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Washington Geological Survey

# SEPA ENVIRONMENTAL CHECKLIST

### *Purpose of checklist:*

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

### *Instructions for applicants:*

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

### *Instructions for Lead Agencies:*

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

### *Use of checklist for nonproject proposals:*

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the supplemental sheet for nonproject actions (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

## *A. Background*

1. Name of proposed project, if applicable:

   Cascade Big Bear Mine

2. Name of applicant:

   Cunningham Crushing, Inc.

3. Address and phone number of applicant and contact person:

**Applicant**
Cunningham Crushing, Inc.
PO Box 8
Hamilton, WA 98255
360-826-1109

**Contact**
Wheeler Consulting Group, Inc.
PO Box 1452
Bellingham, WA 98227
360-815-3014

4. Date checklist prepared:

August 6, 2020

5. Agency requesting checklist:

Washington State Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

The life of the project is approximately 20 (+/-) years depending on market demand. The proposal is an existing mine that requires a reclamation plan update, as it is expanding from 3-acre exempt mine status. As a working mine, the proposal is for one mining phase and one reclamation segment based on market conditions. Reclamation would commence immediately after completion of mining.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There are no plans for future expansion at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- Cascade Big Bear Mine Reclamation Plans, prepared by Impact Design
- Cascade Big Bear Mine Reclamation Application (SM-8a) and Narrative, prepared by Wheeler Consulting Group
  - Cascade Big Bear Mine Soil Acceptance Policy
  - Cascade Big Bear Mine Spill Plan
- SEPA Checklist Appendix A: Cascade Big Bear Mine Geologic and Hydrogeologic Area Summary, Prepared by Impact Design

- SEPA Checklist Appendix B: Cascade Big Bear Mine Sound Analysis, prepared by BRC Acoustics.

Referenced documents may be obtained upon request from the division office.

SEPA 9/28/2020 TC

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

Washington State Department of Natural Resources: Reclamation Permit

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The 38-acre Cascade Big Bear Mine operations plan is for removal of the talus that has accumulated at the foot of a nearly vertical rock face that rises approximately 800 feet above the elevation at the toe of the talus. Geographically, the resource, talus, lies at the base of a cliff trending northeast to southwest across the mine. The talus, including variously-sized smaller material, has been estimated at 1.2 million tons.

Mining would advance in a single phase of 9.6 acres as shown on Plan Sheet 3 of the mine reclamation plan set. The operations plan employs a top-down mining method, which would allow for recovery of various resource sizes while benching horizontally along the base of the cliff. Temporary vertical cut slopes into the talus and interburden will vary from near vertical to the angle of repose above base bedrock (1.25 horizontal to 1 vertical, or 1.25H:1V) and would be a minimum of 10 feet deep for allow for equipment placement. No work will occur in bedrock below the talus or in the cliff wall. Permanent cut slopes would not exceed 2H:1V. To ensure an incised pit floor, a 6-foot vertical berm consisting of in situ material or overburden would remain along the edge of each benched extraction area. This would not only effectively contain stormwater but also provide visual screening, lighting, and noise abatement to the surrounding properties and should satisfy Mine Safety and Health Administration (MSHA) requirements.

Rock of a size that can be easily accommodated in standard haul trucks would be loaded using standard site equipment and removed from the mine site. Large boulders would be split by hydraulic cracking or small charge blasting to a size that can be accommodated by standard loading equipment and haul trucks. As larger talus is removed from the top layer, smaller material would be extracted and stockpiled or removed from the mine site based on market demand. Yet smaller material would be screened and/or crushed into variously sized material for sale as finished product. No material washing is proposed; no process water would be necessary or used. All equipment fueling would occur from a contracted mobile source. Small charge blasting would be contracted on an as-needed basis; no blasting materials would be stored on the mine site. Access would be controlled through installation of a site access gate, fencing along Rockport-Cascade Road, and standard mine signage. The site access gate would be closed to prevent access during blasting activities.

Though little topsoil exists on the site, topsoil and non-commercial interburden material that require removal would be salvaged and used for reclaiming the site; stockpile areas for these materials are shown on the Cascade Big Bear Mine Reclamation Plan Sheet 3. A materials balance table is provided on Plan Sheet 3 that shows the maximum volume of topsoil and interburden that could be stockpiled on the mine site for future reclamation. Topsoil available on-site is insufficient for mine reclamation and would require some importation to meet reclamation needs. For reclamation, the mined areas would be graded and covered with topsoil and interburden materials and then revegetated. As noted, the entire permit area is designated Natural Resource Land with a Mineral Resource Overlay (MRO). For subsequent use, this reclamation plan proposes restoration of the mine area to allow for forestry use, which conforms to the Skagit County Comprehensive Plan land use designation of NRL. Native and naturalized forest tree species would be planted as a single reclamation segment proposed for the site. Native grasses and legumes would be planted in portions of the site that do not seed naturally from topsoil.

There are no drainages, wetlands, or riparian areas within or near the mineral extraction limits. No permanent buildings would be constructed on the mine site and therefore, no demolition would be required at the completion of mining.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

- There no assigned address; the mine is accessed approximately four miles south of Marblemount on Rockport Cascade Road.
- Lat/Long: 48.509054, -121.455042
- Section 24, Township 35N, Range 10E of the W.M.
- Legal Description:
  P45543: NE1/4 NW1/4 LESS TR & 80FT STRIP TO CO EXC TH N SIDE OF A TRI RUN ELY 100FT & TH W SIDE OF SD TRI RUN SLY 100FT FR TH NW COR OF SD NE1/4 OF TH NW1/4 TH ENDS OF TH TWO SIDES CONNECTED WITH A DIAGONAL LI RUN NELY & SWLY 141.5FT M/L.
- The site plan, vicinity map, and topographic map are included attached to the Geologic Summary attached as Appendix A.

## *B. Environmental Elements*

### 1. *Earth*

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on the site exceeds 100 percent, but typical steep topography ranges between approximately 40 percent to approximately 70 percent.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

There are no classified agricultural soils on the project site. The prevalent surficial soil units at the mine site include Andic Xerochrepts, warm-Rock outcrop complex, 65 to 90 percent slopes and Barneston very cobbly sandy loam, 0 to 8 percent slopes.

- Andic Xerochrepts, warm-Rock outcrop complex, 65 to 90 percent slopes occurs on the easterly portion of the site that includes a large rock outcrop. This unit is about 65 percent Andic Xerochrepts and about 25 percent Rock outcrop; components are so intricately intermingled that they cannot be mapped separately. The Andic Xerochrepts are moderately deep to very deep and are well drained, with moderate permeability. The content of rock fragments and depth to dense glacial till and bedrock vary widely within short distances. Available water capacity is low to moderately high and runoff is rapid with severe water erosion hazard. Rock outcrop occurs as steep cliffs and irregular formations. This unit is used as woodland; the areas of Rock outcrop make up about 25 percent of this unit and limit yields accordingly
- Barneston very cobbly sandy loam, 0 to 8 percent slopes is the surficial soil unit of the mine floor. This very deep, somewhat excessively drained soil is on terraces with elevations ranging to 1,200 feet. Typically, the surface is covered with a mat of needles and twigs, with the remainder being cobbly sand to depth. Permeability is moderately rapid to a depth of 18 inches and very rapid below this depth. Available water capacity is moderate and runoff is slow, with a slight water erosion hazard. Areas within this soil unit are used mainly as woodland. The main limitation of this unit for use as homesites is the presence of large stones that interfere with excavation. The main limitations for septic tank absorption fields are the large stones and the risk of seepage.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

A summary of the geologic setting for the Cascade Big Bear Mine is attached as Appendix A.

Soils are the mine floor are flat and stable. The talus deposition at the base of the mine's rock face of Shuksan Greenschist is the result of historic rockfall. This rockfall may continue to occur periodically (Appendix A). Isolated rockfall is a natural geologic process, and in the absence of development, presents little risk to human health or the environment. The presence of shallow, competent bedrock across the site suggests a low probability of significant rockfall.

No modification to or disturbance of the mine's rock face is included in the mining plan. The proposal, therefore, would not result in increased instability.

*1 e. The proposed plan allows for clean imported materials and excess mined rock to be placed as fill to a depth of 50 feet against the rock outcrop to recreate a smaller talus slope for reclamation (comment by Nicole Damer, DNR 09/22/2020)*

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Mining would progress from noth to south in one phase to remove talus collected at the bottom of the mine's rock face over 9.6 acres. As talus is removed using standard mining, loading, and hauling equipment, material grading would occur to bench the work area to allow equipment staging for ongoing talus removal. No filling is proposed as part of the mining plan.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

The existing mine floor is flat and not subject to erosion. Erosion could, however, occur on topsoil and interburden piles or temporary and permanent bench slopes. Some erosion could occur with newly-placed topsoil in the reclamation segment of the proposal. Standard erosion control measures would be employed during mining and reclamation. Soil and interburden storage piles would be stabilized to avoid erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

No impervious surface occurs in the existing mine; no impervious surfaces are proposed.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Erosion would be controlled by directing stormater to the infiltration area proposed between a constructed berm and the cliff face. Stormwater would be detained and allowed to fully infiltrate.

### *2. Air*

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During mining and reclamation, equipment exhaust from as many as six mining-related grappling, earth-moving, loading, and hauling vehicles would be released to the air. Exhaust would also be generated by employee vehicles. During screening and crushing, which may occur sporadically, additional sources of equipment exhaust would be present on the site. Dust would likely be generated during both mining and reclamation; standard dust control measures would be employed to prevent fugitive dust from leaving the site.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Off-site sources of emissions primarily include vehiclular exhaust from the adjacent Rockport-Cascade Road.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

All equipment to be used during mining and reclamation would be maintained in good working order with industry-standard exhaust systems. A water truck would be used on the internal roadway for dust suppression.

### *3. Water*

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The Skagit River occurs approximately 2,500 feet west of the mine site. The mine site is separated from the river by residential properties and Rockport-Cascade Road. DNR maps two streams: one Type N (non-fish-bearing) stream located east of the mine flowing south into a Type F (fish-bearing) stream located south of the mine flowing west. The westerly-flowing Type F stream flows to a large wetland located immediately adjacent to the Skagit River.

Though these streams are mapped, they do not occur on the project site or in the project area. Anecdotal information from the adjacent property owners is that runoff from the cliff wall infiltrates into the the extremely well-drained alluvial terrace soils. Additional evidence that the mapped streams do not exist is that there are no culverts beneath Rockport-Cascade Road to accommodate any sort of flow from the project area.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No fill or dredge material is proposed to be placed in surface water or wetlands.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No water withdrawal is proposed in association with the proposal. No process water would be required for mining operations. Water necessary for dust control would be supplied by vendor-based water truck service.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the

well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste materials would be discharged to the ground in association with the mining proposal. No septic systems would be installed.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

DNR reclamation requirements require that the 25 year, 24-hour storm event be contained on-site, infiltrated, or safely conveyed off-site. The stormwater design would infiltrate the required volume of water on-site between a 6-foot vertical berm located along the edge of the day-lighted benches and the talus slope. The berm would provide a containment area and ensure potential runoff would not leave the limits of disturbance. The required bermed containment area was calculated as follows:

- NOAA Atlas, Volume IX, Isopluvial Map (Figure 28) shows 55 tenths of an inch of participation for the project site for the 25 year, 24-hour storm event.
- The area of influence is 9.6 acres.
- 55/10 in × 1/12 ft/in × 9.6 acre × 43,560/1 acre/ft= 191,664 cubic feet = 4.4 acre-ft

No water would flow off-site.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The stormwater drainage system was designed to not impact existing site and vicinity drainage patterns. Best management practices required under Ecology's Sand and Gravel General permit as applicable to the Cascade Big Bear Mine would be adhered to.

### *4. Plants*

a. Check the types of vegetation found on the site:

_X__deciduous tree: alder, maple, aspen, other
_X__evergreen tree: fir, cedar, pine, other
_X__shrubs
_X__grass
____pasture
____crop or grain
____ Orchards, vineyards or other permanent crops.
____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
____water plants: water lily, eelgrass, milfoil, other
____other types of vegetation

*4 c. DNR Special Concerns Report does not list any T&E plant species within the section. The report lists the site as within Pacific Silver Fir vegetation zone (comment by ND, DNR 09/22/2020)*

b. What kind and amount of vegetation will be removed or altered?

The Cascade Big Bear Mine is an active mine in which a portion of the mine floor has been colonized by small-diameter conifers and deciduous trees and shrubs, as well as invasive blackberry. These colonized areas would be removed prior to initiation of mining.

c. List threatened and endangered species known to be on or near the site.

No threatened or endangered plant species were identified in desktop and field investigations.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

A 100-foot buffer of existing native vegetation would be retained adjacent to Rockport-Cascade Road. With the exception of the northerly site boundary, the remainder of the mine site would include a 30-foot buffer of existing native vegetation. Reclamation would include revegetation of the site using Douglas fir (*Pseudotsuga menzisii*), red alder (*Alnus rubra*), and a seed mix of clover, rye, and bentgrass.

e. List all noxious weeds and invasive species known to be on or near the site.

Himalayan blackberry (*Rubus armeniacus*) and common dandelion (*Taraxacum officinale*) were observed on the mine site.

*5 b. DNR Special concerns report lists American pika within 1000 feet of the section, T&E species gray wolf within 5280 feet of the section, and T&E species grizzly bear within 52,800 feet of the section (comment by ND, DNR 09/22/2020)*

### *5. Animals*

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other _____

Wildlife was not observed on the site or in the vicinity of the site during site investigations. There are anecdotal reports of hawks, eagles, songbirds, deer, bear, cougars, and coyote occurring in the project site vicinity as described by the property owners.

b. List any threatened and endangered species known to be on or near the site.

WDFW PHS data shows no PHS-listed species occurring at the mine site. No PHS-listed species were observed on the site or in the vicinity.

FWS data list the gray wolf (*Canis lupus*) as an endangered species that may occur in the mine vicinity. Listed threatened species in the vicinity include the North American wolverine (*Gulo gulo luscus*), grizzly bear (*Ursus arctos horribilis*), Marbeled Murrelet (*Brachyramphus marmoratus*), Northern Spotted Owl (*Strix occidentalis caurina*), Yellow-billed Cuckoo (*Coccyzus americanus*), and bull trout (*Salvelinus conflentus*). Dolly Varden (*Salvelinus malma*) are listed as a PSAT (Proposed Similarity of Appearance [Threatened]). No federally listed species were observed on the mine site.

c. Is the site part of a migration route? If so, explain.

The site is part of the Pacific Flyway migration route.

d. Proposed measures to preserve or enhance wildlife, if any:

None are proposed.

e. List any invasive animal species known to be on or near the site.

None known.

### *6. Energy and Natural Resources*

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Diesel fuel and petroleum would be used for operation of mobile mining equipment and trucks. Generators would be used to meet electrical needs.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None are proposed.

## *7. Environmental Health*

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Small quantities of oil, diesel, or gasoline could spill onto the ground in the event of an accident or equipment failure. Any spill would be immediately isolated and cleaned up.

1) Describe any known or possible contamination at the site from present or past uses.

No known

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

No hazardous chemicals or conditions or historic contamination areas occur on the site. There are isolated areas of household debris that has been dumped on the site that shall be cleaned up prior to initiation of mining. No Ecology cleanup sites occur within one mile of the mine site.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

No toxic or hazardous chemicals would be stored on the site. Diesel, petroleum, explosives associated with blasting, and mobile mining equipment maintenance would be used in association with the proposal.

4) Describe special emergency services that might be required.

Special emergency services would be unlikely to be required in association with the proposal. Standard emergency services would be required in the event of an accident or incident.

5) Proposed measures to reduce or control environmental health hazards, if any:

Best management practices outlined in the Spill Contingency Plan (Appendix A of the Reclamation Narrative) would be followed to control/reduce impact to human health or the environment.

*b. Noise*

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The primary source of noise in the project area is traffic on Rockport-Cascade Road; this noise source would not affect the proposal.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noise would be generated by standard mining-related equipment use, hydraulic rock cracking, rock drilling, and small-charge blasting. Occasional and intermittent crushing, screening, and load-out of processed rock rip-rap and aggregate would also occur. Based on Skagit County's Noise Control ordinance (Skagit County Code Chapter 9.50) and performance standards of the Mineral Resource Overlay (SCC 14.16.440(10)(c), the Environmental Designation for Noise Abatement (EDNA) for resource land is Class D, or industrial. Classification of properties to the north of the mine site are EDNA Class A, residential, and land located to the northwest is EDNA Class B, commercial. The Cascade Big Bear Mine is proposed to operate in a standard construction work day over a standard work week: 7:00 a.m. to 6:00 p.m., Monday through Friday. Permitted daytime sound levels from EDNA Class D properties to EDNA Class A and Class B properties is 60 and 65, respectively. Backup alarms are exempt from these noise limits.

The sound analysis completed for the Cascade Big Bear Mine proposal (Appendix B) shows that the combination of activities and equipment proposed would exceed Skagit County noise limits at the northerly property boundary without mitigation. As a result, a 15-foot noise berm is proposed along the northerly property boundary within the 30-foot mining setback, extending from the 100-foot mining setback along Cascade-Rockport Road tapering to the east as the underlying terrain reaches 325 feet. The total length of the berm would be approximately 225 feet. The berm would be constructed in the early stages of material extraction and prior to commencement of processing activities (crushing and screening).

3) Proposed measures to reduce or control noise impacts, if any:

The Cascade Big Bear Mine would be operated within standard construction business hours. Where possible, site equipment will employ low frequency backup alarms.

### *8. Land and Shoreline Use*

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The Cascade Big Bear Mine site is an existing mine, permitting by Skagit County as a conditional use and operated under a small miner's exclusion for mines under three acres. Forestry resource harvest has occurred on the upper slopes of the parcel.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Yes. The site was subject to timber harvest in 1990. No forest of long term commercial significance would be converted to other uses as part of the proposal.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

There are no surrounding farms that would be affected by the proposal or that would affect the proposal. Ongoing logging operations on SF/IF-NRL parcels would not affect the proposal, as

there would be no residents onsite and logging operations would be similar in nature to mining activities onsite. The 100-foot vegetative buffer along Rockport-Cascade Road and 30-foot setbacks on all property lines would provide additional screening.

c. Describe any structures on the site.

No structures occur on the mine site.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

Rural Resource Land / Natural Resource Land with Mineral Resource Overlay (RRc-NRL with MRO)

f. What is the current comprehensive plan designation of the site?

Rural Resource Land / Natural Resource Land with Mineral Resource Overlay (RRc-NRL with MRO)

g. If applicable, what is the current shoreline master program designation of the site?

Shoreline master program designation does not apply.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes. Geologically Hazardous Areas have been mine site coincident with the steep rock cliffs. No other Critical Areas occur on the mine site.

i. Approximately how many people would reside or work in the completed project?

Approximately six people would work at the mine site during standard construction work hours. No residential construction is proposed.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None necessary.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposal is consistent with current comprehensive plan and zoning designations, including goals and policies that support natural resource lands. Adjacent land uses include RRc-NRL to

the southwest, OSRSI to the northwest, RRv to the north, and SF-NRL and IF-NRL to the east and south. Residential and OSRI parcels to the north and northwest would be buffered by standard 30-foot mining setbacks. The 30-foot mining setback along the northerly property boundary would include a noise berm.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

No measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance have been identified. The proposal is for talus removal located on the floor of an existing mine; associated activities would not result in impacts to either agricultural or forest lands.

### *9. Housing*

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Housing is not proposed.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

No housing would be eliminated as a result of the proposal.

c. Proposed measures to reduce or control housing impacts, if any:

None necessary.

### *10. Aesthetics*

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

No structures are proposed.

b. What views in the immediate vicinity would be altered or obstructed?

None. The existing vegetated buffers would remain in place, with the exception of the northerly property boundary, which would include a noise berm. Views from the north toward the site would be of the berm, mixed with native vegetation. Activities on the mine floor would be screened from neighboring uses.

b. Proposed measures to reduce or control aesthetic impacts, if any:

None necessary.

### *11. Light and Glare*

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Lighting may be required for early morning or late afternoon mining activities during winter months. Lighting could include vehicular lights and light stands.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No. Permanent site lighting is not proposed. The existing vegetated 100-foot buffer from Rockport-Cascade Road, vegetated mining setbacks, and northerly noise berm would filter or eliminate light generated by mining activities.

c. What existing off-site sources of light or glare may affect your proposal?

None known.

d. Proposed measures to reduce or control light and glare impacts, if any:

The proposal would utilize only vehicular and portable lighting sources. Vegetated buffers and berm between area roadways and residential properties would screen light resulting from mining activities.

### *12. Recreation*

a. What designated and informal recreational opportunities are in the immediate vicinity?

There are no formal park or recreational facilities in the immediate area of the Cascade Big Bear Mine. Informal recreational activities include the Skagit River, which lies approximately 2,500 feet west of the mine site. There is a public fly-fishing area approximately 1.1 miles northeast of the site. The North Cascades National Park Wilderness Visitor Center is located approximately two miles directly north.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None necessary.

### *13. Historic and cultural preservation*

*13. DNR Special Concerns Report lists archaeological, cemetery, and GLO Indian sites within 5280 feet of the section (comment by ND, DNR 09/22/2020)*

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.

None known.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of

cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Evidence of historic logging occurs on the upper slopes of the mine site. No other evidence of historic use or occupation exists on the site or in the immediate area.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The Washington Information System for Architectural & Archaeological Records Data (WISAARD), operated by the Department of Archaeology and Historic Preservation (DAHP), was reviewed for historic/cultural information for the site and vicinity. According to WISAARD, a pre-contact lithic scatter is located one mile east of the mine site.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

No mitigation or archaeological oversight is proposed. In the event that archaeological materials (e.g. shell midden, faunal remains (bones), stone tools, historic glass, metal, or other concentrations) are encountered during the development of the property, an archaeologist would immediately be notified and work halted in the vicinity of the find until the materials can be inspected and assessed. In the event of inadvertently discovered human remains or indeterminate bones, pursuant to RCW 68.50.645, all work would stop immediately and law enforcement would be contacted. Any remains would be covered and secured against further disturbance, and communication should be immediately established with the Skagit County Sheriff's office and the State Physical Anthropologist at DAHP for coordination with interested Native Tribe(s).

### *14. Transportation*

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The mine site is accessed from Rockport-Cascade Road, which roughly parallels State Route (SR) 20 on the south side of the Skagit River. Rockport-Cascade Road intersects SR-530 southwest of the mine site and Cascade River Road northeast of the mine. The mine is accessed from Rockport-Cascade Road via a gravel access driveways.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No. The closest Skagit Transit stop is on SR-20 at Rockport Caboose, approximately 3.5 miles from the mine site (Route 750).

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

No parking spaces currently exist, none are proposed, and none would be eliminated. Equipment would be parked as necessary to accommodate mining needs.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Up to 6 employee trips and 12 loaded truck trips would be generated during the life of the mine. Peak volumes would likely occur during spring and summer months. Peak daily traffic would be based on market demand for material.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The addition of new truck trips would be unlikely to interfere with the movement of agricultural and forest products on roads or streets in the area. According to Skagit County Public Works and WSDOT level of service data, Rockport-Cascade Road and SR-530 are relatively infrequently traveled and are considered to be level of service (LOS) A, as is the intersection of these roadways. LOS A is the highest level of service and represents free-flowing traffic. The LOS for intersections of both of these roadways with SR-20 falls to B, which represents stable traffic conditions. The Skagit County standard, the level at which traffic mitigation would be required, for Rockport-Cascade Road is LOS D, and WSDOT standards for SR-20 and SR-530 in Skagit County is LOS C. As noted, all roadways and intersections included in the Cascade Big Bear Mine routing plan (Reclamation Plan Sheet 1) operate and levels above standards.

h. Proposed measures to reduce or control transportation impacts, if any:

Data from Skagit County and WSDOT indicate that there is roadway capacity sufficient to ensure that there will be no drop in LOS associated with the proposal. No mitigation is proposed.

## *15. Public Services*

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Mine personnel would be subject to safety training to avoid accidents that could result in the need for public services.

### *16. Utilities*

a. Circle utilities currently available at the site:
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

No utilities occur on the mine site.

c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No utilities are proposed in conjunction with mining activities.

## *C. Signature*

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: A. Ann Parker

Name of signee A. Ann Parker

Position and Agency/Organization Corporate Secretary/Cunningham Crushing, Inc.

Date Submitted: _____