and values of critical areas or their buffers requires critical areas review and written authorization. SCC 14.24.060. In addition, if the CAO conflicts with any other provisions of the Skagit County Code, the more restrictive provisions apply unless the CAO expressly states otherwise. SCC 14.24.060(2). It should be emphasized here that "[i]t is the responsibility of the landowner, or designee, who conducts or proposes to undertake land use activities that can adversely impact critical areas or their buffers to obtain County authorization prior to commencing such activities." SCC 14.24.060 (emphasis added).

While the applicant here ultimately relented and provided documents related to Skagit County's geologic hazard requirement and wetlands and streams, those documents omitted required general critical areas information. Where project activities will occur within 200 feet of a critical area or its buffer, the applicant must provide a critical areas site assessment. SCC 14.24.080(4). A critical areas site assessment must include: (a) an assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development; (b) a description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations; (c) a description of efforts made to apply mitigation sequencing; (d) a proposed mitigation plan including land use restrictions and landowner management, maintenance, and monitoring responsibilities. SCC 14.24.080(4)(c).

(1) The application did not assess the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;

The application does not assess the probable cumulative impacts of applying undersized buffers to every wetland and stream affected by the proposal based on the erroneous

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not a limit but rather an average volume used by the Traffic Engineer to evaluate the existing road system's ability to function at the annual volumes we've proposed. As an average there are certainly days where this would be exceeded and others when the traffic would be lower. Any proposed traffic condition should refer to 46 trips per day as an average rather than a limit." At 1 (emphasis added).

designation of the industrial scale mining as a medium-intensity land use like rural, 5-acre housing.[29] Nor did the application assess the impacts of the expanded internal haul road on the surrounding wetlands or streams, based on the false assumption that the road work preexisted this proposal. Last, as noted above and explained in detail in the McShane review, the AES Memo that concluded that there was no landslide risk failed to evaluate non-planar slopes at the site or possible old slides in the glacial marine drift at the site.[30] These substantial omissions fall short of the site assessment criteria.

(2) The hydrogeologic site assessment did not consider the impacts of drainage alterations on the Samish River wetlands.

In addition, the application did not consider the potential for dewatering the Samish River wetlands by directing stormwater runoff into the mine site and underlying groundwater and away from those wetlands. The application states that stormwater will be infiltrated at the site, and will thus be converted from surface water to ground water. The hydrogeologic site assessment provided with the application, in turn, states that "ground water beneath the Site predominantly flows from south to north, although there is likely an easterly component of ground water flow near the eastern boundary of the proposed mine."[31] As can be seen from that report's ground water contour map, the contours along the eastern boundary of the proposed mine area slope steeply downhill toward the Samish River and its wetlands.[32] Yet the hydrogeologic assessment and other application materials fail to examine the impact of converting surface water runoff that presumably would flow naturally down that steep slope to the wetlands into groundwater flow that would travel in a more north/northeast direction according to the flow direction arrows depicted on the map.

(3) The application does not describe efforts made to apply mitigation sequencing or include a mitigation plan including land use restrictions and landowner management, maintenance, and monitoring responsibilities.

Because the application materials erroneously assume that the mine will not adversely impact critical areas, including the wetlands, streams, and geologically hazardous areas on the site, they do not attempt to apply a mitigation sequence to the project's impacts.

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[29] See Section II.B.3 below for an explanation of this misunderstanding.
[30] *See* Stratum Group, Proposed Grip Mine Haul Road; comments regarding potential geology hazards (June 10, 2022) (attached hereto as Attachment E).
[31] associated earth sciences incorporated, Hydrogeologic Site Assessment; Concrete Nor'West – Grip Road Mine, 3 (Aug. 21, 2015).
[32] *Id.* at 11.

2. The proposal does not satisfy protected critical areas requirements.

To ensure that critical areas near project areas receive long-term protection, the CAO establishes protected critical areas ("PCA") requirements. SCC 14.24.090. PCAs include all critical areas and associated buffers and any areas on a parcel not investigated for critical areas. SCC 14.24.090(1). PCAs must be depicted on a site plan suitable for recording. *Id.* PCAs must be identified in the field and the buffer edges must be marked; temporary markers must be established prior to construction and permanent markers involving permanent stakes and critical areas markers must be installed. SCC 14.24.090(2). The location of these permanent markers must be shown on a plat map or site plan and recorded with the auditor. SCC 14.24.090(2)(b)(ii). Landowners who must establish PCAs must also record a binding agreement needed to stipulate to any other conditions of approval. SCC 14.24.090(3)(b). While the staff report's proposed conditions direct the applicant to depict a PCA, they do not apply the other necessary conditions.

3. The Application does not satisfy the CAO's wetland protection criteria.

The fish and wildlife documents submitted in support of the application fail to satisfy either the site assessment criteria or the buffer requirements for wetlands under the CAO.

a. The Application omits information required for a wetland site assessment.

The CAO requires that wetland site assessments include the following components: (a) a wetland delineation performed by a qualified professional; (b) a site plan indicating wetland and buffer boundaries and the locations of all data points; and (c) a functions and values analysis that includes a discussion of water quality, fish and wildlife habitat, hydrologic regime, flood and stormwater control, base flow and groundwater support, and cultural and socioeconomic values. SCC 14.24.220. A wetland delineation involves "mapping wetlands and establishing a wetland edge or boundary in accordance with the manual adopted under RCW 36.70A.175 pursuant to RCW 90.58.380." SCC 14.04.020.

Neither the NES Report nor the Graham-Bunting documents provide a wetland site assessment that satisfies these criteria. For example, they do not demonstrate that a wetland delineation occurred. Neither the August 2015 Graham-Bunting nor the May 2015 Samish River Ordinary High Water Mark/Wetland Edge document suggests that the authors delineated the edge of the Samish River wetlands.[33] A delineation involves a significant effort to identify the

[33] Graham-Bunting Associates, *Fish and Wildlife Site Assessment: Parcels 50155, 125644, 125645*, prepared for Concrete Nor'West, 2-3 (Aug. 20, 2015) (hereafter, "GBA Report"); Graham-Bunting Associates, *Letter to Concrete Nor/West re: Samish River (Ordinary High Water Mark/Wetland Edge)* (May 18, 2015) (hereafter "OHWM Letter").

exact edge of the entire wetland.[34] Instead of using soils and vegetation to identify the exact edge of the wetland along its full length, the report indicates that the authors used the Ordinary High Water Mark as a proxy for the landward edge of the Samish River and associated wetlands and fail to indicate whether they attempted to locate even the OHWM over the 1600-foot-length of the wetlands bordering the mine site.[35]

Nor do these documents or the GBA Addendum offer data points or a complete functions and values analysis. For example, while the GBA Report states that no impacts are anticipated to threatened, endangered or sensitive species if the standard riparian buffer is applied, the documents do not assess the impacts to fish and wildlife habitat notwithstanding the proposal to reduce the buffer from the standard 300 feet to 200 feet.[36] Similarly, the documents do not evaluate the potential hydrological impacts of redirecting surface water runoff from the slope above the wetland into the mine to serve as groundwater.

b. The substandard medium-intensity buffers, including the 200-foot buffer for the Samish River wetlands, violates the CAO.

As repeatedly stated by the Washington Department of Ecology, the state agency entrusted with regulating and protecting wetlands, the mining proposal qualifies as a high intensity use that requires the largest buffers.[37] As the agency that created the regulatory regime for critical areas in Washington, Ecology's expert opinion on the policy issue of the correct buffers to apply should receive substantial deference.

Category I and II wetlands necessitate a 300-foot-wide buffer for high land use impact development. SCC 14.24.230(1)(a). These buffers "must be measured horizontally in a landward direction from the wetland edge, as delineated in the field…." SCC 14.24.230(2). In addition, where lands abutting a wetland contain a continuous slope of 25% or greater, the buffer must include the sloping areas. *Id.* And where the horizontal distance of the sloping area is greater than the required standard buffer, the buffer should be extended to a point 25 feet beyond the top of the bank of the sloping area. *Id.*

The Samish River wetland qualifies as a Category II wetland and warrants a 300-foot buffer. SCC 14.24.230. According to the Skagit County Code, "high intensity land uses" include "land uses which are associated with high levels of human disturbance or substantial habitat

[34] *See* U.S. Army Corps of Engineers Wetland Delineation Manual, *available at* https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/16/nrcs143_020653.pdf (last visited June 30, 2022).
[35] GBA Report, at 2-3; OHWM Letter.
[36] GBA Report, at 4.
[37] *E.g.*, Attachments H, I.

impacts including, but not limited to, medium- and high-density residential (more than one home per five acres), multifamily residential, some agricultural practices, and commercial and industrial land uses." SCC 14.040.020 (emphasis added).[38] The Mine qualifies as a commercial and industrial use of the land, and the removal of all vegetation and soil across at least 51 acres in order to gain access to underlying rock qualifies as a high level of human disturbance and substantial habitat impacts.

Notwithstanding this express language, and the GBA Report's acknowledgment that high intensity land use impact buffers typically would apply, GBA suggests that the "dry mining activity" should not be considered a high intensity land use based on several factors that merely describe all mining operations.[39] Without explaining how any of the following mining operations justify slashing the buffer by 1/3 of its width, GBA suggests that they rationalize a 200-foot buffer:

- mining up to 200 feet from the Ordinary High Water Mark (though the applicant did not conduct a delineation to determine whether the OHWM, a freshwater riparian marker, also marked the landward edge of the wetland);
- mining to within 10 feet of the water table;
- limiting industrial activity at the site to mine excavation and gravel hauling;
- using a road on the property to haul the gravel;
- establishing a berm;
- historic logging from the 1990s;
- redirecting surface water that would otherwise supply the wetland; and
- mining the buffer first.

Even more nonsensically, GBA suggested that the following would somehow mitigate for project impacts:

- shrinking the buffer from 300 feet to 200 feet;
- measuring the buffer width in the horizontal manner required by law;
- complying with the existing legal requirement to designate the buffer a protected critical area; and
- submitting the application that CNW already submitted.

[38] For comparison, a moderate intensity land use is a "[l]and use[] which [is] associated with moderate levels of human disturbance or substantial habitat impacts including, but not limited to, low density residential (no more than one home per five acres), active recreation, and moderate agricultural land uses."

[39] It is notable that in setting forth the definition for a high intensity land use, GBA replaced the term "industrial" with "residential." GBA Report, at 7.

Plainly, none of these activities render the large surface mine anything other than an industrial mining operation. Nor do they offer compensatory mitigation for that mining.

The NES Report deferred to the GBA report to assume that undersized buffers applied to the thirty-six (36) wetlands within 300-feet of the gravel hauling road, notwithstanding that its frequent gravel truck and trailer traffic plainly qualify as high impact industrial land uses that require 300-foot buffers for the Category II wetlands along the internal haul road. These include at least wetlands N, U, JJ, and MM/NN/PP.[40] Category III wetlands require 150-foot buffers, and Category IV wetlands require 50-foot buffers. SCC 14.24.230(1)(a). By assuming the much narrower buffers, NES substantially underestimated the impact to those wetlands.

Moreover, by clearing 100 feet of the required forested buffer, the Mine would adversely affect functions that the forest provides to the productive riparian zone, including: (1) maintaining water quality; (2) controlling fine sediment; (3) contributing large woody debris; (4) providing shade and moderating the microclimate; (5) contributing litter fall and organic matter; (6) moderating site hydrology and stabilizing slopes; and (7) providing fish and wildlife habitat.[41]

In addition to the requirement to apply a high impact buffer, the buffer would need to extend more than the standard width for those buffer areas shown on the Semrau Topographic Survey Map that abut continuous slopes greater than 25%.

4. The Application does not satisfy geologically hazardous area criteria.

The application materials do not comply with requirements of the CAO's geologically hazardous area criteria. The area where the internal haul road traverses Swede Creek is a geologically hazardous area due to its gradients greater than 30% and its susceptibility to stream bank erosion. SCC 14.24.410(1)(a), .410(1)(e).[42] Consequently, the project is subject to the CAO's geologically hazardous areas site assessment and mitigation requirements, neither of which are met by the application. SCC 14.24.420, .430.

First, the AES Report appears to omit several elements of the requisite site assessment

[40] NES Report, at 5.
[41] *See* Washington Department of Fish & Wildlife, *Riparian Ecosystems, Volume 1: Science Synthesis and Management Implications* (July 2020), *available at:* https://wdfw.wa.gov/sites/default/files/publications/01987/wdfw01987.pdf (last visited April 29, 2021); May, *Stream-Riparian Ecosystems in the Puget Sound Lowland EcoRegion: A Review of the Best Available Science*, 25-26 (2003) *available at:* https://salishsearestoration.org/images/d/d1/May_2003_riparian_best_available_science_puget_lowland.pdf (last visited April 29, 2021).
[42] AES Report, Figure 2, showing Geologic Hazard Areas due to landslide and erosion hazard area.

for the geologically hazardous area near Swede Creek, including: (1) a site plan depicting the height of the slope, slope gradient and cross section indicating the stratigraphy of the site; (2) a description of load intensity, surface and groundwater conditions, fills and excavations; and (3) a description of the extent and type of vegetative cover including tree attitude.[43] The August 2015 Hydrogeologic Site Assessment (by the same consultant) that CNW submitted along with its original permit application includes some of the above elements, but only addresses the site where the gravel will be excavated, not the haul road.

These omissions are particularly critical along the fish-bearing Swede Creek because the geologically hazardous area exhibits characteristics of risk from landslide and erosion.[44] According to a report from a licensed engineering geologist, Dan McShane, the AES Report's fundamental assumption that relatively planar slopes (generally stable) underly the road where it crosses the steep slope is not "remotely consistent" with his view of the site, as demonstrated by Figure 1 of the McShane Report.[45] McShane identified numerous non-planar slopes that should have been evaluated for their potential impact on road stability.[46] In addition to identifying other significant deficiencies in the project's slope stability review, Mr. McShane concluded that

> [t]he report does not provide an adequate discussion of the hazard and a number of slope issues on this site are never discussed or mentioned. **The lack of analysis of several areas of the slope in the AES report is such that it is my opinion that no responsible geologist could reach the conclusion that the road is not at risk from landslides or does not pose a risk of increasing landslides or erosion**.[47]

Due to the AES Report's failure to notice indicators of slope instability at the site, it failed to prepare a mitigation plan designed to avoid and minimize the geologically hazardous impacts of the proposal. SCC 14.24.430. Such a plan would need to address numerous factors to protect against risk to the critical area. SCC 14.24.430(1).

Thus, the application has not satisfied its duties to evaluate and address geologically hazardous areas.

[43] *Compare* AES Report *with* SCC 14.24.420(2).
[44] McShane Report, at Attachment E.
[45] *Id.* at 2.
[46] *Id.*
[47] McShane Report, Attachment E, at 1 (emphasis added).

5. The proposed mine is inconsistent with the SUP criteria.

In addition to the above, mine applications must demonstrate compliance with Skagit County's Special Use Permit ("SUP") criteria. SCC 14.16.440(9); .440(11). As set forth above and in CSVN's SEPA appeal, the application does not comply with SEPA's requirement that it include a full environmental accounting for project impacts, and further, County has not acknowledged or addressed numerous impacts likely to be caused by the proposed gravel mine. Second, the Application omits information that would be necessary to demonstrate that the mine's undersized buffer, severing of a wildlife corridor, road slope instability at Swede Creek, and hauling on substandard roads are consistent with the special use criteria. Indeed, the information in the Application and provided to date by the public demonstrates that the mine, as currently proposed, would cause adverse impacts to general public health, safety, and welfare and thus does not meet SUP criteria. Consequently, it must be denied until the applicant modifies the project for consistency with the SUP requirements.

A special use permit must demonstrate that the proposed activity will not adversely affect or prevent those uses normally allowed within the respective district. SCC 14.16.900(1)(a). In addition, the applicant bears the burden of providing evidence to prove that:

(A) The proposed use will be compatible with existing and planned land use.

(B) The proposed use complies with the Skagit County Code.

(C) The proposed use will not create undue noise, odor, heat, vibration, air and water pollution impacts on surrounding, existing, or potential dwelling units, based on the performance standards of SCC 14.16.840.

(D) The proposed use will not generate intrusions on privacy of surrounding uses.

(E) The proposed use will not cause potential adverse effects on the general public health, safety, and welfare.

(F) For special uses in Industrial Forest—Natural Resource Lands, Secondary Forest—Natural Resource Lands, Agricultural—Natural Resource Lands, and Rural Resource—Natural Resource Lands, the impacts on long-term natural resource management and production will be minimized.

(G) The proposed use is not in conflict with the health and safety of the community.

(H) The proposed use will be supported by adequate public facilities or services and will not adversely affect public services to the surrounding areas, or conditions can be established to mitigate adverse impacts on such facilities.

(I) The proposed use will maintain the character, landscape and lifestyle of the rural area. For new uses, proximity to existing businesses operating via special use permit shall be reviewed and considered for cumulative impacts.

SCC 14.16.900(1)(b)(v).

The application does not demonstrate that the proposed mine will avoid potential adverse effects on the general public health, safety, and welfare and will avoid conflict with the health and safety of the community, or that it is supported by adequate public facilities or services and will not adversely affect public services to the surrounding areas because it has not demonstrated compliance with Skagit County Road Standards, 2000 ("Road Standards"). The applicant conducted a level I TIA, rather than the level II TIA required of the proposal, and thus omitted necessary information as explained below. Road Standards, 4.0, 4.01, 4.02.

(A) The TIA errs in not correcting the trip numbers for heavy trucks to reflect their much greater size and weight than ordinary passenger vehicles and light trucks. The Highway Capacity Manual, which is incorporated by reference in SCRS (SCRS 2000 2.07), states that for road capacity purposes, such vehicles are equivalent to two passenger cars (on level grade, much more when climbing hills). At that rate, peak pm hour mine traffic should be counted as 58.8 trips, not 29.4 trips (Tilghman Transportation Report, Ex. A-28 to the SEPA appeal hearing). Since 58.8 trips exceeds the 50 trip threshold for triggering a Level II TIA, the applicant should have conducted a level II TIA (SCRS 2000 4.02.B).

(B) The TIA does not adequately address traffic impact contributions for identified roadway safety problems and physically inadequate roadways (SCRS 2000 4.06 and Appendix A, Level II Analysis, III.2.c);

(C) The TIA does not meet the requirements for study of impacts to driveways, adjacent roadways, and major roadways and intersections in all directions from the site. This is true for certain routes identified as part of the haul route, as well as other roads that could be used because there is no provision in the TIA limiting mine traffic to the identified routes (SCRS 2000 4.07.B and Appendix A, Level II Analysis, III.1.a);

(D) The TIA fails to take future growth into account in looking at background traffic levels on the proposed haul route (SCRS 2000 4.08.C; Appendix A, Level II Analysis, III.1.a, III.1.d, and IV.1);

(E) The TIA fails to identify and evaluate the combined traffic impacts of the mine and

other major residential and industrial development already planned for the area north of Sedro Woolley, such as the SWIFT Center (SCRS 2000 4.07.C; Appendix A, Level II Analysis, III.1.a, III.1.d, and IV.1);

(F) The TIA states falsely that there are no designated bicycle facilities that coincide with the mine haul route and fails to evaluate risks to bicyclists using bicycle routes designated in the County's Comprehensive Plan and US Bicycle Route Map Route 87 (SCRS 2000 4.07.D.12);

(G) The TIA fails to evaluate the risks posed to Sedro Woolley and Burlington-Edison School District bus routes by the increased truck traffic (SCRS 2000 4.07.D.15);

(H) The TIA misstates the conditions on Prairie Road, implying that there are paved shoulders between two and four feet wide when in fact there are no paved shoulders and there are long stretches of the road where the guard rails are immediately adjacent to the fog line, leaving virtually no shoulder (SCRS 2000 4.09.B);

(I) Aside from the two sharp curves on Prairie Road just east of Old Highway 99, the TIA fails to provide any analysis for other locations such as the "S" curves on Grip Road where it will be difficult to impossible for trucks with trailers to stay within their lanes (SCRS 2000 4.09; Appendix A, Level II Analysis, III.2.c, V, VI, VII, VIII);

(J) The TIA acknowledges that county roads on the proposed haul route do not meet county standards in several key aspects and that there is inadequate sight distance at certain intersections, but does not provide the required conflict analysis for the proposed volume of heavy truck traffic (SCRS 2000 4.09; Appendix A, Level II Analysis, III.2.c, V, VI, VII, VIII);

(K) The TIA fails to propose adequate mitigation measures even for traffic safety issues it identifies, much less for those it omits. For example, there is no explanation as to why the option of cutting back the embankment that restricts sight distance on Prairie Road at the intersection with Grip Road was not considered, when that could fully resolve the sight distance issue. Instead, it proposes as mitigation a traffic-activated, flashing yellow beacon system that, when he originally proposed it, the author characterized as only a <u>temporary</u> measure (SCRS 2000 4.09; Appendix A, Level II Analysis, VI, VII, VIII);

(L) The TIA fails to evaluate the risk of truck brake failure on the steep grade on Grip

Road just west of the mine haul road entrance (SCRS 2000 4.09; Appendix A, Level II Analysis, V.3, VI, VII, VIII);

(M) The TIA does not evaluate impacts from longer days, more days or both; and

(N) The TIA does not evaluate the impact of hauling in hours of darkness.

In addition, the following mine impacts, explored in detail above, conflict with SUP criteria that the mine comply with the Skagit County Code, that it will not cause potential adverse effects on the general public health, safety, and welfare, that it is not in conflict with the health and safety of the community, and that it will maintain the character, landscape, and lifestyle of the rural area that preexists the proposed mine:

- past and likely future adverse impacts to wetlands and streams;
- impacts to an essential wildlife corridor;
- water pollution impacts;
- inadequately-examined noise impacts to neighbors; and
- unexamined carbon impacts.

While the staff report suggests that these impacts may temporarily disrupt the existing character and landscape of the rural area, that characterization is refuted by the length of time the mine proposes to operate – 25-30 years according to the staff report. Staff Report, at 27. Impacts extended over at least a quarter century cannot reasonably be characterized as temporary, and these long-term impacts will be exacerbated by the resulting change to the mine site itself, which will lower grades by 70 feet.

C. CONDITIONS NECESSARY TO MITIGATE DETRIMENTAL IMPACTS

This section proposes conditions to mitigate the detrimental impacts of the mine pursuant to the Code's directives that appropriate conditions mitigate a mine's adverse impacts and that the Hearing Examiner consider standards based on "unique site-specific factors or conditions as appropriate to protect public health, safety and the environment." SCC 14.16.440(9). The proposed mine's location in an ecologically sensitive landscape served by substandard infrastructure presents unique challenges that require a higher standard to protect the environment and the surrounding community. The MDNS conditions do not adequately address these challenges, so we offer the following conditions to significantly reduce the mine's

risks and impacts.

1. **Hours of Operation for Mining activities.** Operation of the mine, including but not limited to transport, excavation, and maintenance, should be limited the hours of 7am to 5pm, Monday through Friday without an expanded hours option.

2. **County roads, traffic and public safety.** The volume and timing of gravel truck traffic and the location of haul routes shall be limited to those set forth below. Prior to commencing mining activity, the applicant shall submit for review and approval from Skagit County a detailed truck traffic monitoring plan to implement these conditions.
   a. Trucks shall be limited to hauling on County roads that are part of a designated haul route: traveling west on Grip Road, then along Prairie Road to old Highway 99. From Old Highway 99, the route would travel to I-5 via Bow Hill Road, or south on Old Highway 99.
   b. Hauling to and from the mine shall be limited to 7 am to 5 pm, Monday through Friday, or to daylight hours, whichever is the shorter period of time.
   c. The number of trucks entering and departing the mine property shall be limited to 23 loaded trucks and 23 empty trucks per day.
   d. During the peak PM traffic hour, the number of trucks entering and departing the mine property shall be limited to two loaded trucks and two empty trucks.
   e. Private party sales of gravel from the mine site is prohibited.
   f. A cost sharing agreement shall be negotiated between the applicant and Skagit County pursuant to Skagit County Comprehensive Plan Policy 4D-5.3, which states:

      Policy 4D-5.3 Roads and Bridges: New public roads and bridges accessing designated Mineral Resource Overlay Areas shall be designed to sustain the necessary traffic for mineral extraction operations. Existing roads and bridges shall be improved as needed as each new extraction operation is developed. Cost sharing for the improvement of roads and bridges shall be negotiated between the permitting authorities and the applicant.

      The cost sharing agreement must identify each of the permanent road improvements identified below and include deadlines for completion of improvements, bonding necessary to ensure enforcement by the County, as well as financing and deadlines for maintenance of these improvements over the lifetime of the mine, taking into consideration the wear and tear associated with the increased use by heavy truck traffic. Specific improvements in the cost sharing agreement shall include:

(1) At intersection of Grip Road and Mine Access Road: The traffic-activated flashing yellow beacon system already required for the intersection of Grip Road and the mine access road in the MDNS.

(2) At intersection of Grip Road and Prairie Road:

(A) Bring intersection and stopping sight distances for the Prairie Road/Grip Road intersection into full compliance with Skagit County Code by further removal of the steep embankment on the north side of that intersection.

(B) The traffic activated flashing yellow beacon system already required for the intersection of Prairie Road and Grip Road in the MDNS.

(3) At intersection of Prairie Road and Old Highway 99**:** Contribute to a County led evaluation of safety hazards associated with the intersection of Prairie Road and Old Highway 99, to evaluate the best options for reducing collision rates in the future as traffic rates increase. Should an upgrade to the intersection be warranted during the lifetime of the mine, then the Applicant shall contribute proportionally to the upgrade.

g. All County roads along the haul route shall be brought up to requirements for new road construction as per Skagit County Road Standards (2000), including:

(1) Widen Grip and Prairie Roads with hardened shoulders along the entire length of the haul route.

(2) Straighten and widen the curves on Grip Road hill about ¼ mile west of the junction between the Property's internal haul road and Grip Road to provide adequate stopping sight distance, ensure gravel trucks with trailers can stay within lanes, and provide a shoulder that meets Skagit County Roads (2000) new road construction standards on both sides of the road.

(3) Widen the two 90 degree turns on Prairie Road just east of Old 99, as required in the MDNS.

3. Natural Environment. Consistent with Skagit County Code, the following actions need to be completed by qualified professionals prior to commencing mining activity.

a. Field flag and survey the landward edge of the wetlands associated with the Samish River on the property and the landward edge of the required vegetated

buffer on the Samish River. The buffer edge must be: 1) at least 300 feet landward from the surveyed wetland edge, and 2) at least 25 feet landward from the top of the slope. This buffer must be undisturbed and no-cut, and the buffer edge fenced and permanently marked consistent with Skagit County's Critical Areas Ordinance.

b. Survey and permanently mark on the ground a 200-foot undisturbed vegetated buffer between the active mine site and adjacent private property, to reduce noise, vibration and dust. Do not allow side-casting of material in these buffers.

c. Fully comply with Skagit County Development Code 14.32 and the Washington State Department of Ecology's 2012 Stormwater Management Manual for Western Washington, as amended in December 2014. This would include Skagit County approval of stormwater site plans and stormwater pollution prevention plans for the entire project, including the internal haul road and any offsite improvements to be required by Skagit County, such as County road improvements.

d. Develop a detailed maintenance plan for the private, internal haul road consistent with the requirements for private roads in Skagit County Road Standards, 2000, and as outlined in Skagit River System Coop's (SRSC) comment letter dated March 9, 2022. As stated in SRSC's letter, the plan needs to include "responsibilities of periodic bridge inspections, inspection of surface water management BMP's, and identified responsibility and financial liability for maintaining such infrastructure". The plan must be developed in consultation with a qualified geologist to ensure that appropriate measures are taken to avoid slope failure in Swede Creek gorge through the lifetime of the mine. Said plan must be made available to the public for review and comment prior to being finalized.

e. Grant a permanent Native Growth Protection Easement to Skagit County or a qualified conservation organization. The purpose of the easement is to provide an undisturbed wildlife corridor traversing the applicant's larger contiguous property. The protected corridor would connect critical areas east of the private haul road, and provide a north-south route for native wildlife to cross the applicant's property undisturbed and in relative safety. The protected corridor must average at least 350 feet wide. Continued use and maintenance of the existing minor forest roads that cross the wildlife corridor would be allowed for forestry purposes, but no expansion said roads would be allowed. This protected

corridor would provide some mitigation for damages to critical areas caused by the change of use of the haul road and its expansion, as well as the high intensity use of the haul road with substandard buffers. Another benefit and purpose of the easement is to off-set carbon emissions from the project by protecting native forest and allowing it to mature. The easement can encompass other required buffers and could link together the sensitive wetlands and streams and their buffers.

4. **Site Compliance and Monitoring Plan.** Prior to commencing mining activity, develop a monitoring plan in cooperation with Skagit County that shares the cost for site inspections, monitoring reports and any necessary follow-up. Conduct site inspections at least every three years with qualified County personnel, or designees who are unaffiliated with the mine owner and operator. The monitoring plan must ensure compliance with the conditions of the settlement agreement, the MDNS and the Special Use Permit, and include the following:

   a. Mechanisms for stopping work and correcting deficiencies if violations are identified, together with follow-up site inspections to ensure implementation of any corrective action.

   b. A written report with findings from the site inspections that is completed and released to the public within 45 days of the site visit, including any enforcement or corrective actions required.

   c. To ensure compliance with permit and settlement conditions, the site inspection shall evaluate:

      (1) the condition of all buffers and critical areas adjacent to the mine site and the internal haul road;
      (2) the condition of the Native Growth Protection Easement;
      (3) the footprint of the haul road to ensure that expansion has not occurred;
      (4) compliance with all requirements and conditions set forth in the Road Maintenance Plan;
      (5) groundwater depth at such time in the future when mine excavation is within 25 feet of expected groundwater depth to ensure ten feet separation from the groundwater, in consultation with a qualified geologist; and
      (6) compliance with Skagit County Stormwater Management regulations.

5. **Periodic Review and renewal of Special Use Permit.** The Special Use Permit shall be subject to review based on a consideration of performance and changing conditions. In conjunction with the above site compliance and monitoring plan, the County shall conduct a review of the permit every five years to evaluate compliance with the original conditions, as demonstrated by the periodic site inspection and compliance monitoring. If mine operations are determined to be substantially in compliance with the original terms of the Special Use Permit, then the permit will be renewed. Public input will be sought prior to renewal of the Special Use Permit, and a process will be identified to resolve any disputes regarding the compliance status.

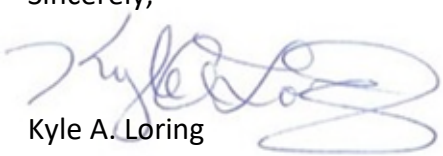
6. **No processing or mine expansion.** The applicant has stated that they do not intend to develop a gravel processing facility on the site at this time or expand the mine in the future. The environmental review and conditions of the permit would be significantly different if these parameters were changed. Therefore, the applicant must agree to a permanent restriction that prohibits future processing on site, or expansion of the mine.

III. Conclusion.

Notwithstanding the six-year interval since CNW initially applied for the special use permits, it has not provided sufficient information to fully examine project impacts and has not addressed the impacts that it and members of the public have identified. The modest modifications to the original proposal will benefit the public, but fall short of the steps necessary to protect users of the narrow, rural roads, residents of the quiet rural community, the Samish River and Swede Creek ecosystems, the existing fish and wildlife corridor, and the climate. Consequently, the SUP must be denied until CNW acknowledges and addresses the full suite of project impacts.

If you have any questions, please contact me at 360-622-8060 or kyle@loringadvising.com.

Sincerely,



Kyle A. Loring
Counsel for Central Samish Valley Neighbors

Cc: David Ortman
Cori Russell, Hearing Examiner Coordinator

Hal Hart, PDS Director
Jason D'Avignon
Bill Lynn
Reuben Schutz
Tom Ehrlichman
Martha Bray
John Day

Attachs:

A. WDNR timber harvest map

B. Skagit Valley Bike Map

C. Prairie Road Guardrail Map

D. Loring Advising Letter to Kevin Cricchio on behalf of CSVN re: CNW Grip Road Gravel Mine Critical Areas Review File #PL16-0097 (February 7, 2022)

E. Stratum Group, Proposed Grip Mine Haul Road; comments regarding potential geology hazards (June 10, 2022)

F. Matt Mahaffie, report re: PL16-0097 & PL16-0098 & February 22, 2022 MDNS (June 9, 2022)

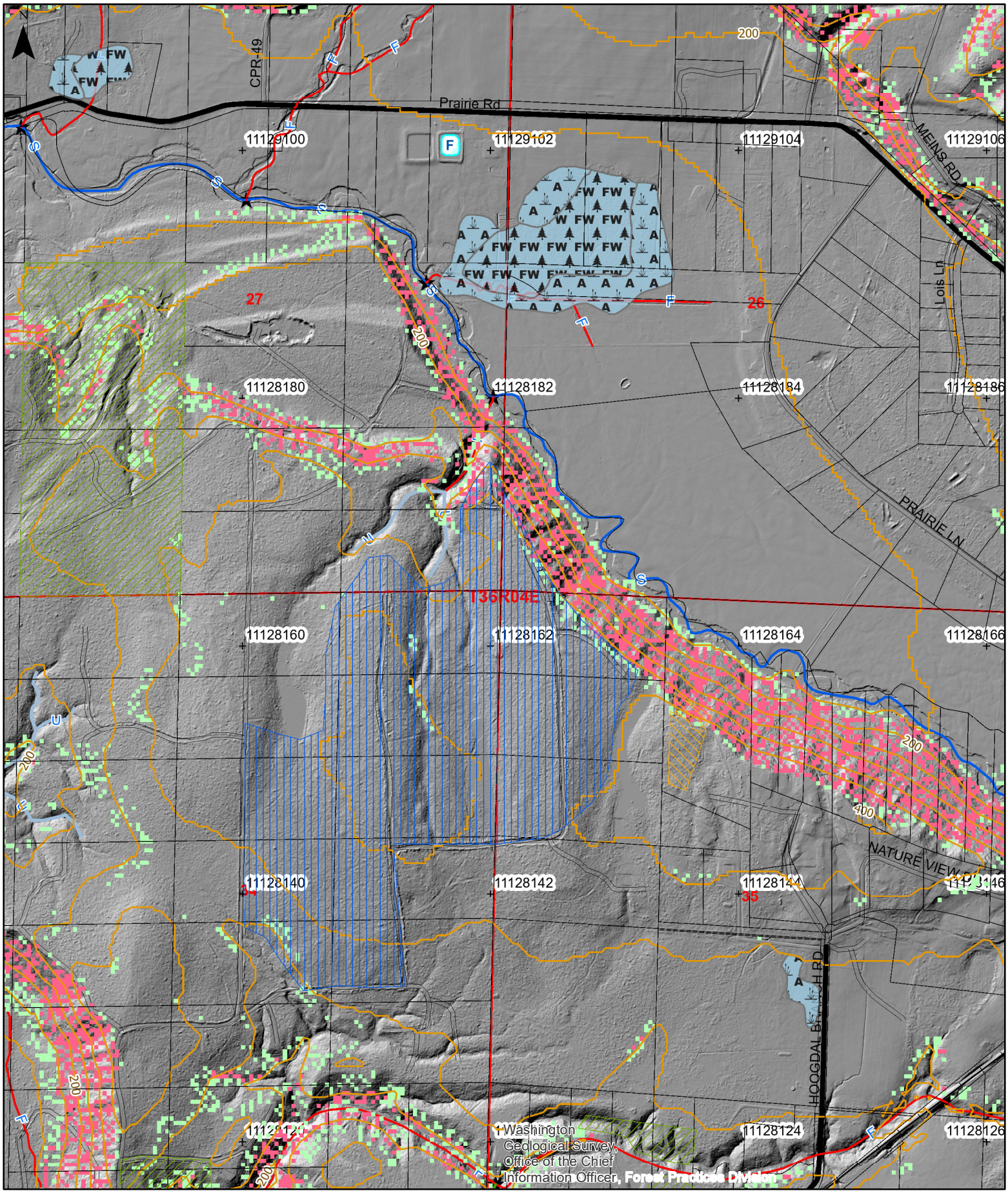
G. Tilghman Group, Report to Hearing Examiner re: Concrete Nor'west – Grip Road Gravel Mine (June 13, 2022)

H. Luerkens Letter to K. Cricchio re: Ecology Comments on the Grip Road Gravel Mine, Project File # PL16-0097 and PL16-0098, 2 (March 11, 2022).

I. Gresham letter to J. Cooper re: Ecology Comments on the Grip Road Gravel Mine, Project File # PL16-0097 and PL16-0098, 2 (June 1, 2016).

ATTACHMENT A

Active harvest -- Lisa Inc



WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

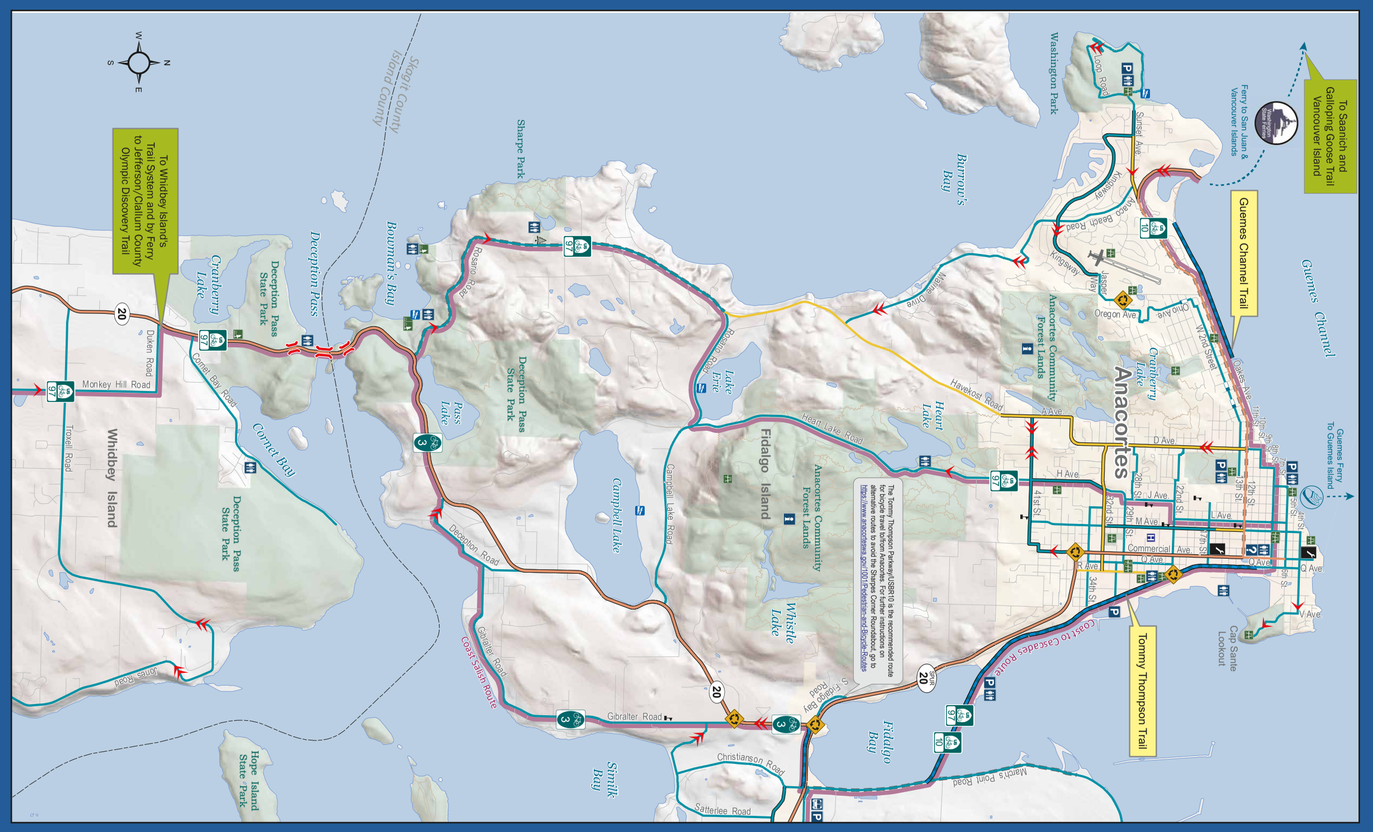
Extreme care was used during the compilation of this map to ensure its accuracy. However, due to changes in data and the need to rely on outside information, the Department of Natural Resources cannot accept responsibility for errors or omissions, and therefore, there are no warranties that accompany this material.

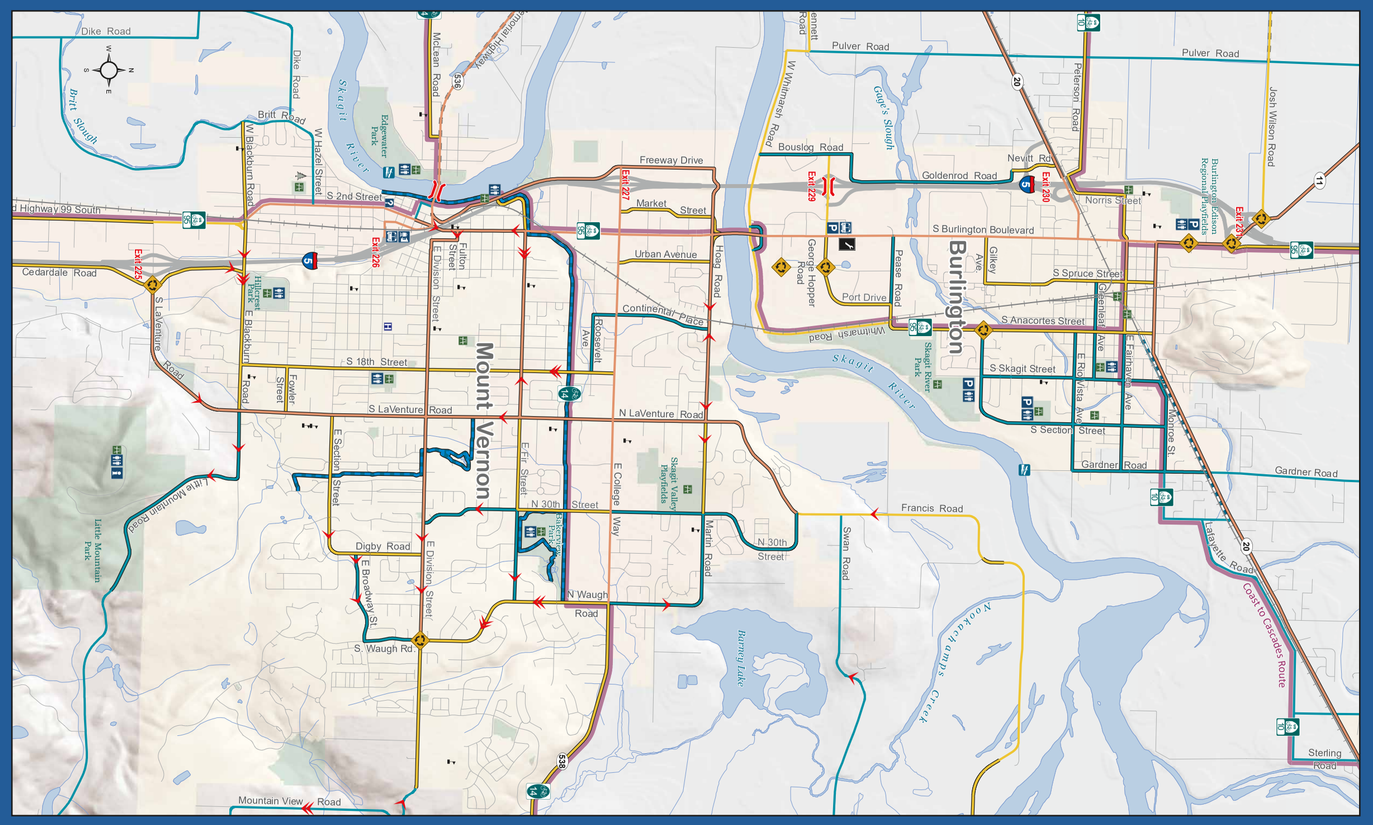
009473

0 0.25 Miles

Date: 4/26/2021 Time: 5:05:00 PM

ATTACHMENT B





Discover the wonderful bicycling Skagit County has to offer.

The Skagit County Bike Map is intended to familiarize cyclists with the many great bicycling opportunities in Skagit County and to provide information to cyclists so they can make their own decisions as to which route is suited for their skill level.

The 2018 edition of the map is made possible with support and funding from: Skagit Regional Health, Anacortes Chamber of Commerce, bikespot, Skagit Bicycle Club, Island Hospital, Port of Skagit, Skagit Cycle Center, Sedro-Woolley Chamber of Commerce, Kiwanis Club of Burlington-Edison, Skagit Bank, Skagit Valley Food Co-Op, Sherman Physical Therapy, Shell Puget Sound Refinery and La Conner Chamber of Commerce.

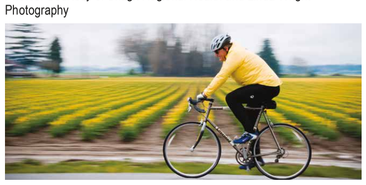
Special thanks to Skagit County Geographical Information Services, Skagit Council of Governments staff and Non-Motorized Advisory Committee members: Marie Erbstoeszer, Jeroldine Halberg, Steve Jahn, Liz McNett Crowl and Linda Talman. Thanks as well to Walt Farmer and John Pope for their assistance with the map.

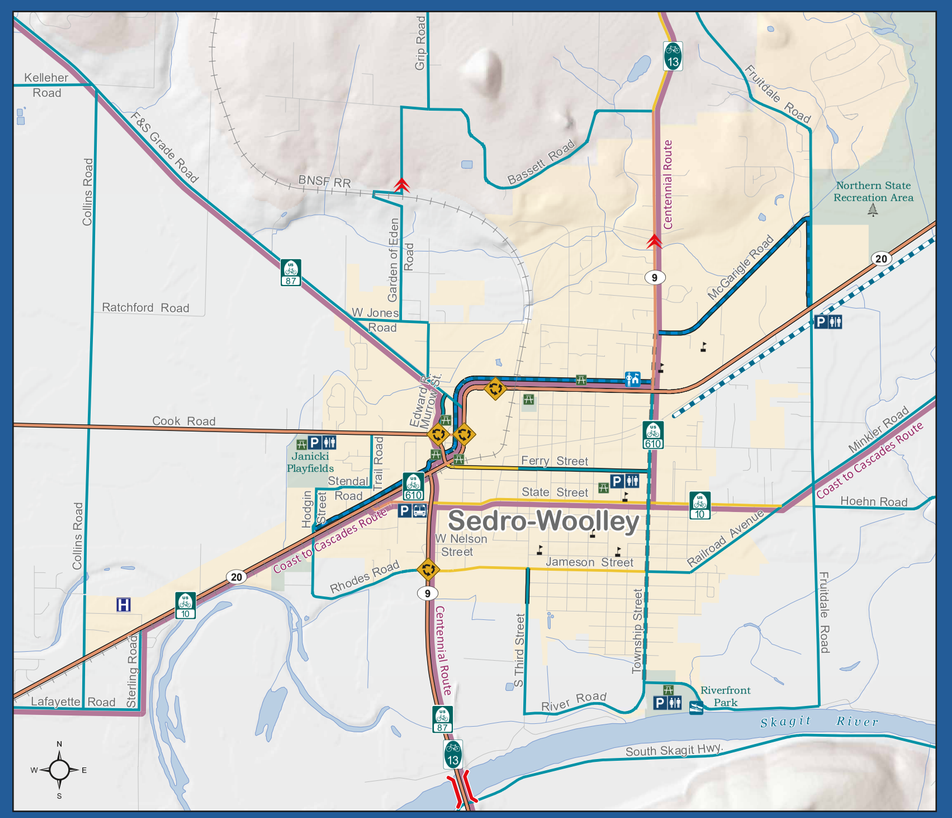
To contribute, request multiple copies, or to send comments and suggestions, contact info@scog.net.

Cartography & Map Design: Kim Berry, Skagit County Geographical Information Services and Mapping Services

Graphic Design: Thomas Printing

Photos: Courtesy of Skagit Regional Health and Linda Wright Photography





The Non-Motorized Advisory Committee developed this map with the intent of encouraging safe bicycling, increasing physical activity, improving health, and increasing the amount of non-motorized transportation trips taken in Skagit County.

This map is intended to provide information to cyclists so that they can make their own decisions as to which route is suited for their skill level. Facilities in Skagit County range from narrow roads with no shoulder to roads with bike lanes or wide shoulders, and separated non-motorized trails. Likewise, vehicular traffic varies from low to high on the roads throughout the region.

The roads have been coded with input from local bicycle commuters, recreational cyclists, and transportation planners using criteria important to bicyclists including: grade, pavement condition, paved shoulder width, vehicle lane width, traffic volumes, and speed. The legend matrix of the roads should only be used as a guide. Cyclists should be prepared to make their own evaluations. Experienced cyclists may feel comfortable on medium and heavy traffic routes, while beginning and novice riders may prefer to stick to routes with designated bike lanes or lower traffic volumes.

This map and the accompanying information are intended solely to assist bicyclists in their selection of facilities to ride on throughout Skagit County. This map includes facilities within multiple jurisdictions, and as such, conditions and design elements may vary widely. It is the responsibility of the individual bicyclist to remain alert at all times as to the conditions of a facility, pedestrian and vehicle traffic, and the inherent potential for conflict in any shared-use space. Riders should always ride with care for their own safety as well as the safety of all users of a facility right-of-way.

The Tommy Thompson Parkway/USBR10 is the recommended route for bicycle travel to/from Anacortes. For further instructions on alternative routes to avoid the Sharpes Corner Roundabout, go to https://www.anacorteswa.gov/1001/Pedestrian-and-Bicycle-Routes

Legend

4ft + Shoulder	2ft to 4ft Shoulder	No Shoulder	*Average Annual Daily Traffic
═	┅	─	Heavy Traffic 7000 + AADT *
═	┅	─	Medium Traffic 3,000 - 7,000 AADT *
═	┅	─	Low Traffic 0 - 3,000 AADT *

Federal and Regional Bike Routes

Separated Non-Motorized Trails

- Paved
- Unpaved

Hill	Visitor Information	School
Steep Hill	Parking	County Park
Narrow Bridge	Restrooms	City Park
Roundabout	Transit	State Park
Regional Bike Routes 14 3 - Coast Salish Route 5 - Coast Millennium Route 13 - Centennial Route	Train Station	National Park Service Office
	20 State Route	Hospital
	Interstate (No Bikes)	Bike Shop
US Bike Routes 87, 95, 97, 610 10-Coast to Cascades Route	Park/Public Land	Urban Areas

Additional Information Links

Little Mountain Park Trails (360) 336-6125
http://www.littlemountainpark.org/map/

City of Anacortes Parks and Recreation (360) 293-1918
www.anacorteswa.gov/490/Parks-Recreation

Port of Skagit Trails 360-757-0011
http://scog.net/Content/2018/04/Port_of_Skagit_TrailSystem.pdf

Link to Online Version of Bike Map
www.skagitcounty.net/BikeMap

0 2.5 5
Miles

N S W E

SAME ROADS • SAME RIGHTS • SAME RULES

Be Visible • Wear a Helmet • Be Alert • Have Fun

BE PREDICTABLE
Ride so drivers can see you and predict your movements. Remember that the rules in the driver's manual apply to bicyclists also.

BE ALERT
Ride defensively and expect the unexpected. Remember, bicyclists are more vulnerable.

BE EQUIPPED
Always wear a helmet. Use protective gear and wear visible clothing.

USE HAND SIGNALS
Hand signals tell others what you intend to do. Signal as a matter of courtesy and self-protection.

RIDING ON SIDEWALKS MAY BE PROHIBITED
Pedestrians have the right-of-way. Give them an audible warning before you pass. Watch for vehicles at driveways and intersections.

BE VISIBLE AT NIGHT
The law requires a strong headlight and a rear reflector or taillight at night or when visibility is poor. Wear light-colored clothes with reflective tape for extra protection.

RIDE IN A STRAIGHT LINE
Ride in a straight line and far enough from parked cars so you can avoid suddenly opened doors. Riding in a straight line allows others to anticipate what you are likely to do.

OBEY TRAFFIC SIGNS, SIGNALS, AND LAWS
Bicyclists must follow the same laws as motorists. Stop at red lights and stop signs just as you would in a car.

CHOOSE THE BEST WAY TO TURN LEFT
1) Like an auto, signal, move into the left lane, and turn left. Do not turn left from the right lane.
2) Like a pedestrian, use the crosswalk and walk your bike across the sidewalk.

FOLLOW LANE MARKINGS
Do not go straight in a lane marked right-turn-only.

NEVER RIDE AGAINST TRAFFIC
Bicyclists must ride with traffic. Approach velocities are unsafe! Motorists are looking for oncoming traffic when turning right.

RIDE WITH BOTH HANDS READY TO BRAKE
You may need to stop suddenly at unexpected times. In rain, allow three times the normal braking distance.

SCAN THE ROAD AROUND YOU
Look ahead and anticipate what other traffic is likely to do. Watch for cars, people, pebbles, grates, etc. Learn to look back over your shoulder without losing your balance or swerving.

RIDE IN THE MIDDLE OF NARROW LANES
When the lane is too narrow for a car to pass you safely, ride in the middle of the lane.

DO NOT PASS ON THE RIGHT
When approaching an intersection or driveway, be especially cautious and do not overtake a vehicle on its right; it might turn right in front of you.

YOU MAY LEAVE A BIKE LANE
When overtaking a bicycle, making a left turn, avoiding a road hazard or other obstruction or you are afraid a motorist might turn across your path, you may temporarily merge WITH CAUTION into the adjacent automobile lane for safety or better visibility.

RIDE SINGLE FILE
When riding with other bicyclists, ride in a single file line so automobiles can safely pass. Cyclists in front should warn those following of potential hazards.

009476

ATTACHMENT C

Prairie Road Guard Rail

Approximate total length of guard rail: 3,600 feet
Red bars indicate approximate locations of breaks in guard rail for farm roads

ATTACHMENT D

LORING ADVISING

By Electronic Portal, Email, and U.S. Mail

February 7, 2022

Kevin Cricchio, Senior Planner
Skagit County Planning and Development Services
1800 Continental Place
Mount Vernon, WA 98273
kcricchio@co.skagit.wa.us

Re: File No. PL16-0097 & PL16-0098
Concrete Nor'West Grip Road Gravel Mine Critical Areas Review

Dear Mr. Cricchio,

I am writing on behalf of Central Samish Valley Neighbors ("CSVN") to request that Skagit County Planning and Development Services ("PDS") address several significant oversights in Miles Sand and Gravel's ("Miles")[1] December 21, 2021 response to the critical areas review requested by Skagit County Planning and Development Services ("PDS"). Those omissions include the lack of evaluation of the impacts associated with the road work that Miles conducted in 2018 along the full length of the 2.2 mile-long haul road, as well as an analysis based on the proper wetland buffer sizes for high intensity land uses, large gravel trucks and trailers, and unstable slopes near Swede Creek. The absence of such an evaluation under either of Skagit County's State Environmental Policy Act ("SEPA") rules or critical areas regulations is particularly remarkable given that Miles' consultant identified 36 wetlands, one fish bearing stream, and 21 seasonal, non-fishbearing streams within 300 feet of the roadway. The potential environmental impacts of the road improvements and identified use fall well within the critical areas review information requested for the haul route in PDS' September 2, 2021 letter, and the oversight must be remedied consistent with that request and to inform PDS' forthcoming issuance of a threshold determination under SEPA. While my client appreciates that the formal public comment period has been limited so that it will not recommence until issuance of that threshold determination, we are submitting this letter now to assist the County in issuing a fully-informed determination. Please note that this letter addresses only the haul road impacts; earlier SEPA comments address other environmental review flaws associated with the project.

This letter briefly explores the historical use of the overall Miles property within the context of the applications that Miles submitted in 2016 for a special use permit (PL16-0097) and forest practice conversion (PL16-0098), and then identifies critical omissions in the

[1] Note that references to "Miles" in this letter are intended to refer to Concrete Nor'West as well.

biological and geotechnical reports that the applicant submitted in December 2021 and the legal framework that requires that information. These omissions include an evaluation of the road improvements that Miles conducted in 2018 in conjunction with its projected gravel hauling, an analysis of impacts with the 300-foot buffers for high intensity uses, and potential impacts to Swede Creek from the road; associated steep, unstable slopes; and stream processes.

A. Procedural History and Haul Road Use and Development.

The property ("Property") that contains the proposed gravel mine site ("Site") has been owned for the purpose of forestry for at least twenty years. According to a 2009 Forest Management Plan ("Forest Plan") prepared for Trillium Corporation, the Property spans approximately 722.6 acres and has been managed for forestry for a few decades.[2] The Forest Plan, prepared in conjunction with Miles assuming ownership of the Property, notes that Miles wished to maintain the current forest designation, and "the integrity of the property shall be maintained by managing the property as a productive tree farm," that would "provide timber production, wildlife habitat, watershed management and recreational activities."[3] Miles has since applied to convert 68 acres to a gravel mine.

1. Mining site permit applications.

On March 7, 2016, Miles submitted two applications to PDS, one for a forest practice conversion (PL16-0098) and one for a mining special use permit (PL16-0097). The forest conversion application seeks to facilitate the mining by clearing 68 acres of land of their soil, trees, and other vegetation, including 50,000 board feet of timber and associated stumps. The mining application seeks approval to excavate approximately 4,280,000 cubic yards of sand and gravel within that same 68-acre expanse.[4] While the mining application has been made publicly available on a PDS website dedicated to the project review, the forest conversion application, which the PDS Permits website indicates was approved in 2016, is not available there or on the Permits website. [5] An active public records request seeks that document.

[2] Randy R. Bartelt, Timber Management Plan, Skagit County, Washington, for Trillium Corporation Lands (Nov. 5, 2009).
[3] *Id.* at unnumbered page 2.
[4] CNW, Revised Project Description (Section A), 8 of 17 (received Feb. 23, 2018).
[5] While the project website (https://www.skagitcounty.net/Departments/PlanningAndPermit/gravelmine.htm) includes a link for "Forest Practice Conversion Permit, PL16-0098," that link directs the view to a DNR document titled "Forest Practices Application/Notification: Western Washington," rather than a Skagit County permit.

2. Application materials initially did not acknowledge the existence of the project's private haul road or its environmental impacts.

A consistent theme in the application process has been the lack of acknowledgment of impacts from the 2.2 mile-long haul road that would connect the mining portion of the property with the public road system. For example, the application initially implied that such a road did not exist, stating that the "site is accessed via Grip Road, which is a County Road," and that "[t]he mine site will not have a defined road system per se, as the mine floor and elevation will be constantly changing as mining progresses."[6] The March 2, 2016 SEPA Checklist conceded the existence of this internal road, but omitted any reference to impacts from development or use of that road, stating merely that "[s]ite will access on Grip Road from an existing private forest road at an existing gate approximately 0.7 miles east of the intersection of Grip Road to Prairie Road."[7]

This overlooked haul road would be subject to a significant amount of heavy truck traffic. A September 10, 2020 Traffic Impact Analysis ("TIA") by DN Traffic Consultants estimates that under "extended hours conditions," the Mine would generate 29.4 truck-and-trailer trips per hour.[8] The TIA does not define extended hours or explain why the site would be limited to that number of trips if demand were high enough to require greater production. DN Traffic Consultants' earlier memo, aptly-titled "Maximum Daily Truck Traffic," estimated that a realistic maximum number of trips for truck-and-trailer was 60 trips per hour.[9] Thus, the application anticipates as many as one truck and trailer every 1-2 minutes.

Presumably to accommodate this new volume of heavy traffic, in 2018, significant road construction activities appear to have occurred along the full length of the haul road, expanding its width, significantly building up the surface, replacing culverts, and cutting vegetation. Under "Conditions on Approval / Reasons for Disapproval," the DNR Notice of Decision for FPA #2816283 by Dave Klingbiel sets out conditions to be met "Prior to truck haul" and "during rock haul activities," clearly indicating that the work is being done for mining use, not forestry. An April 30, 2021 letter by Skagit River System Cooperative ("SRSC") noted that google map images showed that the forest roads were widened and that three culverts were replaced.[10] SRSC estimated that the widening of the haul route by approximately 10 feet over its two miles and the conversion to a gravel surface had added 2 acres of compacted gravel.

[6] CNW, Revised Project Description (Section A), 9 of 17 (received Feb. 23, 2018).
[7] SEPA Checklist, at 3.
[8] DN Traffic Consultants, Traffic Impact Analysis for Grip Road Mine (Sept. 10, 2020).
[9] DN Traffic Consultants, Memo re: Grip Road Gravel Pit, Maximum Daily Truck, 2 Traffic (Nov. 30, 2016).
[10] Letter from N. Kammer to M. Cerbone re: Concrete Nor'West gravel pit (April 30, 2021).

Historical forest practices documents for the site indicate that the road was not widened and graveled for forestry purposes. From the time that Miles purchased the Property in 2009 through two forest practices applications submitted to the Washington Department of Natural Resources ("DNR") in 2015 and 2018, Miles communicated a lack of intent to further develop existing roads for forestry. The Forest Plan stated that "[a]n extensive all-season forest road system services the property," and noted that all of the road maintenance contemplated by a 2002 Road Maintenance and Abandonment Plan had been implemented.[11] A July 29, 2015 Forest Practices Application/Notification ("FPA") discussed the harvest of 125 acres of trees, at least some on very unstable soils, as well as wetland soils and riparian management zones for fish-bearing waters. That document noted that the roads had been maintained for forestry standards. A 2018 FPA proposed to harvest timber on the three parcels that would become the gravel mine and noted that no new roads would be needed for the logging and the attached RMAP checklist stated that the roads are maintained to forest practices standards. Although the earlier Forest Plan contemplated the possibility of substituting a lift of surface rock for grading, and a Miles representative later attempted to characterize the road work as associated with forestry activities, both the 2015 and 2018 FPAs indicated that no new roadwork was necessary for the proposed forestry activities. Nor did either of those FPAs include an environmental evaluation of the impacts of doing so.

While PDS initially declined to require a review of the haul road's impacts, it reversed that decision on June 17, 2021 when it issued a letter to Dan Cox that requested that a critical areas review be conducted for the haul road.[12] PDS noted that the presence of steep slopes, wetlands within 300 feet, and streams within 200 feet of the haul road warranted critical areas review by a qualified consultant. On August 30, 2021, after Miles appealed that letter decision, the Hearing Examiner upheld the determination.

3. Recently submitted reports describe a property interlaced with sensitive ecological features but omit essential impact evaluations due to unwarranted assumptions.

On December 1, 2021, Miles submitted two reports: (1) Impact Assessment & Mitigation Plan; and (2) Response to Skagit County Geologic Hazard Requirement ("Geotech Report"). The Impact Assessment consultants investigated the haul road and its environs and found that it lay within 300 feet of a remarkable number of ecologically sensitive features.[13] For example, a

[11] *Id.* at unnumbered page 3.
[12] Letter from H. Hart to D. Cox re: PL16-0097/98 Determination of need to complete Standard Critical Areas Review (June 17, 2021).
[13] NW Ecological Servs., Grip Road Gravel Mine Impact Assessment & Mitigation Plan, i (Dec. 2021).

wetland that supplies the habitat needs of the federally threatened and state endangered Oregon spotted frog reaches within approximately 200 feet of the road.[14] The Impact Assessment limited its analysis to "the use of the roadway to transport materials from the mine site only."[15] The report did acknowledge that the project would include the paving of a steeper section of roadway by the bridge across Swede Creek.

a. The Impact Analysis failed to evaluate road construction impacts.

Notwithstanding this rich ecological setting, and the submission of the mining applications in 2016, the Impact Assessment overlooked the impacts of the 2018 road expansion and graveling on those critical areas and failed to fully evaluate the impacts of its use by mining trucks and trailers. First, the report did not evaluate the road surfacing, expansion, culvert replacement or installation, vegetation cutting, or material stockpiling that occurred in 2018. This omission appears to be the result of a misunderstanding whereby the report authors were not aware of the 2018 roadwork. Thus, the report assumed that "[t]he proposed change in use does not extend the footprint of the road prism," and that "[d]ue to the length of time the road has been present, no actions proposed outside the existing road prism, and continued similar use, no new direct impacts to wetlands, streams, or buffers are anticipated."[16] However, the report does note that the road is an existing impact, and states that "[t]he majority of water quality impacts to adjacent wetlands and buffers occurred with the installation of the roadway some time ago when the road was cleared, graded, compacted, and developed."[17] Because some of those impacts occurred in 2018 in conjunction with preparation of the road for the mining project, they must be evaluated, including potential impacts on wetlands intersecting with the road, as identified on Figures 4 through 9 of the Impact Assessment.

b. The road use analysis erroneously relied on a significant undercount of the trucking and assumed no difference between logging and gravel trucks.

The Impact Assessment incorporated erroneous assumptions about the road use and thus does not support its conclusion that the road use will cause "minor" indirect impacts to water quality and potentially wildlife functions associated with site critical areas and buffers. First, the report states that a 2019 traffic study projected just 46 trips per day for the haul road.[18] However, as noted above, a 2020 memo by that consultant projected almost 30 trips

[14] Impact Assessment, at i. The study did not survey the boundaries of the wetlands and streams it identified, so their precise location remains an estimate.
[15] *Id.*
[16] *Id.* at ii.
[17] Impact Assessment, at 12, 13.
[18] Impact Assessment, at 12.

per hour under extended conditions.[19] This substantial difference between the traffic load assumed for environmental impacts and that projected by the applicant's traffic consultant likely led to a significant underrepresentation of project impacts. In particular, this may affect the statement that even the increased traffic levels assumed by the report "may detour wildlife from the area immediately around the roadway when trucks are present...but is not anticipated to deter use of this habitat all together."[20] Second, the report does not appear to appreciate any difference between past logging trucks and gravel trucks other than an increase in volume for the mine. Consequently, the report should be revised to reflect the different nature of gravel truck traffic. According to SRSC, the applicable gravel truck and pup will weigh 105,500 pounds, approximately 20% heavier than the typical 88,000 pound logging truck.

c. The Impact Analysis applied the wrong buffer sizes.

In addition, the report must be revised because it relied on buffer sizes for moderate intensity land uses rather than the buffers that apply to the proposed high intensity land use of frequent gravel hauling by trucks and trailers.[21] The report argues that a moderate land use intensity applies but fails to note that the definition for moderate impact land uses includes such development as low-density residential development like one home/five or more acres, active recreation, and moderate agricultural land uses.[22] According to the Skagit County Code, "high intensity land uses" include "land uses which are associated with high levels of human disturbance or substantial habitat impacts including, but not limited to, medium- and high-density residential (more than one home per five acres), multifamily residential, some agricultural practices, and commercial and industrial land uses."[23] The proposed gravel mine and trucking qualify as an industrial use and therefore warrant buffers accordingly.[24] Consequently, the report must revisit its conclusion that the haul road "does not overlap with the regulated buffer for wetlands A, B, D, G, J, K, L, and X."[25] The applicable buffers for those wetlands are 10 to 40 feet wider than assumed by the report authors.

d. The Geotech Report does not address potential instabilities.

In its SEPA comment letter, SRSC identifies several concerns with the unstable slopes near the Swede Creek Gorge that are not addressed by the Geotech Report. For example, SRSC identifies the existence of a 60-80-foot long sidecast crack and slump (12-18" deep) on the

[19] DN Traffic Consultants, Traffic Impact Analysis for Grip Road Mine (Sept. 10, 2020).
[20] Impact Assessment, at 17.
[21] *See* Impact Assessment, at 8.
[22] SCC 14.24.230(1)(a).
[23] SCC 14.040.020 (emphasis added).
[24] *Id.*
[25] Impact Assessment, at 12.

fillslope near the top of the hill north of Swede Creek, and opines that further failure could risk damaging sediment delivery to Swede Creek.[26] The letter also identifies two cutslope failures that slumped and filled the ditchline and requested that all three failures be addressed to prevent further damage to the drainage infrastructure.[27]

The Geotech Report does not address the geological failures identified by SRSC. Nor does it address hydrological processes associated with Swede Creek that could impact the slope even though it concludes that the area qualifies as a landslide hazard area in part because it is a "[p]otentially unstable area[] resulting from rapid stream incision, stream bank erosion, and undercutting by wave action."[28] It concludes that the change in haul road usage based on truck type can avoid impacts to the geologic hazards near the haul road but does not explain how it reached that conclusion.[29] For example, it does not compare the type of truck or volume of traffic proposed for the mine with the current use of the road to show that the significant increase can be accommodated without impacting the unstable slopes.

Further, like the Impact Assessment, the Geotech Report incorrectly assumed that it should not evaluate the impacts of the road construction activities in 2018.[30] Instead, with the exception of the asphalting of an approach to the Swede Creek bridge, the report stated that it would base its impacts assessment on "the change in use of the haul road to a route used for aggregate mine trucking…."[31] The unfounded assumption that "th[e] same haul road was used in the past to transport harvested logs from the surrounding area," may have led the author to underappreciate the impacts of adding 30 hourly 105,500 pound trucks on a road that was altered significantly since much forestry occurred on the site, and must be corrected.[32]

B. SEPA Requires Full Evaluation of the Road Impacts.

Prior to PDS issuance of a new threshold determination, Miles must address the omissions identified above so that PDS may fully consider the environmental effects of the haul road development and hauling use. RCW 43.21C.030; *see Boehm v. City of Vancouver*, 111 Wn. App. 711, 717, 47 P.3d 137 (2002). SEPA requires agencies to "consider total environmental and ecological factors to the fullest extent when taking 'major actions significantly affecting the quality of the environment.'" *Lassila v. City of Wenatchee*, 89 Wn.2d 804, 814, 576 P.2d 54 (1978) (quoting *Sisley v. San Juan County*, 89 Wn.2d 822, 830, 567 P.2d 1125 (1977)). To

[26] SRSC letter, at 4.
[27] *Id.*
[28] Geotech Report, at 5 (citing SCC 14.24.410(2)(e).
[29] Geotech Report, at 8.
[30] Geotech Report, at 5.
[31] Geotech Report, at 5.
[32] Geotech Report, at 6.

determine whether an environmental impact statement is required for a major action, the responsible governmental body must first determine whether the action will cause significant impacts and render a threshold determination accordingly. RCW 43.21C.030(2)(c); *Boehm*, 111 Wn. App. at 717.

A major action significantly affects the environment when it is reasonably probable that the action will have more than a moderate effect on the quality of the environment. WAC 197-11-794; *Boehm*, 111 Wn. App. at 717 (citing *Norway Hill Pres. & Prot. Ass'n v. King County Council*, 87 Wn.2d 267, 278, 552 P.2d 674 (1976)). Significance involves a proposal's context and intensity; an impact may be significant if its chance of occurrence is low but the resulting impact would be severe. WAC 197-11-794.

To evaluate an action's effects, a responsible official like PDS must: (1) review the environmental checklist and independently evaluate the responses of the applicant; (2) determine if the proposal is likely to have a probable significant environmental impact; and (3) consider mitigation measures that the applicant will implement as part of the proposal. WAC 197-11-060(1); WAC 197-11-330; *Indian Trail Prop. Ass'n v. Spokane*, 76 Wn. App. 430, 442, 886 P.2d 209 (1994). In reviewing a project's impacts, an official must review both direct and indirect impacts and both short-term and long-term impacts. WAC 197-11-060(4). If the responsible official's review concludes that the proposal will not cause probable significant adverse environmental impacts, she issues a determination of nonsignificance ("DNS"). WAC 197-11-340. Conversely, a finding of probable significant adverse environmental impact leads to the issuance of a Determination of Significance ("DS"). WAC 197-11-360. A determination of significance triggers the need for an environmental impacts statement to review the project's identified impacts. WAC 197-11-360.

An agency that determines that a proposal will not result in a significant impact bears the burden of demonstrating "that environmental factors were considered in a manner sufficient to be prima facie compliance with the procedural dictates of SEPA." *Bellevue v. Boundary Rev. Bd.*, 90 Wn.2d 856, 867, 586 P.2d 470 (1978) (quoting *Lassila*, 89 Wn.2d at 814). For example, the threshold determination must be based on information sufficient to evaluate the proposal's environmental impact. *Boehm*, 111 Wn. App. at 718. In addition, a court will not uphold a DNS unless the record demonstrates that the government gave actual consideration to the environmental impact of the proposed action or recommendation. *Boehm*, 111 Wn. App. at 718. An incorrect threshold determination will be vacated because it thwarts SEPA's policy to ensure the full disclosure of environmental information so that environmental matters can be given proper consideration during decision-making. *Norway Hill Pres. & Prot. Ass'n v. King*

County Council, 87 Wn.2d 267, 273, 552 P.2d 674 (1976)).

As described above, the reports that Miles submitted in December 2021 continue to omit essential information about impacts associated with the applications, including impacts associated with widening and surfacing the haul road with gravel, the use of larger gravel trucks and trailers, and potential destabilization of existing unstable slopes. The information made available to date indicates that those impacts, which are a direct result of the applications to mine the Property, have not been evaluated. Absent that information, PDS would not be able to adequately consider the environmental factors, "in a manner sufficient to be a prima facie compliance with the procedural dictates of SEPA." *Lassila v. City of Wenatchee*, 89 Wn.2d 804, 814, 576 P.2d 54 (1978).

Furthermore, Miles' forest conversion application documents indicate that the road was not upgraded to support forestry at the site. Regardless, the impacts of that development have never been evaluated, and since the current SEPA review process affords the first opportunity to do so, we urge you to request that information.

C. The Critical Areas Regulations Require a Full Review of the Road Impacts.

Skagit County has incorporated the goals, policies, and purposes of its Critical Areas Ordinance ("CAO") into its SEPA policies.[33] PDS recognized its duty to review the haul road's critical areas impacts when it communicated that requirement to the applicant. While the reports submitted in December provided previously undisclosed information about wetlands, streams, and unstable slopes that might be affected by the project, the information gaps discussed above fall short of the critical areas analysis directives.

For example, the reports did not describe efforts made to apply the mitigation sequence to the road development or the fillslope or cutslope failures or propose a mitigation plan to address those impacts.[34] Nor did they result in a delineation and permanent marking of critical areas and their buffers.[35] Ultimately, the reports did not ensure that these proposed alterations to wetlands, streams, and their associated buffers would maintain the functions and values of those critical areas or prevent risk from the unstable slopes.[36] It should be noted that the conversion of the forest practices to a mine are subject to these critical areas requirements.[37]

[33] SCC 14.24.060(3).
[34] SCC 14.24.080(4)(c) (requiring site assessment that addresses mitigation sequence and proposes mitigation plan).
[35] SCC 14.24.090, .220.
[36] SCC 14.24.080(5)(a).
[37] SCC 14.24.110(1).

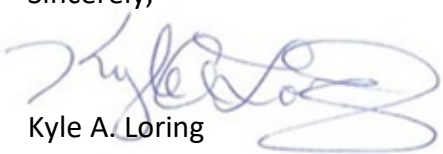
The Geotech Report also appears to omit several elements of the requisite site assessment, including: (1) a site plan depicting the height of the slope, slope gradient and cross section indicating the stratigraphy of the site; (2) a description of load intensity, surface and groundwater conditions, fills and excavations; and (3) a description of the extent and type of vegetative cover including tree attitude.[38] The August 2015 Hydrogeologic Site Assessment (by the same consultant) that Miles submitted along with its original permit application includes some of the above elements, but only addresses the actual mine site, not the haul road.

D. Conclusion.

We appreciate the effort work that PDS has put into obtaining sufficient information about the applications to conduct the applicable SEPA and critical areas review. As a result, the December 2021 reports submitted by Miles provided a significant amount of new information about site conditions and the vast amount of ecologically sensitive areas along the haul road. Now they must be amended to address the impacts of road upgrades that occurred in conjunction with the forest conversion to mining operations, as well as the impacts from high intensity, industrial use of the road.

If you have any questions, please contact me at 360-622-8060 or kyle@loringadvising.com.

Sincerely,



Kyle A. Loring
Counsel for Central Samish Valley CSVN

Cc: Leah Forbes
Jason D'Avignon
Martha Bray
John Day

Attachments: SRSC Letter

[38] *Compare* Geotech Report *with* SCC 14.24.420(2).

Skagit River System Cooperative
11426 Moorage Way • P.O. Box 368 LaConner, WA 98257-0368
Phone: 360-466-7228 • Fax: 360-466-4047 • www.skagitcoop.org

April 30, 2021

Michael Cerbone
Skagit County Planning and Development Services
1800 Continental Place
Mount Vernon, WA 98273

Reference: Concrete Nor'West gravel pit
(submitted electronically via: County Comment Portal)

Dear Michael,

The Skagit River System Cooperative (SRSC) has reviewed the resubmittal of the proposal by Concrete Nor'West for a gravel pit near the Samish River (PL16-0097 and PL16-0098). The steelhead and coho salmon that spawn and rear in the Samish River and its tributaries are important tribal resources, so we are submitting comments on behalf of the Swinomish Indian Tribal Community and Sauk-Suiattle Indian Tribe.

Depth of Quarry Excavation

We would like to reiterate our previously stated concerns about the bottom depth of excavation for the pit. It is important to prevent ant interaction of surface water and ground water in order to prevent pollution and protect water quality. We understand from the project documents that the extent of gravel mining will not go deeper than 10-feet higher than the groundwater levels surrounding the Samish River in order to prevent this interaction between groundwater and surface water. Limiting the depth of excavation should prevent the gravel pit from becoming a pond, and from river water being affected by groundwater interaction. However, it is important to consider the practicality of conveying this provision to the on-the-ground employees operating the pit decades from now, when that maximum depth of excavation will be approached.

For clarity and certainty, we would like the specific elevation of final excavation to be established as part of the permitting process, and that elevation should be based on Samish River water surface elevations at normal winter flow, not during summer low flow. On-the-ground monumentation should be available onsite with clear signage, located where it won't be disturbed by decades of mining, but close enough to be useful when the pit begins to exhaust its capacity.

Additionally, we would like to see periodic site evaluations every five years with reporting to the Department of Ecology. The evaluations should include a rod-and-level survey to determine the current depth of excavation using onsite monumentation, and an evaluation of the depth of excavation

remaining. This evaluation will serve to continue to convey the provisions and on-the-ground expectations to the employees operating this mine.

We expect there to be no surface runoff from the gravel mine, as pits create a topographically closed depression. Finally, we expect there to be no on-site processing of gravel, as stated in the plans.

Haul Route

The project proponent must expand their environmental assessment to include the haul route from the gate at Grip Road to the mine site itself. The existing onsite haul route is about 2 miles long and was developed for forestry activities. The quantity, seasonality, and duration of traffic; types and weights of vehicles; agency with jurisdiction; and maintenance responsibility will all change with this proposal, and as such, impacts must be considered. The route crosses numerous wetlands, a couple of typed streams, and the gorge and large stream Swede Creek, a known salmon-bearing stream. We have concerns on how the proposal will affect these sensitive areas.
The haul route was apparently widened recently. The as-built drawings recently provided by Semrau Engineering indicate the road is approximately 22 feet wide as-built. Archived airphotos and Google Earth indicate that this road was previously much narrower, approximately 15 feet as measured from airphotos.

I am unclear what permits were acquired to do the road widening, or if the work was under DNR jurisdiction (under FPA # 2816283 or FPA # 2814718) or Skagit County as improvements to a private road at the time. The two FPA's referenced do not indicate any road work or culvert replacements at typed streams would occur, but the roadwork did in fact replace culverts at approximate STA 12+27, STA 64+00, and STA 64+95 which with a cursory assessment and details in the FPA indicate would be Type N or Type F streams.

When this work occurred happens to be easy to ascertain. A 7/15/2018 Google Earth airphoto shows the work underway, with the northern portion of the haul route widened to more than 20 feet, and the southern part of the haul route remains narrow at about 10-12 feet and as in an apparent 2-track condition. An excavator is working at 48.563041, -122.280407. A roller is parked at 48.569462, -122.276716. The widening of the road adds up to more than 2 acres of new compacted gravel (2 miles x 10 feet). We would like to hear details of the design and regulatory approvals for this substantial road widening and project to replace all culverts.

Moving forward, we expect an environmental assessment to survey the road for stream crossings, wetlands, and seeps (of which there are many) to support a design that meets the Skagit County Drainage Ordinance and allows free flow of all surface waters across the road through appropriately sized culverts and ditches for streams and cross drains. We expect all culverts to be appropriately spaced and located, in particular those at approximate road stations STA 12+27, STA 64+00, and STA 64+95 where we believe typed streams to be present. All culverts must be appropriately sized to meet Skagit County Code or Washington State Forest Practices, whichever is more restrictive.

We feel that over the long term that the gravel operations use of this road presents an impact to surface waters and aquatic habitat due to sedimentation and runoff, and presents a greatly increased risk of slope failures that threaten to directly impact Swede Creek. We presume that the BMPs in the ditchline along the road were implemented concurrently with the above-described road work and the 2018 FPA. While remnants of the BMPs were evident in the ditchline (decayed straw wattles) recently, these BMPs

are clearly short-term treatments for forest practices, which typically represent a short duration of heavy use along a forestry road, as in during the harvesting and subsequent replanting activities. However, the proposed mine will have a very long duration (25 years) of a very heavy use (documents indicate 4.6 up to 30 trucks per hour). Typical forest practices short-term BMPs and management of stormwater are likely insufficient, unless scrupulously maintained, to effectively prevent runoff into surface waters.

The type of vehicle that will be utilizing this haul route is also notably different than a typical log truck, which can typically weigh around 88,000 pounds. The application materials indicate that the typical loaded gravel truck and pup will weigh 105,500 pounds, or 20% heavier. This, combined with the vastly greater number of vehicles and duration of the action, must be considered in an adequate drainage and stormwater management plan.

The road and all crossing structures must be assessed to ensure that they are capable of handling the types of traffic expected on the mine service road. We would like to see information specific to the age of the bridge and an onsite assessment by a bridge engineer that the bridge is capable of handling long-term usage by 105,500 pound vehicles; the provided memo is based on a typical engineering drawing dated 1999 and "from the original bridge installation and "photos and descriptions" sent to the engineer by the project proponent. This seems like an insufficient assessment of a bridge that serves as the key haul route for this mining project and is central to our concerns about the risk to aquatic habitat.

From our perspective, the risk of failure at this bridge would bring substantial harm to downstream aquatic habitat and we would like to be assured that this timber bridge is capable of handling the mine traffic. Traffic along the haul route must be adequately planned for, maintained, and mitigated. We request an onsite bridge inspection be completed prior to permitting, and repeated periodically at no less than every 5 years for the duration of the mine. We request this bridge inspection schedule and submittal of inspection reports to Skagit County Public Works be a provision of the permitting of this mine.

We would like to see the applicant submit a maintenance plan for all stormwater and drainage conveyance systems, including the assignment of responsibility for such maintenance. The road maintenance provisions and the stormwater and drainage maintenance plan must be recorded with the permitting of the mine, and enforced and carried out as a provision to the permit, to prevent impacts to surface waters and wetlands in the vicinity of the haul route throughout the duration of this mine.
We also feel that the 2-mile haul route, which has been essentially doubled in width ahead of this mining activity, should be fully assessed by a qualified consultant who can identify sensitive areas, priority habitat areas, wetlands, and streams; quantify the impact; and suggest appropriate and mitigation measures to reduce impacts resulting from this project.

When identifying mitigation measures, we would like to draw attention to an undersized and impassable culvert on a Type F stream located along a spur road on the subject property that we have recorded in a inventory of barrier culverts (48.563983, -122.275181). We suggest as a potential mitigation measure to compensate for road expansion and impacts to remove this culvert and naturalize the stream, or replace this culvert with an appropriately sized culvert based on an assessment of channel dimensions and fish use.

Swede Creek gorge

We have specific concerns about the haul route through the steep valley at Swede Creek. The route crosses a bridge at Swede Creek, which the proponent has designated will be a one-lane bridge with signage. The engineer, Semrau, has provided an as-built drawing set, dated 2018, for the haul route, which supported this review.
Firstly, we would like to see no additional road widening within the Swede Creek gorge. Should any widening be absolutely necessary, the road should be cut into the hillslope and not be built further onto the fillslope.

The slopes in this gorge are very steep, well over 70% at some locations, with delivery possible since Swede Creek is at the toe of steep slopes.

The are a couple of existing road failure issues within the gorge that must be corrected as soon as possible to prevent any further road failures or degradation to water bodies. These existing road failures serve as an example of the types of road issues we are very concerned about. There is presently a 60-80 foot long sidecast crack and slump (12-18" deep) on the fillslope near the top of the hill north of Swede Creek. Any further failure risks sediment delivery directly into Swede Creek. The sidecast failure occurred recently, at a time with relatively little road traffic. With the constant impact of loaded 105,500-pound gravel trucks passing by at a rate of 4.6 to 30 trucks per hour, the compaction, vibration, and degradation of appropriate ditches and drainage features will be constant, greatly increasing the risks that use of this road presents to Swede Creek.

In addition to the sidecast cracking, there are two cutslope failures that have slumped and filled the ditchline. All three of these failures must be immediately addressed to ensure that no further damage to the drainage infrastructure or Swede Creek occur.

In an environment like the Swede Creek gorge, water management is of the utmost importance. This fact cannot be understated. Cross drains and backup cross drains must efficiently transport surface runoff across the road surface and not be allowed to run haphazardly down the ditchline. The outlet of cross drains must be carefully selected by an experienced road designer to ensure that erosion or failure of the fill slope will not be aggravated.

Slope failures and debris slides are disastrous for fish habitat. Debris slides can decimate instream biota and adjacent riparian areas, bury redds and appropriate spawning substrates, and contribute to downstream water quality problems. Road management and reducing the risk of debris torrents originating at forest roads is something that our organization has invested a great deal of time, effort, and money to address and correct, and remains a significant concern of ours at this location.
We understand that the road is proposed for paving at STA 21+00 to 26+00, located within the Swede Creek gorge and within the riparian buffer of Swede Creek. While there are some negative impacts and risks associated with paving due to increased impervious area and increased runoff quantity and speed, we recognize that paving can greatly reduce sediment delivery to streams. We recognize that sediment delivery is one of the greater threats to the aquatic habitat adjacent to this proposal. For that reason, we would like to see consideration of paving both the north and south approaches to the Swede Creek bridge, from hillcrest down to the bridge.

Washington State Forest Practices Board Manual suggests paving within 200 feet of a stream as a BMP for sediment control. "In situations where sediment control devices need to be used long-term consider surfacing that requires little to no maintenance such as chip sealing or paving portions of roads." We feel that would be a prudent BMP in this situation, where permanent management of sediment must be

required. However, as will all surface water management in a steep gorge, paving must be designed with care by an experienced road engineer with experience working with these building materials in steep terrain, to ensure that runoff is carefully managed to avoid erosion or slope failure, and disconnect from streams and wetlands.

We would like to see some improvements to drainage management within the gorge, with additional cross drains installed to ensure capacity and redundancy in the case of slumping into the ditchline, as is presently occurring. This ensures that water can get off the road if a culvert is clogged, rather than run down the road and trigger further slope failures and damage to the aquatic environment. In risky terrain for forest roads, redundancy and maintenance are key. The outlet of any cross drains in the gorge should be disconnected from directly contributing to Swede Creek; this may be in the form of swales, settling basins, sediment curtains, or straw wattles that can prevent pollution from reaching a surface water body. Permanent treatment BMPs should be considered and utilized. Substantial rock aprons should be built at the outlet of all culverts, with particular attention and size emphasized at culverts within the Swede Creek gorge. We feel strongly that to reduce sediment runoff in the gorge, paving, permanent BMPs, and ample cross drainage opportunities can help to reduce impacts.

Road Maintenance

We understand the access road from Grip Road to the quarry (nearly 2 miles) will be designated a Private Road by Skagit County, and the landowner(s) of the road will be responsible for its maintenance. We are concerned about impacts of this road should it go unmaintained over the 25-year duration of this project. Ditches and culvert inlets that become clogged with debris and sediment, potholes, washboards, winter snowplowing that forms windrows along road edges, damaged culverts and aprons, or damage to the Swede Creek bridge all present situations where there are increased and avoidable impacts to surface water bodies.

We would like to see an adequate drainage and stormwater management plan assessing and prescribing improvements to the private haul route. We would like to see applicant submit a maintenance plan for all stormwater and drainage conveyance systems, including the assignment of responsibility for such maintenance. We would like to see a schedule of periodic on-site bridge inspection to assess the Swede Creek bridge and the anticipated traffic level and loads. The road maintenance provisions and the stormwater and drainage maintenance plan must be recorded with the permitting of the mine, and enforced and carried out, to prevent impacts to surface waters and wetlands in the vicinity of the haul route.

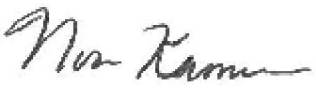
Reclamation

We would like to see the proponent submit a reclamation plan for their proposal, and this plan should be provided for ours and public review. The mine reclamation plan for this site should specify access controls that are adequate to assure that no dumping will occur, either by Concrete Nor'West or any authorized or unauthorized parties. Obsolete gravel pits have a tendency to become dumping grounds for all kinds of waste and trash. If some of that trash were to leach toxic materials into the permeable gravel at the pit, the result could be devastating for Samish River fish. A robust plan to prevent dumping at the pit would be a prudent step at this stage of permitting the mine.

As always, SRSC appreciates the opportunity to comment on this proposal, and we look forward to continuing our collaboration with the County on these matters. If you have any questions about our

comments, or if there is anything that we can provide, please don't hesitate to call me at (360) 391-8472 or email at nkammer@skagitcoop.org.

Sincerely,



Nora Kammer
Environmental Protection Ecologist
Skagit River System Cooperative

ATTACHMENT E

STRATUM GROUP
PO Box 2546, Bellingham, Washington 98227

June 10, 2022

Re: **Proposed Grip Mine Haul Road**
Comments Regarding Potential Geology Hazards

I reviewed the Associated Earth Sciences (AES) Response to Skagit County Geologic Hazard Requirement dated December 16, 2021 and a letter regarding the proposed mine by the Skagit River System Cooperative (SRSC) dated April 30, 2021. I also reviewed the available geologic mapping in the area (Geologic Map of the Bow and Alger 7.5-minute Quadrangles, Western Skagit County Washington), reviewed lidar (light distance and ranging) bare earth imagery of the vicinity, review of historic aerial imagery and incorporated my own notes and observations I have made in the vicinity of the site and at locations with similar geologic conditions.

I have been a geologist and engineering geologist since 1983 and am licensed in the State of Washington as a geologist and engineering geologist. I currently work at Stratum Group where I routinely conduct geology hazard assessments. I have been working as a geologist in northwest Washington State since 1989 and am very familiar with the geology of the Samish Valley and continental glacial history of the area that are relevant to the slopes I in the Swede Creek drainage. I was on the project teams that completed literature reviews of deep-seated glacial landslides and deep-seated bedrock landslides for the Cooperative Monitoring, Evaluation and Research (CMER) Committee, the committee charged with advancing the science needed to support the adaptive management program associated with WAC 222. I have been the lead author of the of geology hazardous areas for local governments in Washington State. I have attached a copy of my CV.

Based on the geology assessment in the AES report, I cannot conclude that the proposed haul road that appears to have been constructed along a former logging road is not at risk from landslides or erosion. Furthermore I cannot conclude that the proposed haul road will not increase the risk of landslides or erosion based on the information provided in the AES report. The report does not provide an adequate discussion of the hazard and a number of slope issues on this site are never discussed or mentioned. The lack of analysis of several areas of the slope in the AES report is such that it is my opinion that no responsible geologist could reach the conclusion that the road is not at risk from landslides or does not pose a risk of increasing landslides or erosion.

My comments below are in regards to the Associated Earth Sciences report.

Comment #1 Regarding lidar bare earth review

The lidar bare earth review (last paragraph of page 2) is very limited and only addresses whether or not there are indications evidence of deep-seated slope movement at the immediate road area where the road crosses the slope. The brief review included this statement: "*The area of slope identified by the County as a geohazard, exhibits relatively planar features indicative of generally good overall stability.*"

If a slope is planar, the slope is usually stable. No planar slopes can indicate that the slope is not stable or that there have been past landslides or areas of erosion. My own review of the lidar bare imagery is not remotely consistent with that statement that the slopes in this area are relatively planar. There are numerous non planar features in the vicinity including two non planar features that appear to be related to the road cut into the slope and one below the road which appears be related to erosion by Swede Creek that would undermine the slope the road is located on. There are areas of convergent topography including one area above the road that could be a potential landslide area.

Lidar bare earth imagery is a remarkable tool for identifying landforms prior to visiting a site. My own review of the lidar identified numerous non planar features (Figure 1) that should have been directly observed and evaluated and discussed as they all relate to the road stability.

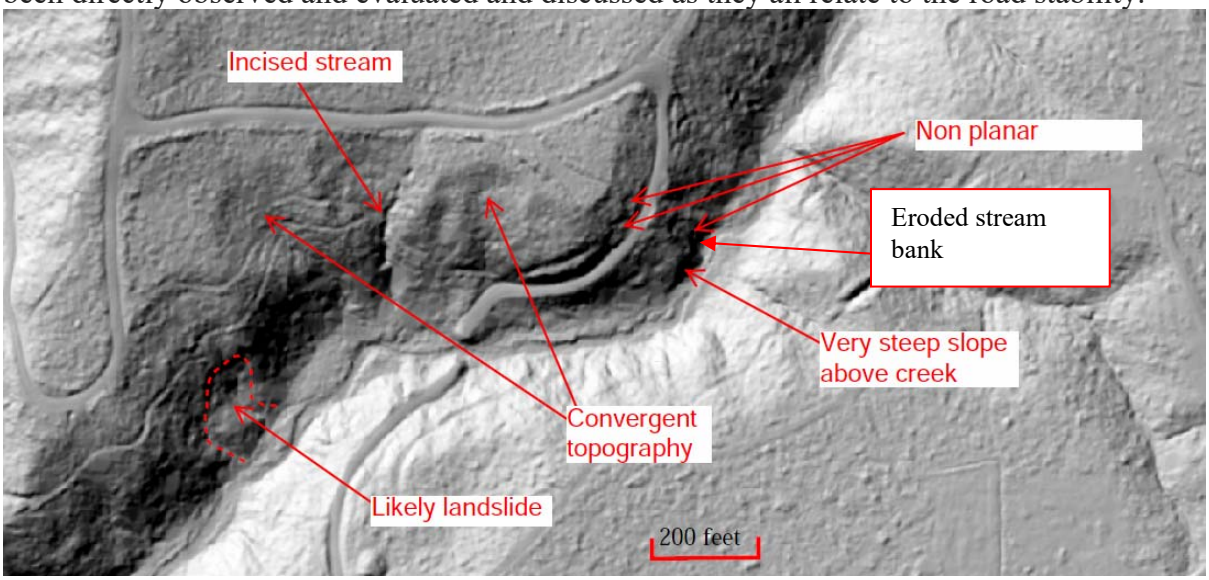


Figure 1. Lidar bare earth imagery of proposed access road and Swede Creek valley (2017 lidar via the Washington State Department of Natural Resources Lidar Portal). Note the lidar imagery predates the recent widening work on the proposed haul road.

The features indicated in Figure are all non planar features that were not recognized, discussed or analyzed in the AES report. These features are all potential landslide or erosion hazard areas that should be evaluated in more detail.

Comment #2 Regarding Visual Slope Reconnaissance

AES provides one paragraph regarding their visual slope reconnaissance. None of the features that are shown on the Figure 1 lidar are discussed or assessed. Each of the features indicated in Figure 1 and their relevance to the assessing the slope area of the proposed haul road are discussed below.

> Swede Creek and stream processes along Swede Creek are never discussed. This is a significant omission in that the slopes in question are the result of Swede Creek having eroded a deep narrow steep sided valley. Lidar imagery clearly shows an active stream channel and active stream movement and evidence of recent erosion. There is a likely landslide associated with the creek a short distance down stream and what appears to be a steep stream cut slope below the proposed haul road (indicated on Figure 1) that is not mentioned or discussed. The lidar imagery shows what appears to be slope slump (a non planar feature) just above the steep stream cut slope. Further erosion at this location will undermine the slope the proposed haul road crosses. Stream erosion of the slope below the haul road is never mentioned or discussed in the report.
>
> The convergent topography below the east-west section of the road above the slope was not addressed. These slopes are clearly not planar. What are these features? What geomorphic processes formed these features and how active are those processes? Could the road above impact the processes? Do the processes on these slopes pose a long term risk to the road?
>
> The incised stream channel below the east-west road above the slope is never mentioned or discussed. The lidar image clearly shows this stream is a sharp feature suggesting recent active erosion. Does the road impact water flow to this feature? Does increased erosion from road drainage potentially impact the public resources down slope in Swede Creek?

Comment #3 Stability of glacial marine drift

On page 6 AES makes the following statement: “Based on our field observations, the mapped presence of high-strength glacially consolidated sediments at the steep slopes, and the lack of moderate- to deep-seated instability indicators it is our opinion that the use of the road for

mining operation will not increase the risk of landsliding or erosion at or near the identified geologic hazard areas."

The statement that the glacially consolidated sediments are high-strength is generally accurate. However, the upper slopes are mapped as being underlain by glacial marine sediments. Glacial marine sediments were never consolidated by glacial ice. Glacial marine sediments frequently contain desiccation fractures and due to these fractures are not high strength sediments. It has been my experience that fractures in the glacial marine drift can weaken over time leading to landslides. The convergent slope areas noted in Figure 1 that are less steep slope areas and I suspect are old slides within the glacial marine drift. The proposed haul road cuts through the upper slope in an area that has been mapped as glacial marine drift.

Comment # 4 Stormwater Mitigation

AES lists mitigation for the road (page 7) indicating that the road has impacted the stability of the slope and has the potential to further impact the stability of the slope.

In particular AES recommends "Clean out material that has sloughed into the swale that could potentially block surface water" and "Avoid concentrated surface water discharge onto the steep slopes."

It is clear from the recommendations that the slope should be considered a landslide and erosion hazard area. The consequences of failure to keep the swale cleared was never discussed and the details of how the swale will be constructed is not described or the frequency of sloughing into the swale.

Typically avoidance of geology hazard areas is the initial approach that should be taken under critical areas. This road was originally built as a logging road. Old logging roads are typically 'put to bed' when not in use so that drainage problems do not develop. Reusing this road for a new purpose across a landslide and erosion area should require a more detailed plan to address drainage than the very general recommendations made.

No mention of changes to road drainage are made regarding the incised stream below the east-west section of the road (Figure1) as this incised stream was never observed or discussed in the report.

Comment #5 Regarding identified sidecast cracks and cut slope slumps

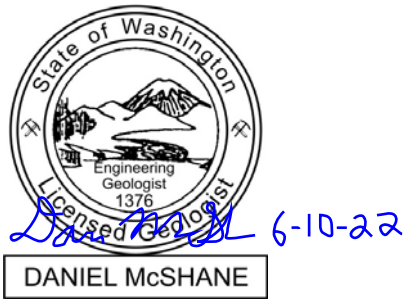
SRSC noted a crack in the road sidecast and also noted slumps into the ditch. Cracks in the side cast are indicative of soil movement within the side cast and could result in a landslide down into Swede Creek. The slumps into the ditch observed by SRSC indicate that the cut slope is not

stable and is subject to slope failures that will at the least impact the drainage along the road and potentially the impact the road. Neither of these observations made by SRSC were ever mentioned or addressed in the AES report.

Stratum Group appreciates the opportunity to comment on this proposal. Should you have any questions regarding please contact our office at (360) 714-9409.

Sincerely yours,
Stratum Group

Dan McShane, L.E.G., M.Sc.
Licensed Engineering Geologist



ATTACHMENT F

Matt Mahaffie
22031 Grip Road
Sedro Woolley, WA 98284

June 9, 2022

Skagit County Hearing Examiner
Skagit County Planning and Development Services
1800 Continental Place
Mount Vernon, WA 98273

RE: PL16-0097 & PL16-0098 & February 22, 2022 MDNS

Dear Mr. Examiner:

As requested by the appellants in this MDNS appeal, I am providing this document as a summary of my review of the critical areas review and SEPA Mitigated Determination of NonSignificance (MDNS) that Skagit County issued for PL16-0097 and PL16-0098, a proposal to clear 68 acres and install a gravel mine on 51 acres. Since 2006 I have been an independent critical areas consultant (Skagit Wetlands & Critical Areas, LLC), having performed hundreds of site assessments in Skagit County, all of which have been approved. Additionally, for over 7 years I have been a Natural Resource Planner/Critical Area Specialist with Whatcom County, reviewing proposals and associated documents for compliance with local ordinances, including the Critical Areas Ordinance, Shoreline Master Program, and State Environmental Policy Act review. I'm writing this letter to express my expert opinion in my consulting capacity.

These comments describe the deficiencies in the application materials regarding critical areas and in Skagit County's review process in issuing the MDNS. I have great familiarity with this particular property, having spent over 20 years traversing all portions of it when it was open for public access (under previous owners) as well as reviewing it professionally as a wetland/critical areas specialist under previous development proposals (also under previous ownership). I have reviewed application materials associated with critical areas like wetlands and streams on the site, and this letter explains that the applicant and County have not conducted an adequate review of impacts to critical areas across the site.

In addition to the MDNS and its stated conditions, I also reviewed the following five documents that the applicant submitted to Skagit County to discuss critical areas:

- *Re: Samish River (Ordinary High Water Mark/Wetland Edge),* letter by Graham-Bunting Associates May 18, 2015.
- *Fish and Wildlife Site Assessment: Parcels 50155, 125644 125645* prepared by Graham-Bunting Associates August 20, 2015.
- *Addendum to Fish and Wildlife Site Assessment: Parcels 50155, 125644 125645* prepared by Graham-Bunting Associates April 18, 2017.

- *Impact Assessment and Mitigation Plan* prepared by Northwest Ecological Services December 2021.
- *Critical Areas Assessment (Wetland Delineation & Fish and Wildlife Assessment)* prepared by Northwest Ecological Services December 2021.

The first four of these documents were apparently cursorily reviewed by Skagit County staff as well as being provided to the public through the permitting process, including during several applicable comment periods. The final document in the list above, *Critical Areas Assessment* (NES 2021), a 418-page technical document, was not provided to the public until the week of June 6, 2022, well after the February 22 issuance of the MDNS and expiration of the comment periods, and only upon repeated requests by myself. Additionally, there has been no indication that Skagit County staff has in any way reviewed this document for accuracy. When I first inquired about it prior to issuance of the MDNS in preparing a comment letter, staff told me they were unaware of its existence, a statement repeated in the end of May 2022, and it was not even downloaded to the record/file until June of 2022 after repeated requests for the document. This is highly relevant as it is the baseline condition document that the subsequent *Impact Assessment* draws from; without consideration of the validity of existing conditions it would be unlikely that any findings from the *Impact Assessment* could be given weight on their subsequent accuracy.

Insufficient Information in the Applicant's Critical Areas Documents

While I have not had direct access to the site to verify specific findings put forward by the supplied assessments, I offer the following summaries to address the necessary information that is lacking from those assessments and the significant errors therein
Re: Samish River (Ordinary High Water Mark/Wetland Edge), letter by Graham-Bunting Associates May 18, 2015.

- This simple letter describes the Ordinary High-Water Mark (OHWM) and wetland edge in layman's terms. The description of the OHWM would be a common and acceptable submittal document for such a feature. However, the identification of the wetland herein does not; Skagit County Code (SCC 14.24.200.2) lays out the proper procedure to document wetland presence, relying heavily on the application of the appropriate United States Army Corps of Engineers manual and applicable Regional Supplement. This document does not satisfy SCC to document wetland presence in any way.

Fish and Wildlife Site Assessment: Parcels 50155, 125644 125645 prepared by Graham-Bunting Associates August 20, 2015.
&
Addendum to Fish and Wildlife Site Assessment: Parcels 50155, 125644 125645 prepared by Graham-Bunting Associates April 18, 2017.

- The singular wetland rating put forth for the riparian wetland associated with the Samish River appears accurate (Graham-Bunting, 2015) under the rating form in effect in 2015, even if current wetland rating standards were applied. However, the land use intensity (moderate) put forth does not conform to the land use intensity description put forth in Appendix 8C of WA DOE Publication No. 05-06-008 as required if using the alternative buffers in SCC 14.24.230(1)(b). This was verified via contact with the applicable regional wetland specialists with the Washington State Department of Ecology (Doug Gresham, DOE, personal conversation 12/23/16 and Chris Luerkens 3/11/2021). The Department of Ecology created the wetland buffer system and established the criteria for the different land use intensities, and both of the WA DOE specialists I spoke with have also commented to Skagit County that this proposal qualifies as high intensity (see record).

  I agree with the WA DOE officials that the land use intensity for a full-time gravel mining operation is unquestionably **high**. Based on the high intensity land use, and the high habitat score that Graham Bunting identified in their wetland rating, SCC 14.24.230 requires a 300ft wetland buffer rather than the applicant's proposed 200ft buffer (300 also being the standard buffer). This was required in review by Skagit County (discussed later in this letter).

- In addition, the Graham-Bunting mine site review/assessment neglected SCC 14.24.230(2), where in general, buffers are to extend 25 feet past the top of sloping areas that are 25% or greater. The site plan as indicated shows areas where this provision is applicable (when utilizing a 200ft buffer as shown). Regardless of the aforementioned land use intensity issue, the buffer likely should still extend past the 200ft line indicated in such areas unless there is a rational reason put forth not to, which does not appear to have been provided specific to this project.

- A wetland assessment is required for the mine site portion of the project as proposed (regardless of the land use intensity) per SCC 14.24.220. A complete wetland assessment has not been submitted for this project even though the Graham-Bunting Fish & Wildlife Assessment made it clear that a wetland was present. Neither of the Graham-Bunting reports meets the standards put forth by Skagit County Code for a Wetland Assessment as outlined in SCC 14.24.220. It is lacking a delineation performed to the applicable standards put forth by Skagit County and lacks the appropriate documentation required by SCC for determination (wetland data points).

Critical Areas Assessment (Wetland Delineation & Fish and Wildlife Assessment) prepared by Northwest Ecological Services December 2021.

As this voluminous document was provided only days before the writing of this review, I was able to make only a cursory review of it. Based on that review, I found the following deficiencies:

- Forest Practice Applications (FPAs) issued by WA DNR for these parcels over the years directly contradict the findings of the NES report in that a number of the streams noted to be seasonal non-fish (Type Ns) in the NES document were shown by DNR to be, in fact, fish-bearing (Type F). The streams noted onsite within the review area were Swede Creek and 21 separate stream segments. All of the 21 stream segments were noted as seasonal non-fish streams, however, there is no indication of how NES arrived at this conclusion. Skagit County defers to the Washington Department of Natural Resources' stream typing system, set forth at WAC 222-16-030 and WAC 222-016-031, to define the physical criteria for such a determination. NES's very minimal stream descriptions indicate that such criteria were not met by the physical standards applied (specifically noted stream width and photographic documentation appeared to indicated streams were, in fact, Type F by the physical criteria put forth in WAC 222-16-031).

  Based on my review of WA DNR FPA #2817147, FPA #2814605, and FPA # 2814718, those documents indicate that numerous streams onsite are Type F, not Type Ns as put forward by NES with no supporting documentation. Pursuant to SCC 14.24 Type F streams require a 100-150ft buffer, not the 50ft buffer asserted by NES. Such designations directly affect consideration of potential impacts (i.e. protection of riparian function such as shading, erosion control, large woody debris contribution, and organic litter contribution essential to aquatic life), both to the feature itself as well as to buffers by spatial intrusion. Any stream determinations should provide the methodology and documentation for how that determination was made (i.e. WA DNR Water Typing Worksheet or similar methodology) which was not done.

- Several of the wetlands onsite are known to be fish-bearing (Type F) waters, specific to the review area Wetland "JJ" and additionally considered fish and wildlife habitat conservation areas pursuant to SCC. These were not addressed as such in the document, or accurately described generally, and the impacts therefore were not assessed.

- The documents did not address numerous questions regarding the supplied wetland ratings. A large number of wetland ratings were provided and should have been individually reviewed by Skagit County and/or another appropriate reviewer. The County did not know of the existence of the delineation document and could not have reviewed same.

Impact Assessment and Mitigation Plan prepared by Northwest Ecological Services December 2021.

- Initially, critical area review, and to a lesser extent SEPA review, were limited to the proposed mine site only. However, a Northwest Ecological Services "Impact

Assessment and Mitigation Plan" noted the presence of, presumably, all wetlands and streams within the haul route. While the document was noted to not be a complete Wetland or Fish & Wildlife Assessment as required by Skagit County Code, it does appear to provide a baseline for the site conditions along the haul route. However, notable discrepancies include:

- As with the mine itself, the proposed internal haul road was stated to be a moderate intensity land use (the NES report referenced Graham-Bunting for such, not an individual finding/analysis). Skagit County and WA DOE have previously stated that the proposed mine constitutes a high intensity land use, and it follows that the internal haul road should be considered a high intensity land use as well. WA DOE has also now issued rules requiring that roads accessing such high intensity land use projects be considered as high intensity land use themselves. I have reviewed dozens of NES projects, and all of them indicate a high intensity land use rating for roads that will have as much traffic as is projected here; NES and their assessment need to conduct their own analysis rather than rely upon the Graham-Bunting analysis, which was previously rejected by Skagit County as discussed below. (see Figure 1 for other instances where NES identified surface mining projects as high intensity). The haul route is a high intensity use and should have the appropriate buffers for that consideration

- No consideration was seriously given in the assessment to the change of use. This road has expanded notably after applying for special use permit, both in width of the roadbed and in maintained width of the road corridor. Such road upgrades reflect the proposed change of use. Forest roads may have less impact on critical areas when used for forestry, a use that is basically episodic in nature; a short time of harvest and then let rest for possibly decades with only minimal use until the next harvest. One can see from aerial photos that the road, which was largely vegetated over 10 years ago, is now a significant, visible scar on the landscape. This continual maintenance for new use, and the proposed 25 years of continual use for hauling gravel will affect all of the wildlife that would still use these critical area/buffers under forest management only. As it was clear that this road expansion was for the permit at hand, any spatial impacts should be addressed with compensatory mitigation.

  Additionally, no serious consideration was given to such wildlife use or impacts evaluated; migration, water access, shelter, etc. The NES *Impact Assessment* stated both that there would be impacts to wildlife but also that there wouldn't be impacts, contradicting itself, and provides no mitigating measures for same. This will be a distinct habitat break in what is presently one of the largest undeveloped tracts remaining in lowland Skagit County, home to deer, bear, cougar, and elk as well as many avian and small mammal species, in addition to the more water-dependent amphibians found within the wetlands that depend on being able to traverse wetland buffer areas as part of their life cycles. Heavily trafficked corridors are well known to affect the habits of such wildlife and no assessment was made for this. Wetland specialists such as NES staff (who are not trained

terrestrial wildlife biologists) should still be familiar with these concerns through the application of the Wetland Rating System for Western Washington (WA DOE Publication 14-06-030. There is ample literature available, best available science as it were, that could be drawn upon. However, none was cited or referenced in the essential lack of analyzing this change in regards to the minimums standards of Critical Area compliance, but more importantly the authors declined to analyze these potential impacts at the holistic level SEPA review can provide.

- The road crosses one of the most productive tributaries in the Samish River basin (Swede Creek) as well as being within the buffer of many wetlands and small streams. Light, noise, and dust are all measurable impacts (and noted within Skagit County Code) as impacts to be mitigated for, however, Northwest Ecological Services did not address any of these. Northwest Ecological has been observed to more properly address such impacts, including those noted above, on numerous other projects they have reviewed. It is unclear why the scope of this proposal has been so minimized and does not actually address any of the potential impact that the proposed amount of truck traffic will produce or the habitat it will undeniably fragment. The fact that the significant road improvements (grading, surfacing, and vegetation clearing) occurred after submission of the forest practice conversation and gravel mine applications indicates that they were not made for forest management.

Project Review

The most apparent discrepancy with the proposal from a critical areas standpoint has been the continual interpretation of the proposal as a moderate land use intensity. This was clearly and concisely put to rest by Mr. John Cooper of Skagit County on July 6, 2017 in his letter to the applicants regarding the incomplete nature of the application at that time and the further requirements needing to be fulfilled. Excerpt of Item 6 of that letter below. This requirement was not appealed. Any assertion by Miles Sand & Gravel that a moderate land use intensity was approved by Skagit County prior to the issuance of the February 22, 2022 MDNS appears to be blatantly false, and reliance upon that assertion by submissions by the applicant cannot be accepted.

6. The Fish and Wildlife Site Assessment prepared by Graham Bunting and Associates discusses land use impacts in Section 5.2.2 and concludes that the gravel mining operation is a moderate impact land use, thus a 200-foot buffer is adequate to protect the Samish River and associated wetlands. However, comment letters received from the Washington Department of Ecology (dated June 1, 2016 and December 27, 2016) and other local wetland professionals conclude that the gravel mining operation is a high impact land use and will require a 300-foot buffer from the edge of the wetland to the gravel mine. SCC 14.04 defines High Impact Land Use as *"land uses which are associated with high levels of human disturbance or substantial habitat impacts including, but not limited to, medium- and high-density residential (more than one home per five acres), multifamily residential, some agricultural practices, and commercial and industrial land uses."* Since your proposal is both a commercial and industrial land use that involves the extraction of approximately 4,280,000 cubic yards of material over 20 years, the proposed operations are a high impact land use. **Please amend your application and plans to indicate a 300-foot buffer from the edge of the wetlands to the gravel mining operation**.

The consultants preparing documents for Miles at this time also clearly contradict an assignment of Moderate Land Use through past reviews (see again Figure 1). It is extremely difficult to trust the documents put forth by Northwest Ecological Services that have relied upon this finding when they themeselves consistently state such land use activities are not moderate, but high.

Review of the proposal also did not demonstrate compliance with the following criteria in the Skagit County Critical Areas Ordinance (SCC 14.24):

- No meaningful protective measures have been assessed to the buffer of the critical area adjacent to the mine operations, or those features along the haul route for that matter. SCC 14.24.090 requires the designation of PCA's and protective measures. This has been completely ignored throughout this permitting process, both by the applicant as well as the County in apparent contradiction to SCC. While recording of a Protected Critical Area (PCA) site plan is standard and generally adequate for a single-family home, a commercial operation with employees on heavy equipment, no oversight, and no vested interest in the observation of the buffer is a recipe for disregard of said buffer (not to mention a PCA is required by SCC). Glaringly as well, there is no reference on the ground for the buffer. If there is no survey or mapping of the properly delineated wetland edge at the mine site, how will anyone know where the buffer is? The buffer should be required to be demarcated in the field, an absolute standard practice, and in reality, should be fenced as well (absolutely another standard industry practice) and as noted in SCC 14.24.090.

- As proposed, the mine extraction boundary is proposed to go to exactly the 200ft line from the Samish River. No consideration was made to the impacts to the buffer from this action. By not maintaining root zones or similar, adverse impacts to the buffer will occur, this is why SCC 14.24.080(4)c requires a 15ft maintenance corridor outside of buffers. Nor is it understood how such a working boundary line will be maintained at such a fine level from the documents

provided. Any work, even minor vegetation management or inadvertent activities, within 200ft of the Samish River would require permitting under SCC 14.26, the Skagit County Shoreline Management Master Program, and again, such is not addressed.

- In addition to the inadequate assessment along the haul route, I noted that environmental impacts outside of the haul route were not addressed either in the applicant's submittals or in any County reviews. Water quality impacts to the tributaries of Swede Creek and the Samish River are already noted by the continually failing shoulder of Grip Road; truck traffic has been observed to affect this by failing to stay fully upon the pavement, and the great increase in truck trips will continue to exacerbate this issue. Particulate emission as well as dust/sediment dispersal will also occur into the adjacent waterways, several of which (roadside ditches) are designate fish bearing/regulated waterways themselves, with the remaining ditches having direct surface water connectivity. Additionally, the increase of noise in rural areas by such projects, onsite or on haul routes, has been noted to affect the habits of local wildlife populations, another impact not addressed in any way, although noted through numerous public comments.

Conclusions

As previously noted, I consider this review to be a summary of easily observable discrepancies in this application's compliance with applicable regulations, and with no documentation from Skagit County (staff report or similar), even that level of review is difficult. I do not intend this to be a comprehensive review of the submitted documents, but rather a showing that such comprehensive review is still needed and warranted. As it appears that Skagit County is unable to conduct such technical review at this time, it should be completed by a third party that specializes in such, both for the specifics of review of technical reports as well as broader environmental review under the SEPA process.

Thank you for your time and consideration on this matter.

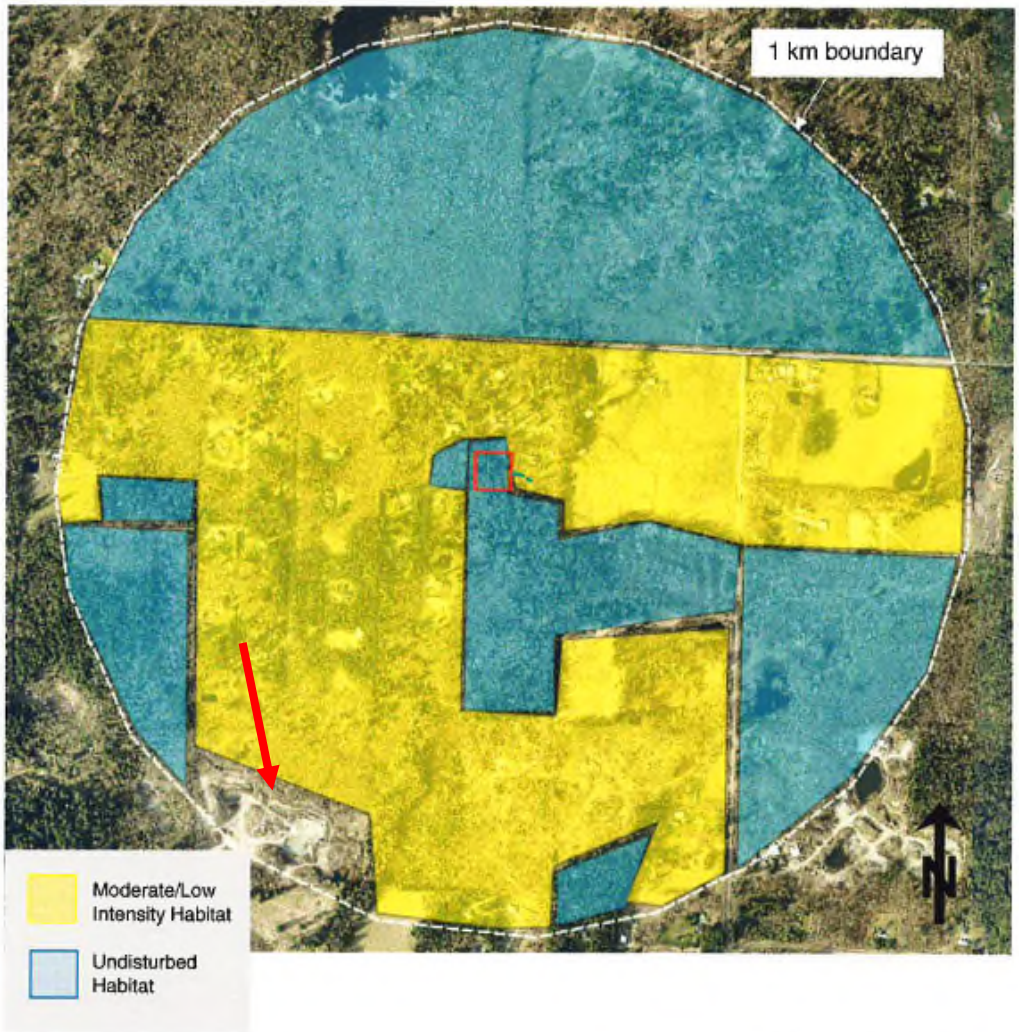
Respectfully,

Matt Mahaffie

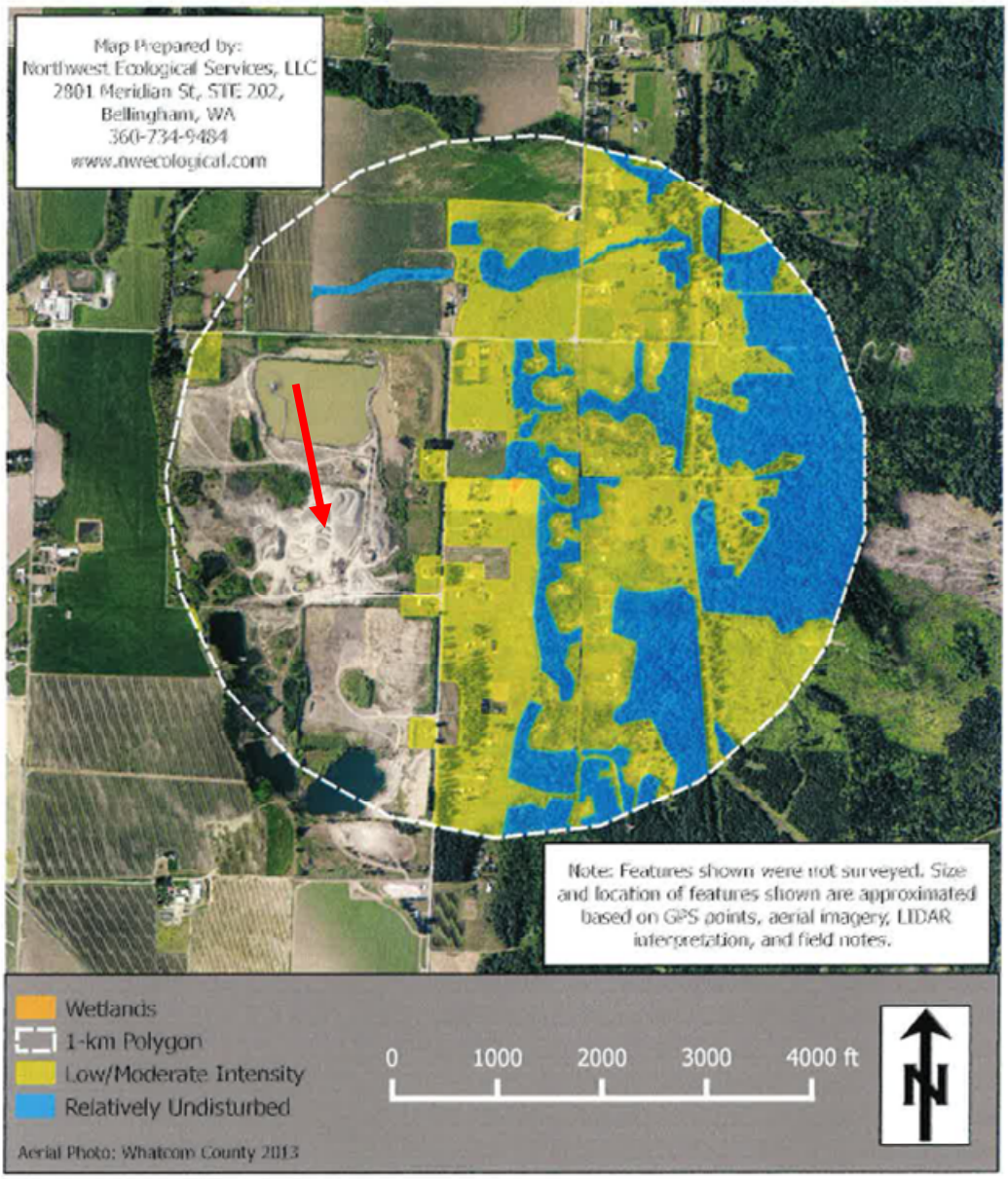
Encl.

Figure 1

Figure 1



Wetland Rating Map indicating land use intensity prepared by Northwest Ecological as available in the public record (Whatcom County). High land use intensity indicated by lack of colored shading. Note gravel pit at red arrow noted as high intensity land use by Northwest Ecological.



Wetland Rating Map indicating land use intensity prepared by Northwest Ecological as available in the public record (Whatcom County). High land use intensity indicated by lack of colored shading. Note gravel pit at red arrow noted as high intensity land use by Northwest Ecological.

ATTACHMENT G

TILGHMAN GROUP
TRANSPORTATION PLANNING

13 June 2022

Hearing Examiner
Skagit County
700 S. 2nd Street, Rm. 100
Mount Vernon, WA 98273

re: Concrete Nor'west – Grip Road Gravel Mine

Dear Mr. Examiner:

I write on behalf of Central Samish Valley Neighbors to express concerns about the transportation impacts of the proposed gravel mine to be located on Grip Road. In preparing my comments, I have reviewed the applicant's Traffic Impact Analysis, SEPA Checklist, Noise Study and the MDNS. Additionally, I have visited the area, driving the roads to be used for the haul route.

I am an independent transportation planning consultant with 37 years of experience working in Washington State and elsewhere around the country. My experience includes preparing traffic impact analyses and transportation master plans for a wide variety of land uses and providing expert witness services regarding transportation for numerous cases in Washington State.

My comments focus on the TIA and on the conditions in the MDNS.

Comments on the TIA

1. **The TIA notes that Grip Road and Prairie Road do not meet current County road standards because they are too narrow and lack shoulders but does not indicate that those roads comprise 56% of the haul route (2.85 miles of the total 5.04 miles on public roads).** Those narrow roads give drivers no margin for error or recovery, a condition that would be exacerbated by adding frequent heavy mine trucks.

2. **A Level II TIA should have been required so that a Safety Analysis would have been conducted.** Skagit County Road Standards 4.09.B states:

   Conflict Analysis is applicable to locations where accident data is not available or sufficient for analysis. This analysis is used to predict or measure accident potential at a location. A Conflict Analysis should determine the number of conflict points, frequency of conflicts and severity of conflicts based on expected traffic volumes and mix of traffic. Similar to the manner in which accidents are grouped by type of collision, traffic conflicts are arranged by type of maneuver.

Given that the mine's traffic is almost exclusively heavy trucks, that there is no history of frequent heavy truck traffic on Grip Road or Prairie Road to indicate accident potential, that those roads do not conform to current County road standards, that sight-distance deficiencies exist at key intersections, and that the mix of traffic will range from pedestrians and bicyclists to heavy trucks, a conflict analysis should be undertaken.

The County's threshold for requiring a Level II TIA is a project that generates 50 or more peak hour trips and meets any one of various warrants including "*If there exists any current traffic problems in the local area as identified by the County or a previous traffic study has identified high accident locations, poor roadway alignment or capacity deficiencies."* This standard does not distinguish types of vehicles when counting trips. But it should be noted that heavy trucks usually account for 2% to 10% of general traffic and, that for road capacity purposes, they are equivalent to about two passenger cars (on level grade, much more when climbing hills, according to the Highway Capacity Manual 2010, Exhibit 15-11). So, when the TIA notes that the worst-case peak hour volume would be 29.4 truck trips, it could be considered equivalent to 58.8 passenger cars in the peak hour, exceeding the 50-trip threshold for a Level II TIA. And recent slope and roadbed failures on Grip Road just west of the mine access road are well known to the County as are the 90-degree curves that cause long trucks to encroach on opposing lanes and/or track off the pavement.

3. **The average daily truck volume identified in the TIA is too broad of an average to provide a meaningful indication of daily traffic volume to the public and decision makers. That means that the full impacts of the proposed gravel mine's truck traffic have not been identified in terms of traffic operations, safety (especially regarding school buses and cyclists) and noise.** The average daily volume cited, 46 truck trips (a trip is either an arrival or departure), was derived from the expected amount of gravel to be excavated annually divided by 260 days of operation and the load capacity of dump trucks and their trailers. While the average daily trip number could be useful for pavement load calculations (showing how many times an axle passes a given location in a year), it obscures the range of volumes likely to occur across each day of any given week and therefore the public's experience of hauling operations. The applicant should show seasonal variations in volume so that the range of daily truck trips is known for the busier seasons. There are many ways that an average daily volume of 46 truck trips could be achieved over the course of a week or so, including days with fewer than 20 truck trips and days with over 100 truck trips, as shown in this table:

5-day average of 46 trips/day can occur many different ways

Daily Trip Examples			
Monday	5	35	0
Tuesday	120	50	0
Wednesday	5	40	230
Thursday	90	45	0
Friday	10	60	0
Total	230	230	230
Average Day =	46	46	46
Peak/Average:	2.61	1.30	5.00

4. **The TIA does discuss a high day's volume due to "extended hours" of operation but leaves the reader wondering how the extended hours actually work and what the impact would be.** That high day would have 294 daily truck trips. The TIA identifies the same daily hours of truck travel (7a.m. to 5p.m.) as during normal operations yet indicates a higher volume of excavation to be hauled during those 10 hours. More trucks could accomplish that, but it still leaves the reader wondering what hours are being extended. Presumably, "extended hours" means longer days of operation, more days, or both. If that is true:
    a. ***the TIA did not evaluate impacts from longer days, more days or both*.** The TIA does not address weekend hauling (except to note the annual daily trip average if hauling ran six days per week), although the MDNS mentions it. There is no weekend traffic data, and no indication of whether trucks hauling on a Saturday or Sunday would conflict with other road users including cyclists.
    b. ***The TIA did not evaluate the impact of hauling in hours of darkness*** which could occur should extended hours go earlier than 8 a.m. or later than 5 p.m. between November and February. Hauling during hours of low visibility or darkness poses additional safety risks given the sub-standard narrow roads without shoulders, Grip Road's lack of a fog line and sight-distance deficiencies at the mine access road and at the Prairie/Grip Road intersections.

    Much greater clarity is needed about the "extended hours" operation including how many days would be involved, and whether hauling would occur more than ten hours per day. That clarity would allow the County to identify impacts and determine appropriate mitigation measures.

5. **More than 10% of daily truck traffic could occur in one hour, the impacts of which have not been evaluated.** The TIA assumes without evidence that 10% of daily truck traffic occurs during the peak hour. But with a 10-hour operating day, that means that every hour has the same volume. For example, the TIA says that an average day with 46 daily truck trips will have 4.6 trips in the peak hour. Similarly, during "extended hours", the TIA notes that the peak hour volume would be 30 truck trips (with 294 daily trips over ten hours, the average hourly volume would be 29.4 truck trips). Two problems arise:
    a. It is very likely that truck trips would not be so evenly distributed across the day, such that the mine would generate more than 10% of its daily trips in one hour. That hour may or may not correspond to the afternoon peak hour of street traffic. Under the "extended hours" scenario, it is likely that more than 30 truck trips would occur in one hour, the impacts of which weren't evaluated in the TIA. Based on the TIA, the County and the public do not know the peaking characteristics of the mine's truck traffic and whether additional mitigation is warranted to deal with peak truck volumes.
    b. The TIA did not discuss the intensity of truck traffic during "extended hours" operations with a truck trip every two minutes for the entire 10-hour hauling day. That is an intense volume of heavy trucks across the day creating a high level of traffic conflict with residents and other road users including school buses and cyclists, as well as noise.

6. **According to Skagit County Road Standards (Version 5.2, 4.08.D.11-12), a TIA should include information about the location of bus stops, service and usage, and about pedestrian and bicycle linkages and usage.** The TIA only notes that no public transit stops or dedicated bicycle facilities exist on the area's roads. However, there is no mention of school bus service for the Sedro-Wooley School District including Samish Elementary School that serves children on Grip Road, Prairie Road

and F&S Grade Road, Cascade Middle School and Sedro-Wooley High School or for the Burlington-Edison School District that also serves children on the western segment of Prairie Road. (See school district boundary maps, attached). Nor is there any information about the number of cyclists, seasonal use, group rides, or the conditions that cyclists face on Grip Rd. or Prairie Rd. where shoulders are non-existent. The potential for the mine to generate its peak truck volume during the period when school buses stop on Grip and Prairie Roads should be identified and the impacts to school bus safety evaluated to determine whether measures should be taken to reduce truck volumes or otherwise reduce the risk of collisions. A Level II TIA Conflict Analysis could have done this.

7. **Skagit County Road Standards (Version 5.2, 4.08.D.2) requires that a TIA describe "roadway geometrics, including horizontal and vertical curvature."** The TIA does not identify the steep (average 8% grade), shoulder-less curves on Grip Road just west of the mine's access road. Nor does the TIA acknowledge the slope failure problems that have caused emergency repairs to be made in recent years to this steep, narrow road. Absent this information, there is too little context in which to anticipate impacts of heavy truck traffic to safety, maintenance, noise. Those impacts could be:

    a. Safety -- the steep grade raises safety concerns should a truck lose its brakes over this nearly half-mile segment. Again, the narrow road and lack of shoulders leaves no room for driver error or vehicle recovery. While this would likely be a rare event, it is possible and I know of a specific instance of failed brakes on a gravel mine truck near Washougal, Washington.
    b. Safety -- with just 20-22 feet of pavement and no shoulder, haul drivers will be challenged to keep their trucks in their lane on the curves without encroaching on the opposite lane of travel.
    c. Maintenance – heavy trucks overriding the pavement's edge will likely accelerate damage to the road, increasing repair costs to the public. With such a narrow road, it is highly likely that this will occur as there is no leeway for drivers other than encroaching on the opposing lane.
    d. Noise -- loaded trucks would likely use engine compression brakes to slow their descent on Grip Road. That will increase noise in the road's vicinity, something that was not evaluated in the noise study that looked only at noise on the mine's property. This will be a significant concern for periods of "extended hours" operation when truck volumes are expected to increase significantly beyond normal operating volumes.

8. **Additional increases in sight-distance at the intersection of Prairie Road and Grip Road should be investigated before approving installation of a flashing beacon.** The TIA recommends installing an actuated flashing beacon to compensate for deficient sight-distance. However, WSDOT's draft guidance to the application of a flashing beacon (generally known as an Advance Warning System) requires that:

*The following countermeasures must be attempted, and shown to be insufficient, in the order shown below**, before implementing an AWS*** (emphasis added):

Countermeasures	*Status*
1. Installation or Revision of Dilemma Zone Detection, as applicable (PTSWF only).	This is for signals, so not applicable here.
2. Improving sight distance, including obstruction removal or adding supplemental signal displays.	Stopping sight distance for 20 mph advisory speed (115 feet) has been achieved, but ability to remove remaining obstruction has not been evaluated in the TIA or MDNS.
3. Speed limit revisions, if possible.	Advisory speed limit is posted for 20 mph
4. Revision of signal timing – Yellow Clearance Interval, in particular (PTSWF only).	This is for signals, so not applicable here.
5. Installation of a single 48" x 48" Signal Ahead (W3-3) sign or applicable W Series Intersection Warning (W2-1 Cross Road Symbol, W2-2 Side Road Symbol, etc.) sign.	A side-road symbol identifying Grip Road is posted in for both northbound and southbound traffic on Prairie Road
6. Installation of dual (gated) 48" x 48" Signal Ahead (W3-3) signs or applicable W Series Intersection Warning signs, for two lane, three lane, and divided (median or barrier with sufficient shoulder width) highways.	Not applicable here
7. Installation of a single 48" x 48" Signal Ahead (W3-3) sign or applicable W Series Intersection Warning sign with continuous or actuated (actuated preferred), alternating flashing beacons.	This is the proposed beacon.

Source: WSDOT Traffic Electric Equipment Manual, P2.3, Draft June 2019; Tilghman Group

The TIA did not discuss whether fulfilling the second countermeasure, removing the remainder of the embankment obstructing sight lines, is possible. It appears that the bulk of the embankment lies within the right-of-way (if the County's iMap property map is accurate) so its removal should be investigated and the increase in sight-distance determined before approving the flashing beacon. This is especially important with the addition of heavy trucks slowly accelerating from Grip Road onto Prairie Road. Figures 1a and 1b (attached) show the apparent right-of-way on Prairie Road, and the distance from the roadway's centerline to the right-of-way spanning the embankment.

Comments on the MDNS

- Mitigation Measure #2 – *Hours of operation…. If seasonal (temporary) demand indicates a need for extended hours, or Saturday or Sunday operations, the applicant shall submit a request for a temporary deviation to these permitted hours to Planning & Development Services (PDS). If permitted by PDS, such operations may be subject to additional conditions by PDS.*

    - Criteria for additional conditions should be specified now, including acceptable hours for morning and evening operations based on noise, conflicts with school buses, and volumes for daily and hourly truck trips. Trucks will be the predominant vehicle type on Grip Road during certain hours, fundamentally altering the road's current rural character of low volumes and general quiet.
    - Limits should also be set on the number of consecutive days over which "extended hours" of operation can occur so that they are truly temporary.
    - Limits should also be placed on the total number of "extended hours" variances that can occur in one year.
    - Compression brake noise should be a consideration in setting additional hours and days of temporary operation.

- Mitigation Measure #3 – *No track out of dirt, debris, or rocks onto county road/rights-of-way is permitted.*

    - Dust control will be needed on the access road and Grip Road, in addition to sweeping. While dust control is the subject of Mitigation Measure #4, it should also be included in #3.

- Mitigation Measure #6 – *The proposed gravel mine/quarry shall comply with SCC 14.16.840 (Skagit County Performance Standards) regulating vibration, heat, glare, steam, electrical disturbance, and noise in unincorporated Skagit County.*

    - This measure should be modified to include truck noise in compliance with WAC 173-62. SCC 14.16.840 references WAC 173-60 that deals with noise generated by land uses, but nowhere does the MDNS address truck noise.

- Mitigation Measure #13.vi – *The applicant shall comply with all Skagit County load restrictions on the Samish River bridge on Old Highway 99 North. If the dump truck/pup trailer combinations exceed the load restrictions, the applicant will use Interstate 5 (I-5) for southbound access to the Belleville pit located on Old Highway 99 North, south of the Samish River Bridge until such time as the bridge is improved.*
    - The entirety of the haul route should be identified to indicate acceptable roads for the heavy mine trucks and trailers and to identify those that are not acceptable (see next bullets regarding F&S Grade Road and Grip Road east of the mine).
    - The I-5 alternate route requires that haul truck drivers stop at the southbound weigh station between the interchanges at Bow Hill Rd. and Cook Rd. That stop may dissuade

drivers from using I-5. In that case, there is no other good route option except for using F&S Grade Road. And that route requires trucks to make an additional left turn (one from Prairie to F&S Grade and then another from Kelleher to Old 99) and involves an acute right turn from F&S Grade Road onto Kelleher Road. To enforce the use of I-5 when necessary, use of F&S Grade Rd. should be prohibited as a haul route.

- Grip Road east of the mine access road has many 90-degree curves and should be evaluated for the ability of trucks to track in their lanes prior to any approval of this as a haul route. The TIA did not address those curves even though it assigned 5% of daily truck traffic to the east on Grip Road.

- Mitigation Measure #13.vii – *The maximum daily truck traffic that is allowed associated with the subject gravel mine/quarry is limited to an average of 46 daily trips during mining operations not to exceed 30 trucks per hour under extended hours operations.*
  - A method for measuring and monitoring the average daily truck volume should be defined now. It needs to address:
    - Frequency of counting
    - Procedure for counting and reporting counts
    - Verification of the counts
    - The counting period used to determine the average (such as weekly).
  - A maximum allowable daily volume should be set, in addition to specifying the average daily volume. A maximum could be 150% of the average daily volume, or 69 truck trips (46 x 150%). As noted in comment #1 above, the daily average could be met with widely varying day's volumes, so setting a maximum relative to the average would give the public a clearer idea of what to expect in terms of truck traffic and its impacts to neighbors and road users.
  - Similarly, a maximum hourly volume should be set to minimize conflicts with other users, especially school buses and cyclists. Minimizing those conflicts may well entail setting a maximum hourly volume less than 30 truck trips as noted in the MDNS. For example, with 10 trucks per hour in one direction, a cyclist riding in the same direction on Prairie Road between Grip Road and Old 99 faces an 81% probability of encountering a gravel truck. School buses may face similarly high odds of encountering gravel trucks as they stop to unload students.

- An additional condition to Mitigation Measure #13 should be added to address the Grip Road "S" curves west of the mine access road that requires the applicant to add shoulders and investigate re-aligning the curves to avoid encroachment on the edge of pavement or the opposing lane. This condition would be consistent with the County's Comprehensive Plan Policy 4D-5.3:

  New public roads and bridges accessing designated Mineral Resource Overlay Areas shall be designed to sustain the necessary traffic for mineral extraction operations. ***Existing roads and bridges shall be improved as needed as each new extraction operation is developed. Cost sharing for the improvement of roads and bridges shall be negotiated between the permitting authorities and the applicant.*** (Emphasis added)

- A performance condition should be included to determine when it is safe for trucks to use Grip Road on frosty and icy days.

- Require a haul route agreement that stipulates roadway maintenance and repair financial responsibilities for the mine operator due to added truck trips. An example from Garfield County is attached.

Additional Comments

1. Bicycles face a high probability of encountering trucks on Prairie Road. Even with just one cyclist and 3 trucks in the same direction in one hour, the cyclist faces a 28% probability of being met by a truck. And for busier periods, say with 10 trucks per hour in one direction, the probability is 75%. (See attached matrix of encounters per hour between trucks and cyclists based on trucks following the speed limits and cyclists riding at an average of 15 mph). The narrow lanes and lack of shoulders make this high probability a serious safety concern.

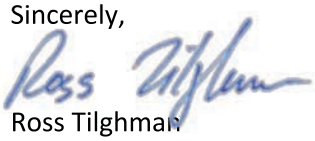
2. I have estimated carbon emissions from hauling on an annual basis. The calculation is as shown in the following table. The assumptions used mirror those in the TIA for annual excavation and truck loads, resulting in:

    a. 200,000 tons/year excavation at 34 tons/truck yields 5,882 loaded truck trips/year + 5,882 unloaded return truck trips/year
    b. A haul route of 7.69 miles in length measured from approximately the mid-point of the site to the Bellevue Pit dump area (see attached aerial image of the haul route's length).
    c. A total of 2,386,162 loaded ton-miles and 848,162 unloaded ton-miles
    d. Carbon emissions of 222 grams/ton-mile per the EPA's 2017 Vocational Vehicle Standards for Heavy Heavy-Duty Class 8 trucks

Estimated CO2 Emissions from Mine Trucks					
			Annual Ton-Miles		
			Loaded	Unloaded	
		Tons:	52.75	18.75	
Distance to Belleville Pit	7.69	miles	2,386,162	848,162	
Emissions (g/ton-mile)			222	222	*per EPA 2017 Vocational Vehicle Standards Heavy Heavy-Duty Class 8*
Emissions total (grams)			529,727,912	188,291,912	
Emissions Total (Metric Tons)			529.73	188.29	
Combined Annual TOTAL (Metric Tons)			718.02		
Gross Vehicle Weight	105,500	lbs			
in tons:	52.75	tons			
Payload	34.00	tons			
Tare Weight					
Truck + Trailer (approx.)	18.75	tons			
Truck Volume per TIA:					
200,000	tons/year extracted				
34	tons/truck				
5,882	Loaded truck trips/year				
5,882	Unloaded truck trips/year				
Source: Tilghman Group					

In conclusion, the narrow roads comprising the majority of the haul route, the mix of traffic on those narrow roads including school buses and cyclists, the slope and S curves on Grip Road, the limited sight-distances and the potentially high frequency of heavy truck traffic require additional analysis of safety conflicts and measures to avoid or mitigate those conflicts.

Sincerely,



Ross Tilghman

Ross Tilghman is a transportation planning consultant with his own firm, the **Tilghman Group.** He has 37 years of experience in analyzing transportation demands for a wide variety of land uses and in developing solutions to meet transportation needs. A full member of the Urban Land Institute, Mr. Tilghman is a frequent participant in ULI Advisory Service Panels working in communities around the country and has been active in developing ULI's Building Healthy Communities initiative. He currently serves on ULI's Suburban Development and Redevelopment Council. Tilghman completed five years as a Commissioner on the Seattle Design Commission, including a year as Chair

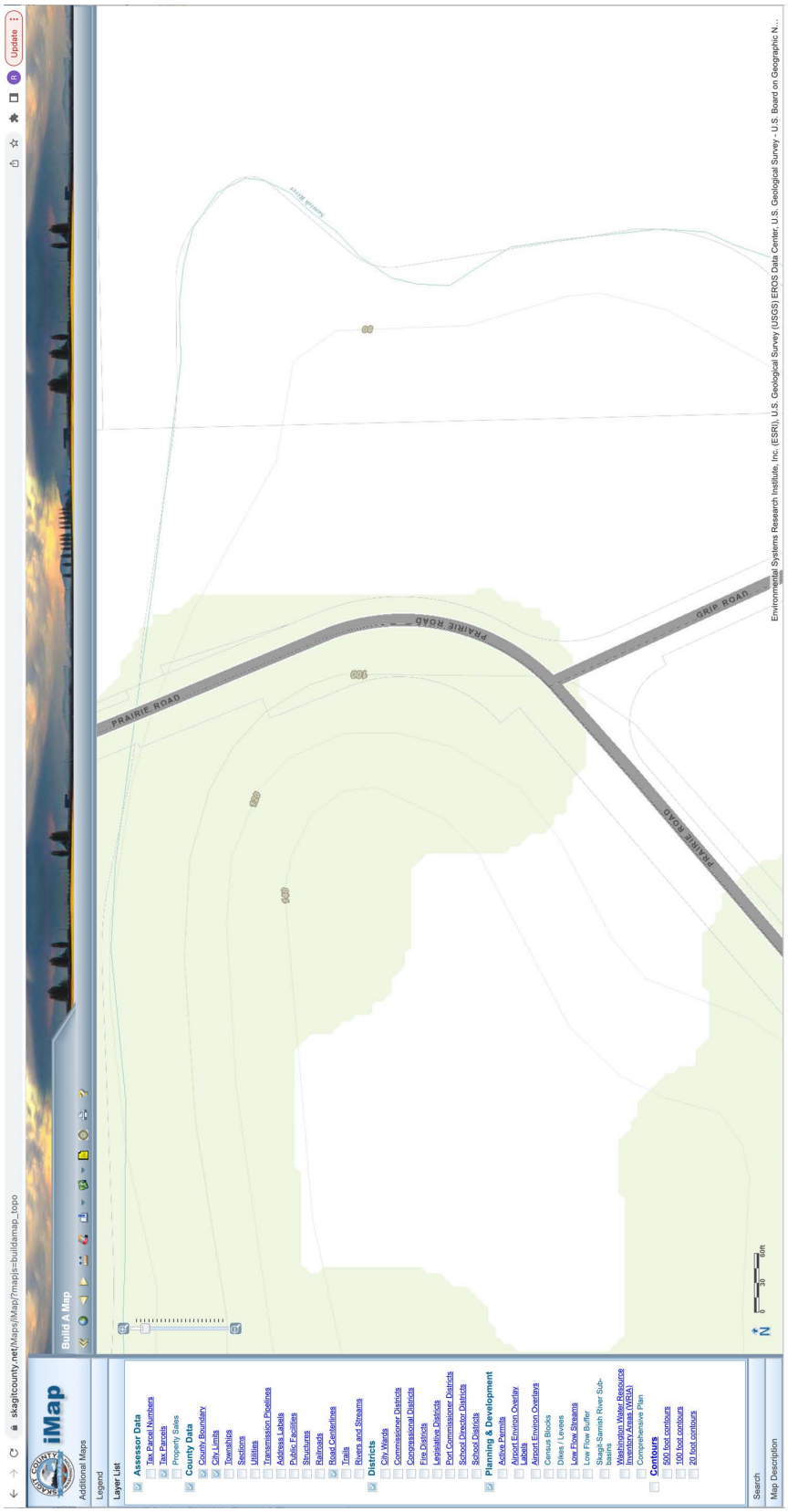


Figure 1a. Variable Right-of-Way on Prairie Road near Grip Road

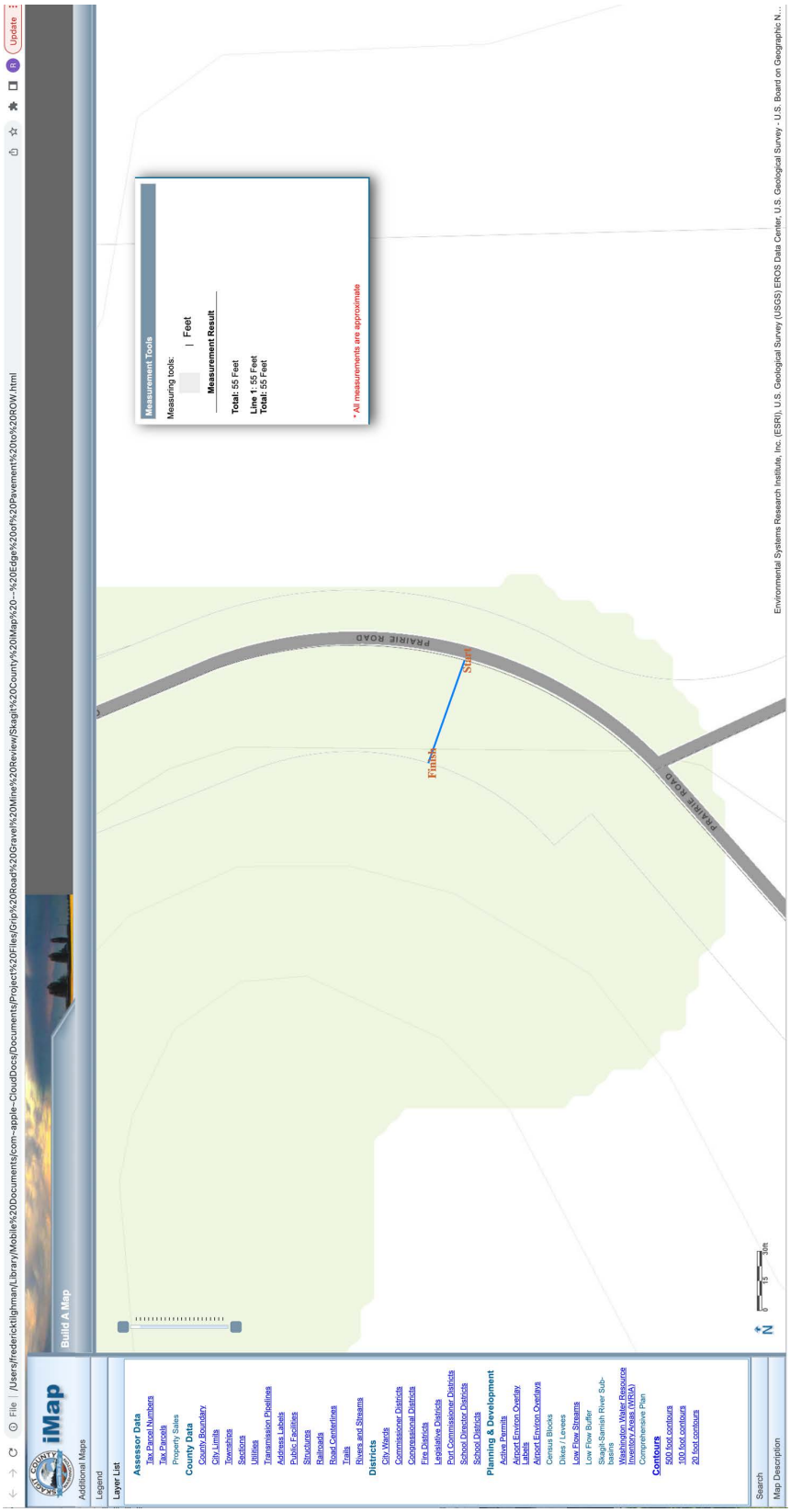
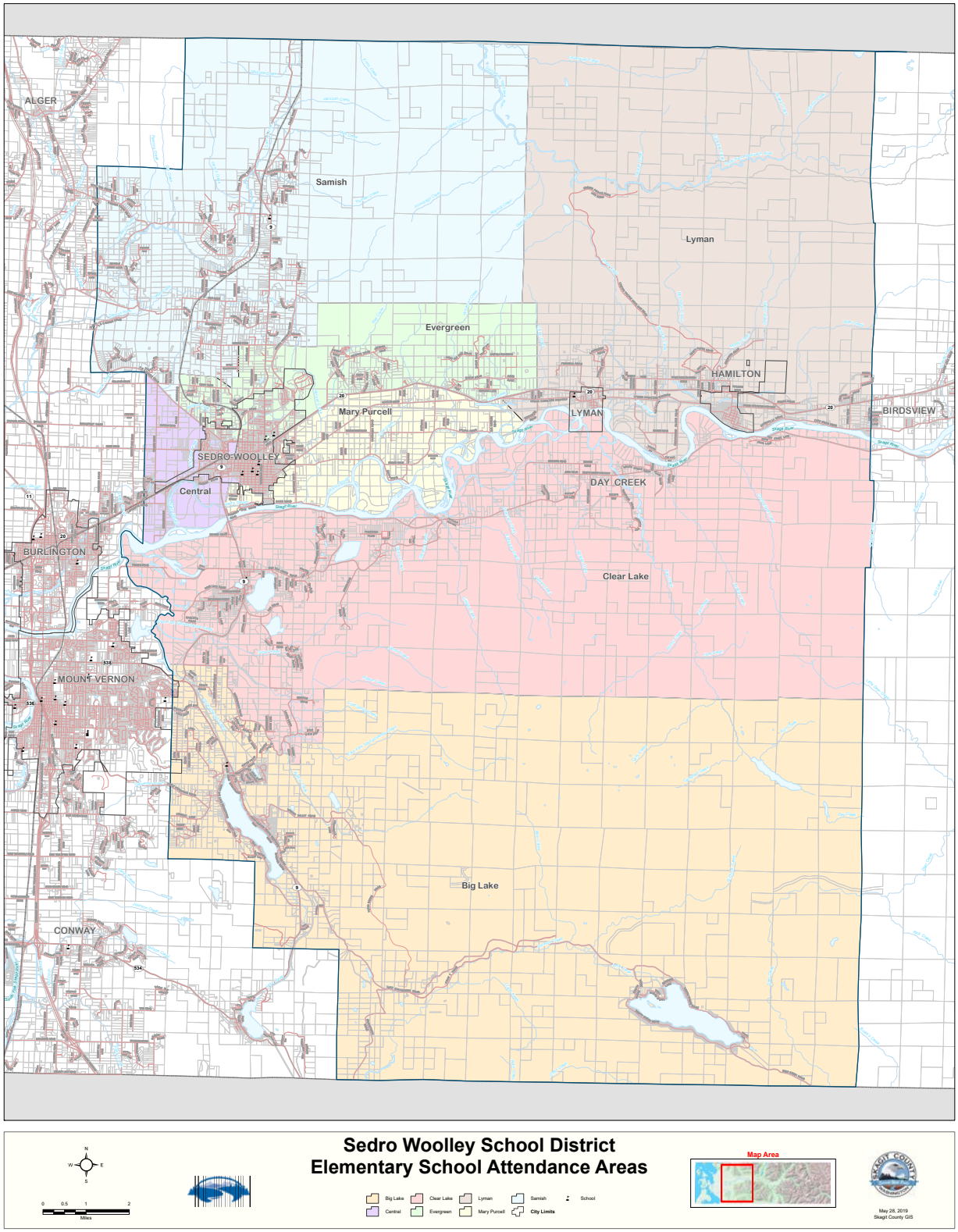


Figure 1b. Distance from Roadway Centerline to Right-of-Way


ALGER
Samish
Lyman
Evergreen
HAMILTON
Mary Purcell
LYMAN
BIRDSVIEW
SEDRO-WOOLLEY
Central
DAY CREEK
BURLINGTON
Clear Lake
MOUNT VERNON
Big Lake
CONWAY
Sedro Woolley School District
Elementary School Attendance Areas
Big Lake
Central
Clear Lake
Evergreen
Lyman
Mary Purcell
Samish
City Limits
School
Map Area
May 28, 2019
Skagit County GIS

google.com/maps/d/u/0/viewer?mid=1w-bEyG3EYg43qLxp7rXkd7iph-o&ll=48.54528135583506%2C-122.420114&z=12
Update
B-E P-8 School Boundary ...
This map was created by a user. Learn how to create your own.
This school boundary map is used to assist in the placement of students. While the school boundaries and proximity of the student's
16,294 views
Published on June 26, 2019
SHARE
Schools
Burlington-Edison High School
Westview Elementary
Bay View Elementary
Allen Elementary
Lucille Umbarger Elementary
Edison Elementary
P-8 Neighborhood Schools
Edison Elementary (K-8) Boundary
Bay View (K-8) Boundary
Allen (K-8) Boundary
LU (1-8) Boundary
West View & B-EHS Boundary
Made with Google My Maps
Lake Whatcom Southerly Boat Launch
Doran
Chuckanut
Cyrus Gates Overlook at Larrabee State Park
Larrabee State Park
Reil Harbor
Wickersham
Sinclair Island
Vendovi Island
Samish
Alger
Samish Bay
Prairie
Blanchard
Cypress Island Aquatic Reserve
Guemes Island Resort
Samish Island Public Beach Access
Lyman Hill
Skagit Speedway
Cypress Island
North Beach
Samish Island, Washington
The Skagit Casino Resort
Edison
Bow
Belfast
Guemes Island
Handmade Cooking Knives
Samish Unit
Avalon Golf Links
Northern State Recreation Area
Minkler Lake Conservation Area
Minkler
Padilla Bay National Estuarine Research...
Allen
Anacortes
Leary
Sedro-Woolley
Bay View State Park
PeaceHealth United General Medical Center
Washington Park
Sterling
Hart Island
Burrows Island Lighthouse
Fidalgo Bay Aquatic Reserve
Bay View
Skagit Regional Airport
Burlington
Fred Meyer
Allan Island
Mt Erie Summit Trail
Clear Lake
Costco Wholesale
Seascape Panorama House
Fidalgo Island
Whitney
Fredonia
Schuh Farms
Avon
Tulip Town
Dewey
Rosario Beach
Kukutali Preserve State Park Heritage Site
Mt Vernon
Google My Maps
Map data ©2022 Imagery ©2022 TerraMetrics
Terms
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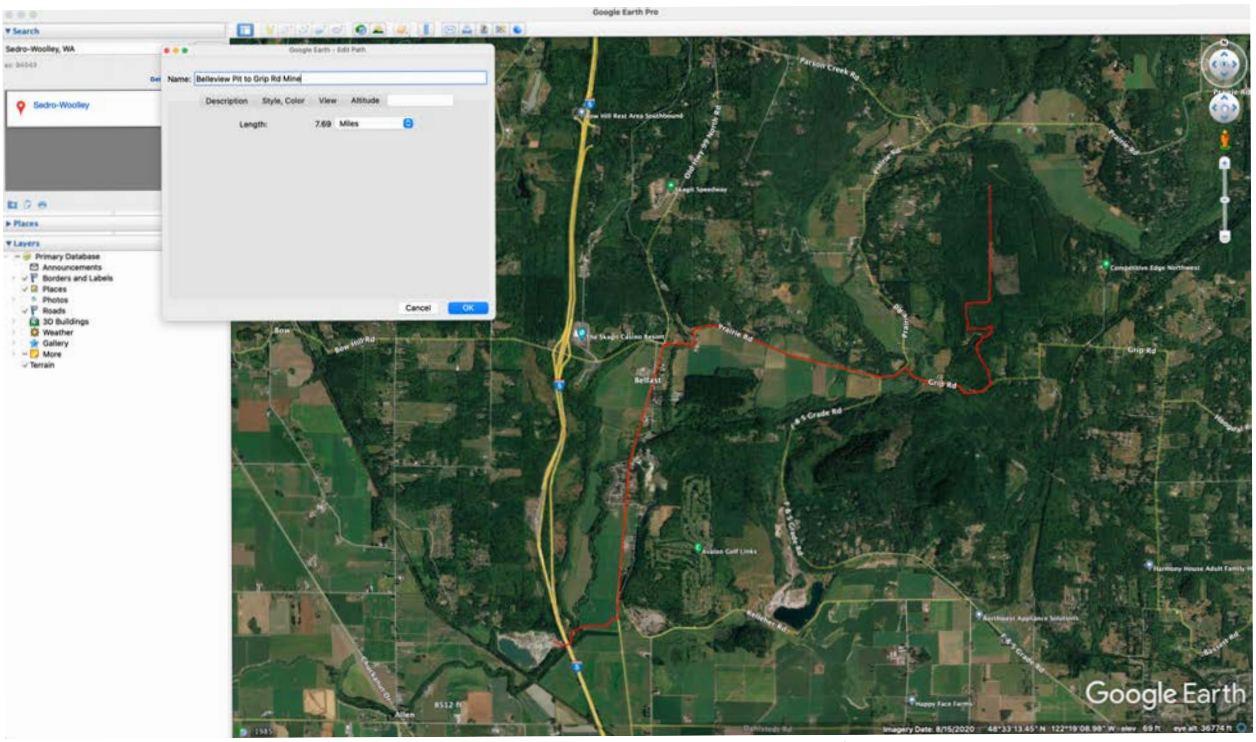
Keyboard shortcuts



Distance between Belleview Pit and Grip Road Mine

dieselnet.com/standards/us/fe_hd.php

Vocational Trucks

At Phase 1, this vehicle segment has been divided into three regulatory subcategories—Light Heavy (Class 2b through 5), Medium Heavy (Class 6 and 7), and Heavy Heavy (Class 8)—which is consistent with engine classifications. At Phase 2, the standards were further differentiated depending on engine type (diesel, gasoline) and the duty cycle: urban, multi-purpose and regional. The final Phase 1 (2017) and Phase 2 (2027) vehicle standards are depicted in Table 4 and Table 5, respectively.

Table 4: Phase 1 final (MY 2017) vocational vehicle standards

Category	EPA CO_2 Emissions	NHTSA Fuel Consumption
	g/ton-mile	*gal/1,000 ton-mile*
Light Heavy Class 2b-5	373	36.7
Medium Heavy Class 6-7	225	22.1
Heavy Heavy Class 8	222	21.8

Table 5: Phase 2 final (MY 2027) vocational vehicle standards

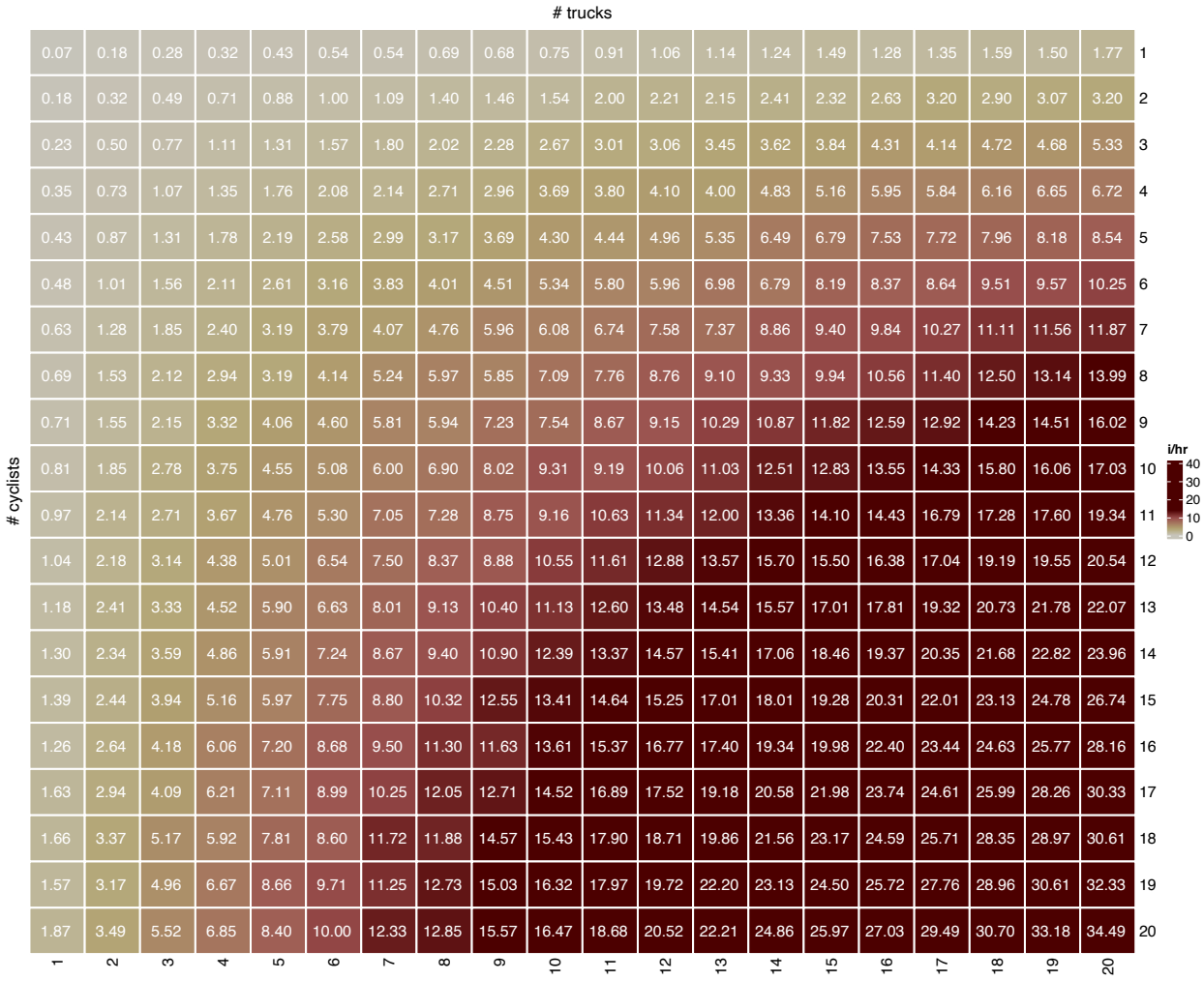
Category	EPA CO_2 Emissions *g/ton-mile*			NHTSA Fuel Consumption *gal/1,000 ton-mile*		
	Urban	Multi-purpose	Regional	Urban	Multi-purpose	Regional
Vehicles with CI engines						
Light Heavy Class 2b-5	367	330	291	36.0511	32.4165	28.5855
Medium Heavy Class 6-7	258	235	218	25.3438	23.0845	21.4145
Heavy Heavy Class 8	269	230	189	26.4244	22.5933	18.5658
Vehicles with SI engines						
Light Heavy Class 2b-5	413	372	319	46.4724	41.8589	35.8951
Medium Heavy Class 6-7	297	268	247	33.4196	30.1564	27.7934

Engine standards for light heavy-duty (LHD), medium heavy-duty (MHD), heavy heavy-duty (HHD) diesel engines and for heavy-duty gasoline engines are shown in Table 6.

Table 6: Engine standards for engines installed in vocational vehicles (FTP cycle)

Category	Year	CO_2 Emissions	Fuel Consumption*
		g/bhp-hr	*gallon/100 bhp-hr*
LHD Engines	2014	600	5.89[a]
	2017	576	5.66
	2021	563	5.5305
	2024	555	5.4519
	2027	552	5.4224
MHD Engines	2014	600	5.89[a]
	2017	576	5.66
	2021	545	5.3536
	2024	538	5.2849
	2027	535	5.2554
HHD Engines	2014	567	5.57[a]
	2017	555	5.45
	2021	513	5.0393
	2024	506	4.9705
	2027	503	4.9411
HD Gasoline Engines	2016	627	7.06

* Equivalent NHTSA standards based on 10,180 g CO_2 per gallon of diesel
[a] Voluntary in MY 2014 and MY 2015.



Incidents per Hour of Trucks Meeting Cyclists on Prairie Road between Old 99 and Grip Road

6.E. RESOLUTION TO DESIGNATE HAUL ROUTES

_____ COUNTY

HAUL ROUTE AGREEMENT NO. _____

THIS AGREEMENT, made and entered into this _____ day of_____, 20__, by and between _____ County, hereinafter designated as the "County", and _____ hereinafter designated as the "Contractor",

WHEREAS, the Contractor plans to use county roads in transporting any item, including but not limited to products, equipment, materials, and/or supplies over the county roads listed in a Road Use Plan attached as Exhibit __; and

WHEREAS, the County is responsible for constructing, altering, improving, and maintaining county roads under the supervision and direction of the Public Works Director and/or the County Engineer; and

WHEREAS, the County may limit or prohibit classes, types of weights or vehicles which travel on County roads pursuant to RCW 36.75.270 and 46.44.080; and

WHEREAS, the County and the Contractor anticipate that as a result of the Contractor's use of County roads, accelerated deterioration may occur. Thus, repairs or improvements may be required and additional maintenance expenses may be incurred by the County; and

WHEREAS, the County is authorized to issue Haul Route Permits under the provisions of RCW 36.75.270 and 46.44.080.

NOW, THEREFORE, in consideration of the terms, conditions, and covenants contained herein, it is mutually agreed as follows:

1. PURPOSE STATEMENT:

This Haul Route Agreement shall be completed for existing, new, and expanded hauling operations that may cause accelerated deterioration of county roads. These hauling operations shall include but not be limited to: pits and quarries, logging, contractors, and developers.

2. DEFINITIONS:

A. Routine Maintenance. "Routine Maintenance" means grading, reshaping, repair and/or modification of the road prism which would occur in the absence of the use of a road as a haul route, as indicated in a regular maintenance

schedule, or at the same intervals or frequency as would normally be included in such a schedule.

B. Additional Maintenance. "Additional Maintenance" means grading, reshaping, repair, and/or modification performed on County roads in excess of the same operations performed as routine maintenance by the County.

C. Extraordinary. "Extraordinary" means beyond what is common or usual, or used for a special service.

D. Arbitrator. "Arbitrator" means an independent civil engineer, registered in the state of Washington, who is experienced in road design, construction, and maintenance.

E. Bond. "Bond" means a certificate, cash, or written obligation, in a form satisfactory to the County, made by the Contractor to guarantee the performance of its contractual obligations to the County.

F. Contractor. "Contractor" means the person/corporation entering into this Agreement, and shall include any owner or designee, operator, manufacturer, developer, or supplier that uses County roads for the transport of any item including, but not limited to, products, equipment, materials, and/or supplies where such use may cause accelerated deterioration of such County roads.

G. County Road. "County Road" means a street, road, or other public way, including shoulders, designated for the purpose of vehicular traffic and under the jurisdiction of the County.

H. Director. "Director" means the County's Director of Public Works and/or the County Engineer, or his/her authorized designee.

I. Haul Road. "Haul Road" means any County road, bridge, or other structure which is used for transporting items including, but not limited to products, equipment, materials, and/or supplies and as a result incurs deterioration.

J. Haul Route. "Haul Route" means the system of haul roads between a source site and the destination and/or the source site and the nearest major intersection as determined by the County.

K. Improvements. "Improvements" mean roadway prism improvements required by the Director because of the Contractor's use of the haul road.

L. Right of Way. A general term denoting public land, property, or interest therein, usually in a strip acquired for or devoted to transportation purposes.

M. Road Prism. "Road Prism" means the driving surface of a road (including constructed roadbed), shoulders, ditches including backslopes, fillslopes, curbs, gutters, storm drainage facilities and sidewalks including backslopes.

3. GENERAL AGREEMENT AS TO ROAD USE:

The Contractor understands and agrees that, although the haul roads covered by this Agreement are on the County Road System and are subject to normal traffic use the Contractor, by virtue of its extraordinary use of the roads, assumes responsibility for all damage and additional maintenance and signing costs on such roads resulting from its use of such roads as a haul route. Such costs are to be reimbursed by the Contractor as outlined in Section 7.

The County hereby agrees to the Contractor's use of the haul roads covered by this Agreement subject to the conditions contained herein. The Contractor shall be responsible for obtaining any other permits or licenses which the County or any other governmental entity may require to operate or move its vehicles on county roads. This Agreement shall not serve to relieve any operator of a Contractor's vehicle from complying with applicable speed limits, weight restrictions, or other posted restrictions.

Any improvements to or widening of the road necessitated by the Contractor's operations, including modification of roadway approaches to accommodate transport vehicles, shall be considered incidental to the hauling performed, shall be made a the Contactor's sole expense unless otherwise authorized in addendum to this Agreement, and shall remain in place or be removed at the Director's choice. Any such improvement shall be authorized by County permit.

4. ASSUMPTION OF RISK AND LIABILITY OF CONTRACTOR:

The County has not made and does not herein make any representation as to the present or future conditions of its roads or the character of the traffic on any of its roads, and the Contractor assumes all risks of damage to property of or injury to, Contactor or anyone acting under the authority granted to the Contractor by this Agreement.

The Contractor agrees and covenants to indemnify, defend, and save harmless the County against and from any loss, damage, costs, charges, liability, claims, demands, or judgments, whether to persons or property, arising out of any act, action, neglect, omission, or default on the part of the Contractor or anyone acting under the Contractor's authority granted by this Agreement.

In case any suit or cause of action shall be brought against the County on account of any act, action, neglect, omission, or default on the part of the Contractor or anyone

acting under the Contractor's authority granted by this Agreement, the Contractor agrees and covenants to pay all costs, charges, attorney fees, and other expenses and any and all judgments that may be incurred by or obtained against the County, including all such costs incurred by the County to enforce this provision.

The Contractor shall have Public Liability and Property Damage Insurance.

5. ROAD USE PLAN:

The Contractor and the County have agreed to the Road Use Plan, which is attached hereto and incorporated herein as Exhibit __. The Road Use Plan designates which County roads are to be used in this Haul Route Agreement. In addition, the Road Use Plan contains the following information:

A. Vehicle trips per day of travel;
B. Hours and dates of travel;
C. Gross weight loadings;
D. Vehicle types, trailers, and combinations, number of axles, distance between axles, and tire sizes; and
E. Products, equipment, materials and/or supplies to be transported and estimated quantities of same.

Any variance from the approved Road Use Plan requires (1) an advance written request to the Director by the Contractor, and (2) if the Director agrees to such use, this Agreement shall be amended to include such additional roads. Roads so added are subject to all Sections of this agreement and may be subject to the additional provision. The County will require a new application annually at the start of the Contractor's hauling operations.

If the Director desires to change conditions, he/she may do so at his/her discretion by sending written notice to the Contractor at least three (3) days before the effective date of the change. The County shall not be responsible for additional costs incurred by the Contractor resulting from changes to this agreement.

6. INSPECTION AND DOCUMENTATION:

Prior to the signing of this Agreement and prior to the start of Contractor's hauling operations on County Roads covered by this Agreement, representatives of the County and the Contractor shall make a joint pre-inspection to determine the existing condition of the road prism of such roads. The County will complete a pre-inspection report indicating the condition of such road prism and attach and incorporate such report herein as Exhibit __. The pre-inspection report will include a statement of the extent and frequency of routine maintenance on such road prism and may include

photographs, video logs, or other recording devices showing the condition of the existing road prism.

Deficiencies of the road prism noted in the pre-inspection report shall show an estimated cost to repair. The Contractor shall not be responsible for these costs.

The haul route will be inspected twice each year, before and after the Summer/Fall haul period. The haul route shall also be inspected within 15 days of the County's receipt of the Contractor's certified mail notice (pursuant to Section 12D) that it has permanently ceased hauling operations. Any additional inspections shall be at the Contractor's expense. After such re-inspection the County shall complete and give to the Contractor a report of (1) the condition of the road prism(s) used by the Contractor for hauling and (2) the costs of additional maintenance and additional signing, if any, performed by the County as a result of the Contractor's operations since the previous inspection. All subsequent inspections shall be documented and attached as exhibits to this agreement and used for determining the Contractor's reimbursement obligation under Section 7.

Upon written notification of completion of the hauling operation, a joint post-inspection will be conducted, documented, and attached hereto and incorporated herein as Exhibit __.

7. CONTRACTOR REIMBURSEMENT OF COUNTY EXPENSES:

The County will defray the expense of routine maintenance of haul roads designated in this Agreement and will maintain separate records of all items, accounts, and expenditures on said roads.

During the period for which this Agreement is in effect, the Contractor agrees to reimburse the County for all costs of (1) additional maintenance and (2) additional signing necessitated by the Contractor's use of County roads.

Reimbursement for such additional maintenance and additional signing shall be limited to the actual cost to the County of labor (including fringe benefits), equipment, and materials, plus fifteen percent (15%) for administration. The Contractor shall make payment to the County upon receipt of detailed invoices supported by written documentation equivalent to that normally supplied by the County. The Contractor shall pay the invoiced amount to the County within 30 days from the invoice date.

In the case of hauling on a County road by two or more contractors, invoices shall be prorated by the County. This proration may be based upon, but need not be limited to, the weight, frequency, vehicle configuration, and/or duration of the hauling operations. In such cases, all Contractors will be invited to attend a joint pre-inspection and any subsequent re-inspections that may occur.

The Director may require a bond, if it is concluded that there may be damage done to the road prism or any county facilities thereon.

8. DISPUTES:

In the event a dispute over the Contractor's reimbursement obligations under this Agreement cannot be resolved between the parties to this Agreement, the dispute shall be submitted to an Arbitrator for resolution and determination. The Contractor shall, however, pay all total invoice amounts when payment is due under this Agreement. Any disputed sums shall be held in escrow until the arbitration is completed.

The Arbitrator shall be selected by agreement of both parties. If the parties cannot agree on an arbitrator, he/she shall be appointed by the Board of County Commissioners. The findings of the Arbitrator shall be final and conclusive as to the parties. Arbitration shall be completed within sixty (60) days of the selection of the arbitrator. The costs of arbitration shall be apportioned by the arbitrator according to the principle that the losing party should pay the winning party's cost.

9. RESTRICTIONS:

The Director has the authority to immediately restrict, during the life of this agreement, the weight or speed of the vehicles on the roadway below the legal limits applicable to such roads and vehicles for the following reasons, included but not limited to:

A. Temporary road closures;
B. Temporary weight restrictions caused by weather conditions;
C. Weight restrictions posted on County bridges; and/or
D. Where continued unrestricted use of road under this Agreement will endanger public health, safety or welfare thereon.

1. GENERAL TERMS:

Once this Agreement has been executed and is on file with the County, the County will issue a haul route permit to the Contractor. A copy of the permit shall accompany each vehicle of the Contractor using any County haul road, and shall be shown upon demand to representatives of the County or any law enforcement officer.

2. COMPLIANCE WITH LAWS AND REGULATIONS:

The Contractor shall comply with all Federal, State, and local laws and regulations.

3. REVOCATION AND TERMINATION:

This Agreement may be terminated by the Director and the haul route permit revoked when any of the following occurs:

A. Violation by the Contractor of any of the terms of this Agreement.
B. Untimely Contractor payment of any County invoice.
C. Where continued use by the Contractor of County roads under this agreement will endanger public health, safety or welfare.
D. The Contractor notifies the Director by certified mail that he/she has permanently ceased hauling operations at which time a post-inspection will be conducted and an invoice issued for final payment.

Upon termination of this Agreement, for any reason, the Contractor shall immediately discontinue hauling operations covered by this Agreement.

The termination of this Agreement shall not prejudice the County's right to collect damages incurred theretofore or thereafter accruing, on account of Contractor's use of the road.

If, after revocation of this agreement, the Contractor wishes to resume operation, the Contactor shall request to enter into a new agreement.

4. SEVERABILITY:

If any portion of this Agreement is held invalid it shall have no effect upon the validity of the remaining portions of this Agreement.

5. SCOPE AND CONSTRUCTION OF TERMS:

The definitions in this Agreement shall control the meaning of terms used herein. Where no definition is expressly stated herein, a term shall have that meaning clearly indicated by, or reasonably implied from, the context in which such term is used.

6. NOTIFICATION:

All notices and oral or written communications relating to this agreement may be forwarded to:

On behalf of the County:	On behalf of the Contractor:
_____	_____
Title: _____	Title: _____

Phone: _____ Phone: _____

IN WITNESS WHEREOF, the parties hereto execute this Agreement as of this ____ day of____, 20__, this Agreement shall remain in effect until revoked or terminated as provided under Section 13.

COUNTY OF_____ CONTRACTOR

Signature: _____ Signature: _____

Name: _____ Name: _____
County Engineer

Title: _____

Address: _____

By: _____
_____ Phone: _____

ACKNOWLEDGEMENT

STATE OF WASHINGTON)
)SS (Individual Acknowledgment Form)
COUNTY OF_____)

This is to certify that on this ____ day of _____ 20__, before me, the undersigned, a notary public, personally appeared_____, to me known to be the person(s) who executed the foregoing instrument, and acknowledged to me that ____ signed the same as ____ free and voluntary act and deed; that he/she/they have the authority to sign this document as he/she/they have indicated, and for the uses and purposes therein mentioned.

Given under my hand and official seal this ____ day of ____, 20__.

_____
Notary Public in and for the State of
Washington residing at _____

ACKNOWLEDGEMENT

STATE OF WASHINGTON)
)SS (Corporation Acknowledgment Form)
COUNTY OF_____)

This is to certify that on this ____ day of _____ 20__, before me, the undersigned, a notary public, personally appeared_____, and _____, of the corporation that executed the foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that _____ authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

Given under my hand and official seal this _____ day of _____, 20__.

_____
Notary Public in and for the State of
Washington residing at _____

_____ COUNTY
DEPARTMENT OF PUBLIC WORKS

APPLICATION FOR A HAUL ROAD PERMIT & JOINT SITE INSPECTION FORM
Pursuant to Ordinance No.____

Name of Applicant: _____
Mailing Address: _____
_____
Business Phone: _____

County Roads to be Utilized as Haul Route

Road Name & Number	Surface Type	Miles
_____	_____	M.P.___ to M.P.___
_____	_____	M.P.___ to M.P.___
_____	_____	M.P.___ to M.P.___
_____	_____	M.P.___ to M.P.___

Estimated Quantities to be Transported – cy/tons/Mbf

Quantity_____	Vehicle Type_____	Trips/Day_____
Quantity_____	Vehicle Type_____	Trips/Day_____
Quantity_____	Vehicle Type_____	Trips/Day_____
Quantity_____	Vehicle Type_____	Trips/Day_____

Haul Period: From: _____ To: _____

Date of Site Inspection: _____

Initial: ___ Final: ___ Public Works Title: _____
Inspection: ___ Inspection:___ Permittee Title: _____

$_____ Surety as computed by the attached formula shall remain in effect throughout the life of the Haul Route Agreement.

_____ _____
Department of Public Works Permittee

Original to Department of Public Works – Copy to Permittee

BOND FORMULA

PRELIMINARY FORMULAS FOR ESTIMATING ADDITIONAL MAINTENANCE FOR HAULING OPERATIONS ON COUNTY ROADS.

TYPES OF SECURITY_____ COUNTY WILL ACCEPT:

Cash deposit with _____ County
A Certified Bond from a Bonding Company
Cashier's Certified Check Payable to _____ County

Formula for Surety = _____ Loads X _____ Miles X Surface Type Repair Factor

GRAVEL ROADS _____ Loads X_____ Miles X $_____/Miles = _____

BST ROADS _____ Loads X_____ Miles X $_____/Miles = _____

ACP _____ Loads X_____ Miles X $_____/Miles = _____

TOTAL _____

NO SECURITY IS REQUIRED FOR 10 LOADS OR LESS FOR ONE SEASON COUNTY WIDE

The Minimum Bond will be $500

Computed additional maintenance costs due to the hauling operation is in addition to normal maintenance costs. Normal annual road maintenance costs for private vehicles, light truck usage is approximately $_____ a mile.

EXHIBIT ____

PRELIMINARY INSPECTION REPORT

DATE: ________________________ TIME: ________________________

INSPECTION TEAM (NAME & AGENCY REPRESENTING): ________________________

____

____

BEGINNING POINT ________________________ ENDING POINT ____________

ROAD	MILEPOST	DISTRESS	PHOTOGRAPH

ROAD	MILEPOST	DISTRESS	PHOTOGRAPH
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

DESCRIPTION AND FREQUENCY OF ROUTINE MAINTENANCE:

_____
_____
_____
_____
_____
_____

ACKNOWLEDGEMENT

SIGNATURE: _____ TITLE: _____
FIRM: _____

SIGNATURE: _____ TITLE: _____
FIRM: _____

SIGNATURE: _____ TITLE: _____
_____COUNTY

ESTIMATED COST OF REPAIR

PROJECT: _____ DATE: _____
LOCATION: _____

ITEM	LABOR	RATE	HOURS	AMOUNT

LABOR SUB-TOTAL _____

ITEM	EQUIPMENT	RATE	HOURS	AMOUNT

EQUIPMENT SUB-TOTAL _____

ITEM	MATERAL	UNIT	COST	QUANTITY	AMOUNT

MATERIAL SUB-TOTAL _____

TOTAL COST _____

SIGNED: _____

TITLE: _____

HAUL ROUTE AGREEMENT PROCEDURAL OUTLINE

I. Notification of hauling activities – usually by Conditional Use Permit
   - A. Estimate quantity of material to be hauled.
   - B. Estimate number of trips.
   - C. Type of trucks to be used.
   - D. Projected term of hauling activity.

II. Meet with applicant
   - A. Applicant identified proposed route.
   - B. Review of proposed route by agency.
     1. Safety elements – maintain public health, safety and welfare.
        - a. School zones
        - b. Residential areas
        - a. Parks and public facilities
     1. Approve or alter requested route.
   - C. Pre-inspection of haul route
     1. Inventory roads
        - a. Walk through (if necessary) – video entire route
        - b. Photograph questionable areas and milepost them
        - b. Describe and document physical condition of roadway
        - c. Establish and set speed limit if required
        - d. Document maintenance history
     2. Summary of inventory
        - a. Description of existing condition
        - b. Anticipated normal maintenance requirements for term of Haul route Agreement
        - c. Explanation of what will be considered additional maintenance
        - d. Concurrence of summary by applicant

III. Enter Haul Road Agreement with _____ County

IV. Inspections during hauling activities, if required, with applicant

V. Post inspection of haul route
   - A. Repeat applicable sections of pre-inspection inventory of roads.
   - B. Develop cost estimate of additional maintenance.
   - C. Submit to applicant.
   - D. Negotiate settlement.

VI. Terminate Haul Route Agreement

HAUL ROUTE AGEEMENT PROCEDURES

I. Notification of hauling activities – (Example: Conditional Use Permit/SEPA)

A. Estimate quantity of material to be hauled.
B. Estimate number of trips.
C. Type of trucks to be used.
D. Projected term of hauling activity.

II. Meeting with applicant and County

A. Applicant identifies proposed route.
B. Review of proposed route by agency.
C. Pre-inspection of haul route.

III. Enter into Haul Road Agreement with _____ County.
Issue Haul Route Permit.

IV. Inspections during hauling activities, if required with Contractor.
Contractor notifies County of ceasing hauling operation.

V. Agreement Termination Process

A. Conduct post-inspection inventory of roads.
B. Develop cost estimate of additional maintenance.
C. Submit to Contractor.
D. Negotiate settlement.
E. Terminate Haul Route Agreement.

ATTACHMENT H

Exhibit A-39

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000
711 for Washington Relay Service • Persons with a speech disability can call (877) 833-6341

March 11, 2022

Kevin Cricchio, Senior Planner
Skagit County Planning and Development Services Department
1800 Continental Place
Mt. Vernon, WA 98273

RE: Ecology Comments on the Grip Road Gravel Mine
Project File # PL16-0097 and PL16-0098

Dear Kevin Cricchio:

Thank you for the opportunity to provide comments on the State Environmental Policy Act (SEPA) mitigated determination of nonsignificance (MDNS) for the Concrete Nor'West gravel operation near Grip Road. On behalf of Ecology's Shorelands and Environmental Assistance (SEA) Program, I am submitting the following comments regarding this project for your consideration:

- Based on review Fish and Wildlife Assessment prepared by Graham-Bunting Associates, it is not clear if the wetland adjacent to the Samish River have been delineated as required in Skagit County Code (SCC) 14.24.200. Without an accurately delineated wetland edge it is unclear how the width of the wetland buffer will be identified.

- Based on the Graham-Bunting Associates Fish and Wildlife Assessment, it appears that the wetland along the Samish River was rated using the Ecology 2004 Wetland Rating Form. Section 14.24.210 of the County's Critical Areas Ordinance (CAO) requires that wetlands be rated according to Ecology's 2014 Wetland Rating System.

- The wetland along the Samish River has been rated as Category II wetland per the Graham-Bunting report. The proposed gravel mine would appear to be considered a high land use impact per SCC 14.24.230(1)(a), and therefore require a standard buffer of 300'. The Graham-Bunting report implies use of an optional buffer width, however, it is unclear how the proposed 200' buffer is consistent with the optional wetland buffer widths listed in SCC 14.24.230 (1)(b).

Thank you for considering these comments from Ecology. Based on the extensive number of documents associated with this proposal, it is possible that I may have missed information that

could have addressed my concern. If you have any questions or would like to discuss these comments, please contact me at (360) 410-4807 or by email at chris.luerkens@ecy.wa.gov.

Sincerely,

Chris Luerkens, Shorelands & Wetlands Permit Specialist
Shorelands and Environmental Assistance Program

Sent by email: Kevin Cricchio, kcricchio@co.skagit.wa.us

ATTACHMENT I

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office 3190 160th SE Bellevue, Washington 98008-5452 (425) 649-7000

June 1, 2016

John Cooper, Natural Resource Planner
Skagit County Planning and Development Services Department
1800 Continental Place
Mt. Vernon, WA 98273

RE: Ecology Comments on the Grip Road Gravel Mine
Project File # PL16-0097 and PL16-0098

Dear Mr. Cooper:

Thank you for sending information on the Grip Road Gravel Mine to the Washington State Department of Ecology (Ecology) for our review and comment. As the Ecology Wetland Specialist responsible for Skagit County, I wish to have the following comments entered into the record. The project submittal provided to us included a mitigated determination of nonsignificance, SEPA environmental checklist, and engineering drawings.

Concrete Nor'west has submitted an application for a forest practice conversion and mining special use permit to develop a gravel mining operation. This 68-acre property consists of three lots (Parcels P125644, P125645, and P50155) that are located northwest of Sedro Woolley in unincorporated Skagit County. The property is located north of Grip Road, south of Prairie Road, and is bisected by the Samish River. The Skagit County iMAP shows the Samish River flowing across the northeast corner of the property in the Warner Prairie area.

The proposed action involves harvesting approximately 50,000 board feet of timber, removing the stumps, and converting the property to a gravel mining operation. This gravel mining operation will remove approximately 4,280,000 cubic yards of gravel over a 25 year period. Gravel will be removed by truck and trailer (generating about 46 truck trips per day) to one of Concrete Nor'wests nearby facilities for processing.

The gravel mine will cover 51 acres and be excavated to within 10 feet of the groundwater table. A 200' buffer of undisturbed vegetation will be provided between the Samish River and the gravel mine. A 50' setback will also be provided along the remaining perimeter of the gravel mine where no grading will occur. All storm water runoff generated within the gravel mine excavation should flow into the closed depression and be prevented from reaching the Samish River.

According to the SEPA environmental checklist, a Fish and Wildlife Site Assessment was prepared by Graham-Bunting Associates. They stated that the toe of the slope adjacent to the Samish River was mapped using LIDAR data. The engineering drawings show the 200' setback from wetlands associated with the Samish River, which I assume occurs at the toe of slope. However, there weren't any maps showing associated wetlands or the ordinary high water mark (OHWM) of the Samish River.

Any wetlands that occur on the property would be waters of the state subject to the applicable requirements of state law (see RCW 90.48 and WAC 173.201A) and Section 401 of the Clean Water Act (33 USC §1341) and 40 CFR Section 121.2. If any wetland impacts do occur, the applicant shall obtain all necessary state and federal authorizations prior to beginning any ground-disturbing activities or vegetation removal. To obtain state and federal authorization, the following items are required:

- A delineation of all wetlands on the property by a qualified wetland biologist, and survey of the delineated wetland boundaries;
- Flagging of the OHWM along the Samish River banks by a qualified biologist, and survey of the boundaries;
- A jurisdictional determination from the U.S. Army Corps of Engineers stating whether the delineated wetlands on the property are under federal jurisdiction;
- Ratings of all wetlands on this property using the current *Washington State Wetland Rating System for Western Washington*;
- A critical area report describing wetland conditions on the property, wetland data sheets, wetland rating forms, and photographs;
- A Joint Aquatic Resources Permit Application form for impacts to jurisdictional wetlands and the Samish River; and
- A mitigation plan for unavoidable wetland and buffer impacts following the standards in *Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance* (Ecology Publication #06-06-011a).

If you have any questions or would like to discuss my comments, please give me a call at (425) 649-7199 or send an email to Doug.Gresham@ecy.wa.gov.

Sincerely,

Doug Gresham

Doug Gresham, PWS
Wetland Specialist
Shorelands and Environmental Assistance Program

DG:awp