



SEMRAU ENGINEERING & SURVEYING, P.L.L.C.

June 14, 2019

Paul A. Randall-Grutter, P.E., County Engineer
Skagit County Public Works
1800 Continental Place
Mount Vernon, WA 98273

**Subject: Alternative Road Standard Request
Grip Road Gravel Mine Access Road
Mining Special Use Permit PL16-0097
Concrete Nor'west and Miles Sand & Gravel**

Dear Mr. Randall-Grutter:

Following is a request for alternatives to the standards according to Section 2.10 "Alternatives" of the Skagit County Road Standards (7/17/00) for the Grip Road Mine private internal access road. Section 2.10 recognizes that "Situations will present themselves where alternatives may be preferred to allow conformance with existing conditions, to overcome adverse topography...without adversely effecting safety, maintainability or esthetics."

The existing gated, private access road is sufficient for current and proposed use. The access road currently facilitates commercial logging traffic and meets the DNR Forest Road Standard. According to Section 3.08B(10)(B) "An access permit is required for all emergency access roads connecting to a county road regardless of length." The Commercial Class Access, Type "D", onto Grip Road has been approved by Skagit County under Permit AC16-0015. Additional details of the history and condition of the access road have been provided by Miles Sand and Gravel in written responses to Skagit County dated 5/15/17 and 2/23/18, which are attached.

The private internal roadway is gated and is not, in our judgment, a Private Road as described in the Skagit County Road Standards, that will be open at all times to be traversed by the public. This private internal roadway will be used by professional drivers that will be in contact with their dispatch and each other by radio just the same as any emergency vehicle. This is also not a commercial roadway that will be used by the public to access the site. This roadway will remain gated when the mine is not operating and will remain closed to the public at all times. However the road may be characterized, an alternative is permitted under Section 2.10.

Since the October 9, 2018 update, Skagit County has Access Standards based on the International Fire Code for emergency vehicle access roads or driveways for slopes greater than 16%. The subject roadway was acquired by the Trillium Corporation from Scott Paper Corporation in the early 1990's. Trillium submitted the Road Maintenance Abandonment Plan (RMAP) to the WA DNR which was accepted in September 2002, RMAP Number R2800007L. Concrete Nor'west acquired the property in 2013. All aspects of the plan have been implemented to date.

SCC 2.10(D)(1) The reason for this alternative request is acceptance of the existing roadway for deviation of both slope and width within the Swede Creek riparian area to overcome the adverse topography without adversely effecting safety, maintainability or esthetics. The road has functioned well for the logging truck traffic and is expected to do the same with mining trucks. Allowing the alternative will avoid potential impacts to critical slope areas and riparian areas consistent with well accepted policies to avoid impacts to the extent practicable.

SCC 2.10(D)(2) This alternative request is for Section 3.08(B)(1) for width, Section 3.08(B)(3) for slope, and Section 9.02(A) for the existing one lane bridge.

SCC 2.10(D)(3) Supporting evidence:

ALTERNATIVE TO WIDTH

Sections 3.08 B 1 – *“An access road shall have a minimum 20’ driving surface.”*

The existing gravel access road has the minimum 20’ driving surface in all but three locations. Stations 13+50 to 14+50 (18 ft), Stations 16+00 to 18+50 (16 ft at culvert), and Stations 22+50 to 27+00 (15 ft). The existing one lane bridge at Stations 20+53 to 21+04 has a 14.4’ wide concrete deck. The narrow roadway sections are all on the approaches to the bridge over Swede Creek. At the creek and bridge crossing, the roadway is greater than the 20-foot minimum and adequately accommodates stopping of trucks and the two way passage on both sides of the bridge to accommodate the one lane bridge. Widening of the road in these areas is not necessary to maintain functionality and safe passage of the work trucks and emergency vehicles. Widening of the roadway would affect the already stable ditches, cut slopes and embankments which are all within a critical area zone for steep slopes and the riparian area of the creek.

The structural integrity and load capacity of the bridge was evaluated to have an HS-25 rating. (See attached DCG Civil Structural memo, April 13, 2017)

Roadways as narrow as 12 feet are allowed under Skagit County standards from the International Fire Code for up to two residences. The narrow sections of the subject roadway are short and visible from the wider portions of the road on both ends and will pose no issues for the low number of passenger vehicles that will access the site. For the larger trucks and professional drivers that will be in radio contact, or for emergency vehicles, a signage plan is proposed as an alternative to warn and communicate the location of the narrow roadway sections and one lane bridge crossing.

ALTERNATIVE TO SLOPE

Section 3.08 B 3 – *“The maximum grade for a gravel access road shall be 12%. An exception in the Uniform Fire Code allows grades in excess of this when approved by the County Fire Marshal provided that NFPA 13D Fire Sprinklers are installed in all dwellings.”*

The existing gravel roadway exceeds the 12% limit in two locations. From Stations 16+00 to 18+00 at a slope of 12.8% and Stations 22+00 to 25+00 at a slope of 14.7%. Both of these locations are on the approach to the bridge over Swede Creek. Both of these sections are within the standards for a gravel roadway with slope in the range of 14% to 16% if every building includes NFPA 13D sprinkler systems.

No buildings are proposed at this time. The current road has been suitable for logging traffic for some time, and the benefits of disturbing a functional roadway are negligible in these two locations within the Swede Creek canyon. The roadway in these two areas also meets the acceptable slope and surface requirements for commercial driveway standards for Skagit County under the International Fire Code and SCC 15.04.030(2)(f)(ix).

ALTERNATIVE TO ONE-LANE BRIDGE

Section 9.02 A - *“In the general case, the bridge roadway shall comprise the full width and configuration of the road being served, to include the traveled way plus curbs, shoulders, sidewalk, walkway, and/or bike lane. Bridge roadway widths shall be measured between curbs or between faces of rails, whichever is less, but in no case will the width be less than 26’ curb-to-curb for two-lane traffic.”*

The existing one-lane bridge at Stations 20+53 to 21+04 has a 14.4' wide concrete deck between curbs. At both sides of the bridge, the roadway is greater than the 20-foot minimum and adequately accommodates stopping of trucks and the two-way passage on both sides of the bridge to accommodate the one lane bridge. Widening of the bridge in this location is not necessary to maintain functionality and safe passage of the work trucks and emergency vehicles and would only increase unnecessary impacts to the riparian area. The existing bridge has been determined to meet the HS-25 loading as would be required of a new bridge. (Jordan M. Janiki, PE, April 13, 2017)

SCC 2.10(D)(4)

Included for review is the Grip Road Gravel Mine Access Road As-Built drawings (September 13, 2018), both in plan and profile. On Sheet C10 of this plan set is a proposed signage plan intended as an engineered alternative that fully meets the safety, function, appearance, fire protection and maintainability as outlined above for the alternatives and minor deviation to the width, slope and the one-lane bridge.

The proposed alternative to the road standard to accommodate the gravel mine complies with the Skagit County Comprehensive Plan. The mine, located within a mineral resource overlay, is a temporary use for the existing roadway and bridge. The property to the north of Swede Creek is Rural Resource-Natural Resource Lands (RRc-NRL). The purpose of the RRc-NRL "district is to recognize and encourage the conservation of those lands which have the characteristics of both long-term commercially significant agriculture and forestry either on-site or on adjacent sites." The current approved forest road is all that is necessary for the long-term commercially significant forestry uses. Changes to the existing roadway and bridge would not be conserving of the "commercially significant natural resource land base." Modification of the roadway beyond the current condition could open the area to non-resource related residential and commercial uses.

The proposed alternative also conforms to the mitigation sequence outline under SCC 14.24.080(5)(b)(i and ii) by "avoiding the impact altogether by not taking a certain action", and "minimize the imp[acts] by limiting the degree or magnitude of the action and its implementation by using appropriate technology."

Thank you for your consideration, and please don't hesitate to call if you have any questions or need additional information.

Semrau Engineering & Surveying, PLLC

John B. Semrau, PE & PLS
john@semrau.com
360-424-9566





10000 10000 10000
10000 10000 10000
10000 10000 10000
10000 10000 10000
10000 10000 10000

May 15, 2017

Via E-mail: Johnc@co.skagit.wa.us

Skagit County Planning and Development Services
1800 Continental Place
Mount Vernon, WA 98273
Attn: John Cooper, Planner/Geologist

RE: March 14, 2017 Request for Additional Information (PL16-0097)

Dear Mr. Cooper,

Thank you for your March 14, 2017 letter request for additional information relative to the above noted application. We are providing answers to each of the questions below.

In the second paragraph of the letter you discuss conditions related to two significant issues that we will respond to. In both cases the County provides no rationale to support the arbitrary conditions suggested. Please consider our response below and revision of those proposed conditions.

The first is the maximum number of truck trips per day, in which you state that based on the information we provided, 46 truck trips per day is a reasonable limit. The information we provided describes 46 truck trips per day – on average – as being easily accommodated by the existing road system. This is not a limit but rather an average volume used by the Traffic Engineer to evaluate the existing road system's ability to function at the annual volumes we've proposed. As an average there are certainly days where this would be exceeded and others when the traffic would be lower. Any proposed traffic condition should refer to 46 trips per day as an average rather than as a limit. Attached is a November 30, 2016 Addendum by DN Traffic Consultants that further describes the capacity of the existing road system in terms of limits. Any traffic condition related to limits should reflect the trips proposed in this November 30, 2016 Addendum.

With regard to the second issue, you state operations will be limited to Monday through Friday, 7:00 a.m. to 5:00 p.m. (except holidays). The ability to limit hours of operation lies with the Hearing Examiner, but only in certain situations. As you are aware, SCC 14.16.440(10)(i) states: Hours of operation shall vary according to the locations on the site as stated below and may be shortened by the HE based on site-specific circumstances.

- (i) Within designated natural resource lands, the hours of operation may be unlimited. The Hearing Examiner may limit hours of operation to daylight hours or to such other reasonable limitation deemed necessary to address potential significant adverse impacts to existing adjacent land uses, on any portion of the mining site where



mining activity is proposed to occur less than 1/4 mile from existing Rural Intermediate, Rural Village, or Urban Growth Area designated lands;

Three significant facts are presented in this code section. First is that the Hearing Examiner is the authority charged with imposing hours limits. The staff is to make recommendations and act as the SEPA Official. There is no basis for a finding of a probable significant noise impact to support a condition. Second, in Natural Resource Lands, like the property here, hours of operation may be unlimited. That is the default standard. Third, the Hearing Examiner may consider limiting hours of operation on “any portion of the mine site where mining activity is less than ¼ mile from Rural Intermediate, Rural Village, or Urban Growth Area designated lands.” Since our project is not within ¼ mile from any of those zones, our hours of operation may not be limited. We are, of course, required to comply with maximum allowable noise level per Chapter 173-60 which you’d previously described in your staff report and recommended as a condition of approval. That mitigation must be taken into account in the SEPA process.

For the remaining items, I will respond below in the same order of the bulleted items from your letter:

1. Based on comments received, the County requested a professional archaeological survey for the project area. Please see the attached March 9, 2017 Archaeological Survey by Cultural Resources Consultants which concludes that “no cultural resources were identified during the survey.” This report should not be made available to the public because it contains information about archaeological sites, which are exempt from public disclosure requirements under state law (RCW 42.56.300). Please protect this document in your records as required by State law.
2. This second item deals with the County’s request for our Forest Road to meet Skagit County Private Road Standards. “Forest Roads” are defined under WAC 222-16-010. Forest Road construction and maintenance is regulated through WAC 222-24. The Forest Road standards are “intended to assist landowners in proper road planning, construction and maintenance so as to protect public resources.” The Skagit County Road Standards, International Building Code and International Fire Code referenced in the SCC are intended to address structures and residential lots. These standards apply to all building permits and the platting and land division regulations.

The internal roadway is not a Private Road as described in the Skagit County Road Standards that will be open at all times to be traversed by the public. This Forest Road has been in continuous use and maintained for forest practice since before 1974 as defined in WAC 222-16-010. This is a gated internal roadway that will be used by professional drivers that will be in contact with their dispatch and each other by radio just the same as any emergency vehicle.

This Forest Road is all that is necessary for the temporary extraction and transport of minerals to the County Road and the ongoing and future management and harvest of the timber resources. In Skagit County there are many miles of Forest Roads operated and managed by private, state and federal managers. These roadway systems are not required to be built to the Skagit County Road and development standards unless they serve structures and residences. No structures



are proposed or required for this mine operation. IFC Appendix D103.2 Fire Department Vehicle Access Roads referenced in SCC 15.040 are defined by length of road and numbers of residential lots.

We assert that the Forest Road standards and existing roadway are sufficient and all that is necessary to transport the mine materials to the County Road and provide for adequate emergency response. In your letter you mention additional Critical Areas review for improvements to the haul road to County Road standards. The County should re-consider this approach and discourage any unnecessary impacts to critical areas. It is environmentally irresponsible to develop these roads to a greater standard than is necessary for the safe removal of the natural resources.

We are submitting for your review our Timber Management Plan dated November 9, 2009. This contains our Forest Road plan for this property. We can agree to maintain the Forest Road at an average 20 foot width and graveled surface under the Forest Road standards per WAC 222-16-010 which has already been approved for this road system. Maintaining the road to this standard will provide the necessary ingress and egress for emergency vehicle access to the proposed mine site as well as supporting the dominate land use of ongoing forest management on the remaining 650 acres of this approximate 730 acre ownership. Finally, as requested, we are submitting a memo from Jordan Janiki, PE certifying the bridge over Swede Creek at the required HS-25 rating.

3. This third bullet requests clarification as to whether a 2,000 gallon fuel tank may be stored on site and requests our spill control and countermeasure plan. All sand and gravel mines in Washington State are regulated by the Department of Ecology under the Sand And Gravel General Permit (SGGP) in compliance with the provisions of The State of Washington Water Pollution Control Law Chapter 90.48 Revised Code of Washington and The Federal Water Pollution Control Act (The Clean Water Act) Title 33 United States Code, Section 1251 et seq. (copy attached). That mitigation must be taken into account in the SEPA process. RCW 43.21C.240. Once local and state surface mining approvals have been obtained, coverage under the Sand And Gravel General Permit will be obtained prior to mining. Section S5 of the SGGP requires a Site Management Plan (SMP). The SMP consists of 4 main sections, including:
 - a. Erosion and Sediment Control Plan (ESCP)
 - b. Monitoring Plan
 - c. Stormwater Pollution Prevention Plan (SWPPP)
 - d. Spill Control Plan (SCP)

Section S8 SMP Section 3 of the SWPPP requires an inventory of materials stored on-site, including fuel, and has specific requirements for source control Best Management Practices in the event fuel will be stored on site. So to answer the questions posed in your letter, yes fuel "may" be stored on-site, and if it is it will be done in compliance with the Sand And Gravel



General Permit which authorizes this activity and protects water quality. We will be happy to provide the County a copy of our site specific Site Management Plan, once completed, for your file. Although this requirement does not need to be restated by the County, we are certainly comfortable with the County conditioning the approval to require that coverage under the Sand And Gravel General Permit must be obtained prior to beginning mining operations on-site.

4. The fourth item is a request for clarification regarding screening or processing of material. We are not proposing either activity in this application.

5. The last item requests an update to the Fish & Wildlife / Wetland site assessment to address Threatened and Endangered Species and the appropriate width of the riparian buffer. The August 20, 2015 Site Assessment by Graham Bunting & Associates at Section 4.1, Threatened, Endangered and Sensitive Species, concludes that "No impacts to threatened, endangered or sensitive species above the existing baseline are anticipated, provided that the standard riparian buffer is applied." Even so, based on the County's request, GBA has provided the attached April 18, 2017 addendum which further addresses the issues raised during the public comment, including habitat requirements for the Oregon Spotted Frog, and concludes that the proposed critical area protections will provide the required protection. Finally, Section 5.2.2 Land Use Intensity of the August 20, 2015 Report fully describes the rationale and justification for the moderate intensity land use and 200' buffer. Since this item is fully addressed in the existing Site Assessment, we have not asked our consultant to provide any update at this time.

Please contact me if you require any additional information or to discuss any of the items above.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dan Cox', is written over a light blue horizontal line.

Dan Cox

Environmental, Land Use & Safety Manger

encls:

November 30, 2016 DN Traffic Consultants Addendum

November 5, 2009 Timber Management Plan

April 13, 2017 DCG Engineering Bridge Rating Letter

April 18, 2017 GBA Fish & Wildlife Addendum

March 9, 2017 Archaeological Survey by Cultural Resources Consultants

Washington State Department of Ecology Sand & Gravel General Permit



10000 2nd Avenue, Suite 200
Mount Vernon, WA 98273
Phone: 360.535.1100
Fax: 360.535.1101
www.miles.rocks

February 23, 2018

Via E-mail: Johnc@co.skagit.wa.us

Skagit County Planning and Development Services
1800 Continental Place
Mount Vernon, WA 98273
Attn: John Cooper, Planner/Geologist

RE: Replying to November 20, 2017 Meeting and November 21, 2017 Letter from Dan Cox to Dale Pernula PL16-0097)

Dear Mr. John Cooper,

Since our meeting and last correspondence, we have completed the Noise and Vibration Study and made additions to the Environmental Protection Plan. We are still looking forward to your third-party review of the traffic impacts. We would appreciate the opportunity to review and comment on that report once available. Following is our updated response.

1. With regard to the proposed hours of operation, we understand the County's recommendation was for Monday through Friday, 7:00 a.m. to 5:00 p.m. We presented our rationale for unlimited hours in our application and in our May 15, 2017 letter. Based on the results of our Noise and Vibration Study (described under Item 2 below), we continue to request "the hours of operation may be unlimited."
2. Our consultant, Ramboll US Corporation, completed a Noise and Vibration Study on February 20, 2018. In this study you will find that the model sound levels from the onsite mining and haul trucks are well below both the daytime and nighttime limits and expects no impacts from onsite mining operations. This study also considered the potential for vibration impacts from haul trucks traveling along Grip Road and Prairie road and found no impacts to residences from these trucks traveling to and from the mine site.
3. With regard to truck trips, the County letter from July 6, 2017 does not accurately represent what we have proposed. Our proposal is clearly presented in the reports by DN Traffic Consultants, which have previously been approved by Public Works; and the conclusions of those approvals were conditions in the September 12, 2016 Staff Report to the Hearing Examiner. In addition, our recently completed Noise and Vibration Study indicates no potential adverse effects from noise and vibration of haul truck traffic, therefore, the initial County recommendation to limit the number of truck trips should be dropped.



4. We continue to disagree with the County defining our haul road as a “Private Road” as defined by the Skagit County Road Standards, Section 3.07, Private Roads. The proposed haul road will remain gated, private and is an internal haul road to be used by professional drivers. We do however understand the County’s need to ensure emergency vehicle access which we support as we discussed in our November meeting. For these reasons we are comfortable with a reasonable performance standard of Section 3.08B, Emergency Vehicle Access Road, (except as constrained by the existing approach and bridge over Swede Creek) as a condition of approval.
5. We have made a couple of small additions to the Environmental Protection Plan as we discussed in our November 20, 2017 meeting. This division of Miles Sand and Gravel manages 17 of these permits for sites under the Sand & Gravel General Permit through the Washington State Department of Ecology.
6. With regard to the appropriate land use intensity rating and buffer requirement, this issue has already been decided and approved by the County through its subject matter experts. The County has already issued a development permit associated with this application predicated on medium intensity use, as described in our application, and a 200’ buffer. This project started with a more conservative than required approach to determining ordinary high water mark and wetland edge. “Samish River (Ordinary High Water Mark/Wetland Edge)”, letter report by Graham-Bunting Associates (GBA), May 18, 2015, proposed shoreline jurisdiction, 200 feet from the toe of the slope, when in fact the active channel varies between 50 feet and 300 feet from said toe location. GBA also characterized the subject proposal to be a “moderate land use intensity” in their report “Fish and Wildlife Site Assessment: Parcels 50155, 125644, 125645”, August 20, 2015.

5.2.2 Land Use Intensity – Chapter 14.04 of the Skagit County Unified Development Code defines high intensity land uses as:

“Land uses which area 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 residential land uses.”

While at face, the subject dry mining activity appears to be a high intensity land use, GBA also considered the following elements of the subject proposal:

- The mine site is located greater than 200 horizontal feet landward of the OHWM
- The mine site is also separated vertically approximately 90 feet above the OHWM
- Mining activities will be separated from the OHWM by a protective berm
- The dry mine floor will maintain a maximum depth of 10 feet above the underlying water table
- All surface water will drain through the gravel floor of the mine site – no surface water will drain directly to the Samish River



- The mine site is located in an area logged during the 1990s by a previous landowner
- No processing or industrial activity is proposed in conjunction with the project
- Aggregate extraction will be maintained at a relatively low volume level
- The project will utilize an existing interior road system
- The area contiguous to the berm will be mined first and reclaimed pursuant to a reclamation plan to be approved by the Washington State Department of Natural Resources. The goal of the reclamation plan will be to return the site to forest management or low density residential which are considered low and moderate land use intensities respectively.

Graham-Bunting Associates & Environmental & Land Use Services CNW Assessment: August 20, 2015

Based on the elements of the project listed above, GBA would characterize the subject proposal as a moderate land use intensity. Moderate land use intensity is defined as:

“ Land uses which are associated with moderate levels of human disturbance or substantial habitat impacts including, but not limited to, low density residential (no more than one home per five acres), active recreation, and moderate agricultural land uses.”

In short, the subject proposal is to utilize an existing mineral resource area by extracting relatively low volumes of aggregate with an excavator, loading the material into a dump truck and hauling the material to an authorized offsite processing facility.

The County has already issued a development permit associated with this application predicated on medium intensity use as described in our application and a 200' buffer. If the County is no longer concurring with the GBA characterization of a “moderate land use intensity” we need to know that and would like to see your rebuttal and reasons for this change.

Public comment regarding the appropriate land use intensity can be presented to the Hearing Examiner, where we will have an opportunity to respond.

7. In response to your request to update our application materials and our review of the applications, SEPA and project record, we found that the “Samish River (ordinary High Water Mark/Wetland Edge)” report by Graham-Bunting Associates, dated May 18, 2015, submitted to the County in June 2016 and referenced in SEPA checklist, has not been included in the record. We are including a copy of that memo with this letter.

As we discussed in our meeting on November 20, 2017, we have also gone through the list of material discrepancies found on pages 4 and 5 of the letter from Jonathan K. Sitkin and Nolan F. Davidson to John Cooper, Skagit County Planning and Development Services, March 2, 2017.



Traffic Figures:

February 8, 2016 traffic study was submitted with the MSUP application in March 7, 2017. The SEPA checklist also refers to the March 7, 2017 study. The MSUP application, Section A and Section B referenced the May 2015 report in three places on pages 9, 12 and 13. This has been corrected to reference the February 8, 2016 study and is attached for submittal.

Hours of Operation:

Proposal is for “unlimited” hours of operation as proposed in Section A, Item 2 of the application. “Normal” hours of operation would be 7:00 a.m. to 5:00 p.m., Monday through Friday as stated in Section A, Item 4 of the application.

Depth of Mine

The SEPA checklist, mine plan and mine cross-sections are based on survey information and work performed after the August 21, 2015 Hydrogeologic Site Assessment and bore hole exploration. Bore holes were plotted on the mine maps and the depth to ground water was converted to the survey map datum, NAVD88. The groundwater and bottom of the mine have been plotted on the cross sections and the separation of 10 feet is maintained. Hydrogeologic Site Assessment concludes the ground water is present “at an elevation of approximately 145 to 155 feet (msl).” There is no discrepancy between the “approximate” elevations in the Hydrogeologic report and the surveyed or rectified elevations in the SEPA and on the Mine Plans. The mine bottom will be a minimum 10 feet above the ground water table.

Amount of Gravel to be Removed

The SEPA Checklist, Special Use Permit and Staff Report all correctly report that 4.28 million cubic yards are proposed to be excavated over the life of the mine. The February 2016 traffic study uses 200,000 tons to be removed annually as an estimate for calculating the number of truck trips.

On Site Processing

No processing of gravel material is proposed on site as correctly stated in the MSU application and the Fish and Wildlife Site Assessment, August 20, 2015. Please disregard the reference to dry screening found in the Hydrogeologic Site Assessment, August 21, 2015.

Noise

A noise and vibration study has been completed and is being submitted for your review. The Staff Report can be revised to reflect the findings of the study.

Please include this document in the record and let us know if there are any further discrepancies in our application that need correction.



DEPARTMENT OF ENVIRONMENTAL
NATURAL & CULTURAL AFFAIRS
PERMITS DIVISION
1000 UNIVERSITY AVENUE, SUITE 100
ANN ARBOR, MI 48106-1200
PHONE: 734.769.2200
FAX: 734.769.2201
WWW.MILES.ROCKS

We are looking forward to your review and our working with the County to move this project back to the Hearing Examiner so that a decision can be made. Please contact me to discuss any additional questions or issues.

Sincerely,

A handwritten signature in blue ink that reads 'Dan Cox'.

Dan Cox

General Manger

encl:

Noise and Vibration Study, February 20, 2018

Site Specific Spill Control Plan

Samish River (Ordinary High water Mark/Wetland Edge), May 18, 2015

MSUP application Section A and B



Driveway Standards for Skagit County

Planning & Development Services · 1800 Continental Place · Mount Vernon WA 98273
voice 360-416-1320 · inspections 360-416-1330 · www.skagitcounty.net/planning

A driveway to serve residential or commercial uses must meet the following standards from the International Fire Code.¹ These standards are the minimum and apply to all building permits. Roads within a new subdivision must comply with the Skagit County Road Standards.

When Fire Access is Required

You must provide a fire apparatus access road for every facility, building, or portion of a building constructed or moved into or within the jurisdiction when the facility is over 150 feet from a fire apparatus access. Exceptions may be made for minor additions or accessory buildings to existing dwellings when in the opinion of the Fire Marshal the addition or accessory building may not create significantly dangerous situations.

General Design Standards

The standards on the left apply to driveways serving 1-2 residential lots. The standards on the right apply to private roads that serve more than two lots must comply with the Skagit County Road Standards.

	1-2 residential lots	3 or more residential lots or commercial use
Width	12'	20'
Vertical Clearance	13'6"	13'6"
Turning Radius—Inside	20'	20'
Turning Radius—Outside	50'	50'
Turnouts	20' wide and 30' long every 300'	N/A
Road Terminus (for roadways exceeding 150 ft)	Acceptable means of turning around fire apparatus approved by the Fire Marshal	96' cul-de-sac standards or as approved by the Fire Marshal
Bridges	Pursuant to Skagit County Road Standards	Pursuant to Skagit County Road Standards

Standards Based on Grade

All residential and commercial driveways must meet these standards

Grade	Surface	Fire Suppression System	Water Storage
≤ 12%	gravel or equivalent; or concrete, asphalt, or equivalent	Not required	Not required
> 12% and ≤ 14%	concrete, asphalt, or equivalent	Not required	Not required
> 14% and ≤ 16%	gravel or equivalent; or concrete, asphalt, or equivalent	NFPA 13D system required	Not required
> 16%	gravel or equivalent; or concrete, asphalt, or equivalent	NFPA 13D system required	10,000-gallon water storage tank with dry hydrant required for each residence

Notes

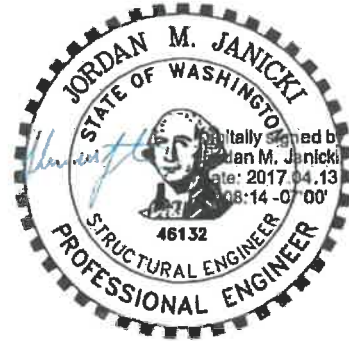
- The Fire Marshal may make modifications to these standards if the road is not buildable because of topography, waterways, non-negotiable grades, or similar conditions. These modifications are based on the building being protected by NFPA 13D automatic sprinkler systems, and additional fire protection as required by the Fire Marshal.
- For roads accepted or platted by Skagit County prior to June 11, 1990, the Fire Marshal may modify these standards if firefighting or rescue operations would still be possible.
- For lots not in a fire district and accessible only by water, the access road requirement may be waived if the project meets all of the other requirements of Skagit County Unified Development Code to qualify for a building permit.
- Emergency vehicle access roads or driveways may not be obstructed in any manner, including vehicle parking. Width and clearance requirements consistent with these standards must be maintained at all times.
- Security gates across fire access roads must be approved by the Skagit County Fire Marshal. Security gates must have an approved means of emergency operation by fire personnel.

¹ SCC 15.04.030(2)(f).



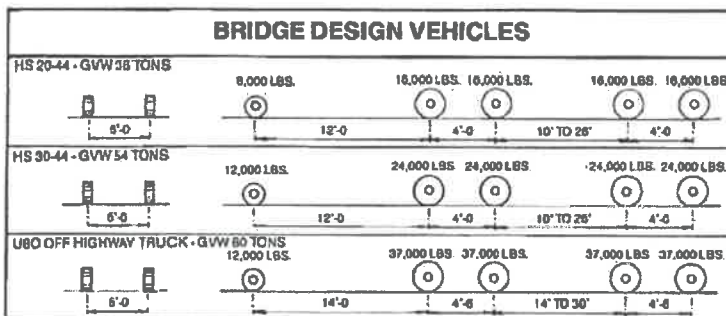
MEMORANDUM

TO: Mike Janicki
Dan Cox
FROM: Jordan M. Janicki, PE, SE
DATE: April 13, 2017
RE: Janicki Logging 40ftx14x Bridge Load Rating
Location: Off Grip Road, Sedro-Woolley, WA



The Davido Consulting Group has analyzed the load rating capacity of the main structural members of the Janicki Logging Bridge located off the Grip Road in Sedro-Woolley, based on the photos and descriptions from Mike Norris. W36x184 were used in the analysis for the girders and W12x40's was assumed for the cross purlins based on Janicki Logging drawings from 2/18/99. Based on the analysis the bridge rated for HL-93, and HS-25 loading. The limiting factor in the design is the shear capacity of the concrete decking limiting the rating to HS-25

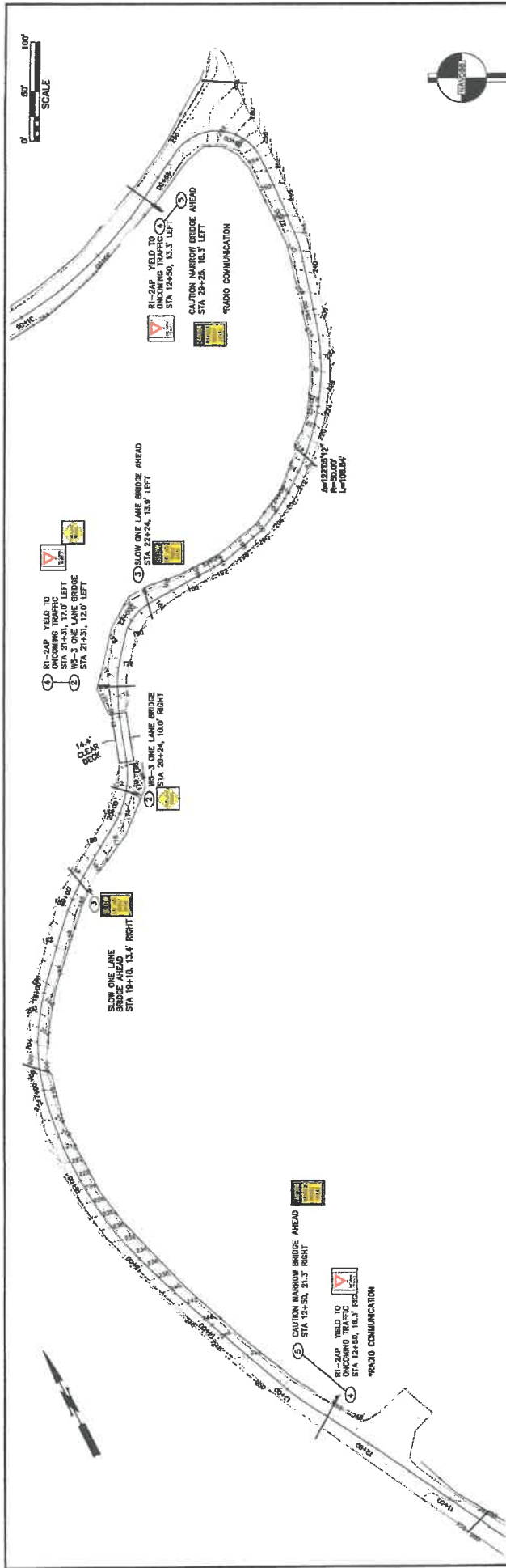
The main bridge girders and the cross members have a much greater capacity than is required for this loading and have the capability of supporting up to U80 off highway loads. Please contact DCG if a higher load rating is required for a specific load case.



Mount Vernon Office
2210 Riverside Drive, Suite 110
Mount Vernon, WA 98273
Tel 360.899.1110

Lake Forest Park Office
15029 Bothell Way NE, Suite 600
Lake Forest Park, WA 98155
Tel 206.523.0024

Whidbey Island Office
PO Box 1132
Freeland, WA 98249
Tel 360.331.4131



SIGN LEGEND



R1-1 STOP



W3-3 ONE LANE BRIDGE



SLOW ONE LANE BRIDGE AHEAD



R1-2AP YIELD TO ONCOMING TRAFFIC



CAUTION NARROW BRIDGE AHEAD

COPYRIGHT 2018
BERNSTEIN ENGINEERING & SURVEYING, PLLC
 CIVIL ENGINEERING • LAND SURVEYING • PLANNING
 2110 KINGSIDE DRIVE, SUITE 208
 SEASIDE, WA 98138
 360-424-6556



9.13.18

SIGNAGE PLAN
STATION 15+00 TO 30+00

SCALES:
 HORIZONTAL: 1" = 50'
 VERTICAL: 1" = 10'
 NOTE: IF THIS SHEET IS LESS THAN 24" X 36" THEN SHEET HAS BEEN CORRECTED

GRIP ROAD GRAVEL MINE ACCESS ROAD AS BUILT
 SEC. 27, 34, T. 36 N., SEC. 3, T. 35 N., R. 4 E., W.M.
 SKAGIT COUNTY, WASHINGTON

FIELD BY/DATE: 311/24-78
 DATE: 9/13/18
 DRAWING: 5188NFD.DWG
 JOB NO.: 5188
 SHEET: 10

NO.	DATE	REVISION	BY	REV

REVIEW MEMORANDUM

To: Paul Randall-Grutter, PE – County Engineer, Skagit County Public Works
From: Matthew Palmer, PE *MP*
Subject: Traffic Study Review
Project: Grip Road Gravel Pit, GTC #17-161
Date: December 18, 2018

This review memorandum is a review of the DN Traffic Consultants memorandums dated February 8, 2016 (Comments Below) and dated November 30, 2016 (No Comments) for the proposed Grip Road Gravel Pit.

February 8, 2016 Memo

1. How realistic is it that 100% of the trucks accessing the gravel pit will be dump truck plus trailer? In previous analysis of gravel pits conducted by GTC a ratio of 70% truck/trailer and 30% single truck have been utilized.
 - a. If 100% truck and trailer cannot be guaranteed, please document the impacts of the anticipated truck mix.
2. Counts were collected in 2013 as we are entering 2019.
 - a. Provide data showing that the 2013 counts are still valid or provide new counts.
3. What are anticipated to be the true operating hours of the pit? If the pit is operational only until 3 PM, a new count should be conducted from 3-6 PM to make sure to capture the possible end peak of the pit. Otherwise, explain that this would be the worst case-scenario and that the time in which the gravel pit will be putting trucks onto the road will have a lower amount of traffic.
 - a. Clarify the operating hours of the pit and how that relates to impacts on the roadway.
4. What is the life expectancy of the pit with 200,000 tons of gravel removed annually?
5. The insufficient sight distance is called out in the report, but it is not addressed as to how this will be fixed, particularly for the access. Additionally, the sight distance for the Grip Road/Site Access appear to be flipped for Eastbound/Westbound. It appears Westbound has less sight distance than eastbound based on observations.
 - a. The intersection and access point are existing today, so please provide a plan/profile showing the available sight distance at the access to Grip Road and possible mitigation that could be done to remedy the entering sight distance.
 - b. Provide sight distance calculations for trucks as well, based on AASHTO guidelines.
 - c. Provide a collision history to determine if sight distance limitations are causing crashes.

6. The mitigation of a truck activated flashing beacon north of Grip Road on Prairie Road for southbound traffic seems appropriate.
 - a. The detector should activate the flashing beacon for the following scenarios:
 - i. Westbound trucks on Grip Road approaching Prairie Road
 - ii. Southbound truck stopped on Prairie Road waiting to turn left onto Grip Road.