Exhibit A-05: Loring Advising letter re: File No. PL16-0097 & PL16-0098 (April 30, 2021)

LORING ADVISING

Exhibit A-5

By Electronic Portal and Email

April 30, 2021

Hal Hart
Director of Skagit County Planning and Development Services
1800 Continental Place
Mount Vernon, WA 98273

Re: File No. PL16-0097 & PL16-0098; Concrete Nor'West Grip Road Gravel Mine
Skagit County Planning and Development Services Mitigated Determination of Nonsignificance

Dear Mr. Hart,

I'm writing on behalf of Central Samish Valley Neighbors ("CSVN") to request that Skagit County Planning and Development Services ("PDS") reconsider and withdraw the Mitigated Determination of NonSignificance ("MDNS") that it issued for the clearing and development of a 68-acre sand and gravel mine ("Mine") along the Samish River. The MDNS conflicts with Washington's State Environmental Policy Act ("SEPA") because it issued without an evaluation of multiple potential environmental impacts from the Project. For example, although prominent issues like the Mine's hours of operation and its encroachment into the 300-foot wetland buffer have been raised consistently since Concrete Nor'West ("CNW") applied for a special use permit for the Mine in 2016, the MDNS does not limit the hours of operation or reject CNW's proposed 200-foot buffer. Its silence on those issues can be presumed to allow CNW to operate the Mine without time limitations, as CNW has asserted that it may, and to mine up to just 200 feet from wetlands that host Endangered Species Act-listed species like the Oregon spotted frog. Yet the neither PDS nor the applicant has evaluated the impacts of those project operations. Absent this information, as well as significant information gaps like the refusal to evaluate private haul road impacts on Swede Creek, a fish-bearing tributary of the Samish River, PDS has not satisfied the SEPA requirement that it fully consider the environmental impacts of the Mine. The MDNS must be withdrawn.

Moreover, PDS must issue a Determination of Significance ("DS") because the information disclosed in the application materials for permits PL16-097 and PL16-0098 indicates that the Mine would cause significant impacts. For example, CNW's traffic impacts analysis confirms that dump trucks and trailers pose a threat to other users on the narrow, high-speed-limit roads that they will traverse.

CNW has had five years to address the potential impacts of its Mine, and while they have slowly piecemealed a few additional documents, they have not demonstrated that the Mine will address the impacts. As the representative of the local community entrusted with ensuring that applicants for large industrial development analyze and address environmental impacts, PDS must respond accordingly and issue a DS and start the Environmental Impact Statement ("EIS") process to address the Mine's impacts.

This letter explains below that: (1) the Project outlined by the application materials; (2) will have a variety of impacts, some unevaluated and others already identified as significant; on (3) its sensitive ecological surroundings and the local transportation network. The MDNS does not adequately condition the Mine to address those impacts.

In drafting this letter, we reviewed application materials that included the following: (1) the March 7, 2016 fact sheet, special use narrative, and project description; (2) subsequent special use narratives and revised project description; (2) SEPA Checklist; (3) fish and wildlife documents by Graham-Bunting Associates; (4) the Hydrogeologic Site Assessment from Associated Earth Sciences; and (5) traffic documents by DN Traffic Consultants. We also reviewed comment letters by state agency officials, consulted with fish and wildlife officials and a traffic engineer, and reviewed publicly-available information about the site and environs like aerial photographs and the regional bicycle map. We have attached the CSVN November 24, 2020 comments on the Project's SEPA process, none of which have been addressed since the submission of that letter, and incorporate it by reference.[1]

A. Project Details.

Concrete Nor'West has applied for a Mining Special Use Permit to excavate approximately 4,280,000 cubic yards of sand and gravel in a 68-acre mine in the Central Samish Valley.[2] 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. The mining would require the clear cutting of timber, followed by excavation that would dig down 90 feet toward the water table. The withdrawn MDNS stated in 2016 that logging would remove approximately 50,000 board feet of timber from the land but there are no updates on the progress of the logging.[3] While the proposed mining would occur on three parcels totaling 77 acres, these parcels form just a portion of an overall block of

[1] Attachment A.
[2] CNW, Revised Project Description (Section A), 8 of 17 (received Feb. 23, 2018).
[3] Skagit County, Notice of Withdrawn and Re-Issued MDNS, 1 (April 15, 2021) ("MDNS").

parcels totaling more than 726 acres.[4] Although the SEPA Checklist suggests that there are no plans for future additions, expansion, or further activity related to or connected with the proposal, a large portion of the other 650+ acres of land have also been designated as Mineral Resource Overlay, with some of it approved for active harvest by the Washington Department of Natural Resources.[5] A noise and vibration study submitted by CNW did not evaluate the noise and vibration impacts that would occur after logging of the larger property.

1. Hours and staffing.

According to CNW, mine hours would be unlimited consistent with its underlying zoning, though normal working hours would typically extend for 10 hours, from 7am to 5pm, six days a week.[6] According to the MDNS, hauling would occur during the workweek, Monday through Friday, and site operations would occur Monday through Saturday.[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. Hazardous materials.

The Application offers conflicting information about whether hazardous materials will be stored at the site. It responds "Yes" to a question about whether chemicals, waste oils, solvents, and fuels would be stored at the site, and describes the possibility of installing a 2,000-gallon diesel fuel tank.[10] But it also states that "[w]aste oils, solvents, etc. will not be stored on site."[11]

3. Gravel and sand hauling routes and volume.

Application materials offer varying estimates of the amount of truck traffic that the mine would generate. A September 10, 2020 Traffic Impact Analysis ("TIA") by DN Traffic Consultants estimates that under "extended hours conditions," the Mine would generate 29.4

[4] CNW Special Use Narrative, at 2.
[5] SEPA Checklist, 2 of 18 (March 2, 2016); Attachment B shows a DNR timber harvest map for the area, with approved Class II timber harvests marked in blue overlay.
[6] CNW, Revised Project Description (Section A), 8 of 17 (received Feb. 23, 2018).
[7] Skagit County, Notice of Withdrawn and Re-Issued MDNS, 1 (April 15, 2021).
[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).
[10] CNW, Revised Project Description (Section A), 10 of 17 (received Feb. 23, 2018).
[11] CNW, Revised Project Description (Section A), 10 of 17 (received Feb. 23, 2018).

truck-and-trailer trips per hour.[12] 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.[13] That study assumed that increased demand for material would lead to increased production at the site, limited only by the (likely artificial) logistical consideration of the number of truck and pups available in Skagit County.[14] DN Traffic explains in its TIA that the ~30 trips per hour that it estimates for a higher end number is based on the anticipation that the Mine could generate up to 5000 tons per day. It does not explain how this production amount was derived and does not explain the inconsistency between the ~30 trips figure and the 60 truck-and-trailer trips per hour that it deemed a realistic maximum in its Maximum Daily Truck Traffic memo.

The gravel and sand would be hauled by trucks and trailers forced to navigate narrow rural roads with medium to high speed limits. The original road special use narrative stated that hauling would occur along Old Highway 99, Prairie Road, and Grip Road.[15] Subsequent documents identified Bow Hill Road and F&S Grade Road as potential route extensions. Road widths along these routes are just 20-22 feet and they allow speeds up to 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.[16] A simple review of these roads through google maps' street view function confirms that paved shoulders are largely non-existent on those roads, though some stretches contain large gravel that promptly slopes down to a ditch. 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. Local residents have communicated that guard rails have been installed along a significant stretch of Prairie Road, shrinking the width available for cyclists and pedestrians outside the actual roadway to nothing.

The transportation documents associated with the application do not prescribe a haul route, but instead contemplate multiple options. The TIA states "[i]t is estimated that 95 percent of the trips will 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; ten (10) percent of the trips to end users via I-5 south, five (5) percent to end users west of I-5 on Bow

[12] DN Traffic Consultants, Traffic Impact Analysis for Grip Road Mine (Sept. 10, 2020).
[13] DN Traffic Consultants, Memo re: Grip Road Gravel Pit, Maximum Daily Truck, 2 Traffic (Nov. 30, 2016).
[14] DN Traffic Consultants, Memo re: Grip Road Gravel Pit, Maximum Daily Truck, 2 Traffic (Nov. 30, 2016).
[15] CNW, Grip Road Special Use Narrative, page 9 of 17 (March 7, 2016).
[16] See Skagit Valley Bike Map, attached hereto as Attachment C.

Hill Road; and five (5) percent to end users east of the Mine access via Grip Road."[17] 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. The Application's revised project description identifies the route through Grip Road, Prairie Road, and Old Highway 99 North.[18]

In addition, although the Application does not describe the on-site haul route on CNW property, a review of aerial photographs indicates that it would stretch for more than two (2) miles between the Mine and Grip Road.

4. Independent review of transportation documents.

Although CNW has provided several documents about the Mine's traffic impacts, a review by Jeffrey Hee, P.E., Senior Transportation Engineer at Transportation Solutions Incorporated ("TSI") reveals that some impacts have yet to be addressed and others have not been fully evaluated.[19] Mr. Hee analyzed project documents, including the traffic reviews by DN Traffic Consultants, and discovered the following unresolved issues:

- the maximum trip generation numbers and frequency of maximum trip hours and days for the Mine have not been finalized. The Application offers conflicting information about the maximum traffic to be generated, and County conditions could require trucks without trailers, which would decrease capacity for each shipment and therefore increase the number of trips to ship the same overall volume of material. Also, the Application does not identify whether the trip generation numbers account for on-site workers and non-haul mining operations (page 3);

- site distance impacts were not evaluated based on common industry practice that contemplates the use of 85th-percentile design speeds from the County's Road Standards. Instead, even though those 85th-percentile speeds were readily available on the Skagit County of Governments website, DN Transportation relied on lower posted speeds for its modeling. This may underrepresent sight distance risks (page 4);

- site distance impacts were not evaluated for the intersection where the site access road meets Grip Road, based on the mistaken assumption that it wasn't required for a lower

[17] DN Traffic Consultants, Traffic Impact Analysis for Grip Road Mine, 13 (Sept. 10, 2020).
[18] CNW, Revised Project Description (Section A), 9 of 17 (received Feb. 23, 2018).
[19] Memorandum from Jeff Hee to John Day and Martha Bray re: Grip Road Gravel Mine Traffic Analyses Peer Review Comments (April 30, 2021) (attached hereto as Attachment D).

volume road (page 4);

- no mitigation was proposed to address site distance impacts at the Grip Road/access road intersection for egress to the east, and no analysis occurred to determine whether a gravel truck or truck/trailer combination can safely navigate the road network east of the mine (page 4);

- intersection sight distances were not evaluated for truck/trailer combinations at the intersection of F&S Grade Road and Prairie Road. Consequently, Mr. Hee recommended preventing the hauling on F&S Grade Road (page 5);

- the significant truck-trailer impacts that the TIA identifies between the site and Old Highway 99 have not been fully addressed (pages 1, 5);

- there has been no analysis of safety impacts associated with truck-and-trailer combinations traveling east of the Mine access. Mr. Hee recommended preventing hauling east of the Mine site (page 5-6);

- the Application does not evaluate traffic impacts associated with the redistribution of truck traffic onto Cook Road due to Samish River bridge weight limits. This is important given the traffic issues that WSDOT and Skagit County have identified for the Cook Road interchange at Old Highway 99 (page 6);

- the Application does not provide detailed specifications for the type(s) of vehicle(s) it modeled for transportation impacts, preventing confirmation of its results (page 5).

Specifically, with regard to site distance and haul route concerns, Mr. Hee notes at pages 5 and 6 that the following comments and questions should be answered:

- is the County's vision clearance triangle satisfied in the study area?

- what speed is needed to achieve site distance at the study locations?

- are sight distance exhibits available for public review?

- Why are total crashes different in some of the Tables in the TIA?

- Will the applicant complete the improvements recommended by the TIA for the intersection of Prairie Road and Old Highway 99?

- Why doesn't the TIA provide conclusions about whether the project traffic will increase the frequency and severity of collisions on the haul route given the route's geometric and sight distance constraints?

B. Valuable Ecological Setting.

The 68-acre mine site and associated properties provide important terrestrial and aquatic habitats. The Samish River, a salmon-bearing river, winds for more than one-quarter mile along the eastern portion of the mine property. Associated wetlands extend toward the Mine from the river's active channel and flood plain, though it is unknown just how close the edges of the wetland reach to the proposed mining area because they have not been delineated.[20] Swede Creek, a documented fish-bearing stream, would be traversed by every truck hauling gravel and sand to and from the Mine on the private haul road. The Application does not acknowledge the private haul road as part of the project and therefore does not evaluate impacts to wetlands along that route[21] or to Swede Creek from the haul road that crosses it.[22] A fish-bearing tributary to the Samish River crosses the southeastern corner of the Mine site.

1. Lack of analysis of undersized Mine buffer.

According to the project description set forth in the MDNS, the Mine would observe a 200-foot wetland buffer rather than the 300-foot buffer required for the wetlands associated with the Samish River. The MDNS refers to the mining of approximately 4,280,000 cubic yards of sand and gravel.[23] According to its Special Use Narrative, CNW will be able to extract 4,280,000 cubic yards of material if it mines up to 200 feet from the estimated edge of the wetlands, and approximately 3,942,000 cubic yards if it observes the required 300-foot buffer.[24] By embracing the larger volume, the MDNS indicates PDS' approval of a 200-foot buffer for the Mine.

A buffer of at least 300 feet applies to the Mine as a high intensity land use adjacent to a Category II wetland.[25] 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

[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.
[21] See Attachment E, map created with Washington Department of Fish and Wildlife mapping tool for identifying site-potential tree height, showing wetlands and drainages near haul road.
[22] Graham-Bunting Associates, Fish and Wildlife Site Assessment: Parcels 50155, 125644, 125645, 1 (Aug. 20, 2015) (circle showing limits of area reviewed around 68-acre mine site) (hereafter "GBA Assessment").
[23] *Compare* MDNS, at 1 *with* CNW Special Use Narrative, at 1.
[24] CNW Special Use Narrative, at 1.
[25] Skagit County Code 14.24.230.

industrial land uses."[26] The Mine qualifies as a commercial and industrial use of the land, and the clear-cutting of existing forest and conversion to a sand and gravel mine qualifies as a high level of human disturbance and substantial habitat impacts. In addition, the Application does not evaluate the angle of the slope in the buffer to determine whether it is greater than 25%, and thus warrants an extension of the buffer 25 feet past the top of the slope.[27]

In addition, by clearing the forest into the buffer, the Mine would eliminate functions that the forest furnishes 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.[28]

This riparian zone where the aquatic environment transitions to a terrestrial environment is essential for the Oregon spotted frog--listed as endangered by Washington in 1997 and threatened federally in 2014--that relies on the wetlands and environs.[29] The US Fish & Wildlife Service has identified critical habitat for the frog that extends from far upstream on the Samish River and includes the mine property adjacent to the river.[30] The 2017 GBA Addendum acknowledges that these wetlands meet the definition of critical habitat for the spotted frog due to their size, saturated soils, and shallow ponds.[31] The GBA Addendum includes a photograph showing these ideal conditions, as well as a hand-drawn line intended to reflect the edge of the saturated area.[32]

However, neither the SEPA Checklist nor the Application's documents by Graham-Bunting evaluate the impact on the Oregon spotted frog or other wetland species of converting one-third of the riparian buffer into a gravel mine. Consistent with the proposal to mine up to

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[26] SCC 14.040.020 (emphasis added).
[27] SCC 14.24.230(2).
[28] *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).
[29] Graham-Bunting Associates, Addendum to Fish and Wildlife Site Assessment: Parcels 50155, 125644, 125645, 1 (April 18, 2017) (hereafter "GBA Addendum").
[30] *See* US Fish and Wildlife Service Critical Habitat for Oregon Spotted Frog map attached to that addendum that shows critical habitat on the Mine property, attached hereto as Attachment F.
[31] GBA Addendum, at 1.
[32] GBA Addendum, at 2.

200 feet from the wetland, the GBA Addendum suggests that a 200-foot buffer is sufficient to protect aquatic life, but does not offer any justification for that assertion other than the absurd claim that clear-cutting a forest and converting it to a sand and gravel mine is a "medium" intensity use.[33] Nor does the GBA Addendum indicate why a 200-foot buffer would protect the Oregon spotted frog when Skagit County's critical areas ordinance requires a 300-foot buffer to protect the Category II wetland from the impacts of high intensity land uses like mining operations.[34] In fact, the GBA Addendum expressly disclaims that it is not intended to be used for the purpose of evaluating the spotted frog under the Endangered Species Act.[35]

2. Lack of response to Ecology concerns.

In addition to overlooking the impacts of developing 1/3 of the buffer intended to protect species such as the Oregon spotted frog, CNW declined to address state agency concerns expressed by Doug Gresham, the Washington Department of Ecology wetland specialist responsible for Skagit County. In his initial April 7, 2016 email, Mr. Gresham stated that wetland impacts should be avoided by refraining from excavating within the buffer area associated with the Samish River and its associated riparian wetlands and that any wetlands identified on the property that would be impacted should be delineated and permits should be submitted to Ecology.[36] In a June 1, 2016 comment letter, Gresham declared that additional wetland requirements include: (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 wetland and buffer impacts per Ecology standards.[37] In addition, Mr. Gresham noted in his June 1, 2016 correspondence that the Application omitted maps showing associated wetlands or the ordinary high water mark of the Samish River.[38]

Six months later, Mr. Gresham supplemented his earlier comments by expressing a

[33] GBA Addendum, at 2.
[34] Skagit County Code 14.24.230.
[35] GBA Addendum, at 2.
[36] Email from Doug Gresham to Planning & Development Services re: PDS Comments (April 7, 2016);
[37] 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) (hereafter "Gresham June 2016 Comments").
[38] Gresham June 2016 Comments.

concern with CNW's use of a 200-foot buffer rather than the required 300-foot buffer.[39] Gresham stated that CNW needed to address the gravel mine's encroachment into the 300-foot buffer.[40] Gresham also stated that he had "a concern with the access road that will need to be improved to accommodate 46 truckloads a day, which could impact wetlands and streams. This access road may need to be widened, the Swede Creek bridge may need to be upgraded, and storm water drainage features may need to be reconfigured."[41] Gresham noted that these issues had not been addressed.[42]

Notwithstanding these clearly-stated agency concerns, CNW continues to propose to excavate up to 200-feet from what it assumes is the ordinary high water mark of the Samish River and associated wetlands without delineating the specific location of the river's edge, its floodplain, or the associated wetlands. CNW did not supplement the Application with a survey or flagging of the edge of Samish River, delineation of wetlands on the property (including any wetlands along the haul route), critical area reports for wetlands, a mitigation plan, or a discussion of impacts associated with the Swede Creek bridge or haul road development on the creek or wetlands. Instead, an engineering and surveying group drew a map with estimates for the location of Samish River "plotted from May 2011 aerial photo" and "wetland at toe of slope from LiDAR data and field observation," without a delineation survey.[43] The map is captioned "alternate 300 foot buffer," but none of the application materials indicate that CNW has decided to apply anything other than a 200-foot buffer. The map shows what appear to be roads or mining areas extending into the estimated buffer.

3. Water quality and quantity impacts.

Drainage from the site currently flows to the Samish River both above and below ground. The Application indicates that the mining would occur in an area that is currently elevated about 90 feet above the river and its associated wetlands (50-75 feet above the valley floor in the eastern portion of the site), and that groundwater from the site flows in a northerly direction and discharges to the Samish River.[44] According to the Application, CNW would construct a berm approximately 200 feet landward of the assumed wetland edge in order to

[39] Gresham email to Planning & Development Services re: Ecology Comments on the Grip Road Gravel Mine, Project File # PL16-0097 (Dec. 23, 2016).
[40] *Id.*
[41] *Id.*
[42] *Id.*
[43] Semrau Engineering and Surveying, Pre-Mining Topographic Survey Map, Grip Road Gravel Mine (7-31-2018).
[44] GBA Assessment, at 3; Associated Earth Science Incorporated letter to Concrete Nor'West re: Hydrogeologic Site Assessment, Concrete Nor'West – Grip Road Mine, 3 (Aug. 21, 2015) (hereafter "Hydrogeo Assessment").

direct drainage from the site to the gravel floor for infiltration into the groundwater.[45] The Application does not evaluate whether that berm and mine infiltration would redirect surface water away from the wetlands and river complex and thus dewater these sensitive ecological features, or analyze the impacts of that dewatering.

Application materials offer conflicting information about whether the Mine would reach the water table. Although the GBA Assessment states that the mine would be excavated to a depth of 10 feet above the water table, the SEPA Checklist states that the Mine would be excavated to a depth of 154-163 feet above mean sea level while the hydrogeological assessment found the water table at 145-155 feet above mean sea level.[46] The Application did not evaluate whether excavation to a depth of 154 feet would interfere with a water table at 155 feet.

C. SEPA Requires Withdrawal of the MDNS Because the Application Does Not Supply PDS With Sufficient Information to Fully Consider the Project's Environmental Impacts.

PDS must withdraw the MDNS because it has not fully considered the environmental and ecological effects of CNW's sand and gravel mining proposal. RCW 43.21C.030; *see Boehm v. City of Vancouver*, 111 Wn. App. 711, 717, 47 P.3d 137 (2002). For example, PDS issued the MDNS without analyzing the impact of clearcutting and mining a large portion of a wetland buffer intended to protect wetland species like the federally-threatened and state-endangered Oregon spotted frog. Nor has the Application evaluated impacts associated with the private haul road that will traverse Swede Creek and travel near uncategorized and unsurveyed wetlands. The Application also omits a full analysis of the risk to human health and safety from a haul route that involves public roads where the proposed truck and trailer would not be able to stay in its lane on two-lane roads with speed limits up to 50 mph, and risks associated with the sight distance at the intersection of Grip Road and the site access road. In the absence of this information, PDS has not satisfied its duty under SEPA to fully consider the project's adverse environmental impacts.

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 determine whether an environmental impact statement is required for a major action, the responsible governmental

[45] GBA Assessment, at 3.
[46] GBA Assessment, at 3. *Compare* SEPA Checklist, at 3 *with* Hydrogeo Assessment, at 3.

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.

Agencies must first ensure that the proposal is properly defined. WAC 197-11-060(3). Every part of a proposal that combines to form a single course of action must be evaluated in the same environmental document. WAC 197-11-060(3)(b). Thus, where different parts of the same proposal could not proceed unless they are implemented simultaneously, they must be evaluated together. WAC 197-11-060(3)(b)(i). Because the Mine could not function without the use of the private haul road to transport the product off-site, environmental impacts associated with the use of that road must be evaluated as part of the project's SEPA review.

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)).

The MDNS, SEPA Checklist, and associated application materials here demonstrate that PDS did not 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). The MDNS is not based on information sufficient to evaluate the proposal's environmental impact, as identified below and as exemplified by the lack of response to riparian and wetland requirements noted by Doug Gresham, Ecology's wetland specialist for Skagit County.

1. The MDNS is not based on information sufficient to evaluate the proposal's environmental impact.

The sections below summarize some of the information omitted from the Application that is necessary to fully understand and consider the Mine's environmental impacts. For more detailed descriptions and additional flaws, please see the CSVN November 2020 comment letter at Attachment A.

a. Lack of review of impacts within the Project's full footprint.

The application materials do not evaluate environmental impacts associated with the two-mile-long private haul road that transects the applicant's larger contiguous ownership and traverses Swede Creek, even though industrial-scale use of this haul road is a crucial element of the Project. For more information about this omission, see Attachment A, CSVN Letter at 4.

b. Lack of review of climate impacts associated with hauling sand and gravel.

No application materials, including the SEPA Checklist, evaluate the climate change impact associated with carbon emissions from mining and hauling more than 4 million cubic yards tons of sand and gravel over a 25-year period. Indeed, the SEPA Checklist asserts that, "[t]here are no off-site sources of emissions that would impact the proposal."[47] For more

[47] SEPA Checklist, at 5.

information about this omission, see Attachment A, CSVN Letter at 5 (identifying off-site and cumulative impacts omitted and ignored).

c. Lack of review of impacts from converting 1/3 of a forested buffer into a gravel mine, including impacts to listed species.

Although the MDNS contemplates the mining of more than 4 million cubic yards of sand and gravel, which would occur only if PDS applies a 200-foot buffer rather than the required 300-foot buffer, neither CNW nor PDS evaluated the impacts of reducing the buffer by 100 feet over a stretch of approximately ¼ mile. Nor does the Application review the impacts of this reduction on the listed Oregon spotted frog that relies on the wetlands and environs for its habitat.

d. Lack of sufficient information about wildlife impacts.

Notwithstanding that the Project would convert at least 51 acres of forested land to a gravel pit, the Application does not identify or analyze impacts to native fauna. CSVN have communicated to PDS that bears, cougars, and bobcats have been known to frequent the area and that local residents regularly observe the use of that area as a wildlife corridor between Butler Hill to the south and the Samish River valley and Anderson Mountain to the north. Yet the SEPA Checklist asserts that the property is not an animal migration route. In addition to providing critical habitat for the Oregon spotted frog, bull trout, and Puget Sound steelhead, the Samish River and its associated wetlands provide important habitat for a wide range of species that include river otters, beavers, bald eagles, belted kingfishers, great blue herons, spotted sandpipers, and numerous species of migratory songbirds. The Application should be supplemented to identify the animal species that inhabit or necessarily transit that area and analyze the impacts of turning that land into an open gravel pit and the impacts of converting what is presumably a lightly-used forest road to heavy industrial use.

e. Potential water pollution impacts.

The Application repeatedly states that stormwater will be infiltrated at the site, and notes that the groundwater flows to the nearby Samish River, but does not evaluate whether spills of fuels or other hazardous materials will impact the river's water quality after traveling through, ultimately, just 10 feet of ground before entering the groundwater. The Application also does not evaluate potential impacts from stormwater runoff of the private haul road, including sedimentation and petroleum products entering Swede Creek or wetlands east of that road. The Application must evaluate the potential for water pollution and the effects on Samish River and Swede Creek.

f. Lack of requisite Critical Areas review.

Skagit County has incorporated the goals, policies, and purposes of its Critical Areas Ordinance ("CAO") into its SEPA policies.[48] Consequently, to satisfy its duties under SEPA, the County must require compliance with CAO directives like the standard review of impacts that includes the submission of a critical area checklist and/or a site plan that shows the location of the proposed activity and associated area of disturbance in relation to all known critical areas or critical areas indicators.[49] The County must then review these project documents, complete a critical areas staff checklist, inspect the site, and complete the critical areas field indicator form.[50] Where the County's review concludes that the proposed activity extends to within 200 feet of critical area indicators or a distance otherwise specified by the chapter, it must require a critical areas site assessment. Ultimately, this process should result in protected critical areas being delineated and their outer edges and buffers marked permanently.[51]

With regard to wetlands, any proposed high impact land use within 300 feet of wetland indicators, and any other proposed land use within 225 feet of wetland indicators, requires a wetland site assessment.[52] The site assessment must result in a wetland delineation, classification, site plan with wetland and buffer boundaries, and functions and values analysis.[53]

CNW's application does not satisfy these standards and thus does not meet Skagit County's SEPA requirements. The Application does not identify wetlands adjacent to the haul road at all, much less conduct a wetlands assessment for the impacts associated with the proposed hauling. The Application does acknowledge the existence of wetlands associated with the Samish River, but does not include a delineation, site plan with delineated boundaries depicted in relation to the Mine activities, or a full functions and values assessment. Absent this information, the County does not have sufficient information to issue a threshold determination.

g. Lack of sufficient review of noise impacts.

The Application's noise studies rely on a flawed methodology and overlook the planned

[48] SCC 14.24.060(3).
[49] SCC 14.24.080(1).
[50] SCC 14.24.080(2) (note that these reviews must occur to determine whether activities that are within 200 feet of critical areas or their buffers, or a distance otherwise specified by the CAO).
[51] SCC 14.24.090.
[52] SCC 14.24.210.
[53] SCC 14.24.220.

removal of the forest buffer between the Mine and neighboring properties. For more information about this omission, see Attachment A, CSVN Letter at 13-14.

h. Lack of sufficient review of recreation impacts.

The Application omitted any acknowledgement or analysis of impacts to cycling along regional and federal bicycle routes. For more information about this omission, see Attachment A, CSVN Letter at 14-15.

i. Lack of sufficient information about transportation impacts.

As identified above, the Application omits significant, necessary information about potential traffic impacts, including final maximum traffic generation numbers, site distance impacts for intersections like that at Grip Rd/site access road, modeling with speeds anticipated by Skagit County's Road standards, mitigation for site distance impacts, the impact of truck-trailers crossing the centerline between the site and Old Highway 99, travel east of the Mine, and the redistributed traffic to Cook Road. These must be addressed.

2. The MDNS issued absent consideration of applicable mitigation measures.

While the MDNS included several conditions, the vast majority of them merely require compliance with existing standards (though the MDNS did not require observation of Skagit County's 300-foot buffer and instead embraced CNW's decision to apply only a 200-foot buffer). To the extent that the MDNS included conditions for transportation impacts, it merely directs CNW to avoid hauling with trailers or to design and construct unidentified road improvements on two turns on Prairie Road. Other mitigation measures that should have been considered include:

- Scaled-back size of mine;
- Scaled-back rates of extraction;
- Limiting hours of operation to daylight hours during the workweek. This would partially address areas where the site distance is impaired;[54]
- Limiting the daily number of truck trips;
- Protections from sedimentation and stormwater drainage into Swede Creek;
- A drainage/runoff plan for the length of the private haul road to prevent surface water impacts from heavy traffic on the haul road;

[54] Per recommendation of Transportation Solutions, at 4.

- Requiring roadway upgrades to decrease the likelihood of collisions between Project trucks and other vehicles, bicycles, and pedestrians; and
- Identifying a prescribed haul route.

D. Conclusion.

Notwithstanding the five-year interval since CNW initially applied for the special use permits, it has not supplied PDS with environmental information about the proposal sufficient to warrant a threshold determination. PDS issued the MDNS without fully considering the Project's significant environmental impacts, from loss of habitat for an endangered frog to traffic impacts to impacts associated with the private haul road. CSVN therefore asks PDS to correct that mistake by withdrawing the MDNS and by coordinating with the Applicant to conduct an EIS for the significant impacts referenced above.

In addition, CSVN requests that PDS publish online the comments submitted to address the MDNS as soon as possible.

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: Michael Cerbone
Martha Bray
John Day

Attachs:

A. CSVN Letter to Hal Hart re: Proposed Grip Road Gravel Mine #PL16-0097—Comments on SEPA Review

B. WDNR timber harvest map

C. Skagit Valley Bike Map

D. Grip Road Gravel Mine Peer Review Traffic Impact Analysis

E. WDFW map showing wetlands and drainages near haul road

F. US Fish and Wildlife Service Critical Habitat map for Oregon Spotted Frog

ATTACHMENT A

By Email

November 24, 2020

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

RE: Proposed Grip Road Gravel Mine #PL16-0097—Comments on SEPA Review

Dear Mr. Hart and Mr. Cerbone:

We are writing on behalf of the local community group Central Samish Valley Neighbors (CSVN) to comment on the large new gravel mine along the Samish River proposed by Miles Sand and Gravel/Concrete Nor'West (CNW) in their application for a mining Special Use Permit (SUP) #PL16-0097. Our comments identify information that the County still needs to obtain in order to conduct an adequate review of the impacts that the proposed mine would cause. This information involves the need for both project details and the evaluation of environmental impacts. We are submitting this letter in advance of the renewed public process that Skagit County has committed to conducting[1] with the goal of informing your decision as you restart that process.

As you know, we have been expecting a decision from Skagit County Planning and Development Services (PDS) regarding next steps with this application for many months. Given the uncertainty about the timing of the new public process, we are taking this opportunity to provide you with our concerns. This also allows some of our members who were excluded from the initial State Environmental Policy Act (SEPA) process due to notification flaws to address the project impacts before more time passes. We anticipate following up with additional comments when the PDS issues the revised SEPA determination promised on its website.[2] As the County reopens SEPA and public review for the application, we respectfully request that you respond to community concerns, withdraw the 2016 MDNS, and require a full environmental impact statement (EIS) for the project that takes into consideration all of the environmental impacts.

[1] We are referring to the Skagit County Prosecuting Attorney's representation in a brief last year that *"[o]nce the County receives a complete application, the County will conduct further analysis of potential project impacts, re-issue public notice, publish a new staff report with recommendations on the Special Use Permit conditions, issue a revised SEPA determination, and another public comment period and public hearing will follow."* Skagit County's Response to Renewed Motion to Intervene, PL 18-0200, at 2-3 ((Oct. 4, 2019).

[2] Statement regarding PDS's intent to issue a revised SEPA determination located on the County's website: https://www.skagitcounty.net/Departments/PlanningAndPermit/gravelmine.htm.

Over the last four years, the County has gone to considerable effort to clarify this proposal by requesting additional information from the applicant. Nonetheless, the application remains incomplete and inconsistent, and the applicant has still not provided all of the information necessary to evaluate the environmental impacts of the project. The submitted application materials are substantively inaccurate and inconsistent, and the scale of the project is consistently under-represented. Rather than clarifying the proposal, the additional submittals from the applicant have added more layers of confusing and contradictory information. And, the applicant has still not proposed or evaluated appropriate mitigation or project alternatives. For these reasons, the County's MDNS both was premature and failed to meet the environmental review requirements of SEPA and Skagit County Code. Based on our own review and consultation with our attorney, the project impacts identified in the application are significant and warrant additional analysis through an EIS that fully evaluates them and identifies appropriate alternatives and mitigation measures.

Summary of necessary information and environmental review omitted from the application materials. Based on our review of the March 7, 2016 SEPA Checklist, the August 2, 2019 Supplemental SEPA Checklist Information, the documents referenced in those materials, and the other documents posted to the County's project website, the application continues to suffer from the SEPA inadequacies listed below.

1) Project scale is under-represented: The application minimizes and under-represents the scale of the mining activity by avoiding many details and using vague descriptors such as "extracting relatively low volumes of aggregate".

2) Full footprint of project is not included in the environmental review: The application does not evaluate environmental impacts within the full footprint of the project. Instead, the project description is limited to just the 68 acre area where the actual mine would be. None of the project documents evaluate the use or impact of a two-mile long private haul road that transects the applicant's larger contiguous ownership, even though industrial scale use of this private haul road is a crucial element of the project.

3) Off-site and cumulative impacts are omitted and ignored: The application omits and/or minimizes descriptions of off-site and cumulative impacts of the project, especially off-site impacts related to truck traffic.

4) Future plans not disclosed: The application omits plans for future on-site processing despite the suggestion in the application materials that the applicant may seek to operate on-site processing in the future. This omission prevents a complete evaluation of the impacts and identification of appropriate mitigation.

5) Impacts on Environmental Elements inadequately reviewed: Defects in application materials result in a failure to fully disclose impacts for all of the "Environmental Elements" required by SEPA.

6) Mitigation measures and project alternatives not considered: Consequently, the application does not identify or evaluate appropriate mitigation measures or alternatives.

We discuss all of these issues further below, in the order listed.

1) **Project scale is under-represented.** The SEPA Checklist, Supplement and Special Use Narrative minimized and under-represented the scale of the proposed mining development by avoiding detail and using vague descriptors such as "extracting relatively low volumes of aggregate". The mining activity was described using generalities, and omitting many details. This approach obscured important information and it is unclear whether key details were used by the County in its SEPA review. Other examples of misleading application materials include the characterization of the site as "very remote" and the proposed mining as a "temporary" activity. The SEPA Checklist states, "traffic generated by the project will be typical of mining operations," but does not state any actual numbers. To the extent the submitted documents actually provide this information, many of those details are buried in the referenced studies and drawings.

   The truth is that this is a proposal for a 50-acre open pit mine that will eventually be ninety feet deep. This is a hole in the ground about the area of 38 football fields and ten stories deep. The Checklist states that there will be "4.28 million cubic yards of excavation". If 4 million cubic yards are hauled off site (assuming 1 yard equals 3,000 pounds), this would be approximately 6 million tons of sand and gravel removed from the site over a twenty-five year-period, or 240,000 tons per year. We do not see this scale of land disturbance and trucking at this location as "low volume". Furthermore, although the application characterizes the mining operation as a "temporary activity," its proposed daily operations over 25 years will feel permanent to the community, as will the long-term alterations to the landscape. The "very remote" characterization likewise ignores the actual setting--the site is located in an area where no prior industrial scale mining has occurred, and it would operate amidst a rural residential neighborhood with more than 100 homes within a mile of the site and 750 homes within three miles. And, an investigation into the DN Traffic memo (June 2019) reveals that the "typical" gravel truck traffic referenced in the SEPA Checklist is actually an estimated 11,765 tandem gravel truck trips per year on narrow substandard County roads.[3]

[3] Contrary to the volume of gravel stated in the SEPA checklist, the DN traffic memo assumes that 200,000 tons of material per year will be removed from the site. Using DN's math, and assuming the larger volume stated in the SEPA checklist, the number of truck trips per year would be actually be closer to 14,118 (240,000 tons/34

By avoiding details in the main project documents, the application appears complete, but does not actually address the full impacts of the project, nor does it explore less damaging alternatives or identify mitigation measures.

2) **Full footprint of project is not included in the environmental review.** The SEPA Checklist's description of the project site (Section A. #11) as only a 68-acre parcel of land precludes review of the full scope of the project; it fails to clearly identify the two-mile-long haul road across the applicant's 726-acre property, which is required to get the gravel to Grip Road. The applicant's SEPA narrative, as well as the updated narrative for the Special Use Permit application, describes the mine occurring on a 68-acre parcel of land and mentions the access point with Grip Road. It does not clearly explain that the mine site is located two miles from the access point on Grip Road. Therefore, hauling the mined material off site involves use of a private haul road that transects the applicant's larger 726-acre ownership.

   Industrial scale use of this private haul road is integral to the project, and yet the land area that the road crosses is not included in the project description. The application materials do not even identify the parcels the road crosses as part of the project. This is misleading and misrepresents both the size of the project and the extent of the environmental impacts. The private haul road, all of which is on the applicant's larger ownership, is adjacent to wetlands and crosses Swede Creek, a fish-bearing stream. This private haul road has been significantly upgraded in the past two years, without County oversight, under the auspices of the former landowner's Forest Management Plan (Trillium, 2009), filed with the state Department of Natural Resources. There are potentially significant impacts to surface water quality and hydrology as well as to Critical Areas, not only from the recent road upgrading, but also from the planned industrial scale use of this road by heavy trucks. Yet, this two-mile stretch of land has not been afforded environmental review.

   In the course of the permit review, and in response to public comments, the County requested that the applicant describe how this private haul road meets the County's private road standards. In response, the applicant submitted a request for Alternatives to County Road Standards (June 2019), and an "as built" drawing of the road. It is unclear if there was any formal decision issued by the County regarding this request, but regardless this does not address potential impacts from the heavy industrial use of the private haul road to surface water quality and quantity and to fish and wildlife habitat. The footprint of the entire project, including the areas adjacent to the haul road, must be included in the

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tons/truck*2), or an average of 54 truck trips per day (not 46 per day as stated in the DN memo). This is one of many examples of inconsistent and confusing information provided in the application materials.

environmental review of the project. It is not possible to evaluate the full project impacts or the necessary remediation measures without this information.

3) **Off-site and cumulative impacts omitted and ignored.** One of the most significant components of this proposal is the plan to haul approximately 4 million cubic yards of sand and gravel from the site to be processed at another facility. The material would be moved by truck along more than five miles of County roads over a period of 25 years. This trucking activity is a crucial part of the project that will cause significant environmental harm, yet the project description in the SEPA Checklist (Section A. #11), as well as the updated narrative for the Special Use Permit application, omit details of this aspect. The only mention of truck traffic is by reference – listing several "traffic memos" submitted by the applicant separately, together with piecemeal supplemental information and addenda. The County's pursuit of additional information on traffic impacts eventually led to a third-party desktop review by a consulting traffic engineer engaged by the County (HDR), and most recently (September 2020) a longer Traffic Impact Analysis (TIA) that was prepared by DN Traffic Consultants on behalf of CNW. However, all of the documents that look at the traffic impacts appear as a kind of postscript. This has the effect of concealing the severity of the truck traffic impacts and it considers only those impacts related to a narrow set of criteria regarding County road standards and "level of service". In reality, the off-site impacts from a heavy and sustained volume of truck traffic over a twenty-five year period are many-pronged and cumulative. These impacts include carbon emissions and air pollution, noise, vibration, public safety, and damage to public infrastructure. A full SEPA review needs to evaluate and identify mitigation measures for <u>all</u> of these impacts, not just those that fall under the narrowly defined criteria in County Code for triggering Traffic Impact Analyses. Furthermore, the applicant's TIA fails to meet some of the basic requirements for such documents included in Skagit County Road Standards, 2000, as incorporated by reference in the Skagit County Code.

   To illustrate the scale of this proposal (using the conservative figures in the DN traffic studies) approximately 294,000 truck trips over a 25-year period are required to haul the amount of material the applicant proposes to excavate from the mine. The shortest haul route to CNW's Belleville Pit site on County roads is approximately 11.5 miles round trip, plus an additional 4 miles round trip on the private haul road. Cumulatively, this is more than 4,600,000 miles over 25 years, or more than 184,000 miles per year. This is equivalent to almost 800 round trips between Seattle and New York City. [4] Furthermore, one fully

[4] Different application documents identify conflicting amounts of material to be excavated and hauled from the site, as well as different haul routes and mileage and load weights. Using the higher extraction figures in the SEPA checklist (assuming 4 million cubic yards of excavation), 356,666 truck trips would be required over a 25-year period cumulatively more than 5,528,300 miles (220,000 miles per year), equivalent to 970 round trips between New York City and Seattle.

loaded standard gravel truck with pup trailer weighs more than 80,000 pounds. Very few of the off-site impacts associated with this hauling have been addressed in the application materials. Finally, the number of truck trips and cumulative mileage may actually be considerably higher than stated above depending on several factors, including weight limits on the bridge over the Samish River on Highway Old 99 and the extent of third-party sales.

Other off-site impacts that were minimized or inadequately described in the application documents include potential impacts to surface water; impacts of noise from mining equipment and hauling; and potential impacts to fish and wildlife. We address these concerns elsewhere in this letter under the specific environmental elements, in the order they appear in the SEPA Checklist.

4) **Future plans not disclosed.** The SEPA checklist asks specifically if there are any plans for future additions, expansion, or further activity related to or connected with this proposal (Section A. #7). The applicant answered 'no' to this question on the SEPA Checklist but implies elsewhere that they may conduct onsite processing at a future date. The applicant was asked to clarify this point, and in a letter to the County on May 15, 2017, states only that no processing was proposed "in this application" – implying that future on-site processing is contemplated. And, the revised "Special Use Narrative," dated Aug. 2, 2018, states in the third paragraph that "No processing is proposed onsite at this time" (*emphasis ours*). SEPA guidelines require that all parts of a proposal be disclosed, even if the applicant plans to do them "over a period of time or on different parcels of land." We find the inconsistency on this topic troubling. Given the cost of hauling raw materials 184,000 miles/year, we find it unlikely that CNW will not apply for an additional permit in the future to allow on-site gravel processing. Furthermore, the disclosure of future plans is essential here because the project buffers would need to be larger to accommodate on-site gravel processing, and because the project would be subject to even more rigorous scrutiny. On-site processing would trigger a significantly larger buffer (200 feet—double the 100 feet currently proposed) on the northern and western borders to reduce noise and vibration impacts to the neighboring private properties (SCC 14.16.440(10)). This would reduce the amount of gravel available for extraction, but it is an important mitigation measure for reducing impact to adjacent landowners. It is also reasonable to assume that the applicant plans to expand the mine itself over time to cover more of the large property holding there. There have been many examples of Skagit County approving similar expansions and scope changes through the permitting process. Dividing the planned activities into separate development applications is a way to piecemeal SEPA review and thus under-evaluate project impacts. Under SEPA, the full scope of the proposed project must be considered in order to prevent inappropriate phased or piecemeal review (WAC 197-11-060(5)(d)(ii). Given that the applicant has expressly reserved the right to pursue processing at this site in the future, the project must be reviewed on the basis of what has been reserved as a

potential future activity—that such processing would occur on the site. Therefore, the conditions on the permit need to anticipate potential future expansion with larger buffers and additional measures to reduce likely future impacts. Alternately, restrictions need to be put in place to prevent such changes to on-site activities in the future.

5) **Impacts on Environmental Elements inadequately reviewed.** As addressed below, defects in the application materials result in the lack of adequate review of the project's impacts to earth, air, water, and environmental health are minimized or not completely disclosed in the SEPA Checklist and supporting documents.

Earth (SEPA Checklist, Section B. #1): Although question #1.e. of the SEPA Checklist requests a description of any project filling, excavation and grading, the applicant limits its response to the 51-acre open-pit mine footprint. The Checklist does not describe essential project elements such as storage and management of excavated and side-cast materials. In fact, there is no description of what, if any, site preparation will occur outside of the footprint of actual mine.

The "Site Management Plan, Sand and Gravel Permit" document that the applicant submitted (also a requirement for WA Department of Ecology's NPDES permit) does not cure the Checklist defect. It is almost entirely generic, and simply lists typical Best Management Practices (BMPs) to prevent erosion and manage buffers. It is not site-specific and does not actually explain how the side-cast materials, or "overburden", will be handled or how buffers along property lines will be managed. It is unclear in this plan which BMP's listed will actually be implemented or when or where they will be used. This omitted information is essential for verifying that the project would protect water quality, minimize disturbance to wildlife habitat, and reduce noise, dust and vibration impacts on neighboring properties.

Numerous relatively small private parcels lie to the west and north of the proposed mine site. Noise, dust and vibration from the mine will impact these properties. An appropriately-scaled, undisturbed vegetated buffer must be established to protect these properties. It is unclear in the application materials if the buffers between the mine and adjacent properties will be left undisturbed. In addition, there are repeated assertions in project documents that all runoff from the site will drain into the open pit and infiltrate into groundwater. This does not address any surface water runoff and contamination from side-cast material that may be stockpiled outside of the footprint of the mine itself for use in reclamation when mining operations are completed. There is no way to evaluate the impact of this earth moving activity when it is not fully explained and described.

Question #1.g. asks if any impervious surfaces are proposed. The applicant states that no permanent, impervious surfaces are proposed, despite the two-mile private haul road and

the apparent need for on-site staging areas at the mine site for dozens of trucks and equipment. A site-specific surface water drainage plan that includes measures for protecting waterways from sediment and other contaminants from these impervious surfaces needs to be prepared and implemented.

Air (SEPA Checklist, Section B. #2): The applicant's response to question #2.a., which requests disclosure of the project's air emissions, avoids identifying the substantial amount of emissions to be expected over the project's 25-year lifespan. Instead, the answer characterizes air quality impacts as "temporary." Mining is an ongoing activity. It is not temporary construction. There will be earthmoving equipment generating emissions constantly during operating hours for decades. Additionally, there is no mention of the significant cumulative carbon and particulate emissions from 25 years of diesel truck traffic. This omission alone is fatal to SEPA review.

Question #2.b. The applicant states incredulously that there are no off-site sources of emissions or odor. This answer simply ignores emissions from diesel truck hauling. As stated above, the cumulative mileage of tandem diesel trucks hauling material from this mine is more than 4,600,000 miles, or more than 184,000 miles per year.[5] The diesel emissions from this hauling activity will be concentrated in a small area, day after day, year after year. Diesel emissions include both particulates that create localized health hazards and greenhouse gasses that contribute to global climate change. The type of diesel fuel used, maintenance and age of vehicles, speed and driving patterns, idling activities, etc. all influence the intensity of emissions. The applicant must disclose the true nature and quantity of these emissions and identify measures to reduce the impact to air quality. A simplistic calculation of the carbon emissions from just the hauling component of this project is more than 17,200 metric tons over 25 years, or around 690 metric tons per year[6]. The actual amount of carbon emissions will probably be considerably higher because, as discussed above, the mileage is under-represented. This is a very carbon-intensive proposal. The applicant needs to provide realistic estimates of the cumulative emissions from all of the truck hauling and on-site mining activities, as well as propose an adequate mitigation plan for them.

Water (SEPA Checklist, Section B. #3): Question #3.a. involves disclosing impacts to surface water. The Checklist does not fully disclose surface water impacts from the project's proposed undersized buffer. The applicant proposes a 200-foot vegetative buffer between

[5] Assumptions: round trip of 15.4 miles between the mine and Belleville Pit, 46 round trips per day, 260 days per year, for 25 years.

[6] Carbon emissions estimation based on the per ton/mile truck emissions estimates and sample calculations included in the EDF publication produced to assist industry in reducing carbon emissions, "A Green Freight Handbook", Chapter 2, Establish Metrics, we estimate that depending again on which of the two proposed main haul routes is followed, annual (total) truck CO2 emissions will be between 271 (6,768) and 403 (10,064) metric tons.

the mine and the adjacent Samish River, but a 200-foot buffer is not adequate and is inconsistent with Skagit County Critical Areas Ordinance (SCC 14.24.230) requirements for the intensity of this land use. Additionally, when slopes of 25% or more are present, buffers are generally required to extend 25 feet beyond the top of the slope. We address this further in the section on "animals" below, and in the attached memo titled: "Fish and Wildlife, and Water Quality (Regulated Critical Areas) Review " (Wiggins, November 2020).

In response to these concerns, PDS asked the applicant to submit drawings showing a 300 foot buffer, which they did. This drawing is labeled "Alternate 300 foot buffer" (dated July 2018). To date, however, this "alternate" buffer has not been required as a condition of the permit.

In addition, mine site plans identify an unnamed tributary to the Samish River on the southeast corner of the site. The supplement to the SEPA checklist references the Site Management Plan to explain how surface water will be protected. Again, as discussed above in the "Earth" section, this Site Management Plan is not site-specific and simply lists a number of BMPs without explaining where or how they may be implemented; except that Appendix B ("Site Map") of the plan identifies one "monitoring point" near the tributary stream. There is not enough information provided to determine if surface water will be adequately protected from sediment and other contaminants or if the minimal monitoring proposed will be adequate to detect such pollution. In addition, it is unclear from the project documents where all the surface water in the areas around the mine site may drain after the site is disturbed. The mine site is perched above the river and it is unclear if the proposed buffers encompass the entire slope edge between the mine and the river. There is not enough detail in the drawings and application materials to ensure that erosion and contaminated run-off will be prevented from making its way downslope to the river.

Question #3.b. involves disclosing impacts to groundwater. The applicant states that no waste discharge will occur into groundwater. The Supplement to the SEPA Checklist again references the Site Management Plan, and states that mining runoff will infiltrate into the bottom of the mine. However, the project description states that the intention is to mine within ten feet of the groundwater level. Given the pervious nature of the sand and gravel floor of the mine, we question if this method of preventing groundwater contamination is sufficient. This is especially concerning as the groundwater in this location will essentially flow directly into the Samish River and into designated critical habitat for the endangered Oregon Spotted Frog (discussed further below in the section about animals). Protection of groundwater requires further evaluation, especially in terms of the potential for fuel and other toxic material spills from heavy equipment in the mine (this issue is further discussed below under the section about environmental health and hazardous chemicals.)

In addition, the application does not explain how operators will ensure that they remain at least ten feet above groundwater during seasonal fluctuations. To avoid the risk of the mining activity penetrating into groundwater, the applicant must identify a method for determining the highest groundwater level and establish a monitoring plan to ensure compliance.

Question #3.c. involves describing impacts from water runoff, including stormwater. In addition to the concerns related to runoff from the mining site described above in the 'earth' section, the impact of runoff from the haul road to surface water was not identified as a concern and has not been addressed. This involves impacts to both water quality and quantity -- to the wetlands on site, to Swede Creek and to the greater Samish watershed. There is the potential for sedimentation in Swede Creek, a fish-bearing stream, and for increased overland flows and downstream flooding. There are already significant flooding issues associated with Swede Creek. The ditch adjacent to Grip Road east of the bridge over the Samish River is an overflow channel of Swede Creek. The Public Works Department and local residents are well aware that this ditch routinely spills over its banks and floods the roadway during high rainfall events. In addition, the edge of the roadbed itself at this location has required repeated hardening and repair due to erosion caused by the high volume of water flowing through this ditch. The impacts to hydrology and the potential for exacerbating sedimentation and flooding problems from the increased impervious surface and heavy use of the haul road, especially in the gorge where the road crosses Swede Creek, needs to be evaluated and appropriate mitigation measures required. A stormwater management plan for the haul road needs to be prepared and implemented.

Plants (SEPA Checklist Section B. #4): Notwithstanding that the mine would completely strip native vegetation from more than fifty acres of land, the Checklist omits any discussion of ways to minimize this impact. A one-sheet survey drawing titled "Reclamation Plan and Mine Sequence" (May 2015) shows the proposed mine area divided into four quadrants labeled "1" through "4". These labeled quadrants presumably explain the "sequencing" of the mining activity, but there appears to be no narrative explaining how or when this sequencing may occur. Phasing the mining so that portions of the site remain forested until it is needed, and/or reclaiming sections over time while other sections are being mined would significantly reduce the impact to native vegetation. Simply reducing the scale of the proposed mine would be even more appropriate. Measures and alternatives that reduce the impact to the native vegetation must be evaluated.

Animals (SEPA Checklist Section B. #5): The Checklist omits significant animal species and potential project impacts on them. First, the Checklist states that no threatened or endangered species are known to be on or near the site. In fact, the US Fish and Wildlife Service and WA Department of Fish and Wildlife have designated Critical Habitat for the Oregon Spotted Frog (*Rana pretiosa*) along the Samish River directly adjacent to the site. In

addition, there is designated Bull Trout (*Salvelinus confluentus*) Critical Habitat a few hundred feet downstream from the northeast corner of the mine site. The Oregon Spotted Frog was believed to be extirpated from this area until breeding sites were discovered in 2011-2012 in the upper Samish River. The Samish River system is the only place in Skagit County that the Oregon Spotted Frog has been found. It is listed as Endangered in Washington State, and Threatened federally. Bull Trout is a Candidate species for listing in Washington State and is listed as Threatened federally. The presence of designated critical habitat for species listed under the Endangered Species Act (ESA) was not disclosed in the SEPA Checklist nor in the accompanying Fish and Wildlife Assessment (GBA/August 2015). These are serious omissions.

At the request of the County, an Addendum to the Fish and Wildlife Assessment was submitted by the applicant to address the presence of the Oregon Spotted Frog habitat adjacent to the site (GBA/April 2017). However, the addendum simply states that in the consultant's opinion, their recommended 200-foot buffer is adequate to protect this designated critical habitat without siting any clear science or expert biological opinion to back up the statements. In fact, a note in the Addendum states:

> "*Our original assessment and this addendum are not intended to constitute a biological evaluation pursuant to the requirements of the Endangered Species Act. The documents are intended solely to demonstrate compliance with the Skagit County Critical Areas Ordinance (SCC 14.24).*"

Further evaluation of the impact from the proposed mining to the Oregon Spotted Frog, Bull Trout, and their designated critical habitat, needs to be conducted, consistent with State requirements and the Federal ESA. As discussed in sections elsewhere in this letter (in "earth", "water" and "toxics"), measures are not clearly described that will protect the water quality of the Samish River, its tributaries, and the groundwater that flows to the river. This is a serious concern that must be addressed to ensure that the Oregon Spotted Frog, Bull Trout, and Puget Sound Steelhead habitat is adequately protected according to law.

In addition, the SEPA Checklist and Supplement do not acknowledge a number of large mammals that are known to frequent this area. These include bear, cougar and bobcat. Furthermore, the Checklist states that the property is not an animal migration route even though local residents regularly observe the use of this area as a wildlife corridor between Butler Hill to the south and the Samish River Valley and Anderson Mountain to the north. Surrounding landowners have seen cougar, bobcat, and bear traveling across their properties on numerous occasions, and at least one resident located south of the subject property has captured many photos of these animals on remote trail cameras. These animals require large territories and are sensitive to disturbance. The subject property is the last large undeveloped property linking a larger landscape between Butler Hill to the

south, and the Samish River to the north. The applicant's Fish and Wildlife Assessment does not address the impacts to this wildlife corridor. Measures could be taken to protect a swath of land and maintain intact vegetative buffers surrounding the mine on the applicant's larger ownership. This would help reduce this impact.

Finally, the applicant's Fish and Wildlife Assessment is more than five years old (August 2015), and its limited scope does not address the current data regarding Threatened and Endangered Species (ESA). A new complete Fish and Wildlife Assessment needs to be prepared that considers the full footprint of the project, including the land area impacted by the private haul road, as well as all ESA species that may be impacted by the proposal. These concerns are further discussed in the attached memorandum: "Fish and Wildlife, and Water Quality (regulated Critical Areas) review" (Wiggins, November 2020).

Energy (SEPA Checklist Section B. #6): This is a very fossil fuel and carbon intensive project, both on and off site. As stated previously, just to haul the proposed volume of gravel to the applicant's processing site would require diesel truck/trailer combinations to drive more than 4,600,000 miles over 25 years, or more than 184,000 miles per year. This does not include the on-site energy consumption from the heavy equipment required for the mining activity. In addition, there is no electrical power supply to the site. There is no mention of power supply in the application materials, but presumably the applicant plans to run generators to provide light and power to the site. This will create even more fossil fuel consumption (and noise pollution that has not been disclosed). The applicant has made no attempt to estimate the amount of energy required, nor the impacts to the environment from it. There are no proposed energy conservation measures. The applicant should be required to evaluate alternatives to such high rates of energy consumption, and a carbon budget should be calculated with mitigation identified to offset the effects of carbon emissions to the atmosphere.

Environmental Health (SEPA Checklist Section B. #7): Question #7a. Toxics: The Supplement to the SEPA Checklist states that "mobile fueling vehicles" and "mobile maintenance vehicles" will be used and that "if fueling stations or other storage of these materials occurs on site, it will be in compliance with the NPDES Permit filed with the WA Department of Ecology". These vague and inconsistent statements fail to confirm whether fueling stations and fuel storage are planned or not. Furthermore, the application does not define "mobile fueling" or "mobile maintenance" or measures to control or respond to spills from them in different locations across the site. The applicant must explain how they will monitor this and provide specific management practices for use with mobile fueling and maintenance units.

Although the Site Management Plan purports to address spill prevention, it merely recites generic BMPs. It does not state what specific measures will be used on this site, nor does it

show any locations for fueling, fuel storage, etc. The applicant needs to disclose what the nature and location of the fuel storage and vehicle refueling and maintenance process will actually be, and what measures will be taken to prevent spills and toxins from entering surface and groundwater. As discussed previously, there is a real danger of surface water contamination and or groundwater contamination through the bottom of the mine floor if this issue is not properly addressed.

Question #7.b. Noise: This section requires disclosure of health impacts related to noise generated from the project on-site and off-site. The applicant submitted an "Updated Noise and Vibration Study" (November 2018), which concludes through modeling that the noise generated from the mine, and from off-site trucking, is within the limits set forth in Skagit County Code. There are several major flaws in this study that call into question its thoroughness and validity:

- Concerning the computer modeling of mine operation noise levels, the November 2018 noise study states "A front-end loader, dozer, and excavator were assumed to operate concurrently in the mine", with noise levels at 100 feet from each shown as 75, 75, and 76, dBA respectively. The study does not cite the source for these numbers. Presumably, different sizes and models of heavy equipment generate different levels of noise, and are not interchangeable for noise level modeling purposes.

- Furthermore, the noise study appears to address only "typical" mine production levels, not the "extended hours" production scenario of up to 5,000 tons per day described in the September 2020 DN Traffic Consultants Traffic Impact Analysis. Presumably, the latter would require more pieces of heavy equipment to accomplish, as well as more trucks. Based on the seasonal nature of sand and gravel demand, it seems likely that the mine would exceed "typical" or "average" production levels for extended periods during late spring, summer, and early fall. For a noise study to be valid, it must address the <u>maximum</u> production level.

- The computer modeled noise level receptor labeled "R3" is located approximately 900 feet north of the receiving property boundary, not at the receiving property boundary as required under WAC 173.58-020(11) and 173-60-040(1).

- The study does not address the significant noise fully loaded truck/trailer combinations will generate using their compression brakes while descending the Grip Road hill. Adding an "average" of 46 diesel trucks a day (or 30 trucks an hour, as under the "extreme" scenario from the DN Traffic Impact Analysis) onto Grip and Prairie Road will be a major change to the soundscape for residents along the haul route for the next 25 years regardless of whether the trucks exceed legal noise limits.

There are 100 homes within a mile radius of the proposed mine, and 375 homes within a 2 mile radius. Even if the applicant's consultant can somehow create a model that shows that the noise generated from the mine and truck traffic is below the thresholds set out in the WAC and Skagit County Code, the ambient noise from the mine and the trucks will become a constant backdrop for the residents in the surrounding area. This noise will have a lasting impact on public health, on the quality of life in this quiet rural neighborhood, and on wildlife. Per an article titled "The Adverse Effects of Environmental Noise Exposure on Oxidative Stress and Cardiovascular Risk" in the National Institute of Health's online National Medical Library, "Epidemiological studies have provided evidence that traffic noise exposure is linked to cardiovascular diseases such as arterial hypertension, myocardial infarction, and stroke."

The SEPA checklist and accompanying documents contain no discussion of ways to reduce or mitigate noise impacts, instead the focus is simply on proving that this new unprecedented level of industrial scale noise pollution will somehow meet legal standards. What is "legal" and what is "acceptable" are not interchangeable.

Light and glare (SEPA Checklist Section B. #11. The applicant apparently intends to operate the mine during dark hours, however the application does not describe the type of lighting that will be used on site. Nor does the application identify whether, or what, lighting would be installed for security purposes. The 700 acres owned by the applicant is currently used only for forestry, and it is dark at night. The type of lighting used for heavy construction tends to be very bright and penetrates into the night sky. Measures need to be taken to minimize light pollution from the site. Impacts on migrating birds from even small amounts of outdoor lighting is well-documented.[7] The applicant needs to describe the type and extent of the lighting systems that are planned, and appropriate mitigation measures need to be required, including down-shielding of all lights, and installing motion sensors and controls where constant lighting is unnecessary.

Recreation (SEPA Checklist Section B. #12: This section requires disclosing "designated and informal recreational opportunities" in the vicinity. The applicant's response mentions only hunting and fishing. In fact, local residents walk on Grip and Prairie Roads, and the haul route along Grip and Prairie Roads is a popular recreational bicycling route. The route is included in a "Skagit County Bike Map" produced by Skagit Council of Governments, and distributed by Skagit County Parks Department. This same bike map is also included in Skagit County's 2016 Comprehensive Plan, as the "Bicycle Network Map"; it includes Grip and Prairie Roads as part of the inventory of the County's non-motorized transportation system. This important recreational activity was not disclosed in the SEPA checklist; nor were impacts to it evaluated. As discussed elsewhere in this letter, Grip and Prairie Roads

[7] https://www.fws.gov/news/blog/index.cfm/2020/4/22/Lights-Out-for-Migrating-Birds

are narrow and substandard with soft or nonexistent shoulders. There are many parts of this route where there is literally no option for a cyclist to move to the right to make room for a passing vehicle. The recent addition of guardrails on portions of Prairie Road have had the effect of eliminating options for a shoulder and narrowing the roadbed even further (guardrails were apparently installed more to protect power poles from vehicle collision than for public safety).

The introduction of an average of five tandem gravel trucks an hour (much less the 30 trucks an hour under the "extreme" scenario) to this route will render recreational cycling not only unpleasant, but very dangerous. Mitigation and alternatives could be identified for reducing the impact of trucking on these important recreational uses, such as widening and hardening road shoulders, limiting the number of trucks allowed per day on the road and designating 'safe passage' times during each day, when trucks are not allowed to haul from the site.

The omission in the SEPA checklist and project documents of the impact on pedestrians and bicyclists along the haul route is just one more example of the serious inadequacies in the application materials, and the disregard for public safety shown by the applicant. Issues regarding public safety related to truck traffic and the condition of County roads along the haul route are further discussed below under traffic.

Transportation/Traffic (SEPA Checklist Section B. #14): The SEPA Checklist and Supplement asserts that that no improvements to existing roads are necessary and that traffic generated will be "typical" of mining operations. The Checklist and Supplement then reference studies conducted by their traffic consultant DN Traffic Consultants without providing further details. However, a review of those documents reveals that "typical" traffic is a stunning 11,765 truck trips per year. The SEPA documents do not identify this number. DN Traffic goes on to calculate that this will "average" 46 truck trips per day. However, given the seasonal nature of gravel mining, this "average" is meaningless. The number of trucks that the applicant intends to deploy on a daily or weekly basis has never been clearly defined. This makes it impossible to evaluate the actual intensity of use and potential threats to public safety.

DN Traffic Consultants' more recent "Traffic Impact Analysis" (TIA), submitted in September 2020, seems intended to address the basic requirement that a TIA be done for this project (we have been requesting a TIA since we first learned about the permit application in 2016). It also seems intended to address at least some of the issues we have raised in the many comment letters we have submitted since that time. However, the document fails on both counts. While we intend to submit a detailed comment letter to the county on the entire TIA in the future, we provide below a summary of some of our main concerns.

- It does not meet the requirements and format for a Level II TIA as set out in Skagit County Road Standards, 2000 (SCRS) (SCRS 4.01-4.02 and Appendix A).
- It does not state whether the information included in the TIA supersedes previous inconsistent and/or contradictory information submitted by the consultant and the applicant regarding critical aspects of the project, including hours of operation and numbers of truck trips. This adds to the overall lack of definition for the project rather than clarifying it.
- It proposes that if the applicant needs to exceed a limit of 46 truck trips per day to meet demand (up to a limit of 29.4 trips each way per hour, or 294 trips per 10-hour operating period), they will first request permission from the County, and then Public Works will be responsible for determining temporary safety measures to mitigate for the increased risks. This is problematic in several regards:
    - It does not state how often and for how long this "extended hours operation" could occur.
    - It seems to imply, without ever stating clearly, that hauling under this scenario would take place for only 10 hours per day, while mining would happen for unspecified "extended hours." Since the applicant has repeatedly asserted their right to operate up to 24 hours per day, seven days per week, we must assume that both accelerated mining and hauling could take place during those hours. The actual number of round trips per 24-hour period under this scenario would be 706, meaning there would be 1,412 one-way truck trips every 24 hours, and 60 one way truck trips every hour. Mine traffic impacts must be evaluated on this basis.
    - Without specifying what measures would need to be implemented to ensure traffic safety under this "extended hours" scenario, the applicant defers its obligation in this regard to the County and potentially exposes the County to liability.
- It contains false statements regarding existing road conditions and uses, as well as future uses, for instance:
    - As previously noted, the statement that there are no designated bicycle routes on the roads proposed for the haul route, when in fact a map of these routes is included in the non-motorized transportation component of the County Comprehensive Plan.
    - The statement that the shoulders on Prairie Road vary from two feet to four feet wide. In actuality, recently installed guardrails on the south side of the road practically eliminate the shoulder entirely for a considerable distance along the haul route.
    - The statement that there is no significant development planned that will impact traffic levels on the proposed haul route. In fact, the County has already approved bringing Kalloch Road and North Fruitdale Road up to arterial

standards to provide better access from the north to the Sedro Woolley Innovation for Tomorrow (SWIFT) Center. The bulk of this traffic from the north will come via I-5, Bow Hill Road, Prairie Road, Grip Road, and Mosier Road. In addition, a major new residential development is planned for north of Sedro Woolley between SR9 and Fruitdale Road. This will also generate a significant amount of traffic to the north via these same roads.

- It omits key facts and conditions, such as:
    - The existence of several Burlington and Sedro-Woolley School District bus routes along the proposed haul route. It makes no mention of these bus routes; does not analyze the threats presented by mine truck traffic to the safety of schoolchildren, parents, or district employees and equipment; and proposes no mitigation actions for these risks.
    - A major roadway misalignment issue on the Grip Road Hill curves, which requires that a truck with pup trailer repeatedly encroach on both the centerline and the edge of the pavement (there is no fog line) while navigating this very narrow, steep section of the road.
    - The existing, progressive failure of the pavement and roadbed on the outside of the uphill (south side) lane of traffic in the above location. This presents both a safety hazard to the public and an ongoing maintenance liability for the county.
- It documents some of the other existing, critical road deficiencies and traffic hazards but either omits corresponding mitigating actions or proposes inadequate mitigation actions. For example:
    - It documents that a truck with pup trailer cannot navigate the two 90-degree curves on Prairie Road east of the Old Highway 99 intersection in either direction without encroaching significantly on both the fog line and centerline. It acknowledges that this constitutes a traffic safety hazard, but does not propose any mitigation actions. Instead, it states that the County is responsible for dealing with this issue.
    - It proposes a flashing yellow light warning system to mitigate for inadequate sight distance at the Prairie Road/Grip Road intersection, a measure the author of the TIA described as "temporary" in an earlier traffic memo. This is the same place where, in an email obtained via public records request, former PDS Senior Planner John Cooper described coming upon the scene of an auto accident at this intersection and being told by the attending Sheriff's Department officer (who himself was a former commercial truck driver) that a flashing yellow warning light would be insufficient to prevent accidents in that location (John Cooper email to Dan Cox, 1/30/2017).

In addition, in the TIA fails to disclose serious impacts with regard to use of the bridge over the Samish River on Old 99. In response to information about the bridge's weight

restrictions, the TIA proposes either to reduce load weights or to use an alternate route that involves continuing west up Bow Hill Road from Prairie Road to I-5, heading south to the Cook Road exit, and then north on Old 99. However, these options either generate more truck trips than proposed (lighter loads equals more trucks trips) or follow a considerably longer haul route. The impacts from this longer haul route have not been analyzed. There are many concerns related to dozens of gravel trucks making their way up the steep Bow Hill Rd and entering and exiting two busy freeway interchanges, and passing through additional busy intersections that are already hazardous. And of course, either way, the cumulative mileage and emissions increase. These additional impacts have simply not been evaluated.

As we stated above, the comments included here on DN Traffic's TIA are only some examples of how woefully short this document falls when it comes to addressing the true scope of road and traffic safety risks associated with this project. Until these issues are thoroughly analyzed and comprehensive mitigation measures proposed, the only valid SEPA threshold determination for the proposed mine is a determination of significance (DS) requiring a full environmental impact statement (EIS).

Finally, to our knowledge, the County's hired traffic engineer/consultant, HDR, who has been reviewing the various traffic information submitted by the applicant, has never visited the site and actually observed the condition of the roads in question. All of the third-party review has been conducted remotely using information and data provided by the applicant and County – it is simply unacceptable that the reviewers signing off on the traffic studies have not observed in-person the problems with road conditions and safety.

Public Services (SEPA Checklist Section B. #15). The applicant states that there will be no impacts to public services, but absent measures to address the road safety issues discussed above, the traffic collision rate in this area will undoubtedly increase. This will create a heavier demand on law enforcement and first responders. In addition, the need for road maintenance will increase considerably with the hauling of 200,000 tons of gravel per year on Grip and Prairie Roads.

The applicant should be required to share costs of necessary infrastructure improvements as stated in Skagit County Comprehensive Plan Policies: *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.*

6) **Appropriate mitigation measures or alternatives are not identified.** The overriding assumption in the application documents seems to be that this project requires very little mitigation. There is no real exploration of project alternatives or other ways proposed to reduce impacts. We find this very troubling, and it supports the need for a full EIS. Since key aspects of the proposal are still not clearly defined, it is difficult to fully explore appropriate permit conditions and mitigation measures. Nonetheless, it is clear to us that there are some pathways to addressing the project impacts. A few examples of alternatives that should be explored, and mitigation measures or permit conditions that should be required are discussed in the various sections of this letter, and identified below, along with a list of additional studies that need to be completed.

- Explore alternative project scenarios that include significantly scaled back rates of extraction, a smaller mine size and limits on daily truck trips.
- Limit hours of operation and hauling to daylight hours.
- Require a larger buffer on Samish River consistent with the County's Critical Areas Ordinance and Department of Ecology's guidance for protecting river and associated wetlands and sensitive & critical habitat from industrial uses.
- Require a larger undisturbed vegetated buffer between the active mine and adjacent private property, to reduce noise, vibration and dust.
- Major road and safety upgrades along the haul route need to be included before hauling is allowed, including but not limited to:
    - Traffic lights and/or turn lanes at critical intersections including: Grip Road at the intersection with the mine access road; at intersection of Grip and Prairie Roads; at the intersection of F&S Grade and Prairie Roads, at intersection of Prairie Road and Old 99.
    - Improve site distance to the east at intersection of Prairie and Grip Roads
    - Widen Grip and Prairie roads and harden shoulders.
    - Straighten and widen curves on Grip Road hill or find an alternate access point to the mine below the 'S curves' and hill.
    - Improve the two ninety degree turns on Prairie Road so that trucks can stay in their lanes.

- Gravel trucks must be restricted to the identified haul route (presuming necessary road improvements have been made). There are numerous safety issues with other haul routes that have not been evaluated, including at least four ninety degree corners on Grip Road heading east where it is impossible for large trucks to stay in their lane.
- The above safety concerns are also applicable to sale of mined materials to private parties and independent truckers. The application materials are not consistent regarding whether CNW intends to sell directly to third parties. If this were to occur,

these third party trucks would not necessarily stay on the identified haul route. Therefore sale to private parties and independent truckers from the site must be prohibited.

Additional Assessments or Studies needed:

- Fully updated Critical Areas study and Fish and Wildlife assessment of the larger property, including the private haul road and areas adjacent to it, with appropriate mitigation measures identified for the footprint of the entire project, not just the mine itself.
- Further evaluation needs to be conducted of the impact to the listed Oregon Spotted Frog and Bull Trout consistent with State and Federal Endangered Species Act.
- The impacts to hydrology and potential for exacerbating sedimentation and flooding problems from the increased impervious surface and heavy use of the haul road, especially in the gorge where the road crosses Swede Creek, needs to be evaluated and appropriate mitigation measures required.
- Full Level II Traffic Impact Analysis.
- A realistic estimate of the cumulative emissions from all of the mining activities on-site, as well as the diesel emissions from truck hauling needs to be made, and a mitigation plan proposed.
- A revised Noise Study that corrects the serious flaws identified in this letter.

We hope that you find this letter useful as you proceed with your review of this project, and the new SEPA process. We would be happy to discuss any of it further, and look forward to hearing from you. Thank you for your time and consideration.

Sincerely,

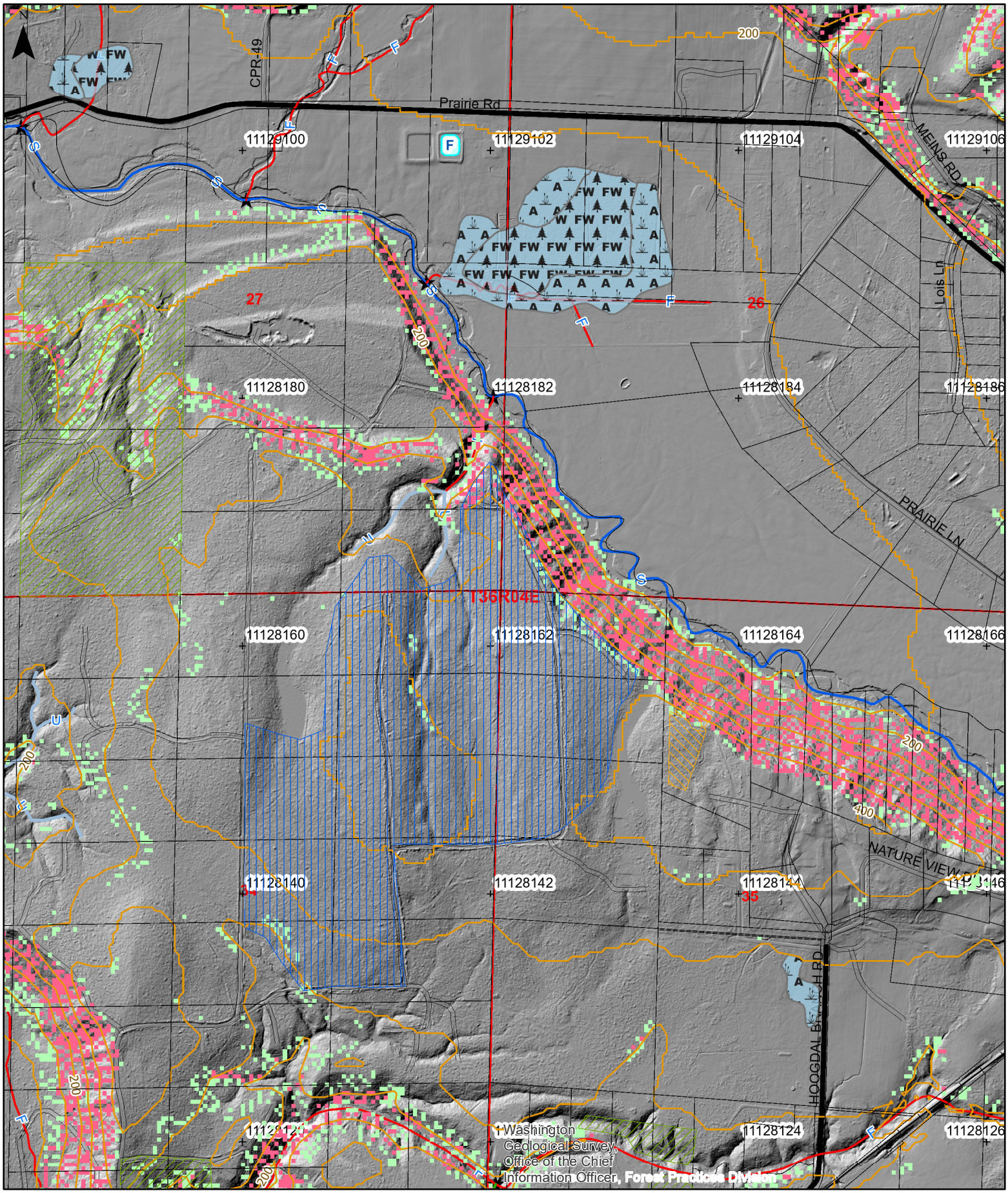
Martha Bray and John Day
6368 Erwin Lane
Sedro-Woolley, WA 98284

cc: Julie Nicholl, Skagit County Prosecuting Attorney
Kyle Loring, Attorney, Loring Advising

Encl: "Fish and Wildlife, and Water Quality (regulated Critical Areas) review" (Wiggins, November 2020

ATTACHMENT B

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.

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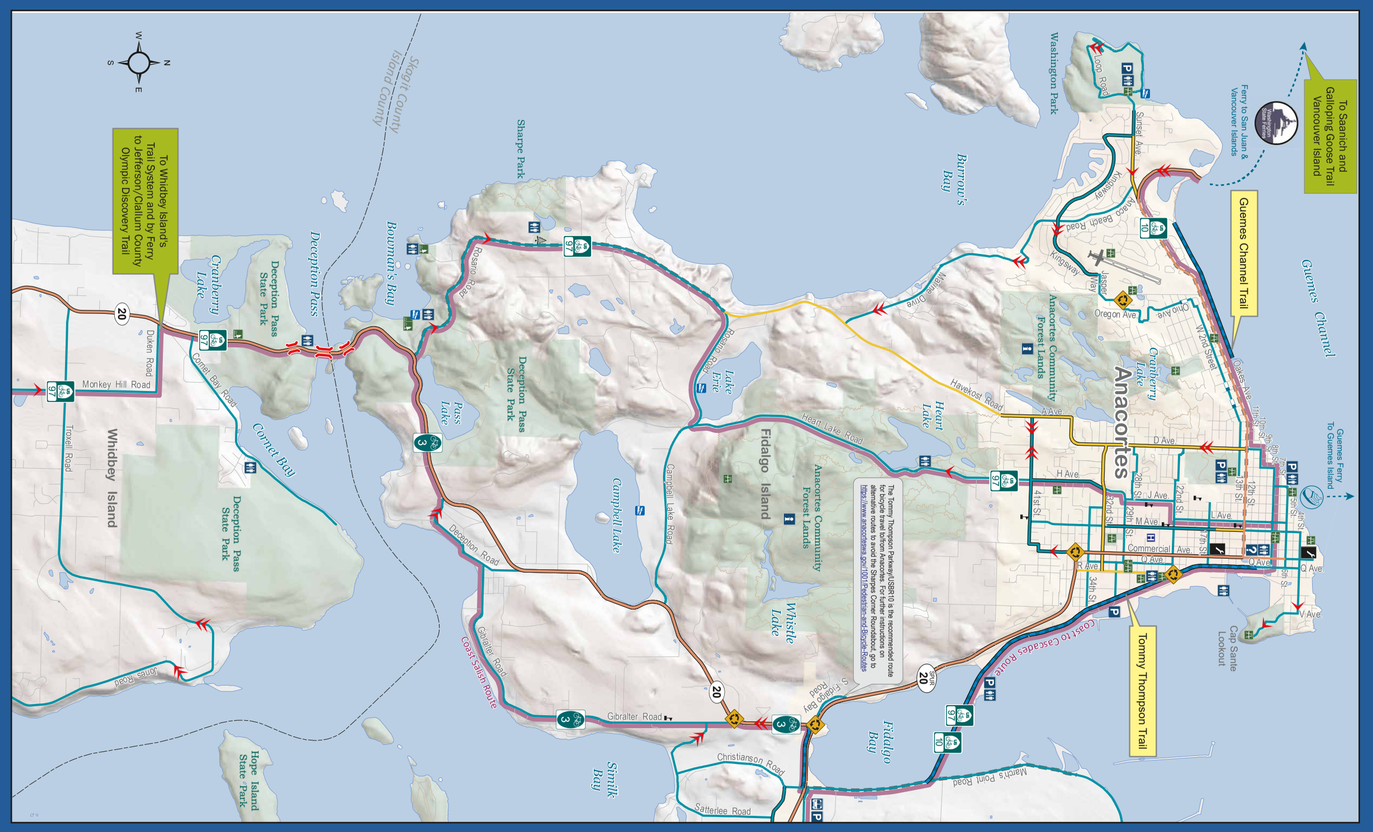
Date: 4/26/2021 Time: 5:05:00 PM

ATTACHMENT C



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.

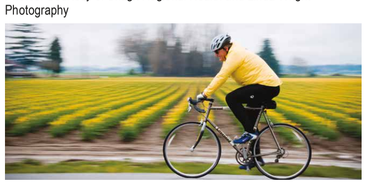
Special thanks to Skagit County Geographical Information Services, Skagit Council of Governments staff and Non-Motorized Advisory Committee members: Marie Erbstoeszer, Jeroldine Halberg, Steve Jahn, Liz McNett Crowl and Linda Talman. Thanks as well to Walt Farmer and John Pope for their assistance with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

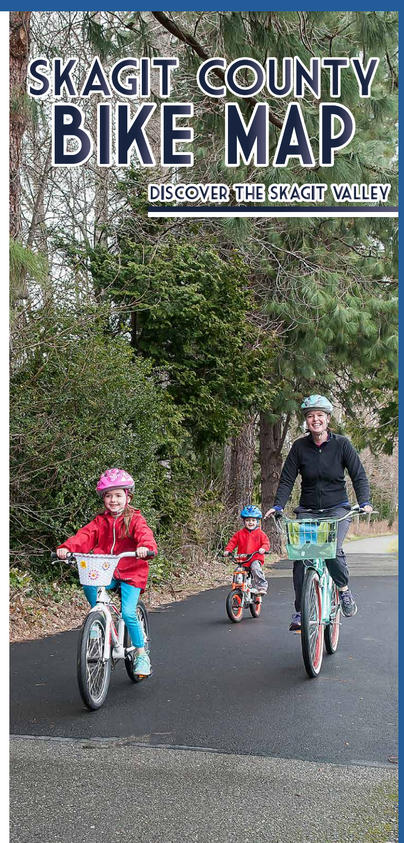
To contribute, request multiple copies, or to send comments and suggestions, contact info@scog.net.

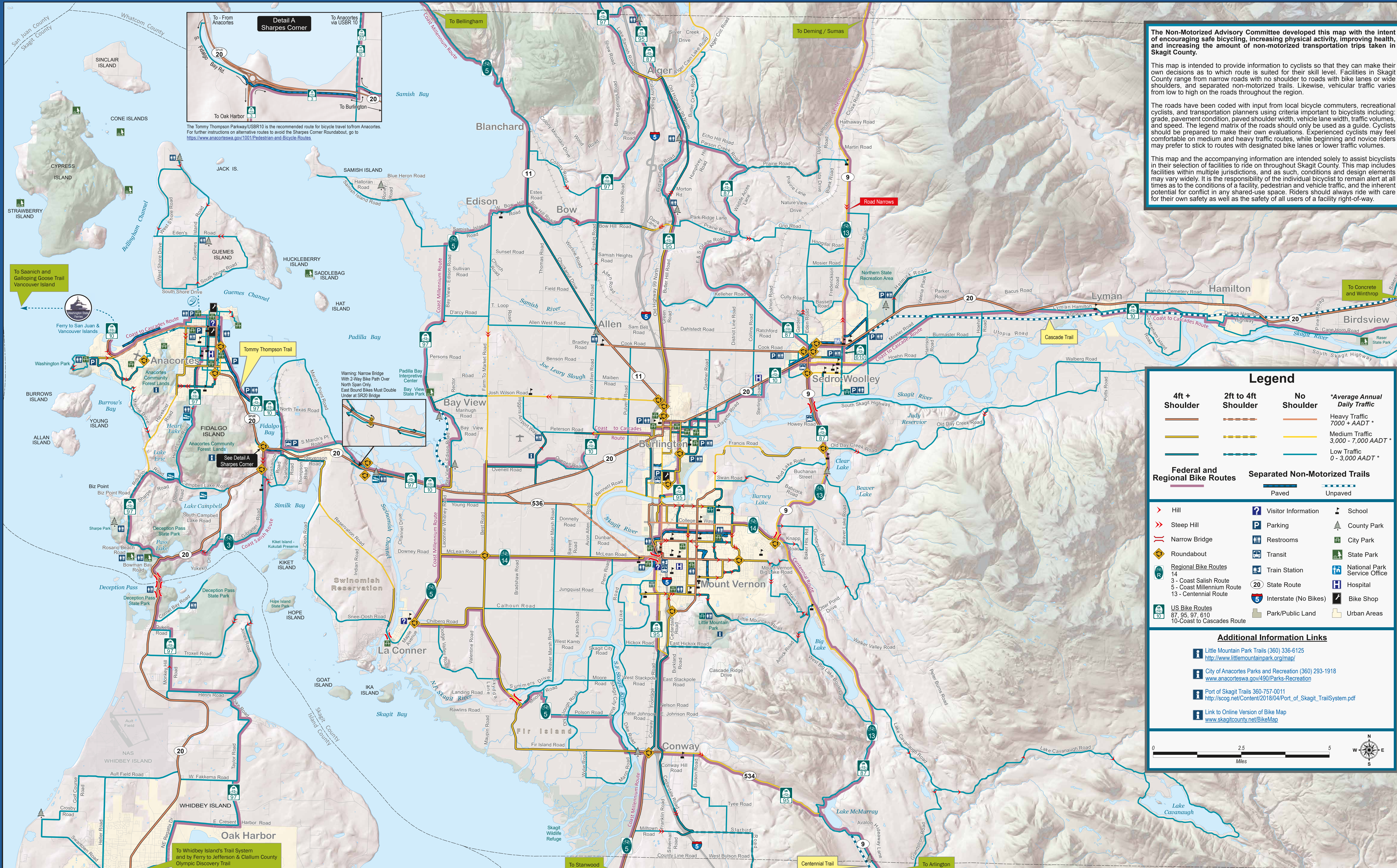
Cartography & Map Design: Kim Berry, Skagit County Geographical Information Services and Mapping Services

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.

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.

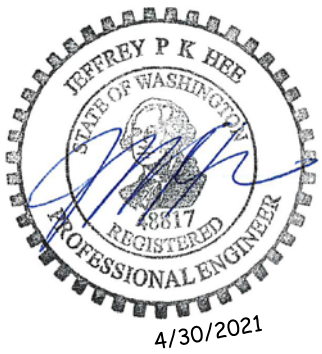
YOU MAY LEAVE A BIKE LANE
When overtaking a bicycle, making a left turn, avoiding a road hazard or other obstruction or you are afraid a motorist might turn across your path, you may temporarily merge WITH CAUTION into the adjacent automobile lane for safety or better visibility.

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.

001104

ATTACHMENT D

Transportation Solutions
INNOVATIVE | PRACTICAL | EQUITABLE



April 30, 2021

To: John Day and Martha Bray, Central Samish Valley Neighbors

From: Jeff Hee, PE, Transportation Solutions

Subject: Grip Road Grave Mine Traffic Analyses
Peer Review Comments

This memorandum provides my professional opinion comments on the Applicant's traffic impact analyses and responses to comments, Skagit County and HDR staffs' comments, and Skagit County's Re-Issued conditions for the proposed Grip Road Gravel Mine project. If you have any questions, please contact me at your convenience.

Main Comments/Questions

- What is the maximum trip generation and anticipated frequency of maximum trip hours and days? The November 30, 2016 Maximum Daily Truck Traffic memorandum forecasted a maximum trip generation of 60 truck trips per hour. The September 10, 2020 TIA documented an extended hours maximum haul operation of 29.4 truck trips per hour. The frequency and intensity of trips generated suggest a need for additional analysis and mitigation on the part of the Applicant.
- The County's April 15, 2021 Re-Issued MDNS gives the Applicant the option to improve substandard roadway conditions or to not use truck/trailer combinations. If the Applicant elects not to resolve substandard roadway conditions and use standard gravel trucks (no trailer), then the number of truck trips generated is anticipated to be higher than what was evaluated in the traffic analysis.
- The Applicant's mitigation measures do not address all impacts at the new mine access/Grip Road intersection. The intersection sight distance is not satisfied at the site access and the mitigation measures do not extend to Grip Road east of the new access. Additionally, it is my opinion that the sight distance impacts were not accurately disclosed.
- Safety impacts were identified on the proposed haul route in the vicinity of Friday Creek east of Old Highway 99. There are sections along the haul route where the roadside shoulder sections do not meet County standards. The analyses of roadway centerline and shoulder impacts just in the vicinity of Friday Creek, in my opinion, does not provide sufficient information to conclude the other sections along the haul route are adequate for gravel truck traffic.

This document is organized to present my comments and questions regarding the trip generation analysis, proposed site operations, sight distance analysis, roadway shoulder and centerline impacts, haul route impacts, and requests for additional information on the Applicant's traffic mitigation plans, level-of-service standards and impacts to Cook Road.

The comments that follow are based on criteria from the Skagit County Road Standards as applied to the analyses prepared by the Applicant's consultant. References include:

> Section 2.14. "Transportation and frontage improvements, SEPA mitigation, traffic impacts, fees, etc. or the proportionate cost share of the improvements based on peak hour trips and necessary to mitigate impacts of the development (or each phase of development if it is done in phases) shall be in place or paid no later than time of final plat approval or certificate of occupancy, whichever occurs first, for that development or

phase. If the improvements are not listed on the County Transportation Improvement Plan, they shall be installed prior to final plat approval.

"Frontage improvements will be required for all new development that front on an existing County road (See Section 13). Other transportation improvements that may be required will be identified in the Traffic Impact Analysis (See Section 4.06) and the Safety Analysis (See Section 4.09)."

Section 4.00. "All applications for land division and changes of land use shall include sufficient data to determine the amount of additional traffic generated by the development. Such data shall also be used as a guideline for access road and/or driveway requirements."

Section 4.06. "The County may require developments to make traffic impact contributions if the development significantly adds to a road's need for capacity improvement, to a roadway safety problem, or to the deterioration of a physically inadequate roadway. Such traffic impact contributions are in addition to transportation and frontage improvements required in the immediate area for access to and from the development. See also Section 2.14."

Documents Reviewed

- *Grip Road Gravel Pit Preliminary Traffic Information* February 8, 2016, DN Traffic Consultants.
- *Grip Road Gravel Pit Maximum Daily Truck Traffic* November 30, 2016, DN Traffic Consultants.
- *Grip Road Mine Response to Skagit County Request* April 13, 2020, DN Traffic Consultants.
- *Concrete Nor'West Grip Road Gravel Pit Project* April 28, 2020 Grip Road Gravel Pit Traffic Impact Analysis, HDR recommendations.
- *Concrete Nor'West Grip Road Gravel Pit Project* May 14, 2020 Grip Road Gravel Pit Traffic Impact Analysis by County Staff, HDR recommendations.
- *Mitigated Determination of Nonsignificance PL16-0097 and PL16-0098* May 26, 2016, Skagit County.
- PL16-0097 *Revised Request for Additional Information* July 31, 2020, Skagit County Planning and Development Services.
- *Grip Road Min Traffic Impact Analysis* September 10, 2020, DN Traffic Consultants.
- *PL 16-0097 Mining Special Use Permit Response to Additional Information Request, July 31, 2020,* October 8, 2020, Semrau Engineering and Surveying, PLLC mitigation plans.
- *Notice of Withdrawn and Re-Issued MDNS for Concrete Nor'West File #'s PL16-0097 and PL16-0098* April 15, 2021, Skagit County.

Trip Generation Impacts and Hours of Operation

Page 1 of the February 8, 2016 Preliminary Traffic Information memorandum states that hauling from the project is limited to 9 AM-3 PM on 260 working days (Monday-Friday) per year. The trip generation assumes an average and even distribution of truck traffic during those hours. The time frame is typically consistent with the consultant's conclusions that there will be negligible traffic impacts during the traditional AM (7-9 AM) and PM

(4-6 PM) peak hour traffic periods. The preliminary study forecasted the site's hourly trip generation to be 7.67 truck trips per hour.

Page 13 of the September 10, 2020 TIA changed the site operations to 7 AM-5 PM. Truck hauling was proposed to be limited to Monday-Friday and onsite activity proposed to extend to Saturday. Unlike the earlier project proposal, the current proposal will generate truck traffic during the peak hour periods. Under a typical operation, the TIA indicates that the site would generate an average of 4.6 combination truck/trailer trips per hour. The truck/trailer combination is assumed for all truck trips based on the 34-ton load capacity of the combination vehicle.

The frequency and to a degree the intensity of the peak number of truck trips generated by the site are unclear. The consultant's November 30, 2016 Maximum Daily Truck Traffic memorandum states that the maximum truck volume generated by the project could be up to 60 truck trips per hour, based on the availability of truck/trailer combinations in the County. The consultant's September 10, 2020 TIA computed a maximum truck volume of 29.4 trips per hour, assuming extended hours of operation and a higher daily volume transported for the site.

The forecasted maximum trip generation and frequency of maximum trip generating events needs to be clarified. It is assumed that maximum conditions will not occur every day or for every hour of the day; however, it is reasonable for the County to consider implementing restrictions on the project's operations. Restrictions such as prohibiting hauling during the weekday AM, PM, or school peak periods or limiting hauling to not to exceed 5 trucks per hour (based on the consultants 4.6 trucks per hour forecast) would reduce the potential for significant project impacts during peak traffic hours and during the time-periods associated with school bus pickup/drop-off.

Condition 12 of the County's April 15, 2021 Re-Issued MDNS allows the Applicant to limit their operations to non-truck/trailer combination vehicles unless other roadway safety mitigation measures are satisfied. If the Applicant elects to limit their operations to trucks without trailers, then the number of truck trips generated by the project is expected to be higher, due to the smaller hauling capacity of a gravel truck and assuming the same annual and daily tonnage goals provided by the Applicant.

A higher trip generation scenario, based on restrictions on the truck types, should be evaluated. Also, it is common practice to update level-of-service analyses provided in the September 10, 2020 TIA should the trip generation increase.

Trip Generation Impacts and Hours of Operation Additional Comments/Questions

- Does the trip generation account for onsite workers and mining/non-haul operations?
- The site operations have changed from 2013 to 2020. The average-normal hourly trip generation has ranged from 4.6 to 7.67 hourly truck trips. What is the peak hour trip generation anticipated?

Sight Distance Analysis

Sight distance factors include design speeds, brake reaction times, braking distances, and time gaps for turning vehicles, among other factors. Skagit County Road Standards Section 2.02 includes the following speed definitions:

Design Speed - A speed determined for design and correlation of the physical features of a highway that influence vehicle operation: the maximum safe speed maintainable over a specified section of road when conditions permit design features to govern.

Operating Speed - Used for determination of sight distance. Operating speed should be equal to the P85 speed for existing facilities and be equal to the design speed for new facilities.

Tables 5 and 6 from the September 10, 2020 TIA indicate that the posted speed was used to evaluate the sight distance requirements.

There are several locations where sight distance was identified as a concern. The County's Road Standards, suggest a design speed alternative to the posted speed. The Skagit Council of Governments (SCOG) publishes measured daily traffic volumes and 85th-percentile speeds on their website. A common practice is to use the 85th-percentile speed as the design speed when evaluating sight distance. The sight distance analyses should be revised to reflect the publicly available speed data from the SCOG. I note that in some instances the sight distance may be better than reported by the Applicant's consultant and in other instances sight distance may be worse, when revised using the SCOG data.

Page 11 of the September 10, 2020 TIA states that; "Existing sight distance at Prairie Road/Grip Road and Prairie Road/F&S Grade Road intersection is the responsibility of Skagit County. If sight distance deficiencies exist at these intersections, it is the responsibility of the County to make necessary improvement to provide acceptable sight distance."

Page 11 of the TIA states that; "The Applicant is responsible for providing acceptable SSD (stopping sight distance) and ISD (intersection sight distance) at Grip Road/site access." Page 12 of the TIA identifies intersection sight distance deficiencies at Prairie Road/Grip Road and Grip Road/site access. At Grip Road/site access the TIA states; "In this case, it is estimated there would be no more than one (1) left turning truck during the PM peak hour from the Mine access road. The WSDOT Design Manual (section 1310.05 Intersection Sight Distance), however, indicates that ISD is not required for low volume roadways such as Grip Road."

The Skagit County Road Standards are not based on the WSDOT Design Manual. The WSDOT Design Manual does not appear to include exemptions from sight distance requirements for low volume roads. The WSDOT Design Manual reference, does not deal with sight distance.

On April 28, 2020 HDR comments recommended a reanalysis of sight distance based on truck and trailer combinations and also mitigation for entering sight distance at the site access.

The September 10, 2020 TIA states that; "one (1) left turning truck is forecast during the PM peak hour from the Mine access road". There is no sight distance mitigation proposed to the east of the mine access. The warning beacon system proposed for sight distance mitigation, if still reasonable with any changes trip generation, should be extended to the east of the mine access, at minimum.

The warning devices are recommended by the Applicant and accepted by HDR and the County staffs. Since these devices are intended to mitigate and not resolve existing sight distance deficiencies, which the Applicant's consultant has indicated are the responsibility of the County, it is requested that the hours of hauling operations be limited to daylight hours to afford roadway users optimal conditions to navigate through sight distance impaired locations.

Sight Distance Analysis Additional Comments/Questions

- Is County's Vision Clearance Triangle (Road Standards Figure C-2) satisfied in the study area?
- Were sight distance exhibits submitted and are they available for review?
- What is the speed needed to achieve sight distance at the study locations?
- Intersection sight distance for truck/trailer combinations was not evaluated at the F & S Grade Road/Prairie Road intersection (Table 6 September 10, 2020 TIA); and thus, it is requested that mine traffic be prohibited from using F & S Grade Road, unless additional analysis or mitigation is provided.

Roadway Shoulder and Centerline Impacts

Page 20 of the September 10, 2020 TIA states; "Prairie Road has a number of curves which would force the dump truck/pup rigs to encroach on the centerline or the shoulder." Page 21 states; "The Consultant prepared an AutoTurn® analysis of these turns on Prairie Road approximately 1200 lineal feet and 1800 lineal feet east of the Prairie Road/Old Highway 99 intersection. Based on this analysis, it was estimated the dump truck/pup trailer combination is expected to encroach approximately two (2) to three (3) feet onto the shoulder of over the centerline." Page 21 later states; "Potential encroachment of the dump truck/pup combination on shoulder and center line is a safety concern. It should be noted the roadways are not consistent with current Skagit County Road Standards for shoulder widths."

The exhibits included in the TIA are hard to read. The exhibits do not provide dimensions and specifications for the non-standard, "custom", truck/trailer design vehicle. Common practice for reporting vehicle-turn results is to provide an exhibit clearly showing the design vehicle and its analysis specifications. This is reasonable considering the design vehicle is "custom" and was created for this analysis.

The Grip Road east of the Prairie Road and west of the site is narrow and includes ditches, curve warning and speed reduction signs, guardrails, no shoulder striping, limited available shoulder area and a relatively steep grade section. Common practice is to apply design vehicle turning templates to justify the roadway section(s) can support the desired vehicle. No turning templates or similar analyses were applied to Grip Road based on the materials provided to review.

The Re-Issued MDNS Condition 12 gives the Applicant an option to operate with gravel trucks (no trailers).

To verify that the proposed haul route can support truck/trailer combinations or gravel trucks (no trailers) the Applicant's consultant should provide additional turning templates to support use of the existing road section.

Haul Route Impacts

Page 1 of the County's July 2020 Request for Additional Information document identifies concerns that truck/trailers will not be able to navigate the 90-degree turns on Prairie Road directly east of Friday Creek.

The project trip distribution, Figures 4 and 6 in the September 10, 2020 TIA, shows truck trips to/from the east of the site on Grip Road.

The 90-degree turns on Grip Road directly of the site access have similar challenges as those on Prairie Road near Friday Creek. There is no analysis that supports a truck/trailer combination traveling to/from the east of the site. I recommend that the County limit the haul route to/from the west of the site unless the roadway

geometry to the east of the site is analyzed and there is documentation provided to support a haul route either for truck/trailer combinations or a truck (no trailer) vehicles east of the site.

The crash history on pages 9 and 10 of the September 10, 2020 TIA does not report or evaluate collision trends on road segments on the haul route. It is common to include segment crash trends in a TIA, particularly when the analyses disclose safety issues on the haul road segment in the vicinity of Friday Creek and also since the County is allowing the Applicant the option of not mitigating certain existing substandard conditions.

Haul Route Additional Comments/Questions

- It would be useful if turning templates could be amended to show the gravel truck (non-combination) impacts at key locations along the haul route.
- The total crashes at I-5 SB Ramps/Bow Hill Road and at Old Highway 99 N/Bow Hill Road/Prairie Road are different in Tables 2, 3, and 4 in the September 10, 2020 TIA.
- The TIA report recommends improvements at Prairie Road/Old Highway 99. Will the Applicant complete the improvements recommended in the report?
- The analysis does not provide any conclusions on if the project traffic will increase the frequency and severity of collisions on the haul route, given the haul route's geometric and sight distance constraints.

Mitigation Plans Additional Comments/Questions

The plans included for the Mine Access do not include street names and are difficult read. May new copies be sent of Sheets 3 and 10 and any other relevant sheet?

Other Comments/Questions

- The TIA does not address the segment LOS requirements, per the County Road Standards. Based on the analyses to date, this is not likely to be a significant issue, unless the trip generation radically increases.
- The TIA references a weight limitation on the Samish River bridge on Old Highway 99. The Re-Issued MDNS requires the project to comply with the weight restrictions on the bridge. Compliance to the bridge loading was addressed in the TIA by redistributing traffic to I-5 southbound to the Cook Road interchange. The WSDOT, SCOG and County have identified traffic issues on Cook Road at the interchange and at and on Old Highway 99 and related to the local railroad crossing. Does the redistribution of truck traffic to Cook Road affect traffic operations and warrant mitigation?

ATTACHMENT E

Washington Dept of Fish & Wildlife

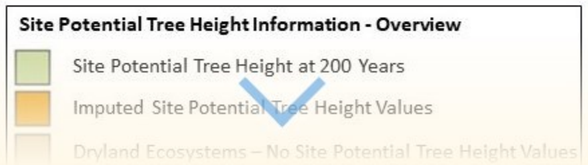
Priority Habitats And Species: Riparian Ecosystems and the Online SPTH Map Tool

This mapping tool provides site-potential tree height information at the parcel level state-wide. However, the specific application of this tool is for those areas that are proximate to waterbodies - also known as the riparian ecosystem.

The riparian ecosystem is the extent of the area alongside a waterbody that significantly influences the exchange of energy and matter among terrestrial and aquatic ecosystems. Riparian ecosystems are a focal point for conservation because within them, protection of full riparian functions are possible. In addition to fish and wildlife habitat connectivity, those functions include bank stability, shade, pollution removal, and contributions of detrital nutrients and of large woody debris. For more information see: ***Riparian Ecosystems***, *Volume 1: Science Synthesis and Management Implications* and *Volume 2: Management Recommendations*.

Using this online map tool:

- The online map contains GIS data layers that will provide you with site-potential tree height (SPTH) values (in feet) for forested ecoregions (green), imputed site-potential tree height values (in feet) for selected urban areas (gold/orange), steps to derive a riparian management zone width value for dryland ecosystem areas (brown), or directions for contacting WDFW Habitat Biologists for riparian guidance for lands that have no site-potential tree height values (tan).



Site-potential Tree Height (SPTH) and Riparian Management Zone (RMZ) Values

Find address or place

Legend

Washington State NHD Hydrography

NHD Coastline

NHD Rivers
- Stream / Perennial
- Intermittent / Ephemeral
- Canal, Ditch
- Pipeline
- Connector

NHD Waterbody
- Lake, Pond, Reservoir
- Swamp, Marsh
- Ice Mass

NHD Area
- Large Rivers
- Canal, Ditch
- Foreshore
- Rapids

Site Potential Tree Height Information

Site Potential Tree Height at 200 Years

Imputed Site Potential Tree Height Values

Other Lands - No Site Potential Tree Height Values
- No NRCS soil information available
- No SPTH site index data available

Dryland Ecosystems: No Site Potential Tree Height Values
- Red: Band_1
- Green: Band_1
- Blue: Band_1

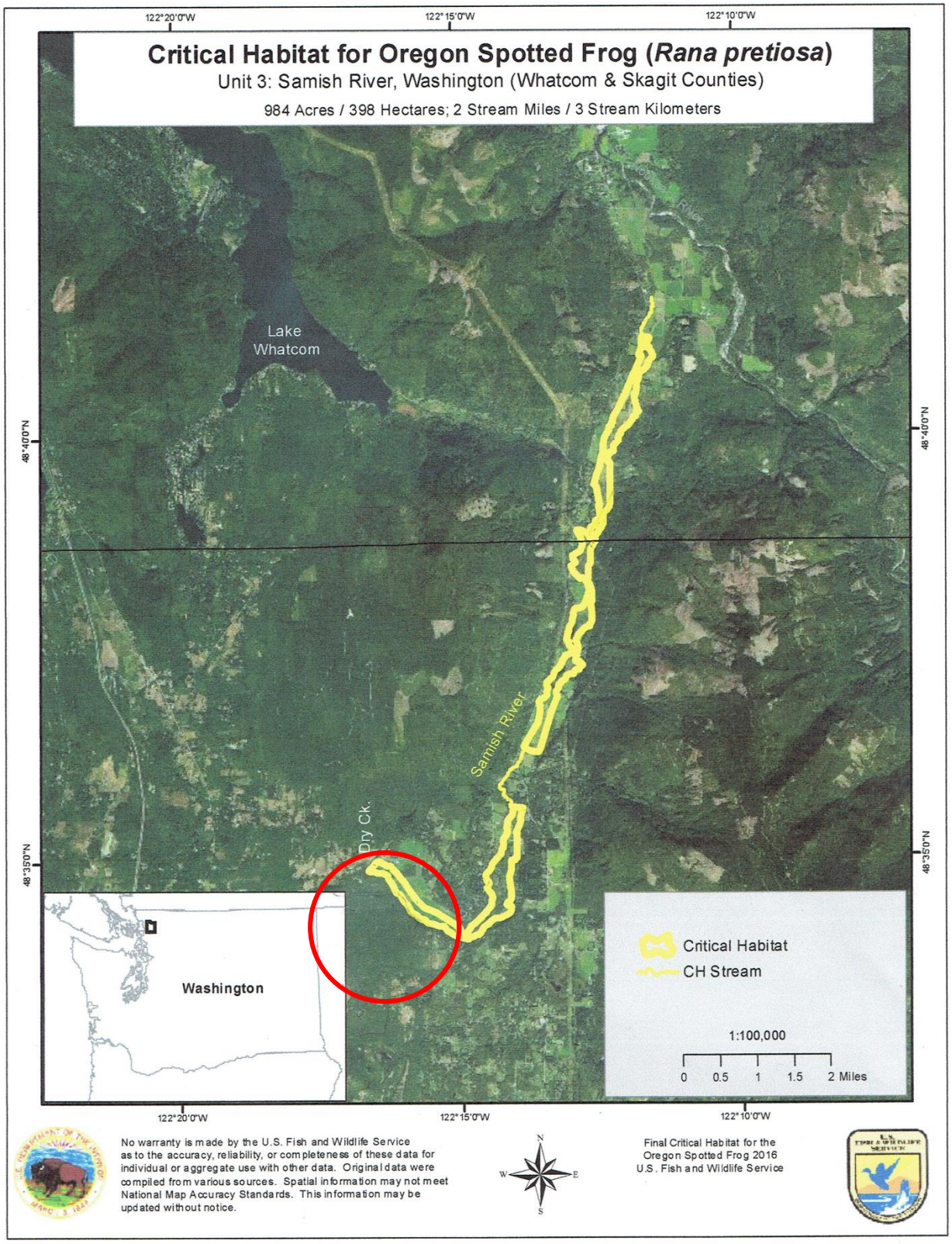
600ft

48.5734 -122.2727 Degrees

001113

Maxar | WDFW

ATTACHMENT F


Critical Habitat for Oregon Spotted Frog (Rana pretiosa)
Unit 3: Samish River, Washington (Whatcom & Skagit Counties)
984 Acres / 398 Hectares; 2 Stream Miles / 3 Stream Kilometers
122°20'0"W
122°15'0"W
122°10'0"W
48°40'0"N
48°35'0"N
Lake Whatcom
Samish River
Dry Ck.
Washington
Critical Habitat
CH Stream
1:100,000
0 0.5 1 1.5 2 Miles
No warranty is made by the U.S. Fish and Wildlife Service as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notice.
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S
Final Critical Habitat for the Oregon Spotted Frog 2016
U.S. Fish and Wildlife Service